1.0 Use and Application

The licensee has proposed administrative and technical changes to the CTS to bring them into conformance with 10 CFR 50.36 and with STS Section 1.0 specifications. The discussion of changes provided below follow the order of the individual specifications within STS Section 1.0 with the ITS Section 1.0 specification titles listed in italics before the applicable discussions.

a. Administrative Changes

Those specifications of CTS Section 1.0 that have been retained in corresponding ITS Section 1.0, have been reworded to conform to the STS presentation. The most significant administrative changes that were made are as follows:

1.1 *Definitions*

1. The definitions appearing in Section 1 of the WNP-2 ITS are listed differently from the WNP-2 CTS by deleting the identification numbers associated with each definition and listing them in alphabetical order.

2. The following definitions are retained in the WNP-2 ITS. Some editorial changes are included so that these defined terms are consistent with NUREG-1434 and with WNP-2 plant-specific terminology without changing the intent of the definitions.

ACTIONS
AVERAGE PLANAR LINEAR HEAT GENERATION RATE (APLHGR)
CHANNEL CALIBRATION
CHANNEL CHECK
CHANNEL FUNCTIONAL TEST
CORE ALTERATION
CORE OPERATING LIMITS REPORT (COLR)
DOSE EQUIVALENT I-131
EMERGENCY CORE COOLING SYSTEM (ECCS) RESPONSE TIME
END OF CYCLE RECIRCULATION PUMP TRIP (EOC-RPT) SYSTEM RESPONSE TIME
ISOLATION INSTRUMENTATION RESPONSE TIME
LEAKAGE (~~formerly~~ IDENTIFIED LEAKAGE, PRESSURE BOUNDARY LEAKAGE and UNIDENTIFIED LEAKAGE)
LINEAR HEAT GENERATION RATE (LHGR)
LOGIC SYSTEM FUNCTIONAL TEST
MAXIMUM FRACTION OF LIMITING POWER DENSITY (MFLPD)
MINIMUM CRITICAL POWER RATIO (MCPR)
MODE
OPERABLE-OPERABILITY
PHYSICS TESTS
RATED THERMAL POWER (RTP)
REACTOR PROTECTION SYSTEM (RPS) RESPONSE TIME
SHUTDOWN MARGIN (SDM)
STAGGERED TEST BASIS
THERMAL POWER

Definitions 1.9 and 1.14 are reformatted and these concepts are contained in other WNP-2 ITS definitions.

TABLE 1.2
TURBINE BYPASS SYSTEM RESPONSE TIME

All other definitions in the WNP-2 CTS (1.2, 1.3, 1.9, 1.11, 1.12A, 1.13A, 1.14, 1.15, 1.16, 1.20, 1.24, 1.25, 1.27, 1.29, ~~1.31,~~ 1.31a, 1.32, 1.33, 1.34, 1.37, 1.38, 1.39, 1.41, 1.43, 1.46, ~~1.48,~~ 1.49, 1.50, 1.51 and Table 1.1) are no longer used as defined terms in the WNP-2 ITS. Definition 1.~~18~~ and Table 1.1 are reformatted and these concepts are contained in the WNP-2 ITS in Sections 1.4. ~~In addition,~~ definitions 1.27 and 1.33 have been reformatted and these concepts are contained in the WNP-2 ITS in Sections 5.0. The remaining definitions are not applicable under the ITS and therefore may be deleted from the ITS. 16

As noted above, the staff and the licensee have agreed to minor word changes throughout the WNP-2 ITS definition section. These word changes are clarifications that do not alter the meaning of the definitions or change the restrictive level of the TS. The definitions in Section 1.0 perform a supporting function for other sections in the WNP-2 ITS. Therefore, these definitions are acceptable for WNP-2.

WNP2 proposed changes to isolation instrumentation response time definition (Item #57) are pending approval of TSTF

3. The staff reviewed the proposed changes in the definition section for their effect on the Safety Limits (SLs) and SL violations that appear in Section 2.0 and the LCOs and Action Statements in Section 3, including the Surveillance Requirements. The staff finds that no adverse effects would result from the proposed changes and concludes that when the definitions, as modified, are applied in other sections of the TS, the restrictive level of the requirements are not changed and, therefore, the safety margins are not affected. In addition, the staff concludes that the licensee's proposed changes clarify the definitions and would reduce the tendency for misinterpretation. Further, the staff finds that WNP-2 ITS definitions have appropriately applied the guidance provided in STS. Therefore, we find these changes acceptable.

1.2 *Logical Connectors*

This is a new section in the WNP-2 ITS. This section explains the meaning and use of "Logical Connectors" through the use of examples so that the entire WNP-2 ITS are clearer from a human factors standpoint. The staff reviewed this section and considers this proposed addition and reformatting to be an enhancement to the WNP-2 ITS. We further find that the addition is consistent with STS and is acceptable.

1.3 *Completion Times*

This is a new section in the WNP-2 ITS. This section does not change completion times, but provides guidance through the use of examples on the use of "Completion Times." "Completion Time" is the amount of time allowed to complete an action or the amount of time allowed for a structure, system or component to be inoperable. This section is administrative in nature and is provided as an aid to the licensee's staff. The staff reviewed this section, and finds it is consistent with STS and is acceptable.

~~WNP2 proposed changes to STS CT examples (Item #59) are pending approval of TSTF 31.~~

1.4 *Frequency*

This is a new section in the WNP-2 ITS. This section defines the proper use and application of surveillance frequency practices through the use of examples. A clear understanding of the correct application of a specified frequency is necessary to ensure compliance with a surveillance requirement.

The staff reviewed this section and finds that the "Frequency Notation" definition and the "Frequency Notation Table" (Definition 1.~~18~~ 1.16 and Table 1.1, respectively) of the CTS have been adequately incorporated into the descriptions and examples of this section, that this section is consistent with STS and is acceptable.

b. <u>Less Restrictive Requirements</u>

By electing to implement the STS Section 1.0 specifications, proposed a number of less restrictive conditions than are allowed by the CTS. The more significant conditions are the following:

1. The phrase "or actual," in reference to the injected signal, is added to the definition of Channel Functional Test and Logic System Functional Test. Some Channel Functional Tests are performed by insertion of the actual signal into the logic (e.g., rod block interlocks). For others, there is no reason why an actual signal would preclude satisfactory performance of the test. Use of an actual signal instead of the current requirement which limits use to a simulated signal, will not affect the performance of the channel. Operability can be adequately demonstrated in either case since the channel itself can not discriminate between "actual" or "simulated."

2. As provided for with analog channels, the signal used to test bistable channels (in the CFT definition) is proposed to be allowed to be injected "as close to the sensor as practicable." Also, the definition of Logic System Functional Test allows the signal to be injected "as close to the sensor as practicable" in lieu of "from the sensor." Injecting a signal at the sensor would in some cases involve significantly increased probabilities of initiating undesired circuits during the test since several logic channels are often associated with a particular sensor. Performing the test by injection of a signal at the sensor requires jumpering of the other logic channels to prevent their initiation during the

test, or increases the scope of the test to include multiple tests of the other logic channels. Either method significantly increases the difficulty of performing the surveillance. Allowing initiation of the signal close to the sensor provides a complete test of the logic channel while significantly reducing this probability of undesired initiation.

3. A change is proposed to allow the physical movement or removal ~~removal~~ of a control rod to not be considered a Core Alteration. In this activity the control cell must first have all the fuel bundles removed prior to this control rod movement. In this configuration, the negative reactivity inserted by removing the adjacent four fuel assemblies is significantly more than any minimal positive reactivity inserted during the removal of the control rod. Appropriate technical specification controls are applied during the fuel movements preceding the control rod removal to protect against or mitigate a reactivity excursion event. After such time, sufficient margin and design features (the design of a control rod precludes its removal without all fuel assemblies in the cell removed) are in place to allow removing the TS controls during the control rod removal.

Movement or

This is an "A" change.

4. The definition of logic system functional test (LSFT) changed to exclude the actuated device. The actuated device is to be tested as part of a system functional test, which is specified in the system Specification. Deleting the actuated device from the definition of LSFT eliminates the confusion as to whether a previously performed LSFT is rendered invalid if the final actuated device is discovered to be inoperable as a consequence of another surveillance (e.g., valve cycling). In instances where the CTS does not contain a corresponding "system functional test," which would test the actuated device, one is added in the ITS. ~~As an example, {WNP2 to provide an example}.~~ The ATWS-RPT breaker actuation is now required by ITS SR 3.3.4.2.4. Therefore, end device testing will be adequately controlled using the ITS format.

5. The CTS definition "core alteration" states that "normal" movement of SRMs, IRMs, LPRMs, TIPs or special movable detectors (i.e., incore instruments) is not a core alteration. However, no delineation of what is included in "normal" component movement is given. The ITS focus the definition on activities that can affect the core reactivity. Since incore instruments have negligible (if any) effect on core reactivity, any movement of incore instruments has essentially no impact on core reactivity. Therefore, deletion of "normal" from the TS definition maintains core alterations as movement of only that which can affect core reactivity and does not place any restrictions on incore instrument movement.

The above less restrictive requirements have been reviewed by the staff and have been found to be acceptable, because they do not present a significant safety question in the operation of the plant. The TS requirements that remain are consistent with current licensing practices, operating experience and plant accident and transient analyses, and provide reasonable assurance that the public health and safety will be protected.

c. <u>More Restrictive Requirements</u>

By electing to implement STS Section 1.0 specifications proposed a number of

more restrictive conditions than are required by the CTS. The more significant conditions are the following:

1. In the ITS, "Startup" mode is now defined to include anytime the reactor mode switch is in the "Refuel" position concurrent with the reactor vessel head bolts being fully tensioned. This is currently a plant condition that has no corresponding mode and could therefore be incorrectly interpreted as not requiring the application of the majority of CTS;

2. In the ITS, "Shutdown" modes are redefined with a footnote stating "all reactor vessel head bolts fully tensioned" to eliminate the current overlap in defined modes when the mode switch is in "shutdown" position with the vessel head detensioned, for which both the definition of Refuel as well as Cold Shutdown could apply. It is not the intent of the TS to allow an option of whether to apply Refuel applicable LCOs or to apply Cold Shutdown applicable LCOs. This proposed change precludes an unacceptable interpretation.

3. The current "Refueling" definition would cease to be applicable when average coolant temperature exceeds 140 °F since with the mode switch in Refuel, a plant condition exists which has no corresponding mode. This condition could therefore be incorrectly interpreted as not requiring the application of the majority of TS. By defining the Refuel mode as including plant conditions with no specific coolant temperature range, sufficiently conservative restrictions will be applied by the applicable LCOs during all fueled conditions with the vessel head bolts detensioned.

La deleted in Rev B

~~4. New definitions L_a, and Pressure and Temperature Limits Report are added~~ PTLR deleted in Rev C
~~to the WNP-2 ITS. These new definitions are compatible with changes made throughout the WNP-2 ITS to clarify the related requirements and to reduce the likelihood of misinterpretation of the ITS. The new WNP-2 definitions are also defined in NUREG-1434. Plant-specific wording differences have been reviewed and do not change the meaning of these definitions.~~

The staff has reviewed the above more restrictive requirements and concludes that they result in an enhancement to the ITS. Therefore, the more restrictive requirements are acceptable.

d. <u>Significant Differences from the STS (NUREG-1434)</u>

Generic change package TSTF-31 proposes to revise Examples 1.3-3 and 1.3-6 to more accurately reflect BWR example specific actions. The purpose of these examples is to help ensure the Completion Time convention in the STS is understood and properly applied. In example 1.3-3, a separate Completion Time is given in Condition C for one Function X subsystem inoperable concurrently with one Function Y subsystem inoperable. In example 1.3-6, the proposed change is to revise the current STS Completion Time to "12 hours" from "72 hours." The staff accepts these changes as plant specific changes for the WNP-2 ITS; however, the staff position is to deny the generic change package until the industry can agree to a set of Example 1.3 Completion Times that apply to each of the vendor approved STS.

e. Relocated

None

2.0 SAFETY LIMITS

This chapter has been renamed from the existing WNP-2 TS, Chapter 2.0 "Safety Limits and Limiting Safety System Settings." Although renamed, this chapter contains essentially the same information as the existing Chapter 2.0. Information not retained in this chapter is contained elsewhere within the improved WNP-2 TS.

In accordance with the guidance in the Final Policy Statement, the licensee has proposed administrative and technical changes to the CTS to bring them into conformance with STS Chapter 2.0 specifications. For each category of change, the discussions generally follow the presentation order of the individual specifications within STS Chapter 2.0. ~~As appropriate, the ITS Chapter 2.0 specifications are listed in italics before the applicable discussions.~~

This chapter has been reformatted and reorganized to separate the safety limits and safety limit violations. The staff has reviewed WNP-2's proposed Chapter 2.0, based on NUREG-1434, as modified to include plant-specific limits and terminology, and finds this chapter is consistent with the Commission's regulations and is acceptable.

a. Administrative Changes

The specifications of CTS Chapter 2.0 that have been retained in corresponding ITS Chapter 2.0, have been reworded to conform to the STS presentation. In particular, the ~~following~~ most significant administrative changes that were made are as follows:

[A.1] CTS 2.2 lists the Limiting Safety System Settings(LSSS) which are the Reactor Protection System (RPS) Instrumentation Allowable Values that assure Safety Limits are not violated. The CTS LSSS are moved to ITS 3.3.1.1, RPS Instrumentation consistent with STS format. The protection and monitoring functions of the RPS have been designed to ensure safe operation of the reactor. This is achieved by specifying limiting safety system settings (LSSS) in terms of parameters directly monitored by the RPS, as well as LCOs on other reactor system parameters and equipment performance. The LSSS are defined in the specifications as the "allowable values," which, in conjunction with the LCOs, establish the threshold for protective system action to prevent exceeding acceptable limits, including SLs, during design basis accidents (DBAs). Nominal trip setpoints are specified in the setpoint calculations. ~~and in the LCS~~. The nominal setpoints are selected to ensure that the actual setpoints do not exceed the allowable value between successive channel calibrations. Operation with a trip setpoint less conservative than the nominal trip setpoint, but within its allowable value, is acceptable. A channel is inoperable if its actual trip setpoint is not within its required allowable value. Thus, the RPS setpoints are effectively retained within the ITS. Evaluation of any technical changes to the requirements is performed in the evaluation of ITS 3.3.1.1. This is considered an administrative change in the location of the requirements within the TS, and is therefore acceptable.

[A.2] The CTS references Specification 6.7.1 on Safety Limit Violations,

which has been removed from TS since it duplicates existing regulatory reporting requirements. CTS administrative controls section 6.7.1 has been deleted from TS as discussed in the Administrative Controls chapter. Since the ITS does not provide cross references, and since CTS 6.7.1 has been deleted, the CTS reference to CTS 6.7.1 serves no useful purpose and has been deleted. This is an acceptable administrative change.

The preceding changes to CTS Chapter 2.0 result in limits that are unchanged from the current requirements cited. In some cases, these changes result in a clearer presentation of the intent of current requirements. Accordingly, these changes are purely administrative. Therefore, they are acceptable.

b. Less Restrictive Requirements

The licensee, in electing to implement the specifications of STS Chapter 2.0, "Safety Limits," proposed a number of less restrictive requirements than are allowed by CTS Chapter 2.0. These requirements are the following:

[LA.1] CTS SL 2.1.4 requires that "the ECCS must be manually initiated after depressurizing the reactor" if the reactor vessel water level is at or below the top of active fuel. These specific actions are moved from the TSs to appropriate Emergency Operating Procedures (EOPs). ITS 2.2.X requires that within 2 hours, compliance with safety limits be restored and all insertable control rods be inserted, but does not contain specific actions for restoring reactor vessel water level. Using the EOPs, ~~LCS~~ and other plant procedures to restore water level is consistent with CTS 2.1.4 because the procedures contain the CTS requirements plus additional methods for restoring reactor vessel water. The 2 hour time frame for completion of the action is consistent with the allowed time to restore other Safety Limit violations and allows appropriate actions to be evaluated by the operator and completed in a timely manner. Moving the requirements to EOPs, ~~LCS~~ and other plant procedures is acceptable since the EOPs are required by ITS 5.4.1, and changes will be controlled by the provisions of 10 CFR 50.59.

in Rev B this is moved to 5.0 (i.e. page 14) of SE ~~As~~ as new LA.1

[LA.2] CTS 6.7.1.a requires that the Corporate Nuclear Safety Review Board (CNSRB) be notified of a safety limit violation. CTS 6.7.1.b requires that the Plant Operations Committee (POC) review the Safety Limit Violation Report. CTS 6.7.1.c requires that the Safety Limit Violation Report be submitted to the CNSRB. These requirements are moved to ~~QA Program~~ plant procedures. The Vice President, Nuclear Operations, to whom the CNSRB is an advisory board, is notified of a Safety Limit violation. The duties of the CNSRB, as defined in chapter 6.0 of the CTS, are removed from technical specifications and placed in the Quality Assurance Program Description in the FSAR. The POC review of the LER and submitting the LER to the CNSRB occurs after plant shutdown and does not affect the safe operation of the plant; therefore, maintaining these requirements in QA Program, per 10 CFR 50.54(a) requirements, is an acceptable less restrictive change.

The less restrictive requirements described in the preceding material have been found by the staff to be acceptable because they do not present a significant safety question in the operation of the plant. The TS

requirements that remain are consistent with current licensing practices, operating experience and plant accident and transient analyses, and provide reasonable assurance that the public health and safety will be protected.

c. More Restrictive Requirements

The licensee, in electing to implement the specifications of STS Chapter 2.0, "Safety Limits," proposed a number of more restrictive requirements than are allowed by CTS Chapter 2.0. These requirements are the following:

[M.1] CTS Section ~~chapter~~ 2.1 includes applicability statements for each Safety Limit. These are removed in the conversion to the ITS, thereby making all Safety Limits applicable to all modes of operation. The CTS applicability statements are based on the physical possibility that a violation could occur in specific modes or specific limitations required for protection in specific modes. The removal of the applicability statements imposes additional evaluation requirements and administrative actions for conditions when a challenge to a barrier cannot occur; therefore, it is more restrictive. This is an acceptable more restrictive change.

[M.2; not significant~~, ≥ vs >, delete from SER~~] ~~CTS SLs 2.1.1 requires action when reactor vessel steam dome pressure and core flow are "greater than" the limits stated. The limits on reactor vessel steam dome pressure and core flow are revised to "greater than or equal to" in ITS SL 2.1.1.2. This change resolves a discontinuity between CTS SL 2.1.1 and SL 2.1.2 and is consistent with the STS. This is acceptable as a more restrictive change.~~

~~[M.3; deleted by Rev B, TSTF-05, see A.2 above]~~ ~~CTS administrative control 6.7.1 requires that a Safety Limit Violation Report be submitted following a safety limit violation and specifies the contents of the Safety Limit Violation Report. The Safety Limit Violation Report is replaced by submission of a Licensee Event Report (LER) per 10 CFR 50.73 within 30 days. ITS 2.2.4 submission of an LER instead of a Safety Limit Violation Report is more restrictive because 10 CFR 50.73 requires more information to be submitted. Also, ITS 2.2.4 limits the time for submission of an LER whereas time limits do not exist for submission of a Safety Limit Violation Report. This is an acceptable more restrictive change to conform to the STS.~~

~~[M.4; deleted by Rev B, TSTF-05, see A.2 above]~~ ~~Actions to be taken when a safety limit violation occurs are addressed in CTS 6.7.1, and are moved to ITS 2.2. ITS section 2.2.3 requires the Plant General Manager be notified of a safety limit violation. ITS section 2.2.4 requires an LER be submitted to the Plant General Manager. Notifying the Plant General Manager of safety limit violations and submitting associated LERs to the Plant General Manager are additional required actions that ensure adequate communication, and are therefore more restrictive. These additional required actions ensure greater dissemination of important information related plant safety and have no adverse effect on plant safety.~~

The staff has reviewed the above more restrictive generic requirements and concludes that they result in an enhancement to the ITS. Therefore, the more

restrictive requirements are acceptable.

d. Significant differences from 1434

None

e. Relocated Specification

None

3.0 LIMITING CONDITIONS FOR OPERATION (LCOs) AND ASSOCIATED APPLICABILITY, ACTION REQUIREMENTS (ACTIONS) AND SURVEILLANCE REQUIREMENTS (SRs)

In accordance with the guidance in the Final Policy Statement, the licensee has proposed administrative and technical changes to the CTS to bring them into conformance with STS Chapter 3.0 specifications. For each category of change, the discussions generally follow the presentation order of the individual specifications within each improved TS Chapter 3.0 section.

3.0 LCO and SR Applicability

a. Administrative Changes

The specifications of CTS Section 3/4.0 have been retained in corresponding improved TS Section 3.0, but have been reworded to conform to the STS presentation. In particular, the ~~following~~ most significant administrative changes that were made are as follows:

~~[A.1 Not used]~~

LCO 3.0.1

A.2 The phrase in CTS 3.0.1 "Compliance with...is required" is replaced with the phrase "LCOs shall be met" in ITS 3.0.1 for consistency with the other ITS Section 3.0 LCOs. ~~In addition~~, the term "OPERATIONAL CONDITIONS" is changed to "MODES" and "Conditions specified therein" is changed to "specified conditions in the Applicability," to be consistent with STS terminology. These changes are purely administrative because they do not, by themselves, change existing requirements.

INSERT A.2

LCO 3.0.2

delete

unclear - use suggested insert instead

A.2 In the event an LCO is not met, CTS 3.0.1 requires compliance with the "associated ACTION requirements." This requirement is moved to ITS LCO 3.0.2. CTS 3.0.1 does not require the LCO or associated ACTION requirements to be met or completed if the LCO is met or is no longer applicable. This exception to the requirement of CTS 3.0.1 to comply with the LCOs is retained in ITS LCO 3.0.2. Moving these provisions of CTS 3.0.1 to a separate specification, ITS LCO 3.0.2, is a purely administrative change.

A.3 The lead-in sentence of CTS 3.0.2 defines when "noncompliance with a Specification" exists. In corresponding ITS LCO 3.0.2, this definition is replaced with "Upon discovery of a failure to meet an LCO..." because the term "noncompliance" is not used in the ITS. In the ITS, not meeting a requirement means the same as not complying with a requirement. Thus, this wording change is purely administrative.

Other wording changes to CTS 3.0.2 to conform to the STS are: "restored" is changed to "met or is no longer applicable;" "time intervals" is changed to "Completion Time(s);" "ACTION requirements" is changed to "Required Action(s)." Also, the phrase "unless otherwise stated" is added consistent

INSERT A.2 to subsection 3.0.a, LCO 3.0.1

The phrase "that upon failure to meet the Limiting Conditions for Operation, the associated ACTION requirements shall be met" was changed to "as provided in LCO 3.0.2 and LCO 3.0.7." ITS LCO 3.0.2 addresses the requirement of meeting the associated ACTIONS when not meeting a Limiting Condition for Operation. ITS 3.0.7 addresses another situation when an LCO requirement is allowed not to be met. The added exception of ITS LCO 3.0.7 is discussed below in subsection 3.0.a, LCO 3.0.7 A.6.

with current WNP-2 TS exceptions found in a few CTS LCOs. The clarity achieved by these purely administrative changes will reduce the potential for misapplication of the provisions of ITS LCO 3.0.2.

LCO 3.0.3

A.4 CTS 3.0.3 requires a unit shutdown when an LCO is not met, "except as provided in the associated Action requirements." In ITS LCO 3.0.3, this exception is replaced with "and the associated Actions are not met, an associated Action is not provided, or if directed by the associated Actions," to cover all potential possibilities that require entry into LCO 3.0.3. Clarifying this exception is purely administrative.

The specified time period to reach each MODE during the unit shutdown is revised to include the 1-hour time period allowed by CTS 3.0.3 for initiating the shutdown. Also, the specified time period for reaching each MODE is referenced from the time of entry into LCO 3.0.3, instead of the current presentation where each specified time is referenced to the end of the previous time period (e.g., "the next," or "the following," or "the subsequent"). These presentation changes are purely administrative.

The general exception to CTS 3.0.3 reads, "Where corrective measures are completed that permit operation under the ACTION requirements, the ACTION may be taken in accordance with the specified time limits as measured from the time of failure to meet the Limiting Condition for Operation." This exception is reworded in ITS LCO 3.0.3 to read, "Where corrective measures are completed that permit operation *in accordance with the LCO or Actions, completion of the actions required by LCO 3.0.3 is not required*" (italics added). Clarifying the intent of the current exception is a purely administrative change.

*

The sentence "This Specification is not applicable in OPERATIONAL CONDITION 4 or 5" is changed to "LCO 3.0.3 is only applicable in MODES 1, 2, and 3." This administrative change replaces all CTS exceptions to CTS 3.0.3 contained in individual specifications that are not applicable in MODES 1, 2, or 3.

LCO 3.0.4

A.5 CTS 3.0.4 is reworded to clarify the existing restrictions on changing the operational condition of the unit, as follows:

CTS 3.0.4:	ITS LCO 3.0.4:
Entry into an OPERATIONAL CONDITION or other specified condition shall not be made unless the conditions for the Limiting Condition for Operation are met	When an LCO is not met, entry into a MODE or other specified condition in the Applicability shall not be made

* see page 1, change from "OPERATIONAL CONDITIONS" to "MODE" was considered significant in 3.0.1

CTS 3.0.4:	ITS LCO 3.0.4:
* without reliance on provisions contained in the ACTION requirements.	* except when the associated ACTIONS to be entered permit continued operation in the MODE or other specified condition in the Applicability for an unlimited period of time.
This provision shall not prevent passage thru OPERATIONAL CONDITIONS	This Specification shall not prevent changes in MODES or other specified conditions in the Applicability
as required to comply with ACTION requirements.	that are required to comply with ACTIONS
	or that are part of a shutdown of the unit.
Exceptions to these requirements are stated in the individual Specifications.	Exceptions to this Specification are stated in the individual Specifications.

* Note that these words are actually less restrictive than the corresponding CTS words. This less restrictive requirement is addressed below. in ~~§~~subsection 3.0.b, LCO 3.0.4, L.1

In addition to the above wording changes, the following statements are added to further clarify the intent of the exceptions:

> These exceptions allow entry into MODES or other specified conditions in the Applicability when the associated ACTIONS to be entered allow unit operation in the MODE or other specified condition in the Applicability only for a limited period of time.

The above clarifications (except for the change denoted by an asterisk) are purely administrative because they do not reduce or increase the current restrictions on changing the operational condition of the unit. Finally, the ITS appears to narrow the Applicability of this Specification with the following statement:

> LCO 3.0.4 is only applicable for entry into a MODE or other specified condition in the Applicability in MODES 1, 2, and 3.

However, based on the licensee's review of the CTS and the proposed ITS, it was determined that this statement does not add any exceptions to this specification beyond those that currently exist or that are proposed in individual Specifications in the ITS (and justified on a case-specific basis). Therefore, this change is also purely administrative.

LCO 3.0.5

délete- not an admin change

( ) ITS LCO 3.0.5 is a new specification that adds another exception to the requirement of CTS 3.0.1 (being retained in ITS 3.0.2) to meet the Required Actions if the associated LCO is not met. LCO 3.0.5 specifies an exception to this requirement for instances where restoration of inoperable equipment to an OPERABLE status could not be performed while continuing to comply with Required Actions. This clarification, which is considered less restrictive by the licensee, is further addressed below.

LCO 3.0.6

A.6 ITS LCO 3.0.6 is a new specification that provides guidance regarding the appropriate ACTIONS to be taken when a single inoperability (a support system) also results in the inoperability of one or more related systems (supported systems). Addition of this specification is administrative because it makes explicit the intent of the CTS and is consistent with current operating practice. However, in conjunction with this clarification, the ITS contain a new specification, ITS 5.5.11, "Safety Function Determination Program (SFDP)." This evaluations of this programmatic specification must be performed whenever a support system is discovered to be inoperable (i.e., upon entry to ITS LCO 3.0.6). The SFDP is addressed as a more restrictive requirement in Subsection 5.0.c of this safety evaluation.

LCO 3.0.7

A.7 ITS LCO 3.0.7 is a new specification that provides guidance regarding the meeting of LCOs in ITS Section 3.10, "Special Operations." Special operation LCOs allow certain TS requirements to be temporarily changed (made applicable in part or whole, or suspended) to permit the performance of special tests or operations which otherwise would be prohibited. Without special operation LCOs, many of the special tests and operations necessary to demonstrate select plant performance characteristics, special maintenance activities and special evolutions could not be performed. LCO 3.0.7 eliminates the confusion which would otherwise exist regarding which LCOs apply during the performance of a special test or operation. This is consistent with the intent of CTS Section 3/4.10, "Special Test Exceptions." However, without this specific allowance to change the requirements of another LCO, a conflict of requirements could be incorrectly interpreted to exist. Addition of this specification is purely administrative because it only clarifies the intent of the special test provisions of the CTS.

SR 3.0.1

A.8 The first sentence of ITS SR 3.0.1 retains the requirement of CTS 4.0.1 to meet the surveillance requirements when the associated LCO is required to be met (unless otherwise stated in the surveillance requirement).

~~A.8~~ In order to more clearly define the relationship between meeting surveillance requirements and the associated LCOs, ITS SR 3.0.1 contains three additional provisions:

(a) The second sentence of ITS SR 3.0.1 is an addition to the CTS that explicitly states the intent of the CTS; it is thus a purely administrative change. It reads, "Failure to meet a Surveillance, whether such failure is experienced during the performance of the Surveillance or between performances of the Surveillance, shall be failure to meet the LCO."

(b) The third sentence of ITS SR 3.0.1 incorporates the first sentence of CTS 4.0.3, with the following administrative clarifications:

First sentence of CTS 4.0.3:	Third sentence of ITS SR 3.0.1:
Failure to perform a Surveillance Requirement	Failure to perform a Surveillance
within the allowed surveillance interval defined ~~in~~ by Specification 4.0.2	within the specified Frequency
shall constitute noncompliance with the OPERABILITY requirements for a Limiting Condition for Operation.	shall be failure to meet the LCO,
	except as provided in SR 3.0.3.

In keeping with STS terminology, the phrase "allowed surveillance interval defined in Specification 4.0.2" is replaced with "specified Frequency" and the term "noncompliance with the OPERABILITY requirements for a Limiting Condition for Operation" is replaced with the phrase "failure to meet the LCO."

The reference to CTS 4.0.2 (ITS SR 3.0.2) is omitted from ITS SR 3.0.1 because it is not necessary for understanding what is meant by "specified Frequency." Finally, the exception to ITS SR 3.0.1 contained in SR 3.0.3 is a less restrictive requirement addressed below. in subsection 3.0.b, SR 3.0.3, L.1.

(c) The fourth sentence of CTS 4.0.3 is retained as the fourth sentence of ITS SR 3.0.1 with minor wording changes to clarify the intent of the CTS, as follows:

Fourth sentence of CTS 4.0.3:	Fourth sentence of ITS SR 3.0.1:
Surveillance requirements do not have to be performed on inoperable equipment.	Surveillances do not have to be performed on inoperable equipment or variables outside specified limits.

Since all LCOs do not deal exclusively with equipment OPERABILITY, a clarifying phrase "or variables outside specified limits" is added.

SR 3.0.2

A.9 CTS 4.0.2 states that:

> Each Surveillance Requirement shall be performed within the specified Surveillance interval with a maximum allowable extension not to exceed 25% of the specified surveillance interval.

This requirement is retained in the first sentence of ITS SR 3.0.2, with some clarification added, as follows:

> The specified Frequency for each SR is met if the Surveillance is performed within 1.25 times the interval specified in the Frequency, as measured from the previous performance or as measured from the time a specified condition of the Frequency is met.

The revised statement more clearly establishes what constitutes meeting the specified Frequency of each SR. Thus, it represents an administrative enhancement to the CTS.

~~A.9~~ The last sentence of ITS SR 3.0.2 reads:

> Exceptions to this Specification are stated in the individual Specifications.

This statement acknowledges the explicit use of exceptions in various SRs within the ITS. Thus, its addition is also an administrative enhancement to the CTS.

DELETE NOT ADMIN

( ) The second and third sentences of ITS SR 3.0.2 are additions to the CTS to further explain when the Frequency extension allowance does and does not apply. These additions to CTS are addressed below as a more restrictive requirement and as a less restrictive requirement, respectively.

SR 3.0.3

DELETE NOT ADMIN

( ) The second and third sentences of CTS 4.0.3 are replaced by the more restrictive provisions of ITS SR 3.0.3, that are addressed below.

SR 3.0.4

A.10 CTS 4.0.4 is retained with the following clarifications in the first two sentences of ITS SR 3.0.4:

CTS 4.0.4:	ITS SR 3.0.4:
Entry into an OPERATIONAL CONDITION or other specified applicable condition	Entry into a MODE or other specified condition in the Applicability of an LCO
shall not be made unless the Surveillance Requirement(s) associated with the Limiting Condition for Operation	shall not be made unless the LCO's Surveillances
have been performed within the applicable surveillance interval or as otherwise specified.	have been met within their specified Frequency.
This provision shall not prevent passage through or to OPERATIONAL CONDITIONS as required to comply with ACTION requirements.	This provision shall not prevent entry into MODES or other specified conditions in the Applicability that are required to comply with ACTIONS
	or that are part of a shutdown of the unit.

The above clarifications are purely administrative because they change neither the current restrictions for changing the operational condition of the unit, nor the current exceptions to those restrictions. In particular, addition of the phrase "or that are part of a shutdown of the unit" only makes explicit the intent of the current exception to those restrictions.

~~A.10~~ The third sentence of ITS SR 3.0.4 states:

> SR 3.0.4 is only applicable for entry into a MODE or other specified condition in the Applicability in MODES 1, 2, and 3.

This clarification of the applicability of SR 3.0.4 is added for consistency with ITS LCO 3.0.4. The previous discussion of the applicability of LCO 3.0.4 applies equally to SR 3.0.4. Therefore, adding this clarification is a purely administrative change.

5.5.6 Inservice Testing Program

A.11 CTS 4.0.5 defines the requirements for inservice inspection (ISI) and inservice testing (IST) of ASME Code Class 1, 2, & 3 components. The IST requirements are moved to ITS Section 5.5 where they are presented as a programmatic specification to conform to the STS format. This change is administrative because no technical changes to the CTS IST requirements are

being made. However, the ISI requirements are being placed in the licensee's ISI program. This less restrictive change is addressed below. in subsection 3.0.b, GENERAL, LA.4

Conclusion

The preceding changes to CTS Section 3/4.0 result in limits that are unchanged from the current requirements cited. In some cases, these changes result in a clearer presentation of the intent of current requirements. Accordingly, these changes are purely administrative. Therefore, they are acceptable.

b. Less Restrictive Requirements

The licensee, in electing to implement the LCOs and SRs of STS Section 3.0, "LCO and SR Applicability," proposed a number of less restrictive requirements than are allowed by CTS Section 3/4.0. These requirements are the following:

6.5 LA.4 *General*

4 ~~F~~ Inservice Inspection (ISI) Requirements

CTS require ISI of American Society of Mechanical Engineers (ASME) Code Class 1, 2, and 3 components in accordance with Section XI of the ASME Boiler and Pressure Vessel (BPV) Code. These requirements are contained in the following specifications:

4.0.5	Inservice Inspection and Testing Surveillance Applicability
4.0.5.a	ISI Performance Required by §50.55a.
4.0.5.b	ISI Frequency Definitions.
4.0.5.c	Applicability of CTS 4.0.2 to ISI Frequencies.
4.0.5.d	ISI Additional to Other Surveillance Requirements.
4.0.5.e	TS take precedence over the ASME BPV Code.
4.0.5.f	ISI program for piping identified in Generic Letter 88-01

DELETE

(3/4.4.8 R.1)

3/4.4.8	RCS Structural Integrity
3.4.8	Structural Integrity of ASME Code Class 1, 2, and 3 Components in accordance with CTS 4.0.5.
ACTION a	ASME Code Class 1 components not conforming.
ACTION b	ASME Code Class 2 components not conforming.
ACTION c	ASME Code Class 3 components not conforming.
ACTION d	CTS 3.0.4 does not apply.
4.4.8	Comply with ISI requirements of CTS 4.0.5.

The structural integrity inspections in the CTS prevent long-term degradation of ASME Code Class 1, 2, and 3 components, and ensure that structural conditions of these components are maintained at an acceptable level throughout the life of the plant. The inspection program associated with the CTS requirements is performed on systems assumed to function to mitigate a design basis accident. However, the CTS also establish OPERABILITY requirements for these same systems. Thus, the limits in CTS 3.4.8 are not required to ensure OPERABILITY of ASME Code Class 1, 2, and 3 components. The

DELETE

associated ACTIONS are also not required because the ACTIONS of each LCO associated with an ASME Code Class 1, 2, and 3 component will ensure that suitable measures are taken in the event of a non-conformances to Code requirements affecting the OPERABILITY of the component. Thus, the ACTIONS associated with CTS LCO 3.4.8 have been deleted. The ISI program implements the 10 CFR 50.55a requirements and will ensure that the structural degradation of safety systems will be within limits.

CTS 4.0.5.a (and CTS 4.4.8 by reference to it) states that ISI shall be performed in accordance with Section XI of the ASME BPV Code and applicable addenda as required by 10 CFR 50.55a. However, this provision is redundant to 10 CFR 50.55a. Thus, control of this commitment under 10 CFR 50.55a is acceptable. Regulatory requirements need not be restated in the ITS.

Because 10 CFR 50.55a contains the necessary requirements to accomplish the safety objective of the CTS ISI requirements for ASME Code Class 1, 2, and 3 components, an explicit specification requiring compliance with the ISI provisions in 10 CFR 50.55a does not need to be included in the improved TS. Therefore, these requirements may be relocated to the licensee's ISI Program.

LCO 3.0.4

L.1 As noted above in subsection 3.0.a, LCO 3.0.4.A.5, replacement of the words "without reliance on provisions contained in the ACTION requirements" with "except when the associated ACTIONS to be entered permit continued operation in the MODE or other specified condition in the Applicability for an unlimited period of time," is a relaxation of CTS 3.0.4. The existing requirement is unduly restrictive. For many specifications, in the event the LCO is not met, continued operation is permitted for an unlimited period of time provided that the applicable specified action requirements are and continue to be met. For these cases, entry into the Applicability of the associated specification should also be permitted, provided such action requirements are and continue to be met. In both cases, meeting these action requirements during operation of the unit affords the same level of protection as meeting the associated LCO. Thus, this change is acceptable because it does not pose a safety question in the operation of the unit.

LCO 3.0.5

L.2 ITS LCO 3.0.5 is a new provision, consistent with the STS, that permits inoperable equipment to be returned to service under administrative controls to perform testing to determine OPERABILITY. It allows an exception to ~~improved~~ ITS LCO 3.0.2 for instances in which inoperable equipment could not be restored to an OPERABLE status while continuing to comply with ACTIONS associated with the LCO.

Many action requirements in the CTS require an inoperable component to be removed from service, such as maintaining an isolation valve closed. An exception to these ACTIONS is necessary to allow the performance of SRs to demonstrate the OPERABILITY of the equipment being returned to service. This

exception is also needed in order to restore other equipment to OPERABLE status, if performance of the SR necessary for demonstrating that OPERABILITY requires returning the inoperable equipment to service.

LCO 3.0.5 is necessary to establish an allowance that, although informally utilized in restoration of inoperable equipment, is not formally recognized in the CTS. It is considered a less restrictive change because it specifies an exception to LCO 3.0.2. Because this provision is restricted to activities deemed necessary to restore equipment OPERABILITY and is consistent with existing practice, it is acceptable.

SR 3.0.2

L.3 The statement "If a Completion Time requires periodic performance on a "once per..." basis, the above Frequency extension applies to each performance after the initial performance," is added to CTS 4.0.2 to allow the 25% extension applied to Surveillance Frequencies to also apply to Required Actions with periodic Completion Times. By extending this allowance to periodic action requirements, the flexibility in scheduling the performance of all periodic requirements, whether Surveillances or Required Actions, is made consistent. This change does not reduce the effectiveness of periodic action requirements to compensate for the associated ACTIONS Conditions because periodic action requirements will still, on average, be performed once during each specified interval. Therefore, this change is acceptable.

INSERT SR 3.0.3, L.4

Conclusion

The less restrictive requirements described in the preceding material have been found by the staff to be acceptable because they do not present a significant safety question in the operation of the plant. The TS requirements that remain are consistent with current licensing practices, operating experience and plant accident and transient analyses, and provide reasonable assurance that the public health and safety will be protected.

c. More Restrictive Requirements

The licensee, in electing to implement the LCOs and SRs of STS Section 3.0, "LCO and SR Applicability," proposed a number of more restrictive requirements than are allowed by CTS Section 3/4.0. These requirements are the following:

SR 3.0.2

M.1 CTS 4.0.2 allows extending the time of performance of a surveillance by 25% of the specified surveillance interval. As noted above, ITS SR 3.0.2 retains this allowance except for Frequencies specified as "once." This exception clarifies the intent of the CTS which is only meant to provide flexibility for the scheduling of periodic surveillances. Removing the possibility of misapplying the CTS allowance to non-periodic surveillance requirements is a benefit to safety. Therefore, ITS SR 3.0.2 is acceptable.

INSERT L.4 to subsection 3.0.b, SR 3.0.3

L.4 The second and third sentences of CTS 4.0.3 state:

> The time limits of the ACTION requirements are applicable at the time it is identified that a Surveillance Requirement has not been performed. The ACTION requirements may be delayed for up to 24 hours to permit the completion of the surveillance when the allowable outage time limits of the ACTION requirements are less than 24 hours.

ITS SR 3.0.3 allows that, at the time it is discovered that the Surveillance has not been performed, the requirement to declare the equipment inoperable (LCO not met) may be delayed for up to 24 hours regardless as to whether the Completion Times of the Actions are 24 hours or less. This is based on Generic Letter 87-09 which states, "It is overly conservative to assume that systems or components are inoperable when a surveillance has not been performed. The opposite is in fact the case, the vast majority of surveillances demonstrate that systems or components in fact are operable. When a Surveillance is missed, it is primarily a question of operability that has not been verified by the performance of the required surveillance."

Based on consideration of plant conditions, adequate planning, availability of personnel, the time required to perform the Surveillance and the safety significance of the delay in completing the Surveillance, the staff concluded in the Generic Letter that 24 hours is an acceptable time limit for completing a missed Surveillance when the allowable outage times of the ACTIONS are less than the 24 hour limit or a shutdown is required to comply with ACTIONS.

However, it stands to reason that since 24 hours has been determined to be an acceptable time limit for completing the Surveillance, this 24 hour deferral should apply to all systems or components, regardless of whether or not their ACTIONS Completion Time is 24 hours or less. This is primarily because shorter Completion Times are generally provided for more safety significant Required Actions. Therefore, if a 24 hour delay can be safely applied to a Required Action with a short (e.g., 2 hour) Completion Time, there should be less of a safety impact when a 24 hour delay is applied to a Required Action with a long (e.g., 7 day) Completion Time. Furthermore, consistent application of the 24 hour delay regardless of Completion Time is critical to eliminating potential confusion and misapplication. For example, some ACTIONS have more than one Completion Time; some > 24 hours and other ≤ 24 hours. The confusion associated with the application of the 24 hour deferral to the Completion Times of this example's Required Actions, illustrates the potential for misapplication throughout the Technical Specifications. Therefore, this change is acceptable.

SR 3.0.3

L.4 The second and third sentences of CTS 4.0.3 state:

> The time limits of the ACTION requirements are applicable at the time it is identified that a Surveillance Requirement has not been performed. The ACTION requirements may be delayed for up to 24 hours to permit the completion of the surveillance when the allowable outage time limits of the ACTION requirements are less than 24 hours.

Less restrictive

ITS SR 3.0.3 retains the allowance only to delay performing the associated LCO action requirements for 24 hours ~~(~~for surveillance intervals ≥ 24 hours~~)~~. ~~but changes the focus from the length of the allowable outage time (AOT) to the length of the surveillance interval.~~ Regardless of the Completion Times of the Required Actions that would otherwise apply, ITS SR 3.0.3 specifies the delay as "from the time of discovery, up to 24 hours or up to the limit of the specified Frequency, whichever is less." This change is more restrictive in the event the missed surveillance is required to be performed more often than once per 24 hours. Surveillances with Frequencies greater than once per 24 can easily be performed well within the specified interval. Thus, the current allowance of 24 hours is unnecessary in such cases. Deleting the 24-hour allowance for such cases ensures a more timely OPERABILITY verification of the affected system. Therefore, this change is acceptable.

move to admin

In addition, ITS SR 3.0.3 contains two additional sentences to clarify that the LCO must be declared not met and the applicable Conditions must be entered if either (a) the surveillance is performed but not met within the delay period, or (b) the surveillance is not performed within the delay period. These sentences replace the second sentence of CTS 4.0.3 and clarify its intent. Thus, they are an administrative enhancement and are acceptable.

Conclusion

The staff has reviewed these more restrictive requirements and believes they strengthen the CTS. Therefore, these more restrictive requirements are acceptable.

d. Significant ~~STS~~ Differences ~~for~~ from 1434

The licensee, in electing to adopt the LCOs and SRs of STS Section 3.0, "LCO and SR Applicability," proposed no significant differences between the ITS and the STS.

e. Relocated

None

3.1 REACTIVITY CONTROL SYSTEMS

The licensee has proposed administrative and technical changes to the CTS to bring them into conformance with 10 CFR 50.36 and with STS Section 3.1 specifications. The discussion of changes provided below follow the presentation order of the individual specifications within STS Section 3.1. The ITS Section 3.1 specification titles are listed in italics before the applicable discussions.

a. Administrative Changes

The specifications of CTS Section 3/4.1 that have been retained in corresponding ITS Section 3.1, have been reworded to conform to the STS presentation. In particular, the most significant administrative changes that were made are as follows:

3.1.1 Shutdown Margin

[A.1; not significant, ~~delete discussion from SER~~] ~~CTS 3.1.1, Action b, requires verifying insertable control rods are inserted. The action statement is revised to initiate immediate action to insert all insertable control rods. ITS 3.1.1, Required Action C.1, enhances the presentation because it requires performing an active action instead of a passive verification; therefore, it is an acceptable administrative change.~~

[A.2] CTS 3.1.1, Action b, requires suspending all activities that could reduce Shutdown Margin (SDM). The ITS deletes this requirement for Modes 3 and 4. In Modes 3 and 4 immediate insertion of control rods terminates the only action that can significantly reduce SDM, control rod withdrawal. ITS 3.1.1, Required Actions C.1, & D.1, ~~and E.2,~~ require immediate insertion of control rods. The requirement to suspend all activities that could reduce the SDM is redundant with immediate rod insertion.

E.2 not applicable in MODE 3, 4

CTS 3.1.1, Action c, requires suspending CORE ALTERATIONS and all other activities that could reduce the SHUTDOWN MARGIN. The ITS deletes the requirement for suspending all other activities that could reduce the SHUTDOWN margin. ITS 3.1.1, Required Actions E.1 and E.2, provide actions to terminate all Mode 5 activities that can reduce SDM. The requirement to suspend other activities that could reduce SDM is redundant to ITS 3.1.1, Required Actions E.1 and E.2.

Deleting these CTS requirements is an acceptable administrative change.

[A.3] CTS 3.1.1, Actions b and c, requires establishing SECONDARY CONTAINMENT INTEGRITY within 8 hours. This is revised to require action to be initiated within 1 hour to establish secondary containment. The existing ACTION to "establish SECONDARY CONTAINMENT INTEGRITY within 8 hours" appears to provide a period of time (8 hours) in which integrity could be violated even if capable of being maintained. Additionally, if the plant status is such that integrity is not capable of being established within 8 hours, the existing ACTION results in "non-compliance with the Technical Specifications" and a

requirement for an LER. The intent of the ACTION is more appropriately presented in proposed Required Actions D.2, D.3, D.4, E.3, E.4, and E.5. With the proposed Required Actions, a significantly more conservative requirement to establish and maintain the secondary containment boundary within the most expeditious time possible consistent with safe operation. However, this conservatism comes from the understanding that if best efforts to establish the boundary exceeded 8 hours, no LER will be required. This interpretation of the ACTIONS intent is supported by the STS. Because this is an enhanced presentation of existing intent, the proposed change is administrative.

[A.4] CTS 3.1.1, Actions b and c, require establishing SECONDARY CONTAINMENT INTEGRITY. The ITS conversion removed the definition of SECONDARY CONTAINMENT INTEGRITY and incorporated the elements of the definition into specific ITS. ITS 3.1.1, Required Actions D.2, D.3, D.4, E.3, E.4, and E.5, perform the essential actions to provide a means to control a potential radioactive release. This meets the intent of "establishing SECONDARY CONTAINMENT INTEGRITY" as required by the CTS; therefore, this is an acceptable administrative change.

[A.5] CTS 3.1.1, Action c, requires inserting all insertable control rods within 1 hour. The ITS changes the rod insertion requirement to immediate initiation of action to insert all insertable control rods. The existing ACTION to "insert...within 1 hour" is revised to "initiate action to insert...Immediately." (This change is similar to that addressed in discussion A.3.) The existing requirement appears to provide an hour in which control rods can be left withdrawn, even if able to be inserted. If the control rod is incapable of being inserted in 1 hour, the existing ACTION results in "non-compliance with the Technical Specifications" and a requirement for an LER. The intent of the ACTION is more appropriately presented in proposed Required Action E.2. With the proposed Required Action, a significantly more conservative requirement to insert the control rod(s) within the most expeditious time possible consistent with safe operation and maintain insertion is imposed. No longer would the provision to withdraw or leave withdrawn one or more control rods for up to 1 hour exist. However, with this conservatism comes the understanding that if best efforts to insert the control rod(s) exceeds 1 hour, no LER will be required. This interpretation of the ACTIONS intent is supported by the STS. Because this is an enhanced presentation of existing intent, the proposed change is administrative.

[A.6] CTS 4.1.1.a requires an SDM test be performed prior to or during the first startup. The SR is changed to state definitively that it will be performed within 4 hours after criticality. Most SDM tests are performed in-sequence while critical and, therefore, 4 hours after reaching criticality is provided as a reasonable time to perform the required calculations and have appropriate verification completed. The ITS SR 3.1.1.1 Frequency clearly defines an existing requirement of CTS; therefore, it represents an enhanced presentation of the CTS intent and is an acceptable administrative change.

[A.7; not significant, consider excluding from SER] CTS 4.1.1.a requires SDM surveillance performance after each refueling. Refueling is replaced with "following fuel movement within the reactor pressure vessel or control rod

replacement," which are the activities that occur during refueling that can alter SDM. ITS SR 3.1.1.1 requires the SDM verification following the specific activities that could cause a change in the SDM, which is an enhancement of the CTS intent; therefore, this is an acceptable administrative change.

[A.8] CTS 4.1.1.c requires SDM verification after detection of an immovable rod. This requirement is moved to ITS LCO 3.1.3, Required Action A.4. This is an administrative move of the requirement to be consistent with STS format and any technical changes to the requirement are evaluated in section 3.1.3; therefore, this is an acceptable administrative change.

[A.9] CTS 3.1.1, Action c, is modified by a footnote that excludes movement of IRMs, SRMs, or special movable detectors from the requirement to suspend CORE ALTERATIONS. This exclusion is incorporated in the definition of CORE ALTERATIONS in ITS Section 1.1; therefore, this is an acceptable administrative change.

3.1.2 Reactivity Anomalies

[A.1] CTS ~~3~~4.1.2.a requires performing the reactivity anomaly surveillance "during the first startup" which the ITS requires "within 24 hours after reaching equilibrium conditions following startup." The surveillance compares the monitored K_{eff} with the predicted K_{eff} as a function of cycle exposure while at steady state reactor power conditions, which are described in the ITS Bases. ITS SR 3.1.2.1 Frequency is based on achieving steady state conditions plus a reasonable time, 24 hours, for performing the required calculations and completing appropriate verifications. This change clearly defines intention of the CTS to perform the surveillance during the first startup; therefore, it is an acceptable administrative change.

3.1.3 Control Rod Operability

[A.1] CTS 3.1.3.1 contains the requirements for inoperable control rods. The requirements are revised to consider all cases, including those from other CTS LCOs, when the control rod is unable to perform its scram function. The terminology is changed for control rods that are immovable to the ITS terminology of "stuck" and "inoperable." These are acceptable administrative changes. Special considerations for compliance with the banked position withdrawal sequence, with inoperable control rods is added to the ITS. This change is an acceptable administrative change.

similar RETAINED 3.1.4, A.4

[A.2] ~~similar note in 3.10.8; not significant, consider excluding from SER]~~ ITS LCO 3.1.3, ACTIONS, adds a note allowing separate entry for each control rod. The CTS does not require this note because of the structure of the action statements but the ITS structure requires the note. The note allows a specified period of time for verifying limits and, when necessary, fully inserting and disarming the control rod. This retains the CTS intent and is an acceptable administrative change.

[A.3, similar note in 3.10.8; not significant, consider excluding from SER] The ITS allows bypassing the Rod Worth Minimizer (RWM), if needed for

inserting control rods and continued operations, provided the appropriate ACTIONS of ITS 3.3.2.1 (the RWM Specification) are taken. This is a human factors consideration to assure clarity and understanding of the requirement and allowance. This change is an acceptable administrative change.

[A.4; not significant, consider excluding from SER] CTS LCO 3.1.3.1, Action a, phrase "Immovable, as a result of excessive friction or mechanical interference, or known to be untrippable" is replaced by the term "stuck" in the ITS. ITS 3.1.3, Condition A, removes unnecessary details of potential mechanisms that describe ways control rods may be stuck. This change is an acceptable administrative change.

and CTS 4.1.1.c

CTS 3.1.6 footnote **, & CTS 3.1.3.7 footnote **

[A.5] CTS 3.1.3.1, footnote **, permit~~s~~ intermittently rearming a control rod, under administrative control, to permit testing associated with restoring the control rod to OPERABLE status. Consistent with the STS, the ITS has incorporated this allowance into ITS LCO 3.0.5; therefore, this is an acceptable administrative change.

CTS 3.1.3.2, Action b, CTS 3.1.3.6, Action c, & CTS 3.1.3.7, Action c

[A.6] CTS 3.1.3.1, Action b.3, state~~s~~ "the provisions of Specification 3.0.4 are not applicable." Consistent with the STS, the ITS has incorporated this allowance into ITS LCO 3.0.4; therefore, this is an acceptable administrative change.

[A.7] CTS ~~section~~ 3/4.1.3.1 includes the requirements for scram discharge volume drain and vent valves. The ITS moves these requirements to section 3.1.8 of the ITS, consistent with the format of the STS. Evaluations of any changes to the requirements are in ITS 3.1.8. This is an acceptable administrative change.

[A.8] CTS 4.1.3.1.2 requires proving operability of control rods when above the low power setpoint of the RWM and Rod Sequence Control System (RSCS). The ITS deletes references to the RSCS. This change is consistent with the evaluation of deleting CTS 3/4.1.4.2, which addresses the acceptability of deleting requirements concerning RSCS. This is an acceptable administrative change. SEE INSERT A.8

[A.9] CTS 4.1.3.1.2 is not required to be met for inoperable control that are disarmed electrically or hydraulically rods, as stated in the surveillance requirement and per CTS 4.0.3. and therefore, operable control rods are not currently required to have their directional control rods disarmed. This explicit exemption is deleted because ~~ITS SR 4.0.3~~ does not require inoperable control rods to meet surveillance requirements, and the ITS does not require withdrawn OPERABLE control rods to have directional control valves disarmed. Therefore, the ITS deletes this phrase. This an acceptable administrative change.

CTS ~~LCO~~ 4.0.3 and ITS SR 3.0.1

[A.10; not significant, consider excluding from SER] CTS 4.1.3.1.3 lists surveillances performed to prove operability of the control rods. The ITS omits this SR because it is redundant to cross-reference surveillances. This is an acceptable administrative change.

[A.11] CTS 4.1.1.~~a~~ c requires verifying SDM with an allowance for the rod worth

INSERT A.8 to subsection 3.1.a, LCO 3.1.3

CTS 3.1.3.6, Actions a.1 and a.2 provides actions to recouple control rods based upon whether or not RWM and RSCS will permit the recoupling attempts. CTS 3.1.3.7, Action a.3 provides actions when a control rod position indicator is inoperable, based upon whether or not the RSCS will allow insertion of the associated control rod.

of an immovable or untrippable control rod. This allowance is moved to the ITS definition of SDM in section 1.1. The technical changes are evaluated in chapter 1.0. Moving this requirement is an acceptable administrative change.

[A.12] CTS 3.1.3.2 requires that the maximum control rod scram insertion time be ≤ 7 seconds. ITS incorporates this requirement as a surveillance requirement that must be met to meet the rod operability LCO. ITS SR 3.1.3.4 does not eliminate any CTS requirements or impose new or different treatment of the requirements (except as evaluated in ~~item~~ L.8). Therefore, this is an acceptable administrative change. subsection 3.1.b, LCO 3.1.3,

[A.13] not significant, consider excluding from SER] CTS 3.1.3.2 defines time zero as deenergization of the scram pilot valve solenoids. This is incorporated in the ITS as a footnote to Table 3.1.4-1. This is an acceptable administrative change.

[A.14] CTS SR 4.1.3.2 requires performing control rod scram timing at specific frequencies. The control rod scram timing surveillances are moved to ITS SRs 3.1.4.1, 3.1.4.2, 3.1.4.3 and 3.1.4.4, which are required by ITS SR 3.1.3.4. The SER on ITS ~~Section~~ LCO 3.1.4 contains evaluations of technical changes. This is an acceptable administrative change.

[A.15] CTS 3.1.3.6 requires control rods to be coupled to their drive mechanism. This requirement is incorporated into a surveillance requirement that must be met to consider control rods operable. ITS SR 3.1.3.5 requires verifying that each control rod does not go to the withdrawn overtravel position, which verifies control rod coupling. ~~Items LA.2, L.4, L.9, and L.10 evaluates technical changes to the required actions for an uncoupled control rod.~~ This change is an acceptable administrative change.

IN 3.1.B.5.A.3 SAID - NOT significant

[A.16] CTS LCO 3.1.3.6, Action a, requires inserting an uncoupled control rod to accomplish recoupling. Consistent with the STS the ITS omits the method for restoring operability. Coupling the control rod by inserting it remains an option but details are not in the ITS. This is an acceptable administrative change.

[A.17] CTS 4.1.3.6.a requires performing an overtravel check "prior to reactor criticality after completing CORE ALTERATIONS that could have affected rod coupling integrity." The Frequency requirement for ITS SR 3.1.3.5 requires verification of coupling "prior to declaring control rod OPERABLE after work on control rod or CRD system that could affect coupling." Incorporation of "following CORE ALTERATIONS" as a subset of "work" is an acceptable administrative change.

the control drive

[A.18] CTS 3.1.3.7 requires that the control rod position indication shall be OPERABLE. This is included in the ITS as a surveillance requirement. ITS SR 3.1.3.1 requires determining the position of each control rod every 24 hours. An operable control rod position indication system is required to comply with the surveillance requirement. This is an acceptable method for assuring control rod position indication is operable. This change is an acceptable administrative change.

[A.19] CTS 3.1.3.7, Applicability, requires the control rod position indication to be operable in OPERATIONAL CONDITION 5 for withdrawn control rods. The operability requirements for Mode 5 are moved to ITS LCO 3.9.4. The move is an acceptable administrative change.

[A.20] ACTION a.3.a)2) of CTS 3.1.3.7 requires verifying the position and bypassing of control rods with inoperable position indicators by a second licensed operator or other technically qualified member of the unit technical staff. The requirements of this ACTION are now covered by the Note to Required Action C.2 of ITS 3.1.3, which states, in part, that RWM may be bypassed as allowed by LCO 3.3.2.1. LCO 3.3.2.1 in conjunction with LCO 3.1.6 provides the requirements of CTS ACTION a.3.a)2). Therefore, an explicit ACTION in ITS 3.1.3 to verify the position and bypassing of control rods is not needed.

[A.21] CTS 3.1.3.4, Action a.1, requires declaring inoperable control rods that exceed the specified scram times[, but not maximum scram time of 7 seconds]. ITS 3.1.4 considers control rods with excessive scram times as specified by ITS 3.1.4 "slow" instead of inoperable. CTS 3.1.3.1, Action c, requires going to HOT SHUTDOWN if more than eight control rods are inoperable. The CTS requirement for going to HOT SHUTDOWN is modified by requiring going to HOT SHUTDOWN if there are more than eight control rods are "slow" or inoperable. This is incorporated as ITS 3.1.3, Required Action C.1 and Condition F, and ITS 3.1.4, Required Action A.2. The change is an acceptable administrative change because the terminology for rods with excessive scram times has changed but the number of control rods that requires shutting down has remained the same.

[L.11/A] CTS 3.1.3.6, Action a.1, requires verifying recoupling by demonstrating that the control rod will not go to the overtravel position. The ITS incorporates this requirement by proving coupling with a surveillance: ITS SR 3.1.3.5 verifies a control rod does not go to the withdrawn overtravel position. An uncoupled control rod would fail to meet SR 3.1.3.5, since only an uncoupled control rod would go to the overtravel position during the performance of this SR. After restoration of a component that caused a required SR to be failed, SR 3.0.1 requires the appropriate SRs (in this case SR 3.1.3.5) to be performed to demonstrate the OPERABILITY of the affected components. ITS SR 3.1.3.5 verifies control rod coupling which verifies control rod operability. ITS SR 3.1.3.5 contains the same requirement as CTS 3.1.3.6, Action a.1, to verify the control rod will not withdraw to the overtravel position, and is an acceptable administrative change.

3.1.4 Control Rod Scram Times

* discussion not relevant to [A.1]

[A.1] CTS 4.1.3.2.a requires demonstrating the maximum scram times of all control rods prior to THERMAL POWER exceeding 40% of RATED THERMAL POWER following CORE ALTERATIONS~~*~~. ~~where the * refers to a footnote that exempts movement of SRM, IRM, or special movable detectors or normal control rod movement.~~ The ITS revises CORE ALTERATIONS~~*~~ to "following refueling" in the Frequency for ITS SR 3.1.4.1. This is equivalent to CORE ALTERATIONS excluding control rod movement, which should not affect scram time, and work on control rods, which is tested by ITS SRs 3.1.4.3 and ~~3.2.4.4~~. This is an acceptable
3.1.4.4.

administrative change. a use of CORE ALTERATION,

[A.2] CTS 4.1.3.2.a references ~~a~~ footnote* that states "Except movement of SRM, IRM, or special movable detectors or normal control rod movement." Section 1.1 of the ITS incorporates this footnote in the definition of CORE ALTERATIONS. This is an acceptable administrative change.

[A.3] ITS Table 3.1.4-1 includes a note that requires declaring inoperable control rods with scram times greater than 7 seconds. The note requires entry into ITS LCO 3.1.3. This is needed since the proposed LCO delineates between "slow" control rods and inoperable control rods (changes related to slow control rods are addressed in LCO 3.1.3 A.21 and ~~in~~ LCO 3.1.4 A.5). Addition of the note is an acceptable administrative change. subsection ~~LCO~~ 3.1.a, LCO

CTS 4.1.3.2.b requires verifying maximum scram times for individual control rods following CRD system maintenance that affects specific individual control rods. This verifying of maximum scram time for individual control rods is allowed, by the footnote (**) on page 3/4 1-6, at less than 950 psig provided the scram times are within established limits. The footnote (b) for ITS Table 3.1.4-1 retains the requirement for scram times to be within established limits (the ITS change from 950 psig to 800 psig is evaluated in ~~item~~ subsection 3.1.c, LCO 3.1.3 M.1). The movement of the CTS footnote (**) to footnote (b) for ITS Table 3.1.4-1 is an acceptable administrative.

[A.4] ITS 3.1.4 adds an ACTIONS note allowing separate condition entry for each two-by-two array. This Note provides direction consistent with the CTS 3.1.3.4 Action's intent for not meeting control rod scram times. Upon discovering each two-by-two array not within the scram time limits, each specified ACTION is applied, regardless of previous application to other two-by-two arrays. This is an acceptable administrative change.

[A.5] CTS 3.1.4, Action a.1, requires declaring inoperable control rods that do not meet average scram times when the two-by-two array does not meet its scram times. The ITS changes this requirement to declaring the control rods that do not meet the average scram time criteria as "slow." ITS 3.1.4, Required Action A.1, in declaring these rods as "slow" is consistent with the CTS because, while the CTS declares these control rods inoperable, it allows them to remain withdrawn provided separation criteria are met and no more than eight control rods are inoperable. Required Actions A.2 and A.3 of ITS 3.1.4 have been added to ensure these two requirements are maintained. This is an acceptable administrative change.

[A.6] CTS 3.1.3.4, Action b, provides exemption to the provisions of Specification 3.0.4. ITS LCO 3.0.4 incorporates the exemption and Section 3.0.a of this safety evaluation addresses this change. This is an acceptable administrative change.

3.1.5 Control Rod Scram Accumulators

[A.1] CTS 3.1.3.5, Applicability, specifies Modes 1, 2, and 5*, where the '*' refers to a footnote stating "At least the accumulator associated with each withdrawn control rod. Not applicable to control rods removed per

Specification 3.9.10.1 or 3.9.10.2." Also, CTS 3.1.3.5, Action b, specifies required actions for inoperable accumulators in Mode 5. The ITS moves the requirements associated with Mode 5 to ITS 3.9.5. This is an acceptable administrative change.

[A.2] ITS 3.1.5 adds an ACTIONS note allowing separate condition entry for each control rod scram accumulator. This note provides more explicit instructions for applying the ACTIONS of the ITS. In conjunction with ITS 1.3, "Completion Times," this Note provides direction consistent with the intent of the CTS ACTIONS for inoperable control rod accumulators. Upon discovering each inoperable accumulator, the ITS requires applying each specified ACTION, regardless of previous application to other inoperable accumulators. This is an acceptable administrative change.

[A.3; not significant, delete from SER] ~~CTS LCO 3.1.3.5, Action a.1.a, requires restoring the inoperable accumulator to OPERABLE status. The ITS deletes this requirement because all ACTIONS imply restoring to OPERABLE status. Consistent with the STS, this is an acceptable administrative change.~~

[A.4; not significant, consider excluding from SER] CTS LCO 3.1.3.5, Action a.1, contains an action of "Otherwise be in at least HOT SHUTDOWN within the next 12 hours." The ITS deletes this action because no circumstances preclude the possibility of complying with actions to declare the control rod accumulator inoperable or "slow' per ITS LCO 3.1.5, Action A.1. Therefore, it is not necessary to include this instance of shutting down to HOT SHUTDOWN. This is an acceptable administrative change.

[A.5] CTS 3.1.3.5, Action a.2.a, requires verifying a control rod drive (CRD) pump is operating by inserting at least one withdrawn control rod at least one notch. ACTION B.1 of ITS 3.1.5, requires restoring charging water header pressure to at least 940 psig. These methods both assure that sufficient control rod drive pressure exists to insert control rods. The proposed method for determining charging water header pressure provides added assurance that the charging water pressure is sufficient to insert all control rods, whereas the existing method only assures that one rod can be inserted. Since the change is exchanging one verification method for another equivalent (or better) method, this is an acceptable administrative change.

[A.6; not significant, consider excluding from SER] CTS 3.1.3.5, Action a.2.b, requires inserting and disarming the inoperable control rods. The ITS 3.1.5 ACTIONS for inoperable accumulators do not repeat the ACTIONS for an inoperable control rod. Once declared inoperable, the ACTIONS for an inoperable control rod are required to be taken. ITS 3.1.3, Required Actions C.2, C.3 and F.1, contain these requirements for inoperable control rods. Since this is a difference in presentation only, it is an acceptable administrative change.

[A.7] CTS 3.1.3.5, Action c, provides exemption to the provisions of Specification 3.0.4. ITS LCO 3.0.4 incorporates the exemption and Section 3.0.a of this safety evaluation addresses this change. This is an acceptable administrative change.

[A.8] CTS 4.1.3.5.a exempts performing the surveillance if the control rod is inserted and disarmed or if the control rod is scrammed. ITS SR 3.0.1 incorporates this requirement which exempts performance of surveillances on inoperable equipment. This is an acceptable administrative change.

3.1.7 Standby Liquid Control System

[A.1] CTS 4.1.5.b.3 verifies each automatic valve in the correct position. ITS deletes this requirement because the Standby Liquid Control (SLC) system has no automatic valves. This is an acceptable administrative change.

[A.2] CTS SR 4.1.5.b.3 requires verifying each valve is in its correct position. The SLC System is manually actuated (requiring reposition of valves and starting of the SLC pumps by the operator). In CTS, this is recognized and interpreted that "in the correct position" allows the valves to be in a non-accident position provided they can be realigned to the correct position. In ITS SR 3.1.7.5, the words "in the correct position" mean that the valves must be in the accident position, unless they can be automatically aligned on an accident signal (and if so, then they can be in the non-accident position). Thus, for the SLC System and other manually actuated systems, the additional words "or can be aligned to the correct position" have been added to clarify that it is permissible for this systems' valves to be in the non-accident position and still be considered OPERABLE. Since this is the current requirement, this change is considered administrative.

[A.3; not significant, consider excluding from SER] CTS Figure ~~3.1.7.1~~ 3.1.5-1 is a graph of allowable solution concentration vs. solution saturation temperature for the range of concentrations from ~~9.5% to 40%~~ 7.5% to 42%. The ITS uses a graph that only displays the acceptable range of 13.6% to 15.0% solution concentration. The ITS Figure 3.1.7-1 is a better presentation of the graph because it only displays allowable values for concentration, and is less confusing. This is an acceptable administrative change.

3.1.8 SDV Vent and Drain Valves

[A.1] The scram discharge volume (SDV) vent and drain requirements contained in CTS 3/4.1.3 are moved to new ITS 3.1.8, thereby requiring LCO and Applicability statements. The LCO and Applicability are consistent with CTS 3.1.3.1, the LCO previously containing SDV vent and drain valve requirements. This is an acceptable administrative change.

CTS 3/4.1.4.1 Rod Worth Minimizer

[A.1] CTS 3/4.1.4.1, Rod Worth Minimizer, is moved to ITS 3.3.2.1 in accordance with the format of the STS. Evaluations of any technical changes are in the ITS 3.3.2.1 evaluation. This is an acceptable administrative change.

CTS 3/4.1.4.3 Rod Block Monitor

[A.1] CTS 3/4.1.4.3, Rod Block Monitor, is moved to ITS 3.3.2.1 in accordance with the format of the STS. The evaluation of technical changes is included

in the ITS section 3.3.2.1 evaluation. This is an acceptable administrative change.

The preceding changes to CTS Section 3/4.1 result in limits that are unchanged from the current requirements cited. In some cases, these changes result in a clearer presentation of the intent of current requirements. Accordingly, these changes are purely administrative. Therefore, they are acceptable.

b. Less Restrictive Requirements

The licensee, in electing to implement the specifications of STS Section 3.1, "Reactivity Control Systems," proposed a number of less restrictive requirements than are allowed by CTS Section 3/4.1. These requirements are the following:

3.1.1 Shutdown Margin

[L.1] CTS 3.1.1, Action c, requires suspending all core alterations if SDM is less than specified, in Mode 5. The ITS modifies the requirement to suspend core alterations, "except for control rod insertion and fuel assembly removal." ITS 3.1.1 Required Action E.1, allows continuing activities that have the potential to correct the problem and restore a margin of safety to inadvertent or uncontrolled core criticality; therefore, the change is a conservative action and an acceptable less restrictive change.

[L.2] CTS 3.1.1, Action c, requires inserting all control rods if the SDM is less than specified. ITS 3.1.1, Required Action E.2, requires inserting control rods in cells with fuel assemblies installed. Control rods in core cells without fuel assemblies have negligible effect on the reactivity of the core, so inserting these control rods do not significantly improve SDM. In fact, due to a variety of considerations (i.e., location of blade guides, ongoing instrumentation maintenance, water chemistry), inserting these control rods may not be desirable. This is an acceptable less restrictive change.

[L.3] CTS 4.1.1 b requires verifying SDM within 500 MWD/T of the predicted exposure at which the SDM is equal to the limit. The ITS deletes this requirement. The SDM limits account for uncertainties and biases, and for fuel cycle changes. If the margin is met, as determined by the initial startup test and corroborated by the periodic reactivity anomaly surveillance, ITS SR 3.1.2.1 and CTS 4.1.2, there is no need for additional Surveillance Requirements. The requirement for maintaining SDM remains in the ITS; this is only deleting a specific verification of the SDM. This is an acceptable less restrictive change.

3.1.2 Reactivity Anomalies

[LA.1] CTS 3.1.2, Action a, requires determining and explaining, by analysis, the cause of the reactivity difference. This is moved to the ITS Bases. Restoring the reactivity difference to acceptable limits may include an evaluation of predicted core reactivity conditions to explain and correct the difference. The details associated with the method of restoring compliance

with the limit are not necessary to ensure the plant restores the limit in a timely manner. This is an acceptable less restrictive change.

[L.1] CTS 3.1.2, Action a, requires explaining and correcting a core reactivity difference within 12 hours; the ITS changes the time to 72 hours. Since SDM is demonstrated after startup by a test before reaching the conditions for this surveillance, the safety impact of the extended time for evaluation is negligible. ITS 3.1.2 Completion Time is based on the low probability of a DBA during this period. The 72 hours allow sufficient time to assess the physical condition of the reactor and complete the evaluation of the core design and safety analysis. Changing this value is an acceptable less restrictive change.

[L.2] CTS 4.1.2.a requires performing the surveillance following CORE ALTERATIONS. The phrase "~~following~~ fuel movement within the reactor pressure vessel or control rod replacement" replaces CORE ALTERATION. These are activities that occur during core alterations that can alter core reactivity, but do not have a reversible effect, such as control rod movement. ITS SR 3.1.2.1 requires performing the anomaly surveillance following the specific activities that could cause a change in the core reactivity. This change more accurately presents the CTS intent; therefore, this is an acceptable administrative change.

[L.3] CTS SR 4.1.2 b requires performing a reactivity anomaly surveillance at least once per 31 effective full power days. The ITS replaces the Frequency with 1000 MWD/T, during operations in Mode 1, in ITS SR 3.1.2.1. Both consider the relatively slow core reactivity change exposure and operating experience related to variations in core reactivity and are generally equivalent. Therefore, changing to a more commonly used value that is an acceptable less restrictive change.

3.1.3 Control Rod Operability

[LA.1] CTS 3.1.3.1, Actions a.1.b), b.1, and b.2; 3.1.3.6, Action a.2; and 3.1.3.7, Action a.3.b) include details for disarming control rod drives. These details are moved to the Bases because these details are not necessary to ensure the associated CRDs of inoperable control rods are disarmed. ITS 3.1.3 Required Actions A.2 and C.3 are adequate to ensure disarming of control rod drives associated with inoperable control rods. This is an acceptable less restrictive requirement because it moves the methods of performing actions to the Bases~~, which are controlled by the Bases Control Program contained in section 5 of the ITS~~.

[LA.2] CTS 3.1.3.7, Actions a.1 and a.2, specify two methods of determining control rod position. The details of these methods are moved to the Bases for ITS SR 3.1.3.1. This surveillance requires determining each control rod position every 24 hours. Movement of details of performing specific actions to the Bases is an acceptable less restrictive change.

[L.1] CTS 3.1.3.1, Action b.1.a), requires verifying inoperable control rods are separated from other inoperable control rods by at least two control cells no matter what the reactor's thermal power level. If the inoperable control

rods do not meet separation criteria then the inoperable control rods must be inserted. ITS 3.1.3, Required Action C.2, requires insertion of inoperable control rods. In the ITS, all inoperable control rods which will not scram or cannot be verified to scram (e.g., loss of position indication) are required to be fully inserted, and therefore, cannot impact scram reactivity. Therefore, scram reactivity remains preserved at all power levels. Implementation of ITS 3.1.3, Action D, is only ~~allowed~~ applicable below 10% thermal power because of control rod drop accident (CRDA) concerns related to control rod worth. Above 10% power, control rod worths that are of concern for the CRDA are not possible. ITS 3.1.3, Action D, allows 4 hours to correct the situation prior to commencing a required shutdown, while the CTS (ACTION a.1) allows 1 hour. This time extension is acceptable given the low probability of a CRDA during this brief proposed time extension, and the desire not to impose excessive time constraints on operator actions that could lead to hasty corrective actions. The proposed extension to this action does not represent a significant safety concern. This is an acceptable less restrictive change.

[L.2] CTS 3.1.3.1, Action a.1, requires disarming a stuck control rod within 1 hour. The required time for disarming the control rod is extended to 2 hours to account for the actual expected time to perform the action. ITS 3.1.3, Completion Time for Required Action A.2, is acceptable as a less restrictive change because the action is performed for protection of the control rod drive mechanism and does not adversely affect reactor safety.

[L.3] CTS 3.1.3.1, Action a.~~1~~ 2, requires restoring the stuck rod to operable status within 48 hours or going to HOT SHUTDOWN within the next 12 hours. This is revised to allow continuous operation with one stuck rod provided the other action requirements of ITS 3.1.3, Condition A, are met. ITS 3.1.3 allowance for continuous operation with a single stuck control rod is acceptable because Required Actions A.1, A.3, and A.4 verify rod separation criteria are met, SDM is maintained and all other withdrawn control rods can be moved. With a single withdrawn control rod stuck, the remaining OPERABLE control rods can provide the required scram and shutdown reactivity. During a transient, a single stuck control rod in addition to an assumed single failure will have no significant impact on the established operating limits. Therefore, this is an acceptable less restrictive change.

[L.4] In ~~the~~ CTS 3.1.3.6, ACTION a.~~2~~ for an uncoupled control rod, two hours is provided to recouple and, if unsuccessful, insert the control rod before entering CTS 3.1.3.1, ACTION b.1. CTS 3.1.3.1, ACTION b.1, provides an additional 1 hour to disarm the control rod (a total of 3 hours to insert and disarm). In the ITS all inoperable non-stuck control rods are required to be fully inserted and disarmed. The time allowed to complete the insertion is proposed to be extended to 3 hours for all cases (i.e, uncoupled control rods, loss of position indication, excessive scram speed, certain combinations of conditions with a low pressure on a control rod scram accumulator). The three hours provides a minimal time to attempt restoration prior to inserting and disarming. Since inoperable non-stuck control rods do not represent a loss of SDM, and are limited to a total of no more than 8 inoperable control rods by ITS LCO 3.1.3, the extended time does not represent a significant safety concern.

In the CTS, the disarming of a control rod must occur within the same time allotted to insert the control rod. Disarming a control rod can involve personnel actions by other than control room operating personnel. This process requires coordination of personnel and preparation of equipment, and potentially requires anti-contamination "dress-out," in addition to the actual procedure of disarming the control rod. In recognition of the potential for excessive haste required to complete this task, the ITS provides an additional hour to complete disarming a control rod, for a total of four hours. The proposed 4 hour time does not represent a significant safety concern since the control rod is already in its required position (in accordance with other actions), and the action to disarm is solely a mechanism for precluding the potential for future misoperation. This is an acceptable less restrictive change.

[L.5] CTS 4.1.3.1.2.a requires moving each partially or fully withdrawn control rod one notch to demonstrate operability at least once per 7 days. The frequency for this surveillance is extended to 31 days for partially withdrawn control rods. The ITS SR 3.1.3.1 Frequency of 31 days is acceptable because of the following: 1) fully withdrawn control rods are exercised weekly and are a significant sample size of the control rods; 2) the requirement to verify operability of all control rods if a stuck control rod is discovered; and 3) the rare occurrence of stuck rods during operation. This is an acceptable less restrictive change.

[L.6] CTS 4.1.3.1.2.b requires moving withdrawn control rods one notch to prove operability at least once per 24 hours with a stuck control rod. This is revised to only require performing the operability tests once within 24 hours of discovering a stuck control rod. ITS 3.1.3, Required Action A.3, requires performing ITS SR 3.1.3.2 and ITS SR 3.1.3.3, control rod notch tests, to ensure that a common mode problem does not exist and that control rod insertion capability remains. Performing the control rod notch test once is acceptable because it accomplished the same objective as the daily notch test of the CTS without requiring the additional testing. This is an acceptable less restrictive change.

[L.7] CTS 4.1.1.c requires verifying acceptable SDM within 12 hours of detecting a stuck control rod. The time allowance for verifying acceptable SDM is extended to 72 hours in ITS 3.1.3, Required Action A.4. This is acceptable because failure to reach COLD SHUTDOWN is only likely if an additional control rod adjacent to the stuck control rod also fails to insert during a scram. Even with this postulated additional single failure, sufficient reactivity control remains to reach and maintain HOT SHUTDOWN conditions. Also, ITS 3.1.3 requires a notch test for each remaining withdrawn control rod to ensure that no additional control rods are stuck. Given these considerations, the extended time (72 hours versus the current 12 hours) allowed to demonstrate SHUTDOWN MARGIN provides a reasonable time to perform the analysis or test. This is an acceptable less restrictive change.

[L.8] CTS 3.1.3.2, Action a.2, requires performing the scram time surveillances of CTS 4.1.3.2.c on a 60 day frequency when operation continues with average scram insertion time(s) greater than the limit. The ITS deletes testing on a 60 day frequency. During normal power operating conditions, more

frequent scram testing is not desirable because it is a significant perturbation to steady state operation, involving significant power reductions, abnormal control rod patterns, and abnormal control rod drive hydraulic system configurations. Because of the frequent testing of control rod insertion capability (SR 3.1.3.2 and SR 3.1.3.3) and accumulator OPERABILITY (SR 3.1.5.1), and the operating history demonstrating a high degree of reliability, more frequent scram time testing is not deemed necessary to assure safe plant operation. This is an acceptable less restrictive change.

[L.9] CTS 3.1.3.6, Applicability, specifies OPERATIONAL CONDITIONS 1, 2, and 5* with the '*' referring to the footnote "At least each withdrawn control rod. Not applicable to control rods removed per Specification 3.9.10.1 or 3.9.10.2." Also, CTS 3.1.3.6, Action b, requires taking specific action for an uncoupled control rod in OPERATIONAL CONDITION 5*. Applicability to OPERATIONAL CONDITION 5* is deleted. This is acceptable because ITS Mode 5 requires the mode switch to be in Shutdown or Refuel position. In Shutdown no control rods can be withdrawn and in Refuel only one control rod can be withdrawn. Coupling requirements during refueling are not necessary since only one control rod can be withdrawn from core cells containing fuel assemblies. The probability and consequences of a single control rod dropping from its fully inserted position to the withdrawn position of the control rod drive are negligible (i.e., reactor will remain subcritical and within the limits of the CRDA assumptions). This is an acceptable less restrictive change.

[L.10] CTS 3.1.3.6, Action a.2, requires inserting and disarming the uncoupled control rod if recoupling is not accomplished on the first attempt or if the RWM does not permit recoupling. ITS 3.1.3, Required Action C.2, retains the requirement to insert the uncoupled control rod and provides a time allowance of 3 hours. This will require bypassing the RWM and operation with an out-of-sequence control rod. Therefore, coupling attempts are allowed regardless of the RWM allowance because of the short time allowed. The NOTE in ITS 3.1.3, Required Action C.2, allows bypassing the RWM. If unable to restore coupling or to insert the control rod within three hours, ITS 3.1.3, Required Action F, requires going to HOT SHUTDOWN. Allowing unrestricted coupling attempts within 3 hours is an acceptable less restrictive change.

[L.12] CTS 3.1.3.6, Action a.1.a), and CTS 4.1.3.6 ~~requires~~ require verifying recoupling or coupling by observing any indicated response of the nuclear instrumentation. This verification is deleted in the ITS because this is not a positive check that the control rod is coupled. If sufficient friction is not present an uncoupled rod would follow the drive being withdrawn and provide the same neutron indication as a coupled rod. ITS SR 3.1.3.5 requires verification that a control rod does not go to the withdrawn overtravel position. The overtravel feature provides a positive check of coupling integrity since only an uncoupled control rod can go to the overtravel position. Performance of ITS SR 3.1.3.5 provides adequate assurance that the control rod is coupled. This is an acceptable less restrictive change.

[L.13] CTS 4.1.3.7.b and 4.1.3.7.c require determining that the control rod position indication system is OPERABLE during performance of CTS 4.1.3.1.2

(control rod movement tests) and CTS 4.1.3.6.b (control rod coupling verifications). The CTS surveillances for verifying rod position indication OPERABILITY during other surveillances is deleted. If position indication is not available, ITS SR 3.1.3.2, SR 3.1.3.3, and SR 3.1.3.5 (control rod movement tests and control rod coupling verifications) cannot be satisfied and appropriate actions will be taken for inoperable control rods in accordance with the ACTIONS of ITS 3.1.3. As a result, the requirements are adequately addressed for the control rod position indication system by Specification 3.1.3 and associated SR 3.1.3.2, SR 3.1.3.3, and SR 3.1.3.5. This is an acceptable less restrictive change.

3.1.4 Control Rod Scram Times

[LA.1] CTS 4.1.3.2.c, requires testing at least 10% of the control rods on a rotating basis. ITS SR 3.1.4.2 changes this requirement to verify a representative sample as defined by the Bases for SR 3.1.4.2. [~~The details of what constitutes a representative sample are moved to the Bases.~~] Specification 3.1.4 and associated SR 3.1.4.2 are adequate to ensure scram time testing is performed. This is an acceptable less restrictive change to the TS.

[L.1] CTS 3.1.3.4, Action a.2~~,~~.c requires performing the scram time surveillances of CTS 4.1.3.2 on a 60-day frequency when operation continues with average scram insertion time(s) greater than the limit. The ITS deletes testing on a 60-day frequency. During normal power operating conditions, more frequent scram testing is not desirable because it is a significant perturbation to steady state operation, which involves significant power reductions, requires abnormal control rod patterns, and requires abnormal control rod drive hydraulic system configurations. Because of the frequent control rod insertion capability testing (SR 3.1.3.2 and SR 3.1.3.3), accumulator OPERABILITY testing (SR 3.1.5.1), and an operating history demonstrating a high degree of reliability, more frequent scram time testing is not necessary to assure safe plant operation. This is an acceptable less restrictive change.

3.1.5 Control Rod Scram Accumulators

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[LA.1] CTS 3.1.3.5, Action a.2.b, provides details for disarming control rod drives. These details are moved to the Bases for ITS 3.1.~~5~~3. ITS 3.1.3, Required Actions A.2 and C.3, ensure disarming control rod drives associated with inoperable control rods. ~~This is similar to LA.1 to LCO 3.1.3.~~ This is an acceptable less restrictive requirement~~because it moves the methods for performing actions to the Bases, which are controlled by the Bases Control Program in ITS Section 5~~.

[LC.1] CTS 4.1.3.5.b requires performing surveillances on pressure and leak detection instrumentation. The scram accumulator leak detectors, pressure detectors, and associated alarm do not necessarily relate directly to accumulator OPERABILITY, and are removed from the TS. These requirements are adequately addressed in plant procedures and policies~~that 10 CFR 50.59 control~~. This is an acceptable less restrictive change.

[L.1] CTS 3.1.3.5, Action a.1.b, requires declaring a control rod inoperable with an inoperable accumulator but allows the control rod to remain withdrawn and not disarmed. ITS 3.1.5, Required Actions A.1 and B.2.1, provides the flexibility to declare to control rod "slow" within certain limitations. At reactor pressures greater than 900 psig the control rod will scram even without the associated accumulator, although probably not within the required scram times. Therefore, the ITS provides the option to declare a control rod with an inoperable accumulator "slow" when reactor pressure is acceptable. The ITS 3.1.3 and 3.1.4 actions for a "slow" control rod, with the restrictions included in the ITS and the ITS actions for "slow" control rods, are essentially equivalent to the CTS required actions for an inoperable control rod due to an inoperable accumulator. Insert L.1a ITS 3.1.5, Required Actions B.2.1, B.2.2, and C.2, will allow one hour to declare a control rod, with an inoperable accumulator, inoperable or "slow" which is a reasonable time to attempt investigating and restoring an inoperable accumulator. ITS 3.1.5, Required Actions B.1 and Condition C, does not allow the ~~one-hour time limit for declaring a~~ control rod to be declared inoperable or "slow" with insufficient ~~reactor pressure or~~ charging header pressure to assure the rods with inoperable accumulators can be scrammed. The ITS requires immediate shutdown in this case. This less restrictive change is acceptable. Insert L.1b

[L.2] CTS 3.1.3.5, Action a.2, does not specify a time limit for declaring inoperable multiple control rods with inoperable accumulators; therefore, the CTS time limit is assumed to be immediate. The ITS change allows one hour before declaring the rod "slow" or inoperable. ITS 3.1.1, Completion Times for Required Actions B.2.1, B.2.2, and C.2, allows a reasonable amount of time for investigating and restoring inoperable accumulator(s). This less restrictive requirement is limited to times when sufficient reactor pressure or charging header pressure exists to assure that the control rods can be inserted. This is an acceptable less restrictive change.

[L.3] CTS 3.1.3.5, Action a.2.a), requires immediately verifying at least one control rod drive (CRD) pump is operating or placing the reactor mode switch in the Shutdown position. The ITS allows 20 minutes for restoring charging header pressure to greater than 940 psig when more than one control rod accumulator is inoperable, provided reactor pressure is ≥900 psig. ITS 3.1.5, Required Action B.1, is acceptable with a 20 minute completion time when adequate reactor pressure exists to assure that the control rods will be inserted. For example, the twenty minutes allows time for restoring a CRD pump which avoids an unnecessary reactor scram, if a lost charging pump is the cause of the inoperable accumulators. This is an acceptable less restrictive change.

[L.4] CTS 4.1.3.5.b.2 requires measuring and recording the time, up to 10 minutes, that the accumulators remain above the pressure alarm setpoint with no CRD pump running. The ITS deletes this surveillance requirement because there is no accident or transient analytical assumption that the control rod scram accumulator check valves maintain accumulator pressure for a specified time period with no CRD pump operating. The reactor must be scrammed per ITS 3.1.5, Required Action D.1, within 20 minutes of two accumulators becoming inoperable if the CRD charging header pressure is not restored to greater than 940 psig (i.e., no operating CRD pump). Removing the CTS surveillance requirement is an acceptable less restrictive change.

INSERT L.1a to subsection 3.1.b, LCO 3.1.5

CTS 3.1.3.5 only allows one control rod accumulator to be inoperable. When more than one accumulator is inoperable, an LCO 3.0.3 entry is required.

INSERT L.1b to subsection 3.1.b, LCO 3.1.5

allows only 20 minutes to restore charging water pressure if reactor pressure is $\geq$ 900 psig, and no time if reactor pressure is < 900 psig. When this time expires, the ITS

3.1.7 Standby Liquid Control System

[LA.1] The requirements of CTS 4.1.5.d to perform the tests of the SLC system "during shutdown" is moved to plant procedures ~~controlled by 10 CFR 50.59~~. ~~The testing in CTS 4.1.5.d~~ [proposed SR 3.1.7.7 and SR 3.1.7.8] ~~is proposed~~ to ~~be relocated to plant procedures~~ in accordance with the guidance of Generic Letter 91-04. ITS SR 3.1.7.7 and SR 3.1.7.8 adequately ensures the test is performed; therefore, including the details of test performance in the ITS is not necessary. This is an acceptable less restrictive change.

[LA.2] CTS 4.1.5.d.1, specifies the system flow must be through an explosive valve. This SR also specifies the method for selecting the replacement explosive valve. These requirements are moved to the ITS Bases. ITS SR 3.1.7.8 adequately ensures system flow test performance; therefore, including the details of test performance and selecting the replacement valve in the ITS is not necessary. ~~The Bases Control Program in ITS Section 5 controls the Bases.~~ This is an acceptable less restrictive change.

[LA.3] CTS 4.1.5.d.1 specifies performing the SLC system flow test by pumping demineralized water into the reactor vessel and 4.1.5.d.3 specifies verifying the storage tank and pump suction piping unblocked by pumping from the storage tank to the test tank and flushing the piping with demineralized water. These requirements are moved to the Bases. ITS SR 3.1.7.7 and SR 3.1.7.8 ensure test performance; therefore, including the details of test performance in the ITS is not necessary. This is an acceptable less restrictive change.

[LA.4] CTS 4.1.5.d2 requires demonstrating the operability of the SLC pump relief valve. The IST Program, required by 10 CFR 50.55a, provides requirements for the testing of all ASME Code Class 1, 2, and 3 valves in accordance with Section XI of the ASME Code. This test is moved to the IST program, prescribed in ITS 5.5.6, which is an acceptable less restrictive change.

[LA.5] CTS Figure 3.1.5-2 shows the setpoint for the low and high storage tank level alarms. These details of system design are moved to the FSAR. ITS LCO 3.1.7 and the definition of OPERABILITY adequately define the requirements that the SLC system must meet to be operable. ~~Changes to the FSAR are control by 10 CFR 50.59~~. This is an acceptable less restrictive change.

[LD.1, revise per Tech Branch Review] 3 The Frequencies for performing current Surveillances 4.1.5.d.1 and 4.1.5.d.~~2~~ (proposed SRs 3.1.7.7 and 3.1.7.8) have been extended from 18 months to 24 months to facilitate a change to the WNP-2 maintenance cycle from 12 months to 24 months. The current conditions in the northwest require that WNP-2 shut down each spring for an annual maintenance and refueling outage. Currently, most of the current Surveillances that are required to be performed on an 18 month interval are performed annually because they must be performed while the plant is shut down. This has resulted in increased testing, with a resultant increase in cost and personnel exposure, with no comparable increase in reliability or safety. This change is being proposed to support limiting the amount of surveillance testing that must be performed each maintenance and refueling outage. The proposed change will allow these Surveillances to extend their Surveillance Frequency from the

current 18 month Surveillance Frequency (i.e., a maximum of 22.5 months accounting for the allowable grace period specified in current Specification 4.0.2 and proposed SR 3.0.2) to a 24 month Surveillance Frequency (i.e., a maximum of 30 months accounting for the allowable grace period specified in current Specification 4.0.2 and proposed SR 3.0.2). This proposed change was evaluated in accordance with the guidance provided in NRC Generic Letter No. 91-04, "Changes in Technical Specification Surveillance Intervals to Accommodate a 24-Month Fuel Cycle," dated April 2, 1991. Reviews of historical maintenance and surveillance data have shown that these tests normally pass their Surveillances at the current Frequency. An evaluation has been performed using this data, and it has been determined that the effect on safety due to the extended Surveillance Frequency will be small. In addition, the proposed 24 month Surveillance Frequencies, if performed at the maximum interval allowed by proposed SR 3.0.2 (30 months) do not invalidate any assumptions in the plant licensing basis.

[L.1] CTS 3.1.5, Applicability, specifies OPERATIONAL CONDITION 5*, where the "*" refers to a footnote stating "With any control rod withdrawn. Not applicable to control rods removed per Specification 3.9.10.1 or 3.9.10.2." The ITS deletes applicability to Mode 5 because ITS LCO 3.1.1, Shutdown Margin, assures that the reactor remains subcritical with one control rod withdrawn. In Mode 5 only one control rod can be withdrawn. This is an acceptable less restrictive change. Insert L.1

[L.2] CTS 4.1.5.a.2 verifies the available volume of sodium pentaborate is within the CTS Figure 3.1.5-2 limits. The ITS includes the value for the low level limit in ITS SR 3.1.7.1 and deletes Figure 3.1.5-2, including the high level limit in CTS, as indicated by the high level alarm. The high level alarm is based on preventing an overflow of the storage tank; therefore, it is not necessary to assure SLC OPERABILITY. In addition, ITS SR 3.1.7.4 verifies the concentration of boron in solution, which along with ITS SR 3.1.7.1 verifies SLC storage tank OPERABILITY. This is an acceptable less restrictive change.

[L.3] CTS 4.1.5.b.2 requires determining that the available weight of sodium pentaborate is greater than or equal to 5500 lbs. The ITS deletes this requirement because the minimum volume allowed by ITS SR 3.1.7.1 and the minimum concentration allowed by ITS SR 3.1.7.4 ensures 5536 lbs. of available sodium pentaborate in the SLC storage tank. Therefore, these surveillances ensure that sodium pentaborate in the SLC storage tank is ≥ 5500 lbs; therefore, including the CTS 4.1.5.b.2 requirement would be redundant. This is an acceptable less restrictive change.

[L.4] CTS 4.1.5.d.4 verifies the operability of the storage tank heaters by verifying the expected temperature rise of the solution after energizing the heaters. The ITS deletes this SR because ITS SR 3.1.7.2 verifies the capability of the heaters to maintain the sodium pentaborate solution within limits. This is an acceptable less restrictive change.

3.1.8 SDV Vent and Drain Valves

[LD.1, revise per Tech Branch review] The Frequency for performing current

INSERT L.1 to subsection 3.1.b, LCO 3.1.7

Also, CTS 3.1.5, Action b requires taking specific action for an inoperable SLC System in OPERATIONAL CONDITION 5*.

Surveillance 4.1.3.1.4.a (proposed SR 3.1.8.3) has been extended from 18 months to 24 months to facilitate a change to the WNP-2 maintenance cycle from 12 months to 24 months. The current conditions in the northwest require that WNP-2 shut down each spring for an annual maintenance and refueling outage. Currently, most of the current Surveillances that are required to be performed on an 18 month interval are performed annually because they must be performed while the plant is shut down. This has resulted in increased testing, with a resultant increase in cost and personnel exposure, with no comparable increase in reliability or safety. This change is being proposed to support limiting the amount of surveillance testing that must be performed each maintenance and refueling outage. The proposed change will allow this Surveillance to extend the Surveillance Frequency from the current 18 month Surveillance Frequency (i.e., a maximum of 22.5 months accounting for the allowable grace period specified in current Specification 4.0.2 and proposed SR 3.0.2) to a 24 month Surveillance Frequency (i.e., a maximum of 30 months accounting for the allowable grace period specified in current Specification 4.0.2 and proposed SR 3.0.2). This proposed change was evaluated in accordance with the guidance provided in NRC Generic Letter No. 91-04, "Changes in Technical Specification Surveillance Intervals to Accommodate a 24-Month Fuel Cycle," dated April 2, 1991. Reviews of historical maintenance and surveillance data have shown that this test normally passes the Surveillance at the current Frequency. An evaluation has been performed using this data, and it has been determined that the effect on safety due to the extended Surveillance Frequency will be small. In addition, the proposed 24 month Surveillance Frequency, if performed at the maximum interval allowed by proposed SR 3.0.2 (30 months) does not invalidate any assumptions in the plant licensing basis.

THIS SDV-CFT for Rod BLOCKS- NOT DISCUSSED IN ITS 3.3.2.1

[L.1] CTS 4.1.3.~~4.b~~.1.4.b requires performing a CHANNEL FUNCTIONAL TEST of the scram discharge volume (SDV) scram and control rod block level instrumentation following a scram from a pressurized condition. The ITS deletes the scram instrumentation portion of the SR because of historical evidence, maintenance and SR data, that the SR has never failed because of a scram from pressurized conditions. Additionally, ITS 3.3.1.1 (CTS 3.3.1) requires performing a CHANNEL FUNCTIONAL TEST of the scram instrumentation on a 92 day Frequency. Specifications for control rod block instrumentation associated with the SDV are moved to plant specific controls as evaluated in section ITS 3.3.2.1. This is an acceptable less restrictive change.

CTS 3/4.1.3.8 Control Rod Drive Housing Support

[L.1] CTS ~~LCO~~ 3/4.1.3.8 delineates the requirements for the control rod drive housing support. ITS implements the control rod drive housing support in the control rod OPERABILITY requirements of ITS LCO 3.1.3. ITS LCO 3.1.3 contains the CTS 3.1.3.8 applicability to OPERATIONAL CONDITIONS 1 and 2. Post-maintenance inspections conducted through plant configuration management control have the same function as the current Technical Specifications requirement. Since work is not normally performed on the CRD housing support at power, and checks on its installation are not made at power there is no current requirement to verify CRD housing support installation in power operating conditions. Therefore, the deletion of this current Technical Specifications is acceptable based on use of plant configuration management control to ensure proper CRD housing support installation.

CTS 3/4.1.4.2 Rod Sequence Control System

[L.1] CTS 3/4.1.4.2 contains specifications for RSCS that the ITS deletes. Deletion of the RSCS is acceptable because of the following reasons: 1) RSCS provides a similar function as the RWM and the ITS retains the requirements for the RWM; 2) An NRC Safety Evaluation Report approves elimination of the RSCS while retaining the RWM as a backup to the operator for control rod pattern, and the changes made in the ITS conversion are consistent with the guidelines of the SER (NRC Safety Evaluation Report, dated December 27, 1987, approving elimination of the RSCS while retaining the RWM to provide backup to the operator for control rod pattern control, in support of Amendment 17 of General Electric Topical Report NEDE-24011-P-A, "General Electric Standard Application for Reactor Fuel,"); 3) ITS LCO 3.3.2.1 requires another operator or qualified member of the technical staff verify rod moves when the RWM is inoperable; and 4) ITS 3.3.2.1 limits the number of startups without the RWM to one per calendar year, and it only allows the bypassing the RWM after 12 control rods have been withdrawn. This is an acceptable less restrictive change.

CTS 3/4.1.6 Feedwater Temperature

[LA.1] CTS 3/4.1.6, Feedwater Temperature, specifies the limitations when lowering feedwater temperature for cycle extension. The ITS conversion moved the requirements to the Core Operating Limits Report (COLR) which is controlled by ITS 5.6.5. The purpose of this allowance is to extend the operating cycle by lowering feedwater temperature for reactivity addition to compensate for the reactivity loss due to fuel depletion. Prior to reaching end of cycle exposure, operation with reduced feedwater temperature is allowed and controlled by plant procedures. This is considered to be acceptable since the short term effect of the increased subcooling is to more strongly bottom peak the axial power shape allowing a scram to suppress the flux faster. Compensation for the long term effect of a pronounced bottom burn can be made by rod pattern adjustments and axial flux shape monitoring. After reaching end of cycle exposure, final feedwater temperature reduction operation is allowed with reduced feedwater temperatures provided the feedwater temperature is maintained ≥ 355°F as assumed in the final feedwater temperature reduction transient analyses. CTS 3/4.1.6 allows modification to a limit (feedwater temperature) that is not controlled by the Technical Specifications. Since the allowance to modify the feedwater temperature limit is not directly applicable to any Technical Specification, it is not necessary to be maintained in the Technical Specifications. This is an acceptable removal of details not required in TS.

The less restrictive requirements described in the preceding material have been found by the staff to be acceptable because they do not present a significant safety question in the operation of the plant. The TS requirements that remain are consistent with current licensing practices, operating experience and plant accident and transient analyses, and provide reasonable assurance that the public health and safety will be protected.

c. More Restrictive Requirements

The licensee, in electing to implement the specifications of STS Section 3.1, "Reactivity Control Systems," proposed a number of more restrictive requirements than are allowed by CTS Section 3/4.1. These requirements are the following:

3.1.1 Shutdown Margin

[M.1] An additional surveillance frequency for SDM verification is added to require a~~n~~ SDM test be performed prior to each in vessel fuel movement during fuel loading sequence in ITS SR 3.1.1.1. This additional verification assures the required SDM is maintained during fuel loading. Since SDM is assumed in several refueling mode analyses in the FSAR, assurance that intermediate fuel loading patterns have adequate SDM is necessary. This change imposes a requirement where none is explicitly provided in the CTS. This will have no adverse effect on plant safety~~)~~, since compliance with SDM limits is required in both the CTS and ITS~~)~~.

3.1.3 Control Rod Operability

[M.1] ITS 3.1.3, Condition D, is incorporating the requirements for compliance with the Banked Position~~/~~Withdrawal System (BPWS) into TS and is applicable to all control rods whether withdrawn or inserted. CTS 3.1.3.1, Actions a and b, requires action only for withdrawn control rods; therefore this is a more restrictive change. Compliance with the BPWS is required for both inserted and withdrawn control rods so this change enhances reactor safety. This is acceptable.

[M.2] CTS 3.1.3, Action a, addresses a single stuck rod but an LCO 3.0.3 entry is required for more than one stuck rod. This requirement is now explicitly stated as ITS 3.1.3, Required Action B. Because the ITS allows separate entry for each stuck control rod the actions of ITS 3.1.3, Condition A, are performed in addition to the actions of Condition B. ITS 3.1.3, Required Action A.2, now requires disarming the control rod drive of all stuck CRs, and therefore is a more restrictive requirement. The additional action provides protection for the control rod drive if there is a scram during the shutdown. It has no adverse effect on plant safety but it does provide additional protection for plant equipment. This is an acceptable more restrictive change.

[M.3] ITS 3.1.3, Required Action C.2, requires insertion of inoperable control rods which is more restrictive than the CTS which allows the inoperable control rods to remain withdrawn if the ability to insert the rod is verified. Inserting all inoperable control rods will enhance plant safety; therefore, this is an acceptable more restrictive change.

[M.4] ITS 3.1.3, Action E, incorporates the inoperable control rod separation criteria requirements of the BPWS analysis into the TS. Currently, the only separation criterion in Technical Specifications is to ensure all inoperable control rods are separated by two OPERABLE control rods. The current BPWS analysis also requires that no more than three inoperable control rods are in any one rod group. Therefore, ACTION E has been added to provide appropriate actions for when this occurs. This is a more restrictive TS requirement which

will have no adverse effect on plant safety. This change is an acceptable more restrictive change.

[M.5] ITS SR 3.1.3.2 and SR 3.1.3.3 demonstrate control rod operability by insertion of the control rods which is more restrictive than CTS 4.1.3.1.2 that allows demonstrating operability by moving the control rods in either direction. Inserting the control rod better proves the ability of the control rod to perform its scram function. This change will enhance plant safety and is an acceptable more restrictive change.

[M.6] ITS SR 3.1.3.4 measures the time from full out to position 5 for scram insertion times. This is more restrictive than measuring the time from full out to position 6. The change, which conforms to the STS, will have no adverse effect on plant safety and is an acceptable more restrictive change.

CTS 3.1.3.7, Action a.3.a)1) requires

[M.7] ITS 3.1.3, Required Action C.2, requires inserting and disarming inoperable control rods. ~~Item A.12 evaluates~~ declaring rods without position indication inoperable. CTS 3.1.3.1, Action b.1.b), allows the control rods with failed indication to remain withdrawn if power is below the low power setpoint of the rod sequence control system (RSCS). By declaring control rods without rod position indication inoperable, ITS imposes a more restrictive requirement to insert and disarm the control the rods. This is an acceptable more restrictive change.

3.1.4 Control Rod Scram Times

[M.1] CTS 4.1.3.2 requires testing control rods with reactor coolant pressure greater than or equal to 950 psig. The pressure at which the control rods must be tested has been changed in the ITS to ≥ 800 psig. This pressure corresponds to the limiting pressure for CRD scram testing: the maximum scram times are experienced at or below this pressure ~~cannot be utilized to verify scram times at rated pressure~~ because of the competing effects of the reactor vessel pressure and the accumulator pressure scram forces. The scram time requirements, applied at 800 psig, are related to transients analyzed at rated reactor pressure (assumed to be > 950 psig). Scram times demonstrated at 800 psig are conservative with respect to the conditions assumed in the design basis transient and accident analyses. This change is therefore an acceptable more restrictive change, and is consistent with NUREG-1433 (the applicable STS for this system).

[M.2] The allowance of CTS 3.1.3.4, Action a 1, to declare slow control rods operable if an analysis determines that the required scram reactivity remains for the slow four control rod group is deleted. This has a positive effect on plant safety because no longer can an unlimited amount of slow two-by-two arrays provided the safety analysis is reperformed each time while the requirement for shutdown based on number of "slow" and inoperable control rods remains the same in the ITS as in the CTS. This is an acceptable more restrictive change.

3.1.5 Control Rod Scram Accumulators

[M.1] ITS 3.1.5, Condition C, imposes additional restrictions on operation if

"One or more control rod scram accumulators inoperable with reactor steam dome pressure < 900 psig." With reactor pressure less than 900 psig and charging header pressure less than 940, the ITS requires verifying all control rods associated with inoperable accumulators be fully inserted. If this requirement cannot be met, ITS 3.1.3, Required Action D.1, requires immediately placing the mode switch to shutdown. Also, with reactor pressure less than 900 psig and a single control rod with an inoperable accumulator, ITS 3.1.3, Required Action C.2, imposes a more restrictive time limit of one hour for declaring the rod inoperable, for which the CTS previously allowed up to 8 hours. These additional ITS action requirements are conservative when both reactor pressure and charging header pressure are below values that assure that the control rods can be inserted. This has a positive effect on plant safety and is an acceptable more restrictive change.

3.1.6 Rod pattern Control

[M.1] A new specification, ITS 3.1.6, is added which requires compliance with the Banked Position Withdrawal Sequence (BPWS). This addition to the CTS incorporates existing plant requirements for compliance with the BPWS. Adding this change increases BPWS requirements and has a positive affect on plant safety and is an acceptable more restrictive change.

3.1.7 Standby Liquid Control System

[M.1] ITS SR 3.1.7.8 adds a Frequency of once within 24 hours after restoring solution temperature within the limits of Figure 3.1.7-1. This SR verifies the heat traced piping between the storage tank and the pump suction valve is heat traced and remains unblocked from the precipitation of the boron in the heat traced piping. This is an acceptable addition.

The staff has reviewed these more restrictive requirements and believes they strengthen the CTS. Therefore, these more restrictive requirements are acceptable.

d. **Significant Differences from the STS (NUREG-1434)**

The licensee, in electing to adopt the specifications of STS Section 3.1, "Reactivity Control Systems," proposed the following differences between the ITS and the STS.

3.1.3 Control Rod Operability & 3.1.6 Rod Pattern Control

[JFD 2] The WNP-2 rod pattern control design does not include a Rod Action Control System, but a rod worth minimizer (RWM), similar to the BWR/4 design. Therefore, the Notes have been modified to reflect the RWM design, and are consistent with the NUREG-1433.

ALSO Applicable to 3.1.5

3.1.4 Control Rod Scram Times

[JFD 3] STS 3.1.4 and the associated ACTIONS have been modified to be consistent with the current WNP-2 Licensing Basis, as it relates to scram

times. The concept of a "slow" control rod has been retained. The current WNP-2 Licensing Basis scram times are based on two-by-two arrays, and allows a total combination of eight "slow" and inoperable control rods. The ACTIONS of both STS 3.1.4 (Required Action A.2), as well as STS 3.1.3 (Required Action C.1) have been modified to ensure no more than a total of eight control rods are either slow or inoperable and the ACTIONS of STS 3.1.4 (Required Action A.3) have been modified to ensure the separation criteria are met, similar to the current requirements. The Note in STS Table 3.1.4-1 has been deleted since it has been replaced with Required Action A.1. The current ACTION of STS ~~CTS~~ 3.1.4 and Notes to Table 3.1.4-1, as well as the Required Actions of Condition C to STS ~~CTS~~ 3.1.3, have been renumbered to reflect these changes. In addition, STS 3.1.5, Required Actions A.1 and B.2.1, and associated Notes have also been modified to reflect the scram time methodology (i.e., based on a two-by-two array).

[JFD 9] The current words of STS SR 3.1.4.1 require each control rod to be tested if any fuel movement in the reactor pressure vessel (RPV) occurs. This effectively means that even if only one bundle is moved (e.g., replacing a leaking fuel bundle mid-cycle), all the control rods are required to be tested per the words of the SR. While a generic change to the Bases attempted to ensure that only those rods affected be tested (BWR-18, comments C.2 and C.14, which were adopted in NUREG-1434, Revision 1), the current Bases words do not preclude misinterpretation of this requirement. The actual SR was not modified (by generic change BWR-18) and continues to require each rod to be tested. In addition, there are other SRs (SR 3.1.4.2 and SR 3.1.4.3) that require only the affected control rods to be tested, further adding confusion. Therefore, it is proposed that SR 3.1.4.1 be modified to require each rod to be tested following a refueling, and SR 3.1.4.4 be modified to require each affected rod to be tested following fuel movement within the RPV. This is consistent with the actual intent of the SRs.

3.1.5 Control Rod Scram Accumulators

[JFD 3]

Applicable to 3.1.4 (correction in Rev C)

[JFD 4] The ITS Table 3.1.4-1 has been modified since the WNP-2 safety analysis assumes only one set of scram times at one pressure, similar to NUREG-1433.

3.1.7 Standby Liquid Control System

[JFD 7] The WNP-2 design is such that heat tracing is only applied up to the pump suction valve of each SLC pump. Therefore, the ITS SR 3.1.7.~~6~~ 8 has been changed to reflect this design.

3.1.8 SDV Vent and Drain Valves

[JFD 8] The current WNP-2 Licensing Basis for CTS 3.1.3.1 allows continued operation with one or more SDV vent or drain lines with one valve inoperable, provided the associated line is isolated. Therefore, ITS 3.1.8, Required Action A.1 has been modified to reflect this allowance. In addition, the Note to Required Action B.1 has been moved so that it now applies to both ACTION A and ACTION B, consistent with current Licensing Basis. The current ACTIONS Note has been numbered to reflect this change.

Conclusion

The preceding differences from STS Section 3.1 are consistent with the WNP-2 design and existing requirements and commitments or proposed changes found to be acceptable as discussed elsewhere in this evaluation. Therefore, these differences are acceptable.

e. Relocated Specifications

None

3.2 POWER DISTRIBUTION LIMITS

The licensee has proposed administrative and technical changes to the CTS to bring them into conformance with 10 CFR 50.36 and with STS Section 3.2 specifications. The discussion of changes provided below follow the presentation order of the individual specifications within STS Section 3.2. The ITS Section 3.2 specification titles are listed in italics before the applicable discussions.

a. Administrative Changes

The specifications of CTS Section 3/4.2 that have been retained in corresponding ITS Section 3.2, have been reworded to conform to the STS presentation. In particular, the most significant administrative changes that were made are as follows:

3.2.1 Average Planar Linear Heat Generation Rate

SIMILAR DELETED IN 3.4.3

[A.1; not significant, ~~consider excluding from SER] CTS 3.2.1, Applicability,~~ includes OPERATIONAL CONDITION 1. ITS 3.2.1, Applicability, does not include MODE 1 because ITS specifies THERMAL POWER > 25% thereby identifying the mode. This is an acceptable administrative change.

3.2.2 Minimum Critical Power Ratio

[A.1, ~~similar to 3.2.1 A.1~~; not significant, ~~consider excluding from SER] CTS~~ 3.2.3, Applicability, includes OPERATIONAL CONDITION 1. ITS 3.2.2, Applicability, does not include MODE 1 because ITS specifies THERMAL POWER > 25% thereby identifying the mode. This is an acceptable administrative change.

3.2.3 Linear Heat Generation Rate

[A.1, ~~similar to 3.2.1 A.1~~; not significant, ~~consider excluding from SER] CTS~~ 3.2.4, Applicability, includes OPERATIONAL CONDITION 1. ITS 3.2.3, Applicability, does not include MODE 1 because ITS specifies THERMAL POWER > 25% thereby identifying the mode. This is an acceptable administrative change.

3.2.4 APRM Gain and Setpoint

Subsection 3.3.6.1

[A.1] CTS 3.2.2 includes the APRM Flow Biased Simulated Thermal Power - Upscale Scram Trip Setpoint and Allowable Value. The ITS moves the allowable value to ITS LCO 3.3.1.1, Function 2.b. The ITS deletes the Trip Setpoint {as evaluated ~~in change discussion~~ LA.5 of ITS LCO 3.3.1.1}. The CTS Allowable Value is reduced by the value of "T," (FRTP/MFLPD). ITS retains this reduction to the APRM Allowable Value by using the definition of "T" as ITS LCO 3.2.4.b. This is an acceptable change.

[A.2; not significant, ~~consider excluding from SER]~~ ~~CTS 3.2.2, Applicability, includes OPERATIONAL CONDITION 1. ITS 3.2.4, Applicability, does not include~~

MODE 1 because ITS specifies THERMAL POWER > 25% thereby ~~identifying the~~ mode. This is an acceptable administrative change.

CTS 3/4.2.7 Stability Monitoring - Two Loop Operation CTS 3/4.2.6 Power/Flow Instability

[A.1] CTS 3/4.2.6 provides requirements for Power/Flow Instability. ITS moves these requirements to ITS Section 3.4, consistent with the STS format. Technical changes are evaluated in ITS ~~Section~~ LCO 3.4.1. This is an acceptable administrative change.

CTS 3/4.2.8 Stability Monitoring - One Loop Operation

[A.1] CTS 3/4.2.7 provides requirements for Stability Monitoring in Two Loop Operation. ITS moves these requirements to ITS Section 3.4, consistent with the STS format. Technical changes are evaluated in ITS ~~Section~~ LCO 3.4.1. This is an acceptable administrative change.

Insert A.1

The preceding changes to CTS Section 3/4.2 result in limits that are unchanged from the current requirements cited. In some cases, these changes result in a clearer presentation of the intent of current requirements. Accordingly, these changes are purely administrative. Therefore, they are acceptable.

b. Less Restrictive Changes

The licensee, in electing to implement the specifications of STS Section 3.2, "Power Distribution Limits," proposed a number of less restrictive requirements than are allowed by CTS Section 3/4.2. These requirements are the following:

3.2.1 Average Planar Linear Heat Generation Rate

[LA.1] CTS 3.2.1, Action, requires initiating corrective action within 15 minutes. The ITS replaces this completion time with a discussion of "prompt action," in the Bases for ITS 3.2.1. The 2-hour Completion Time allows the operator to evaluate and complete appropriate actions in a timely manner. Also, the probability of a DBA occurring simultaneously with the APLHGR out of specification is low during the 2-hour Completion Time. This is an acceptable less restrictive change.

[L.1] CTS 4.2.1.b specifies a frequency of within 12 hours after completing a 15% power increase. ITS SR 3.2.1.1 changes this frequency to 12 hours after reaching or exceeding 25% RTP and incorporates the CTS 4.2.1.a frequency of at least once per 24 hours. Performing the SR once during initial startup is sufficient because of the large inherent margin to operating limits. Following the initial verification, performing the SR every 24 hours is sufficient to identify trends that may lead to noncompliance. This is an acceptable less restrictive change.

[L.2] CTS SR 4.2.1.c, verifies APLHGR is within limits initially and on a 12 hour interval when operating with a LIMITING CONTROL ROD PATTERN for APLHGR.

INSERT A.1 to subsection 3.2.a, CTS 3/4.2.8

[A.1] CTS 3/4.2.8 provides requirements for Stability Monitoring in One Loop Operation. ITS moves these requirements to ITS Section 3.4, consistent with the STS format. Technical changes are evaluated in ITS LCO 3.4.1. This is an acceptable administrative change.

Since a LIMITING CONTROL ROD PATTERN is currently defined as operating on a power distribution limit such as APLHGR ~~or Minimum Critical Power Ratio (MCPR)~~, the condition is extremely unlikely and the Surveillance would seldom be required. Additionally, the initial Surveillance is superfluous as it would not be evident that a LIMITING CONTROL ROD PATTERN has been achieved until the Surveillance is performed. Therefore, the ITS deletes this requirement.

3.2.2 Minimum Critical Power Ratio

[LA.1, similar to 3.2.1 LA.1] CTS 3/4.2.3, Action, requires initiating corrective action within 15 minutes. The ITS replaces this completion time with a discussion of "prompt action," in the Bases for ITS 3.2.2. The 2-hour Completion Time allows the operator to evaluate and complete appropriate actions in a timely manner. Also, the probability of a DBA occurring simultaneously with the MCPR out of specification is low during the 2-hour Completion Time. This is an acceptable less restrictive change.

[L.1, similar to 3.2.1 L.1] CTS 4.2.3.1.b specifies performing the surveillance within 12 hours after completing a 15% power increase. ITS SR 3.2.2.1 changes this frequency to 12 hours after reaching or exceeding 25% RTP and incorporates the CTS 4.2.3.1.a frequency of at least once per 24 hours. Performing the SR once during initial startup is sufficient because at low power levels there is a large inherent margin to operating limits. Following the initial verification, performing the SR every 24 hours is sufficient to identify trends that may lead to MCPR outside limits. This is an acceptable less restrictive change.

[L.2, similar to 3.2.1 L.2] CTS 4.2.3.1.c, verifies MCPR is within limits initially and on a 12 hour interval when operating with a LIMITING CONTROL ROD PATTERN for MCPR. Since a LIMITING CONTROL ROD PATTERN is currently defined as operating on a power distribution limit such as MCPR ~~or APLHGR~~, the condition is extremely unlikely and the surveillance would seldom be required. Additionally, the initial surveillance is superfluous as it would not be evident that a LIMITING CONTROL ROD PATTERN has been achieved until the surveillance is performed. Therefore, the ITS deletes this requirement.

3.2.3 Linear Heat Generation Rate

[LA.1, similar to 3.2.1 LA.1] CTS 3/4.2.~~3~~4, Action, requires initiating corrective action within 15 minutes. The ITS replaces this Completion Time with a discussion of "prompt action," in the Bases for ITS 3.2.3. The 2-hour Completion Time allows the operator to evaluate and complete appropriate actions in a timely manner. Also, the probability of a DBA occurring simultaneously with the LHGR out of specification is low during the 2-hour Completion Time. This is an acceptable less restrictive change.

[L.1, similar to 3.2.1 L.1] CTS 4.2.~~1~~4.b specifies a frequency of within 12 hours after completing a 15% power increase. ITS SR 3.2.3.1 changes this frequency to 12 hours after reaching or exceeding 25% RTP and incorporates CTS SR 4.2.~~1~~4.a frequency of at least once per 24 hours. Performing the SR once during initial startup is sufficient because of a large inherent margin to

operating limits. Following the initial verification, performing the SR every 24 hours is sufficient to identify trends that may lead to noncompliance. This is an acceptable less restrictive change.

[L.2, similar to 3.2.1 L.2] CTS 4.2.~~1~~4.c, verifies LHGR is within limits initially and on a 12 hour interval when operating with a LIMITING CONTROL ROD PATTERN for LHGR. Since a LIMITING CONTROL ROD PATTERN is currently defined as operating on a power distribution limit such as LHGR, the condition is extremely unlikely and the surveillance would seldom be required. Additionally, the initial surveillance is superfluous as it would not be evident that a LIMITING CONTROL ROD PATTERN has been achieved until the surveillance is performed. Therefore, the ITS deletes this requirement.

3.2.4 APRM Gain and Setpoint

[LA.1, similar to 3.2.1 LA.1] CTS 3.2.2, Action, requires initiating corrective action within 15 minutes. The ITS replaces this Completion Time with a discussion of "prompt action," in the Bases for ITS 3.2.2. The 6-hour Completion Time allows the operator to evaluate and complete appropriate actions in a timely manner. Also, the probability of a transient or DBA occurring simultaneously with the LCO not met is low during the 6-hour Completion Time. This is an acceptable less restrictive change.

[LA.2] A footnote to the CTS 3/4.2.2 Action includes details about the APRM gain adjustment methodology. These details are deleted. ITS LCO 3.2.4, Action A.1, assures that required APRM gains adjustments occur. This is an acceptable less restrictive change.

[L.1] CTS 3.2.2, Action, requires adjusting APRMs within 2 hours. ITS 3.2.4 imposes a Completion Time of 6 hours to comply with the LCO. Adjusting the APRMs is one method for complying with the LCO. The 6-hour Completion Time allows the technician sufficient time to perform adjustments, but still requires completing appropriate actions in a timely manner. Also, the probability of a transient or DBA occurring simultaneously with the LCO not met is low during the 6-hour Completion Time. This is an acceptable less restrictive change.

[L.2, similar to 3.2.1 L.1] CTS 4.2.2.b specifies a frequency of within 12 hours after completing a 15% power increase. ITS SR 3.2.4.1 changes this frequency to 12 hours after reaching or exceeding 25% RTP and incorporates CTS 4.2.1.a frequency of at least once per 24 hours. Performing the surveillance once during initial startup is sufficient because of the large inherent margin to operating limits. Following the initial verification, performing the surveillance every 24 hours is sufficient to identify trends that may lead to the APRM gain and setpoint outside limits. This is an acceptable less restrictive change.

move to subsection e

[R.1~~LR~~] CTS 3/4.2.2 includes requirements for the APRM Flow Biased Neutron Flux-Upscale Rod Block. These requirements are moved to plant documents controlled by 10 CFR 50.59. No DBA or transient takes credit for APRM rod block signals. Also, NEDO-31466 identifies that loss of the APRM rod block signals is a non-significant risk contributor to core damage frequency and

R.1 offsite release. This is an acceptable less restrictive change.

The less restrictive requirements described in the preceding material have been found by the staff to be acceptable because they do not present a significant safety question in the operation of the plant. The TS requirements that remain are consistent with current licensing practices, operating experience and plant accident and transient analyses, and provide reasonable assurance that the public health and safety will be protected.

c. More Restrictive Changes

None

d. Significant Differences from the STS (NUREG-1434)

The licensee, in electing to adopt the specifications of STS Section 3.2, "Power Distribution Limits," proposed the following differences between the ITS and the STS.

3.2.4 APRM Gain and Setpoint

[JFD 3] The APRM "setpoint" is not normally specified in the COLR since it is not cycle specific. Therefore, references to the COLR have been deleted and the proper modification to the "setpoint" has been provided. This modification (i.e., greater than or equal to the ratio of FRTP and the MFLPD) is consistent with words currently provided in the Bases. In addition, the word "setpoint" has been replaced with the name of the actual APRM Function that is being modified, consistent with similar statements in other places in the ITS. Also, the acronym "FRTP" has been defined in LCO 3.2.4.a, since it is now used in LCO 3.2.4.b. SR 3.2.4.2 has been modified to reflect the changes made to the LCO.

The preceding differences from STS Section 3.2 are consistent with the WNP-2 design and existing requirements and commitments or proposed changes found to be acceptable as discussed elsewhere in this evaluation. Therefore, these differences are acceptable.

e. Relocated Specifications

~~None~~ see page 4., R.1

3.3 INSTRUMENTATION

The licensee has proposed administrative and technical changes to the CTS to bring them into conformance with 10 CFR 50.36 and with STS Section 3.3 specifications. The discussion of changes provided below follow the order of the individual specifications within STS Section 3.3 with the ITS Section 3.3 specification titles listed in italics before the applicable discussions.

a. Administrative Changes

Those specifications of CTS Section 3/4.3 that have been retained in corresponding ITS Section 3.3, have been reworded to conform to the STS presentation. The most significant administrative changes that were made are as follows:

CTS includes action requirements. Editorial change includes actions (subject of this A.1)

3.3.1.1 Reactor Protection System (RPS) Instrumentation

A.1 CTS 3/4.3.1 provides the LCO ~~and Surveillance~~ Requirements for the reactor protection system (RPS) instrumentation. ITS 3.3.1.1 provides these requirements with more explicit instructions for Actions application for TS compliance. In conjunction with the ITS Specification 1.3, "Completion Times," the Actions Note ("Separate Condition entry is allowed for each....") and the wording for ITS Actions B and C ("One or more Functions") provide direction consistent with the intent of the CTS Action for an inoperable RPS instrumentation channel. This administrative change provides more explicit requirements, conforms to the STS format, and is therefore acceptable.

A.2 CTS 3/4.3.1 Action ~~(a)~~ provides an exception to the applicability of the provisions of CTS 3.0.4 for RPS instrumentation. ITS 3.0.4 provides requirements that allow operation consistent with CTS 3.0.4 therefore the specific CTS allowance is deleted. This change is acceptable based on ITS 3.0.4 instructions, and conformance to the STS format.

Applicability Exemption allowance

A.3 ~~Replaced with SE section 3.3.b.A and 3.3.b.B~~ (RTT), SEE PAGE 19

Not Applicability Allowance

A.4 CTS Table 3.3.1-1 table notation (e), provides an Applicability allowance for the Reactor Vessel Steam Dome Pressure-High function in Mode 2 "when the reactor vessel head is removed per Specification 3.10.1". ITS Table 3.3.1.1-1 does not provide this Mode 2 Applicability allowance because the applicable condition during which the reactor vessel head is unbolted and removed in Mode 2, has been deleted in the ITS (See Discussion of Changes for CTS 3/4.10.1). Therefore, the note is not required. The change is an acceptable administrative change that is in conformance with the STS.

exception

CTS Table 3.3.1-1 table notation (f), provides an Applicability allowance for the Primary Containment Pressure - High function in Mode 2 "not required operable when PRIMARY CONTAINMENT INTEGRITY is not required". ITS Table 3.3.1.1-1 does not provide this Mode 2 Applicability allowance because the applicable condition during which Primary Containment operability is not required in Mode 2 has been deleted in the ITS (See Discussion of Changes for CTS 3/4.10.1). Therefore, the note is not required and the change is an acceptable administrative change that is in conformance with the STS.

A.5 The CTS Table 3.3.1-1, Minimum Channels Operable Per Trip System 4 requirement for the Main Steam Isolation Valve - Closure function is "~~four~~". The ITS Table 3.3.1.1-1 requirement is ~~eight~~. 8 Each of the eight MSIVs transmit a closure signal to each RPS trip system. All channels are required operable to assure a scram with the worst single failure. Based on this, the ITS Table 3.3.1.1-1 minimum channels operable requirement is "~~eight~~". 8 Since this involves no design change but is a difference of nomenclature, this change is an acceptable administrative change.

A.6 The CTS Table 3.3.1-1, Minimum Operable Channels Per Trip System requirement for the Reactor Mode Switch Shutdown Position is "1". The ITS Table 3.3.1.1-1 requires "2". Each Reactor Mode Switch transmits signals to all four logic strings of the RPS trip logic. Therefore, all four channels of this function are required operable to assure a manual scram with the worst single failure. The ITS Table 3.3.1.1-1 minimum channels per trip system requirement is appropriately specified as "2". Since this involves no design change, but is a difference of nomenclature, this acceptable change is administrative, and conforms to the format of the STS.

A.7 CTS Table 3.3.1-1, Actions 3 and 9, specified for several RPS functions in Mode 5 requires, in part, the suspension of all operations involving core alterations and the insertion of all insertable control rods within 1 hour. ITS 3.3.1.1 Required Action H.1 replaces these CTS Actions. ITS Required Action H.1 requires immediate initiation of action to fully insert all insertable control rods in core cells containing one or more fuel assemblies. The CTS Action to "insert...within 1 hour" is revised to "initiate action to insert...Immediately." The CTS requirement appears to provide an hour in which control rods may be left withdrawn, even if able to be inserted. Also, if the control rod is incapable of being inserted in 1 hour, the CTS action appears to result in the requirement for an LER. The intent of the required action is more appropriately presented in ITS Required Action H.1. With ITS Required Action H.1, a significantly more conservative requirement to insert the control rod(s) and maintain them inserted is imposed. No longer does the provision to withdraw or leave withdrawn one or more control rods for up to 1 hour appear to exist. As an enhanced presentation of the existing intent, the change is an acceptable administrative change.

A.8 CTS Table 3.3.1-1, table notation (h), modifies the Mode 5 Applicability of RPS Function 8, "Scram Discharge Volume Water Level - High". CTS table notation (h) requires Function 8 Applicability in Mode 5 only when any control rod is withdrawn (not applicable to control rods removed per Specification 3.9.10.1 or 3.9.10.2). ITS Table 3.3.1.1-1 footnote, (a), replaces the CTS table notation (h). ITS footnote (a) requires RPS Function 8 Applicability in Mode 5 only with any control rod withdrawn from a core cell containing one or more fuel assemblies. This Applicability is consistent with CTS table notation (h), but clarified by removing the cross references to the Special Operations LCOs. The change is administrative. The clarification of RPS Function Applicability and the removal of the Special Operations LCO cross references is supported by the STS and is acceptable.

A.9 The CTS Table 4.3.1.1-1, Function 1a and 2a channel functional test surveillance frequency of "S/U" and Note c, "within 24 hours prior to startup,

if not performed within the previous 7 days," are deleted in ITS Table 3.3.1.1-1. The S/U and Note c requirements are redundant to ITS SR 3.0.4 which requires the surveillance to be successfully performed prior to entry into the applicable operational conditions. Once the applicable conditions are entered, the surveillance frequency requires the periodic testing to assure operability requirements are met. Therefore, the removal of this S/U channel functional test requirement is administrative, and acceptable.

A.10 CTS Table 4.3.1.1-1, table notation (f), requires the LPRMs to be calibrated "at least once per 1000 Effective Full Power Hours (EFPH)". ITS SR 3.3.1.1.7 changes the LPRM calibration frequency to "1130 MWD/T average core exposure." Both Frequencies consider the LPRM sensitivity changes based on operating experience, and represent roughly the same time interval, approximately 6 weeks. The change allows a more convenient tracking parameter since MWD/T is commonly calculated and recorded by the core monitoring software system. This administrative change consistent with the STS format is acceptable.

A.11 CTS Table 4.3.1.1-1 requires performing a daily channel check on the APRM Flow Biased Simulated Thermal Power—Upscale Function. Table notation (g) of this daily surveillance test requires the core flow to be measured and compared with the rated core flow. The flow comparison requirements are not retained in ITS Table 3.3.1.1-1. Table 4.3.1.1-1 instrumentation testing provides duplicate requirements to CTS jet pump SRs 4.4.1.2.1 and 4.4.1.2.2 which are retained in ITS as SR 3.4.~~X~~2.1. Additionally, note (g) establishes separate and less stringent limits when compared to the ITS jet pump surveillance SR 3.4.2.1, which requires the recirculation loop (jet pump) flow to be within 10% of the established pattern. Since this SR is redundant to CTS 4.4.1.2.1 and 4.4.1.2.2, the change is administrative.

A.12 The CTS Safety Limits, Table 2.2.1-1, and the RPS CTS 3/4.3.1 have been combined and incorporated into ITS Table 3.3.1.1-1. This change conforms to the format of the STS and is therefore acceptable.

A.13 CTS Table 2.2.1-1, Function 9, "Turbine Stop Valve - Closure" and Function 10, "Turbine Control Valve Fast Closure, Trip Oil Pressure - Low" are renamed in ITS Table 3.3.1.1-1 as follows: Function 8, "Turbine Throttle Valve - Closure" and Function 9, "Turbine Governor Valve Fast Closure, Trip Oil Pressure - Low". Renaming the RPS Functions to match the WNP-2 design is an acceptable administrative nomenclature change.

3.3.1.2 - Source Range Monitors

A.1 CTS 3.3.7.6 Action b requires that when in Modes 3 and 4, with one or more of the required source range monitor channels inoperable, a "verification" that all insertable control rods are inserted into the core is required within 1 hour. In Modes 3 and 4 a single control rod may be withdrawn under the provisions of Special Operations LCO 3.10.3 and LCO 3.10.4, or some unanticipated event may have resulted in uninserted control rods. Therefore, rather than an action to "verify...inserted," a more definitive action statement is required. ITS 3.3.1.2 Required Action D, provides the definitive instruction to "Fully insert all insertable control

rods" within 1 hour, when one or more required source range monitor channels are inoperable in Modes 3 and 4. This is acceptable because the ITS wording provides the same intent in the event all insertable control rods are found to be inserted, but also clarifies that any uninserted control rods are to be inserted. The administrative change provides clarification to the LCO without changing the technical requirement.

A.2 CTS 4.3.7.6 lists the applicable surveillance requirements for the source range monitoring instrumentation. ITS ~~SR~~ 3.3.1.2 includes all of the source range instrumentation surveillance requirements in a more organized table format, consistent with the STS. These format changes include a note that provides direction for proper application of the Surveillance Requirements for TS compliance. This change represents a presentation preference only and is, therefore, administrative.

A.3 CTS 3.9.2 ACTION requires an immediate halt to all operations involving core alterations, and the insertion of all insertable control rods when in Mode 5 with SRM operability requirements not met. ITS 3.3.1.2 eliminates the control rod insertion requirement by including the phrase, "except for control rod insertion", since, as currently required, ~~initiation of a manual scram~~ the insertion of all insertable control rods results in a CORE ALTERATION, i.e., reactivity addition. Since the intent of the action to suspend core alterations was to stop any additional core alterations, and this change retains the intent of the CTS, the change is therefore administrative.

3.3.2.1 Control Rod Block Instrumentation

A.1 CTS Table 3.3.6-1 and CTS Table 4.3.6-1 table notation "*" modifies the Mode 1 Applicability of the Rod Block Monitor Functions to "With THERMAL POWER ≥ 30% of RATED THERMAL POWER". ITS Table 3.3.2.1-1 footnote (a) provides this ≥30% RTP Applicability requirement and adds "and no peripheral control rod selected" to the Applicability of the RBM Functions. The RBM Functions are not required when a peripheral control rod is selected, because the RBM design includes an automatic bypass when any peripheral rod is selected as stated in CTS Table 3.3.6-1 notation (a). Therefore, the ITS Applicability is changed to account for this plant design. Since the ITS relate to the design and to CTS requirements, the change is administrative and therefore acceptable.

A.2 ~~proposed change is denied (comment database item 30)~~

A.3 CTS 3/4.1.4 Action (b) allows exclusion of TS 3.0.4 Applicability for the Rod Worth Minimizer. The ITS does not include this specific allowance, because ITS 3.0.4 is written to provide the allowance. The change is consistent with the STS format, and is acceptable.

3.3.2.2 Feedwater and Main Turbine High Water Level Trip Instrumentation

A.1 CTS Table 3.3.9-1 presents the Feedwater and Main Turbine High Water Level Trip instrumentation channel Applicability in a table format. ITS 3.3.2.2 provides the Applicability for these functions with the LCO in the STS format rather than the CTS table format. This administrative change is a

presentation preference consistent with the STS format.

A.2 From page 34

A.3 CTS SR 4.3.9.2 requires performance of a logic system functional test and "simulated automatic operation" of all channels at least once per 18 months. The "simulated automatic operation" procedural detail is not included in the ITS requirements. The required automatic operation for this system is to close the feedwater and main turbine valves, and closure of these valves is specifically identified and included within the ITS logic system functional test, SR 3.3.2.2.4. This is a administrative change which conforms to the STS format and is therefore an acceptable.

3.3.3.1 Post Accident Monitoring (PAM) Instrumentation

A.1 CTS 3.3.7.5 and CTS Table 3.3.7.5-1 provides the LCO ~~and Surveillance~~ Requirements for the Accident Monitoring Instrumentation. ITS 3.3.3.1 provides these requirements with more explicit instructions for Actions application for TS compliance. In conjunction with the ITS Specification 1.3, "Completion Times," the Actions Note ("Separate Condition entry is allowed for each....") and the wording for ITS Actions A and C ("one or more Functions") provide direction consistent with the CTS Action for an inoperable Post Accident Monitoring channel. This administrative change provides more explicit TS requirements, conforms to the STS format, and is therefore acceptable.

CTS = INSTRUMENT ITS = FUNCTION

CHAmber

INSTRUMENT

A.2 CTS Table 3.3.7.5-1 includes ~~Function~~ 2, "Reactor Vessel Water Level", ~~Function~~ 3, "Suppression ~~Pool~~ Water Level", and ~~Function~~ ~~6~~5 "Drywell Pressure". These Accident Monitoring instrumentation functions consist of instruments with different ranges to satisfy RG 1.97 requirements.

For the Reactor Vessel Water Level instrumentation, the different ranges are: a. -150 inches to +60 inches; and b. -110 inches to -310 inches. Current TS require 2 channels of reactor vessel water level, however; each channel consists of two instrument transmitters, one for each range. Using the ITS format, these instruments are shown in Table 3.3.3.1-1 as Functions ~~2a~~. 2.a and 2.b, with 2 required channels for each instrument Function.

Suppression

For the Suppression Pool Water Level instrumentation, the different ranges are: a. -25 inches to +25 inches; and b. 2 ft to 52 ft. Current TS require 2 channels of pool water level, however; each channel consists of two instrument transmitters, one for each range. Using the ITS format, these instruments are shown in Table 3.3.3.1-1 as Functions 3a, and 3b, with 2 required channels for each instrument Function.

For the Drywell Pressure instrumentation, the different ranges are: a. -5 psig to +3 psig; b. 0 psig to 25 psig; and c. 0 psig to 180 psig. Current TS require 2 channels of drywell pressure, however; each channel consists of three instrument transmitters, one for each range. Using the ITS format, these instruments are shown in the Table 3.3.3.1-1 as Function 5a, Function 5.b, and Function 5.c, with two required channels for each instrument Function. These administrative changes provide more explicit TS requirements, conform to the STS format, and are therefore acceptable.

A.3 The CTS Table 3.3.7.5-1, ~~MINIMUM~~ CHANN~~ELS~~ ~~o~~perable column provides information to determine which CTS 3.3.7.5 Actions to perform. (i.e., not meeting the minimum channels operable requirement of "1", in a 2 channel design, means two channels are inoperable). ITS Table 3.3.3.1-1 changes the format to a REQUIRED CHANNELS presentation according to the STS format. The ITS format provides explicit Conditions and Required Actions for the number of inoperable REQUIRED CHANNELS. This acceptable administrative change represents a presentation preference only.

A.4 CTS Table 3.3.7.5-1, Function 27, "Primary Containment Valve Position", ~~MINIMUM~~ CHANN~~ELS~~ ~~o~~perable requirement is "1/valve". ITS Table 3.3.3.1-1 Function 7 renames this Function, "PCIV Position", and changes the operable channels nomenclature to "2 per penetration flow path" and adds Note (a). Note (a) provides an exception to the "2 per penetration flow path requirement"; When a PCIV is in a isolated position by either closing and de-activating an automatic valve, closing a manual valve, installing a blind flange, or by securing flow through a check valve, the PCIV indication is not required for that valve. Implementing this exception to CTS requirements is a common practice. The ITS Note clarifies the PCIV position indication requirements in a format consistent with the STS. This administrative change provides more explicit TS requirements, conforms to the STS format, and is therefore acceptable.

DELETE & DISCUSSED M.1 (page 59)

A.5 CTS Table 3.3.7.5-1, Action b is based on a minimum channels operable requirement of 1 channel (i.e., 2 required channels inoperable). A new accident monitoring function; "ECCS Pump Room Flood Level", is added to the ITS Table 3.3.3.1-1, which requires 5 operable channels. ITS 3.3.3.1, Condition C and Required Action C.1 is modified to address two or more inoperable channels for one or more ITS PAM functions(s) so that actions are clearly present within the format of the ITS for the five channel ECCS pump room level instruments. This administrative change provides more explicit TS requirements, conforms to the STS format, and is therefore acceptable.

INSERT NEW A.5

A.6 CTS 3.3.7.5, Action 81~~(b)~~, provides instructions and technical requirements for submitting a Special Report to the Commission per CTS 6.9.1, when operability requirements are not met for the Primary Containment Gross Radiation Monitoring instrumentation. ITS 3.3.3.1 Condition F provides the requirement to initiate action according to ITS 5.6.~~7~~6. ITS 5.6.~~7~~6 includes the instructions and technical requirements for special reporting according to the STS format. Any technical changes to the PAM reporting requirement are addressed in the discussion of changes for ITS: 5.6.~~7~~6. This administrative change provides equivalent TS requirements, conforms to the STS format, and is therefore acceptable. 7=>6 IN Rev C

3.3.3.2 Remote Shutdown System

A.1 CTS 3.3.7.4 and CTS Table 3.3.7.4-1 provides the LCO and Surveillance Requirements for the Remote Shutdown Monitoring Instrumentation. ITS 3.3.3.2 provides these requirements with more explicit instructions for Actions application for TS compliance. In conjunction with the ITS Specification 1.3, "Completion Times," the actions Note ("Separate Condition entry is allowed for

INSERT A.5 to subsection 3.3.a, LCO 3.3.3.1

ITS 3.3.3.1 includes Action D that directs entry into appropriate Conditions referenced in ITS Table 3.3.3.1-1 when two or more channels in the same Function are inoperable and the Completion Time for restoration of all but one required channel has expired (i.e., ITS Action C). Action D has been added since not all Functions have the same Actions when the required channels are not restored. This change represents a presentation preference only and is considered administrative.

each....") and the wording for ITS Action A ("one or more required Functions"), provide direction consistent with the intent of the CTS Action for an inoperable Remote Shutdown System instrument channel. This administrative change provides more explicit TS requirements, conforms to the STS format, and is therefore acceptable.

A.2 CTS ~~3.3.3.2 SR~~ 4.3.7.4 requires operability demonstration for each Remote Shutdown Monitoring Channel by performing a channel check on a monthly basis. A channel check is a qualitative assessment of channel behavior. ITS SR 3.3.3.2.1 requires the same testing except the SR is limited to those channels which are normally energized. Some Remote Shutdown System instrument channels are deenergized during normal operation and energizing these channels requires use of a transfer switch which takes control of the instrument function away from the operators in the control room and shifts control to the remote shutdown panel. When this is performed, the instruments and associated controls in the control room are deenergized and no indication and control are available to control room operators. Therefore, this ITS SR 3.3.3.2.1 is modified to exclude the channel check requirement from deenergized channels. These administrative changes provide more explicit TS requirements, conform to the STS format, and are therefore acceptable.

3.3.4.1 End of Cycle Recirculation Pump Trip (EOC-RPT) Instrumentation

A.1 CTS 3.3.4.2 Applicability requires the End of Cycle Recirculation Pump Trip (EOC-RPT) Instrumentation to be operable in Mode 1 when Thermal Power is ≥ 30% of Rated Thermal Power. ITS 3.3.4.1 deletes the Mode 1 Applicability because when THERMAL POWER is ≥ 30% of RTP the unit will always be in Mode 1. Therefore, it is unnecessary to state Mode 1 in the Applicability. This administrative change provides more explicit TS requirements, conforms to the STS format, and is therefore acceptable.

A.2 CTS 3.3.4.2 and CTS Table 3.3.4.2-1 provide the LCO and ~~Surveillance~~ Requirements for the EOC-RPT Instrumentation. ITS 3.3.4.2 provides these requirements with more explicit instructions for Actions application for TS compliance. In conjunction with the ITS Specification 1.3, "Completion Times," the Actions Note ("Separate Condition entry is allowed for each....") and the wording for ITS Action A ("one or more required channels"), provide direction consistent with the intent of the CTS Action for an inoperable EOC-RPT instrument channel. This administrative change provides more explicit TS requirements, conforms to the STS format, and is therefore acceptable.

A.3 CTS 3.3.4.2 Actions footnote "*" states the provisions of Specification 3.0.4 are not applicable. This allowance is provided in ITS 3.0.4. Therefore, this specific allowance has been deleted in the ITS. This administrative change conforms to the STS format, and is acceptable.

A.4 CTS SR 4.3.4.2.2 requires performance of a logic system functional test and "simulated automatic operation" of all channels at least once per 18 months. The only automatic operation required for this system is the opening of the pump trip breakers. Opening of the pump trip breakers is specifically identified and included within the ITS SR 3.3.4.1.4 logic system functional

test. This change conforms to the STS format while preserving the current TS requirements and is therefore an acceptable administrative change.

3.3.4.2 ATWS Recirculation Pump Trip Instrumentation

A.1 CTS 3.3.4.1 and CTS Table~~s~~ 3.3.4.1-1 ~~& 2~~ provide the LCO ~~and Surveillance~~ Requirements for the ATWS-RPT Instrumentation. ITS 3.3.4.2 provides these requirements with more explicit instructions for Actions application for TS compliance. In conjunction with the ITS Specification 1.3, "Completion Times," the Actions Note ("Separate Condition entry is allowed for each....") and the wording for ITS Action A ("one or more required channels"), provide direction consistent with the intent of the CTS Action for an inoperable ATWS-RPT instrument channel. This administrative change provides more explicit TS requirements, conforms to the STS format, and is therefore acceptable.

A.2 CTS SR 4.3.4.1.2 requires performance of a logic system functional test on all ATWS-RPT channels, including the "simulated automatic operation" of each channel every 18 months. The "simulated automatic operation" is normally conducted with the system functional test. However, for the ATWS-RPT system automatic operation is only required to be demonstrated for opening the pump trip breakers. The opening of these breakers is specifically identified in the ITS logic system functional test, SR 3.3.4.2.4. This change conforms to the STS format and is acceptable.

3.3.5.1 Emergency Core Cooling (ECCS) Instrumentation

A.1 CTS 3/4.3.3 provides the LCO ~~and Surveillance~~ Requirements for the Emergency Core Cooling System (ECCS) Actuation Instrumentation. ITS 3.3.5.1 provides these requirements with more explicit instructions for Actions application for TS compliance. In conjunction with the ITS Specification 1.3, "Completion Times," the Actions Note ("Separate Condition entry is allowed for each....") and the wording for ITS Action A ("One or more Functions") provide direction consistent with the intent of the CTS Action for an inoperable ECCS Actuation instrumentation channel. This administrative change provides more explicit requirements, conforms to the STS format, and is therefore acceptable.

A.2 CTS SR 4.3.3.3 requires the demonstration of the ECCS response time of each ECCS trip function to be within the limit at least once per 18 months. ITS 3.3.5.1 does not include this Surveillance Requirement. The technical content of this requirement is moved to ITS 3.5.1, ECCS—Operating and ITS 3.5.2, ECCS—Shutdown. Any technical changes to these requirements are addressed in the Discussion of Changes for ITS: 3.5.1 and ITS: 3.5.2, in Section 3.5.

A.3 The CTS Table 3.3.3-1 column title, "~~MINIMUM~~ operable CHANN~~ELS PER TRIP SYSTEM~~" column title is replaced in ITS Table 3.3.5.1-1 with "~~REQUIRED~~ CHANNELS ~~PER FUNCTION~~". Therefore, the number of channels listed in the ITS column represents the number of instrument channels required for each ECCS Actuation function. This change conforms to the STS format, and is an

acceptable administrative change.

A.4 CTS Table 3.3.3-1 requires 1 manual initiation channel per trip system for each ECCS actuation function, and 2 manual initiation channels for each ADS trip system. ITS Table 3.3.5.1-1 requires 2 channels per manual ECCS actuation function and 4 channels per manual ADS actuation function. Each of the ECCS manual initiation switch and push button channels provides two inputs to the initiation logic. Each of the ADS manual initiation switch and push button channels (2 switch and push buttons per ADS trip system) provide two inputs to the ADS initiation logic. Therefore, with each input considered a channel, the required channels per function requirement in ITS Table 3.3.5.1-1 is specified as "2" for current ECCS Trip functions A.1.h, B.1.f, and C.1.g, and "4" for current Trip functions A.2.f and B.2.e. The change is a difference in nomenclature and does not involve design differences. This change conforms to the STS format, and is an acceptable administrative change.

A.5 minor administrative - SAME AS A.2 ON 3.3.5.1 (page 8) [AND OTHERS]

A.6 CTS Table 3.3.3-1, Actions 30, 32, and 35 for the Automatic Depressurization System (ADS) functions, require declaring the associated system (i.e., trip system or division) inoperable when the number of inoperable channels are less than the minimum operable channels the time period to restore the channels to operable status has elapsed. The requirement to declare the associated trip system or division inoperable is not used in ITS.3.3.5.1 Required Actions F and G. Instead, ITS 3.3.5.1 Required Actions F.1 and G.1 require declaring the ADS valves inoperable within 1 hour from discovery of loss of ADS initiation capability in both trip systems. As an alternative, ITS 3.3.5.1, Required Action F.2 and G.2 require that the inoperable channels be placed in the tripped condition after the specified time to restore the channels to operable status. If the Required Actions F or G are not performed within the allowed time periods ITS 3.3.5.1 Required Action H.1 requires declaring the supported features inoperable. The STS format separates the action requirements for repairing inoperable channels from the requirements to declare systems inoperable. Based on the STS format the actions for single channel inoperabilities may result in entire systems or subsystems being declared inoperable. The changes to the STS format are acceptable administrative changes.

NOT RELATED TO THE ADMIN CHANGE

INSERT NEW A.6

A.7 CTS Table 3.3.3-1 Action 36 requires placing an inoperable Condensate Storage Tank Level - High, Level 8 or a Suppression Pool Water Level - High channel in the tripped condition or declaring the HPCS system inoperable. ~~Replacing the CTS requirement is~~ ITS 3.3.5.1 Required Action D.2.2, which allows aligning the HPCS pump suction to the suppression pool, in lieu of tripping the channel, has been added. Aligning the HPCS Pump suction to the suppression pool results in the same condition as tripping the channel because tripping one channel results in the suction being aligned to the suppression pool. This change conforms to the STS format, and is an acceptable administrative change.

A.8 CTS Table 3.3.3-1, Action Statements, footnote "*" allows exclusion of CTS 3.0.4 Applicability for some ECCS Actuation instrumentation Actions. This specific allowance is not included in the ITS, because ITS 3.0.4 is written to provide the allowance. The change is consistent with the STS format, and is

INSERT A.6 to subsection 3.3.a, LCO 3.3.5.1

In its place, the total time to restore the channel has been provided. Currently, CTS 3.3.3 Action b provides 24 hours to restore the channel, and if not restored, CTS Actions 30, 32, or 35, as applicable, must be taken. These three Actions require declaring the trip system inoperable immediately. Once declared inoperable, CTS Action c requires the trip system to be restored within 7 days or 72 hours, depending upon whether or not HPCS and RCIC are operable. These Actions have been combined into a single ITS Action, depending upon whether or not the channel is allowed to be placed in trip (ITS Actions F and G). Since the times have not changed, except where discussed separately,

acceptable.

A.9 The CTS ~~SR~~ 4.3.3.1 Channel Functional Test requirement for all ECCS manual initiation functions is excluded in the ITS. Performance of ITS SR 3.3.5.1.~~5~~,6 Logic System Functional Test (LSFT), satisfies the requirements of the CTS 4.3.3.1 Channel Functional Test. The manual initiation functions have no adjustable setpoints, but are based on switch manipulation. Therefore, the LSFT, which tests all contacts, provides the proper testing of these channels. The change is consistent with the STS format, and is acceptable.

A.10 CTS 3.3.3 Action c requires placing the plant in the Hot Shutdown condition if an ADS trip system is not restored to operable status within a required period of time. ITS 3.3.5.1 Required Action H replaces this requirement with a requirement to declare the ADS Valves inoperable. The ADS Valve Specification, ITS 3.5.1, requires a plant shutdown when ADS Valves are declared inoperable. Therefore, in lieu of repeating the shutdown Actions, ITS 3.3.5.1 Required Action H requires declaration of ADS Valves inoperable. This satisfies the intent of the CTS requirement. The change is consistent with the STS format, and is acceptable.

~~A.11 Proposed change is denied (comment database item #30)~~

3.3.5.2 RCIC System Instrumentation

A.1 CTS 3/4.3.5 provides the LCO and ~~Surveillance~~ Requirements for the RCIC ~~Emergency Core Cooling System (ECCS)~~ Actuation Instrumentation. ITS 3.3.5.2 provides these requirements with more explicit instructions for Actions application for TS compliance. In conjunction with the ITS Specification 1.3, "Completion Times," the Actions Note ("Separate Condition entry is allowed for each....") and the wording for ITS Action A ("One or more Functions") provide direction consistent with the intent of the CTS Action for an inoperable RCIC actuation instrumentation channel. This administrative change provides more explicit requirements, conforms to the STS format, and is acceptable.

A.2 CTS Table 3.3.5-1 presents RCIC Actuation instrumentation operability requirements in a "per trip system" format. ITS Table 3.3.5.2-1 presents operability requirements for this instrumentation is presented in a "per Function" format, consistent with the STS. Thus, the number of required channels for CTS Table 3.3.5.2-1, Function a, Reactor Vessel Water Level - Low Low, Level 2, is changed to "4" in ITS Table 3.3.5.2-1, since there are two trip systems, with two channels per trip system. CTS Table 3.3.5-1 Functions b, c, and d are not affected since there is only one trip system for each of these three Functions. This change consistent with the STS format and is acceptable.

A.3 CTS Table 3.3.5-1 requires one Manual RCIC Initiation Channel per trip system operable. The RCIC Manual Initiation switch and push button introduce a signal into the RCIC System initiation logic that is redundant to the automatic protective instrumentation and provides manual initiation capability. There is one switch and push button (with two channels) for the RCIC System. The ITS format considers each input to initiation logic a

channel, therefore, ITS Table 3.3.5.2-1 presents the operability requirement as two channels of Manual RCIC Initiation per Function. The change involves no design change but is a result of a difference in STS format. This change consistent with the STS format and is acceptable.

A.4 CTS Table 3.3.5-1, Action 52, requires placing at least one inoperable RCIC Actuation Function channel in the tripped condition when more than one channel per Function is inoperable. ITS 3.3.5.2 adds Required Action D.2.2 to allow the RCIC pump suction to be aligned to the suppression pool in lieu of tripping the channel, if a Condensate Storage Tank Water Level - Low channel is inoperable. Allowing the RCIC pump suction to be aligned to the suppression pool results in the same condition as if a channel were tripped, tripping one channel results in the suction being aligned to the suppression pool. This change is consistent with the STS format and is acceptable.

A.5 minor administrative

A.6 CTS Table 4.3.5.1-1 requires a Channel Functional Test be performed on the RCIC Manual Initiation Function on a "Refueling" surveillance test interval. The Channel Functional Test requirement is deleted in the ITS, since it is redundant to the Logic System Functional Test required by ITS SR 3.3.5.2.4. The Manual Initiation Function has no adjustable setpoints, but is based on switch manipulation. Therefore, the Logic System Functional Test, which tests all switch contacts, provides proper testing of the Manual Initiation Function. This change is consistent with the STS and is acceptable.

3.3.6.1 Primary Containment Isolation Instrumentation

A.1 CTS 3/4.3.2 provides the LCO ~~and Surveillance,~~ Requirements for the Primary Containment Isolation Actuation Instrumentation. ITS 3.3.6.1 provides these requirements with more explicit instructions for Actions application for TS compliance. In conjunction with the ITS Specification 1.3, "Completion Times," the Actions Note ("Separate Condition entry is allowed for each....") and the wording for ITS Action B ("One or more automatic Functions") provides direction consistent with the intent of the CTS Action for an inoperable isolation instrumentation channel. This administrative change provides more explicit requirements, conforms to the STS format, and is therefore acceptable.

A.2 CTS 3.3.2 Actions includes an exception to the applicability of CTS 3.0.4. ITS 3.3.6.1 deletes this exception because ITS 3.0.4 contains the provision to allow continued operation once a channel is placed in the tripped condition. This change is consistent with the STS format and is acceptable.

A.3 ~~Replaced with SE section 3.3.b.A and 3.3.b.B~~ RTT, see page 19 and Insert A3

A.4 CTS Surveillance Requirement 4.3.2.3, Isolation System Response Time, requires each test to include at least one channel per trip system so that all channels are tested at least once every N times 18 months. This statement is deleted in ITS SR 3.3.6.1.7, since it is covered by the definition of

INSERT A.3 to subsection 3.3.a, LCO 3.3.6.1

CTS 4.3.2.3 requires a Response Time Test on all the Primary Containment Isolation Instrumentation Functions. A Note has also been added to ITS SR 3.3.6.1.7 that exempts the sensors for the Main Steam Line (MSL) Isolation Reactor Vessel Water Level - Low Low, Level 2, Main Steam Line Pressure Low, and Main Steam Line Flow—High Functions from response time testing and allows the design sensor response time to be used in the determination of the Isolation Instrumentation Response Time. Deletion of the response time test for these sensors was evaluated in NEDO-32291, "System Analyses for Elimination of Selected Response Time Testing Requirements," January 1994, and was determined acceptable since other Technical Specification Surveillances (Channel Calibration, Channel Functional Test, Channel Check, and Logic System Functional Test) ensure that sensor response times are within acceptable limits. These other tests are normally sufficient to identify failure modes or degradation in instrument response time and assure operation of the analyzed instrument loops within acceptable limits. Furthermore, there are no known failure modes that can be detected by response time testing that cannot also be detected by other Technical Specification Surveillances. In addition, the NRC Safety Evaluation Report (SER) from B.A. Boger (NRC) to R.A. Pinelli (BWROG), dated December 28, 1994, required that the utility commit to certain additional requirements and state this in the plant specific license amendment. WNP-2 has committed to these additional requirements. This evaluation has been documented in a 50.59 evaluation that deletes these sensors from the current WNP-2 Isolation Instrumentation Response Time requirements, since the actual response times have been removed from WNP-2 Technical Specifications and placed under WPPSS control as documented in the NRC SER for Technical Specification Amendment 139. Therefore, this change is considered administrative.

In addition, the response time for some of the Primary Containment Isolation Functions directly corresponds with the diesel generator start delay time. Therefore, these response time tests are redundant to the diesel generator start time tests in CTS 3/4.8.1.1 (ITS 3.8.1). NUREG-1366 and Generic Letter 93-05 both recommend deletion of these tests when they are redundant to the diesel generator tests. Therefore, these response time tests have been deleted (by not referencing the proposed response time SR to these Functions), and their deletion is considered administrative.

STAGGERED TEST BASIS in ITS 1.1, Definitions. This change is consistent with the STS, and is therefore acceptable.

A.5 The requirements of CTS Tables 3.3.2-1, 3.3.2-2, and 4.3.2.1-1 for Trip Function 1, Primary Containment Isolation are put in ITS Table 3.3.6.1-1. ITS Table 3.3.6.1-1 divides the Function into two sections, Main Steam Line Isolation (Function 1) and Primary Containment Isolation (Function 2). The individual Functions are reordered with the proper isolation signal. This change is consistent with the STS format, and therefore is acceptable.

A.6 CTS Table 3.3.2-1 provides operability requirements for the manual initiation switch an~~d manual initiation push buttons~~ on a "per trip system" basis. Each manual initiation switch and push button channel (except for the RCIC System) provides two inputs to the isolation logic. Therefore, in the ITS format each input is a channel, thus the operability requirements for these functions in ITS Table 3.3.6.1-1 are more appropriately specified as "2" for CTS Table 3.3.2-1, Trip Functions 1.g (groups 2 and 5 logic), 3.j, and 5.f, and "4" for Trip Function 1.g (group 1 logic). The change is a difference in nomenclature and does not involve design differences. This change conforms to the STS format, and is an acceptable administrative change.

Group 3 + SECONDARY

A.7 CTS 3/4.3.2 includes requirements for both primary and secondary containment isolation functions. ITS 3.3.6.2 contains those CTS 3/4.3.2 requirements specified for secondary containment isolation functions. Any technical changes to secondary containment isolation functions are discussed in the discussion of changes for ITS 3.3.6.2. The Group ~~3 PCIVs~~ common to primary and secondary containment isolations ~~functions~~ are listed in both ITS 3.3.6.1 and ITS 3.3.6.2. The above changes are differences in nomenclature and do not involve design differences. These changes conform to the STS format, and are acceptable.

& ISOLATION INSTRUMENTATION FUNCTIONS

A.8 The CTS Table 3.3.2-1, Minimum Operable Channels Per Trip System N.A. requirement for Trip Function 3.f, "SLCS Initiation," is denoted as "NA". ITS Table 3.3.6.1-1 changes this requirement to "2". Each of the SLC pumps provide input into the RWCU isolation logic. Therefore, the number of channels is changed to correspond to the actual number of input channels from SLC. The CTS and ITS requirements would result in declaring the RWCU function inoperable if either input was inoperable. The change to the required number of channels reflects the current design, is consistent with the STS format and is acceptable.

A.9 CTS Table 3.3.2-1, Action 22, requires closing the affected RWCU system isolation valves within 1 hour and declaring the system inoperable. ITS 3.3.6.1, Required Action I.1, provides an additional option of declaring the associated Standby Liquid Control (SLC) subsystem inoperable if isolating the RWCU System is not desirable. Since this Action is required if the RWCU System can not be isolated i.e., the purpose for RWCU isolation is to ensure the SLC subsystems will function properly by ensuring that the injected boron is not removed from the reactor coolant system. The change provides an equivalent set of remedial action, is consistent with the STS format, and is acceptable.

A.10 CTS Table 3.3.2-1, Actions 22, 24, 26, requires declaring the affected systems inoperable when inoperable isolation actuation instrument channels render a system inoperable. ITS 3.3.6.1 does not include the requirement to "declare the affected system inoperable" because cross references to other TS are generally removed from the ITS. The change is consistent with the STS format and is acceptable.

NOT DELETED FROM ITS

A.11 CTS Table 3.3.2-1, Function 3.i, lists Room 409 as a RWCU Line Routing Area. ITS Table 3.3.6.1-1 ~~does not list the room number for this actuation Function~~. The room number is changed from "409" to "509" in to correct a typographical error in the CTS. ~~Markup only and deleted from the ITS~~. The change is consistent with the STS format and is acceptable.

A.12 CTS Table 4.3.2.1-1 requires a channel and 5.g functional test for Manual Initiation Functions~~,~~ 1.g, 2.d, 3.j, 4.i, ~~5~~.g, and SLCS Initiation Function 3.f. These channel functional test requirements are deleted in the ITS, since they are redundant to ITS SR 3.3.6.1.6, logic system functional test. The Manual Initiation and SLC System Initiation channels have no adjustable setpoints, but require switch manipulation to verify operability. ITS SR 3.3.6.1.6, logic system functional test, tests switch movement, all switch contacts and provides proper testing of channels previously tested by the channel functional test. Therefore, this deletion is an acceptable administrative change.

A.13 minor administrative NOT MINOR PER 3.3.1.1, A.13

This is an M change move to page 63

M.3 ~~becomes A.14~~ The CTS Table 3.3.2-1 channel for Function 2.d, Group 3 PCIV Manual Initiation requires one ~~switch and one push button~~ to be operable per trip system. ITS Table 3.3.6.1-1 requires four channels per trip system. The Group 3 hardware design is comprised of two switch and two push buttons providing 4 logic inputs per trip system. Each switch and push button combination provides two channels of input to the isolation logic. Therefore, using the ITS format that each input is a channel, the operability requirement for this Function in ITS Table 3.3.6.1-1 is more appropriately specified as "4." In addition, Since currently only one of the two switch and push buttons per trip system is required, this change is more restrictive. ~~this change involves no design change, but is only a difference in nomenclature, it is an acceptable administrative change.~~

3.3.6.2 Secondary Containment Isolation Instrumentation

A.1 CTS 3/4.3.2 provides the LCO ~~Actions and Surveillance~~ Requirements for the secondary containment isolation Actuation Instrumentation. ITS 3.3.6.2 provides these requirements with more explicit instructions for Actions application for TS compliance. In conjunction with ITS Specification 1.3, "Completion Times," the Actions Note ("Separate Condition entry is allowed for each....") and the wording for ITS Action B ("One or more automatic functions") provides direction consistent with the intent of the CTS Action for an inoperable isolation instrumentation channel. This administrative change provides more explicit requirements, conforms to the STS format, and is acceptable.

A.2 CTS 3.3.2 Actions includes an exception to the applicability of CTS

3.0.4. The exception is deleted in ITS 3.3.6.2 because ITS 3.0.4 contains the provision which allows continued operation once a channel is placed in the tripped condition. This change is consistent with the STS format and is acceptable.

INSERT A.3

A.3 ~~Replaced with SE section 3.3.b.A and 3.3.b.B~~

A.4 ~~becomes L.4~~ INSERT L.4 from page 50.

A.5 CTS Table 3.3.2-1, Action 25, requires establishing Secondary Containment Integrity with the standby gas treatment system operating within 1 hour. ITS 3.3.6.2, Required Actions C.1.1 & C.2.1 replaces the use of the defined term Secondary Containment Integrity with the elements of that definition; "Isolate the associated penetration flow path", and clarifies the need to start the associated SGT subsystem(s). Each of the individual CTS requirements are specifically addressed by ITS 3.3.6.2, Required Actions C.1.1 and C.2.1. The change is consistent with the STS, and is acceptable.

A.6 CTS Table 4.3.2.1-1 requires a channel functional test for the secondary containment isolation Manual Initiation function. This channel functional test requirement is deleted in the ITS, since it is redundant to ITS SR 3.3.6.2.4, logic system functional test. The Manual Initiation channels have no adjustable setpoints, but are based on switch manipulation. ITS SR 3.3.6.2.4 tests all contacts and provides proper testing of channels previously tested by the CTS channel functional test. Therefore, this deletion is acceptable.

A.7 CTS ~~3.6, Containment Systems, Surveillance Requirement 4.3.5.3,~~ ~~3.6~~ 4.6.5.3.d.2 requires verifying the Standby Gas Treatment System filter train starts and isolation dampers open on manual initiation from the Main Control Room and on a simulated automatic initiation signal. The technical content of this requirement is divided into two Surveillances. The majority of this Surveillance is performed as ITS SR 3.3.6.2.4, a logic system functional test (LSFT). The LSFT verifies that each initiation signal functions properly. The actual system functional test is performed in ITS SR 3.6.4.3.3. This ensures that the entire system is tested with proper overlap of the different testing requirements.

3.3.7.1 Control Room Emergency Filtration

A.1 minor administrative

A.2 CTS 3/4.3.7 provides the LCO ~~and Surveillance~~ Requirements for the Radiation Monitoring Instrumentation. ITS 3.3.7.1 provides these requirements along with additional Control Room Emergency Filtration function requirements with explicit instructions for Actions application for TS compliance. In conjunction with ITS Specification 1.3, "Completion Times," the Actions Note ("Separate Condition entry is allowed for each....") and the wording for ITS Action E provides direction consistent with the intent of the CTS Action for an inoperable radiation monitoring instrumentation channel. This administrative change provides more explicit requirements, conforms to the STS

INSERT A.3 to subsection 3.3.a, LCO 3.3.6.2

CTS 4.3.2.3 requires a Response Time Test on all the Secondary Containment Isolation Instrumentation Functions. The ITS does not require a response time test for the Secondary Containment Isolation Function. The response time for the Secondary Containment Isolation Functions directly corresponds with the diesel generator start delay time. Therefore, these response time tests are redundant to the diesel generator start time tests in CTS 3/4.8.1.1 (ITS 3.8.1). NUREG-1366 and Generic Letter 93-05 both recommend deletion of these tests when they are redundant to the diesel generator tests. Therefore, these response time tests have been deleted (by not referencing the proposed response time SR to these Functions), and their deletion is considered administrative.

format, and is acceptable.

A.3 CTS 3.3.7.1, Action c, excludes applicability of CTS 3.0.3 and 3.0.4 for the radiation monitoring channel operability requirements. A Note to ITS 3.3.7.1, Condition E, maintains the exclusion of 3.0.4 applicability in the ITS. ~~CREF TS~~. ITS 3.3.7.1 Conditions and Required Actions cover all potential conditions for inoperable equipment in the system and, as such, a TS statement that Specification 3.0.3 is not applicable, is unnecessary. This is a change in presentation of TS requirements only and is acceptable.

portion of the

A.4 CTS ~~3.7 CREF System Surveillance Requirement~~ 4.7.2.e.2, requires verifying that each CREF pressurization mode actuation test signal initiates an automatic switch-over to the pressurization mode of operation. Th~~is~~e actuation instrumentation SR is moved to ~~the ITS LSFT SR~~, SR 3.3.7.1.4. The LSFT verifies that each signal functions properly. The actual system functional testing included in CTS 4.7.2.e.2 is performed in the ITS SR 3.7.3.3 ~~Surveillance Requirements~~. This will assure that the entire system is tested with proper overlap testing. Therefore, moving the actuation instrumentation Surveillance testing to ITS 3.3.7.1 is consistent with the STS format and is acceptable.

3.3.8.1 Loss of Power (LOP) Instrumentation

A.1 CTS 3/4.3.3 deals with emergency core cooling system actuation instrumentation, portions of which include the loss of power functions. ITS 3.3.8.1 deals exclusively with loss of power instrumentation and incorporates the loss of power functions from CTS 3/4.3.3. The ITS LCO requires the instruments listed in ITS Table 3.3.8.1-1 to be operable. The table includes all appropriate functions. This change reorganizes current TS requirements and is acceptable.

Loss of Power

A.2 The CTS 3/4.3.3 provides the LCO and ~~Surveillance~~ Requirements for ~~ECCS actuation~~ instrumentation. ITS 3.3.8.1 provides these requirements with more explicit instructions for Actions application for TS compliance. In conjunction with the ITS Specification 1.3, "Completion Times," the Actions Note ("Separate Condition entry is allowed for each....") and the wording for ITS Action A ("One or more automatic Functions") provides direction consistent with the intent of the CTS Action for an inoperable ~~isolation~~ instrumentation channel. This administrative change provides more explicit L.O.P. requirements, conforms to the STS format, and is therefore acceptable.

NO TABLE - deleted from T.S

A.3 CTS 4.3.3.3 requires that the response time of each ECCS ~~component~~ trip function shall be demonstrated to be within the limit at least once per 18 months, however, there is CTS Table 3.3.3-3 ~~has~~ no response time requirements for loss of power instrumentation. ~~ITS Table 3.3.8.1-1 has no response time testing requirements because Amendment 139 deleted this requirement from CTS Table 3.3.3-3~~. This change is consistent with the approved licensing basis for the plant and is acceptable.

139 DELETED Reqmt. TABLE - TABLE SAID 'NA' for requirement

A.4 CTS Table 3.3.3-1, Action 37, directs taking the action "required by Specification 3.8.1.1 or 3.8.1.2, as appropriate." ITS Required Action B.1,

requires the associated diesel generator to be declared inoperable if the inoperable channel is not tripped in 1 hour, but the ITS format does not provide cross references to the diesel TS. The CTS reference to another technical specification serves no functional purpose, and its removal is acceptable.

~~A.5 became L.3~~ /

A.~~6~~5 CTS Table 3.3.3-1, Action 38, footnote *, states the provisions of CTS 3.0.4 are not applicable for placing an inoperable loss of power instrument channel in trip within 1 hour. The ITS 3.3.8.1 actions does not include this footnote as a requirement. ~~The~~ ITS allows operation to continue once a channel is in the tripped condition. Thus, this change is part of the ITS 3.0.4 Actions and is acceptable. 3.0.4

3.3.8.2 RPS Electric Power Monitoring

A.1 CTS 3.8.4.4, action a and action b, require operators to "restore the inoperable power monitoring channel to OPERABLE status" and "restore at least one electric power monitoring channel to OPERABLE status," respectively. The format of ITS 3.3.8.2 actions follow the format of the STS by not including restore to operable status options because it is always acceptable to exit a required action by restoring equipment to within the LCO limits. Not requiring this action is an editorial change to adopt the STS format and is acceptable.

A.2 ITS 3.3.8.2, ~~Required~~ Action C requires a reactor shutdown if the required actions are not complete. This action is not part of the CTS, however, CTS action 3.0.3 is functionally equivalent to the ITS. CTS 3.0.3 allows one hour to commence a shutdown, in addition to the ITS 12 hours to achieve Mode 3 and 36 hours to achieve Mode 4. Thus, this change to the STS format results in essentially the same requirements and is acceptable.

Since these requirements result in the same limits as the current requirements, the changes are purely administrative and are therefore acceptable.

b. <u>Less Restrictive Requirements</u>

The licensee in electing to implement STS Section 3.3 has adopted a number of less restrictive conditions than are allowed by CTS. Several of these conditions had elements of change that were common to more than one specification and as such were presented as generic changes. The more significant conditions are the following with the generic changes discussed in the first without reference to a particular ITS Section:

A. Extend surveillance frequencies of applicable Functional Units from the current 18 months to 24 months.

The proposed TS modifications will extend the nominal frequencies for performing the following surveillance tests for certain safety system instruments channels from an existing 18 months to a refueling interval of nominally 24 months, not to exceed 30 months. ITS Sections affected are 3.3.1.1, 3.3.2.2, 3.3.4.1, 3.3.4.2, 3.3.5.1, 3.3.5.2, 3.3.6.1, 3.3.6.2, 3.3.7.1 and 3.5.1.1. — INSERT 3.3.3.1, 3.3.3.2

1. Logic System Functional Tests:
   CTS 4.3.1.2/ITS SR~~s~~ 3.3.1.1.14
   CTS 4.3.9.2/ITS SR 3.3.2.2.4
   CTS 4.3.4.2.2 and 4.3.4.2.3/ITS SR~~s~~ 3.3.4.1.4 and 3.3.4.1.5 — NOT LSFT
   CTS 4.3.4.1.2/ITS SR 3.3.4.2.4
   CTS 4.3.3.2/ITS SRs 3.3.5.1.~~5~~6 & 3.3.8.1.4
   CTS 4.3.5.2/ITS SR 3.3.5.2.4
   CTS 4.3.2.2/ITS SRs 3.3.6.1.6 &
   ~~CTS 4.3.2.2/ITS SR~~ 3.3.6.2.4
   NOT LSFT / NOT RELATED TO 3.3
   CTS 4.7.1.1.b/ITS SR 3.7.1.5
   CTS 4.7.1.2.b/ITS SR 3.7.2.2
   CTS 4.7.2.e.2/ITS SR 3.7.3.3 and SR 3.7.3.4
   CTS 4.7.9.b.1, 4.7.9.b.2 and 4.7.9.b.3/ITS SR 3.7.6.2 and SR 3.7.6.3

2. ~~RPS~~ Response Time Tests (RTT):
   CTS 4.3.1.2/ITS SR~~s~~ 3.3.1.1.15
   CTS ~~4.3.4.2.2 and~~ 4.3.4.2.3/ITS SR~~s 3.3.4.1.4 and~~ 3.3.4.1.5
   CTS 4.3.2.3/ITS SR 3.3.6.1.7
   ~~CTS 4.3.3.3/ITS SR 3.5.1.8, ECCS Response time test~~ ~~Not RTT~~, ADEQUATELY DISCUSSED IN 3.5
   DELETE - A CHANGES NOT RELATED to 18 to 24
   CTS 4.3.1.3/ITS SR 3.3.1.1.15, add a new Note 2 to read, "The sensor response time for Functions 3 and 4 may be assumed to be the design sensor response time."
   CTS ~~4.3.3.3/ITS SR 3.5.1.8, add a Note to read "Instrumentation response time may be assumed to be the design instrumentation response time."~~ covered IN 3.5
   CTS 4.3.2.3/ITS SR 3.3.~~1.~~6.1.7, add a Note to read "The sensor response time for Functions 1.a, 1.b, and 1.c may be assumed to be the design sensor response time."

3. Channel Functional Test:
   CTS 4.3.1.1/ITS SR 3.3.1.1.13 For Functional Unit 11, "Reactor Mode Switch Shutdown Position"

INSERT CTS 4.3.7.5/ ITS 3.3.3.1.4 INST-3 AND 28

4. Channel Calibration: ~~FUNC~~ TRIP Function 1.a
CTS 4.3.9.1/ITS SR 3.3.2.2.3, For ~~Functional Unit 1,~~ "Reactor Vessel Water Level-High, Level 8".
CTS 4.3.7.4.1/ITS SR 3.3.3.2.3, For ~~Functional Unit~~ TRIP INSTRUMENT 4, "Suppression Chamber Water Level"
CTS 4.3.3.1-1/ITS SR 3.3.5.1.4, For Functional ~~Units~~ 1.c, "LPCS Pump Start-LOCA Time Delay Relay," 1.d, "LPCI Pump A Start-LOCA Time Delay Relay," 2.c, "LPCI Pump B Start-LOCA Time Delay Relay," and 2.d, "LPCI Pump C Start-LOCA Time Delay Relay."
CTS 4.3.2.1-1/ITS SR 3.3.6.1.5, For Functional ~~Unit~~ 3.a ~~/4.a~~, "Reactor Water Cleanup System Isolation, Differential flow-high" trip

NOT IN CTS, AN 'M' CHANGE

NOT INSTRUMENTS DISCUSSED IN SE IN 3.5

5. Miscellaneous Tests:
CTS 4.5.1.c/ITS SR 3.5.1.5, System functional test for LPCS, LPCI and for HPCS systems.
CTS 4.5.1.d/ITS SR 3.5.1.5, Test for HPCS auto suction transfer from condensate storage tank to suppression pool.
CTS 4.5.1.e.3.a/ITS SR 3.5.1.6, ADS functional test including simulated automatic emergency operating sequence actuation excluding actual valve actuation.
CTS 4.5.1.e.3.b/ITS 3.5.1.7, Manual opening each ADS valves and monitoring control and bypass valve positions and corresponding change in measured steam flow.
CTS 4.7.3.c.1,2 and 3/ITS SRs 3.5.3.4 and 3.5.3.5

A THIS IS ALREADY III, ITS-08P page 10

In their submittal the licensee stated that the proposed modification is based on guidance provided by the staff in Generic Letter (GL) 91-04, "Changes in Technical Specification Surveillance Intervals to Accommodate a 24-Month Fuel Cycle," dated April 2, 1991. GL 91-04 provides guidance on how licensees should evaluate the effects of a 24 month extension on the safety of the plant and perform an evaluation to support a conclusion that the effect of such an extension on safety is insignificant. The licensee has performed a detailed engineering review of all instrument loops affected to establish the basis for a 30 month (24 months + 25%) calibration frequency. Using the WNP-2 procedures, the analyses were performed to verify that the surveillance interval extensions have a small effect on plant safety and would not invalidate any assumptions in the plant licensing basis. In GL-91-04, the NRC staff discussed seven issues pertaining to increasing the interval of instrument surveillance and identified specific actions that licensees should take to address each of these issues. The staff evaluated the licensee's submittal to verify that the licensee has addressed these issues and provided an acceptable basis for increasing the calibration interval for instruments that are used to perform safety functions, and concluded that the licensee's response was acceptable.

For the proposed extension in Channel Calibration frequency, the licensee stated that, the scope of this request is being limited to those instruments which are calibrated during the annual refueling outage. The current plant operating conditions have WNP-2 shutdown each spring for an annual maintenance and refueling outage. Consequently, most of the current surveillances that are required to be performed on an 18 month interval are performed annually since they must be performed while the plant is shutdown. This has resulted in

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increased testing with a resultant increase in cost and personal exposure. The proposed extension in frequency of Channel Calibration supports to limit the amount of testing that must be performed each maintenance and refueling outage. The drift analysis performed by the licensee lead to the conclusion that the impact of the revised frequency on the reliability of the instrumentation to meet the design criteria of the safety related equipment is very small and that the instrument drift is not a significant factor in increasing the surveillance interval. This is acceptable to the staff.

MOVE to ADMIN CHANGE A.3 on pg 11

Notes to surveillance requirements exempting instrumentation sensors from response time testing and allowing the design-response-time to be used instead have been proposed in accordance with evaluations performed in the topical report NEDO-32291, "System Analysis for Elimination of Selected Response Time Testing Requirements," January 1994. The licensee in their submittal stated that WNP-2 has committed to meet additional requirements stipulated by the NRC SER (B.A. Boger of NRC to R.A. Pinelli of BWROG) dated December 28, 1994, and will perform evaluations under the 50.59 process to delete these sensors from the current WNP-2 Response Time Test requirements. The licensee further added that because response times have been removed from the CTS and have been placed in WPPSS control per TS amendment 139, the 50.59 process will be used for this evaluation. This is acceptable to the staff.

B. Revision to STIs and AOTs Related to Staff Approved Topical Reports

The licensee has proposed to revise STIs and AOTs for instrument channels as follows:

A. Proposed change: CTS 3.3.1/ITS 3.3.1.1, Reactor Protection System Instrumentation, ~~LCO 3.3.1~~, extend AOT for placing the inoperable channel or trip system in trip condition from 1 hour to 12 hours for the first trip system and to 6 hours for the second trip system.

B. Proposed change: CTS 3.3.9/ITS 3.3.2.2. Add a following new Note to surveillance requirements (SR). "When a channel is placed in an inoperable status solely for performance of required Surveillances, entry into associated conditions and Required Actions may be delayed for up to 6 hours provided feedwater and main turbine high water level trip capability is maintained."

C. Proposed change: CTS 4.3.9.1/ITS 3.3.2.2, Table 4.3.9.1-1, Trip Function 1.a, Reactor vessel water level-high Level 8, revise frequency for Channel Calibration from M (monthly) to 92 days. TABLE = CTS NOT ITS

D. Proposed change: CTS 3.3.4.2/ITS 3.3.4.1, ~~LCO 3.3.4.2~~; End-of-Cycle recirculation Pump trip system Instrumentation, Revise Actions "b" and "c.1" to extend AOT for placing an inoperable channel into tripped condition, from 1 hour to 72 hours.

E. Proposed change: CTS TABLE 3.3.4.2-1/ITS 3.3.4.1. Revise footnote (a), "A trip system may be placed in an inoperable status for up to 2 hours for required surveillance provided that the other trip system is

that

NOT QUOTES

operable" to read, ~~"A~~ that trip system may be placed in an inoperable status for up to 6 hours for required surveillance provided that the other trip system is operable.

F. Proposed change: CTS 4.3.4.2.2/ITS SR 3.3.4.1.4, ~~LCO 3.3.4.1.a~~. For Trip Functions 1, Turbine throttle valve-closure, and 2, Turbine governor valve fast closure, revise frequency for Channel Functional Test from M (monthly) to 92 days.

G. Proposed change: CTS Table 3.3.4.1-1/ITS 3.3.4.2. ~~LCO 3.3.4.2~~, Revise footnote (a), "One channel may be placed in an inoperable status for up to 2 hours for required surveillance provided the other channel is OPERABLE," to read, ~~"O~~one channel may be placed in an inoperable status for up to 6 hours for required surveillance provided that the other channel is OPERABLE. CTS Table 4.3.4.1-1/ITS ~~3.3.4.2~~ SR 3.3.4.2.2, revise Channel Functional Test frequency from M (monthly) to once in 92 days. 4

Changed function numbers because (a) is CTS

H. Proposed changes: CTS Table 3.3.3-1/ITS 3.3.5-1. Emergency Core Cooling System Actuation Instrumentation, Revise footnote (a) to include Trip Functions, ~~3.c~~ C.1.c - Reactor vessel water level-high, Level 8, ~~3.f~~ C.1.f - HPCS system flow rate low (minimum flow), and ~~3.g~~ C.1.g - Manual initiation for which a channel may be placed in an inoperable status for 6 hours during periods of required surveillance without placing the trip system in the tripped condition, ~~provided~~ regardless at least one other OPERABLE channel in the same trip system is monitoring that parameter.

NOT PROVIDED

NOT RELATED TO SPECIFIC TOPICAL REPORT, SEE page 41

CTS Surveillance requirement 3.4.5.1.e.2/ITS SR 3.3.5.1.2. Revise Channel Functional Test frequency from current 31 days to 92 days.

J. Proposed change: CTS Table 3.3.5-1/ITS 3.3.5.2-1. Reactor Core Isolation Cooling System Actuation Instrumentation, add words,"for functions 1 and 3 only" after word "provided" in the footnote (a), "A channel may be placed in an inoperable status for up to 6 hours for required surveillance without placing the trip system in the tripped condition provided at least one other OPERABLE channel in the same trip system is monitoring that parameter."

K. Proposed change: CTS Table 3.3.2-1/ITS 3.3.6.1-1. Isolation actuation instrumentation, Primary containment isolation and CTS Table 3.3.2-1/ITS 3.3.6.2-1, Isolation actuation instrumentation, Secondary containment isolation. revise part of the Note (a), "provided at least one other OPERABLE channel in the same trip system is monitoring that parameter," to read,"provided the associated Function maintains isolation capability." (Note 2 to SR)

L. Proposed change: CTS 4.3.7.1-1/ITS Table 3.3.7.1-1. CREF Instrumentation Surveillance requirements, revise frequency for Channel Functional Test from M (monthly) to 92 days for Instrumentation #~~4~~ 1, Main control room ventilation Radiation Monitor.

The licensee in their submittal has stated that the proposed changes described in items A through L, were evaluated in reliability analyses NEDC-30851-P-A, March 1988, NEDC-30936-P-A, December 1988, NEDC-30851-P-A, Supplement 2, March 1989, NEDC-31677-P-A, June 1989, GENE-770-06-1-A, December 1992, and GENE-770-06-2-A, December 1992, and were approved by the staff. Results of these analyses indicated that the proposed STIs and AOTs maintain an acceptable risk. The licensee stated that the logic design of the affected instrumentation is bounded by that analyzed in the reliability analysis and the conclusions of the analysis are applicable to the WNP-2 design. The safety evaluation reports (SERs) for these analyses stipulated certain conditions which must be met by the licensee before approved results of the analyses could be applied to plant specific systems. In revision B to this submittal the licensee stated that the requirements of the NRC SER accepting the generic reliability analyses have been met by WNP-2. This is acceptable to the staff.

3.3.1.1 Reactor Protection System (RPS) Instrumentation

LA.1 CTS ~~SR~~ Table 4.3.1.1-1 Note (f) requires LPRM calibrations to be performed using the TIP system. ITS SR 3.3.1.1.7 does not specify the use of the TIP system for accomplishing the required TS surveillance testing. Instead, the Bases for Note (1) to ITS SRs 3.3.1.1.9 and 3.3.1.1.10 discuss that changes in neutron detector sensitivity are compensated for by performing the 7 day calorimetric (SR 3.3.1.1.2) and the ~~1200~~ 1130 MWD/T LPRM calibration against the TIP's (3.3.1.1.7). Since locating the instructions to calibrate the LPRMs using the TIP system do not effect changes to the outcome of LPRM calibrations it is not necessary to include these requirements in the ITS to ensure the operability of the RPS Instrumentation. Therefore, the change is acceptable.

CTS ~~SR~~ 4.3.1.2, Logic System Functional Test, requires each of the logic components of channel logic circuits to be tested, including the "simulated automatic operation of all channels." ITS SR 3.3.1.1.14 does not include the instruction to simulate automatic operation of all channels. Instead, ITS Bases B 3.3.1.1 state that the testing demonstrates operability of the required trip logic. Since these instructions do not effect changes to the outcome of logic system channel functional testing it is not necessary to include these requirements in the ITS to ensure the operability of the RPS Instrumentation. Therefore, the change is acceptable.

CTS Table 4.3.1.1-1, SRM/IRM channels, and the APRM and IRM channel check table notation (b) requires determining that the APRM and IRM channels overlap "for at least ½ decade". ITS SR 3.3.1.1.5 and SR 3.3.1.1.6 provide the surveillance requirements for the APRM and IRM channel checks. The CTS limits that define APRM and IRM channel operability as having an overlap of "at least ½ decade is moved to ITS Bases B 3.3.1.1 in accordance with the STS format. These surveillances ensure that no gaps in neutron flux exists from subcritical to power operation for monitoring core reactivity status. In addition to the ½ decade overlap as an acceptable limit, the ITS accepts any overlap between the APRMs and the IRMs if the transition between Modes ~~is~~ can be made without either APRM downscale rod block or IRM upscale rod block. Since these instructions are not limits to operation rather they are acceptable methods for meeting ITS requirements these CTS requirements can be moved to the Bases for SRs.

LA.2 CTS 3.3.1 footnote "*" states, "An inoperable channel need not be placed in the tripped condition where this would cause the trip function to occur"and Note "**" states, "If more channels are inoperable in one trip system than in the other, place the trip system with more inoperable channels in the tripped condition, except when this would cause the Trip Function to occur." ITS Bases B 3.3.1.1 includes these details in the Actions of Specification 3.3.1.1 which ensure inoperable channels are placed in trip or the plant is placed in a non-applicable Mode or condition, as appropriate. As a result, including details in the ITS is not necessary for ensuring the appropriate actions are taken in the event of inoperable RPS channels. This change is in accordance with the STS and is acceptable.

LA.3 CTS Table 3.3.1-1, table notation (b), requires removing the RPS shorting links from the RPS circuitry prior to and during the time any control

rod is withdrawn and while performing shutdown margin demonstrations per CTS 3.10.3 for IRM Neutron Flux - High Functions in Mode 5. In the ITS all requirements for removing the RPS shorting links are moved to plant controlled procedures. The refueling functions, refueling interlocks and shutdown margin, are required to be operable by LCO 3.9.1 and LCO 3.9.2. Although shutdown margin may not have been demonstrated in Mode 5, shutdown margin calculations are performed and, along with procedural compliance for any core alterations, provide indication that adequate shutdown margin is available. In addition to SRM operability with shorting links removed, IRM operability continues to provide backup for the credited functions for any significant reactivity excursions. Placing the shorting link requirements in plant procedures controlled by provisions of 10 CFR 50.59 provides acceptable control for future changes to these requirements and is consistent with the content and scope of the STS, therefore, the change is acceptable.

LA.4 CTS Table 3.3.1-1 table notation (c) for APRMs states that if there is less than two LPRM inputs per level or less than 14 LPRM inputs to an APRM channel, the APRM channel is inoperable. In the ITS, the LPRM acceptance criteria are placed in the ITS Bases B 3.3.1.1 which states that if sufficient LPRMs are not available, i.e., the same number as in CTS Table 3.3.1-1, Note (c), then the associated APRM is inoperable. Since these acceptance criteria are one of many limits that meet the TS requirement to be operable, i.e., capable of performing the intended design function, then placing these words in the Bases establishes the appropriate basis for RPS Instrumentation. The change conforms to the STS format and is acceptable.

LA.5 CTS Table 3.3.1-1, table notation (d), states the Main Steam Isolation Valve—Closure Function shall be automatically bypassed when the reactor mode switch is not in run and reactor pressure is less than 1060 psig; CTS Table 3.3.1-1, table notation (g), states that the Primary Containment Pressure—High Function also actuates the Standby Gas Treatment System; CTS Table 3.3.1-1, table notation (i), states that the Turbine Throttle Valve—Closure and the Turbine Governor Valve Fast Closure, Valve Trip System Oil Pressure—Low Functions are automatically bypassed based on turbine first stage pressure when thermal power is less than 30% of RTP; and CTS Table 3.3.1-1, table notation (j), states that Turbine Throttle Valve—Closure and the Turbine Governor Valve Fast Closure, Valve Trip System Oil Pressure—Low Functions also actuate the EOC-RTP System. These statements explain safety system capabilities rather than establish CTS limits to operation that ensure RPS instrumentation operability, therefore these design details are appropriately contained in the FSAR. In addition, the Applicabilities for the Turbine Throttle Valve—Closure and the Turbine Governor Valve Fast Closure, Valve Trip System Oil Pressure—Low Functions have been modified to be ≥ 30% RTP, consistent with the design and current Note (i), and the reference to the turbine first stage pressure in Action 6 has been relocated to the FSAR since it describes how the 30% RTP signal is generated. Changes to the FSAR are controlled by the provisions of 10 CFR 50.59. These changes conform to the STS and are acceptable.

LA.6 CTS Table 4.3.1.1-1, table notation (h), for Function al unit 2b, Flow Biased Simulated Thermal Power - Upscale, Refueling interval channel calibration requires that the calibration verify a simulated thermal power time constant

equal to 6 ± 1 second. ITS SR 3.3.1.1.11 states the time constant as the upper range of the band. This shows the time constant requirement as equal to or less than 7 seconds, which is to be verified every 18 months in accordance with the STS format. If the actual time constant is less than the minimum time, then the Function will cause an RPS trip sooner than is required. While this may be undesirable from an availability standpoint, it does not result in a safety significant change because the assumptions of the safety analysis will continue to be met. Other RPS Allowable Values only list the minimum or maximum values, not both, even though WNP-2 has a range to which the actual setpoint is set. The change is presentation preference only, and therefore acceptable.

LA.7 CTS Table 2.2.1-1 lists the Limiting Safety System Settings (LSSS) Trip Setpoint and Allowable Value for each RPS Function. ITS Table 3.3.1.1-1 only lists the RPS Allowable Values consistent with the STS format. The LSSS values are defined by ITS Bases to be the Table 3.3.1.1-1 Allowable Values. 10 CFR 50.36 requires LSSS to be settings for automatic protective devices related to variables having significant safety functions. LSSS are implicit in the assumptions of the staff approved setpoint methodology. The Allowable Value is also implicit in the assumptions of the staff approved setpoint methodology and the Bases state that the Allowable Value is the TS limit for instrument Function operability. Changes to the trip setpoints in procedures can be adequately controlled by the provisions of 10 CFR 50.59. The format is consistent with the STS format and the staff approved setpoint methodology, therefore these changes are acceptable.

LB.1 Replaced with SE section ~~3.3.b.A and~~ 3.3.b.B

LD.1 Replaced with SE section 3.3.b.A ~~and 3.3.b.B~~

LE.1 Replaced with SE section 3.3.b.A ~~and 3.3.b.B~~

LF.1 ~~Replaced with SE section 3.3.b.A and 3.3.b.B~~ NOT IN SE

L.1 CTS LCO 3.3.1 Mode 3 and 4, requirements for APRMs, IRMs, Reactor Mode Switch Shutdown Position, and Manual Scram are deleted in ITS LCO 3.3.1.1. During normal operation in Modes 3 and 4, all control rods are fully inserted and the Reactor Mode Switch Shutdown position control rod withdrawal block TS (ITS 3.3.2.1) requires instrumentation to be operable that prohibits control rod withdrawal. With the rod block instrumentation operable and all rods inserted, the APRM, IRM, and Reactor Mode Switch Shutdown Position and Manual Scram functions are not required to be operable because there are sufficient controls in place to ensure positive core reactivity changes do not occur. Special Operations LCO 3.10.3 and LCO 3.10.4 allow a single control rod to be withdrawn in Modes 3 or 4 by allowing the Reactor Mode Switch to be in the Refuel position. This change is in accordance with the STS format. Therefore, to ensure adequate protection from a reactivity excursion the IRM scram function of the RPS is required to be operable by LCOs 3.10.3 and LCO 3.10.4.

L.2 CTS Table 3.3.1-1 requires Mode 5 Applicability for ~~APRM~~ IRM Functions all units 1a and 1b, Reactor Mode Switch Shutdown Position, and Manual Scram. ITS Table

3.3.1.1-1, Note (a), is added to the Mode 5 Applicability for these functions. Note (a) requires Mode 5 Applicability for these functions with any control rod withdrawn from a core cell containing one or more fuel assemblies. During normal operation in Mode 5, all control rods are fully inserted. This change is consistent with the STS. Under these conditions, the RPS function is not required to be operable because there are sufficient administrative controls in place to ensure positive core reactivity changes do not occur. If a rod is withdrawn such that positive reactivity is added, the IRM Function is required to be operable.

L.3 CTS Table 3.3.1-1, APRM Mode 5 Applicability, other than during shutdown margin demonstrations, is deleted in ITS Table 3.3.1.1-1 . The remaining requirements during SDM demonstrations are moved into the shutdown margin demonstration Special Operation Technical Specification.

The staff concludes in general that the APRMs are not necessary for safe operation of the plant while operating in Mode 5 with the mode switch in "Refuel" because: (1) The IRMs are a safety related subsystem of the NMS and are required by Technical Specifications to be operable in Mode 5 (with a control rod withdrawn). The IRMs will generate an RPS scram or control rod block if neutron flux increased to the applicable setpoint, (2) The IRMs and SRMs are designed and calibrated to be more sensitive to neutron flux than the APRMs, (3) The IRMs are designed to monitor local core events while the APRMs provide a measure of core average power conditions. The IRMs can monitor and react to the most probable reactivity events expected during refueling, i.e., control rod withdrawal or fuel insertion, (4) The IRMs would detect and respond (control rod block or reactor scram) to an inadvertent criticality event before the APRMS would provide a trip function, (5) The withdrawal of only one control rod in Mode 5 is permitted by the "one-rod-out" interlock while in "Refuel." The core is designed to be subcritical with one rod out, (6) The withdrawal of a second control rod or inadvertent addition of a fuel bundle in Mode 5 is precluded by refueling interlocks, refueling procedures, and administrative controls, (7) The APRMs will still be required (Special Operation LCO 3.10.8) to be operable during a shutdown margin demonstration performed in MODE 5, (8) The SRMs are required to be operable in Mode 5, (9) The transient analysis discussed in the FSAR does not require the APRMs to be operational in Mode 5 to mitigate an undesirable operational or transient condition.

In place of the Mode 5 APRM requirements, the licensee has committed to institute various levels of control to prevent inadvertent reactor criticality and fuel damage during refueling operations. These commitments include: (a) Licensed plant operators are trained to operate equipment and follow approved procedures, (b) Plant approved refueling and maintenance procedures specify core alteration steps, (c) SRMs indicate the potential for reactor criticality and generate a control rod block signal on high neutron flux levels. When shutdown margin has not been demonstrated, and control rods are withdrawn procedures require the shorting links be removed so that the SRMs will operate in the non-coincident scram mode to cause a reactor scram as necessary, (d) Refueling interlocks prevent the removal of more than one control rod and prevent the insertion of fuel bundles into the core unless all control rods are fully inserted, (e) The IRMs provide an indication of local

power. IRMs will provide control rod blocks and scram signals on high neutron flux levels.

The staff concludes that if operator errors should occur, followed by postulated equipment malfunctions, there will be adequate systems and interlocks without the APRMs to preclude inadvertent criticality or violation of a safety limit.

L.4 CTS Table 3.3.1-1, Actions 3 and 9 and table notation ~~(g)~~ (h), and CTS Table 4.3.1.1-1, table notation (j), have been modified by ITS Table 3.3.1.1-1, Note (a), to only require RPS Functions to be operable in Mode 5 with any control rod withdrawn from a core cell containing one or more fuel assemblies. In addition, proposed Action H for Mode 5 only requires action to be initiated to fully insert control rods in core cells containing one or more fuel assemblies. Control rods withdrawn from or inserted into a core cell containing no fuel assemblies have a negligible impact on the reactivity of the core and therefore are not required to be operable with the capability to scram. Provided all rods otherwise remain inserted, the RPS functions serve no purpose and are not required. In this condition the required shutdown margin and the required one-rod-out interlock ensure no event requiring RPS occur. The Actions for inoperable equipment in Mode 5 are also revised to be consistent with the Applicability. Since all control rods are fully inserted during fuel movement, the applicable conditions cannot be entered while moving fuel. The only possible core alteration is control rod withdrawal which is addressed by Action H. In addition, since the Required Action requires the control rods to be inserted, the requirement to also lock the Mode switch in shutdown (current Action 9) has been deleted. This change is in accordance with the STS, and is acceptable.

L.5 CTS Table 3.3.1-~~1~~ al Unit, Action 6, for RPS Function ~~8~~ al Unit 9, Turbine Throttle Valve - Closure, and Function ~~9~~ 10 "Turbine Governor Valve Fast Closure, Valve Trip System Oil Pressure - Low", in Mode 1, requires initiating a reduction in ~~Thermal~~ POWER within 15 minutes. ITS 3.3.1.1 Action E deletes this requirement. Immediate power reduction may not always be the conservative method to assure safety. The ~~required~~ Action to be < 30% RTP within 6 hours remains in ITS ~~Required~~ Action E, ensuring prompt action is taken to exit the Applicability due to the inoperability of the associated RPS Functions. This change conforms to the format of the STS, and is acceptable.

L.6 CTS Table 3.3.1-~~1~~ al Unit 10, Action 6, for RPS Function ~~8~~ al Unit 9 Turbine Throttle Valve - Closure, and Function ~~9~~, "Turbine Governor Valve Fast Closure, Valve Trip System Oil Pressure - Low", in Mode 1, requires reducing RTP to < 30% within 2 hours. ITS 3.3.1.1 Action E extends this 2 hour requirement to 4 hours. This additional 2 hours provides time to decrease power in a controlled and orderly manner, assuming the minimum required equipment is operable. The extra time reduces the potential for a unit upset that could challenge safety systems. This time is consistent with the STS requirement, and therefore acceptable.

L.7 CTS Table 4.3.1.1-1 provides channel calibration and channel functional test Surveillance Requirements for the RPS APRM and IRM functions. A Note to ITS SR 3.3.1.1.3, Note 2 to ITS SR 3.3.1.1.9, and Note 2 to ITS SR 3.3.1.1.10

are added to exempt the channel functional test and channel calibration requirements until 12 hours after entering Mode 2 from Mode 1. The IRM and APRM setdown functions are required in Mode 2, but not in Mode 1, and the required surveillances cannot be performed in Mode 1 (prior to entry in the applicable Mode 2) without utilizing jumpers or lifted leads. Use of these devices is not recommended since minor errors in their use may increase the probability of a reactor transient or event which is a precursor to a previously analyzed accident. Therefore, time is allowed to conduct the SRs after entering the applicable Mode. This Frequency is consistent with the STS requirement, and determined acceptable.

Functional Units

L.8 CTS Table 4.3.1.1-1 requires a channel functional test performed for Function 2b, "APRM Flow Biased Simulated Thermal Power - Upscale", and Function 2c, "APRM Fixed Neutron Flux - Upscale" prior to each reactor startup. The S/U CTS surveillance test requirement is deleted in the ITS. ITS SR 3.3.1.1.8 requires these surveillance tests on a quarterly surveillance test interval (STI) while in the applicable Modes, as required by SR 3.0.1, and must be current prior to entering the applicable Modes, as required by SR 3.0.4. The quarterly STI is sufficient verification that the APRMs are properly functioning. Performing a reactor startup does not impact the ability of the monitors to perform their required function. Therefore, performing an additional surveillance required to be performed "prior to a reactor startup" is extraneous and unnecessary.

L.9 CTS Table 4.3.1.1-1, notation(e) requires a weekly channel calibration of the APRM Flow Biased Simulated Power - Upscale Function, consisting of adjusting of the APRM flow biased channel to conform to a calibrated flow signal. The Frequency for performing this Surveillance is extended from 7 days to 92 days as part of the ITS SR 3.3.1.1.8, channel functional test requirement for the APRM Flow Biased Simulated Thermal Power—High Function. In their submittal the licensee stated a review of historical maintenance and surveillance data for the past two years has shown that this test always passes the surveillance at the current frequency (i.e., the instruments have never been required to be adjusted due to a failure of this surveillance). The licensee also stated that an evaluation has been performed using this data, and it has been determined that the effect on safety due to the extended surveillance frequency will be small. The effect of the increased interval on instrument drift was also considered in their evaluation. In addition to the proposed 92 day surveillance frequency, the licensee stated that if the surveillance is performed at the maximum 115 day interval allowed by SR 3.0.2 the licensing basis assumptions are not invalidated. Based on the historical test data and extended drift analysis for the 92 day test interval the staff concludes that extending the STI from 7 days to 92 days has a negligible impact on safety and does not invalidate any assumptions in the plant licensing basis. Therefore, the changes are acceptable to the staff.

L.10 The CTS Table 4.3.1.1-1 channel check requirement for the Reactor Vessel Steam Dome Pressure—High Function is deleted in the ITS. Pressure switches perform this RPS Function. These switches are either in the "tripped" or "not tripped" condition, depending on the sensed pressure relative to the trip setpoint. The CTS channel check requirement is satisfied by verifying each of

the pressure switches are "not tripped" as indicated by the associated alarm annunciators. There is no read-out indication provided that can be used to compare these instruments to the indications of other similar instruments measuring the same parameter. This channel check methodology provides a comparison of the "tripped" and "not tripped" status of the pressure switches, but does not provide an indication of the overall condition of the pressure switch beyond that provided by the annunciators. Thus, the verification of this status on a 12 hour periodicity does not provide information that is not constantly available to the Plant Operations Staff through the absence of an annunciator. The change is acceptable.

L.11 A Note is added to the APRM heat balance calibration (ITS SR 3.3.1.1.2), that was not included in the CTS,. The Note states that the Surveillance is not required to be performed until 12 hours after THERMAL POWER ≥ 25% RTP. This note is added because it is difficult to determine core THERMAL POWER from a heat balance. At low power levels, a high degree of accuracy is unnecessary because of the large inherent margin to thermal limits (MGPR and APLHGR). This Frequency change is consistent with the STS, and is acceptable.

3.3.1.2 Source Range Monitors

LA.1 CTS ~~SR~~ 4.3.7.6.c requires prior to withdrawing control rods, the ~~the performance of a channel functional test at least once per 31 days, including;~~ verification that the source range monitor count rate is at least 0.7 cps, "with the detector fully inserted." The instructional requirement, "with the detector fully inserted" is excluded from ITS SR 3.3.1.2.4. Details of the methods for performing the Surveillances are moved to the ITS Bases. The instructional requirements are procedural details that are not necessary for ensuring SRM operability. The Surveillance Requirements of ITS 3.3.1.2 provide adequate assurance the SRMs are maintained operable. The intent of the modified surveillance is supported by the STS, and is acceptable.

LA.2 CTS 3.9.2 requires at least 2 SRM channels to be operable "and inserted to the normal operating level with continuous indication in the control room". The details relating to SRM operability (in this case that the SRMs shall be inserted to the normal operating level) are moved to the Bases. ITS 3.3.1.2 provides the requirements for SRM operability, without clarifying that the SRM must be "inserted to the normal operating level". Procedural details of the methods for complying with the LCO are requirements that are not necessary for ensuring SRM operability. ~~In addition, when a peripheral control rod is selected, the RBM is automatically bypassed and cannot generate a rod block signal~~. The definition of operability in Chapter 1.0 along with the Bases discussion provide adequate assurance the SRMs are maintained operable. The change conforms to the STS format, and is acceptable.

ADD it

CTS 4.9.2.d verifies this within 8 hours prior to and every 12 hours during the required conditions.

LA.3 CTS 3.9.2.d requires the "shorting links" associated with the SRMs to be removed from the RPS circuitry prior to and during the time any control rod is withdrawn and shutdown margin demonstrations are in progress in Mode 5, except when control rods are removed for refueling operations (CTS 3.9.10.1 and 3.9.10.2). Requirements for removing the RPS shorting links are moved from the TS to plant procedures. ITS 3.3.1.2 and Table 3.3.1.2-1 provide the

CTS 4.9.2.b requires a verification, once per 12 hours, that the detectors are inserted to the normal operating level.

requirements for SRM operability. The primary reactivity control functions during refueling are the refueling interlocks and the shutdown margin described in the FSAR. The refueling interlocks are required to be operable by ITS 3.9.1 and 3.9.2. Although shutdown margin is not demonstrated for entry into Mode 5, shutdown margin calculations, along with procedural compliance for any core alterations, ensure adequate shutdown margin. In place of SRM operability with the shorting links removed, IRM operability provides backup for the credited functions for any significant reactivity excursions. Since the SRM channel high flux scram (with shorting links removed) provides only an uncredited backup in Mode 5, moving the shorting link removal requirement to plant procedures does not significantly affect safety.

L.1 When in Mode 2 with IRMs on range 2 or below, CTS 3.3.7.6 ACTION a allows four hours to restore one inoperable SRM to operable status or be in HOT SHUTDOWN within the next 12 hours. ITS 3.3.1.2 allows four hours to restore one or more required inoperable channels when in this mode of operation. The CTS requirement to shut down the unit when more than one required SRM is inoperable is unnecessarily restrictive and does not allow concentration of efforts on repair. Therefore, the Completion Time of four hours is provided (in conformance with STS) for any number of inoperable SRMs as long as adequate capabilities remain to monitor the core. With no operable SRMs, the ability to monitor positive reactivity changes is significantly restricted, thus ITS Action B ensures that no further control rod withdrawal is allowed. This less restrictive change conforms with the STS format, and is acceptable.

L.2 When in Modes 3 and 4 with one or more of the required SRM channels inoperable, CTS 3.3.7.6 action b requires ~~verification~~ that the reactor mode switch is "locked" in the Shutdown position within 1 hour. ITS 3.3.1.2 requires "placing" the reactor mode switch in the Shutdown position for this condition. The position of the reactor mode switch in Mode 3 or 4 is controlled by the Modes definition Table (ITS Table 1.1-1). Reactor mode switch positions other than Shutdown, result in the unit entering some other Mode; with the associated TS compliance requirements of that Mode and of ITS 3.0.4. Therefore, deleting the CTS requirement to; verify the reactor mode switch in the "lock" position, is acceptable because Mode switch position requirements that remain provide sufficient control to prohibit unauthorized rod withdrawal.

L.3 CTS ~~SR~~ 4.3.7.6 b channel functional test and CTS 4.3.2.6.a.2 channel calibration operability requirements are changed by application of SR Notes for ITS SR 3.3.1.2.6 and ITS SR 3.3.1.2.7. These notes allow entry into the Modes and conditions where the SRMs are required to be operable, prior to satisfactory completion of the required channel functional test and channel calibration. This is effectively a CTS 4.0.4 exception, and is similar to the operability exception already allowed for the APRMs in the RPS specification. The SRMs are required in Modes 2 and 3, but not in Mode 1, and the required Surveillance cannot be performed in Mode 1 (prior to entry in the applicable Mode 2 or 3) without utilizing jumpers or lifted leads. Use of these devices is not recommended since minor errors in their use may significantly increase the probability of a reactor transient or event which is a precursor to a previously analyzed accident. Therefore, in accordance with the STS, time is

allowed to conduct the SR after entering the applicable Mode. Insert L.4a

SR 3.3.1.2.6

L.4 CTS SR 4.3.7.6.b.1 requires the performance of a channel functional test within 24 hours prior to moving the reactor mode switch from the Shutdown position, if not performed within the previous 7 days. ITS SR 3.3.1.2.5 and ~~does~~ not require the channel functional test to be performed within 24 hours prior to moving the reactor mode switch from the Shutdown position, but ~~does~~ requires the test to be performed every 7 days while in Mode 5. The required periodic Frequency has been determined to be sufficient verification that the source range monitors are properly functioning. Moving the reactor mode switch ~~does~~ not impact the ability of the monitors to perform their required function. The 7 day frequency for ITS SR 3.3.1.2.5 ensures that the channels are operable while core reactivity changes could be in progress. Therefore, an additional surveillance required to be performed "prior to" one of these events is unnecessary. This less restrictive change conforms with the STS and is acceptable.

Insert L.4b

Insert L.4c

SR 3.3.1.2.4

and SR 3.3.2.1.6, respectively,

No Discussion of 4.9.2.b.1 & 4.9.2.c.1 to go with MODE 5 Discussion

#31 day

No Discussion of MODE 2, 3, 4 requirement SEE INSERT

L.5 CTS 3.9.2(b) requires at least 2 SRM channels to be operable in Mode 5, including at least one with alarm in the control room. ITS 3.3.1.2 contains the SRM indication requirements only. The high flux alarm function of the SRMs does not relate to the operability of the SRMs with respect to their capability to monitor neutron flux levels. In addition, the SRMs have no safety function and are not assumed to function during any design basis accident or transient. Control of the availability of, and necessary compensatory activities if not available, for alarms are more appropriately addressed by plant procedures. The SRMs are retained in ITS since they provide the only available on-scale neutron flux monitoring during refueling. The change conforms to the STS and is acceptable.

Can be deleted - not relevant

L.6 CTS 3.9.2 requires at least 2 SRM channels to be operable in Mode 5. ~~Although, CTS footnote "***" provides an exception that,~~ "an individual SRM is not required to be operable with ≤4 fuel assemblies adjacent to the SRM and no other fuel assemblies in the associated core quadrant." A Note has been added to ITS Table 3.3.1.2-1 that allows only one operable SRM during spiral offload or reload when the fueled region includes only that SRM detector. In Mode 5, during a spiral offload or reload, an SRM outside the fueled region will no longer be required to be operable, since it is not capable of monitoring neutron flux in the fueled region of the core. However, the SRM detector in the fueled region must be operable, as required by ITS SR 3.3.1.2.2.a and Note 2 to SR 3.3.1.2.2 during core alterations to provide adequate coverage of potential reactivity changes in the core. Note 1 states that this SR is required to be met only during core alterations. It is not required to be met at other times in Mode 5 since core reactivity changes are not occurring. Note 2 clarifies that more than one of the three requirements for SRM operability can be met by the same operable SRM. The SR Frequency is based upon operating experience and supplements operational controls over refueling activities, which include steps to ensure that the SRMs required by the LCO are in the proper quadrant. This change is in accordance with the STS and is acceptable.

3.3.2.1 Control Rod Block Instrumentation

INSERT L.4a to subsection 3.3.b, LCO 3.3.1.2

CTS 4.9.2.b.1 requires a channel functional test within 24 hours prior to the start of Core Alterations. CTS 4.9.2.c.1 requires the count rate to be verified prior to control rod withdrawal in MODE 5.

INSERT L.4b to subsection 3.3.b, LCO 3.3.1.2

and 31 days in Modes 2, 3, and 4. ITS 3.3.1.2.4 does not require the count rate to be verified prior to control rod withdrawal in Mode 5, but does require the verification every 12 hours prior to Core Alterations (which encompasses rod withdrawal)

INSERT L.4c to subsection 3.3.b, LCO 3.3.1.2

, withdrawing control rods, and performing Core Alterations

However, ACTIONS only req'd if TSP > AV.

LA.1 CTS 3/4.3.6 requires all control rod block channels to be operable with their trip setpoints set consistent with specified values. ITS Table 3.3.2.1-1 ~~replaces the trip setpoint values with~~ lists only the allowable values. Trip setpoints are operational details that relate to the instrumentation operability. Setpoints limits are established for instrument loops in plant procedures to ensure that safety systems will actuate when process parameters reach these limits before exceeding TS allowable values. These trip setpoints are moved to plant procedures controlled by provisions of 10 CFR 50.59. The ITS allowable value is the chosen limit for process parameters that ensure the assumptions of the safety analysis are met. This change is consistent with the STS format and is acceptable.

LA.2 CTS Table 3.3.6-1 table notation (a), states that "the RBM shall be automatically bypassed when a peripheral control rod is selected or the reference APRM channel indicates less than 30% of RATED THERMAL POWER." CTS requirements: "shall be automatically bypassed" and "the reference APRM channel indicates", are details of the system design that do not establish the necessary applicability requirements to ensure RBM operability. In addition, when a peripheral control rod is selected, RBM is automatically bypassed and can not generate a rod block. Therefore, RBM applicability requirements in ITS Table 3.3.2.1-1 Note "a" require operable instrument channels when "~~Thermal Power~~ ≥ 30% RTP and no peripheral control rod selected." These TS requirements establish a sufficient level of control to ensure RBM Functions are operable consistent with the system design and assumptions of the safety analysis. CTS operability requirements are unchanged, formatted consistent with STS format, and therefore acceptable.

No DISCUSSION of CTS 4.1.4.1 SEE INSERT

LA.3 CTS Table 4.3.6-1 table notation (c) requires that reactor manual control multiplexing system inputs be included in the quarterly channel functional test of RBM Functions. Insert LA.3 The details of what channel components are to be included during surveillance testing are moved to the ITS Bases. The moved requirements are a partial listing of system components and present a description of the system design without establishing requirements necessary to ensure control rod block instrumentation operability. ITS 3.3.2.1 SRs establish TS requirements at a sufficient level to ensure control rod block instrumentation operability. Future changes to the Bases are controlled by the provisions of the Bases Control Program described in Chapter 5. CTS requirements are reduced consistent with the STS format and these changes are acceptable.

L.1 CTS Table 4.3.~~5~~6-1 requires performance of a channel functional test for RBM Functions within 24 hours prior to each plant startup, if not performed within the previous 7 days. The CTS startup surveillance requirement is deleted in ITS Table 3.3.2.1-1. The CTS required periodic testing prior to and during applicable modes have shown to provide sufficient requirements for verifying that the RBMs are operable. Performing additional testing prior to a reactor startup does not adversely affect current testing practice or the ability of the monitors to perform their required function. Therefore, it is acceptable to delete the surveillance requirement "prior to a reactor startup."

L.2 The CTS 3/4.1.4 RWM low power setpoint is reduced to 10% RTP from 20% RTP

INSERT LA.3 to subsection 3.3.b, LCO 3.3.2.1

CTS 4.1.4.1 requires the RWM operability to be demonstrated prior to withdrawal of control rods for the purpose of making the reactor critical and in Mode 1 prior to RWM automatic initiation "by verifying proper indication of the selection error of at least one out-of-sequence control rod" and "by verifying the rod block function by demonstrating inability to withdraw an out-of-sequence control rod."

in ITS Table 3.3.2.1-1 based on Amendment 17 to NEDE-24011-P-A (GESTAR-II) which uses the analytical value basis for the bypass power level. Amendment 17, "Acceptance for Referencing the Licensing Topical Report NEDE-24011-P-A, General Electric Standard Application for Reactor Fuel, Revision 8, Amendment 17," December 27, 1988, states that the previous 20% RTP TS limit was as an extreme bound that included large uncertainties in the Rod Drop Accident (RDA) analyses that existed in the early 1970's. It is now recognized that if core power level exceeds 10% RTP, no control rod pattern can generate rod worths such that the fuel enthalpy would exceed the 280 cal/gm fuel enthalpy limit during the worst RDA. For this reason, this reduction in the bypass power level to the analytical limit value in the TS was approved. The Supply System has reviewed Amendment 17 to NEDE-24011-P-A and the NRC SER, and finds the results and conclusions applicable to WNP-2. The staff finds this is acceptable.

L.3 CTS SR 4.1.4.1 requires surveillance testing to demonstrate RWM operability at the following frequencies for every reactor startup and shutdown regardless of the actual frequency of these events: a) in Mode 2 within 8 hours prior to withdrawal of control rods for making the reactor critical, and in Mode 1 within 8 hours prior to RWM automatic initiation when reducing THERMAL POWER, by verifying proper indication of the selection error of at least one out-of-sequence control rod, b) in Mode 2 within 8 hours prior to withdrawal of control rods for making the reactor critical, by verifying the rod block function by demonstrating inability to withdraw an out-of-sequence control rod, and c) in Mode 1 within 1 hour after RWM automatic initiation when reducing THERMAL POWER, by verifying the rod block function by demonstrating inability to withdraw an out-of-sequence control rod. The Frequency of these Surveillances have been changed in ITS SR 3.3.2.1.2 and 3.3.2.1.3 to every 92 days because the RWM is a very reliable system as shown by both a review of the maintenance history and by the successful completion of the startup surveillance testing during the last 6 reactor startups. In addition, other similar rod block functions have a 92 days channel functional test. This is acceptable to the staff.

L.4 CTS 3.1.4.3 Action a.1 ~~and Surveillance~~, CTS Requirement 4.1.4.3.b have been deleted from the ITS. These requirements require the operator to verify that the reactor is not operating on a limiting control rod pattern when a rod block monitor channel is discovered to be inoperable and additional channel functional testing is required prior to withdrawing rods when operating on a limiting control rod pattern. In TS a limiting control rod pattern is defined as operating on a power distribution limit such as APLHGR or MCPR. This condition is unlikely, furthermore, the appropriate status of power distribution limits does not affect the operability of the RBM. TS LCO requirements for power distribution limits are specified in ITS Section 3.2. Therefore, placing additional remedial action requirements on the RBM System (e.g., that it be tripped within one hour with a channel inoperable while on a limiting control rod pattern) does not substantially ameliorate the reactor condition for which the RBM will protect against an analyzed rod withdrawal event at equal to or greater than 30% RTP. Furthermore, compliance with the surveillance to perform additional testing due to the improbable condition of operating exactly on a thermal limit and requiring the testing be performed "prior to" rod withdrawal is more appropriately addressed by the LCO

containing the initial surveillance that detected the limiting control rod pattern. The change is consistent with the STS and is acceptable.

3.3.2.2 Feedwater and Main Turbine High Water Level Trip Instrumentation

LA.1 CTS 3.3.9 requires the feedwater main turbine trip system trip setpoints to be adjusted to CTS Table 3.3.9-2 values. The CTS and the ITS defines instrument setpoint allowable values as the TS setpoint variable for which TS action requirements must be met. Based on this convention trip setpoints are procedural detail used in the evaluation of setpoint limits but are not limits specified in the ITS. The trip setpoints are setpoint methodology details being moved to plant procedures, controlled by the provisions of 10 CFR 50.59. The setpoint allowable value limit for the parameter is retained for use in ITS SR 3.3.2.2.3. This change conforms to the STS format and is acceptable.

LB.1 Replaced with SE section ~~3.3.b.A and~~ 3.3.b.B

LB.2 Replaced with SE section ~~3.3.b.A and~~ 3.3.b.B

LD.1 Replaced with SE section 3.3.b.A ~~and 3.3.b.B~~

LE.1 Replaced with SE section 3.3.b.A ~~and 3.3.b.B~~

L.1 CTS 3/4.3.9 requires the Feedwater System/Main Turbine trip actuation instrumentation in "Mode 1." ITS 3.3.2.2 changes this Mode Applicability to "≥ 25% RTP." The feedwater and main turbine high water level trip instrumentation is provided to ensure that MCPR is maintained above the Safety Limit; however, MCPR is not a concern below 25% RTP due to the large inherent margin that ensures the MCPR Safety Limit is not exceeded, even if a limiting transient occurs. Therefore, the ITS Mode Applicability is modified to be ≥ 25% RTP, and the CTS shutdown action is changed to only require power reduced to < 25% RTP, consistent with the general instructions for using the STS format. In addition, ITS 3.3.2.2 adds ~~Required~~ Action B to allow 2 hours to restore trip capability (if two or more channels are inoperable trip capability has been lost) prior to requiring a unit shutdown. This time is consistent with the time required to restore a MCPR limit. With the addition of ITS 3.3.2.2 Action B, a Note is added to the ITS Actions Table to provide explicit instructions for application of the Actions for TS compliance. In conjunction with ITS 1.3, "Completion Times," the Actions Note ("Separate Condition entry is allowed for each . . . .") provides direction consistent with the intent of the ITS Actions for an inoperable channel. This change conforms to the format of the STS and is acceptable.

L.2 CTS 3.3.9 Action b requires restoration of an inoperable channel within 7 days or be in at least STARTUP within the next 6 hours when the number of operable channels is one less than required by the Minimum operable Channels requirement. ITS 3.3.2.2 Required Action A.1 changes the requirement, allowing the channel to be placed in the tripped condition and continue operations without a requirement to restore the channel. Placing the inoperable channel in trip essentially changes the current two-out-of-three logic to a one-out-of-two logic, and continues to provide single failure protection. Placing the inoperable channel in the tripped condition is a

conservative change which does not preclude channel restoration in an expeditious manner while in the LCO. The change is in conforms with the STS and is acceptable.

MOVE TO page 5

A.2 ~~becomes L.3~~ CTS 3.3.9 Action a requires placing a channel in the tripped condition when the channel trip setpoint is found less conservative than the Allowable Value listed in CTS Table 3.3.9-2 or declare the associated system inoperable, with no stated completion time for meeting the action. CTS 3.3.9 Action a is treated as an inoperable channel in ITS 3.3.2.2 because the ITS definition of inoperable encompasses a channel made inoperable due to trip setpoints outside their limits or the channel made inoperable for other reasons. ITS 3.3.2.2 Conditions A and B set forth requirements for one or more inoperable channels including remedial actions with completion times as well as shutdown requirements for those conditions where the degraded condition persists. The format of ITS 3.3.2.2 more clearly presents the TS requirement for one or more channels inoperable for reasons due to trip setpoints outside the limits or surveillance requirements not met and the ITS clearly states the completion time requirements. This is an acceptable change consistent with the STS format.

3.3.3.1 Post Accident Monitoring (PAM) Instrumentation

LA.1 CTS Table 3.3.7.5-1, Action 81.~~b~~a, requires initiation of preplanned alternate methods of monitoring inoperable Primary Containment Gross Radiation monitoring channels when specified LCO conditions are not met. This requirement is moved to ITS B 3.3.3.1 Bases. Including these details in the ITS is not necessary to ensure actions are taken to initiate the preplanned alternate method of monitoring since ITS 3.3.3.1 ~~Condition~~ Action F requires an immediate action according to ITS 5.6.~~7~~6. ITS 5.6.~~7~~6 requires a report submitted to the NRC within the following 14 days, and that the report outline the preplanned alternate method of monitoring. This change conforms to the STS and is an acceptable change.

LA.2 CTS Table 4.3.7.5-1, footnote "*", details requirements for performing the channel calibration of the Primary Containment Gross Radiation Monitors that include an electronic calibration using portable instrumentation including checks of the detector range limits but not including the detector. These details are not necessary for assuring the operability of the Primary Containment Gross Radiation Monitors because the ITS definition of channel calibration provides the necessary surveillance test objectives, and together with ITS SR 3.3.3.1.4 provide assurance the primary containment gross radiation monitors are maintained operable. Therefore the CTS note "*" details are moved to ITS Bases B 3.3.3.1.

LE-1 Replaced with SE section 3.3.b.A ~~and 3.3.b.B~~

L.1 CTS Table 3.3.7.5-1 requires the Primary Containment Gross Radiation Monitor Function operable in Modes 1, 2, and 3. Mode 3 operability requirements are not included in ITS 3.3.3.1. The PAM instrumentation assists in the diagnosing and preplanning actions required to mitigate design basis accidents that are assumed to occur in Modes 1 and 2. The probability of an event

occurring in Modes 3, 4, or 5 requiring PAM instrumentation is sufficiently low that the post accident monitors are not required in these Modes. This change is consistent with the STS and is acceptable.

L.2 CTS Table 3.3.7.5-1, Action 80~~(a)~~.a, provides a 7 day Allowed Outage Time (AOT) for one inoperable channel of PAM instrumentation. ITS 3.3.3.1 Required Action A.1 extends this AOT to 30 days. The CTS Table 3.3.7.5-1 Action 80~~(b)~~.b ~~AOT~~ also provides a 48 hour AOT for two inoperable channels of PAM instrumentation. ITS 3.3.3.1, Required Action C.1, extends this AOT for two or more inoperable channels to 7 days. CTS Action 80 applies to all accident monitoring functions except primary containment radiation monitors. CTS Table 3.3.7.5-1, Action 81, for primary containment radiation monitors has a 72 hour AOT for two inoperable channels of PAM instrumentation. ITS 3.3.3.1 Required Action C.1, extends this AOT to 7 days. In addition, for special circumstances involving primary containment penetrations with only one isolation valve (i.e., GDC 56 containment penetration lines), the ITS AOT for one inoperable channel is extended to 30 days from 48 hours. Due to the monitoring design function of the PAM instrumentation and due to the availability of alternate instruments and methods for monitoring critical parameters in a post-accident environment the AOTs extensions to 30 days and 7 days are acceptable. Note 1 is also added to the ITS 3.3.3.1 Actions which provides an exception to the applicability of ITS 3.0.4 that was not allowed in CTS 3.3.7.5. As stated, this note allows Mode changes while relying on the remedial actions provided in the LCO for inoperable instrumentation. This exception is included because of the likelihood that inoperable instrumentation can be repaired within the allowed outage times and entry into the applicable conditions for monitoring instrumentation should not therefore be prohibited.

L.3 A Note has been added to ITS 3.3.3.1 which allows one channel of PAM instrumentation to be inoperable for up to 6 hours for performing Surveillances provided the other channel(s) in the associated Function is operable. Also, by approving various topical reports, the staff in the past has granted the 6 hour allowance for reactor protection system, emergency core cooling system, and isolation system equipment. The licensee stated that the 6 hour testing allowance does not significantly reduce the probability of properly monitoring post-accident parameters when necessary, since the other channel must be operable for this allowance to be used. ~~This is also true incase of leakage detection system instrumentation, which only provides indication~~. Therefore this is acceptable to the staff.

"NA"

L.4 CTS Table 3.3.7.5-1, Action 80, requires a plant shutdown after a 7 day AOT for all instances of one inoperable channel of PAM instrumentation. ITS 3.3.3.1, Action B.1, changes this requirement to "Initiate action in accordance with Specification 5.6.~~7~~6" after the 30 day AOT, instead of requiring a plant shutdown. Due to the passive function of the PAM instruments and the operator's ability to respond to an accident, utilizing alternate instruments and methods for monitoring, this change is acceptable, and is consistent with the STS.

3.3.3.2 Remote Shutdown System

LA.1 CTS Table 3.3.7.4-1 lists the Remote Shutdown System Functions, including the minimum channels required for function operability, readout location. ITS 3.3.3.4 does not include the table or specific instrument listings. The specific instrument listings and related requirements are moved to the licensee-controlled Specifications Manual. Placing the lists of the Remote Shutdown System Functions, the minimum channels required for function operability, and the readout location for each function in plant procedures controlled by provisions of 10 CFR 50.59 provides acceptable control for future changes to these requirements and is consistent with the content and scope of the STS, therefore, the change is acceptable.

LE.1 Replaced with SE section 3.3.b.A ~~and 3.3.b.B~~

L.1 CTS 3.3.7.4 Action a requires inoperable Remote Shutdown Monitoring instrument channel(s) to be restored to operable within 7 days. ITS 3.3.3.2 extends the ~~IS~~ AOT for inoperable remote shutdown system instrumentation and controls to 30 days. The Remote Shutdown System is not a system that is assumed to be operable for any design basis accident evaluated in the FSAR, but this system is required to be operable to assure the plant complies with GDC-19 design criteria. ITS 3.3.3.2 is retained because the system is a significant contributor to risk reduction, and extending the AOT does not have a significant impact on that contribution.

SEE INSERT L.2 ~~Proposed change is denied (comment database item #47)~~

3.3.4.1 End of Cycle Recirculation Pump Trip (EOC-RPT) Instrumentation

LA.1 CTS 3.3.4.2 requires the EOC-RPT instrument channel trip setpoints to be set consistent with the values in CTS Table 3.3.4.2-2. Trip setpoints are operational details that relate to the instrumentation operability. Setpoints limits are established for instrument loops in plant procedures to ensure that safety systems will actuate when process parameters reach these limits before exceeding TS allowable values. These trip setpoints are moved to plant procedures controlled by provisions of 10 CFR 50.59. The ITS allowable value is the chosen limit for process parameters in SR 3.3.4.1.4 to ensure the assumptions of the safety analysis are met. This change is consistent with the STS format and is acceptable.

LA.2 CTS Table 3.3.4.2-3 provides EOC-RPT Function Response Times. The response time values are moved to the licensee-controlled Specification Manual. Response Time testing surveillance requirements for the EOC-RPT Functions are provided in ITS SR 3.3.4.1.5 and SR 3.3.4.1.6. The requirements of Specification 3.3.4.1 and the associated SR ensure the EOC-RPT instruments are maintained operable. Changes to the response time values in the Specification Manual will be controlled by the provisions of 10 CFR 50.59. The change is in accordance with the STS and is acceptable.

LA.3 CTS Table 3.3.4.2-1 Note b, states that Turbine Throttle Valve—Closure and the Turbine Governor Valve Fast Closure, Valve Trip System Oil Pressure—Low Functions shall be automatically bypassed when turbine first stage pressure is less than or equal to the pressure equivalent to thermal power less than 30% of rated thermal power. These system design details are

INSERT L.2 to subsection 3.3.b, LCO 3.3.3.2

A Note has been added to ITS 3.3.3.2 which allows a channel of Remote Shutdown Instrumentation to be inoperable for up to 6 hours for performing Surveillances. Also, by approving various topical reports, the staff in the past has granted the 6 hour allowance for reactor protection system, emergency core cooling system, and isolation system equipment. The licensee stated that the 6 hour testing allowance does not significantly reduce the probability of properly monitoring post-accident parameters when necessary. In addition, this instrumentation is not assumed to function in any design basis accident or transient analysis. It is provided for an event requiring the evacuation of the main control room. Any increase in the risk from this change is not significant because the instrumentation does not perform any mitigating function and because of the low probability of the evacuation being required during the surveillance. Therefore this is acceptable to the staff.

moved to the FSAR. The design details are not necessary in the ITS to ensure operability of the EOC-RPT instrumentation, since bypass circuit operability requirements are adequately addressed in the channel functional test requirements of SR 3.3.4.1.1. Changes to the FSAR will be controlled by the provisions of 10 CFR 50.59. This acceptable change is consistent with the STS. INSERT LA.3

LB.1 Replaced with SE section ~~3.3.b.A and~~ 3.3.b.B

LB.2 Replaced with SE section ~~3.3.b.A and~~ 3.3.b.B

LB.3 Replaced with SE section ~~3.3.b.A and~~ 3.3.b.B

LD.1 Replaced with SE section 3.3.b.A ~~and 3.3.b.B~~

L.1 CTS Action 3.3.4.2(c).2 requires declaring the trip system inoperable when two Turbine Governor Valve channels or two Turbine Throttle Valve channels are inoperable in a trip system. ITS 3.3.4.1 Required Action A.2 provides an option to place all inoperable channels in trip when in this condition. The ITS action conservatively compensates for the inoperable status by restoring the single failure capability to the logic circuit and maintains the required initiation capability of the instrumentation. Therefore, providing this option does not affect continued safe operation of the plant. However, if this action would result in system actuation, then declaring the system inoperable is the preferred action. This change is consistent with the STS format and is acceptable.

L.2 CTS 3.3.4.2 provides required Actions (d) and (e) for conditions rendering a "Trip System" inoperable. ITS 3.3.4.1 Condition B changes the Required Actions to address EOC-RPT trip "Function" (e.g., Turbine Throttle Valve - Closure is a Function) capability. This change provides appropriate allowed out of service times as long as actuation capability is maintained. The Function has lost trip capability if an EOC-RPT trip cannot occur from the Function. This acceptable change is consistent with the STS.

L.3 CTS 3.3.4.2 Actions d & e provide 1 hour to take the actions to adjust the MCPR as required by CTS 3.2.3 when operability requirements for one or both EOC-RPT trip systems are not met or for the MCPR greater than the limit without EOC-RPT. The purpose of the EOC-RPT instrumentation is to ensure violation of the established MCPR safety limit will not occur late in core life due to a turbine trip or generator load rejection event without EOC-RPT. Therefore, the time provided to restore EOC-RPT instrument functions to operable status when one or both trip systems are affected, and the time to apply the MCPR EOC-RPT inoperable limit, is extended in the ITS from 1 hour to 2 hours, consistent with the time provided in CTS 3.2.3 to restore a MCPR limit. The prescribed AOT change is consistent with the STS limits for protecting core thermal limits and is acceptable.

L.4 ITS 3.3.4.2 Required Action C.1 is added to allow removal of the associated recirculation pump from service when instrument channels are inoperable or trip capability is not maintained (Conditions A and B, Required Actions and associated Completion Times not met), instead of a required plant shutdown. Since a

INSERT LA.3 to subsection 3.3.a, LCO 3.3.4.1

In addition, the Applicabilities for the Turbine Throttle Valve - Closure and the Turbine Governor Valve Fast Closure, Trip Oil Pressure - Low Functions have been modified to be $\geq$ 30% RTP, consistent with the design and CTS Table 3.3.4.2-1 Note(b).

manual pump trip accomplishes the same action as the actuation instrumentation these changes are functionally equivalent and the ITS will allow continued plant operation in an approved configuration. The change is in accordance with the STS, and is acceptable.

3.3.4.2 ATWS Recirculation Pump Trip Instrumentation

LA.1 CTS 3.3.4.1 requires the ATWS-RPT instrument channel trip setpoints to be set consistent with the values in CTS Table 3.3.4.1-1. Trip setpoints are operational details that relate to the instrumentation operability. Setpoints limits are established for instrument loops in plant procedures to ensure that safety systems will actuate when process parameters reach these limits before exceeding TS allowable values. These trip setpoints are moved to plant procedures controlled by provisions of 10 CFR 50.59. The ITS allowable value is the chosen limit for process parameters in SR 3.3.4.1.4 to ensure the assumptions of the safety analysis are met. This change is consistent with the STS format and is acceptable.

LB.1 Replaced with SE section ~~3.3.b.A and~~ 3.3.b.B

LB.2 Replaced with SE section ~~3.3.b.A and~~ 3.3.b.B

LD.1 Replaced with SE section 3.3.b.A and ~~3.3.b.B~~

LF.1 ~~Replaced with SE section 3.3.b.A and 3.3.b.B~~ NOT IN SE

L.1 The CTS 3.3.4.1 Action b ~~required actions~~ for a trip system inoperable is revised to address trip Function (e.g., Reactor Pressure Vessel - High is a Function) capability. This is consistent with other TS that provide appropriate allowed out of service times as long as the actuation capability is maintained. The Function has lost trip capability if an ATWS-RPT trip cannot occur from the Function. ITS 3.3.4.2 Action B has also been added to allow trip capability to be lost for one of the two trip Functions for 72 hours. Currently, no time is allowed if trip capability is lost for a Function (i.e., both trip systems are inoperable for the given Function); a shutdown to Mode 2 is required within 6 hours. The 72 hour allowance is considered acceptable because the other Function is continuing to maintain trip capability, and since the ATWS-RPT System is not assumed to function during any design basis accident or transient; it provides protection during a beyond design basis event, whose probability of occurrence is remote. In addition, the plant emergency operating procedures provide requirements to trip the recirculation pumps if an ATWS event occurs, regardless of whether or not the Allowable Values of the ATWS-RPT instrumentation Functions (reactor pressure or water level) have been exceeded. Thus in many ATWS event scenarios, the operators will manually trip the recirculation pumps (i.e., perform the ATWS-RPT function) prior to the instrumentation automatically performing the function.

L.2 CTS 3.3.4.1 Action b requires a reduction to Mode 2 when required Actions are not met within time limits. ITS 3.3.4.2 Required Action D.1 is added in the ITS to allow removal of the associated recirculation pump from service, instead of a reduction to Mode 2, when Required Actions and

Completions Times are not met. Since a manual pump trip accomplishes the same action as the actuation instrumentation these changes are functionally equivalent and the ITS will allow continued plant operation in an approved configuration. The change is in accordance with the STS, and is acceptable.

L.3 CTS Table 4.3.4.1-1 requires a "Quarterly" channel calibration STI for the Reactor Vessel Pressure - High instrument channels. ITS SR 3.3.4.2.3 extends the STI for the channel calibration to "18 months. In their submittal the licensee stated that a review of the past maintenance history has shown that no failures or out of tolerances have been discovered for this instrumentation during past channel calibrations. In addition, the drift data used in the current setpoint calculations support 18 month frequency for channel calibration, which is also consistent with the requirements of NUREG-1434. This is acceptable to the staff.

3.3.5.1 Emergency Core Cooling (ECCS) Instrumentation

LA.1 CTS Table 3.3.3-2 lists the Trip Setpoint and Allowable Value for each ECCS Actuation instrument function. ITS Table 3.3.5.1-1 deletes the Trip Setpoint values and requires only the Allowable Values for each function. The ECCS Actuation instrumentation trip setpoints are moved to plant procedures controlled according to 10 CFR 50.59. Trip setpoints are an operational detail that is included in instrumentation operability; however, the Allowable Value is implicit in the assumptions of the staff approved setpoint methodology and the Bases state that the Allowable Value is the TS limit for instrument function operability. Changes to the trip setpoints located in procedures can be adequately controlled by the provisions of 10 CFR 50.59. The single column allowable value format is consistent with the STS format and the staff approved setpoint methodology, therefore these changes are acceptable.

LA.2 CTS SR 4.3.3.2, Logic System Functional Test, requires the "simulated automatic operation" of all channels as part of the surveillance requirement. ITS SR 3.3.5.1.~~5~~6 Logic System Functional Test does not include the requirement to simulate automatic operation of all channels. Instead, ITS SR Bases~~, B~~ 3.3.5.1.~~5~~6 state that the testing demonstrates operability of the required trip logic. Since these instructions do not effect changes to the outcome of logic system channel functional testing it is not necessary to include these requirements in the ITS to ensure the operability of the ECCS Instrumentation. Changes to the Bases are controlled by the provisions of the ITS Bases Control Program described in ITS 5.0. Therefore, the change is acceptable.

LA.3 CTS 3/4.3.3 tables present ECCS Actuation instrumentation Trip functions as "Division 1 Trip System" or "Division 2 Trip system ~~Functions~~," and some operational requirements are presented in a "per division" format. Other details such as "increasing" or "decreasing" signal trip setpoint response and other design details are also included. ITS 3.3.5.1 deletes these design and operational details not necessary to ensure the Operability of the ECCS Actuation instrumentation. System design and operation details (e.g., bypasses,

associated division, specific equipment affected, etc.) are moved to ITS Bases B 3.3.5.1. The requirements of Specification 3.3.5.1 and the associated Surveillance Requirements are adequate to ensure the ECCS instruments are maintained operable. Changes to the Bases are controlled by the provisions of the Bases Control Program described in ITS 5.0. Removal of these design and operational details to the ITS Bases is consistent with the STS, and is acceptable.

LB.1 Replaced with SE section ~~3.3.b.A and~~ 3.3.b.B

DISCUSSED IN 3.5, NOT INSTRUMENTATION portion. ITS submittal DOC is a 3.5/LC.1

LC.1 CTS 4.5.1 requires performing an ADS backup compressed gas system channel functional test at least once per 31 days. The alarm portion of the functional test is being moved to plant procedures. The ADS accumulator backup compressed gas system pressure alarm instrumentation does not necessarily relate directly to ADS operability. The requirements of ITS SR 3.3.5.1 are adequate to ensure that the ADS backup compressed gas system instrumentation is operable. This change conforms to the STS and is acceptable.

LD.1 Replaced with SE section 3.3.b.A ~~and 3.3.b.B~~

LF.1 ~~Replaced with SE section 3.3.b.A and 3.3.b.B~~ NOT IN SE

L.1 CTS 3.3.3, Action c requires restoration of an inoperable ADS trip system when either trip system is inoperable. ITS 3.3.5.1 Required Action F.2 provides an option when one or more ADS channel(s) are inoperable in an ADS trip system, to place all inoperable channels in the tripped condition. This conservatively compensates for the inoperable status, restores the single failure capability, and provides the required initiation capability of the instrumentation. Therefore, this option does not impact safety. However, if this action would result in system actuation, then declaring the associated ADS valves inoperable ~~and taking the action~~ as required by Action ~~F.1~~ H is the preferred action. This change also conservatively compensates for the inoperable status, and provides the required actions for loss of the initiation capability of the instrumentation. The change is in accordance with the STS, and is acceptable.

L.2 CTS Table 3.3.3-1 footnote "*" provides an Applicability exception for the Condensate Storage Tanks Level - Low, and the Suppression Pool Water Level - High, HPCS initiation functions in Modes 4 and 5. The CTS limits the function operability requirements in Modes 4 and 5 to when the system is required operable per CTS 3.5.2 and 3.5.3. ITS Table 3.3.5.1-1 Note(c) modifies the Mode 4 and 5 Applicability for Condensate Storage Tank (CST) Level-Low Function only, by requiring the function to be operable when HPCS is operable for compliance with ITS 3.5.2, "ECCS - Shutdown" and aligned to the Condensate Storage Tank while tank water level is not within the limit of SR 3.5.2.2. The Mode 4 and 5 Applicability for the Suppression Pool Water Level - High Function is deleted in the ITS. The requirements for automatic restoration of the HPCS water source to the suppression pool are dependent on the availability of sources and the need to realign the pump suction sources. With the HPCS pre-aligned to the suppression pool, there is no need to require automatic realignment. When shutdown, an operable CST can provide sufficient

water to adequately minimize the consequences of a vessel draindown event and automatic realignment is unnecessary. Only with insufficient water in the CST is automatic realignment necessary in the shutdown Modes. The change is in accordance with the STS, and is acceptable.

L.3 CTS 3.3.3 requires CTS the ADS to be operable when reactor steam dome pressure is ≥ 128 psig (3.3.3 Action c, and CTS Table 3.3.3-1 footnote "#"). CTS and TABLE 4.3.5-1 foot note # The pressure which ADS is required to be operable is increased in the ITS to 150 psig (ITS Table 3.3.5.1-1 footnote "d"). The ADS operability requirement is changed to provide consistency of the Operability requirements for all ECCS and RCIC equipment. Small break loss of coolant accidents at low pressures (i.e., between 128 psig and 150 psig) are bounded by analysis performed at higher pressures. The ADS is required to operate to lower the pressure sufficiently so that the low pressure coolant injection (LPCI) and low pressure core spray (LPCS) systems can provide makeup to mitigate such accidents. Since these systems can begin to inject water into the reactor pressure vessel at pressures well above 150 psig (222 psid for LPCI and 285 psid for LPCS), there is no safety significance in the ADS not being operable between 128 psig and 150 psig. The change is in accordance with the STS, and is acceptable.

L.4 ~~Replaced with SE section 3.3.b.A and 3.3.b.B~~ NOT covered by Topical SEE INSERT

3.3.5.2 RCIC System Instrumentation

LA.1 CTS Table 3.3.5-2 lists the Trip Setpoint and Allowable Values for each RCIC Actuation instrument Function. ITS Table 3.3.5.2-1 deletes the Trip Setpoint Values, and provides only the Allowable Values for each Function. The RCIC Actuation instrument trip setpoints are moved to plant procedures controlled according to 10 CFR 50.59. Trip setpoints are an operational detail that is included in instrumentation operability; however, the Allowable Value is implicit in the assumptions of the staff approved setpoint methodology and the Bases state that the Allowable Value is the TS limit for instrument function operability. Changes to the trip setpoints located in procedures can be adequately controlled by the provisions of 10 CFR 50.59. The single column allowable value format is consistent with the STS format and the staff approved setpoint methodology, therefore these changes are acceptable.

LA.2 CTS ~~SR~~ 4.3.5.2, Logic System Functional Test, requires the "simulated automatic operation" of all channels as part of the surveillance requirement. ITS SR 3.3.5.2.4, Logic System Functional Test does not include the instruction to simulate automatic operation of all channels. Instead, ITS Bases B 3.3.5.2.4 state that the testing demonstrates operability of the required trip logic. Since these instructions do not effect changes to the outcome of logic system channel functional testing it is not necessary to include these requirements in the ITS to ensure the operability of the ECCS Instrumentation. Changes to the Bases are controlled by the provisions of the ITS Bases Control Program described in ITS 5.0. Therefore, the change is acceptable.

INSERT L.4 to subsection 3.3.b, LCO 3.3.5.1

The Frequency for CTS 4.5.1.e.2 (initiation portion of the Channel Functional Test (CFT) requirement) has been extended from 31 days to 92 days. These instruments are highly reliable and the sensors function is similar to other instruments that have had their CFT Frequency previously extended. A review of maintenance history has shown that no failures or out of tolerances have been discovered for this instrumentation during a CFT since the trip setpoints have been set in accordance to the current WNP-2 instrument setpoint methodology (which is consistent with the guidance of ISA Standard, SP67.04-1982, "Setpoints for Nuclear Safety-Related Instruments used in Nuclear Power Plants," and was approved for use by the NRC in RG 1.105, Revision 2, February 1986). The current setpoint calculations have been reviewed and support a 92 day CFT Frequency. In addition, the CFT Frequencies of other ADS instrumentation have previously been extended from 31 days to 92 days in accordance with Topical Report NEDC-30936-P-A, December 1988, and the staff SER approving this topical report. The topical report determined that the change had a negligible impact on plant safety, and in fact should improve plant safety because of the reduced testing requirements.

LA.3 CTS Table 3.3.5-1, footnotes a, b, and c provide details pertaining to RCIC actuation instrument channel trip logic configuration. Details relating to system design and operation are not necessary to establish the appropriate level of system operability requirements in the LCO. Rather they provide the basis for the TS limits. Therefore, ITS Table 3.3.5.2-1 does not include logic system details. These details are included in the ITS Bases, which use the provisions of ITS 5.0, Bases Control Program for the assessing acceptable future Bases changes. The remaining requirements of Specification 3.3.5.2 and the associated Surveillance Requirements are adequate to ensure the RCIC instruments are maintained operable. This change is consistent with the STS format, and is acceptable.

LB.1 Replaced with SE section ~~3.3.b.A and~~ 3.3.b.B

LD.1 Replaced with SE section 3.3.b.A ~~and 3.3.b.B~~

LF.1 ~~Replaced with SE section 3.3.b.A and 3.3.b.B~~ Not in SE

L.1 CTS Table 3.3.5-1, Action 50.b requires declaring the RCIC inoperable when the number of inoperable level instrument channels renders both trip systems inoperable. ITS 3.3.5.2 Required Action B.2 provides the option to place one or more inoperable channels in the tripped condition instead within 24 hours or declare the RCIC System inoperable within one hour of determining that the loss of actuation capability exists. This conservatively compensates for the inoperable status, restores the single failure capability and provides the required initiation capability of the instrumentation. Therefore, providing this option does not impact safety. However, if this action would result in system actuation, then declaring the RCIC system inoperable and taking the action required by TS 3.5.1 and 3.5.2 also conservatively compensates for the inoperable status, and provides the required actions for loss of the initiation capability of the instrumentation. The change is in accordance with the STS, and is acceptable.

3.3.6.1 Primary Containment Isolation Instrumentation

LA.1 CTS Table 3.3.2-2 lists the Trip Setpoint and Allowable Values for each Primary Containment Isolation instrumentation Function. ITS Table 3.3.6.1-1 deletes the Trip Setpoint Values, and provides only the Allowable Values for each Function. The Primary Containment Isolation Actuation instrumentation trip setpoints are moved to plant procedures controlled by 10 CFR 50.59. Trip setpoints are an operational detail that is included in instrumentation operability; however, the Allowable Value is implicit in the assumptions of the staff approved setpoint methodology and the Bases state that the Allowable Value is the TS limit for instrument function operability. Changes to the trip setpoints located in procedures can be adequately controlled by the provisions of 10 CFR 50.59. The single column allowable value format is consistent with the STS format and the staff approved setpoint methodology, therefore these changes are acceptable.

LA.2 CTS 3/4.3.2, Action b (first sentences of b.1 and b.2), provides separate requirements for placing inoperable channels in the tripped condition

based upon whether performing the action will result in isolating primary containment. These requirements are incorporated into ITS 3.3.6.1 Required Actions and descriptive text is moved to the ITS Bases. If a channel is not tripped because tripping the channel will result in isolating primary containment, then the Required Action of ITS 3.3.6.1 Condition A is not completed within the required Completion Time and entry into ITS 3.3.6.1 Action ~~Condition~~ C would be required, as described in the Bases. ~~Condition~~ C Action requires that the reactor be taken out of the applicable condition. Alternatively if a channel is not tripped even if tripping the channel will not result in isolating primary containment (CTS Action b.2), then ITS 3.3.6.1 ~~Required~~ Action~~s~~ C is entered. This case is similar to the case when placing a channel in trip results in an isolation. Changes to the Bases are controlled by the provisions of ITS 5.0 Bases Control Program. Since the same response is required, this change is one of presentation preference, consistent with the STS, and is acceptable.

LA.3 CTS 3/4.3.2 Action Footnote "*", provides a requirement to place the primary containment isolation trip system with the most inoperable channels in the tripped condition. Further, "The trip system need not be placed in the tripped condition when this would cause the isolation to occur." Details of the methods for performing Required Actions, i.e., which trip system to trip, are moved to the Bases for ITS 3.3.6.1 . Changes to the Bases are controlled by ITS 5.0, Bases Control Program. These details are not necessary in the ITS to assure required actions are taken to restore automatic primary containment isolation capability. The required actions of ITS 3.3.6.1 including tripping one of the affected trip systems to ensure automatic isolation capability is maintained. This change is consistent with the STS and is acceptable.

LA.4 CTS ~~SR~~ 4.3.2.2, logic system functional test, requires the "simulated automatic operation" of all channels as part of the surveillance requirement. ITS SR 3.3.6.1.6, logic system functional test, does not include the requirements to simulate automatic operation of all channels. Instead, ITS Bases B 3.3.6.1.6 state that the testing demonstrates operability of the required trip logic. Since these instructions do not effect changes to the outcome of logic system channel functional testing it is not necessary to include these requirements in the ITS to ensure the operability of the ECCS Instrumentation. Changes to the Bases are controlled by the provisions of the ITS Bases Control Program described in ITS 5.0. Therefore, the change is acceptable.

LA.5 CTS Table 3.3.2-1 includes a column identifying the primary containment isolation valve groups affected by each isolation function. In addition, CTS Table 3.3.2-1, Table Notations 'g' and 'h' provide additional valve actuation and coincidence details for isolation actuation signals. The ITS moves system design and operational details relating to the primary containment isolation valve grouping and coincidence logic to the ITS Bases. Changes to the Bases are controlled by the ITS 5.0 Bases Control Program. Details relating to system design and operation (e.g., specific valves or valve groups affected) are unnecessary in the LCO. These details are not necessary to assure the operability of the primary containment isolation instrumentation. The requirements of ITS 3.3.6.1 and associated surveillance requirements ensure

that isolation instrumentation is maintained operable.

LA.6 CTS Table 3.3.2-1, Table Notation '*' allows bypassing the Condenser Vacuum—Low Function in Modes 2 and 3 with reactor steam pressure ≤ 1060 psig and all turbine stop valves closed. The CTS bypass requirement "with reactor steam pressure ≤ 1060 psig," is moved to plant procedures since the condenser cannot be pressurized with the main turbine throttle valves closed, regardless of the reactor pressure. The requirement that the main turbine throttle valves are to be closed to allow bypassing the low vacuum function is retained as Footnote 'a' in Table 3.3.6.1-1. In addition, the reactor steam pressure limit is a permissive in the design of the bypass switch. With the reactor pressure > 1060 psig, the low condenser vacuum function cannot be bypassed. Therefore, the CTS reactor steam pressure 1060 psig limit is not needed to ensure the low condenser vacuum function is not bypassed during a Mode or specified condition when it is required operable. Therefore, this change is acceptable.

LA.7 CTS Table 3.3.2-1, Table Notation 'i' provides requirements as to when and how the control of valve RHR-V-8 is returned from the remote shutdown panel to the control room for RHR System Shutdown Cooling Mode Isolation, including the requirement that "the associated key lock switch will be locked" with the valve in the closed position. The ITS moves the requirement that the associated key lock switch will be locked to plant procedures controlled by the provisions of 10 CFR 50.59. In addition, the CTS requirement to "lock" the control switch, which ensures the valve remains closed, is inconsistent with other ITS Actions as they relate to inoperable containment isolation channels. With any other channel inoperable, the ITS Required Actions require tripping the channel or isolating the penetration. However, there is no requirement to "lock" closed the valve used to isolate the penetration. The means by which the valves are maintained closed are left under plant specific controls. Therefore, moving the requirement to lock the control switch to plant procedures is acceptable.

LB.1 Replaced with SE section ~~3.3.b.A~~ and 3.3.b.B

LD.1 Replaced with SE section 3.3.b.A and ~~3.3.b.B~~

LE.1 Replaced with SE section 3.3.b.A and ~~3.3.b.B~~

LF.1 ~~Replaced with SE section 3.3.b.A and 3.3.b.B~~ Not in SE

L.1 CTS 3.3.2, Actions b~~)~~ and c~~)~~, differentiate between whether primary containment isolation function channels are inoperable in one or both trip systems. With channels inoperable in both trip systems, CTS Action c~~)~~ does not allow placing all inoperable channels in the tripped condition, even if this would not result in an isolation. ITS 3.3.6.1 has actions for inoperable channels that are independent of whether one or both trip systems are affected. This allows the conservative action of tripping the inoperable channels, which is preferable to initiating a shutdown, as required in CTS 3.3.2 for many cases. Further, ITS 3.3.6.1 ~~required~~ Actions A and B require that all inoperable channels be restored or tripped with any further action for a shutdown track referenced to conditions provided in Table 3.3.6.1-1.

The change is consistent with the STS, and is acceptable.

L.2 CTS Table 3.3.2-1, Action 20, requires placing the plant in hot shutdown within 12 hours, and in cold shutdown within the next 24 hours, when the required Actions for the Reactor Vessel Water Level - Low, Level 3 Function are not met. The Reactor Vessel Water Level—Low, Level 3, Function affects the Group 5 valves only. The Group 5 valves only affect the LPCI A and B subsystems. ITS 3.3.6.1, Required Action F.1, changes this requirement to allow isolating the affected penetration instead of requiring a unit shutdown. Isolating the affected penetration performs the safety function that would otherwise be performed by the actuation instrumentation. Plant operation can continue with these LPCI valves isolated i.e., the associated LPCI subsystem is inoperable and Actions are provided in ITS ~~3.~~3.5.1 (CTS 3.5.1) that allow operation for a short time. If the penetration(s) is not isolated within 1 hour as required by ITS 3.3.6.1, Required Action F.1, then the plant must be in Modes 3 or 4 as specified by ITS 3.3.6.1, Required Actions H.1 and H.2. Isolating the affected penetration performs the safety function of the isolation instrument channel(s), therefore, this change is acceptable.

MODE SWITCH CAUSES SCRAM, BUT THEN IT IS BYPASSED

L.3 CTS Table 3.3.2-1 requires the SLCS initiation instrumentation to be operable in Mode 3. Mode 3 operability requirements are not included in ITS Table 3.3.6.1-1 for this function. The SLC initiation instrumentation is not required in Mode 3 since ITS 3.3.2.1 requires the Reactor Mode Switch to be in the "shutdown" position which precludes rod movement because the mode switch enforces a control rod ~~scram.~~ Block. This change is consistent with the CTS and ITS Applicability requirements for ~~the~~ SLC System. Therefore, deleting the Mode 3 operability requirement is acceptable.

L.4 ~~Item #113 →Open.~~ CTS Table 3.3.2-1 includes the RCIC/RHR Steam Line Flow - High instrument function for RCIC Isolation. This isolation instrument function is not included in ITS Table 3.3.6.1-1. The RCIC/RHR Steam Line Flow—High function isolates the RCIC System on a pipe break in the RHR steam condensing mode piping because RCIC was originally designed to supply steam to this system. The RHR steam condensing mode is permanently isolated from the RCIC System through a plant modification, removing the need for the RCIC/RHR Steam Line Flow - High function to isolate the RCIC System.

L.5 CTS Table 3.3.2-1 requires two channels of the Reactor Vessel Water Level - Low, Level 3, function of RHR Shutdown Cooling Isolation operable in Modes 1, 2, and 3. Footnote "e" of ITS Table 3.3.6.1-1 changes this requirement to require only one channel operable in Modes 4 and 5 with the RHR Shutdown Cooling System integrity maintained. Since the RHR Shutdown Cooling system isolation occurs on low water level and shutdown cooling return flow rate high in Modes 4 and 5 to mitigate a vessel draindown event, an intact system fulfills the function of one trip system of isolation instrumentation. Therefore, the second trip system is not required, provided system integrity is maintained. With the system piping not intact or while performing maintenance that results in the potential for draining the reactor vessel through the system, both trip systems are required for RHR System isolation in Modes 4 and 5. Therefore, this change is acceptable.

L.6 The CTS Table 3.3.2-1, Mode 1 and 2 RHR shutdown cooling mode isolation requirements on Reactor Vessel Water Level—Low, Level 3, Equipment Area Temperature—High, Equipment Area Ventilation Differential Temperature—High, and RHR Heat Exchanger Area Temperature—High functions are not included in ITS Table 3.3.6.1-1. The Reactor Vessel Pressure—High is the isolation function assumed in the safety analysis to assure that RHR Shutdown Cooling valves are isolated in Mode 1 and Mode 2 when above the RHR cut-in permissive pressure setpoint. When operating below the setpoint in Mode 2, RHR Shutdown Cooling is not in service because ITS 3.5.1 requires all LPCI to be operable in Mode 2, and with RHR aligned to the shutdown cooling mode, LPCI is inoperable. In addition, plant procedures require RHR alignment to the LPCI mode, and the recirculation pumps operating which would necessitate securing the shutdown cooling mode prior to entering Mode 2. Therefore, deleting the Mode 1 and 2 requirements for these functions is acceptable.

L.7 CTS Table 3.3.2-1, Action 20, requires a plant shutdown when the number of inoperable Reactor Vessel Water Level - Low Low, Level 2 instrument channels is less than the Minimum operable Channels per trip system requirement for both Main Steam Line Isolation trip systems. ITS 3.3.6.1, Required Action D.1, changes the plant shutdown requirement for this condition to "isolate the affected main steam line" thereby allowing isolation of the affected main steam line because some conditions may affect the isolation logic for only one main steam line. Each MSIV has solenoids that receives signals from the isolation logic through relays and their contacts. If a contact from the isolation logic fails to open when a low water level signal is received, the solenoid would not deenergize and the MSIV would remain open. Since the ITS does not include the logic as a specific line item, the low water level channel is considered inoperable when a solenoid cannot deenergize. This problem could be localized to only one MSIV. In these cases, it is not necessary to require a shutdown of the unit; rather, isolating the affected line returns the system to a status where it can perform the remainder of its isolation function, and continued operation is allowed although it may be at a reduced power level in Mode 2.

L.8 CTS Table 3.3.2-1, Action 21, requires placing the ~~plant~~ trip in "Startup" with the associated isolation valves closed within 6 hours when required Actions are not met for primary containment isolation functions 1.c.3, 1.d, 1.e, and 1.f. ITS Table 3.3.6.1-1, Required Action D.1, changes the requirement to "isolate all main steam lines". Isolating all main steam lines is a sufficient action with any of main steam isolation actuation function inoperable because closing the valves performs the action of the isolation instrumentation and it forces the plant to enter Mode 2 to avoid the scram that would occur upon isolation of all MSIVs. The requirement to be in Mode 2 is, therefore, implicit and is deleted. The time allowed to isolate the associated main steam lines is extended from 6 hours to 12 hours. The additional time allows an orderly power reduction. The change is consistent with the STS requirements and is acceptable.

L.9 CTS Table 3.3.2-1, Action 24, allows 8 hours to restore an Isolation System Manual Initiation function to operable status, and 1 additional hour to close the affected system isolation valves. This requirement is replaced by ITS 3.3.6.1, Required Action G.1. ITS 3.3.6.1, Required Action G.1, provides

24 hours to isolate the affected flow path. The CTS time is considered overly conservative since the Manual Initiation Function is not assumed in any accident or transient analysis in the FSAR; automatic Functions are the only instrument functions assumed to isolate the penetration. This change is consistent with the non-automatic design of the function and with BWR Standard Technical Specifications, NUREG-1434.

L.10 CTS Table 3.3.2-1, Action 26, allows 1 hour to "Lock close or close as applicable the affected system isolation valves," when an inoperable shutdown cooling (SDC) system reactor vessel low water level isolation channel is not tripped within the TS time limit. This action, however, results in a loss of shutdown cooling, and could result in a more significant safety problem than would exist by leaving the isolation valves open with the inoperable level instrument channels. ITS 3.3.6.1, Required Actions J.1 and J.2, require immediate action to either isolate the affected line or to restore the channel(s) to operable status. The ITS Bases describes circumstances under which either Required Action J.1 or J.2 are required. These actions are consistent with the STS, ensure that SDC is not interrupted when needed, and assures continued action to restore the channel(s) as specified. Therefore, the less restrictive change is acceptable.

NOT IN ITS TABLE

L.11 The RHR Shutdown Cooling Suction Flow Rate-High isolation instrumentation TRIP has been deleted from technical specifications since other instrumentation retained in the ITS provides adequate protection should an RHR line break occur ((Functional ~~Unit~~ 5.e, CTS Tables 4.3.2.1-1 ~~/ITS Table 3.3.6.1-1, Primary containment Isolation Instrumentation~~). IN LCO TABLES ALSO

The RHR SDC system has 5 valves (known as Group 6 valves) which are part of primary containment isolation system. There are seven signals which initiate Group 6 isolation, and reactor vessel pressure-high and residual heat removal shutdown cooling (RHR SDC) suction flow rate - high are part of these seven isolation signals. In their submittal the licensee stated that the accidents and events described in the FSAR do not credit the RHR SDC suction flow rate - high signal to mitigate any design basis accident or event. According to CTS, one ~~out of 2~~ channel~~s~~ per trip system is required to be OPERABLE in ~~modes~~ MODES 1, 2 and 3. In MODE 1, the RHR system is isolated. In MODES 2 and 3 it remains isolated for the reactor vessel pressure ≥ ~~159~~ 135 psig. The reactor pressure-high signal instrumentation being a single failure proof and being OPERABLE in MODES 1,2 and 3 prevents opening of group 6 isolation valves above pressure ~~159~~ 135 psig.

As per proposed ITS, all ECCS subsystems are required to be OPERABLE during MODES 1, 2 and 3. The LPCI system which is another mode of RHR system with a different valve alignment cannot be OPERABLE in MODES 1 or 2 unless aligned for standby mode for LPCI operation. This alignment precludes RHR SDC isolation valves from being open even with the reactor pressure ≤ ~~159~~ 135 psig, when changing from MODE 3 to MODE 2. The proposed ITS (LCO 3.0.4 and SR 3.0.4) will ensure that such a mode change is not permissible unless LPCI is OPERABLE, including alignment in standby mode of LPCI operation. This means the RHR SDC valves will remain closed in MODE 2 even with reactor pressure ~~less than~~ < the RHR cut-in permissive pressure of ~~159~~ 135 psig.

Reactor vessel water level-low, (level 3) signal is one of the seven isolation signals. Instruments for this signal per ITS are required to be OPERABLE during modes 3, 4 and 5. In case a break in the RHR SDC piping outside containment occurs it will be mitigated by signal from this instrument. In addition, area high temperature isolations are also available as a backup to the low water level signal during mode 3 ~~of~~ operation when reactor pressure is less than RHR permissive pressure. In addition, other instruments signals used for initiating isolation are required to be OPERABLE by the proposed ITS. As a result, at all times when RHR SDC is in operation, containment isolation will be accomplished and maintained by other safety-related instrumentation, and the shutdown cooling suction flow rate-high instrumentation is not needed. Therefore, its deletion is acceptable to the staff.

3.3.6.2 Secondary Containment Isolation Instrumentation

LA.1 CTS Table 3.3.2-2 lists the Trip Setpoint and Allowable Values for each secondary containment isolation instrumentation function. ITS Table 3.3.6.2-1 deletes the Trip Setpoint Values, and presents only the Allowable Values for each function. The secondary containment isolation Actuation instrumentation trip setpoints are moved to plant procedures controlled by 10 CFR 50.59. Trip setpoints are an operational detail that is included in instrumentation operability; however, the Allowable Value is implicit in the assumptions of the staff approved setpoint methodology and the Bases state that the Allowable Value is the TS limit for instrument function operability. Changes to the trip setpoints located in procedures can be adequately controlled by the provisions of 10 CFR 50.59. The single column allowable value format is consistent with the STS format and the staff approved setpoint methodology, therefore these changes are acceptable.

LA.2 CTS 3/4.3.2, Action b (first sentences of b.1 and b.2), provides separate requirements for placing inoperable channels in the tripped condition based upon whether performing the action will result in isolating ~~primary~~ SECONDARY containment. These requirements are incorporated into ITS 3.3.6.2 Required Actions and descriptive text is moved to the ITS Bases. If a channel is not tripped because tripping the channel will result in isolating ~~primary~~ containment, then the Required Action of ITS 3.3.6.2 Condition A is not completed within the required Completion Time and entry into ITS 3.3.6.2 ~~Condition~~ ACTION C would be required, as described in the Bases. ~~Condition~~ C ACTION requires that the reactor be taken out of the applicable condition. Alternatively if a channel is not tripped even if tripping the channel will not result in isolating ~~primary~~ SECONDARY containment (CTS Action b.2), then ITS 3.3.6.2 ~~Required~~ Actions C is entered. This case is similar to the case when placing a channel in trip results in an isolation. Changes to the Bases are controlled by the provisions of ITS 5.0 Bases Control Program. Since the same response is required, this change is one of presentation preference, consistent with the STS, and is acceptable.

LA.3 CTS 3/4.3.2 Action Footnote "*", provides a requirement to place the ~~primary~~ SECONDARY containment isolation trip system with the most inoperable channels in the tripped condition. Further, "The trip system need not be placed in the tripped condition when this would cause the isolation to occur." Details of

the methods for performing Required Actions, i.e., which trip system to trip, are moved to the Bases for ITS 3.3.6.2. Changes to the Bases are controlled by ITS 5.0, Bases Control Program. These details are not necessary in the ITS to assure required actions are taken to restore automatic ~~primary~~ containment SECONDARY isolation capability. The required actions of ITS 3.3.6.2 including tripping one of the affected trip systems to ensure automatic isolation capability is maintained. This change is consistent with the STS and is acceptable.

LA.4 CTS ~~SR~~ 4.3.2.2, logic system functional test, requires the "simulated automatic operation" of all channels as part of the surveillance requirement. ITS SR 3.3.6.2.4, logic system functional test does not include the requirements to simulate automatic operation of all channels. Instead, ITS Bases B 3.3.6.2.4 state that the testing demonstrates operability of the required trip logic. Since these instructions do not effect changes to the outcome of logic system channel functional testing it is not necessary to include these requirements in the ITS to ensure the operability of the ECCS Instrumentation. Changes to the Bases are controlled by the provisions of the ITS Bases Control Program described in ITS 5.0. Therefore, the change is acceptable.

LA.5 CTS Table 3.3.2-1 includes a column identifying the secondary containment isolation valve groups affected by each isolation function. In addition, CTS Table 3.3.2-1, Table Notations ~~(b)~~ and ~~(c)~~ provide additional valve actuation and coincidence details for isolation actuation signals. The ITS moves system design and operational details relating to the primary containment isolation valve grouping and coincidence logic to the ITS Bases. Changes to the Bases are controlled by the ITS 5.0 Bases Control Program. Details relating to system design and operation (e.g., specific valves or valve groups affected) are unnecessary in the LCO. These details are not necessary to assure the operability of the ~~primary~~ containment isolation SECONDARY instrumentation. The requirements of ITS 3.3.6.2 and associated surveillance requirements ensure that isolation instrumentation is maintained operable.

LB.1 Replaced with SE section ~~3.3.b.A and~~ 3.3.b.B

LD.1 Replaced with SE section 3.3.b.A ~~and 3.3.b.B~~

LF.1 ~~Replaced with SE section 3.3.b.A and 3.3.b.B~~ NOT IN SE

L.1 CTS 3.3.2, Actions b and c, differentiate between whether secondary containment isolation function channels are inoperable in one or both trip systems. With channels inoperable in both trip systems, CTS Action c does not allow placing all inoperable channels in the tripped condition, even if this would not result in an isolation. ITS 3.3.6.2 has actions for inoperable channels that are independent of whether one or both trip systems are affected. This allows the conservative action of tripping the inoperable channels, which is preferable to initiating a shutdown, as required in CTS 3.3.2 for many cases. Further, ITS 3.3.6.2 ~~required~~ Actions A and B require that all inoperable channels be restored or tripped with any further action for a shutdown track referenced to conditions provided in Table 3.3.6.2-1. The change is consistent with the STS, and is acceptable.

L.2 CTS Table 3.3.2-1, Action 25, requires secondary containment integrity established, with the SGTS operating within 1 hour, or enter CTS 3.0.3, which results in a plant shutdown. ITS 3.3.6.2, Condition C, Required Actions C.1.2 and C.2.1, are added to allow declaring the affected components inoperable and taking the appropriate actions in the associated secondary containment isolation Valve (SCIV) or SGT Systems TS if the associated penetrations and SGT subsystems are not placed in the proper condition within 1 hour. Since the affected instrument functions provide a signal for the SCIVs and SGT System i.e., the instrumentation support SCIVs and SGT System operability, it is appropriate to declare the associated SCIVs and SGT subsystems inoperable. Currently, if an instrument is inoperable but the associated SCIVs and SGT subsystems are otherwise fully operable, an immediate shutdown is required. The CTS Action requirements are overly restrictive, because for the condition of the associated SCIVs and SGT subsystems are inoperable for other reasons, a much longer restoration time is provided. Therefore, the change, is consistent with the STS format, established repair times and is acceptable.

L.3 CTS Tables 3.3.2-1~~,~~ and 4.3.2-1 footnote "#" extends the Mode 1, 2, and 3 Applicability for the "Reactor Vessel Water Level - Low Low, Level 2" function of secondary containment isolation to include "During CORE ALTERATION" ~~and operations with a potential for draining the reactor vessel~~." ITS Table 3.3.6.2-1 does not include the extended applicabiliti~~es~~ ~~requirements~~ for the reactor vessel level function. ~~Although, ITS Table 3.3.6.2 footnote "a" requirements for this function include applicability during operations with a potential for draining the reactor vessel.~~ Automatic secondary containment isolation capabilities on reactor vessel water level decreases are not required during core alterations. Core alterations do not result in any increased potential for vessel draindown. If ongoing activities involve a potential for draining the reactor vessel, then the ITS applicability requires the Reactor Vessel Water Level—Low Low, Level 2 function to be operable. Therefore this change is consistent with STS Applicability requirements, and is acceptable.

MOVE TO PAGE 14

A.4 ~~becomes L.4~~ CTS Table 3.3.2-1, Action 24, requires a plant shutdown when a manual secondary containment isolation initiation function is not restored to operable status within 8 hours, or the affected system isolation valves are not closed within 1 hour, and the system is not declared inoperable. The requirement to shut down the plant is not included in ITS 3.3.6.2. The shutdown requirement is not necessary since the required actions to close the affected valves or to declare the secondary containment isolation valve inoperable can always be completed. In addition, if the valves are not closed but declared inoperable, ITS 3.6.4.2 provides appropriate shutdown actions consistent with the CTS Action 24 shutdown requirement. Therefore, deleting the shutdown requirement is ~~acceptable~~. CONSIDERED ADMIN

3.3.7.1 Control Room Emergency Filtration

ALARM

LA.1 CTS Table 3.3.7.1-1 lists the ~~Trip~~ ALARM Setpoint for the CREF Main Control Room Ventilation Radiation Monitor function. ITS Table 3.3.7.1-1 deletes the ~~Trip~~ Setpoint Values, and presents only the Allowable Values for each function. The instrumentation ~~trip~~ setpoints are moved to plant procedures controlled according to 10 CFR 50.59. ~~Trip~~ ALARM setpoints are an operational

detail that is included in instrumentation operability; however, the Allowable Value is implicit in the assumptions of the staff approved setpoint methodology and the Bases state that the Allowable Value is the TS limit for instrument function operability. Changes to the ~~trip~~ setpoints located in ALARM procedures can be adequately controlled by the provisions of 10 CFR 50.59. The single column allowable value format is consistent with the STS format and the staff approved setpoint methodology, therefore these changes are acceptable.

LB.1 Replaced with SE section ~~3.3.b.A and~~ 3.3.b.B

L.1 CTS Tables 3.3.7.1-1 & 4.3.7.1-1 require~~s~~ the CREF Main Control Room Ventilation Radiation Monitor function to be operable in Mode 5. ITS Table 3.3.7.1-1 replaces the function Mode 5 applicability with footnotes "a" and "b". Footnote "a" requires the CREF Main Control Ventilation Radiation Monitor function to be operable "During operations with potential for draining the reactor vessel". Footnote "b" requires the function operable "During core alterations, and during movement of irradiated fuel assemblies in the secondary containment." These footnotes limit the system operability requirements to those operations that have a potential to create a need for system operation. The conditions omitted by these changes are not initiators of events which require operation of the system and, therefore, the change does not impact safety. Thus, Mode 5 is not a requirement while the conditions that remain in TS could result in a potential for a radiation release in Mode 5. This change is consistent with the STS, and is acceptable.

In addition, CTS Tables 3.3.7.1-1 and 4.3.7.1-1, Table Notation "*" provides for Applicability of the Main Control Room Radiation Monitor "when the main condenser air evacuation system is in operation." This Applicability has been deleted in ITS Table 3.3.7.1-1, because it restates the Mode 1, 2, and 3 definitions. The main condenser air evacuation system is normally operated in Modes 1, 2, and 3, when the reactor could be pressurized. In Modes 4 and 5, the reactor is depressurized. Thus the system is not used to remove non-condensible radioactive gases released from the reactor coolant.

L.2 The Control Room Emergency Filtration System actions have been modified to provide more appropriate actions when one or more main control room ventilation radiation monitors (which provide only an alarm function) are inoperable. (~~Existing~~CTS/ITS ~~specification~~ 3.3.7.1)

Main control room ventilation radiation signals are initiated from four channels of radiation monitors. Two channels are assigned to each remote intake plenum~~s~~ and are required to be OPERABLE to alarm operators as to which remote intake plenum is in the potential radioactive plume generated from the design basis LOCA. The accident analysis assumes that remote air intake radiation monitors are needed to ensure that the remote air intake which is in the plume pathway is isolated before dose limits to the control room personal are exceeded. According to the CTS, 2 out of 2 radiation monitoring channels per intake shall be OPERABLE. In case one of the channels becomes inoperable, the affected intake shall be isolated within one hour and the inoperable channel has to be restored to OPERABLE status within 7 days or, within next 6 hours initiate and maintain the CREF system in pressurization mode. (CTS

Action 70~~X~~.a)

The proposed change removes the requirement to isolate the air-intake if one of the two radiation monitors on any air-intake becomes inoperable. If one out of two monitors on any air-intake becomes inoperable, proposed Required Action ~~E.1 and~~ E.2 requires restoring the inoperable channel to the OPERABLE status in 30 days, and if loss of one out of two monitors occur on both air-intakes, ~~E.1 and~~ E.2 requires the inoperable channel to be restored to its OPERABLE status in 7 days. With one radiation monitor inoperable on any air-intake, the other monitor is fully capable of providing indication of radiation levels at that air-intake. The purpose of the monitors is to provide indication of radiation-levels at the remote air-intake and annunciate in the control room if high radiation is detected above the specified setpoint. On initiation of an alarm, plant personal will isolate the affected air-intake. Therefore, isolation of the air-intake with just one inoperable channel is not necessary, when indication and annunciation for high-radiation level is available through the other operable channel. Also, the licensee stated that the location of air-intakes is such that the plume can not be over both remote air-intakes at the same time. Therefore deletion of the requirement to isolate the air-intake if one of the two radiation monitors is inoperable is acceptable to the staff.

Required ACTION

THIS IS (M.4) on page 64, 65

M CHANGE. SEE M.4

The proposed change also removes the allowance to operate indefinitely in the pressurization mode with one or more radiation monitors inoperable. The accident analysis assumes that the CREF system is in the pressurization mode with makeup through only one of the two remote air intakes. ~~If radiation monitoring capacity of an air-intake could not be maintained,~~ IN ADDITION if ~~or if~~ both monitors of the same air-intake are inoperable, the affected air-intake will be isolated within one hour ~~and the inoperable channel will be restored to OPERABLE status within 7 days of discovery of loss of both channels~~ (Required Action E.1 ~~and E.2~~) Isolation of the air-intake will preclude the dose limits from being exceeded if the un-monitored remote air-intake is in the plume exposure pathway. If all monitors become inoperable or it is not desired to isolate the other air-intake, proposed Required Action F.1 will require declaring both CREF systems inoperable which will result in unit shutdown. In addition, a proposed note in Action E.1 requires entry to LCO 3.7.3 if both air-intakes are isolated due to inoperable radiation monitors. ~~This places additional restrictions on plant operation~~. This is acceptable to the staff.

THIS IS AN L CHANGE SECTION

DELETE - 7 DAYS if BOTH INTAKES NOT 2 IN ONE INTAKE

L.3 CTS Table 3.3.7.1-1, Action 70.a, requires restoring one inoperable Main Control Room Ventilation Radiation Monitor to operable status within 7 days. ITS 3.3.7.1, Required Action E.2, changes the allowed restoration time for either one or two radiation monitors inoperable on one air intake to 30 days. The function of the monitor is to provide indication as to whether or not an accident plume is over the respective remote air intake. The location of the remote air intakes is such that a plume cannot be over both remote air intakes at the same time. If the operable radiation monitors are indicating that the plume is over its respective remote air intake, the other remote intake, which has no operable radiation monitors, cannot have the plume over it. Therefore, it is acceptable to extend the allowed outage time of radiation monitors on one remote air intake to 30 days, provided the other two radiation monitors on

the other remote intake are operable.

The remaining operable radiation detectors receive AC power ~~form~~ from opposite electrical divisions, thus if a loss of offsite power occurs, coincident with a LOCA and a failure of a diesel generator to start, one of the two detectors will remain energized and capable of providing indication to the operators. The proposed 30 day completion time is consistent with the 30 day completion time provided for PAM instrumentation. The radiation monitors perform a similar function as a PAM instrumentation Type A variable; they provide indications so that the control room operation staff can take a specific, preplanned, manual action for which no automatic control is provided, which are required for the Control Room Emergency Filtration System to accomplish its safety function. In addition, manual sampling of the remote air intake location would also provide the necessary information. The proposed 30 day completion time is provided in the dual completion times of proposed Required Action E.2. A 7 day completion time is provided if one or more radiation monitors are inoperable in both remote air intakes, and a 30 day completion time is provided if this is not the case.

3.3.8.1 Loss of Power Instrumentation

LA.1 CTS Table 3.3.3-2 lists the Trip Setpoint and Allowable Values for each loss of power instrumentation function. CTS 3.3.3, action a, requires adjusting the trip setpoint consistent with the trip setpoint specified in CTS Table 3.3.3-2. ITS Table 3.3.8.1-1 deletes the Trip Setpoint Values, and provides only the Allowable Values for each function. The loss of power actuation instrumentation trip setpoints for both 4160-Vac buses ~~base~~ and 120-Vac buses ~~base~~ are moved to plant procedures controlled by 10 CFR 50.59. Trip setpoints are an operational detail that is included in instrumentation operability; however, the Allowable Value is implicit in the assumptions of the staff approved setpoint methodology and the Bases state that the Allowable Value is the TS limit for instrument function operability. Changes to the trip setpoints located in procedures can be adequately controlled by the provisions of 10 CFR 50.59. The single column allowable value format is consistent with the STS format and the staff approved setpoint methodology, therefore these changes are acceptable.

LA.2 CTS ~~SR~~ 4.3.3.2, logic system functional test, requires the "simulated automatic operation" of all channels as part of the surveillance requirement. ITS SR 3.3.8.1.~~3~~4 logic system functional test, does not include the requirements to simulate automatic operation of all channels. Instead, ITS Bases ~~B~~ SR 3.3.8.1.~~3~~4 state that the testing demonstrates operability of the required trip logic. Since these instructions do not effect changes to the outcome of logic system channel functional testing it is not necessary to include these requirements in the ITS to ensure the operability of the LOP instrumentation. Changes to the Bases are controlled by the provisions of the ITS Bases Control Program described in ITS 5.0. Therefore, the change is acceptable.

LA.3 CTS Table 3.3.3-1 lists the loss of voltage and degraded voltage loss of power instrumentation total number of channels and channels to trip

requirements. CTS Table 3.3.3-2, footnote ## identifies design and operational characteristics of the inverse time delay relays and instantaneous voltage relays. ITS moves these system design details to the ITS Bases therefore these requirements are not included in ITS Table 3.3.8.1-1. Specifying channels to trip, and relay types do not add requirements which ensure the loss of power instruments remain operable. The ITS 3.3.8.1 requirements and the associated surveillance requirements ensure the licensing basis instrument channels remain operable or that necessary restrictions are place on plant operations when channels are inoperable. The provisions of the Bases Control Program, described in Chapter 5 of the ITS, control changes to these the TS Bases. The ITS Bases Control Program provides appropriate control of the Bases details and requirements, and the operability of the loss of power instrumentation is assured from the ITS 3.3.8.1. Therefore, moving these design details and requirements to the ITS Bases is acceptable.

VAC

LA.4 CTS Table 3.3.3-2 ~~lists~~ the allowable values for a 4160-Vac nominal voltage basis, and a 120-Vac voltage basis. ITS Table 3.3.8.1-1 lists only the 4160-Vac nominal voltage allowable value. The 120-Vac allowable value duplicates the 4160-Vac allowable value because of the constant transformer ratio between the 4160-Vac and the 120-Vac buses. Therefore, implementing the ITS format for the plant design moves the 120-Vac base allowable value to plant procedures. There is only one setpoint per instrument channel. The 120-Vac ~~analytical~~ setpoint relates to the 4160-Vac bus allowable value specified in ITS Table 3.3.8.1-1. ~~The provisions of the Bases Control Program, described in Chapter 5 of~~ the ITS, control changes to these the TS Bases. The ITS Bases Control Program provides appropriate control of the Bases details and requirements, ~~and the operability~~ of the loss of power instrumentation is assured from the ITS 3.3.8.1. Therefore, moving these design details and requirements to ~~the ITS Bases~~ procedures is acceptable.

NOT GOING TO BASES

LD.1 Replaced with SE section 3.3.b.A ~~and 3.3.b.B~~

LF.1 ~~Replaced with SE section 3.3.b.A and 3.3.b.B~~ NOT IN SE

L.1 Item #93 - confirm revisions of L.1 and the corresponding changes to the Rev C ITS LCO CTS Table 3.3.3-1 requires a minimum ~~of two loss of voltage channels for each division and~~ three degraded voltage channels for Division 1 and 2. ~~The Division 1, 2, and 3 loss of voltage logic are one-out-of-two logic.~~ The Division 1 and 2 degraded voltage logic are two-out-of-three logic and the Division 3 degraded voltage logic is two-out-of-two logic. The instrumentation is a support system to the 4160-Vac engineered safety feature buses and diesel generators, which themselves are support systems to the various systems they power. The diesel generators and engineered safety feature buses meet the single failure criterion, that is, the assumption of one diesel generator and associated engineered safety feature bus failure in the accident analyses. Therefore, the ITS Table 3.3.8.1-1 only requires two Division 1, 2 and 3 degraded voltage channels per division. A single failure of any one of these required channels will only result in the loss of degraded voltage protection to one diesel generator and the two channel design is consistent with staff positions for this second level of bus voltage protection and is acceptable.

For TRS NOT TRB

L.1 is being revised, this will need to be fixed to delete loss of voltage

L.2 CTS 3.3.3 does not include a requirement to declare the diesel generator inoperable for loss of a LOP instrumentation channel associated with a diesel generator. ITS 3.3.8.1, Required Action B.1, requires declaring the associated diesel generator inoperable. This results in taking the appropriate actions in the diesel generator specification (LCO 3.8.1 or LCO 3.8.2) if the inoperable LOP channel remains untripped after 1 hour. The CTS actions for an untripped channel requires entry into CTS 3.0.3, resulting in an immediate shutdown. Since LOP instrumentation provide a DG start signal, they support diesel generator operability, therefore the appropriate TS action is to declare the diesel generator inoperable. If the DG is inoperable for other reasons, the CTS provides a 72 hour restoration time; yet if an instrument is inoperable with the diesel otherwise fully operable, the CTS requires an immediate shutdown. Declaring the diesel generator associated with inoperable loss of power instrumentation inoperable is appropriate and acceptable.

L.3 CTS Table 3.3.3-1, Action 38, allows operation to continue with an inoperable channel until the next channel functional test if an inoperable channel is tripped within one hour. ITS also require inoperable channels to be tripped in one hour. SR 3.3.8.1.1 requires a channel functional test every 31 days. SR 3.0.1 requires all channels to be tested; failure to meet a test is failure to meet the LCO. Potentially, an inoperable channel could prevent performing the channel functional test. If this occurs ~~a~~ the plant is compelled to shutdown due to the inability to perform the required surveillance. However, this restriction on continued operation as is the case in CTS Action 38 need not be specified as an ITS Action because it exists inherently as a result of the channel functional test requirement. In some cases, it will be possible to perform the test with a channel inoperable, using the allowance of ITS LCO 3.0.5. Thus, deleting the requirement to ~~operable~~ operate only until the next CHANNEL FUNCTIONAL TEST will allow continued operation with an ~~inoperable,~~ tripped channel for a longer period of time than is currently allowed. This is acceptable since placing the channel in trip conservatively compensates for the inoperable status, restores the single failure capability, and provides the required initiation capability of the instrumentation. Therefore, it is not necessary to limit the time the channel is allowed to be tripped.

L.4 The ITS adds Note 2 to the surveillance requirements. This note allows a 2 hour delay for entering the associated conditions and required actions for placing a channel in an inoperable status solely for performing required surveillances. This allowance is not a part of the CTS. It requires maintaining DG initiation capability by the associated instrument function. Thus, 2 hours in this condition will not substantially impact risk. Upon completion of the surveillance, the channel must return to operable status. If the 2 hour allowance expires, the applicable condition and required actions apply.

3.3.8.2 RPS Electric Power Monitoring

LF.1 ~~Replaced with SE section 3.3.b.A and 3.3.b.B~~ NOT IN SE

L.1 CTS 3.8.4.4 always requires two reactor protection system electric power monitoring channels for each inservice reactor protection system motor-

generator set or alternate source. ITS 3.3.8.2 requires the same operable equipment in Modes 1, 2, and 3. ITS 3.3.8.2 also applies in Modes 4 and 5 with any control rod withdrawn from a core cell containing one or more fuel assemblies or if both residual heat removal shutdown cooling suction isolation valves are open. With no control rods withdrawn from core cells containing fuel assemblies or with either residual heat removal shutdown cooling suction isolation valves closed, there is no need for the reactor protection system or the reactor protection system bus powered components to perform their function. Therefore, there is no need to require monitoring of the power to protect the equipment. In addition, Special Operations LCO 3.10.4 will allow a single control rod to be withdrawn in MODE 4 by allowing the Reactor Mode Switch to be in the refuel position. Therefore, the applicability only includes those modes or conditions requiring the reactor protection system and the reactor protection system bus powered components, including MODE 4 operations for LCO 3.10.4.

THIS req'tx NOT IN 3.3.8.2 - IT IS IN 3.10.4

L.2 CTS 3.8.4.4, action b, allows 30 minutes to remove the associated power source from service, if both reactor protection system electric power monitoring channels for a power source are inoperable. ITS 3.3.8.2, Required Action B.1, allows 1 hour to remove the associated inservice power supply from service for the same condition. Increasing the allowed outage time for two redundant inoperable channels from 30 minutes to 1 hour provides time for corrective actions, ~~The time extension for two inoperable assemblies is also 30 minutes,~~ thus allowing the appropriate planning to perform required actions based on existing plant conditions and available personnel.

L.3 ~~Proposed change is denied (comment database item #99)~~

SEE INSERT L.3

INSERT L.3 to subsection 3.3.b, LCO 3.3.8.2

A Note has been added to ITS 3.3.8.2 which allows one reactor protection system electric power monitoring channel to be inoperable for up to 6 hours for performing Surveillances, provided the other channel in the associated power supply is operable. Also, by approving various topical reports, the staff in the past has granted the 6 hour allowance for reactor protection system, emergency core cooling system, and isolation system equipment. The licensee stated that the 6 hour testing allowance does not significantly reduce the probability of tripping the associated power supply when necessary, since the other channel must be operable for this allowance to be used. This system supports the RPS and isolation instrumentation. As stated above, a similar note is currently allowed for this instrumentation., provided the RPS or isolation capability is maintained. Since the proposed note is consistent with the time allowed for the supported system and continues to ensure the capability is maintained, this proposed note is acceptable to the staff.

c. More Restrictive Requirements

By electing to implement STS Section 3.3, the licensee has proposed a number of more restrictive conditions than are allowed by the existing TS. The more significant conditions are the following:

3.3.1.1 Reactor Protection System (RPS) Instrumentation

M.1 ~~Item #25 — Hold for appeal decision~~ ITS 3.3.1.1 includes Condition C, which is not included in the CTS 3/4.3.1. When in Condition C, "one or more ~~automatic~~ functions with RPS trip capability not maintained," the ITS provide 1 hour to restore RPS trip capability. With two channels inoperable for the same Function in the same trip system, an RPS scram due to that Function cannot occur. ITS ~~Condition~~ C limits restoration time to 1 hour. This is an additional more conservative restriction on plant operation and is acceptable.
ACTION

M.2 ITS SR 3.3.1.1.12 adds a Surveillance which was not included in the CTS. ITS SR 3.3.1.1.12 verifies the automatic enabling of the Turbine Throttle Valve and Turbine Governor Valve scrams when rated thermal power is equal to or greater than 30% RTP. This is consistent with the STS, and is an additional restriction on plant operation, therefore acceptable.

3.3.1.2 Source Range Monitors

M.1 CTS ~~SR~~ 4.3.7.6.b and ~~SR~~ 4.9.2.b require performance of a SRM channel functional test, ~~within 24 hours prior to the start of core alterations, and at least once per 7 days. The requirement to perform the surveillance within 24 hours prior to the start of core alterations has been deleted in the ITS. The requirement to perform the surveillance every 7 days is retained in ITS SR~~ ITS SR 3.3.1.2.4~~, although,~~ includes an additional requirement ~~is added,~~ to determine a signal-to-noise ratio and verify it is greater than or equal to 2:1 or 20:1, depending upon the count rate requirement. This additional restriction on plant operation ensures that the SRM reading is greater than the specified minimum count rates indicative of neutron flux levels in the core since with a few assemblies loaded, the SRMs will not have a high enough count rate to satisfy the SR. Therefore the change is a more restrictive change.

M.2 CTS ~~SR~~ 4.3.7.6.c requires verification that the source range monitor count rate is at least 0.7 cps prior to withdrawal of control rods. The instructional requirement "prior to control rod withdrawal" is replaced in ITS SR 3.3.1.2.4 with a specified time limit before control rod withdrawal is allowed. The ITS requires the surveillance to be performed once per 24 hours and every 12 hours during core alterations. In addition, the surveillance must be performed once per 24 hours, regardless of whether or not control rods are withdrawn. Since the surveillance is to be performed at a specified time, not just prior to control rod withdrawal, the change improves upon CTS requirements and is more restrictive than current plant practice.

M.3 An additional channel calibration surveillance has been added in the ITS

for the SRMs. CTS SR 4.9.2 does not require a channel calibration to be performed on the SRMs in Mode 5. The new ITS SR 3.3.1.2.7 requires an SRM channel calibration every 18 months if in Mode 5 to verify performance of SRM detectors and associated circuitry. These requirements ensure that the reactivity of the core will be continuously monitored during core alterations The additional restriction on plant operation is added in conformance with the STS .

3.3.2.1 Control Rod Block Instrumentation

M.1 The Reactor Mode Switch Shutdown Position Function is added to ITS 3.3.2.1 for shutdown conditions, Modes 3, 4, and 5. Modes 3 and 4 requirements ensure that all control rods remain inserted when the mode switch is in the shutdown position since positive reactivity insertion events are not analyzed for these modes. In Mode 5 with the reactor mode switch in the "Refueling" position, the refuel position on-rod-out interlock (LCO 3.9.2 "Refuel Position One-Rod-Out Interlock") provides operability requirements for the control rod withdrawal blocks. In Mode 5 with the mode switch in "Shutdown", the control rod withdrawal blocks are assumed in the safety analysis to prevent criticality. Therefore, when the reactor mode switch is in the "Shutdown" position, the control rod withdrawal block is required to be operable to meet the assumptions of the safety analysis. The change enhances current TS requirements and is acceptable.

M.2 ITS SR 3.3.2.1.4 has been added to current TS requirements to require calibration of the RBM automatic enabling setpoints ~~(permissives)~~ of the RBM. This test establishes a necessary requirement to ensure that the RBM will function as designed during plant operation. The more restrictive change enhances current TS requirements and is acceptable.

M.3 Two required actions only are added to the current TS which restrict control rod movement during plant startup with the RWM inoperable. For reactor startup conditions during which the RWM is inoperable continued movement of control rods will be allowed if at least 12 control rods are withdrawn (ITS Required Action C.2.1.1), or if a startup with the RWM inoperable has not been performed in the last calendar year (ITS Required Action C.2.1.2). These new requirements replace the current TS 3/4.1.4.2 for the RSCS and ensure the RWM is reliable. These requirements enhance plant operation and are acceptable.

M.4 ITS SR 3.3.2.1.6 is added to the current TS to ensure the automatic enabling setpoints ~~(permissives)~~ of the RWM are properly calibrated. The RWM is designed to be automatically bypassed when thermal power is greater than 10% RTP as measured by the steam flow signal. Periodic calibration of the automatic bypass setpoint must be verified to ensure the RWM functions as designed. ITS SR 3.3.2.1.6 provides test requirements for the periodic verification of the setpoint. This is an enhancement to plant operation and is acceptable.

M.5 CTS 3.1.4.1 footnote "*" for RWM Mode 2 Applicability is moved to ITS SR 3.3.2.1.2 as a Note. The CTS footnote allows entry into Mode 2 and withdrawal of selected control rods for the purpose of determining operability of the RWM

prior to withdrawal of control rods for bringing the reactor to criticality. There is no established time limit for satisfying note "*." The ITS SR 3.3.2.1.2 Note provides a 1 hour time limit to verify RWM operability by performing channel functional test after any control rod is withdrawn at equal to or less than 10% RTP in Mode 2. The addition of a time limit is an enhancement to plant operation and is acceptable.

3.3.2.2 Feedwater and Main Turbine High Water Level Trip Instrumentation

M.1 ITS SR 3.3.2.2.1 adds an additional Surveillance Requirement to perform a channel check of the feedwater and main turbine high water level trip instrumentation, which is not included in the CTS. This is consistent with the STS content and is an acceptable additional restriction on plant operation.

3.3.3.1 Post Accident Monitoring (PAM) Instrumentation

M.1 An additional PAM Function "ECCS Pump Room Flood Level" is included in ITS Table 3.3.3.1-1. CTS Table 3.3.7.5-1 does not include ECCS Pump Room Flood Level as a PAM Function. The ECCS Pump Room Flood Level Function is included in ITS Table 3.3.1-1 because it is a Regulatory Guide 1.97, Type A Category I variable therefore it is a PAM Function according to the STS format. This is an additional restriction on plant operation, and therefore is acceptable.

M.2 ITS 3.3.3.1 provides remedial action requirements for the Primary Containment Gross Radiation Monitor PAM channels when one channel is inoperable. CTS 3.3.7.5 Action 81 for these radiation channels does not address the plant condition of one channel inoperable. ITS 3.3.3.1, Actions A and B, provide requirements to restore the channel to operable status within 30 days or submit a special report, consistent with Actions for other PAM instruments. This more restrictive change is acceptable.

3.3.3.2 Remote Shutdown System

M.1 A new Surveillance Requirement is included in the ITS (ITS SR 3.3.3.2.4), to verify that each required control circuit and transfer switch is capable of performing its intended function, which is to transfer control power to the remote control panel, once per 24 months. This system is not required to respond to any mechanistic DBA evaluated in the safety analysis and this change is an additional restriction on plant operation. The change is consistent with the recommendations of the STS, and therefore acceptable.

3.3.4.1 End of Cycle Recirculation Pump Trip (EOC-RPT) Instrumentation

M.1 CTS 3.3.4.2 Action b requires placing inoperable channel(s) in one or both trip systems in trip within one hour. If the channels are inoperable due to a trip breaker that will not open, placing the channels in the tripped

condition will not accomplish the intended restoration of the functional capability. A Note is added to ITS 3.3.4.1 Required Action A.2 to exclude the requirement to trip the channel when channel inoperability is the result of an inoperable breaker. Therefore, a channel that is inoperable due to an inoperable breaker must be restored according to ITS 3.3.4.1 Required Action A.1 within 72 hours or the associated recirculation pump must be removed from service or plant shutdown is required within 4 hours. The change is more restrictive on plant operation and conforms to the STS, therefore this change is acceptable.

M.2 New SR 3.3.4.1.3 is added to the ITS to require a verification that the Turbine Throttle Valve - Closure and Turbine Governor Valve Fast Closure, Trip Oil Pressure - Low Functions are not bypassed the Thermal Power is ≥ 30% RTP. This surveillance verifies that the bypass circuit is functioning properly every 18 months. This additional requirement is more restrictive on plant operations and is acceptable.

3.3.4.2 ATWS Recirculation Pump Trip Instrumentation

~~M.1 withdrawn~~

M.2 CTS Table 3.3.4.1-2 requires an instrumentation allowable value of ≤ 1155 psig for the Reactor Vessel Pressure—High Function setpoint. ITS SR 3.3.4.2.3 decreases the allowable value for this ATWS-RPT setpoint to ≤ 1149 psig. The new Allowable Value is based upon the most recent setpoint calculation. This is added restriction to plant operation and is acceptable.

M.1
~~M.3~~ Items # 54/55 - Confirm revisions of M3 and the corresponding changes to the ITS in Rev C CTS 3.3.4.1 Action ~~(~~b~~)~~ provides a 14 day out of service time for one or more inoperable ATWS trip Function channels, i.e. low reactor water level or high reactor pressure if the channels in the other trip system for the affected function are operable. ITS 3.3.4.2 Condition A revises the action to provide a 7 day allowed out of service for each inoperable channel without the requirement to verify the operability status of the channels in the opposite trip system. At the end of the completion time the channel must either be repaired or placed in trip. Once the channel is placed in trip the trip system logic input for the inoperable channel is performed and indefinite operation in this configuration is allowed. With one pressure or one level channel inoperable and untripped in a trip system, the ATWS trip capability, which is the capability to trip both pumps on either a level or pressure signal, cannot be met for both recirculation pumps. The seven day out of service time considers the reliability of the instrument channels, the likelihood of an ATWS event and the configuration of the pump trip logic which retains an operable pump trip on the diverse signal. The 7 day out of service time is more restrictive than the current TS requirements, and is a change to the STS completion times for an inoperable ATWS instrumentation channel based on the plant design. ~~and operating experience.~~ This change is acceptable.

3.3.5.1 Emergency Core Cooling (ECCS) Instrumentation

M.1 CTS 3.3.3, Action b allows 24 hours to take CTS Table 3.3.3-1 Actions when one or more ECCS Actuation instrument channels are inoperable. CTS 3.3.3, Action c allows 7 days to restore ADS trip system A or B to operable status if the HPCS and RCIC are inoperable, and 72 hours if HPCS and RCIC are not operable. ITS 3.3.5.1 Required Actions B.1, B.2, C.1, D.1, E.1, F.1, and G.1 provide requirements for the loss of initiation capability of a function for both divisions/trip systems. These additional Required Actions provide clear direction of the necessary Actions when in this condition. These ITS Required Actions allow operations for 1 hour with a loss of initiation capability of a function for both divisions/trip systems. This additional requirement to plant operation is consistent with the STS format and is acceptable.

FUNCTION NOT ADDED TO ITS - MOVED TO 3.3 FROM 3.5 -

ACTION

ACTIONS & SR WERE ADDED, NOT LIMITS

M.2 ITS Table 3.3.5.1-1 includes six additional ECCS actuation instrument functions. ITS Table 3.3.5.1-1 Functions 1.c, 1.d, 2.c, and 2.d provide requirements for low pressure ECCS pump LOCA Time Delay Relay instrumentation. The logic of this instrumentation is important to the proper functioning of the ECCS in response to a design basis accident. Appropriate actions and SRs have also been added. To provide unique names for these functions, CTS Table 3.3.3-1 Functions A.1.f and B.1.d are renamed as "LOCA/LOOP," to properly describe the function of the Time Delay Relay. In addition, ITS Table 3.3.5.1-1 Functions 4.f and 5.e are added because the CTS does not specify instrumentation TS ~~limits~~ for inoperable channels of the Accumulator Backup Compressed Gas System Pressure - Low Function. CTS do not require specific actions when one or more of the channels are inoperable, and, since the channels are arranged in a two-out-of-three logic, the associated ADS valves are declared inoperable when two of the channels in a subsystem are inoperable. This TS action is consistent with other ADS actuation instrumentation. TS do not required any action when one channel of Accumulator Backup Compressed Gas System Pressure - Low Function per subsystem is inoperable. The proposed Action F will require an individual channel to be tripped in 8 days. When more than one channel in a subsystem is inoperable, Action F will require declaring the associated ADS valve inoperable, consistent with current licensing basis. The logic system functional test requirement of SR 3.3.5.1.5 has been added to ensure the two-out-of-three logic is properly tested, similar to other ADS Functions. Currently, only a channel calibration is required for these instruments. These additional restrictions on plant operation are acceptable.

M.3 ITS Table 3.3.5.1-1 Note (b) is added to the Reactor Vessel Water Level - Low Low Low, Level 1 and Drywell Pressure - High, ECCS actuation instrument functions to ensure the Diesel Generators are covered by the associated instruments. Thus, when a channel is not restored to operable status within required Completion Times, the affected DG is declared inoperable in addition to the affected ECCS division. This is an additional restriction on plant operation conforms to the STS format and is acceptable.

M.4 CTS 3.3.3 Action b, allows one or more ECCS Actuation instrument channels to be inoperable for 24 hours prior to requiring the Actions of CTS Table 3.3.3-1. CTS Table 3.3.3-1 Actions then allow additional time to trip or restore a channel. This additional time is deleted in the ITS, except for the time allowed for the minimum flow channels, for which 1 day of the 7 days

allowed is deleted. ITS Table 3.3.5.1-1 Actions allow 24 hours to trip or restore inoperable channels except for the minimum flow channels, which will allow 7 days, prior to requiring the associated subsystem to be declared inoperable. These Allowed Outage Times are derived from the staff approved BWROG topical report, NEDC-30936-P-A, dated December 1988, which are used in the STS. This is an additional restriction to plant operation and therefore is acceptable.

M.5 CTS Table 3.3.3-1 Action 31 applies to "Minimum Flow" ECCS Actuation instrument channels and requires placing an inoperable in the tripped condition within 1 hour and then allows 7 days to repair the channel before declaring the system inoperable. ITS Table 3.3.5.1-1 removes the option to trip the inoperable channel which means the channel must be restored to operable status in the 7 day period. Placing a channel in trip may not compensate for the inoperability, or it may be a less safe action to take because this is a single channel actuation logic that results in flow paths for minimum or full ECCS flow. If these channels are not made operable the associated subsystem must be declared inoperable and the associated TS required actions taken. This is an additional restriction to plant operation and therefore is acceptable.

M.6 Replaced with SE section 3.3.b.A and 3.3.b.B

M.7 Replaced with SE section 3.3.b.A and 3.3.b.B

THESE ARE L DISCUSSIONS SEE INSERT M.6 & M.7

3.3.5.2 RCIC System Instrumentation

M.1 ITS 3.3.5.2, adds Required Actions B.1 and D.1 for response to a loss of RCIC Initiation capability of a Table 3.3.5.2-1 Function. The CTS does not include these additional requirements which require the RCIC System declared inoperable within 1 hour from discovery of a loss of RCIC Initiation capability. This addition restriction on plant operation is consistent with the STS, and is acceptable.

3.3.6.1 Primary Containment Isolation Instrumentation

M.1 CTS Table 3.3.2-1, Table Notation (d), allows up to two of the four Main Steam Line Flow - High instrument channels to be inoperable before TS actions are required. The CTS allowance could result in operations where high steam flow exists in some MSLs without the appropriate action to isolate the MSIV. ITS Table 3.3.6.1-1 removes this allowance because the accident analysis assumes an isolation of the MSIV occurs following detection of high steam flow in any main steam line. The ITS identifies the required number of MSL channels to be 2 channels per MSL in ITS Table 3.3.6.1-1. This additional restriction on plant operation is consistent with the STS, and is acceptable.

M.2 CTS 3/4.3.2, Actions, for trip functions; 2.a, Reactor Building Vent Exhaust Plenum Radiation - High, 2.b, Drywell Pressure - High, 2.c, Reactor Vessel Water Level - Low Low, Level 2, and 2.d, Manual Initiation specify actions for inoperable channels in the affected ~~Group 3~~ secondary containment isolation valves and SGT system but do not specify similar actions for the affected

INSERT M.6 to subsection 3.3.c, LCO 3.3.5.1

The following additional Allowable Values have been added for currently required channels of CTS Table 3.3.3-2 (ITS Table 3.3.5.1-1): a) A minimum Allowable Value for the LPCS Pump Discharge Flow—Low (Minimum Flow)(CTS Trip Function A.1.c/ITS Function 1.c) and a maximum Allowable Value for the LPCI Pumps Discharge Flow—Low (Minimum Flow) (CTS Trip Functions A.1.g and B.2.e/ITS Functions 1.h and 2.g) and HPCS Pump Discharge Flow—Low (Minimum Flow) (CTS Trip Function C.1.f/ITS Function 3.f) have been provided to ensure the valves will both open properly to provide minimum flow protection and close to provide assumed ECCS flow to the core; b) A maximum Allowable Value for the Reactor Vessel Pressure—Low (LPCS and LPCI Permissive) (CTS Trip Functions A.1.d, A.1.e, and B.1.c/ITS Functions 1.f and 2.f) has been provided to ensure the injection valves do not open until reactor pressure is below the associated system's design pressure; c) A minimum Allowable Value for the LPCI Pumps A and B Start LOCA/LOOP Time Delay Relay (CTS Trip Functions A.1.f and B.1.d/ITS Functions 1.e and 2.e) has been provided to ensure the pumps do not start too soon as to impact the DGs capability to start the required loads; d) An upper limit to the LPCS and RHR Pump Discharge Pressure—High Allowable Values for ADS (CTS Trip Functions A.2.d, A.2.e, and B.2.d/ITS Functions 4.d, 4.e, and 5.d) has been provided to ensure the setpoint is below the shutoff head of the low pressure ECCS pumps. In addition, the lower Allowable Value for the RHR Pump Discharge Pressure—High Function (CTS Trip Functions A.2.e and B.2.d/ITS Functions 4.e and 5.d) has been increased to reflect the most recent setpoint calculations. These are additional restrictions on plant operation.

INSERT M.7 to subsection 3.3.c, LCO 3.3.5.1

The ADS Timer Function setpoint (CTS Trip Functions A.2.b and B.2.b/ITS Functions 4.b and 5.b) has been decreased to the proper Allowable Value and the HPCS Condensate Storage Tank Level—Low setpoint (CTS Trip Function C.1.d/ITS Function 3.d) has been increased to the proper Allowable Value. The new Allowable Values are based upon the most recent setpoint calculation. These are an additional restrictions on plant operation.

group 3

PCIVs. ITS 3.3.6.1, Actions F, G, and H add the appropriate isolation and alternate shutdown requirements for the Group 3 PCIVs. These requirements are an additional restriction on plant operation consistent with the STS and these changes are acceptable.

M.3 becomes A.13 (SEE NOTE ON page 13, MOVE 'A14' to M.3.) SAME ISSUE AS M.1 BELOW

M.4 ~~Item #77 - Open~~ Isolation Functions added to ITS Table 3.3.6.1-1 include Functions 3.b, 4.b, and 4.c and their associated Required Actions and Surveillance Requirements. Functions 3.b and 4.b delay initiation of the RCIC high steam flow isolation and the RWCU high differential flow isolation, respectively. Function 4.c is the RWCU Blowdown Flow — High Function that isolates the RWCU piping when a high blowdown flow is detected. These additional restriction on plant operation are consistent with the design licensing basis and are acceptable.

M.5 The CTS Table ~~3.3.1-1~~ 3.3.2-1 Applicability for the Reactor Vessel Water Level—Low, Level 3 Function of RHR System Shutdown Cooling Mode Isolation, is revised in ITS Table 3.3.6.1-1 to include Modes 4 and 5. The Reactor Vessel Water Level - Low, Level 3 Function protects against potential draining of the reactor vessel through the RHR suction line during shutdown conditions, when the RHR Shutdown Cooling System is normally operating. ITS 3.3.6.1 also requires ~~Required~~ Action J.~~2~~ for conditions when the function is inoperable in Modes 4 and 5. This restriction on plant operations is consistent with the STS and acceptable.

M.6 ~~Replaced with SE section 3.3.b.A and 3.3.b.B~~ NOT AN L Change - see INSERT M.6

3.3.6.2 Secondary Containment Isolation Instrumentation

M.1 CTS Table 3.3.2-1, "required number of channels per trip system" for the secondary containment isolation, Manual Initiation function is "1" per trip system. The required number of channels for this function is "4" per trip system in ITS Table 3.3.6.2-1. The design of the secondary containment isolation system is two switch and two push buttons per trip system. Each of the switch and push button combination provides two channel inputs to the isolation logic. Therefore, using the ITS format that each input is a channel, the operability requirement for this function in ITS Table 3.3.6.2-1 is more appropriately specified as "4." The change reflects the approved design and is acceptable.

M.2 CTS Table 3.3.2-1, Action 24, allows an additional 8 hours to restore an inoperable manual initiation function to operable status, or close the affected system isolation valves with the next hour, and declare the affected system isolation valves inoperable within the next hour following the initial 24 hour repair time. ITS 3.3.6.2 Required Action C.1.1 and C.1.2 do not include the additional 8 hours to restore the Manual Initiation function. ITS 3.3.6.2 required actions provide valve isolation requirements and requirements for declaring the isolation valves inoperable consistent with the ~~CTS~~ STS limits. The change is more restrictive and acceptable.

INSERT M.6 to subsection 3.3.c, LCO 3.3.6.1

The following changes to the Allowable Values in CTS Table 3.3.2-2 (ITS Table 3.3.6.1-1) have been made. The Main Steam Line Flow—High, Condenser Vacuum—Low, RCIC Steam Line Flow—High, and RCIC Steam Supply Pressure—Low Functions setpoints (CTS Trip Functions 1.c.3, 1.f, 4.a, and 4.c/ITS Functions 1.c, 1.d, 3.a, and 3.c) have been decreased to the proper Allowable Value. The new Allowable Values are based upon the most recent setpoint calculations. These are additional restrictions on plant operation. In addition, for clarity, the unit for the Condenser Vacuum—Low Function (CTS Trip Function 1.f/ITS Function 1.d) has been changed from absolute pressure to vacuum.

M.3 CTS Table 3.3.2-1, Action 24, allows 8 hours to restore an inoperable manual initiation function to operable status, or close the affected system isolation valves within the next hour, and declare the affected system isolation valves inoperable within the next hour. The CTS Action does not address SGT~~S~~ inoperability. ITS 3.3.6.2 adds Required Actions C.2.1 and C.2.2 to address inoperable Manual Initiation channels of the SGT~~S~~ which either requires operation of the SGT~~S~~ or requires that the SGT subsystem be declared inoperable. The addition of the SGT~~S~~ required actions provides more restrictive requirements on plant operation. Therefore, this change is consistent with the STS and is an acceptable more restrictive change.

3.3.7.1 Control Room Emergency Filtration

M.1 CTS 3.3.7.1, Action a, allows four hours to adjust a setpoint to within its TS limits prior to declaring the channel inoperable. This 4 hour allowance is not a requirement in the ITS. ITS 3.3.7.1 requires that setpoints remain within the Allowable Value presented in ITS Table 3.3.7.1-1. When the setpoint is not within this Allowable Value, the channel is declared inoperable immediately. This change is an additional restriction on plant operation, consistent with the STS, and, therefore, acceptable.

M.2 Three new Control Room Emergency Filtration System Instrumentation functions have been added to ITS Table 3.3.7.1-1 that are not included in CTS Table 3.3.7.1-1. The additional functions are: Reactor Vessel Water Level—Low Low, Level 2; Drywell Pressure—High; and Reactor Building Vent Exhaust Plenum Radiation—High. These instruments are the same as those used in the Secondary Containment Isolation Instrumentation Specification and Actions automatically actuate the CREF System. ITS 3.3.7.1, ~~Conditions~~ B, C, and D, ~~Required Actions~~, and SRs 3.3.7.1.1, 3.3.7.1.2, 3.3.7.1.3, and 3.3.7.1.4, complete the limiting condition for operation in the ITS for these additional functions. This change, consistent with the STS format and is acceptable.

M.3 Rep~~laced with SE section 3.3.b.A and 3.3.b.B~~ NOT AN L change SEE INSERT M.3

M.4
CTS Table 3.3.7.1-1, Action 70, requires initiating and maintaining operation of the CREF system in the pressurization mode with one or more of the required Main Control Room Ventilation Radiation Monitors in an air intake inoperable AND PLANT IS ALLOWED TO OPERATE. This requirement for continuous operation in the pressurization mode is not an ITS requirement. ~~ITS 3.3.7.1, Required Action E.1 provides time limits to restore inoperable channels to operable status otherwise the associated air intake is required to be isolated within 1 hour.~~

IN a DBA, With the Control Room Emergency Filtration (CREF) System in the pressurization mode, makeup air to the control room is provided through both intakes, one of which would be in the accident plume. In this configuration the dose limits assumed in the accident analysis would be exceeded ~~because~~, the analysis assumes the air intake radiation monitors are needed to ensure that the air intake in the accident plume is isolated. The intake radiation monitors function to indicate which air intake is in the accident plume and based on this indication, plant personnel will isolate that air intake. Isolating the SEE INSERT M.4

INSERT M.3 to subsection 3.3.c, LCO 3.3.7.1

The Main Control Room Ventilation Radiation Monitor Function section (CTS Table 3.3.7.1-1, Instrumentatio 1/ITS Table 3.3.7.1-1, Function 4) has been decreased to the proper Allowable Value. The new Allowable Value is based upon the most recent setpoint calculation. This is an additional restriction on plant operation.

INSERT M.4 to subsection 3.3.c, LCO 3.3.7.1

since one of the remote air intakes will be in the plume exposure pathway. Thus, the current requirements do not adequately compensate for inoperable radiation monitors; initiating and maintaining the CREF System in the pressurization mode will not have any impact on precluding the dose limits from being exceeded.

uncontaminated air intake ensures that the dose limits to the control room personnel will not be exceeded. During the accident sequence, continued monitoring of the air intake radiation levels is needed to provide indication for shifting the CREF System suction from one intake to the other intake. The accident analysis assumes that the CREF System is in the pressurization mode, with makeup provided through only one of the air intakes. Therefore, if a radiation monitor is not restored within 30 days or 7 days, depending upon whether a monitor is inoperable in one or both air intakes, or if all radiation monitors are inoperable, ITS Required Action F.1 will require both CREF subsystems to be declared inoperable which will result in a unit shutdown per ~~the~~ ITS 3.7.3. In addition, if both radiation monitors on one air intake are inoperable, the associated air intake must be closed within 1 hour (ITS 3.3.7.1 Required Action E.1). With no indication of radiation levels at this intake, it is prudent to initially isolate the air intake during the time provided to restore one of the radiation monitors to operable status. This ensures that if an accident occurs while both radiation monitors are inoperable, the air intake is already isolated to preclude exceeding the dose limits if the unmonitored air intake is in the accident plume. In addition, the Note to ITS 3.3.7.1 Required Action E.1 is added to require entry into ITS 3.7.3 if both air intakes are isolated. Since ITS 3.0.6 provides an allowance to not enter the Required Actions of ITS 3.7.3 when the air intakes are isolated due to inoperable radiation monitors, this Note assures that if both air intakes are isolated, the CREF System is declared inoperable and the Actions of ITS 3.7.3 taken immediately. These changes are additional restrictions on plant operation, consistent with the STS, and are acceptable.

3.3.8.1 Loss Of Power (LOP) Instrumentation

M.1 CTS Table 3.3.3-1, Action 38, allows operation to continue with an inoperable channel until the next channel functional test if the failed channel is tripped within one hour. Action b of CTS 3.3.3 allows 24 hours to take this action. ITS 3.3.8.1, Required Action A, requires placing an inoperable channel in trip within 1 hour. The change to the ITS results in tripping the channel within 1 hour, instead of up to 25 hours allowed by the CTS. This is consistent with the STS. This is an additional restriction on plant operation and is acceptable.

M.2 CTS Table 3.3.3-1 and Table 4.3.3.1-1 require the loss of power instrumentation to be operable in Modes 4 and 5 when TS engineered safety features are required to be operable. ITS 3.3.8.1 requires the loss of power instrumentation to be operable when ITS 3.8.2 requires the associated diesel generator to be operable. As a result, the ITS requires loss of power instrumentation to be operable during Mode 4, Mode 5, during movement of irradiated fuel assemblies in the secondary containment, ~~and~~ as required by ITS 3.8.2. As this applicability could occur with the unit defueled, this is an additional restriction on plant operation. These additional requirements are consistent with the STS, and they are acceptable.

M.3 The CTS does not include Division 1 and 2 TR-S and Division 3 loss of voltage time delays, nor does the CTS separate the sequenced degraded voltage time delay relays for the Division 1 and 2 engineered safety features 4160-VAC

delete These are time delay relay functions. NOT-TRS these are discussed below.

buses. ITS Table 3.3.8.1-1 includes these additional instrument functions (Functions 1.b, 1.c, 1.d, and 2.b). This change is consistent with the STS. Additionally, the CTS only includes the loss of voltage instruments for starting the diesel generators, disconnecting the preferred source of offsite power (TR-S) and auto-transferring to the alternate source of offsite power (TR-B) if available, and shedding the 4.16-kVac engineered safety feature bus loads. The TR-S loss of voltage instruments will not disconnect the TR-B offsite circuit when the TR-B offsite circuit powers the 4.16-kVac engineered safety feature bus for a loss of voltage. The alternate source of offsite power, TR-B, has loss of voltage instruments for that function. Therefore, the ITS includes two new functions, Functions 1.c and 1.d, that provide requirements for the Division 1 and 2 TR-B loss of voltage instruments (TR-B can supply power to Division 1 and 2 only). The ITS also adds suitable actions for when the instrumentation is inoperable. These changes are additional restrictions on plant operation. These additional requirements are appropriate and acceptable.

M.4 CTS Table 3.3.3-2 has the following allowable values (4160-Vac ~~base~~ basis): 4.16 kV Emergency Bus Undervoltage Degraded Voltage - 3632 ± 216 volts with a time delay of 8 ± 0.8 seconds. ITS 3.3.8.1 adds the following requirements to Table 3.3.8.1-1: a) Degraded Voltage Allowable Value - Divisions 1, 2, and 3 (Functions 1.e and 2.c) - ≥ 3685-Vac and ≤ 3755-Vac, b) Degraded Voltage - Primary Time Delay - Divisions 1 and 2 (Function 1.f) - ≥ 5.0 seconds and ≤ 5.3 seconds, c) Degraded Voltage - Secondary Time Delay - Divisions 1 and 2 (Function 1.g) - ≥ 2.63 seconds and ≤ 3.39 seconds, ~~d) Division 3 Loss of Voltage - Time Delay (Function 2.b) - ≥ 1.2 seconds and ≤ 3.5~~ seconds, and ~~e)~~ d) Division 3 Degraded Voltage - Time Delay (Function 2.d) - ≥ 7.36 seconds and ≤ 8.34 seconds. The degraded voltage and degraded voltage time delay relay function setpoints reflect the proper allowable values. The ITS allowable values replicate the most recent setpoint calculations. These changes are additional restrictions on plant operation.

IN M.3

LF CHANGE - NOT AN M. MOVE TO PAGE 54.

Trip function D.1 in CTS Table 3.3.3-2 requires that the loss of voltage protective relays be set consistent with allowable values of 2870± 172 volts for Divisions 1 and 2 and 3016 ± 180 volts for Division 3. Function 1 and Function 2 in ITS Table 3.3.8.1-1 require that the Divisions 1, 2 and 3 loss of voltage protective relays be set consistent with an upper allowable value of 3135 volts and a lower allowable value of 2450 volts.

The changes in allowable values proposed by the licensee represent improvements in the licensee's safety analysis limit calculations and instrumentation setpoint methodology, and the lower setpoint limitation of the loss of voltage protective relays. The staff reviewed the licensee's safety analysis limit calculations and setpoint methodology and found them acceptable. The proposed changes in allowable values are acceptable because they are appropriate values for the plant design as documented in the licensee's calculations.

this ¶ repeats 1st ¶

Trip function D.2 in CTS Table 3.3.3-2 requires that the degraded voltage protective relays for Divisions 1, 2 and 3 be set consistent with allowable values of 3632 ± 216 and with an 8 ± 0.8 second time delay. Function 1 and Function 2 in ITS Table 3.3.8.1-1 require that the degraded voltage protective

REPEAT

relays for Divisions 1, 2 and 3 be set consistent with an upper allowable value of 3755 volts and a lower allowable value of 3685 volts, with a primary time delay ≥ 5.0 and ≤ 5.3 seconds and a secondary time delay ≥ 2.63 and ≤ 3.39 seconds for Divisions 1 and 2, and a time delay ≥ 7.36 and ≤ 8.34 seconds for Division 3.

REPEAT of 1st ¶

The changes in allowable values and time delays proposed by the licensee represent improvements in the licensee's safety analysis limit calculations and instrumentation setpoint methodology. The staff reviewed the licensee's safety analysis limit calculations and setpoint methodology and found them acceptable. The proposed changes in allowable values and time delays are acceptable because they are appropriate values for the plant design as documented in the licensee's calculations.

3.3.8.2 - RPS Electric Power Monitoring

SHOULD MENTION CTS has NO ACTION for INOP IN 4&5

M.1 ITS 3.3.8.2 Required Action D.1 requires to restore the assembly to operable status or initiate action to isolate the Residual Heat Removal (RHR) Shutdown Cooling (SDC) System and insert any withdrawn control rods in cells containing fuel if the Required Actions of Condition A or B are not met. This action places the reactor in the least reactive condition and ensures the IN Mode 4&5 safety function of the RPS and isolation system will not be required. This requirement is acceptable because it provides appropriate actions for plant operations during shutdown and is consistent with the STS.

M.2 ~~Replaced with SE section 3.3.b.A and 3.3.b.B~~ NOT AN L change

M.3 ~~Replaced with SE section 3.3.b.A and 3.3.b.B~~ SEE INSERTS

The staff has reviewed the more restrictive requirements and concludes that they result in an enhancement to the improved TS. Therefore, the more restrictive requirements are acceptable.

INSERT M.2 to subsection 3.3.c, LCO 3.3.8.2

The undervoltage Allowable Value of CTS 4.8.4.4.b.2 has been changed from $\geq$ 108 volts to $\geq$ 110.8 volts. This new Allowavle Value is based on the most recent setpoint calculations, which ensure the RPS and RPS bus powered equipment receive adequate voltage to operate properly. This change is an additional restriction on plant operation.

INSERT M.3 to subsection 3.3.c, LCO 3.3.8.2

Time delay setting requirements have been added for the overvoltage, undervoltage, and underfrequency protective devices of the RPS MG set and alternate power supply electric power monitoring assemblies. Currently, no maximum setting is provided. These devices have adjustable time delay settings. The new Allowable Values are $\leq$ 3.46 seconds for both the RPS MG set power supply electric power monitoring assemblies and the alternate power supply electric power monitoring assemblies. The Allowable Values are based on the current setpoint methodology and ensure that the devices trip to protect the equipment powered by the RPS MG set or alternate power supply. These Allowable Values are also consistent with the current settings of the devices. This change is an additional restriction on plant operation.

~~d.~~ e Relocated Requirements

By electing to implement STS Section 3.3, the licensee has proposed to relocate a number of current requiements. The following proposed relocation is not approved by the staff.

other sections have STS difference Relocated

1. Item #63 - Hold for appeal decision The current TS 3/4.3.2 Condition, Actions and SRs for isolation actuation instrumentation channels shown in Table 3.3.2-1 and Table 3.3.2-3 for the RCIC Drywell Pressure - High function (3/4.3.2.4.h) are proposed to be relocated to the FSAR.

The function of the RCIC Drywell Pressure - High instrument channels is to provide an isolation signal to the RCIC turbine exhaust inboard and outboard vacuum breaker isolation valves. A high drywell pressure signal in conjunction with a RCIC low steam line pressure signal will isolate these valves. The licensee states that the portion of the RCIC system isolated by these valves is not needed to mitigate a design basis accident (DBA) or transient because the two valves are not primary containment isolation valves. Instead, the system isolation protects the RCIC turbine exhaust lines against operation at pressures which might rupture the lines and cause damage to non-safety equipment located in the vicinity of these lines. The licensee indicated that it was uncertain as to the basis for not classifying the valves as isolation valves.

The staff finds that the isolation function is provided to protect the RCIC turbine exhaust vacuum breaker line from overpressurization, thereby preventing a potential leakage path from the primary containment. The isolation signal closes two in-series motor-operated valves in the vacuum breaker exhaust line that runs from the RCIC turbine exhaust piping to the suppression chamber airspace. The valves isolate on a high drywell pressure signal coincident with low RCIC steamline pressure.

DELETE

The staff has identified two issues associated with the proposed change. The first is the change itself, i.e. relocation of the isolation signal a plant controlled document, and the second is re-classification of the valves as containment isolation valves. Although the valves receive isolation signals, they are not classified in the FSAR as containment isolation valves, and hence not subject to the same testing and maintenance requirements.

These issues were discussed at an appeals meeting between the NRC and the licensee held on June 27, 1996, in Rockville, MD. Design criteria in use at the time of licensing of WNP-2 required two isolation valves per penetration unless the valves were excepted based on alternate criteria. In consideration of this, the staff decided that the isolation function should be retained in the TS and that the issue of whether the valves should be classified as isolation valves would be resolved as a longer term issue outside of the conversion process.

Therefore, the staff finds the proposed change unacceptable, and will proceed to address the issue of re-classification of the valves as isolation valves separate from this action.

In accordance with the guidance in 10 CFR 50.36 the licensee has proposed to relocate or reorganize all or portions of the following existing TS to other licensee-controlled documents:

Existing TS	Title
3/4.3.2	Isolation Actuation Instrumentation
3/4.3.3	Emergency Core Cooling System Actuation Instrumentation
3/4.3.6	Control Rod Block Instrumentation
3/4.3.7.1	Radiation Monitoring Instrumentation
3/4.3.7.3	Meteorological Monitoring Instrumentation
3/4.3.7.5	
3/4.3.7.7	Traversing In-Core Probe System
3/4.3.7.10	Loose-Part Detection System
3/4.3.7.12	Explosive Gas Monitoring System
3/4.3.9	Turbine Overspeed Protection System

The more significant changes resulting from relocated items are as follows:

1. The current TS 3/4.3.3 ~~Conditions~~ LCO, Actions and SRs for emergency core cooling system (ECCS) actuation instrumentation channels for ADS 'A'- Manual Inhibit Switch (3/4.3.3.A.2.g) and ADS 'B'- Manual Inhibit Switch (3/4.3.3.B.2.f) functions are relocated to the FSAR.

The ADS manual inhibit function provides operators with the capability to prevent ADS actuation as directed by the emergency procedures. Inhibiting the ADS assists operators in mitigating an ATWS event low pressure ECCS system initiation that would otherwise dilute sodium pentaborate injected by the standby liquid control (SLC) system thereby reducing the effectiveness of the SLC system to shutdown the nuclear reaction in the core. The ADS inhibit switch function is not needed for operability of ECCS actuation instrumentation because these functions do not initiate the ECCS to preserve the integrity of the fuel cladding. The ADS inhibit switches allow management of an ATWS event which is not a DBA or transient and for which operational requirements are addressed in 10 CFR 50.62. The assurance that the ADS trip system is not rendered inoperable by the ADS inhibit function is tested in improved TS 3.3.5.1 by the logic system functional test. The ADS Manual Inhibit Switch may be relocated to the FSAR and will be controlled in accordance with 10 CFR 50.59. Additionally, condition 2.c (18) requirements to maintain an ADS manual inhibit function are deleted from the license.

2. ~~[Confirm redline text is consistent with plant licensing basis]~~ The current TS 3.3.6 ~~Conditions~~ LCO, Actions and SRs for the average power range monitors (3/4.3.6.2), source range monitors (3/4.3.6.3), intermediate range monitors (3/4.3.6.4), scram discharge volume (3/4.3.6.5), and reactor coolant system recirculation flow control (3/4.3.6.~~5~~6) rod blocks are relocated to the FSAR.

The average power range monitor (APRM) control rod block functions to prevent a control rod withdrawal error at power transient utilizing LPRM signals to create the APRM rod block signal. During power operation in Modes 1 and 2 when thermal power is greater than 10% RTP, there is no credible control rod configuration that results in a control rod worth that could exceed the 280

cal/gm fuel damage limit during the design basis control rod drop accident.

The source range monitor (SRM) and intermediate range monitor (IRM) control rod blocks function to prevent a control rod withdrawal error during reactor startup utilizing SRM signals to create the rod block signal. SRM signals are used to monitor neutron flux during startup, shutdown, and refueling conditions. In Modes 1 and 2 when thermal power is less than 10% RTP the control rod blocks from the rod pattern controller banked position withdrawal sequence (BPWS) and the Rod Worth Minimizer (RWM) enforce specific control rod sequences designed to mitigate the consequences of the CRDA. During shutdown conditions, control rod blocks from the Reactor Mode Switch-Shutdown Position ensure that all control rods remain inserted to prevent inadvertent criticalities.

The scram discharge volume (SDV) control rod block functions to prevent control rod withdrawals during power range operation, using SDV high water level signals to create the rod block signal if water is accumulating in the SDV. The purpose of measuring the SDV water level is to ensure that there is sufficient volume remaining to contain water discharged by the control rod drives during a scram, thus ensuring that the control rods will be able to insert fully. This rod block signal provides an indication to the operator that water is accumulating in the SDV and prevents further rod withdrawals. Thus, the SDV water level rod block signal provides an opportunity for the operator to take action to avoid a subsequent scram.

An increase in reactor recirculation flow causes an increase in neutron flux which results in an increase in reactor power. However, this increase in neutron flux is monitored by the neutron monitoring system which has the capability of providing a reactor scram, APRM and IRM high flux when required.

Preventing control rod withdrawal errors when thermal power is less that 10% RTP is adequately controlled by the BPWS, RWM, Reactor Mode Switch functions and by the neutron monitoring system because no DBA or transient analysis takes credit for rod block signals initiated by the APRM, SRM, IRM, scram discharge volume control and reactor coolant recirculation flow rod blocks. The LCO and Surveillances applicable to the ~~ADS Manual Inhibit Switch~~ Rod Blocks may be relocated to the FSAR and will be controlled in accordance with 10 CFR 50.59.

3. ~~[Confirm redline text is consistent with plant licensing basis]~~ Current TS 3/4.3.7.1 ~~Conditions~~ LCO, Actions and SRs for radiation monitoring instrumentation channels for the new fuel storage vault function (3/4.3.7.1.2.a.1)) and for the spent fuel storage pool function (3/4.3.7.1.2.a.2)) area criticality monitors are relocated to the FSAR.

The detection of high radiation in the area surrounding stored fuel in the new fuel vault or the spent fuel pool is provided as an indication of a local criticality. There are no automatic actuation of safety-related systems performed by these instruments. Current TS require continuous sampling monitoring using an alternate portable monitor during fuel handling and a periodic sampling at all other times if the required monitor channels are inoperable. The plant safety analysis assumes other instrument functions detect and isolate primary containment penetrations ~~and penetrations which~~

~~bypass secondary containment during a fuel handling accident.~~ Operability of instrumentation for ensuring release limits are met by initiating containment isolation are required by LCO 3.3.6.1 and LCO 3.3.6.2.

The instruments are not used to mitigate a DBA or transient. Information provided by these instruments on the radiation levels within secondary containment would have limited or no use in identifying/assessing core damage. These area monitors are not used for, nor capable of, detecting a significant abnormal degradation of the reactor coolant pressure boundary prior to a DBA. The monitored parameters are not assumed as initial conditions of a DBA or transient analyses that assumes the failure of, or presents a challenge to the integrity of a fission product barrier. These area monitors do not act as part of a primary success path in the mitigation of a DBA or transient that assumes the failure of, or presents a challenge to the integrity of a fission product barrier.

The area monitors/criticality monitors (new fuel storage vault and spent fuel storage pool) LCO ~~conditions~~, Actions and SRs may be relocated to the FSAR and will be controlled in accordance with 10 CFR 50.59.

4. The current TS 3/4.3.7.3 LCO ~~Conditions~~, Actions, and SRs for the meteorological monitoring instrumentation are relocated to the FSAR. The meteorological monitoring instrumentation is used to measure environmental parameters (wind direction, speed, and air temperature differences) which may affect distribution of fission products and gases following a DBA to be used in connection with the plans for coping with radiological emergencies, pursuant to 10 CFR 50.34(b), and to provide a basis for estimating maximum potential annual radiation doses resulting from radioactive materials released in gaseous effluents, pursuant to 10 CFR 50.36a(a)(2). The meteorological monitoring instrumentation do not address the need for monitoring instrumentation that would automatically actuate safety systems based on predetermined environmental effects or otherwise isolate the control room ventilation system from any source of high radiation. The LCO ~~conditions~~, Actions and SRs may be relocated to the FSAR and will be controlled in accordance with 10 CFR 50.59.

5. The current TS 3/4.3.7.5 LCO ~~Conditions~~, Actions, and SRs for the specific functions listed in the accident monitoring instrumentation Table 3.7.5-1 are relocated to the FSAR.

Accident monitoring parameters are chosen for the purpose to provide sufficient information that is important to safety and needed by the operator so that the operator can perform necessary EOPs to confirm an accident is proceeding per prediction, i.e. automatic safety systems are performing properly, and deviations from expected accident course are minimal.

The STS deterministic screening criteria for plant specific TS includes all Regulatory Guide 1.97 Type A instruments specified in the plant's Safety Evaluation Report (SER) on Regulatory Guide 1.97, and all Regulatory Guide 1.97 Category 1 instruments. Accordingly, this position has been applied to the WNP-2 Regulatory Guide 1.97 instruments. Those instruments meeting these criteria have remained in Technical Specifications. The instruments not

meeting these criteria have been relocated to the FSAR. The instruments meeting the criteria are as follows:

<u>Type A Variables</u>

1. Coolant level in reactor
2. RCS pressure
3. Primary containment pressure

<u>Category 1 (non-Type A) Variables</u>

1. PCIV position
2. Suppression pool water level
3. H_2 concentration
4. O_2 concentration
5. Primary containment area high range radiation

The licensee is revising the RG 1.97 requirements as they relate to the neutron flux (wide range monitor). The BWR Owners Group submitted a Licensing Topical Report, NEDO-31558, that provided alternative neutron monitoring functional design criteria to that of RG 1.97. In a letter to the BWR Owners Group dated 1/13/93, the staff found the alternate design criteria acceptable. This allows the licensee to reclassify the neutron flux (wide range monitor) such that it is not a Type A nor a Category 1 variable. In a letter dated from J.V. Parrish (WPPSS) to the W. T. Russell (NRC), the licensee adopted the staff allowance to reclassify the neutron (wide range) flux monitor. Provide the appropriate references to docketed letter from J.V. Parrish (WPPSS) to the NRC re: neutron flux reclassification. Therefore, the neutron flux (wide range monitor) is not included in ITS Table 3.3.1-1.

The non-Regulatory Guide 1.97 Type A or Category 1 variable instruments, their associated LCO and Surveillances may be relocated to the FSAR and will be controlled in accordance with 10 CFR 50.59.

6. The current TS 3/4.3.7.7 ~~Conditions~~ LCO, Actions, and SRs for the Traversing In-core Probe (TIP) has been relocated to the FSAR. The TIP System is used to calibrate the Local Power Range Monitor (LPRM) detectors by positioning the TIP axially and radially throughout the core. When not in use, TIP instruments are retracted into a storage position inside the drywell wall TIP penetrations during conditions for which the LPRM are required to be operable. The TIP System LCO and Surveillances may be relocated to the FSAR and will be controlled in accordance with 10 CFR 50.59.

7. The current TS 3/4.3.7.10 ~~Conditions~~ LCO, Actions, and SRs for the loose-part detection system have been relocated to the FSAR. The loose-part detection system monitors core noises to identify the existence of loose parts inside the reactor vessel. The relocation of the loose-part monitoring system instrumentation is consistent with the presentation in NUREG-1434. The loose-part detection system provides information only and is not considered in any DBA or transient. The potential of fuel failure due to fuel bundle flow blockage from a lost part will be detected by the radiation monitors in the offgas stream. The loose-part detection system LCO and Surveillances may be

relocated to the FSAR and will be controlled in accordance with 10 CFR 50.59.

8. ~~[Confirm redline text is consistent with plant licensing basis]~~
The current TS 3/4.3.7.12 ~~Conditions~~ LCO, Actions, and SRs have been relocated to the FSAR. The Explosive Gas Monitoring instrumentation detect hydrogen in the gaseous radwaste treatment system to ensure that hydrogen concentrations are maintained below the flammability limit. The offgas system, located in the turbine building, is designed to confine detonations without affecting safety-related equipment. The concentration of hydrogen in the offgas stream is not an initial assumption of any DBA or transient analysis. The relocation of the main condenser offgas treatment system, explosive gas monitoring system instrumentation is consistent with the presentation in NUREG-1434. The Explosive Gas Monitoring instrumentation LCO and Surveillances may be relocated to the FSAR and will be controlled in accordance with 10 CFR 50.59.

9. The current TS 3/4.3.8 ~~conditions~~ LCO, ~~RAs~~ Actions, and SRs for the turbine overspeed protection system instrumentation have been relocated to the FSAR. The turbine overspeed protection system instrumentation is not considered to prevent or mitigate any DBA or transient.

This specification is provided to ensure that the turbine overspeed protection instrumentation and the turbine speed control valves are operable and will protect the turbine from excessive overspeed. Excessive overspeed could potentially result in the generation of missiles which could impact and damage safety related components, equipment or structures, depending on the size and trajectory of the missiles. The licensee performs a turbine inspection and test schedule ~~consistent with License Condition 7 Item (2)~~ such that implementation of the inspection schedule and testing assures that the probability of unacceptable damage to safety related structures, systems and components as a result of turbine missiles is acceptably low. Given the fact that the probability of turbine missile damage is acceptably low, the transient due to the actuation of the turbine stop valves in response to a turbine overspeed event should be considered, i.e., load rejection. For this event the closure of the turbine stop valves initiates the design basis transient (load rejection) and not the turbine overspeed itself. The overspeed instruments do not perform a subsequent function to mitigate the effects of the transient.

LicCon 7 - only said it had to be submitted - LicCon 7 is not a schedule

Although the DBAs and transients include a variety of system failures and conditions which might result from turbine missiles striking various plant systems and equipment, the system failures and plant conditions could be caused by other events as well as turbine failures. In view of the low likelihood of turbine missiles, this scenario does not constitute a part of the primary success path to prevent or mitigate such DBAs and transients. Similarly, the turbine overspeed control is not part of an initial condition of a DBA or transient that either assumes the failure of or presents a challenge to the integrity of a fission product barrier. The requirements associated with these instrumentation functions will be relocated to the ~~FSAR~~ LCS and will be controlled in accordance with 10 CFR 50.59.

The above relocated requirements relating to installed plant instrumentation are not required to be in the TS under 10 CFR 50.36, and are not required to

obviate the possibility of an abnormal situation or event giving rise to an immediate threat to the public health and safety. Further, they do not fall within any of the four criteria set forth in the Commission's Final Policy Statement, discussed in the Introduction above. In addition, the staff finds that sufficient regulatory controls exist under 10 CFR 50.59. Accordingly, the staff has concluded that these requirements may be relocated from the TS to the licensee's ~~TS Bases~~, or FSAR, as applicable.

LCS

d. ~~E~~. Significant Differences from the STS (NUREG-1434)

3.3.~~2~~.1 (SRM INST ~~Rod Block~~) JFD #42
1. A new Note has been added to NUREG SR 3.3.1.2.5 to state that the determination of the signal to noise ratio is not required to be met with less than or equal to four fuel assemblies adjacent to the SRM and no other fuel in the associated core quadrant. When starting to load fuel from the defueled condition, SR 3.3.1.2.5 must be current prior to the start of fuel load. However, with no fuel in the core, a signal to noise ratio cannot be determined. Therefore, this Note has been added similar to the Note in the count rate Surveillance (SR 3.3.1.2.4), which is for the same reason as this proposed Note.

3.3.8.2, RPS Electric Power Monitoring JFD #44
2. The Mode 4 and 5 applicability as it relates to control rod withdrawal, is revised to not include Mode 4, consistent with the Applicability of RPS Functions in LCO 3.3.1.1. In Mode 4 a control rod nay be with drawn from a core cell containing one or more fuel assemblies in accordance with LCO 3.10.4. Therefore LCO 3.10.4 includes operability requirements for RPS Functions and control rods (LCO 3.9.5). As a result, LCO 3.10.4 has been modified to also include requirements for the RPS Electric Power Monitoring assemblies to be operable when the RPS Functions and control rods are required to be operable. Actions of LCO 3.3.8.2 have also been changes for consistency. The current Action ~~of LCO~~ D has been split into two separate Actions, one for when the RHR SDC suction isolation valves are open ~~and open~~ and the other for when a control rod is withdrawn. This provides separate and discrete Actions for the two separate Applicabilities (Mode 4 and 5 with both RHR SDC isolation valves open and Mode 5 with any control rod withdrawn from a core cell containing one of more fuel assemblies).

NO MENTION OF JFD 43

JFD #18 - ~~Item #45~~

3.3.3.1 PAM

3. STS Action D and the Note to Condition C, which specify a 72 hour Completion Time to restore one hydrogen monitor to operable status when two hydrogen monitors are inoperable have been deleted. The ITS replaces these requirements with a 7 day Completion Time to restore one hydrogen monitor when both are inoperable, as shown in Action C. With respect to their importance during an accident, there is no difference between the ability of the H_2 or O_2 monitors to determine concentrations of these gases inside containment in order to ensure that H_2 and O_2 concentrations remain below flammability limits. If all channels of H_2 and O_2 monitors became inoperable, then operators have the option to start the H_2 recombiners immediately following an accident; thereby ensuring flammability limits are not exceeded. In addition, there is no adverse impact on accident management that would result from operating the H_2 recombiners too soon following an accident.

In addition to the H_2 and O_2 monitors the Post Accident Sampling System (PASS) can also be used to sample the primary containment to determine H2 and O2 concentrations and this system is independent of the H_2 and O_2 monitors. However, normally the PASS would be used to approximate core damage during a severe accident. Therefore, sufficient systems are available to the operator to collect the data necessary to determine when to begin recombining H_2 and O_2 following an accident or the recombiners can be initiated as early as possible

during accident management to ensure flammable concentrations of these gases are not reached.

JFD #1. ~~Item #25 - Hold for appeal decision~~
4. Proposed Condition C has been modified to allow one manual RPS Function to not maintain RPS trip capability for up to 12 hours. Currently, if an RPS Function is not maintaining trip capability, Action C would require the capability to be restored within 1 hour. By requiring entry into the Action only when two manual Functions are not maintaining trip capability, essentially allows the required Actions and associated Completion Times of Condition A to govern the situation. Action A allows 12 hours to place the channels or trip system in trip. With one manual Function not able to maintain trip capability, there is still one manual Function maintaining trip capability. In addition, the manual Functions are not assumed to function in any accident or transient analysis.

18 is BRACKETED - SO THIS AN LD, but NOT REALLY A SIGNIFICANT.

JFD #2. - This JFD is for [ ] not Frequency
5. Change [18] to 24 months for Remote Shutdown transfer/switch control tests. A new Surveillance Requirement is included in the ITS (ITS SR 3.3.3.2.3), to verify that each required control circuit and transfer switch is capable of performing its intended function once per 24 months. This system is not required to respond to any mechanistic DBA evaluated in the safety analysis. Extending the SR interval does not have a significant impact on the risk reduction contribution of the system. This is an additional restriction on plant operation, and therefore acceptable.

JFD #32 - ~~Item #63 - Hold for appeal decision~~
6. In addition, 14 Functions have been deleted (current NUREG Functions 2.c, 2.d, 2.e, 2.f, 3.g, 3.h, 3.i, 3.j, 3.k, 3.l, ~~3.m~~, 4.i, 4.j, and 5.e) since they are not applicable to WNP-2. The Functions have been renumbered, where applicable, to reflect these additions and deletions.

JFD #2 (BASES)
7. Redefine DG initiation capability for the allowance to perform DG LOP instrumentation surveillances without entering the LCO conditions and required actions. The STS allows a channel to be tested without entering the LCO Actions provided the Function maintains DG initiation capability. For a typical two-out-of-two trip system, maintaining one channel operable when one channel is tested does not preserve the functional capability of the DG initiation unless the channel being tested is placed in trip. This design is similar to the ECCS design. In ECCS instrumentation, a channel can be inoperable for testing provided the Function maintains ECCS initiation capability. This is defined as maintaining the other trip system operable.

3.4 REACTOR COOLANT SYSTEM (RCS)

In accordance with the guidance in the Final Policy Statement, the licensee has proposed administrative and technical changes to the CTS to bring them into conformance with STS Section 3.4 specifications. For each category of change, the discussions generally follow the presentation order of the individual specifications within STS Section 3.4. As appropriate, the ITS Section 3.4 specifications are listed in italics before the applicable discussions.

a. Administrative Changes

The specifications of the CTS that have been retained in ITS Section 3.4 have been reworded to conform to the STS presentation. In particular, the most ~~following~~ significant administrative changes that were made are as follows:

3.4.1 Recirculation Loops Operating

A.1 CTS 3.4.1.1 states the also requirement for operation of both recirculation loops in OPERATIONAL CONDITION 1 and 2 with various actions for the conditions when one or more loops are not in operation. ITS 3.4.1 Insert A.1 Actions A through F simplify determining actions for the various combinations of loop flow and power. In addition, the ITS format arrangement eliminates the need for an exemption from CTS 3.0.4., formerly contained in CTS 3.4.1.1 Action a.4. This format change is acceptable because it is purely administrative and the requirements are consistent with CTS 3.4.1.1.

IN A.1, ITS ACTUALLY MOVED single loop operation to LCO - rather than as an action - SEE INSERT A.1

{A.2 ~~Below threshold for discussion~~} - not below threshold in 3.5 SEE INSERT A.2

A.3 CTS 3.4.1.1 Action a.1 includes a cross reference to other CTS requirements, specifically CTS 3.2.6 and CTS 3.2.8. CTS 3.2.6 has been incorporated into ITS LCO 3.4.1 and CTS 3.2.8 has been incorporated into ITS 3.4.1, ACTIONS B and C. The required actions in the ITS are the same as the CTS. Therefore, deleting CTS 3.4.1.1 Action a.1 is acceptable as a purely administrative change.

A.4 CTS 3.4.1.1.a.3.b requires that the MCPR Safety Limit (SL) be increased per CTS SL 2.1.2. The ITS maintains the single loop MCPR Safety Limit in Chapter 2.0. thus, when the plant is in single loop, the limit applies immediately, not in 4 hours as implied by CTS 3.4.1.1.a.3.b. This purely administrative change removes an unclear delay in implementing the single loop MCPR Safety Limit and is acceptable.

{A.5 ~~Below threshold for discussion.~~} not below in other sections SEE INSERT A.5

{A.6 Below threshold for discussion.}

A.7 CTS 3.2.6 has been combined into ITS 3.4.1 as a requirement that operation be in the "Unrestricted" Region of the power-to-flow map specified in the COLR (CTS Figure 3.4.1.1-1). With operation in any "Restricted" Region, ITS 3.4.1, ACTIONS have been provided, one of which

INSERT A.1 to subsection 3.4.a, LCO 3.4.1

allows a second option requiring only one recirculation loop in operation, provided certain requirements, currently required by CTS Actions A.3.b) and A.3.c), are met. ITS 3.4.1,

INSERT A.2 to subsection 3.4.a, LCO 3.4.1

CTS 3.4.1.1, Applicability, and CTS 3.4.1.3, Applicability, reference Special Test Exception 3.10.4, which permits the requirement that recirculation loops be in operation to be suspended during Physics Testing and during the Startup Test Program. These references have been deleted in the ITS since the governing requirement has been deleted. The reason for the deletion of CTS 3.10.4 is discussed in the CTS 3/4.10.4 evaluation in subsection 3.10.a. As such, this change is considered administrative.

INSERT A.5 to subsection 3.4.a, LCO 3.4.1

The requirement to perform CTS 4.4.1.1.2 if THERMAL POWER or core flow is low is being moved to ITS 3.4.11 in accordance with the format of the STS. Evaluations of any technical changes are addressed in the ITS 3.4.11 evaluation. This is an acceptable administrative change.

deals with operating in Region A (ACTION A). This change is acceptable because as a purely administrative change that conforms to the current licensing basis.

A.8 CTS 4.2.7.1, 4.2.7.2, 4.2.8.1, and 4.2.8.2 are surveillance requirements for the stability monitoring system in two loop or single loop operation. The manner in which the ITS requirements are now written places the stability monitoring system into an ACTION and the Applicability of the current requirements is encompassed by ITS 3.4.1~~2~~, Action B. Therefore, the exemption from the requirements of CTS 4.0.4, given in 4.2.7.1 and 4.2.8.1, are unnecessary because ITS 3.4.1 Action B covers the requirements. Likewise, CTS 4.2.7.2 and 4.2.8.2 requirements are deleted from the ITS because actual performance was not required under the CTS because of the exemption provided by 4.2.7.1 and 4.2.8.1. CTS 4.2.7.1 and 4.2.8.1 states, "The provisions of CTS 4.0.4 are not applicable", which allows entry into region B or C of the power-to-flow map without first performing the requirements of CTS 4.2.7.2 and 4.2.8.2. The ITS 3.4.1 ACTION B covers using the stability monitoring system, therefore, deleting CTS 4.2.7.1, 4.2.7.2, 4.2.8.1, and 4.2.8.2 is acceptable because it is a purely administrative change that is consistent with the current licensing basis.

A.9 The CTS 3.4.1.3, ACTION a, requires restoring recirculation flow mismatch to within specified limits within two hours. ITS 3.4.1, Required Action E.1 does not explicitly detail the option to restore recirculation flow mismatch to within the specified limit. This action is always an option and is implied in ITS Required Action E.1 with a two hour Completion Time limit. This change is acceptable because it is purely administrative.

A.10 CTS 3.4.1.3, ACTION b, provides a cross reference for performing the Actions of CTS 3.4.1.1. ITS 3.4.1, ACTION E, prescribes the necessary conditions for compliance without references. The CTS reference to take the action required by Specification 3.4.1.1 serves no functional purpose. This change is acceptable because it is purely administrative.

A.11 CTS 3.4.1.1, Action a.3.e provides a reminder to perform surveillance requirement CTS 4.4.1.1.2 under certain conditions of RATED THERMAL POWER or rated recirculation loop flow. ITS SR 3.4.1~~2~~.5 and SR 3.4.1~~2~~.6 (CTS Surveillance 4.4.1.1.2) prescribe the necessary conditions for compliance without references. The CTS reminder to perform SR 4.4.1.1.2 serves no functional purpose. This change is acceptable because it is purely administrative.

3.4.2 Flow Control Valves (FCVs)

A.1 CTS 4.4.1.1.3 describes the OPERABILITY surveillance requirements for the Recirculation System flow control valves. ITS 3.4.2 is added to clarify the intent for OPERABILITY of the Recirculation System flow control valves. ITS SR 3.4.2.1 and SR 3.4.2.2 are equivalent to CTS 4.4.1.1.3. As such, this new LCO provides additional clarification of CTS Recirculation System flow control valve requirements. The addition

~~of ITS 3.4.2 is purely administrative and is acc~~eptable.

3.4.~~3~~2 Jet Pumps

There are no significant administrative changes to the CTS associated with ITS 3.4.~~3~~2.

[A.1 Below threshold for discussion.]

3.4.~~4~~3 Safety/Relief Valves (SRVs)—≥ 25% RTP

There are no significant administrative changes to the CTS associated with ITS 3.4.~~4~~3

[A.1 Below threshold for discussion.]

[A.2 Below threshold for discussion.]

3.4.~~5~~4 Safety/Relief Valves (SRVs)—< 25% RTP

There are no significant administrative changes to the CTS associated with ITS 3.4.~~5~~4

[A.1 Below threshold for discussion.]

3.4.~~6~~5 RCS Operational LEAKAGE

There are no significant administrative changes to the CTS associated with ITS 3.4.~~6~~5

[A.1 Below threshold for discusion.]

[A.2 Below threshold for discusion.] not below in others, see insert A.2

3.4.~~7~~6 RCS Pressure Isolation Valve Leakage

SEE OPEN ISSUE DISCUSSION

A.1 [OPEN ITEM - a pressure range should be specified, rather than an absolute value. Rev. B still is not consistent with the STS.] CTS 3.4.3.2.e, specifies a testing pressure for RCS pressure isolation valves (PIVs) as 950 +/- 10 psig. The observed leakage is then mathematically adjusted to the leakage at the maximum pressure differential, which is 1035 psig. ITS SR 3.4.~~7~~6.1, requires performing the surveillance test at ~~≥ 1035~~ 935 psig, which is in accordance with the applicable ASME Codes. Since there is no change in the actual requirements (i.e., the same leakage limit applies), this purely administrative change is acceptable.

A.2 The ITS 3.4.~~7~~6 ACTIONS include two NOTES that are not contained in the CTS 3.4.3.2. The first NOTE, "Separate Condition entry is allowed for each flow path", provides explicit instructions for proper application of the ACTIONS for ITS compliance. In conjunction with ITS 1.3, "Completion Times," this Note provides direction consistent with the

INSERT A.2 to subsection 3.4.a, LCO 3.4.5

CTS 3.4.3.2.e, CTS 3.4.3.2, Actions c and d, CTS 4.4.3.2.2, and CTS 4.4.3.2.3 are being moved to ITS 3.4.6 in accordance with the format of the STS. Evaluations of any technical changes are addressed in the ITS 3.4.6 evaluation. This is an acceptable administrative change.

intent of the existing ACTIONS for inoperable PIVs. The second NOTE, "Enter applicable Conditions and Required Actions for systems made inoperable by PIVs," facilitates understanding of the intent to consider any system affected by inoperable PIVs. The addition of these Notes is acceptable because it is a purely administrative change and the clarification provided by these Notes is consistent with the CTS intent and interpretation.

SEE OPEN ISSUE DISCUSSION MOVE TO page ~~13~~ 12

LA.2 This should be an admin change. CTS 4.4.3.2.2.a provides the Frequency for performing the RCS pressure isolation valve (PIV) leakage Surveillance. The ITS SR 3.4.~~7~~6.1 Frequency for this surveillance is "In accordance with Inservice Testing Program." Including the requirement to leak test each PIV "At least once per 18 months" in TS is unnecessary because the IST Program, as required by 10 CFR 50.55a, provides an 18 month or less leak test requirement for these valves. Compliance with 10 CFR 50.55a, through the IST Program, is required by the WNP-2 Operating License. These controls ensure the required leak rate testing of PIVs is performed at the required interval. This change is acceptable because it requires performance of the PIV surveillance testing at the same interval as is currently required. Changes to the IST Program will be controlled by the provisions of the IST Program in ITS Chapter 5.0.

3.4.~~8~~7 RCS Leakage Detection Instrumentation

A.1 CTS 3.4.3.1, ACTION b, specifies the requirement for an alternate manual leak rate measurement method when the primary containment sump flow monitoring system is inoperable, in order to continue operation for 30 days. ITS 3.4.~~8~~7 ACTION A, does not contain this requirement because it duplicates the requirements of ITS 3.4.~~6~~5 ITS SR 3.4.~~6~~5.1 requires the LEAKAGE be quantified every 12 hours. If the primary measurement system is not OPERABLE, some form of measurement device is necessary or ITS 3.4.~~6~~5 ACTION C, dictates a shut down because ACTION A or B cannot be met. This change is acceptable because it maintains the requirements of the CTS and is purely administrative.

A.2 If all RCS leakage monitoring systems are inoperable, the CTS would require entering LCO 3.0.3 since CTS ~~LCO~~ 3.4.3.1 would not be met and no other Actions are specified for this condition. ITS 3.4.~~8~~7 ACTION D, explicitly identifies that entering ITS 3:0.3 is required if all required RCS leakage monitoring systems are inoperable. This change is acceptable because it maintains the requirements of the CTS and is purely administrative.

3.4.~~9~~8 RCS Specific Activity

There are no significant administrative changes to the CTS associated with ITS 3.4.~~9~~8

[A.1 Discussed under less restrictive changes.] - move A.1 from page 14

3.4.~~10~~9 *Residual Heat Removal (RHR) Shutdown Cooling System—Hot Shutdown*

[A.1 Below threshold for discussion.] not below other places, SEE INSERT A.1

A.2 The ITS 3.4.~~10~~9 ACTIONS include a NOTE that is not contained in CTS 3.4.9.1. The NOTE, "Separate Condition entry is allowed for each RHR shutdown cooling subsystem", provides explicit instructions for proper application of the ACTIONS for ITS compliance. In conjunction with ITS 1.3, "Completion Times," this Note provides direction consistent with the intent of the ACTIONS for CTS 3.4.9.1 to consider each RHR shutdown cooling subsystem separately. This change is purely administrative and is acceptable.

A.3 CTS 3.4.9.1, ACTION a, requires operability verification of at least one alternate decay heat removal method within one hour and at least once per 24 hours thereafter. ITS 3.4.~~10~~9 ACTION A, requires this verification within one hour but deletes the periodic 24 hour verification. Since the reactor is required to be in Mode 4 within 24 hours whenever ITS 3.4.~~10~~9 ACTION A is entered, ITS 3.4.~~10~~9 is exited and ITS 3.4.~~11~~10 is entered within the first 24 hour period. Once in Mode 4, ITS 3.4.~~11~~10 requires periodic operability verification of an alternate decay heat removal method. Therefore, the periodic frequency requirement of CTS 3.4.9.1, ACTION a is unnecessary. This change is purely administrative and is acceptable.

A.4 CTS 3.4.9.1, ACTION a, contains a footnote that states that if COLD SHUTDOWN cannot be attained, then RCS temperature is to be maintained as low as practical using alternate heat removal methods. This footnote is not contained in ITS 3.4.~~10~~9 because it provides unnecessary duplication of the ITS 3.4.~~10~~9 ACTIONS and contains no additional plant operational restrictions. The requirement in ITS 3.4.~~10~~9 ACTION A, to achieve Mode 4 ensures efforts are made to maintain reactor coolant temperature as low as practical. If conditions prohibit attaining Mode 4 in 24 hours, the ITS require entering LCO 3.0.3, which only requires efforts to reach Mode 4 to continue. For these reasons, deleting the CTS 3.4.9.1, ACTION a, footnote is a purely administrative change that and is acceptable.

A.5 CTS 3.4.9.1, ACTION b, specifies requirements with no RHR shutdown cooling mode loop in operation. ITS 3.4.~~10~~9 ACTION B, requires the same actions and includes recirculation loop operating conditions along with RHR shutdown cooling loop conditions. ITS 3.4.~~10~~9 ACTION B, allows recirculation pump operation as an acceptable method for ensuring necessary RCS flow conditions, in lieu of RHR shutdown cooling pump operation. This action is consistent with the LCO requirements of CTS 3.4.9.1 which specifically allows a recirculation pump to be in operation as an acceptable method for assuring the necessary flow conditions. Therefore, this change is purely administrative and is acceptable.

CHANGES CTS 4.4.9.1 ALSO - NOT DISCUSSED HERE

[A.6 Below threshold for discussion.]

INSERT A.1 to subsection 3.4.a, LCO 3.4.9

CTS 3.4.9.1, footnote "##" is being moved to ITS 3.10.1 in accordance with the format of the STS. Evaluations of any technical changes are addressed in the ITS 3.10.1 evaluation. This is an acceptable administrative change.

3.4.~~11~~ 10 Residual Heat Removal (RHR) Shutdown Cooling System—Cold Shutdown

[A.1 Below threshold for discussion.] Not always, SEE Insert A.1

A.2 The ITS 3.4.~~11~~ 10 ACTIONS include a NOTE that is not contained in CTS 3.4.9.2. The NOTE, "Separate Condition entry is allowed for each RHR shutdown cooling subsystem", provides explicit instructions for proper application of the ACTIONS for ITS compliance. In conjunction with ITS 1.3, "Completion Times," this Note provides direction consistent with the intent of the ACTIONS for CTS 3.4.9.2 to consider each RHR shutdown cooling subsystem separately. This change is purely administrative and is acceptable.

ALSO CHANGES CTS 4.4.9.2 – NOT DISCUSSED HERE

A.3 CTS 3.4.9.2, ACTION b, specifies requirements with no RHR shutdown cooling mode loop in operation. ITS 3.4.~~11~~,10 ACTION B, requires the same actions and includes recirculation loop operating conditions along with RHR shutdown cooling loop conditions. ITS 3.4.~~11~~,10 ACTION B, allows recirculation pump operation as an acceptable method for ensuring necessary RCS flow conditions, in lieu of RHR shutdown cooling pump operation. This action is consistent with the LCO requirements of CTS 3.4.9.2 which specifically allows a recirculation pump to be in operation as an acceptable method for assuring the necessary flow conditions. Therefore, this change is purely administrative and is acceptable.

[A.4 Below threshold for discussion.]

3.4.~~12~~ 11 RCS Pressure and Temperature (P/T) Limits

A.1 The ACTION for CTS 3.4.6.1 requires performing an engineering evaluation when the pressure/temperature limits are exceeded. The NOTES to ITS 3.4.~~12~~,11 ~~ACTIONS~~ CONDITION A.~~2~~ and C.~~2~~ specify that ~~these ACTIONS~~ A.2 & C.2 shall be completed if the applicable condition is entered. Required These NOTES clarify the intent of the CTS 3.4.6.1 ACTION. This change is purely administrative and is acceptable.

[A.2 Below threshold for discussion.] Not always, SEE INSERT A.2

A.3 CTS 4.4.6.1.3 provides surveillance requirements for reactor vessel material surveillance specimens. This SR duplicates the regulations found in 10 CFR 50 Appendix H. These regulations can not be revised by the licensee, therefore, repeating the details of these regulations in the ITS is unnecessary. Deleting the surveillance to meet the requirements of 10 CFR 50, Appendix H, from TS is consistent with Generic Letter 91-01, "Removal of the Schedule for Withdrawal of Reactor Material Specimens from Technical Specifications." This is a purely administrative change and is acceptable.

[A.4 Below threshold for discussion.]

A.5 CTS 4.4.6.1.4.b requires verifying reactor vessel flange and head flange temperature within 30 minutes prior to tensioning of the head bolting

INSERT A.1 to subsection 3.4.a, LCO 3.4.10

CTS 3.4.9.2, footnote "##" is being moved to ITS 3.10.1 in accordance with the format of the STS. Evaluations of any technical changes are addressed in the ITS 3.10.1 evaluation. This is an acceptable administrative change.

INSERT A.2 to subsection 3.4.a, LCO 3.4.11

CTS 3.4.6.1 ACTION to "restore the temperature and/or pressure to within limits within 30 minutes" is proposed to be revised to initiate action to restore the temperature and/or pressure to within limits immediately for conditions other than MODES 1, 2, and 3. The existing ACTION would appear to provide a half hour in which pressure and temperature requirements could exceed the limits, even if capable of being returned to within limits. Also, if the parameters are incapable of being restored to within the limits within 30 minutes, the existing ACTION results in "non-compliance with the Technical Specifications" and a requirement for an LER. The intent of the ACTION is believed to be more appropriately presented in proposed Required Action C.1. This interpretation of the ACTIONS intent is supported by the BWR Standard Technical Specifications, NUREG-1434. Because this is an enhanced presentation of the existing intent, the proposed change is administrative.

studs. ITS SR 3.4.~~12~~ 11.7 deletes this requirement. This requirement duplicates requirements of CTS 4.0.1 (ITS SR 3.0.1) which state that the surveillance is to be current when in the applicable Mode or condition. ITS SR 3.0.1 also states that failure to meet the surveillance constitutes a failure to meet the LCO, which would then require the ACTIONS of the LCO to be taken. The ACTIONS for ITS 3.4.~~12~~ 11 require immediate action to be taken to restore operation to within limits. Therefore, this effectively ensures that the Applicability of the SR (as state in the SR Note) is not entered unless the SR is current. This change is acceptable because it is purely administrative.

[A.6 ~~Discussed under less restrictive~~ changes.] INSERT A.6 from pg. 17.

[A.7 Below threshold for discussion.]

→ INSERT A.8, Rev C.

3.4.~~13~~ 12 Reactor Steam Dome Pressure

~~A.8~~

There are no significant administrative changes to the CTS associated with ITS 3.4.~~13~~ 12.

[3/4.4.7 Below threshold for discussion.] A.1 not below in others see INSERT A.1

The preceding changes to the CTS result in limits that are unchanged from the current requirements cited. In some cases, these changes result in a clearer presentation of the intent of current requirements. Accordingly, these changes are purely administrative. Therefore, they are acceptable.

b. Less Restrictive Requirements

The licensee, in electing to implement the specifications of STS Section 3.4, proposed a number of less restrictive requirements than are allowed by the CTS. These requirements are described in the following:

3.4.1 Recirculation Loops Operating

LA.1 CTS 3.4.1.1, ~~2~~ Action a.2 requires that if operating in region B of the power-to-flow map with one recirculation loop, action be initiated to correct this situation within 15 minutes and be completed within one hour. ITS retains the one hour requirement in ITS 3.4.1, Action D, to correct the prohibited power-to-flow condition, but eliminates the 15 minute requirement to initiate action. The Bases for ITS 3.4.1 state that "action must be taken as soon as practicable to restore operation to region C or the Unrestricted Region". Immediate action may not always be the conservative method to ensure safety. The 1 hour Completion Time allows appropriate actions to be evaluated by the operator and completed in a timely manner. Changes to the Bases will be controlled by the provisions of the Bases Control Program described in Chapter 5.0 of the ITS. For these reasons, this change is acceptable.

LA.2 CTS 3.4.1.1.~~2~~ Action a.2, 3.~~4~~2.7.a & b and 3.2.8, Action a & b ~~a~~, explicitly provide the methods to exit regions B and C of the THERMAL POWER/core flow map. These methods are being moved to the Bases for ITS 3.4.1, ACTIONS C.1 and D.1, with no

INSERT A.8 to subsection 3.4.a, LCO 3.4.11

CTS Figure 3.4.6.1.c provides two curves (A′ and B′) that are effective until 8 effective full power years (EFPY). After 8 EFPY, CTS Figure 3.4.6.1A provides the proper curves. These curves are more limiting than the curves provided by CTS Figure 3.4.6.1.c. Operation at WNP-2 should reach the 8 EFPY point within 2 months after startup from the current refueling outage. At this time, the curves provided by CTS Figure 3.4.6.1.c will no longer be effective. This should occur at approximately the time the ITS is implemented at WNP-2. Therefore, the curves provided by CTS Figure 3.4.6.1.c, including all reference to the curves, have been deleted. This change is acceptable since it is purely adiministrative.

INSERT A.1 to subsection 3.4.a, CTS 3/4.4.7

CTS 3/4.4.7 Main Steam Line Isolation Valves

A.1 CTS 3/4.4.7 is being moved to ITS 3.6.1.3 in accordance with the format of the STS. Evaluations of any changes are addressed in the ITS 3.6.1.3 evaluation. This is an acceptable administrative change.

change in methodology. It is not necessary to include methods to comply with ACTIONS in the TS to ensure safety and they are more appropriately maintained in the Bases. Changes to the Bases will be controlled by the provisions of the Bases Control Program described in Chapter 5.0 of the ITS. For these reasons, this change is acceptable.

This change corresponds to change type 3 as defined in the general discussion of less restrictive requirements at the beginning of Part III of this safety evaluation.

LA.3 Details relating to operational limits ~~and recirculation system controls~~ ~~during single recirculation loop operation~~ are addressed in CTS 3.4.1.1, ~~Action a.3.a~~, Action a.3.d, and ~~4.4.1.1.1.a~~, 4.4.1.1.1.b. The ITS does not contain any of this information. The information is being moved to plant procedures or the FSAR.

From Rev C

The single loop operation flow rate is an operational limit that does not directly relate to the system safety analysis functions but to restrict reactor vessel internals vibration. Since this requirement relates to long term OPERABILITY of the recirculation loops and not immediate safety, moving this limit to plant procedures is acceptable.

~~Details relating to operational controls during single loop operation, namely, placing the recirculation system in local manual mode, are being moved to the FSAR. Operation of the flow control system in the local manual mode is the normal manner in which flow is controlled when in two loop operation. The mode of operation of the flow control system is not related to the ability of the system to perform its safety function. For these reasons, these changes and are acceptable.~~

From Rev C

This change corresponds to change type ~~2~~ 3 as defined in the general discussion of less restrictive requirements at the beginning of Part III of this safety evaluation.

LA.4 The CTS includes Operating Region Limits figures in CTS 3.2.6, 3.2.7, 3.2.8, and 3.4.1.1 (power-to-flow maps). These figures are being moved to the Core Operating Limits Report (COLR) which is referenced in ITS 3.4.1. Moving these figures to the COLR is consistent with Generic Letter 88-16, "Removal of Cycle-Specific Parameter Limits from Technical Specifications," which allows cycle-specific thermal limits to be relocated to the COLR. The current COLR requirements in CTS 6.9.3.2.~~15~~ 10 (ITS 5.6.5.~~6.15~~) provide the NRC-approved analytical methods to determine the limits provided in the power-to-flow map. Any change to the analytical methods would require NRC approval prior to implementation. Changes to the COLR will be controlled by the provisions of the COLR change process described in ITS Chapter 5.0. Rev C

ITS 5.6.5.b.10

LA.5 The ACTION for CTS 3.2.6 requires that if the Thermal Power/core flow conditions are in Region A of the power-to-flow map, a ~~MANUAL SCRAM~~ is initiated "as soon as practical" but in all cases within 15 minutes. For the same plant conditions, ITS 3.4.~~2~~1 requires that the maximum amount of time allowed prior to initiating a reactor scram, if the LCO

requirements are not satisfied, is 15 minutes. The requirement to initiate action "as soon as practical" is moved to the Bases in the form of a discussion that "action must be taken as soon as practicable" to place the reactor mode switch in shutdown. The ITS philosophy is to specify the maximum time allowed, and it is not necessary to include the option to perform the action sooner in the TS. Changes to the Bases will be controlled by the provisions of the proposed Bases Control Program described in ITS Chapter 5.0.

LA.6 The CTS 3.2.7 & 3.2.8, ~~4.2.7~~, and ~~4.2.8~~ specify details relating to stability monitoring system OPERABILITY, as well as how many neutron signals are needed to indicate that the decay ratio is not within specified limits. This technical information is being moved to the Bases for ITS 3.4.1. Inclusion of this information in the TS is not necessary to ensure the stability monitoring system decay ratios are adequately determined and action taken when decay ratios are not within limits. The decay ratio verification requirements of ITS 3.4.1, Required Action B.1 ensure decay ratios are determined. If the decay ratios are not within limits, the ITS 3.4.1, Condition C requirements ensure the appropriate action is taken. For these reasons, moving the details relating to stability monitoring system OPERABILITY to the ITS Bases is an acceptable change. Changes to the Bases will be controlled by the provisions of the proposed Bases Control Program described in ITS Chapter 5.0. For these reasons, this change is acceptable.

This change corresponds to change type 7 as defined in the general discussion of less restrictive requirements at the beginning of Part III of this safety evaluation.

LA.7 ACTIONS a and b for CTS 3.2.7 and 3.2.8 require provide requirements to "as soon as practical, but in all cases within 15 minutes, initiate action" to either reduce the decay ratio or to exit the associated Region (which for both cases is essentially the same action) when the requirements of the associated LCO are not satisfied. These requirements are moved to the Bases for ITS 3.4.1 in the form of a discussion that "action must be taken as soon as practicable" to restore operation to the proper Region of the proposed power-to-flow map specified in the COLR. Immediate action may not always be the conservative method to assure safety. The 1 hour Completion Time of ITS Required Action C.1 allows appropriate actions to be evaluated by the operator and completed in a timely manner. Changes to the Bases will be controlled by the provisions of the Bases Control Program described in ITS Chapter 5.0.

LA.8 - From Rev C, see insert

L.1 With no reactor coolant loops in operation, CTS 3.4.1.1 Action b requires that the unit be placed in HOT SHUTDOWN (Mode 3) within 6 hours. ITS 3.4.1, Required Action G.1 extends the time to reach Mode 3 to 12 hours. The extension is acceptable because it provides the necessary time to shut down the plant in a controlled and orderly manner and reduces the potential for a unit transient that could challenge safety systems.

INSERT LA.8 to subsection 3.4.b, LCO 3.4.1

LA.8 CTS 4.4.1.1.3 requires the OPERABILITY of the Reactor Coolant System recirculation loop speed controller to limit the average rate of change of pump speed to be verified. The ITS does not contain this requirement. This requirement is being moved to plant procedures. The loop speed controllers are assumed to function in analyzed plant transients to ensure the MCPR limits are not exceeded. ITS LCO 3.2.1 requires the MCPR limits to be maintained, but does not require verification of the loop speed controller average rate of change of pump speed. This is acceptable because the verification of the loop speed controller average rate of change of pump speed does not impact the requirement to maintain MCPR limits. Therefore, the loop speed controller average rate of change of pump speed verification can be defined and controlled in plant procedures. Changes to the relocated requirements in plant procedures will be controlled by the provisions of 10 CFR 50.59.

L.2 When only one recirculation loop is in operation, CTS 4.4.1.1.1 requires a surveillance each 8 hours to check that operation is outside Region B of the power-to-flow map. CTS 4.2.6x requires a surveillance each 24 hours to check that operation is outside region A of the power-to-flow map. ITS SR 3.4.1.2 combines these two surveillances into one surveillance that checks operation to be in the "unrestricted region" of the power-to-flow map each 24 hours. The Frequency change for CTS 4.4.1.1.1 and combination of two surveillances into one is acceptable given that operation in Region B is not as limiting as operation in Region A and that both CTS surveillances are still performed.

L.3 ~~This Surveillance cannot be performed prior to its Applicability. Therefore, an allowance for time to initiate the Frequency is required to avoid intentional entry into the ACTIONS each time the second recirculation pump is started (proposed Note to SR 3.4.1.1).~~

redundant to 2

CTS Surveillance 4.4.1.3, requires verifying recirculation flow mismatch each 24 hours. ITS SR 3.4.1.1, retains verifying flow mismatch each 24 hours but adds a NOTE stating "Not required to be performed until 24 hours after both recirculation loops are in operation." Since verifying flow mismatch cannot be performed prior to having both recirculation loops in operation, the ITS SR 3.4.1.1 allows time to ~~initiate~~ perform the surveillance to avoid entry into the ITS 3.4.1 ACTIONS each time the second recirculation pump is started.

~~*3.4.2 Flow Control Valves (FCVs)*~~

~~LD.1 The 18-month Frequencies of the surveillances in CTS 4.4.1.1.3.a and 4.4.1.1.3.b retained in ITS 3.4.2 are changed to 24 months. These changes are acceptable for the reasons given int he section entitled "Surveillance interval Extension from 18 to 24 months" in the general discussion of less restrictive requirements at the beginning of Part III of this safety evaluation.~~

3.4.~~3~~2 Jet Pumps

L.1 CTS ~~sections~~ 4.4.1.2.1.c and 4.4.1.2.2.c specify one method for determining individual jet pump flow distribution, by measuring diffuser-to-lower plenum differential pressure. ITS SR 3.4.3.1.c. adds another method, by measuring jet pump flow. This additional method is used at other utilities and is described in General Electric Service Information Letter No. 330, "Jet Pump Beam Cracks," June 9, 1980. The addition of another valid method to verify jet pump operability is an acceptable change.

3.4.~~4~~3 Safety/Relief Valves (SRVs)—≥ 25% RTP and
3.4.~~5~~4 Safety/Relief Valves (SRVs)—< 25% RTP

LA.1 The note to CTS 3.4.2 provides details relating to lift setting pressure of the safety/relief valves. These details are being moved to the ITS Bases for SR 3.4.~~4~~3.1 and SR 3.4.~~5~~4.1. This change is acceptable because the requirements of ITS SR 3.4.~~4~~3.1 ~~are~~ + SR 3.4.4.1 are adequate to ensure safety/relief

valve lift setpoints are within required settings with the testing details moved to the Bases. Changes to the Bases will be controlled by the provisions of the Bases Control Program described in ITS Chapter 5.0. For these reasons, this change is acceptable.

This change corresponds to change type 7 as defined in the general discussion of less restrictive requirements at the beginning of Part III of this safety evaluation.

[L.1 Moved to discussion of ITS 3.6.2.1.] ; ~~we~~ Not in 3.6.2.1, since it is a change to 3.4, see Insert L.1

3.4.6 RCS Operational LEAKAGE

LA.1 CTS 4.4.3.2.1.a and 4.4.3.2.1.b provide~~s~~ details for performing the reactor coolant system leakage Surveillance by monitoring the primary containment atmospheric particulate and gaseous radioactivity and the primary containment sump flow rate. These details are being moved to the Bases for ITS SR 3.4.~~6~~5.1. Inclusion of these details for leak determination in the TS is not necessary for ensuring reactor coolant system leakage is adequately determined. Changes to the Bases will be controlled by the provisions of the Bases Control Program described in ITS Chapter 5.0.

This change corresponds to change type 3 as defined in the general discussion of less restrictive requirements at the beginning of Part III of this safety evaluation.

L.1 CTS 3.4.3.2.c, specifies an unidentified LEAKAGE rate increase limit for OPERATIONAL CONDITIONS 1, 2, and 3. ITS 3.4.~~6~~5.d only requires this leakage rate increase limit to be applicable in Mode 1. As a plant starts up and increases pressure, leakage occurs due to the increased pressure. Thus, an increase in leakage occurs, and if greater than the limit, could require a unit shutdown, even though total identified leakage is less than its limit, and there is no safety problem. When Mode 1 is achieved, the reactor pressure stabilizes at normal operating pressure and at this point an increase in leakage rate is representative of a problem. The overall 5 gpm unidentified LEAKAGE limit is still in effect in Modes 1, 2, and 3. For these reasons, this change is acceptable.

L.2 CTS 4.4.3.2.1.c requires monitoring the reactor vessel head leak detection system each 24 hours but CTS 3.4.3.1, "Leakage Detection Systems," does not require this indication to be OPERABLE. ITS SR 3.4.~~6~~5.1 maintains the requirement to demonstrate that LEAKAGE is within limits. Indication-only instrumentation, test equipment, and alarms are usually not required to be OPERABLE to support the OPERABILITY of a system or component. Thus, the STS generally contain no OPERABILITY requirements for indication-only equipment. The availability of such indication instruments, monitoring instruments, and alarms, and necessary compensatory activities if they are not available, are more appropriately specified in plant operational, maintenance, and annunciator response procedures required by ITS 5.4.1. For these

INSERT L.1 to subsection 3.4.b, LCO 3.4.3

CTS 3.4.2, Action b provides actions if a stuck open safety/relief valve (SRV) exists. Required Actions for stuck open SRVs are implicit in ITS 3.6.2.1. ITS 3.6.2.1, Required Action D.1 will also require that the reactor mode switch be immediately placed in shutdown if the suppression pool average temperature is ≥ 110°F. CTS 3.4.2, Action b is anticipatory of this requirement in the event of a stuck open SRV, and preemptive in all cases. This Action represents detailed methods of responding to an event and not necessarily a compensatory action for failure to meet this LCO. As such it is not appropriate for ITS 3.4.3 and is adequately addressed in WNP-2 Emergency Operating Procedures and by ITS 3.6.2.1. Therefore, CTS 3.4.2, Action b is deleted from the ITS and the deletion is considered acceptable.

reasons, this change is acceptable.

NOT going to PPM INL.2 DOC

This change corresponds to change type 4 as defined in the general discussion of less restrictive requirements at the beginning of Part III of this safety evaluation.

3.4.7 RCS Pressure Isolation Valve Leakage

LA.1 CTS table 3.4.3.2-1 specifies the list of RCS pressure isolation valves (PIVs) that are leakage tested. ITS 3.4.~~7~~6 requires the leakage from each RCS PIV to be within limits but does not provide the list of applicable RCS PIVs. Inclusion of the list of RCS PIVs in TS is not necessary to ensure PIV leakage is maintained within limits and the list is being moved to the Licensee Controlled Specifications Manual. Moving this list of valves from the TS is consistent with Generic Letter 91-08, "Removal of Component Lists from Technical Specifications," which allowed lists of components to be moved to plant controlled documents. ~~For these reasons, this change is acceptable as a purely administrative change.~~

Type 7?

→ LA.2 from Page 4

LC.1 CTS 3.4.3.2, ACTION d, for RCS leakage, specifies action for inoperable high/low pressure interface valve leakage pressure monitors. These requirements, including the supporting Surveillances, 4.4.3.2.3.a and 4.4.3.2.3.b, are being moved to the Licensee Controlled Specifications Manual. The high/low pressure interface valve leakage pressure monitors do not necessarily relate directly to the leakage limit requirements of the RCS PIVs. The leakage limit requirements of LCO 3.4.~~7~~6 and the leakage test requirements of SR 3.4.~~7~~6.1 will ensure that the limits will be maintained or the appropriate ACTIONS will be taken. Changes to the Licensee Controlled Specifications Manual will be controlled by the provisions of 10 CFR 50.59. For these reasons, this change is acceptable.

This change corresponds to change type 4 as defined in the general discussion of less restrictive requirements at the beginning of Part III of this safety evaluation.

L.1 CTS 3.4.3.2.e specifies a maximum allowable leakage rate of 1.0 gpm for any RCS pressure isolation valve (PIV). ITS SR 3.4.~~7~~6.1 specifies this limit on PIV leakage as less than or equal to 0.5 gpm per nominal inch of valve size with a maximum limit of 5 gpm. This change acknowledges that smaller valves should not be allowed to leak as much as larger valves. ITS 3.4.~~7~~6 continues to limit allowable leakage from the RCS as a whole precluding the possibility of large increases in leakage from a number of valves in the RCS. This change in leakage test criteria for PIVs is consistent with ASME Code requirements and is acceptable.

L.2 CTS 3.4.3.2.e ~~ACTION c,~~ is applicable in OPERATIONAL CONDITION 1, 2, and 3. ITS 3.4.~~7~~6 is applicable in Modes 1, 2, and 3, but provides a Mode 3 exception for valves in the shutdown cooling flow path when needed for the shutdown cooling function. This change resolves a conflict in the CTS that requires shutdown cooling flow path isolation if the pressure

isolation valve leakage is not within limits, even with reactor coolant system pressure below the RHR cut-in permissive pressure, when shutdown cooling is required to be OPERABLE and operating. RHR valve use with leaky pressure isolation valves poses no risk at low pressure since the high to low pressure interface does not exist. Based on these reasons, the change is acceptable.

L.3 CTS 4.4.3.2.2.b requires leak testing of any RCS pressure isolation valve following maintenance, repair or replacement that could affect its leakage rate. This requirement is not explicitly detailed in the ITS 3.4.~~7~~6. Any time the OPERABILITY of a component has been affected by repair, maintenance, or replacement, post maintenance testing is required to demonstrate OPERABILITY of the component. After restoring a component that caused a required SR to be failed, ITS SR 3.0.1 requires performing the appropriate SRs, in this case, ITS SR 3.4.~~7~~6.1, to demonstrate OPERABILITY. Removing the requirement in CTS 4.4.3.2.2.b deletes explicit post maintenance Surveillance Requirements from the ITS. Because ITS 3.0.1 still requires demonstration of operability, this is an acceptable change.

This change corresponds to change type 5 as defined in the general discussion of less restrictive requirements at the beginning of Part III of this safety evaluation.

3.4.~~8~~7 RCS Leakage Detection Instrumentation

L.1 CTS 3.4.3.1 specifies three systems to be operable for RCS leak detection. ITS 3.4.~~8~~7 requires only two systems to be operable which includes a method to quantify the "unidentified" LEAKAGE and a diverse detection method that provides only indication of increased leakage. The CTS primary containment sump flow monitoring system (drywell floor drain sump flow monitoring system in the ITS) is retained by the ITS as the primary method to quantify "unidentified" LEAKAGE. In ITS 3.4.~~8~~,7 the drywell atmospheric particulate and the drywell atmospheric gaseous monitoring systems are grouped such that only one of the two systems is required to be OPERABLE since they provide the same type of indication. The ITS ACTIONS allow the atmospheric monitoring system (consisting of either the particulate or gaseous monitor~~s~~) to be inoperable for 30 days provided grab samples of drywell atmosphere are analyzed once every 12 hours. The ITS Surveillance Requirements also reflect this change in operability requirements. The change is acceptable because the ITS still require the same two diverse methods of leakage detection as the CTS.

L.2 A statement that ITS 3.0.4 is not applicable has been added as a NOTE to ITS 3.4.~~8~~,7 Required Actions A.1 and B.1. No similar NOTE is contained in CTS 3.4.3.1. When this allowance is used, either the drywell floor drain sump flow monitoring system or the required drywell atmospheric monitoring system remains available. The compensatory actions for the inoperable system or the requirement that unidentified leakage be quantified in accordance with ITS 3.4.~~6~~5 provide adequate indication of RCS leakage. Based on these reasons, the change is acceptable.

L.3 A NOTE has been added to the ITS 3.4.~~8~~ 7 Surveillance Requirements to allow a channel to be inoperable for up to 6 hours for performance of required surveillances, provided the other Leakage Detection System channel is OPERABLE. No similar NOTE is contained in CTS 4.4.3.1. The 6 hour testing allowance has been granted by the NRC in topical reports for the Reactor Protection System, Emergency Core Cooling System, and Isolation System Instrumentation. The 6 hour testing allowance does not significantly reduce the probability of properly monitoring leakage since the other channel must be OPERABLE for this allowance to be used. ~~The licensee has agreed to prepare a generic change to the STS to incorporate this allowance and submit it to the NRC~~. Based on these reasons, this change is acceptable.

3.4.~~9~~ 8 RCS Specific Activity

move to page 4

A.1 This is not an administrative change. The ITS requirements are less restrictive than the CTS. CTS 3.4.5, ACTION c, requires increased sampling per Table 4.4.5-1 in OPERATIONAL CONDITION 1 or 2 when THERMAL POWER is changed by more than 15% in one hour, or if Off-Gas radiation level increases during steady state operation by 15,000 microcuries per second or 15% in one hour when release rates are less than 100,000 microcuries per second. ITS 3.4.~~9~~ 8 does not contain this explicit CTS 3.4.5, Action b requirement. However, increased sampling is required by (ITS 3.4.8 Required Actions A.1 and B.1) when the LCO limit is exceeded. Since the time when increased sampling is necessary is only when the limit has been exceeded, (every 4 hours) and the time is consistent (or more frequent) than in CTS 3.4.5, Action c and Table 4.4.5-1, Item 4.b, the inclusion of the CTS SR is unnecessary. ~~Based on these reasons, the change is acceptable~~. Therefore, this change is purely administrative and is acceptable.

LA.1 CTS 4.4.5, Table 4.4.5-1, Item 5, requires isotopic analysis of an off-gas sample for xenon and krypton at least once per 31 days. ITS 3.4.~~9~~ 8 does not require this sample and analysis. The off-gas isotopic analysis for xenon and krypton are not direct measurements related to the limits of ITS 3.4.~~9~~ 8. These analyses are used to routinely monitor and trend coolant activity and are applicable to plant specific controls and administrative limits only. Therefore, this Surveillance is moved to plant procedures. The requirements of ITS SR 3.4.~~9~~ 8.1 ensure that RCS specific activity will be maintained within required limits, thus the additional analysis requirements for xenon and krypton are not necessary. Based on these reasons, this change is acceptable.

L.1 CTS 3.4.5.b states the requirement to maintain specific activity ≤ 100/E-bar μCi/gm. ITS 3.4.~~9~~ 8 does not contain this requirement or the associated Actions and Surveillance Requirements. The CTS Bases state that the intent of this requirement is to limit the specific activity of the reactor coolant to ensure that whole body and thyroid doses at the site boundary would not exceed a small fraction of the 10 CFR 100 limits, in the event of a main steam line failure outside containment or an instrument line break. To ensure that offsite thyroid doses do not exceed 30 rem, ITS 3.4.~~9~~ 8 requires reactor coolant dose equivalent I-131 (DEI) be limited to less than or equal to 0.2 μCi/gm.

ITS 3.7.5 is associated with radioactive effluents and requires that the

after 30 min. decay

gross gamma radioactivity rate of the noble gases measured at the main condenser evacuation system pretreatment monitor station be limited to less than or equal to 332 mCi/second. The Bases for ITS 3.7.5 state that restricting the gross radioactivity rate of noble gases from the main condenser provides reasonable assurance that the total-body exposure to an individual at the exclusion area boundary will not exceed a small fraction (10%) of the 10 CFR 100 limits in the event this effluent is inadvertently discharged without treatment directly to the environment. The Offgas Treatment System, required by ITS 3.7.5, provides reasonable assurance the reactor coolant gross specific activity is maintained at a sufficiently low level to preclude offsite doses from exceeding a small fraction of the 10 CFR 100 limits in the event of a main steam line failure. Additional assurance that the offsite doses will not exceed a small fraction of the 10 CFR 100 limits is provided by increasing the frequency of sampling and analysis of the reactor coolant for DEI from at least once per 31 days to at least once per 7 days.

Since (1) the reactor coolant limit on DEI, ITS 3.4.~~9~~8, assures that offsite doses will not exceed small fractions of the 10 CFR 100 limits in the event of a main steam line failure outside containment and (2) gross gamma radioactivity rate of the noble gases measured at the condenser evacuation system pretreatment monitor station is limited by ITS 3.7.5 to a value that provides reasonable assurance the reactor coolant gross specific activity is maintained at a sufficiently low level to preclude offsite doses from exceeding a small fraction of the 10 CFR 100 limits, this change is acceptable.

L.2 CTS 3.4.5.a is applicable in OPERATIONAL CONDITIONS 1, 2, 3, and 4. ITS 3.4.~~9~~8 is applicable in Mode 1, and Mode 2 or 3 with any main steam line unisolated. The ITS Applicability is limited to those conditions which represent a potential for release of significant quantities of radioactive coolant to the environment. Mode 4 applicability is deleted because the reactor is not pressurized and the potential for leakage is significantly reduced. In Modes 2 and 3, with the main steam lines isolated, no escape path exists for significant releases (i.e., a main steam line break outside of primary containment) and TS requirements for limiting the specific activity are not necessary. The Required Actions are also modified to reflect the new Applicability, and an option for exiting the applicable Modes is provided for cases where isolation is not desired. This change is acceptable because the ITS Applicability covers all conditions with a potential for release of significant quantities of radioactive coolant to the environment.

L.3 A NOTE is added to the Required Actions for ITS 3.4.~~9~~8, ACTION A, to indicate that ITS 3.0.4 is not applicable. CTS 3.4.5 ACTIONS have no such NOTE. The NOTE allows entry into the applicable Modes without restriction because the response to the excess coolant activity is restoring compliance within 48 hours. Since the ITS 3.4.~~9~~8 limits assure the dose due to a LOCA would be a small fraction of the 10 CFR 100 limits, operation during the restoration time frame does not represent a significant hazard to the health and safety of the public. For these

reasons, this change is acceptable.

3.4.~~10~~ 9 Residual Heat Removal (RHR) Shutdown Cooling System—Hot Shutdown

LA.1 CTS 3.4.9.1.a and CTS 3.4.9.1.b specify an OPERABLE RHR shutdown cooling subsystem as one operable RHR pump and one operable RHR heat exchanger. ITS 3.4.~~10~~9 does not contain these details but this information is being moved to the Bases for ITS 3.4.~~10~~9 Inclusion of the details for subsystem OPERABILITY in TS is not necessary in to ensure OPERABILITY. For these reasons, this change is acceptable.

This change corresponds to change type 7 as defined in the general discussion of less restrictive requirements at the beginning of Part III of this safety evaluation.

L.1 A NOTE is included in ITS 3.4.~~10~~ 9 ACTIONS stating that LCO 3.0.4 is not applicable. Another NOTE is added to ITS SR 3.4.~~10~~9.1 stating that the surveillance is not required to be met until 2 hours after reactor steam dome pressure is less than the RHR cut-in permissive pressure. CTS 3.4.9.1 contains no similar NOTES. The RHR System cannot be placed in operation until after applicable conditions are met. Therefore, entry into conditions requiring RHR must be permitted while depending on the ITS 3.4.~~10~~9 ACTIONS to establish RHR and without performing SR 3.4.~~10~~9.1. Allowances that both ITS LCO 3.0.4 and ITS SR 3.0.4 are not applicable are necessary to provide the time to place the system in service. Therefore, ITS 3.4.~~10~~9 ACTIONS NOTE 1 and the ITS SR 3.4.~~10~~9.1 NOTE are necessary. For these reasons, this change is acceptable.

3.4.~~11~~ 10 Residual Heat Removal (RHR) Shutdown Cooling System—Cold Shutdown

LA.1 CTS 3.4.9.~~1~~2.a and CTS 3.4.9.~~1~~2.b specify an OPERABLE RHR shutdown cooling subsystem as one operable RHR pump and one operable RHR heat exchanger. ITS 3.4.10 does not contain these details but this information is being moved to the Bases for ITS 3.4.1~~1~~0. Inclusion of the details for subsystem OPERABILITY in TS is not necessary in to ensure OPERABILITY. For these reasons, this change is acceptable.

This change corresponds to change type 7 as defined in the general discussion of less restrictive requirements at the beginning of Part III of this safety evaluation.

3.4.~~12~~ 11 RCS Pressure and Temperature (P/T) Limits

A.2 This change is less restrictive. CTS 3.4.6.1, applies to all OPERATING CONDITIONS and the CTS ACTION requires that, with any RCS pressure/temperature limit exceeded, operation be restored to within limits within 30 minutes. ITS 3.4.12, ACTION C, applies to conditions other than MODES 1, 2, and 3, and requires that action be immediately initiated to restore parameters to within limits, but requires no definitive time for completing the action. This change is acceptable because the intent of the CTS ACTION is more appropriately presented in

page 6 says below threshold. other sections is called an 'A' change

ITS 3.4.12, ACTION C.1, since there are no other actions to be taken when shutdown if the parameters cannot be restored within a certain time.

A.6 This change is less restrictive. CTS 4.4.1.1.2.c requires the differential temperature between the reactor coolant within the loop not in operation and the operating loop to be less than or equal to 50°F. This requirement is deleted in the ITS. Thermal stresses on vessel components are dependent upon the temperature difference between the idle loop coolant and the RPV coolant. ITS SR 3.4.12.4 and SR 3.4.12.6 ensure that the temperature difference between the idle loop and the RPV coolant is acceptable. The requirements to monitor the temperature difference between an idle loop and an operating loop are unnecessary and have been deleted since they are redundant to the loop-to-coolant requirements of ITS SR 3.4.12.4 and SR 3.4.12.6.

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LA.1 Delete this discussion when P/T limit curves are put back in ITS. CTS 3.4.6.1, specifies the RCS pressure and temperature limits according to CTS figures 3.4.6.1A, 3.4.6.1B, and 3.4.6.1C. ITS 3.4.12, specifies the RCS pressure, RCS temperature, RCS heatup and cooldown rates, and recirculation loop temperature limits by referring to the PTLR. These limits are moved to the PTLR and are not required to be included in the ITS to ensure RCS pressure and temperature are maintained within required limits. Changes to the PTLR are controlled by the provisions of ITS Chapter 5. Moving RCS pressure and temperature limits to the PTLR conforms to the STS and is an acceptable change.

INSERT NEW LA.1 From Rev C.

LA.2 CTS 4.4.1.1.2 contains a NOTE identified as (***) which provides the details relating to the basis for the THERMAL POWER and recirculation flow limitations, (i.e., final values were determined during Startup Testing based upon actual THERMAL POWER and recirculation loop flow which will sweep the cold water from the vessel bottom head preventing stratification). This detail is being moved to the Bases for ITS 3.4.12 and is not necessary to ensure the Surveillance Requirement is performed within the required limitations. The actual limits are maintained in ITS SR 3.4.12.5 and SR 3.4.12.6. For these reasons, this change is acceptable.

This change corresponds to change type 3 as defined in the general discussion of less restrictive requirements at the beginning of Part III of this safety evaluation.

LA.3 CTS 3.4.1.4.b requires operating loop flow less than or equal to 50% of rated loop flow when starting an idle recirculation loop. This detail is being moved to plant procedures. The operating loop flow rate is limited only to restrict reactor vessel internals vibration and is an operational limit since it is not directly related to the ability of the recirculation system to perform its safety functions. This requirement maintains long term OPERABILITY of the recirculation loops and does not have an immediate impact on OPERABILITY. For these reasons, this change is acceptable.

INSERT LA.1 to subsection 3.4.b, LCO 3.4.11

The specific requirements in CTS 4.4.6.1.1 and 4.4.6.1.2that operation be to the right of the limit lines of the applicable Figures are moved to the Bases. These details are not necessary to ensure the limits are met. The requirements to maintain the limits in accordance with the Figures are still maintained in ITS LCO 3.4.11, SR 3.4.11.1, and SR 3.4.11.2. Changes to the Bases will be controlled by the provisions of the proposed Bases Control Program described in Chapter 5 of the Technical Specifications.

This change corresponds to change type 2 as defined in the general discussion of less restrictive requirements at the beginning of Part III of this safety evaluation.

3.4.~~13~~ 12 Reactor Steam Dome Pressure

L.1 CTS 3.4.6.2 requires reactor steam dome pressure to be less than 1035 psig. ITS 3.4.~~13~~ 12 requires reactor steam dome pressure to be less than or equal to 1035 psig. The FSAR safety analyses assumes an initial reactor steam dome pressure of 1035 psig, not less than 1035 psig, and therefore the ITS represents assumed initial conditions for transients. This change is in agreement with the FSAR analyses and is acceptable.

The above less restrictive requirements have been reviewed by the staff and have been found to be acceptable because they do not present a significant safety question in the operation of the plant. The TS requirements that remain are consistent with current licensing practices, operating experience and plant accident and transient analyses, and provide reasonable assurance that the public health and safety will be protected.

c. More Restrictive Requirements

The licensee, in electing to implement the specifications of STS Section 3.4, proposed a number of more restrictive requirements than are required by the CTS. These requirements are described in the following:

3.4.1 Recirculation Loops Operating Required

M.1 CTS 3.2.7, ACTION a. requires initiating action to reduce an excess stability monitoring decay ratio to within limits as soon as practical but in all cases within 15 minutes, but does not have a time limit to complete the action. ITS 3.4.1, ~~ACTION~~ C.1 provides a finite one hour Completion Time to reduce the decay ratio to within limits by restoring operation to the "Unrestricted" Region of power-to-flow map specified in the COLR. The one hour Completion Time is consistent with the CTS one hour time limit for operating in the region of applicability when the stability monitoring system is inoperable (CTS 3.2.7, ACTION b). The addition of a finite Completion Time to restore operation to the "Unrestricted" region of the power-to-flow map represents an additional restriction on plant operation, is consistent with the CTS Completion Time for similar conditions, and is, therefore, acceptable.

M.2 CTS 4.2.7.3 and 4.2.8.3 require monitoring the decay ratio and peak-to-peak noise values calculated by the stability monitoring system when operating in Region C of the power-to-flow map but do not provide a frequency as to how often they shall be monitored. This surveillance requirement is moved to ITS 3.4.1, Required Action B.1, with a Completion Time of "once within 15 minutes and every hour thereafter." The initial 15 minute Completion Time is consistent with Action a of CTS 3.2.7 and 3.2.8 which requires action to be taken within 15 minutes if a decay ratio is not within limits. The 1 hour periodic Completion time is considered appropriate since the stability monitoring system provides

alarms if the decay ratios approach the required limit. This is an additional restriction on plant operation and is acceptable.

~~3.4.2 Flow Control Valves (FCVs)~~

~~There are no more restrictive technical changes to the CTS associated with ITS 3.4.2.~~

3.4.~~3~~2 Jet Pumps

There are no more restrictive technical changes to the CTS associated with ITS 3.4.~~3~~2.

3.4.~~4~~3 Safety/Relief Valves (SRVs)—≥ 25% RTP

M.1 CTS 3.4.2.a requires that at least 12 of the SRVs be OPERABLE. ITS 3.4.~~4~~3 adds a new requirement that the 12 required SRVs must include two SRVs in the lowest two lift setpoint groups. The small break LOCA analysis assumes that two SRVs with lift setpoints in the lowest two lift setpoint groups are OPERABLE. This addition ensures the ECCS performance assumed in the analysis is met. Therefore, this additional restriction on plant operation is acceptable.

M.2 CTS 3.4.2 ACTION a requires shut down to HOT SHUTDOWN within 12 hours for less than the required number of OPERABLE SRVs. The shut down requirements for ITS 3.4.~~4~~3 only require reducing THERMAL POWER to < 25% which is consistent with the Applicability of both CTS 3.4.2 and ITS 3.4.~~4~~3 CTS 3.4.2 Action a allows 12 hours to reach < 25% RTP because, even though the Actions requires going to Hot Shutdown, continued actually shutdown actions are unnecessary once the unit is outside the Applicability of the LCO (< 25% RTP). The Completion Time of ITS 3.4.~~4~~3 ACTION A to reach < 25% RTP is 4 hours. This time is reasonable and consistent with other ITS ACTIONS that require reduction of THERMAL POWER to < 25%. This change is acceptable because it is an additional restriction on plant operations that is consistent with other similar Actions.

M.3 The ITS contain two new Surveillance Requirements. ITS SR 3.4.~~4~~3.1 requires the lift setpoints of the SRVs to be verified in accordance with the Inservice Testing Program and ITS SR 3.4.~~4~~3.2 requires the SRVs to be manually actuated every 24 months. These changes are acceptable because they are additional restrictions on plant operation which provide the appropriate requirements for determining operability of the SRVs.

3.4.~~5~~4 Safety/Relief Valves (SRVs)—< 25% RTP

M.1 The ITS contain two new Surveillance Requirements. ITS SR 3.4.~~5~~4.1 requires the lift setpoints of the SRVs to be verified in accordance with the Inservice Testing Program and ITS SR 3.4.~~5~~4.2 requires the SRVs to be manually actuated every 24 months. These changes are acceptable because they are additional restrictions on plant operation which

provide the appropriate requirements for determining operability of the SRVs.

3.4.~~6~~5 RCS Operational LEAKAGE

There are no more restrictive technical changes to the CTS associated with ITS 3.4.~~6~~5

3.4.~~7~~6 RCS Pressure Isolation Valve Leakage

There are no more restrictive technical changes to the CTS associated with ITS 3.4.~~7~~.6

3.4.~~8~~7 RCS Leakage Detection Instrumentation

M.1 With no atmospheric monitoring available, CTS 3.4.3.1, ACTION a, requires analyzing a periodic grab sample every 24 hours to compensate for the inoperable drywell atmospheric monitoring channels. ITS 3.4.~~8~~,7 Required Action B.1, changes the frequency of this sample from 24 hours to 12 hours. This change is acceptable because it will allow earlier detection of RCS LEAKAGE when the drywell atmospheric monitoring systems are inoperable.

3.4.~~9~~8 RCS Specific Activity

M.1 CTS 4.4.5, Table 4.4.5-1, Item 2 requires isotopic analysis for dose equivalent I-131 concentration at least once per 31 days. ITS SR 3.4.~~9~~8.1 increases the frequency for isotopic analysis for dose equivalent I-131 concentration to at least once per 7 days. This provides a compensatory measure to ensure that, with deletion of the requirement that gross specific activity remain less than or equal to 100/E-bar μCi/gram, offsite doses will remain within a small fraction of the limits of 10 CFR 100. For these reasons, the change is acceptable.

3.4.~~10~~9 Residual Heat Removal (RHR) Shutdown Cooling System—Hot Shutdown

There are no more restrictive technical changes to the CTS associated with ITS 3.4.1~~0~~.9

3.4.~~11~~10 Residual Heat Removal (RHR) Shutdown Cooling System—Cold Shutdown

There are no more restrictive technical changes to the CTS associated with ITS 3.4.1~~1~~0

3.4.~~12~~11 RCS Pressure and Temperature (P/T) Limits

M.1 The CTS 3.4.6.1 ACTION statement applies to all OPERATING CONDITIONS and requires performing an engineering evaluation when the pressure/temperature limits are exceeded but does not specify a time limit for completing this evaluation. ITS 3.4.~~12~~11 Required ~~ACTION~~ A.2 applies to Modes 1, 2, and 3, and 72 hours is specified to determine the RCS is acceptable for continued operation (complete the engineering evaluation)

because the limits for operation in Modes 1, 2, and 3 represent controls on long term vessel fatigue and usage factors.

ITS Required ~~ACTION~~ C.2 applies to Modes other than Modes 1, 2, and 3 and the time specified for determining the RCS is acceptable for continued operation is prior to entering Mode 2 or 3. This is necessary to verify the integrity of the reactor coolant pressure boundary prior to approaching criticality or heating up to 200 °F. This change provides additional restrictions on plant operation and is acceptable.

M.2 The CTS 3.4.1.4 ACTION requires suspending startup of a recirculation loop if the temperature requirements are not met. This statement does not provide an action once the loop is operating if the required conditions are not met. ITS 3.4.~~12~~11 ACTIONS A and C, require restoring the temperature requirements to within limits and determining that the RCS is acceptable for continued operation (by performing an engineering evaluation) if starting requirements are violated. The ITS provide more explicit and consistent actions for conditions when any of the pressure/temperature limits are exceeded. This change is adds restrictions on plant operations and is acceptable.

Action B Requires plant shutdown

3.4.~~13~~12 Reactor Steam Dome Pressure

M.1 CTS 3.4.6.2 is applicable in OPERATIONAL CONDITIONS 1 and 2 and includes a NOTE stating that the reactor steam dome pressure limit is not applicable during anticipated transients. ITS 3.4.~~13~~12 is applicable in Modes 1 and 2 with no exceptions. The reactor steam dome pressure limit is provided to ensure transient analyses assumptions are met. The required actions provide prompt restoration of reactor steam dome pressure in the event a transient causes reactor steam dome pressure to exceed the limit. This change is an additional restriction on plant operation that maintains transient analysis assumptions and is acceptable.

The staff has reviewed these more restrictive requirements and concludes that they result in an enhancement to the CTS. Therefore, these more restrictive requirements are acceptable.

d. Significant Differences from the STS (NUREG-1434)

The licensee, in electing to adopt the specifications of STS Section 3.4, proposed the following differences between the ITS and the STS.

1. STS 3.4.1, "Recirculation Loops Operating" has been revised in ITS 3.4.1 to reflect the current licensing basis requirements related to core thermal hydraulic stability.

5. STS 3.4.4 has been divided into two separate Specifications, ITS 3.4.~~4~~3 and 3.4.~~5~~4, with the appropriate ACTIONS and Surveillances for the given condition. The WNP-2 overpressure protection safety analysis assumes 12 SRVs are OPERABLE when THERMAL POWER is ≥ 25% RTP and only four SRVs are OPERABLE when THERMAL POWER is ~~≥~~ < 25% RTP. This splitting of the Specification due to the different number of SRVs required is consistent

with the STS philosophy. The resulting requirements are consistent with the current licensing basis.

6. STS 3.4.4 specifies the required number of OPERABLE SRVs. The WNP-2 design basis analyses for a small break LOCA assume not only that 12 SRVs are OPERABLE, but also that the 12 required SRVs include two SRVs in the lowest two lift setpoint groups. This ensures the ECCS performance assumed in the analyses is met. Therefore, the requirement that two SRVs in the lowest two lift setpoint groups be OPERABLE has been added in ITS 3.4.~~4~~3.

   In addition, STS 3.4.4 requires that the relief function of a certain number of SRVs be OPERABLE. The current WNP-2 licensing basis does not include TS requirements for the relief mode of the SRVs since the overpressure protection analysis does not assume the relief mode functions to mitigate an overpressurization event. Therefore, the relief mode requirements of STS 3.4.4 have been deleted in ITS 3.4.~~4~~3 and 3.4.~~5~~.4

SPACE

8. STS SR 3.4.4.1 requires that lift settings for SRVs be within ± 1% following testing. CTS 3/4.4.2 and ITS SR 3.4.~~4~~3.1 and SR 3.4.~~5~~4.1 require that lift settings be within ± 3%. This allowance was approved in Amendment Number 137, dated May 2, 1995, and is therefore consistent with the WNP-2 current licensing basis.

10. STS SR 3.4.5.1 requires that RCS unidentified and total leakage be verified every 8 hours. The Surveillance Frequency has been extended to 12 hours in the ITS SR 3.4.~~6~~5.1 consistent with Generic Letter 88-01, "NRC Position on Intergranular Stress Corrosion Cracking (IGSCC) in BWR Austenitic Stainless Steel Piping," Supplement 1. The supplement allowed the Frequency to be once per shift, not to exceed 12 hours. This difference is also consistent with the current licensing basis.

11. STS 3.4.6, Required Action A.2, which requires the high pressure portion of the affected system to be isolated from the low pressure portion by use of a second closed manual, deactivated automatic, or check valve, has been deleted in ITS 3.4.~~7~~6. The current licensing basis for WNP-2 does not include closing a second valve. As described in the WNP-2 response to Generic Letter 87-06, "Periodic Verification of Leak Tight Integrity of Pressure Isolation Valves," WNP-2 tests the valves and if one is found to be leaking beyond the allowable limits, the penetration will be isolated by one valve that meets the leakage limits. This will preclude an intersystem LOCA from occurring on the affected system. In addition, the Note to ITS 3.4.~~7~~6 Required Action A.1, has been modified to reflect this deletion. The Note to Required Action A.1 has also been modified to only apply to check valves, consistent with the current licensing basis.

14. A Note has been added the Surveillance Requirements for STS 3.4.7 (ITS 3.4.~~8~~7) to allow a channel to be inoperable for up to 6 hours solely for performance of required Surveillances, provided the other Leakage Detection System channel is OPERABLE. This Note is similar to other Notes in the ITS, which allow channels that provide automatic actions to

be inoperable for up to 6 hours. This instrumentation only provides indication, and the 6 hour allowance is not allowed unless the other channel is OPERABLE. ~~The licensee has agreed to prepare a generic change to the STS to incorporate this allowance and submit it to the NRC.~~

15. The words in STS LCO 3.4.1~~2~~ stet have been changed from "recirculation pump starting temperature requirements" to "loop temperature requirements" in ITS 3.4.~~12~~11 since the current licensing basis includes additional recirculation loop requirements. These additional requirements have been added as ITS SRs 3.4.~~12~~11.5 and 3.4.~~12~~11.6.

No JFD The Notes to STS SR 3.4.~~11~~ stet .3 and 3.4.11.4 have been modified to only require the SRs to be met during recirculation pump startup. This is when the actual stresses of concern occur and when the SRs really need to be met. The added words are consistent with the wording currently in the Bases for STS SR 3.4.11.3 & SR 3.4.11.4.

The preceding differences from STS Section 3.4 are consistent with the WNP-2 design and existing requirements and commitments or proposed changes found to be acceptable as discussed elsewhere in this evaluation. Therefore, these differences are acceptable.

e. **Relocated ~~Requirements~~** Specifications

In accordance with 10 CFR 50.36, the NRC Final Policy Statement, and the STS, the licensee proposed relocating the following CTS to licensee-controlled documents.

3/4.4.4 Chemistry

R.1 The reactor coolant system chemistry limits of CTS 3/4.4.4 are being relocated to plant procedures that will be controlled under 10 CFR 50.59. The reactor coolant chemistry program provides limits on particular chemical properties of the primary coolant and surveillance practices to monitor those properties to ensure that degradation of the reactor coolant pressure boundary is not exacerbated by poor chemistry conditions. However, degradation of the reactor coolant pressure boundary is a long-term process, and there are other, direct, means to monitor and correct the degradation of the reactor coolant pressure boundary which are controlled by regulations and TS; for example, in-service inspection and primary coolant leakage limits are provided to detect and prevent long-term degradation of the reactor coolant pressure boundary materials, and provide long term maintenance of acceptable structural conditions of the system. These limitations are not of immediate importance to the operator, and are not required to ensure operability of the reactor coolant system pressure boundary. These requirements do not meet any of the criteria of 10 CFR 50.36 for inclusion in TS and this change conforms to the STS. Therefore, this relocation is acceptable.

3/4.4.8 Structural Integrity

R.1 The structural integrity inspections in CTS 3/4.4.8 establish limiting conditions for operation to prevent long-term degradation of ASME Code Class 1, 2, and 3 components and are being relocated to the FSAR. The inspection program associated with the TS requirements is performed on systems assumed to function to mitigate a design basis accident. However, the TS establish operability requirements for these same systems. The specification limits in CTS 3/4.4.8 are not required to ensure operability of ASME Code Class 1, 2, and 3 components. Therefore, the requirements specified in CTS 3/4.4.8 can be relocated the FSAR, changes to which are controlled in accordance with 10 CFR 50.59. These requirements do not meet any of the criteria of 10 CFR 50.36 for inclusion in TS and this change conforms to the STS. Therefore, this relocation is acceptable.

The above relocated requirements relating to the reactor coolant system are not required to be in the TS under 10 CFR 50.36, and are not required to obviate the possibility of an abnormal situation or event giving rise to an immediate threat to public health and safety. Further, they do not fall within any of the four criteria set forth in 10 CFR 50.36(c)(2)(ii) and the Commission's Final Policy Statement, discussed in the Introduction above. In addition, the staff finds that sufficient regulatory controls exist under 10 CFR 50.59. Accordingly, the staff has concluded that these requirements may be relocated from the TS to the licensee's FSAR or plant procedures, as applicable.

3.5 EMERGENCY CORE COOLING SYSTEMS (ECCS) AND REACTOR CORE ISOLATION COOLING (RCIC) SYSTEM

a. Administrative Changes

The specifications of the CTS that have been retained in ITS Section 3.5 have been reworded to conform to the STS presentation. In particular, the most significant ~~following~~ administrative changes that were made are as follows:

3.5.1 ECCS–Operating

A.1 CTS 3.5.1, AP~~PLICABILITY~~ *, references Special Test Exception 3.10.6 which permits one RHR subsystem to be aligned to shutdown cooling for training startups. The reference has been deleted in the ITS because the format of the ITS does not include providing cross references and ITS 3.0.7 adequately prescribes the use of the Special Operations LCOs. The change is acceptable because it is an administrative change that removes a condition allowed by the CTS that is no longer needed.

A.2 CTS 3.5.1 ACTIONs a through ~~f~~ e provide actions for combinations of inoperable ECCS systems. For combinations not described in CTS 3.5.1, entry into LCO 3.0.3 is required. ITS 3.5.1 ACTION H provides the same requirement to enter LCO 3.0.3 for the same combinations, excepted as identified in ~~paragraph [b.X, below (L.5)]~~ subsection 3.5.b, LCO 3.5.1, L5. This change is acceptable because it is an administrative change that provides the same requirements as the CTS.

not really a "duplication" SEE INSERT A.3 (from ~~3.5.b~~ 3.4.a.) LCO 3.4.10 A4.

A.3 CTS 3.5.1 ACTION b.3 & d.3 footnote ~~references criteria that are applicable~~ states that if COLD SHUTDOWN cannot be attained when two ~~or more~~ RHR subsystems are not OPERABLE. ~~The CTS footnote has been deleted because it is an unnecessary duplication of ACTIONS required by CTS 3.4.9.1 and ITS 3.4.10.9 The change is administrative and acceptable because the deleted item contains no additional restrictions on plant operation and the change removes duplication of CTS requirements.~~ Insert A.3

[A.4 Below threshold for discussion.] not always, SEE INSERT A.4

RTT not DELETED in 3.3AS an 'L' SEE INSERT A.5

A.5 CTS 4.3.3.3 requires that an ECCS RESPONSE TIME test is performed at least once per 18 months. A note has been added in ITS SR 3.5.1.8 that exempts the ECCS instrumentation from response time testing and allows the design instrumentation response time to be used in the determination of the ECCS RESPONSE TIME. ~~Deleting the ECCS instrument response time test was evaluated and is described in Section 3.3 (administrative changes for ITS 3.3.5.1) of this safety evaluation.~~ Insert A.5 Based on the above, ~~moving response time testing to ITS SR 3.5.1.8 and~~ substituting a design instrumentation response time test is acceptable as an administrative change.

A.6 CTS 3.5.1.a and 3.5.1.b specify that seven ADS valves are required to be OPERABLE. With two ADS valves inoperable, CTS 3.5.1 Action e.1 allows 14 days to restore one of the two inoperable valves. The CTS do not specify actions or a restoration time for the second inoperable valve; therefore, operation with one of the seven required ADS valves

INSERT A.3 to subsection 3.5.a, LCO 3.5.1

then RCS temperature is to be maintained as low as practical using alternate heat removal methods. This footnote is not contained in ITS 3.5.1, because it provides unnecessary duplication of the ITS 3.5.1 Actions and contains no additional plant operational restrictions. The requirement in ITS 3.5.1, Action D, to achieve Mode 4 ensures efforts are made to maintain reactor coolant temperature as low as practical. If conditions prohibit attaining Mode 4 in 36 hours, the ITS require entering LCO 3.0.3, which only requires efforts to reach Mode 4 to continue. For these reasons, deleting the CTS 3.5.1, ACTIONS b.3 and d.3 footnote is a purely administrative change that is acceptable.

INSERT A.4 to subsection 3.5.a, LCO 3.5.1

CTS 4.5.1.e.2 (indication portion) and 4.5.1.e.3.c) are being moved to ITS 3.3.5.1 in accordance with the format of the STS. Evaluations of any technical changes are addressed in the ITS 3.3.5.1 evaluation. This is an acceptable administrative change.

INSERT A.5 to subsection 3.5.a, LCO 3.5.1

Deletion of the response time test for these instruments was evaluated in NEDO-32291, "System Analyses for Elimination of Selected Response Time Testing Requirements," January 1994, and was determined acceptable since other Technical Specification Surveillances (CHANNEL CALIBRATION, CHANNEL FUNCTIONAL TEST, CHANNEL CHECK, and LOGIC SYSTEM FUNCTIONAL TEST) ensure that instrumentation response times are within acceptable limits. These other tests are normally sufficient to identify failure modes or degradation in instrument response time and assure operation of the analyzed instrument loops within acceptable limits. Furthermore, there are no known failure modes that can be detected by response time testing .that cannot also be detected by other Technical Specification Surveillances. In addition, the NRC Safety Evaluation Report (SER) from B.A. Boger (NRC) to R.A. Pinelli (BWROG), dated December 28, 1994, required that the utility commit to certain additional requirements and state this in the plant specific license amendment. WNP-2 has committed to these additional requirements. This evaluation has been documented in a 50.59 evaluation that deletes these instruments from the current WNP-2 ECCS RESPONSE TIME requirements, since the actual response times have been removed from WNP-2 TS and placed under WPPSS control as documented in the NRC SER documented in Technical Specification Amendment 139.

inoperable is allowed for an indefinite period of time. With three or more of the required valves inoperable, CTS Action e.2 requires placing the unit in MODE 3 in 12 hours. ITS 3.5.1 requires six OPERABLE ADS valves. ACTION E allows 14 days to restore one inoperable valve and ACTION G requires placing the unit in MODE 3 in 12 hours with two or more required valves inoperable. While the required number of OPERABLE ADS valves specified in the LCO has been reduced from seven in the CTS to six in the ITS, there is no real change in requirements since the CTS allow indefinite operation with one of the required seven ADS valves inoperable. The Action requirements remain the same from the CTS to the ITS. The ADS OPERABILITY requirements are based on an analysis summarized in NEDC-32115P, "Washington Public Power Supply System Nuclear Project 2 SAFER/GESTR-LOCA Loss-of-Coolant Accident Analysis," Revision 2, dated July 1993. This analysis demonstrates adequate core cooling is provided during a small break LOCA and a simultaneous HPCS diesel generator failure (limiting LOCA) with two of the seven ADS valves out-of-service. This change reflects the credit provided through the use of NRC approved methods for calculating more realistic (yet conservative) peak cladding temperatures during accident situations. In addition, the above referenced document was reviewed and accepted by the NRC as documented in Amendment No. 137, dated May 2, 1995. Because there has been no change in actual requirements from the CTS to the ITS, this change is purely administrative and is acceptable.

3.5.2 ECCS–Shutdown

A.1 & A.2

DOES NOT DISCUSS CHANGES TO Required ACTION D.2 AND D.3- THEY ARE important to the justifying the CHANGE. (see subsection 3.1.a, LCO 3.1.1, A14 A.2) required

CTS 3.5.2, ACTION b, requires that when two of the ECCS subsystems/ systems are inoperable, secondary containment integrity be established within the next 8 hours. ITS 3.5.2, Required Action D.1, requires that action be initiated to restore secondary containment immediately. All of the individual requirements needed to establish secondary containment integrity, as required by the CTS, are addressed by the ITS Required Actions. The change is a presentation preference adopted by the STS. Additionally, CTS 3.5.2, Action b appears to provide a period of time (8 hours) during which integrity could be violated. The intent of the Action is more appropriately presented in the ITS Required Actions. The ITS Actions, ~~requirement,~~ to initiate action to restore secondary containment to operable status immediately, is consistent with the intent of the CTS Action. This change is purely administrative and is acceptable.

A.3 The CTS 3.5.2 APPLICABILITY footnote specifies that ECCS OPERABILITY is not required ~~when~~ PROVIDED the reactor vessel head is removed, the cavity is flooded, the spent fuel pool gates are removed, and water level is maintained per CTS 3.9.9 and 3.9.8. ITS 3.5.2 is applicable in MODE 5 except with the spent fuel storage pool gates removed and water level ≥ 22 ft over the top of the reactor vessel flange. These are essentially the same criteria as the CTS presented slightly differently. This change is purely administrative and is acceptable.

[A.4 Below threshold for discussion.]

[A.5 Below threshold for discussion.] not Always, SEE INSERT A.5

~~[A.6 Incorporated into L.4]~~

A.~~7~~6 CTS 4.5.3.2.b requires, at least once per 12 hours, verifying that CTS 3.5.3.b is satisfied when the suppression chamber water level is less than the limit or drained. This surveillance requirement is part of the ITS 3.5.2 APPLICABILITY. Inclusion of a periodic verification that the unit condition remains within the Applicability is not necessary in the TS to ensure that the requirements of the specification are complied with in 4.5.3.2.b. Because this requirement is inherent in compliance with the TS, it is acceptable . . . .

A.~~8~~7 CTS 4.3.3.3 requires that an ECCS RESPONSE TIME test is performed at least once per 18 months. A note has been added in ITS SR 3.5.2.7 that exempts the ECCS instrumentation from response time testing and allows the design instrumentation response time to be used in the determination of the ECCS RESPONSE TIME. ~~Deleting the ECCS instrument response time test was evaluated and is described in Section 3.3.X of this safety evaluation~~. Based on the above, ~~moving response testing to ITS SR 3.5.2.7 and~~ substituting a design instrumentation response test is acceptable as an administrative change. Insert A.7

RTT NOT AN L CHANGE IN 3.3. SEE INSERT

3.5.3 RCIC System

A.1 CTS 4.7.3.b specifies requirements for the RCIC pump flow test. In the ITS, this requirement is contained in ITS SR 3.5.3.3. The ~~first~~ footnote to CTS 4.7.3.b specifies that CTS 4.0.4 is not applicable provided the surveillance is performed within 12 hours after reactor steam pressure is adequate to perform the test. ITS SR 3.5.3.3 contains a similar Note which also includes an allowance for adequate flow, to provide clarification. The change is acceptable because it is purely administrative change that adds clarification.

A.2 The ~~second~~ footnote to CTS ~~4~~3.7.3.~~b~~ specifies when the requirement for automatically taking RCIC suction from the suppression pool is effective. The note is being deleted because it ~~is~~ no longer applies (i.e., the Spring 1993 Refueling Outage has already occurred). This change is purely administrative and is acceptable.

The preceding changes to the CTS result in limits that are unchanged from the current requirements cited. In some cases, these changes result in a clearer presentation of the intent of current requirements. Accordingly, these changes are purely administrative. Therefore, they are acceptable.

b. Less Restrictive Requirements

The licensee, in electing to implement the specifications of STS Section 3.5, proposed a number of less restrictive requirements than are allowed by the

INSERT A.5 to subsection 3.5.a, LCO 3.5.2

CTS 3.5.3.a, Action a, and 4.5.3.1 are being moved to ITS 3.6.2.2 in accordance with the format of the STS. Evaluations of any technical changes are addressed in the ITS 3.6.2.2 evaluation. This is an acceptable administrative change.

INSERT A.7 to subsection 3.5.a, LCO 3.5.2

Deletion of the response time test for these instruments was evaluated in NEDO-32291, "System Analyses for Elimination of Selected Response Time Testing Requirements," January 1994, and was determined acceptable since other Technical Specification Surveillances (CHANNEL CALIBRATION, CHANNEL FUNCTIONAL TEST, CHANNEL CHECK, and LOGIC SYSTEM FUNCTIONAL TEST) ensure that instrumentation response times are within acceptable limits. These other tests are normally sufficient to identify failure modes or degradation in instrument response time and assure operation of the analyzed instrument loops within acceptable limits. Furthermore, there are no known failure modes that can be detected by response time testing that cannot also be detected by other Technical Specification Surveillances. In addition, the NRC Safety Evaluation Report (SER) from B.A. Boger (NRC) to R.A. Pinelli (BWROG), dated December 28, 1994, required that the utility commit to certain additional requirements and state this in the plant specific license amendment. WNP-2 has committed to these additional requirements. This evaluation has been documented in a 50.59 evaluation that deletes these instruments from the current WNP-2 ECCS RESPONSE TIME requirements, since the actual response times have been removed from WNP-2 TS and placed under WPPSS control as documented in the NRC SER documented in Technical Specification Amendment 139.

CTS. These requirements are described in the following:

3.5.1 ECCS—Operating

LA.1 CTS 3.5.1 a through c specifies OPERABLE criteria for each system (low pressure core spray, low pressure coolant injection, and high pressure core spray). The CTS details for defining OPERABILITY are being moved to the Bases for ITS 3.5.1 in conjunction with the OPERABILITY definition in Chapter 1.0. This change is acceptable because it is not necessary to include these details in the TS to ensure system OPERABILITY. Changes to the Bases will be controlled by the provisions of the Bases Control Program described in ITS Chapter 5.0. This change corresponds to change type 7 as defined in the general discussion of less restrictive requirements at the beginning of Part III of this safety evaluation.

LA.2 CTS 4.5.1 requires verifying that the low pressure core spray, low pressure coolant injection, and high pressure core spray systems are OPERABLE by venting at the high points, verifying the position of automatic valves, and verifying system pressures. The details for defining OPERABILITY are being moved to the Bases. Inclusion of these details in TS is not necessary to ensure the OPERABILITY of the ECCS subsystems. The requirements of ITS 3.5.1 and the associated Surveillance Requirements are adequate to ensure the ECCS subsystems are maintained OPERABLE. Changes to the Bases will be controlled by the provisions of the Bases Control Program specified in ITS Chapter 5.0. This change corresponds to change type 3 as defined in the general discussion of less restrictive requirements at the beginning of Part III of this safety evaluation.

verify actuation

during flow test

[LC.1 Moved to Section 3.3] SINCE DELETED from CTS 3.5, not CTS 3.3, SEE INSERT LC.1

LC.2 CTS 4.5.1.e.3.d requires a verification of the nitrogen capacity in at least two accumulator bottles per division. This requirement is being moved to plant procedures. Inclusion of this requirement in the TS is not necessary to ensure ADS system OPERABILITY. The requirement was included in the CTS because verifying nitrogen capacity was part of the original licensing basis for the ADS System. A method for verifying nitrogen capacity was to calibrate the accumulator pressure gauges (indication-only). This change corresponds to change type 4 as defined in the general discussion of less restrictive requirements at the beginning of Part III of this safety evaluation.

SAME Equipment in LC.1

LD.1 The 18-month Frequencies of the surveillances in CTS 4.5.1 retained in ITS 3.5.1 are changed to 24 months. These changes are acceptable for the reasons given int he section entitled "Surveillance Interval Extension from 18 to 24 Months" in the general discussion of less restrictive requirements at the beginning of Part III of this safety evaluation.

~~[L.1 Change rejected.]~~ L.1 not used

INSERT LC.1 to subsection 3.5.b, LCO 3.5.1

CTS 4.5.1.e.2 and 4.5.1.e.3.c) requires performing a Channel Functional Test and Channel Calibration, respectively, on the ADS backup compressed gas system pressure alarm. The ADS accumulator backup compressed gas system pressure alarm instrumentation does not necessarily relate directly to ADS OPERABILITY. The STS, does not specify alarm-only equipment to be OPERABLE to support OPERABILITY of a system or component. Control of the availability of, and necessary compensatory activities if not available, for indication instruments, monitoring instruments, and alarms are addressed by plant operational procedures and policies. Therefore, this instrumentation, along with the supporting Surveillances, are proposed to be relocated to plant procedures. Changes to the relocated requirements in plant procedures will be controlled by the provisions of 10 CFR 50.59. This change conforms to the STS and is acceptable. This change corresponds to change type 4 as defined in the general discussion of less restrictive requirements at the beginning of Part III of this safety evaluation.

L.2 CTS 3.5.1, APPLICABILITY, references the minimum reactor pressure for which the ADS is required to be OPERABLE as 128 psig. In ITS 3.5.1, this minimum pressure has been raised to 150 psig. The change is made to provide consistency of the OPERABILITY requirements for all ECCS and RCIC equipment. Small break loss of coolant accidents at low pressures are bounded by analyses performed at higher pressures. The ADS is required to lower the pressure so that the low pressure coolant injection and core spray systems can provide makeup to mitigate such accidents. Since these systems can operate at pressures well above 150 psig (222 psid, steam dome pressure to drywell pressure, and steam dome pressure < 336 psig for LPCI and 285 psid, steam dome pressure to drywell pressure, and steam dome pressure < 336 psig for LPCS), there is no safety significance in the ADS not being OPERABLE between 128 psig and 150 psig.

[L.3 ~~Change rejected.]~~ not used

L.4 CTS 3.5.1 ACTION ~~f~~ specifies cases where special reports are required to be prepared and submitted to the NRC. This requirement has been deleted from the ITS. The requirement to submit a Special Report for ECCS actuation and injection is addressed by 10 CFR 50.73(a)(2)(iv). This CFR section requires an LER be submitted for any event or condition that results in manual or automatic ECCS actuation. This LER requirement covers any actuation and injection that would be stipulated by the Special Report requirement. Regulations provide sufficient control of the reporting requirement provisions to allow the Special Reporting criteria to be removed from the TS. This change corresponds to change type 9 as defined in the general discussion of less restrictive requirements at the beginning of Part III of this safety evaluation.

L.5 CTS 3.5.1 does not have specific ACTIONS for the conditions of HPCS and one low pressure ECCS subsystem inoperability or one ADS valve and one low pressure ECCS inoperability, other than defaulting to CTS LCO 3.0.3. ITS 3.5.1 ACTIONS C and F provide specific ACTIONS for these conditions. The CTS require entry into TS 3.0.3 for HPCS and one low pressure ECCS subsystem or one ADS valve and one low pressure ECCS inoperabilites, implying that the plant is outside the design basis. The FSAR analysis demonstrates that adequate core cooling is provided by the OPERABLE HPCS or ADS System and the remaining OPERABLE low pressure injection/spray systems. However, with HPCS and one low pressure ECCS subsystem or one ADS valve and one low pressure ECCS inoperable, the redundancy is reduced such that with a single additional failure may jeopardize the ability to provide adequate core cooling. When both a high pressure (ADS) and low pressure subsystem are inoperable, ITS ACTION F provides a restoration time of 72 hours. ITS 3.5.1 ACTION C is similar to having two ECCS low pressure injection/spray systems inoperable with a restoration time of ~~seven days~~ 72 hours for either the HPCS or LPCI subsystem. These changes are acceptable because adequate core cooling is maintained in the new Conditions.

L.6 CTS 4.5.1.a.2 does not include criteria that specifically address using the LPCI for shutdown cooling modes of operation. The ITS SR 3.5.1.2 Note has been added to address shutdown cooling modes of operation. The Note allows operation of one or more of the RHR subsystems in the shutdown cooling mode during MODE 3 and clarifies that the subsystems are still considered OPERABLE for the LPCI mode. Because manual valve positioning is required for this mode of operation, it removes the capability of the subsystems to respond automatically and the subsystems would be considered inoperable without this Note. The return to OPERABILITY for the LPCI mode of operation entails only the repositioning of valves, either remote or locally. In addition, the energy requiring dissipation in MODE 3, below 135 psig, is considerably less than that at 100% power with normal operating temperature and pressure. Further, because of the low probability of an event requiring ECCS actuation and the certain need for shutdown cooling, it is considered appropriate to have the subsystems aligned for decay heat removal.

L.7 CTS 4.5.1.c and requires performance & ADS of a system, respectively, functional test for the LPCS, LPCI, HPCS systems and 4.5.1.e.3.a) requires performance of a system functional test for the ADS. These SRs do not allow actual system demands to meet surveillance/testing requirements. ITS SR 3.5.1.5 & SR 3.5.1.6 allows verification of ECCS actuation, by an actual or simulated signal. The ITS change allows substituting actual system demands for simulated demands in surveillance tests. OPERABILITY is demonstrated in either simulated or actual demands since the ECCS subsystem or ADS valve itself cannot discriminate between actual or simulated signals.

L.8 CTS 4.5.1.e.1 requires verifying once per 31 days that the ADS backup compressed gas system pressure in each bottle is ≥ 2200 psig. ITS SR 3.5.1.3 requires verification that the average pressure in all bottles ≥ 2200 psig. The associated analysis in NUREG-0892, "Safety Evaluation report related to the operation of WPPSS Nuclear Project No. 2," has demonstrated that a 30 day nitrogen supply is available if the required bottles have an average pressure of 2200 psig. Therefore, the ITS requirement to verify an average pressure in all bottles is consistent with the safety analysis.

3.5.2 ECCS–Shutdown

LA.1 CTS 3.5.2 provides details that define low pressure core spray, low pressure coolant injection, and high pressure core spray system OPERABILITY. These details are being moved to the Bases for ITS 3.5.2 in conjunction with the OPERABILITY definition in Chapter 1.0. This change was made because it is not necessary to include these details in the TS to ensure system OPERABILITY. Changes to the Bases will be controlled by the provisions of the Bases Control Program described in ITS Chapter 5.0. This change corresponds to change type 7 as defined in the general discussion of less restrictive requirements at the beginning of Part III of this safety evaluation.

LA.2 CTS 3.5.2.e.2 provides the volume of water contained in the condensate

storage tank in addition to the tank water level as a required limit. ITS 3.5.2 retains the level limit, but the limit on the volume of water has been moved to the Bases for ITS 3.5.2. The level limit is retained since this is the information available to the operator regarding the contents of the condensate storage tank. The volume and level limits are equivalent and interchangeable. Therefore, moving one of them to the Bases does not change the OPERABILITY requirements for the CST.

Type 7? Bases Control?

LD.1 The 18-month Frequencies of the surveillances in CTS 4.3.3.3 retained in ITS 3.5.2 are changed to 24 months. These changes are acceptable for the reasons given int he section entitled "Surveillance Interval Extension from 18 to 24 Months" in the general discussion of less restrictive requirements at the beginning of Part III of this safety evaluation.

no mention CTS 3.5.3 Action b.

L.1 CTS 3.5.2 ACTION b requires that, when two ECCS subsystem/systems become inoperable, CORE ALTERATIONS be suspended. The ITS 3.5.2 ACTIONS do not require suspension of CORE ALTERATIONS under the same conditions. ITS 3.9.6 and 3.9.7 provide requirements for maintaining water level in the reactor vessel during CORE ALTERATIONS. The ECCS function provides additional protection for loss of vessel inventory events. However, these events are not initiated by CORE ALTERATION operations and ECCS response to loss of inventory events is not hampered by CORE ALTERATION operations.

L.2 CTS 3.5.3.b requires that while the plant is operating in OPERATIONAL CONDITIONS 4 and 5 suppression pool water volume is maintained at least 127,197 ft^3, equivalent to a level of 30 ft 9¾ inches. ITS SR 3.5.2.2 requires verification that the suppression pool water level is $\geq$ 18 ft 6 inches and the reference to the volume limit has been moved to the Bases. The CTS level requirement is based on MODES 1, 2, and 3 requirements. In MODES 4 and 5, the suppression pool is not needed to condense steam released during a LOCA, therefore, the water level requirement does not need to consider this factor. The new water level limit is based on ensuring adequate net positive suction head (NPSH) and vortex prevention for all the ECCS pumps, and provides an additional 135,000 gallons of water for a recirculation/makeup volume. In addition, the redundant volume requirement (in cubic feet) has been deleted from the TS, leaving the equivalent water level requirement.

L.3 CTS 3.5.3.b.2 and associated ACTION b require that under certain conditions the reactor mode switch be locked in the Shutdown or Refuel position. This requirement has been deleted in the ITS. This change is being made because the position of the reactor mode switch is controlled by the MODES definition Table (ITS Table 1.1-1). Reactor mode switch positions other than Refuel and Shutdown result in the unit entering some other MODE with the associated TS compliance requirements of that MODE and of ITS LCO 3.0.4. ITS 3.5.2 is only applicable for the Shutdown or Refuel position of the reactor mode switch since a reactor mode switch position of other than Shutdown or Refuel results in entry into a MODE other than MODE 4 or 5. Therefore, inclusion of a requirement to lock the reactor mode switch in the Shutdown or Refuel

position in TS is unnecessary.

L.4 CTS 3.5.3 requires that the suppression chamber be operable. CTS 3.5.3.b specifies that the suppression chamber may be drained in OPERATIONAL CONDITIONS 4 and 5 provided that certain conditions are met, including that no operations are performed that have a potential for draining the reactor vessel. In addition, CTS 3.5.3, ACTION b, specifies actions to take if the LCO conditions aren't satisfied, including suspension of all OPDRVs. If the suppression pool is drained, HPCS is the only ECCS subsystem that can be operable, since no other ECCS subsystem has an alternate source of water. However, with one of the two required ECCS system/subsystems inoperable, CTS 3.5.2 ACTION a allows 4 hours prior to requiring operations that have a potential for draining the reactor vessel (OPDRVs) to be suspended. ~~There is an inconsistency between CTS 3.5.3 and CTS 3.5.2 in this regard.~~

The conditions and actions of CTS 3.5.3 are translated as ITS 3.5.2, ACTIONS A and B for one inoperable ECCS subsystem. CTS 3.5.3.b.1 and ACTION b would require immediate suspension of OPDRVs with the suppression chamber water level less that the limit or drained, even though HPCS would remain OPERABLE. ITS 3.5.2, Required Action A.1, provides 4 hours to restore the inoperable ECCS subsystem to OPERABLE status before Required Action B.1 would require suspending OPDRVs, consistent with the actions in CTS 3.5.2 for one inoperable ECCS subsystem. Therefore, this is a less restrictive change relative to CTS 3.5.3, but, because the ITS retain the actions for one inoperable ECCS sub sybsystem in CTS 3.5.2, the change is acceptable.

3.5.3 RCIC System

LA.1 CTS 3.7.3 provides details that define reactor core isolation (RCIC) system OPERABILITY. These details are being moved to the Bases for ITS 3.5.3. These details are being moved to the Bases for ITS 3.5.3 in conjunction with the OPERABILITY definition in Chapter 1.0. This change was made because it is not necessary to include these details in the TS to ensure system OPERABILITY. Changes to the Bases will be controlled by the provisions of the Bases Control Program described in ITS Chapter 5.0. This change corresponds to change type 7 as defined in the general discussion of less restrictive requirements at the beginning of Part III of this safety evaluation.

LA.2 CTS 4.7.3.~~a.1~~ requires that the RCIC system is verified OPERABLE by venting at the high points, ~~and~~ setting the pump flow controller in the correct position, & system actuation. The criteria for defining RCIC OPERABILITY are being moved to the Bases for ITS 3.5.3. Inclusion of these details in TS is not necessary to ensure the OPERABILITY of the RCIC system. The requirements of ITS 3.5.3 and the associated Surveillance Requirements are adequate to ensure the RCIC system is maintained OPERABLE. Changes to the Bases will be controlled by the provisions of the Bases Control Program described in ITS Chapter 5.0. This change corresponds to change type 3 as defined in the general discussion of less restrictive requirements at the beginning of Part III of this safety evaluation.

~~[LD.1 Change rejected.]~~ LD-1, OPEN. , SEE INSERT LD.1 (just in case)

L.1 CTS 4.7.3.c.1 requires performance of a functional test on the RCIC system which includes a simulated automatic actuation of the system. This SR does not allow actual system demands to meet the surveillance testing requirement. ITS SR 3.5.3.5 allows verification of RCIC actuation by an actual or simulated signal. The ITS change allows substituting actual system demands for simulated demands in surveillance tests. OPERABILITY is demonstrated in either simulated or actual demands since the RCIC system itself cannot discriminate between actual or simulated signals.

The above less restrictive requirements have been reviewed by the staff and have been found to be acceptable, because they do not present a significant safety question in the operation of the plant. The TS requirements that remain are consistent with current licensing practices, operating experience and plant accident and transient analyses, and provide reasonable assurance that the public health and safety will be protected.

c. More Restrictive Requirements

The licensee, in electing to implement the specifications of STS Section 3.5, proposed a number of more restrictive requirements than are required by the CTS. These requirements are described in the following:

3.5.1 ECCS—Operating

M.1 Additional info needed as to why additional requirements were added. CTS 4.5.1.e.3.a requires performing a functional test on the ADS system. VALUE LOGIC This requirement is contained in ITS SR 3.5.1.6. However, a functional test of the ADS accumulator backup compressed gas system initiation to verify that the compressed gas system automatically aligns on an actual or simulated signal has been added as part of this SR as described in the Bases for ITS SR 3.5.1.6. This addition is a more restrictive change that is acceptable because it adds a testing requirement . . . ? to ensure op. of back up.

SEE OPEN ITEM DISCUSSION

3.5.2 ECCS—Shutdown

M.1 The note to CTS 3.5.3 Applicability and 4.5.3.2 allows the suppression chamber to not be OPERABLE during cavity flooding. The allowance has been deleted in the ITS. ITS 3.5.2 APPLICABILITY requires the suppression pool to be within the required limits until the cavity is completely flooded. This is an additional restriction on plant operation that provides additional assurance that the ECCS function will be available if needed.

3.5.3 RCIC System

There are no more restrictive changes to the CTS associated with ITS 3.5.3.

The staff has reviewed these more restrictive requirements and concludes that they result in an enhancement to the CTS. Therefore, these more restrictive requirements are acceptable.

INSERT LD.1 to subsection 3.5.b, LCO 3.5.3

The 18-month Frequencies of the surveillances in CTS 4.7.3.c retained in ITS 3.5.3 are changed to 24 months. These changes are acceptable for the reasons given in the section entitled "Surveillance Interval Extension from 18 to 24 Months" in the general discussion of less restrictive requirements at the beginning of Part III of this safety evaluation.

d. Significant Differences from the STS (1434)

The licensee, in electing to adopt the specifications of STS Section 3.5, proposed the following differences between the ITS and the STS.

3. The Completion Time for Required Action B.1 of STS 3.5.1 and Required Action A.1 of STS 3.5.3 has been changed from 1 hour to Immediately in ITS 3.5.1 and 3.5.3. Due to the mechanics of how Completion Times work, the 1 hour allowance can probably never be used. For example, if HPCS is inoperable, STS 3.5.1, Condition B, is entered, and the 1 hour verification of Required Action B.1 is performed. If RCIC is not inoperable at this time, the Required Action is met. However, since the Completion Time starts upon entry into this Condition, if RCIC later becomes inoperable, the 1 hour time in STS 3.5.1, Required Action B.1 has already expired. Thus, a unit shutdown would be required immediately upon discovery of RCIC being inoperable, even though STS 3.5.3, Required Action A.1, for RCIC being inoperable appears to allow 1 hour to verify HPCS OPERABILITY. To avoid this confusion, the time allowed by the CTS has been retained.

6. A new Surveillance Requirement, ITS SR 3.5.1.3, which requires verification of the ADS accumulator backup compressed gas system average pressure, replaces STS SR 3.5.1.3, which ensures the ADS receiver pressure is within limits. This difference is consistent with the WNP-2 current licensing basis.

7. New Surveillance Requirements have been added to STS 3.5.1 and 3.5.2. ITS SR 3.5.1.8 and SR 3.5.2.7 require the ECCS RESPONSE TIME to be verified to be within the limit. These SRs are contained in STS Section 3.3, Instrumentation, as STS SR 3.3.5.1.7. However, the instrumentation for the ECCS trip functions are now exempt from response time testing. ~~See the discussion in Section 3.3.X~~. Therefore, since the ECCS trip function instrumentation is now exempt from response time testing, the response time test is more appropriately located in the system specification.

The preceding differences from STS Section 3.5 are consistent with the WNP-2 design and existing requirements and commitments or proposed changes found to be acceptable as discussed elsewhere in this evaluation. Therefore, these differences are acceptable.

e. Relocated ~~Requirements~~ Specification

~~There are no relocated CTS requirements associated with ITS Section 3.5.~~
NONE

3.6 Containment Systems

In accordance with the guidance in the Final Policy Statement, the licensee has proposed administrative and technical changes to the CTS to bring them into conformance with STS Section 3.6 specifications. For each category of change, the discussions generally follow the presentation order of the individual specifications within STS Section 3.6. As appropriate, the ITS specifications are listed in italics before the applicable discussions.

a. Administrative Changes

The requirements for containment systems in CTS Section 3/4.6 and CTS 3/4.4.7 that are retained in corresponding ITS Section 3.6, have been reworded and reorganized to conform to the STS presentation. In particular, the ~~following~~ most significant administrative changes that were made are as follows:

General

(3.6.1.1 - A.2; 3.6.1.2 - A.1; 3.6.3.3 - A.1) Note * to the MODE 2 Applicability of CTS 3/4.6.1.1 for primary containment and CTS 3/4.6.1.3 for primary containment air locks references the exception to meeting the LCO during low power physics testing in accordance with CTS 3.10.1. Similarly, Note * to the MODE 1 Applicability of CTS 3/4.6.6.2 for drywell and suppression chamber oxygen concentration references the exception to meeting the LCO during the startup test program in accordance with CTS 3.10.5. These references to special test exceptions are deleted. These are purely administrative changes because the references are not needed to apply the special test exceptions.

THIS only effects 3.6.1.1- move TO THE next page

(3.6.1.1 - A.5) CTS 3/4.6.1.1 and 3/4.6.1.2 contain surveillances to verify compliance with other CTS surveillance requirements as follows:

- CTS 4.6.1.1.c and ~~4.6.1.2.e~~ (DELETED in Rev B) requires meeting CTS 4.6.1.3 for primary containment air locks.

- CTS 4.6.1.1.d requires meeting CTS 4.6.2.1 for the suppression chamber.

- ~~CTS 4.6.1.2.d.5 and 4.6.1.2.i require meeting CTS 4.6.1.8.1 and 4.6.1.8.2 for purge supply and exhaust isolation valves with resilient seals.~~

THESE WERE DELETED IN Rev B

These redundant requirements are deleted because the CTS surveillances and other requirements for the systems listed are retained in the corresponding ITS SRs. This change is purely administrative because no reductions in current surveillance requirements result.

move to next page

3.6.1.1 Primary Containment

( ) The ~~requirements for primary~~ containment in CTS 3/4.6.~~1.1~~ "Primary Containment Integrity," 3/4.6.~~1.2~~ " Primary Containment ~~Leakage~~," 3/4.6.1.5

8 SEE GENERAL COMMENT ATTACHMENT

"Primary Containment Structural Integrity," 3/4.6.2.1 "Suppression Chamber," and 6.8.4.f "Primary Containment Leakage Rate Testing Program" are presented in ITS 3.6.1.1 and 5.5.12 in accordance with the format of the STS.

(A.1) The requirement of CTS 3.6.1.1 to maintain primary containment integrity is replaced by the requirement of ITS 3.6.1.1 for primary containment to be operable. The ITS words better convey the meaning intended by the CTS definition "primary containment integrity" (which is no longer used). This administrative change is acceptable because ITS 3.6.1.1 through 3.6.1.8 and 5.5.12 retain all the requirements encompassed by the CTS definition and by the other CTS related to primary containment systems.

[A.2 is addressed under *General*]

(A.3) The requirement of CTS 4.6.1.2 to perform primary containment leakage rate testing is presented in ITS SR 3.6.1.1.1 and the details for these requirements in CTS 4.6.1.1.a, 3.6.1.2, 3.6.1.2.a, and 3.6.1.2.b are presented in ITS 5.5.12, "Primary Containment Leakage Rate Testing Program" (corresponding to CTS 6.8.4.f). CTS 4.6.1.2 must be met as a condition of primary containment operability. This is appropriate because leaktightness is an essential element of an operable containment. Additionally, the CTS contain details also found in 10 CFR 50 Appendix J. However, only the limit for combined Type B and C leakage (0.6 L_a) and the limit for measured Type A leakage (0.75 L_a) are retained in ITS 5.5.12. (The leakage limits in Appendix J are < 0.6 L_a and < 0.75 L_a, not ≤ 0.6 L_a and ≤ 0.75 L_a, as given in the CTS. Thus, in ITS 5.5.12, these limits are stated to match the Appendix J requirements.) All other leakage testing details, such as the description of the test method and when to perform the tests, are deleted because they are redundant to the regulation. Because no decrease in test requirements result, deleting these details from the TS poses no safety questions. Therefore, simplifying the presentation of the CTS containment-leakage-testing requirements in ITS SR 3.6.1.1.1 and ITS 5.5.12 is a purely administrative change.

[A.4 is addressed under *3.6.1.3*] moved requirements to 3.6.1.3 - but there is NO 'A.4' in 3.6.1.3. Do for consistency - SEE INSERT

move A.5 from page 1 [A.5 is addressed under *General*]

(A.6) The definition of the integrated leak rate criteria of L_a, "0.50 percent by weight of the containment air per 24 hours at P_a for a primary containment leakage limit" given in CTS 3.6.1.2.a is being moved ~~retained~~ in ITS 5.5.12, "Primary Containment Leakage Rate Testing Program." ~~This change is purely administrative because it does not change the leak rate criteria.~~ Any tech changes are discussed in 5.5.12.

The criteria is changed in 5.5.12 - so ADDED suggested phrase

(A.7) Primary containment structural integrity requirements in CTS 3/4.6.1.5 are presented in ITS SR 3.6.1.1.1 as inherent to containment operability. CTS 3.6.1.5 requires maintaining primary containment structural integrity at a level consistent with the acceptance criteria of CTS 4.6.1.5.1. CTS 4.6.1.5.1 contains details which are also found in 10 CFR 50 Appendix J: visual inspection prior to each Type A containment leakage rate test. Duplicating

INSERT A.4 to subsection 3.6.a, LCO 3.6.1.1

CTS 3.6.1.2.c, 3.6.1.2.d, and ACTIONS c and d, relating to the position of PCIVs, and the allowed leakage rates and testing of MSIVs and valves in hydrostatically tested lines, are being moved to ITS 3.6.1.3 in accordance with the format of the STS. Evaluations of any technical changes are addressed in the ITS 3.6.1.3 evaluation. This is an acceptable administrative change.

details of the regulations within the TS is unnecessary because the licensee must comply with the details of the regulations regardless of whether they are repeated in TS. Thus, these details are eliminated from the CTS. In addition, the structural integrity reporting requirement in CTS 4.6.1.5.2 is a duplication of information required by 10 CFR 50.73 and 10 CFR Part 50, Appendix J. Appendix J requires reporting degradation that is not serious with the integrated leak rate test (ILRT) report. But if the principal safety barrier, i.e., the primary containment, is seriously degraded, a 30-day report is required by 10 CFR 50.73. Since the special report of CTS 4.6.1.5.2 duplicates these requirements, it is unnecessary and eliminated from the CTS.

Eliminating the details that are found in Appendix J and eliminating the special report requirements that duplicate other regulatory requirements are all purely administrative changes because the regulatory requirements cited remain applicable.

MOVED A.2 to 3.6.2.1 for consistency

(A.8, A.9 and A.10; and ~~A.2 - 3.6.2.1~~) CTS 3.6.2.1.b and CTS 4.6.2.1.d present the drywell-to-suppression chamber bypass leakage limit of ≤ 10% of the acceptable $A/\sqrt{k}$ design value of 0.05 ft^2 (which is 0.005 ft^2), as a condition of operability for the suppression chamber. Because the suppression chamber must function properly to ensure primary containment operability, these drywell-to-suppression chamber bypass leakage LCO and surveillance requirements are presented in ITS SR 3.6.1.1.2 as a surveillance to directly support primary containment operability. This is appropriate because maintaining this bypass leakage within limits is essential for the primary containment to perform its pressure suppression function and to ensure not exceeding the primary containment design pressure. This is an administrative change because it only clarifies that the existing bypass leakage limit is a condition that directly supports primary containment operability.

CTS SR 4.6.2.1.d also specifies a 5-psi drywell-to-suppression chamber leak testing requirement for the first refueling outage with subsequent testing if the leakage is too high. In its submittal, the licensee stated that the first two 5-psi leak tests have been completed and the leakage results have been such that the 5 psi tests are no longer required by the CTS. Therefore, because this specific surveillance requirement is no longer required in the CTS, it is omitted from the ITS.

Finally, CTS SR 4.6.2.1.d specifies that if any 1.5 or 5 psi drywell-to-suppression chamber leak testing limits are exceeded, then the leak testing schedule shall be reviewed by the Commission. Corresponding ITS SR 3.6.1.1.2 contains the surveillance requirements for the drywell-to-suppression chamber leak testing, but omits the provision for NRC review of the schedule. The requirement for the NRC to review the test schedule for subsequent tests is deleted because the ITS SR retains the CTS requirement for additional testing (i.e., half the normal test interval) following failure of two consecutive tests. Since the CTS already contain an approved test schedule in the event a test fails, requiring the licensee to obtain NRC review of the same or an

alternative test schedule is unnecessary. Eliminating a requirement that serves no purpose is an administrative change.

3.6.1.2 Primary Containment Air Lock

( ) The requirements of CTS 3/4.6.1.3 for the primary containment air lock are presented in ITS 3.6.1.2 to conform to the format of the STS.

[A.1 addressed under *General*]

(A.2) CTS 3/4.6.1.3 repeats details for air lock leakage surveillances found in 10 CFR 50, Appendix J. Repeating these details of the regulations within the TS is unnecessary because the licensee is required to comply with the details of Appendix J (except for approved exemptions) regardless of whether the details are contained in the TS. Appendix J only requires that the overall leakage rate (0.05 L_a) and the door leakage rate (0.025 L_a) and test pressures and test intervals be in TS. Thus, these limits, which are specified in CTS 3.6.1.3.c and 4.6.1.3.b, are presented in ITS 5.5.12 which is referenced by ITS SR 3.6.1.2.1.

The following provisions of ITS 3.6.1.2 are meant to clarify the intent of the CTS primary containment air lock requirements:

(a) In the event air lock leakage results in Appendix J acceptance criteria for the overall containment leakage not being met, ACTIONS Note 2 clarifies that the primary containment is inoperable.

(b) In the event an air lock is inoperable (for reasons other than an inoperable door or interlock mechanism), Required Action C.1 ensures that the primary containment overall leakage is evaluated against the Appendix J acceptance criteria.

(c) Note 1 to ITS SR 3.6.1.2.1 clarifies the overall air lock leakage test acceptance criteria by stating that "an inoperable air lock door does not invalidate the previous successful performance of the overall air lock leakage test." Even though the overall test could not be satisfied with an inoperable door, the Note in effect provides an exception to SR 3.0.1. (ITS SR 3.0.1 would normally require declaring the LCO not met - and entering ITS ACTION C (CTS ACTION c)). Therefore, this is acceptable because with only one door known to be inoperable, the barrel and the other operable door provide a sufficient containment barrier.

(d) Note 2 to ITS SR 3.6.1.2.1 ensures that the primary containment overall leakage is evaluated against the Appendix J acceptance criteria every time the air lock leakage test is performed.

These clarifications are purely administrative changes because they are consistent with the intent and interpretation of the action and surveillance requirements of CTS 3/4.6.1.3.

only describes a part of the "maintain to verify." In omitting some of the discussion of the Actions are not described accurately. See insert A.3

(A.3) In the event the ies interlock mechanism is inoperable, ACTIONS a.1 ~~and c~~ of CTS 3/4.6.1.3 specify "maintaining" at least one operable air lock door closed. ~~and either returning the interlock to service within 24 hours or locking the operable door closed.~~ Corresponding ACTION B.1 of ITS 3.6.1.2 specifies "verifying" the operable door ~~closed~~ within 1 hour. ~~and locking it closed within 24 hours.~~ The word verify replaces the word maintain. In addition, ITS ~~ACTION B~~ includes a 1-hour time limit consistent with the primary containment LCO to verify that the door is closed. Replacing the requirement to maintain one door closed with the requirement to verify one door closed within 1 hour does not make this action requirement more or less restrictive. Rather the change serves to clarifies the intent of the CTS action requirement. Thus this change is administrative.

Required

Insert A.3

Required Actions B.1 and C.2

(A.4) A note is added to ACTIONS b and a of CTS 3/~~4~~.6.1.3, as Note 1 in corresponding ACTIONS A and B of ITS 3.6.1.2. The note clarifies that in the event both doors in the air lock are inoperable (corresponding to ITS Condition C), then the Required Actions for Conditions A and B are not applicable. This is because there is no "operable" door in the airlock that can be closed to meet those action requirements. ITS ACTION C only requires closing a door, not an operable door. This clarification is a purely administrative change.

A.5 is used

[A.5 ~~not used~~] - significant in other sections - see insert for consistency

No discussion A.6 - applicable STS 3.6.1.3 to action b.2 See insert A.6 suggestion

Insert A.6

(A.6) ACTIONS a.4 ~~and b.4~~ of CTS 3/~~4~~.6.1.3 states that the provisions of CTS 3.0.4 are not applicable to ACTION a ~~or b~~ in the event of an inoperable air lock interlock mechanism. ~~or airlock door, respectively.~~ Because corresponding ACTIONS B ~~and C~~ of ITS 3.6.1.2 contains action requirements (closing an air lock door) that if met allow unit operation to continue for an unlimited period of time, this CTS allowance is retained under ITS LCO 3.0.4. Changing the presentation of this allowance is purely administrative.

3.6.1.3 Primary Containment Isolation Valves

( ) The requirements related to primary containment isolation valves (PCIVs) given in the following CTS specifications are presented in ITS 3.6.1.3 to conform to the format of the STS: 3/4.4.7, "Main Steam Line Isolation Valves (MSIVs)," 3/4.6.1.1, "Primary Containment Integrity" (only 4.6.1.1.b and Note **), 3/4.6.1.2, "Primary Containment Leakage" (only 3.6.1.2.c and d; ACTIONS c and d; and 4.6.1.2), 3/4.6.1.8, "Drywell and Suppression Chamber Purge System," and 3/4.6.3, "Primary Containment Isolation Valves."

(A.1) CTS 3/4.6.3 contains requirements for all PCIVs shown in CTS Table 3.6.3-1. Corresponding ITS 3.6.1.3 does not contain requirements for the suppression chamber-to-drywell vacuum breakers; rather these are addressed in ITS 3.6.1.7. This change in presentation of CTS requirements is purely administrative.

INSERT A.3 to subsection 3.6.a, LCO 3.6.1.2

If the air lock is inoperable (except as a result of an inoperable door or interlock mechanism), ACTION C specifies "maintaining" at least one air lock door closed. Corresponding Required Action C.2 of ITS 3.6.1.2 specifies "verifying" a door is closed within 1 hour.

INSERT A.5 to subsection 3.6.a, LCO 3.6.1.2

CTS 3.6.1.3, ACTIONS a.1 and b.1, require operators to "return the interlock to service" or "restore the inoperable air lock door to OPERABLE status," respectively. The format of ITS 3.6.1.2 actions follow the format of the STS by not including restore to operable status options because it is always acceptable to exit a required action by restoring equipment to within the LCO limits. Not requiring this action is an editorial change to adopt the STS format and is acceptable.

INSERT A.6 to subsection 3.6.a, LCO 3.6.1.2

CTS 3.6.1.3, ACTION b.2 allows operation to continue with a primary containment air lock door inoperable only until performance of the next required overall air lock leakage test. The requirement for performing the overall air lock leakage test is a requirement of 10 CFR 50 Appendix J (as described in the Primary Containment Leakage Rate Testing Program in Section 5.5 of the proposed Technical Specifications). This requirement is embodied in proposed SR 3.6.1.2.1. It is possible that the test would not be able to be performed with an inoperable air lock door, and a plant shutdown would be required due to the inability to perform the required surveillance. However, this restriction on continued operation need not be specified (as is the case in CTS 3.6.1.3, ACTION b.2) - it exists inherently as a result of the required Appendix J testing. Once the ACTIONS are revised to eliminate the reference to this surveillance restriction (as proposed in the conversion to the STS), the exception to CTS 3.0.4 applicability (CTS 3.6.1.3, ACTION b.4) is not necessary, since the ITS LCO 3.0.4 allows MODE changes provided continued operations is allowed in the ITS Actions. In addition

(A.2 & A.3) Note 2 to the ACTIONS of ITS 3.6.1.3 explicitly specifies the intent of the CTS that each primary containment penetration flow path is treated independent of the other flow paths when applying the action requirements. This administrative clarification is consistent with ITS Section 1.3, "Completion Times," regarding separate Condition entry notes. Notes 3 and 4 to the ACTIONS of ITS 3.6.1.3 explicitly specify the intent of the CTS that in the event an inoperable (or leaking) PCIV (a) makes other systems inoperable, or (b) causes the overall containment leakage rate to exceed the specified acceptance criteria, then the TS action requirements for the affected systems or the primary containment must be followed. Adding these Notes is an administrative change because no new requirements or allowances result from it.

submittal USED A.4 & USED A.5

incorporated DISCUSSION IN

[A.4 ~~not used~~ ~~because it corresponds to~~ L.3 - addition of 1-hour allowance and ACTION ~~B of~~ ITS 3.6.1.3]

[A.5 ~~not used~~] significant in others, see insert A.5

(A.6) ACTION b of CTS 3/4.6.3 for reactor instrumentation excess flow check valves (EFCVs) and ACTION b of CTS 3/4.4.7 for MSIVs specify that the restriction on changing plant operating conditions (or MODES), given by CTS 3.0.4, does not apply in the event of an inoperable EFCV or MSIV. These exceptions to CTS 3.0.4 are allowed on the condition that the other applicable action requirements are met. These specific exceptions to this restriction are retained in the general language of ITS LCO 3.0.4. Changing the presentation of these exceptions to LCO 3.0.4 is purely administrative.

ACTION b of CTS 3/4.6.3 also contains a specific exception to CTS 3.0.3 in the event one or more EFCVs are inoperable. This exception is not necessary and is eliminated because ACTION b already contains a shutdown action requirement in the event the other action requirements for the inoperable EFCVs are not met. Eliminating a redundant requirement is a purely administrative change.

(A.7) CTS 3/4.4.7 for main steam isolation valves and CTS 3/4.6.1.8 for the drywell and suppression chamber purge system valves cease to exist as separate specifications, but the requirements they contain are presented in ITS 3.6.1.3 along with almost all the other PCIV requirements in the CTS. This rearrangement of CTS requirements is purely administrative.

(A.8) Note * to CTS 3.6.1.2.c identifies this LCO condition as an exemption to Appendix J of 10 CFR Part 50 regarding the minimum test pressure of 25.0 psig for leak testing a main steam isolation valve. This kind of detail is unnecessary in the TS and is omitted from the ITS in corresponding SR 3.6.1.3.11. Eliminating this information from the CTS does not alter the validity of the referenced exemption to Appendix J. ~~This exemption is adequately documented in~~ Thus this change is purely administrative.

(A.9) ACTION b of CTS 3.6.1.8 and CTS 4.6.1.8.1, specify leak testing requirements for purge valves with resilient material seals. These requirements are omitted from ITS 3.6.1.3 because the purge valves with

INSERT A.5 to subsection 3.6.a, LCO 3.6.1.3

CTS 3.6.3, ACTION a.1, CTS 3.4.7, ACTION a.1.a), and CTS 3.6.3, ACTION b.1, require operators to "restore the inoperable valve(s) to OPERABLE status" or "the inoperable valve is returned to OPERABLE status," respectively. The format of ITS 3.6.1.3 actions follow the format of the STS by not including restore to operable status options because it is always acceptable to exit a required action by restoring equipment to within the LCO limits. Not requiring this action is an editorial change to adopt the STS format and is acceptable.

resilient seats have been replaced with valves that do not have resilient material seals. Therefore, since these CTS requirements no longer apply to any of the purge valves at WNP-2, deleting these requirements is a purely administrative change.

DELETED IN REV B

~~(3.6.1.3 - L.10 - now CLB) CTS 4.6.1.2 requires performing primary containment leak rate testing in accordance with CTS 6.8.4.f, "Primary Containment Leak Rate Program." This includes testing to verify that CTS 3.6.1.2.c for MSIV leakage and CTS 3.6.1.2.d for hydrostatically tested isolation valve leakage are met (i.e., that the leak rates are within the specified limits). CTS 6.8.4.f requires testing as required by Appendix J, Option B, as modified by approved exemptions. Appendix J allows type B and C isolation valves to be tested on an interval no greater than 24 months with no extensions allowed. This Frequency is also intended to provide for scheduling these valves at each refueling outage.. These two test requirements are retained as ITS SR 3.6.1.3.11 and SR 3.6.1.3.12, respectively; the program requirement is retained as ITS 5.5.12. Specification 5.5.12 contains an explicit statement clarifying that the 25% surveillance interval extension allowed by ITS SR 3.0.2 does not apply to the PCIV leak testing under the program. Reformatting and clarifying CTS requirements are a purely administrative changes.~~

consistancy

3.6.1.4 Drywell Air Temperature

Z> There are no admin changes to CTS associated w/3.6.1.4

~~( ) The requirements in CTS 3/4.6.1.7 for drywell air temperature are presented in ITS 3.8.1.4 in conformance to the format of the STS.~~

3.6.1.5 RHR Drywell Spray

~~( ) The requirements of CTS 3/4.6.2.2 related to drywell spray are presented as ITS 3.6.1.5 to conform to the format of the STS. The requirements related to the suppression pool spray mode of the residual heat removal (RHR) system are relocated to the LCRM and are addressed in Section 3.6.e of Part III of this safety evaluation. (This relocation is an open item.)~~

(A.1) In the event both drywell spray loops are inoperable and both RHR subsystems are also inoperable, it may not be possible to cool down the unit to MODE 4 in the time specified by ACTION b of CTS 3/4.6.2.2. In recognition of this situation, Note * to ACTION b requires that reactor coolant temperature be maintained "as low as practical by use of alternate heat removal methods." It is not necessary to state this eventuality in the ITS. Corresponding ACTION C of ITS 3.6.1.5, to shut down to MODE 4, will remain applicable and must be completed regardless of the decay heat removal capability that is available. That is, the licensee is expected to reduce temperature as much as possible with the available decay heat removal capability. ~~Isn't this more restrictive because the CTS action requirement "allows" doing the best you can (no TS violation) but the ITS action removes this relief from a potential TS violation. Note, this could apply to any shutdown action concurrent with no RHR subsystem operable].~~

(A.2) CTS 4.6.2.2.a requires verifying that each manual, power-operated, or automatic valve in the flow path for the drywell spray mode of the RHR system that is not locked, sealed, or otherwise secured in position, is in its correct position. The intent of this surveillance is clarified in corresponding ITS SR 3.6.1.5.1 by adding "or can be aligned to the correct position." This clarification is consistent with the existing interpretation by the staff for systems that are manually actuated, such as the drywell spray mode of the RHR system. Clarifying the intent of an existing requirement is an administrative change.

3.6.1.6 Reactor Building-to-Suppression Chamber Vacuum Breakers

( ) The requirements of CTS 3/4.6.4.2 related to reactor building-to-suppression chamber vacuum breakers are presented in ITS 3.6.1.6 to conform to the format of the STS.

(A.1) The ACTIONS of ITS 3.6.1.6 are prefaced by a new Note that states "Separate Condition entry is allowed for each line." Because this change only clarifies the intent of the action requirements of CTS 3/4.6.4.2 and is consistent with ITS Section 1.3 regarding the use of such Notes, this change is administrative and acceptable.

Action b DOES cover 2 open - move to page 38.

(3.6.1.6 - M.1) In the event one of the two vacuum breakers in a line is open, ACTION b of CTS 3~~/4~~.6.4.2 requires verifying the other vacuum breaker in the same line is closed within 2 hours. ~~However, ACTION b does not cover the situation in which both vacuum breakers in a line are open; thus CTS 3.0.3 would require an immediate shutdown.~~ Corresponding ACTION B of ITS 3.6.1.3 allows 1 hour to close at least one vacuum breaker in the line before ACTION E requires a unit shutdown. ~~Because CTS 3.0.3 includes a 1-hour delay before the unit shutdown must commence, the ITS action requirement is equivalent to the CTS action requirement.~~ Thus, this change is ~~administrative~~ more restrictive and acceptable.

(A.2) CTS 4.6.4.2 to verify each vacuum breaker is closed is retained as ITS SR 3.6.1.6.1 with two additional Notes to clarify the intent of the CTS. A vacuum breaker is not required to be closed when (a) performing the functional test (SR 3.6.1.6.2) and the setpoint verification (SR 3.6.1.6.3) for the affected vacuum breaker, and (b) during vacuum breaker actuation. Clarifying the intent of a CTS surveillance is an administrative change.

3.6.1.7 Suppression Chamber-to-Drywell Vacuum Breakers

( ) The requirements of CTS 3/4.6.4.1 for the suppression chamber-to-drywell vacuum breakers are presented in ITS 3.6.1.7 to conform to the format of the STS.

LA.6

SEE LA.1 on pg 26

( ) There is a subtle difference in nomenclature between the ITS and the CTS. There are nine suppression chamber-to-drywell vacuum breaker lines, each with a pair of disks, either of which can isolate the line; however, both must open to perform the pressure equalization function. The CTS refer to each disk as

a vacuum breaker and state that each line contains a "vacuum breaker pair;" the term "disk" is not used. That is, each line contains two vacuum breakers. The ITS refers to each pair as a single vacuum breaker, and specifies action requirements relative to whether one or both disks are open, or closed and incapable of opening. This change is meant to conform to the nomenclature of the STS LCO, and relegates ITS differences with the STS to the ITS ACTIONS, where the WNP-2 design feature of double-disk vacuum breakers is explicitly accounted for. This change in nomenclature is administrative because it does not by itself change the current requirements.

(A.1) ITS LCO 3.6.1.7 clarifies corresponding CTS 3.6.4.1 by stating that all nine suppression chamber-to-drywell vacuum breakers (that is, all nine lines each containing a single two-disk vacuum breaker) must be closed "except when performing their intended function" (to open to relieve vacuum). A Note to convey a similar clarification is also added to CTS 4.6.4.1.a (verification that each vacuum breaker is closed) in corresponding ITS SR 3.6.1.7.1—vacuum breakers do not have to be closed when open for performing required surveillances (e.g., SR 3.6.1.7.2 and SR 3.6.1.7.3). This clarification of the intent of the CTS requirements is acceptable because the operability requirements for the vacuum breakers remain the same. Therefore, this change is administrative.

(A.2) In the event one or two of the nine suppression chamber-to-drywell vacuum-breaker lines are inoperable for opening (i.e., one or both disks in each vacuum breaker line inoperable for opening), ACTION a of CTS 3/4.6.4.1 requires verifying that both disks are closed in each affected vacuum breaker line ("both vacuum breakers of each pair") within 2 hours. This action requirement is eliminated because it corresponds to a condition that does not conflict with the LCO requirements of CTS 3.6.4.1. Even with two vacuum breakers inoperable for opening, the LCO is met; thus no corresponding action requirements need to be specified in the TS. Consistent with the CTS 3.6.4.1, ITS LCO 3.6.1.7 only requires 7 of the 9 vacuum breaker lines to be operable for opening, but also requires that all 9 be closed. The action requirement to verify the vacuum breaker lines are closed is unnecessary because the LCO requires that they be closed; if a vacuum breaker disk is discovered open, the vacuum breaker line is inoperable and the appropriate action requirements associated with the LCO must be performed (close the open vacuum breaker disk within 2 hours). Eliminating ACTION a is acceptable because it removes a duplication of the other LCO and action requirements of CTS 3/4.6.4.1 that are retained in ITS 3.6.1.7. Therefore, this change is administrative.

move from page 25

[A.3 and A.4 are addressed under less restrictive changes]

3.6.1.8 Main Steam Isolation Valve Leakage Control (MSLC) System

There were no admin changes . . . ~ ·

( ) The requirements of CTS 3/4.6.1.4 for the main steam isolation valve leakage control system are presented in ITS 3.6.1.8 to conform to the format of the STS.

3.6.2.1 Suppression Pool Average Temperature

( ) The requirements of CTS 3/4.6.2.1 for suppression pool average temperature are presented in ITS 3.6.2.1 to conform to the format of the STS.

(A.1) Although not explicitly stated in the LCO, the 90°F and 105°F limits on suppression pool average temperature (with and without testing that adds heat to the suppression pool) only apply when the power level of the reactor is > 1% rated thermal power (RTP). This is shown by current LCO 3.6.2.1.a.2.b which states that 110°F is the limit when ≤ 1% RTP. Thus, the ITS clarifies the LCO for these two temperature limits by specifying that they apply when reactor power is > 1% RTP (ITS LCOs 3.6.2.1.a and b). In addition, the associated action requirements are modified to only require power to be decreased to ≤ 1% RTP (ACTION B of ITS 3.6.2.1) in the event the temperature limits are not met. These changes are administrative because they only clarify the intent of the existing LCO and action requirements.

[A.2 is addressed under *3.6.1.1*] INSERT A.2, for consistency w/ other sections

~~Add to SR~~ SR to ACTION NOT DISCUSSED IN OTHER SECTIONS of SE

( ) The conditional performance requirements of the surveillance to verify the suppression pool average temperature within limits specified in CTS 4.6.2.1.b, except for the Frequency of "once per 5 minutes during testing which adds heat to the suppression chamber," are presented in the action requirements of ITS 3.6.2.1. No changes in the present requirements result from this alternative presentation. Thus this change is purely administrative.

3.6.2.2 Suppression Pool Water Level

( ) The requirements of CTS 3/4.6.2.1 and CTS 3/4.5.3 for suppression pool water level during unit operation in MODES 1, 2, and 3 are presented in ITS 3.6.2.2 to conform to the format of the STS.

[A.1 is addressed in section 3.5.a under 3.5.2] see insert A.1 for consistency with other sections

3.6.2.3 Residual Heat Removal (RHR) Suppression Pool Cooling

( ) The requirements of CTS 3/4.6.2.3 for the suppression pool cooling mode of RHR are presented in ITS 3.6.2.3 to conform to the format of the STS.

(A.1) In the event both suppression pool cooling loops are inoperable, it may not be possible to cool down the unit to MODE 4 in the time specified by ACTION b of CTS 3/~~4~~.6.2.3. In recognition of this situation, Note * to ACTION b requires that reactor coolant temperature be maintained "as low as practical by use of alternate heat removal methods." It is not necessary to state this eventuality in the ITS. Corresponding ACTION B of ITS 3.6.2.3, to shut down to MODE 4, will remain applicable and must be completed regardless of the decay heat removal capability that is available. That is, the licensee is expected to reduce temperature as much as possible with the available decay

INSERT A.2 to subsection 3.6.a, LCO 3.6.2.1

CTS 3.6.2.1.b, ACTION e, and 4.6.2.1.d, relating to the drywell-to-suppression chamber bypass leakage limit, are being moved to ITS 3.6.1.1 in accordance with the format of the STS. Evaluations of any technical changes are addressed in the ITS 3.6.1.1 evaluation. This is an acceptable administrative change.

INSERT A.1 to subsection 3.6.a, LCO 3.6.2.2

CTS 3.5.3.b, ACTION b, and 4.5.3.2, relating to the suppression pool level requirements while in MODES 4 and 5, are being moved to ITS 3.5.2 in accordance with the format of the STS. Evaluations of any technical changes are addressed in the ITS 3.5.2 evaluation. This is an acceptable administrative change.

heat removal capability. Isn't this more restrictive because the CTS action requirement "allows" doing the best you can (no TS violation) but the ITS action removes this relief from a potential TS violation. Note, this could apply to any shutdown action concurrent with no RHR subsystem operable].

(A.2) CTS 4.6.2.3.a requires verifying that each manual, power-operated, or automatic valve in the flow path for the suppression pool cooling mode of the RHR system that is not locked, sealed, or otherwise secured in position, is in its correct position. The intent of this surveillance is clarified in corresponding ITS SR 3.6.2.3.1 by adding "or can be aligned to the correct position." This clarification is consistent with the existing interpretation by the staff for systems that are manually actuated, such as the suppression pool cooling mode of the RHR system. Clarifying the intent of an existing requirement is an administrative change.

3.6.3.1 Primary Containment Hydrogen Recombiners

( ) The requirements of CTS 3/4.6.6.1 for the drywell and suppression chamber hydrogen recombiner system are presented in ITS 3.6.3.1 to conform to the format of the STS.

(A.1) CTS 4.6.6.1.c requires demonstrating the hydrogen recombiner system is operable by measuring the system leakage rate (a) as part of the integrated leakage rate test (ILRT), or (b) by measuring the leakage rate of the system outside of the containment isolation valves at P_a and including the measured leakage as part of the leakage determined in accordance with the ILRT. This surveillance is deleted because it is duplicative of testing already required by Appendix J to 10 CFR Part 50 and ITS SR 3.6.1.1.1. Omitting this duplicative surveillance from corresponding ITS 3.6.3.1 is thus an administrative change.

3.6.3.2 Primary Containment Atmosphere Mixing System

There are no admin .....

( ) ITS 3.6.3.2 is a new specification that is added to conform to the format and content of the STS.

3.6.3.3 Primary Containment Oxygen Concentration

( ) The requirements of CTS 3/4.6.6.2 for the drywell and suppression chamber oxygen concentration are presented in ITS 3.6.3.3 to conform to the format of the STS.

[A.1 is discussed under *General*.]

(A.2) The Applicability of CTS 3/4.6.6.2 is—

MODE 1 during the time period (a) within 24 hours after thermal power is > 15% of RTP following startup, to (b) within 24 hours

prior to reducing thermal power to < 15% of RTP before a scheduled unit shutdown.

The ACTION of CTS 3/4.6.6.2 allows 24 hours to restore oxygen concentration to within the limit. Otherwise, a unit shutdown to MODE 2 is required. These action requirements are not consistent with the CTS Applicability because the LCO does not apply below 15% RTP. Thus, corresponding ACTION B of ITS 3.6.3.3 only requires reducing thermal power to ≤ 15% of RTP. Because the intent of the CTS ACTION is to only require exiting the Applicability of the LCO, this change is administrative and acceptable.

(A.3) CTS 4.6.6.2 requires verifying oxygen concentration within limits "within 24 hours after THERMAL POWER is greater than 15% of RATED THERMAL POWER," in addition to every 7 days. Corresponding ITS SR 3.6.3.3.1 only specifies the 7-day Frequency because the first Frequency is redundant to CTS 4.0.4 (corresponding to ITS SR 3.0.4) which requires surveillances to be performed prior to entering the Applicability of an LCO. Since this specification is not applicable until 24 hours after thermal power is > 15% of RTP following startup, performance of the surveillance as currently required is ensured. Therefore, deleting this redundant Frequency is a purely administrative change.

3.6.4.1 Secondary Containment

( ) The requirements of CTS 3/4.6.6.5 for the secondary containment are presented in ITS 3.6.4.1 to conform to the format of the STS.

(A.1) The requirement of CTS 3.6.5.1 to maintain secondary containment integrity is replaced by the requirement of ITS 3.6.4.1 for secondary containment to be operable. The ITS words better convey the meaning intended by the CTS definition "secondary containment integrity" (which is no longer used). This administrative change is acceptable because ITS 3.6.4.1, 3.6.4.2, and 3.6.4.3 retain all the requirements encompassed by the CTS definition and by the other CTS related to secondary containment systems.

(A.2) The requirement of CTS 4.6.5.1.b.2 to verify that one door in each access opening is closed is changed in corresponding ITS SR 3.6.4.1.3 to require each inner door or each outer door to be closed. The WNP-2 design includes more than two doors on some of the secondary containment access openings. The current WNP-2 interpretation of this requirement is that all inner doors or all outer doors must be closed, whenever an access opening has more than two doors. This change is a clarification of the CTS requirement and is consistent with plant practice. Thus it is purely administrative.

[A.3 is addressed under *3.6.4.2*] insert A.3 for consistancy with other sections.

INSERT A.3 to subsection 3.6.a, LCO 3.6.4.1

CTS 4.6.5.1.b.3, relating to the position of secondary containment isolation valves, is being moved to ITS 3.6.4.2 in accordance with the format of the STS. Evaluations of any technical changes are addressed in the ITS 3.6.4.2 evaluation. This is an acceptable administrative change.

3.6.4.2 Secondary Containment Isolation Valves

( ) The requirements of CTS 3/4.6.5.1 and 3/4.6.5.2 for the secondary containment ventilation system automatic isolation valves are presented in ITS 3.6.4.2 to conform to the format of the STS.

This change is CALLED 3.6.4.2 L.14 L.6 (page 34, 35)

(3.6.4.1 - A.3) CTS 4.6.5.1.b.3 requires demonstrating secondary containment integrity (operability) at least once per 31 days by verifying that all secondary penetrations not capable of being closed by operable secondary containment automatic isolation dampers/valves and required to be closed during accident conditions are closed by valves, blind flanges, or deactivated automatic dampers/valves secured in position. This surveillance is presented as Required Action A.2 and SR 3.6.4.2.1 of ITS 3.6.4.2. Required Action A.2 for the condition of "one or more penetration flow paths with one secondary containment isolation valve (SCIV) inoperable," requires once per 31 days verifying the affected flow path is isolated in the manner currently specified. ITS SR 3.6.4.2.1 requires verifying every 31 days that "each secondary containment isolation manual valve and blind flange that is required to be closed during accident conditions is closed." Thus, the CTS requirements are more clearly presented in the ITS, but have not changed. Therefore, this change is administrative. - CHANGES were MADE, Less restrictive.

(A.1) Note 2 to the ACTIONS of ITS 3.6.4.2 states that separate Condition entry is allowed for each penetration flow path. This is consistent with the intent of the action requirements of CTS 3/4.6.5.2 for inoperable SCIVs. It is also consistent with the guidance in ITS Section 1.3, "Completion Times," for the use of such ACTION Notes. This clarification of the intent of the CTS action requirements is thus purely administrative. all A.1

A.2 NOT DISCUSSED see 3.6.1.3 A.4, comment, page 6)

(~~A.1~~ & A.4) Note 3 to the ACTIONS of ITS 3.6.4.2 requires entering "applicable Conditions and Required Actions for systems made inoperable by SCIVs." This Note simply clarifies paragraph d of the ACTIONS of CTS 3/4.6.5.2. Paragraph d waves the mode entry restrictions of CTS 3.0.4 for an isolated inoperable SCIV provided the associated system, if applicable, is declared inoperable and the appropriate action requirements for that system are performed. This exception to CTS 3.0.4 is presented as a general exception in ITS LCO 3.0.4. Clarifying the existing requirements in the STS format is a purely administrative change.

A.4 is only applicable to 3.0.4 exception.

[A.3 is not addressed because it is insignificant] significant in other sections, see INSERT A.3

A.4

3.6.4.3 Standby Gas Treatment System

( ) The requirements of CTS 3/4.6.5.3 for the standby gas treatment (SGT) system are presented in ITS 3.3.6.2, 3.6.4.3 and 5.5.7 to conform to the format of the STS.

(A.1) ACTION D of ITS 3.4.6.3 is a new action requirement that directs entry into LCO 3.0.3 if both SGT subsystems are inoperable in MODE 1, 2, or 3. This clarifies the intent of the action requirements of CTS 3/4.6.5.3 that CTS

INSERT A.3 to subsection 3.6.a, LCO 3.6.4.2

CTS 3.6.5.2, ACTION a, requires operators to "restore the inoperable valves to OPERABLE status." The format of ITS 3.6.4.2 actions follow the format of the STS by not including restore to operable status options because it is always acceptable to exit a required action by restoring equipment to within the LCO limits. Not requiring this action is an editorial change to adopt the STS format and is acceptable.

3.0.3 (ITS LCO 3.0.3) must be entered with both SGT subsystems inoperable if the unit is in MODE 1, 2, or 3. It makes no difference whether or not irradiated fuel is being handled in the secondary containment. This change removes the potential for confusion regarding the required action in the event both SGT subsystems are inoperable when operating in MODE 1, 2, or 3 and simultaneously handling irradiated fuel assemblies in the secondary containment. Since ACTION D is equivalent to the CTS action requirements, this change is purely administrative.

(A.2) CTS 4.6.5.3.a, the SGT system 10-hour duration flow test, specifies the heater status during the test as operable, while corresponding ITS SR 3.6.4.3.1 requires the heaters to be operating. This terminology change clarifies that this surveillance must be performed with the heaters operating (i.e., cycling on and off as needed to maintain proper temperature). Clarifying the intent of the current requirement is a purely administrative change.

(A.3) The details of the following SGT filter testing requirements are presented in ITS 5.5.7, "Ventilation Filter Testing Program (VFTP)" to conform to the format of the STS:

4.6.5.3 b
4.6.5.3.c
4.6.5.3.d.1
4.6.5.3.d.4
4.6.5.3.e
4.6.5.3.f

See Section 5.0 of Part III of this safety evaluation regarding any changes to these SGT filter test details. The CTS requirement to perform this testing is presented in ITS SR 3.6.4.3.2. This surveillance makes clear that SGT system operability depends upon successful completion of the VFTP tests. This change in presentation of these CTS surveillance requirements is purely administrative.

(A.4) The technical content of CTS SR 4.6.5.3.d.2, to verify that the SGT subsystem filter train starts and isolation dampers open on a test signal, is divided into two surveillances, in conformance with the format of the STS.
SR 3.3.6.2.4
ITS SR 3.3.6.2.??? tests the instrumentation ~~and control~~ aspects of the SGT subsystem actuation, which is the majority of the current surveillance. ITS SR 3.6.4.3.3, the SGT subsystem functional test, ensures the SGT system will start on a simulated or actual initiation signal. Thus, the scopes of these two surveillances overlap which will ensure the entire system is properly tested. This change is purely administrative because the new presentation does not change the CTS requirements.

Conclusion

The preceding changes result in limits that are unchanged from the current requirements cited. In some cases, these changes result in a clearer

presentation of the intent of current requirements. Accordingly, these changes are purely administrative. Therefore, they are acceptable.

b. Less Restrictive Requirements

The licensee, in electing to implement the specifications of STS Section 3.6, "Containment Systems," proposed a number of less restrictive requirements than are allowed by CTS Section 3/4.6. These requirements are the following:

3.6.1.1 Primary Containment

combination of 2 similar type changes not done in other sections - see INSERT A LA.1

[LA.1 is addressed under *3.6.1.3*]

(LD.1) CTS 4.6.2.1.d~~X~~ specifies performing a drywell-to-suppression chamber bypass leak test on an 18-month interval, or a 9-month interval if the test fails two times in a row. In practice, WNP-2 performs the 18-month interval surveillances annually while the plant is shut down. This results in frequent testing, with a resultant increase in cost and personnel exposure, with no comparable increase in reliability or safety. In corresponding ITS SR 3.6.1.1.2, the surveillance interval is increased to 24 months, or a 12 month interval if the test fails two times in a row. This change limits the amount of surveillance testing during each maintenance and refueling outage. This change is acceptable for the reasons given in the section entitled "Surveillance Interval Extension from 18 to 24 Months" in the general discussion of less restrictive requirements at the beginning of Part III of this safety evaluation.

3.6.1.2 Primary Containment Air Lock

(LA.1) As a condition of operability for the primary containment air lock, CTS 3.6.1.3.b requires that both doors be closed except when the air lock is being used for normal transit entry and exit through the containment. Explicitly specifying this condition in the LCO is unnecessary because the air lock interlock mechanism prevents both doors being opened at the same time. The operability of this interlock ensures one air lock door shall be closed "when the air lock is being used for normal transit entry and exit through the containment." An operable interlock (in accordance with ITS SR 3.6.1.2.2) is explicitly required for air lock OPERABILITY. The requirement for both doors to normally remain closed is moved to the Bases for ITS 3.6.1.2. Removing this air lock operability condition from the TS is acceptable because with only one door closed, the safety design of the containment and the air lock still provide a sufficiently leak tight barrier for postulated events. Changes to the Bases will be adequately controlled by the provisions of the ITS 5.5.10, "Technical Specifications (TS) Bases Control Program."

INSERT LA.1 to subsection 3.6.b, LCO 3.6.1.1

Table 3.6.3-1 identified in CTS 3.6.1.2.b lists all primary containment penetrations and isolation valves. This list is design information that is not needed in the TS. Thus it is removed from the TS consistent with Generic Letter 91-08 and placed in the Licensee Controlled Specifications Manual (LCSM). Moving the list of penetrations and valves to a plant controlled document is acceptable because ITS 3.6.1.1 will continue to ensure that PCIVs meet the leak testing requirements. This change corresponds to change type 1 as defined in the general discussion of less restrictive requirements at the beginning of Part III of this safety evaluation.

operable one

(L.1) Note 1 to the ACTIONS of ITS 3.6.1.2 is a new allowance for entry through a closed or locked air lock door for the purpose of making repairs. This allowance applies even if ~~both~~ doors and the interlock are inoperable. Because this provision could allow compromising the primary containment boundary for brief time periods[1], its use for making air lock repairs is conditioned upon implementing strict administrative controls. As detailed in the Bases, these controls consist of a dedicated ~~(i.e., not involved with any repair or other maintenance effort)~~ individual assigned to ensure: (a) the door is opened only for the period of time required to gain entry into or exit from the air lock, and (b) any operable door is re-locked prior to the departure of the dedicated individual.

not in BASES

This allowance is also acceptable for the following reasons:

- Use of this allowance is restricted to the purpose of making repairs to an inoperable door or air lock. Repairs are directed towards reestablishing two operable closed doors in the air lock, which is clearly the most desirable plant condition for the air lock. The CTS action requirements, the same as the ITS action requirements, allow operation for an unlimited period of time with only one operable door locked closed. By not allowing access to make repairs, however, the CTS may prevent restoring both doors to operable status until the unit shuts down. Operation with both doors operable is a safer condition than operation with a single door operable.

- The overall air lock leakage test must be performed every 6 months. This could eventually result in a plant shutdown from the inability to properly perform this test due to the inability to affect repairs to the inoperable door. Not having to shut down the unit to make repairs avoids the risk of a transient that could challenge safety systems.

- The probability of an event that could pressurize the primary containment during the short time in which the containment boundary is compromised is low.

For future clarity - please move to page 16

as discussed in L1

~~[include~~ L.3 ~~with the discussion for L.1 as follows:]~~ In addition to the above general allowance for entry and exit through the air lock to make repairs to air lock components, Note 2 to ACTION A (one air lock door inoperable) of ITS 3.6.1.2 allows entry and exit during a 7 day period for reasons other than the repair of the air lock. This new allowance may be needed for other maintenance and inspections necessary to support continued unit operation, and

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Only footnote in SER

why here?

[1] In the event of one inoperable door, two cases are possible: (a) If the outer door is inoperable, then it may be easily accessed for repair because compromising the primary containment boundary is not a concern. If the inner door is the one that is inoperable, however, then entry through the operable outer door would be necessary. Doing so would compromise the primary containment boundary for the short time it takes to go through the outer door.

L.1

is acceptable for the same reasons given above in for the allowance to conduct repairs.

"ONCE PER SHIFT" NOT EQUAL TO DEFINED SR FREQUENCY - 12hr

(L.2) Once per shift ~~(every 12 hours at WNP-2)~~, if the shield door is open, ACTIONS a.2 and b.2 of CTS 3/4.6.1.3 require verifying that at least one operable air lock door is locked closed. This verification is also required prior to each closing of the shield door. Corresponding Required Actions B.3 and A.3 of ITS 3.6.1.2 only require verification of a locked closed door every 31 days, but do not depend on the position of the shield door.

The CTS action requirements depend on the position of the shield door because it affords the only access to the air lock. If closed, it precludes access to the air lock. However, with the shield door open, access to the air lock door locking device will still be administratively controlled in accordance with plant procedures currently in place for controlling access to and through the air lock. These administrative controls have proven adequate to ensure the locked door will not be inadvertently opened. In addition, relaxing the frequency of the periodic verification from shiftily to monthly is appropriate because it is consistent with other CTS action requirements that require verification of primary containment penetration isolation (e.g., PCIVs). Therefore, this change is acceptable.

3.6.1.2.2

(L.4) The 184-day Frequency specified by CTS 4.6.1.3.a.1 for the test of the containment airlock interlock mechanism is relaxed to a 24-month Frequency in ITS SR ~~3.6.2.2.~~ Typically, the interlock is installed after each refueling outage, verified operable with this surveillance and is not manipulated until the next refueling outage. Further, if the need for maintenance should arise when the interlock is required, the performance of the interlock surveillance would be required prior to declaring the interlock to be operable again. In addition, when passing through an air lock, procedures call for first verifying that one door is completely shut and that the door seals are pressurized before attempting to open the other door. Therefore, the air lock is not challenged except during actual testing of the air lock. The staff reviewed operating experience with air lock interlocks from the early 1970's to 1995 and found that very few events have occurred in which an inoperable air lock interlock was found as a result of this interlock mechanism surveillance. The mechanism appears to be very reliable and the events which have occurred in which both air locks have been open simultaneously during a mode of operation that required containment integrity were the result of human error, not failure of the interlock mechanism. Therefore, the staff finds the 24-month Frequency for this surveillance acceptable.

(L.5) CTS 4.6.1.3.a.2 requires demonstrating the operability of the primary containment air lock interlock "following maintenance that could affect the interlock mechanism." This explicit post maintenance testing requirement is eliminated because it is inherent to restoring a component to operable status, as addressed in paragraph (5) under the general discussion of less restrictive requirements at the beginning of Part III of this safety evaluation.

3.6.1.3 Primary Containment Isolation Valves and references to it are

(LA.1 under ~~3.6.1.1 and 3.6.1.3~~) Table 3.6.~~2~~3-1 of CTS 3.6.~~1.2.b~~3 lists all primary containment penetrations and isolation valves. This list is design information that is not needed in the TS. Thus it ~~is~~ removed from the TS consistent with Generic Letter 91-08 and placed in the Licensee Controlled Specifications Manual (LCSM). Moving the list of penetrations and valves to a plant controlled document is acceptable because ITS 3.6.1.3 will continue to ensure that PCIVs meet the leak testing requirements. This change corresponds to change type 1 as defined in the general discussion of less restrictive requirements at the beginning of Part III of this safety evaluation.

3=SR
6=PM

(LA.2) The requirements in CTS 4.6.3.5.b on the replacement charges for explosive valves are maintenance details that do not need to be in the TS to ensure the operability of the traversing in-core probe (TIP) system explosive isolation valves. The requirements of ITS 3.6.1.3, SR 3.6.1.3.4, and SR 3.6.1.3.~~10~~9 are adequate to ensure the operability of these valves. Thus, these details are moved to the Bases for ITS 3.6.1.3. This change corresponds to change type 6 as defined in the general discussion of less restrictive requirements at the beginning of Part III of this safety evaluation.

(LA.3) Note ** specifies an exception to CTS 4.6.1.1.b, the monthly "~~hands-on~~" surveillance to verify the proper isolation of primary containment penetrations that cannot be automatically closed as required. This note excepts valves, blind flanges, and deactivated automatic valves which are within the primary containment or other areas administratively controlled to prohibit access for reasons of personnel safety. The note describes in detail what constitutes proper isolation: each valve or flange shall be "locked, sealed, or otherwise secured in the closed position (1½ inch and smaller valves connected to vents, drains or test connections must be closed but need not be sealed)." These procedural details do not need to be in TS to ensure proper isolation of the affected penetration flow paths, and are eliminated. This change corresponds to change type 3 as defined in the general discussion of less restrictive requirements at the beginning of Part III of this safety evaluation.

(LA.4) The combined leakage rate limit and the test pressure of the PCIVs in hydrostatically tested lines, specified in CTS 3.6.1.2.d and associated ACTION d, are moved to the Bases for corresponding ITS SR 3.6.1.3.12. These limits do not need to be stated in the TS because leakage from these valves is (a) not included in the overall type A leakage limits, and (b) not assumed in any design basis calculations relating to offsite dose releases. The requirements of SR 3.6.1.3.12 to "verify combined leakage rate through hydrostatically tested lines that penetrate the primary containment is within limits in accordance with the Primary Containment Leakage Rate Testing Program" are adequate to ensure the leakage tests are conducted at the proper pressure and the leakage rates are within the limit. Therefore, moving these limits to the Bases is acceptable.

(LD.1) The Frequencies for performing the following PCIV surveillances are relaxed from 18 months to 24 months to accommodate a change to the WNP-2 maintenance cycle from 12 months to 24 months.

CTS	ITS	Description
4.6.3.2	SR 3.6.1.3.7	Verification that each PCIV closes on a containment isolation actuation signal
4.6.3.4	SR 3.6.1.3.8	Demonstration that each excess flow check valve (EFCV) closes in the event of an instrument line break condition
4.6.3.5.b	SR 3.6.1.3.9	Test of explosive squib from each shear isolation valve of the traversing incore probe (TIP) system

These changes are acceptable for the reasons given in the section entitled "Surveillance Interval Extension from 18 to 24 Months" in the general discussion of less restrictive requirements at the beginning of Part III of this safety evaluation.

(L.1) In the event a drywell or suppression chamber purge supply or exhaust butterfly isolation valve is open for other than inerting, deinerting, or pressure control, ACTION a of CTS 3/4.6.1.8 requires closing the valve within 1 hour. Previously, these purge valves were not qualified to close automatically under accident conditions. Thus the 1-hour time allowed to close an open purge valve was appropriate. However, the licensee stated in its submittal that these valves have subsequently been qualified. So, 4 hours is now appropriate. Accordingly, corresponding ACTION A of ITS 3.6.1.3 specifies closing the open purge valve within 4 hours. This change is acceptable because these valves are fully qualified to close under accident conditions and because the 4-hour Completion Time is consistent with the time allowed to close other inoperable PCIVs, except MSIVs. ~~Note that the 8-hour Completion Time in ACTION a.1 of CTS 3/4.4.7 for closing an MSIV is unchanged.~~

No DISCUSSION THAT THIS CHANGE TO 8 hours resolves the 4 hr/8hr conflict between 2 CTS.

SEE INSERT L.1

(L.11) ~~[out of sequence because this discussion is related to L.1]~~ CTS 3.6.1.8 allows opening drywell or suppression chamber purge supply or exhaust butterfly isolation valves during MODES 1, 2, and 3 only for inerting, deinerting, and pressure control of primary containment. In addition, it limits purging through the standby gas treatment (SGT) system to ≤ 90 hours per 365 days; CTS 4.6.1.8.2 requires verifying this limit has not been exceeded prior to purging through the SGT system. This time limit is based on past engineering judgement and early plant operating experience, ~~not on any~~ the NOTE analytical requirement. The corresponding requirement in ~~Note 2~~ the Note of ITS SR 3.6.1.3.1 contains a revised limit for opening the purge valves. In addition to inerting, deinerting, and pressure control, ~~Note 2~~ the Note allows the valves to be open for ALARA or air quality considerations for personnel entry, and for surveillances that require the valves to be open. Thus, use of the system

For future clarity, please move to pg 22

INSERT L.1 to subsection 3.6.b, LCO 3.6.1.3

In addition, the CTS repeats most of the requirements, provisions, and Actions for MSIVs in CTS 3/4.4.7; however, the restoration time for MSIVs is 8 hours in CTS 3.4.7, ACTION a, while only 4 hours in CTS 3.6.3, ACTION a. The ITS incorporates the MSIV requirements and associated restoration times into PCIV ITS 3.6.1.3, and resolves the conflict by adopting the 8 hour allowance of CTS 3.4.7.

will still continue to be minimized and limited to safety related reasons. In its submittal, the licensee stated that WNP-2 operating history indicates that these valves are only opened for the specified reasons and for cumulative time periods that are generally less than the currently allowed cumulative times. Therefore, this change is acceptable because (a) the CTS time limit has never been and is never expected to be exceeded—and thus is a superfluous restriction having no practical effect upon unit operation, and (2) if called upon to close, these valves, which are fully qualified to close in the required time under accident conditions, are expected to close.

(L.2) In the event a PCIV is discovered to be inoperable, ACTIONS a.2 and a.3 of CTS 3/4.6.3 require isolating the affected penetration "by use of at least one deactivated automatic valve secured in the isolated position," or "by use of at least one closed manual valve or blind flange" within 4 hours. Similarly, in the event of an inoperable MSIV, ACTION a.1.b) of CTS 3/4.4.7 requires isolating the affected main steam line "by use of a deactivated MSIV in the closed position" within 8 hours. In addition to these methods for isolating a penetration flow path or a main steam line, corresponding Required Actions A.1 and B.1 of ITS 3.6.1.3 also allow isolation of the penetration using a check valve with flow secured. Many penetrations are designed with check valves as acceptable isolation barriers. With forward flow in the line secured, a check valve is essentially equivalent to a closed manual valve. For those penetrations designed with check valves as acceptable isolation devices, this proposed change provides an equivalent level of safety. For penetrations not designed with check valves for isolation, the proposed change does not affect the requirements to isolate with a closed deactivated automatic valve or closed manual valve. This change is acceptable because check valves designed to remain closed when forward flow is secured are acceptable isolation devices and thus may be used to satisfy the isolation action requirement.

(L.3) In the event both PCIVs in a penetration or both MSIVs in a main steam line are inoperable, ACTION a of CTS 3/4.6.3 and ACTION a.2 of CTS 3/4.4.7 require an immediate unit shutdown because the action requirement to maintain a PCIV or MSIV operable in the affected line could not be met. Corresponding ACTION B of ITS 3.6.1.3 directly addresses these conditions and allows an hour to restore one of the valves to operable status before requiring a unit shutdown per ACTION F. This additional hour is acceptable because (a) the likelihood of an event requiring automatic containment isolation to occur during the additional time is not significant, (b) it is consistent with the existing time allowed for other conditions that render the primary containment inoperable, and (c) it makes the ITS action requirements for the various containment boundary degradations consistent.

(L.4) In the event a reactor instrumentation line excess flow check valve (EFCV) is discovered to be inoperable, ACTION b of CTS 3/4.6.3 allows 4 hours to isolate the instrument line. Corresponding Required Action C.1 of ITS 3.6.1.3 (second Completion Time) extends this time to 12 hours. The instrument lines contain orifices and are approximately 1 inch in diameter. Thus, the limiting event would still be within the bounds of the safety

DOES NOT ASSUME EFCV ISOLATES

analysis ~~which assumes ...~~. Therefore, this additional time is acceptable because (a) the instrument line design ensures that a break in the line remains bounded by the safety analysis, (b) the likelihood of an instrument line break during this time is not significant, (c) it may avoid a forced unit shutdown with the attendant potential of a unit transient that could challenge safety systems.

LCO3.0.5 for test only

(L.5) ~~Isn't this change just administrative? Also, isn't it only a specific application of LCO 3.0.5?~~ In the event of an inoperable PCIV, Note * to ACTIONS a.2 and a.3 of CTS 3~~/4~~.6.3 (to isolate the affected penetration) specifies that "valves closed to satisfy these requirements may be reopened on an intermittent basis under administrative control." This provision is retained in ACTIONS Note 1 of ITS 3.6.1.3, and in Note 2 of SR 3.6.1.3.2, the 31-day verification of isolations outside primary containment, and ~~in Note 2~~ added of SR 3.6.1.3.3, the verification of isolations inside primary containment prior to unit entry into MODE 2 or 3. The note in each SR means the surveillances are considered satisfied with the affected penetration unisolated provided the PCIVs are open under administrative controls per ACTIONS Note 1. This allowance is less restrictive than the allowance given in the CTS Note * because it ~~potentially~~ applies to all isolated penetration flow paths, not only the flow paths addressed by CTS ACTIONS a.2 and a.3, and surveillances. Surveillances, repairs, and routine evolutions may require opening closed primary containment penetrations on an intermittent basis. Thus broadening this allowance is reasonable. It is acceptable because the specified administrative controls, which are described in detail in the Bases, will ensure that the penetration will be quickly isolated by a dedicated operator were an event requiring the primary containment function to occur.

Different from same type (see L.5 of 3.6.1.2 - page 17)

(L.6) CTS 4.3.6.1 specifies post-maintenance testing for PCIVs. Such testing requirements are unnecessary in the TS because the definition of operability ensures that appropriate testing is accomplished following maintenance on TS-required components. Thus this surveillance is eliminated. This change corresponds to change type 5 as defined in the general discussion of less restrictive requirements at the beginning of Part III of this safety evaluation.

(L.7 & L.8) CTS 4.6.3.2, functional testing of PCIVs, is retained as ITS SR 3.6.1.3.7 with two less restrictive changes:

(a) The restriction to only perform PCIV functional testing during MODE 4 or MODE 5 is eliminated because some PCIVs may be tested in other than MODE 4 or 5 without jeopardizing safe operation of the unit. Controlling unit conditions to perform a test is a matter for surveillance procedures and schedules, not the TS. As addressed in Generic Letter 91-04, removing this restriction from TS is consistent with most other surveillances that do not dictate plant conditions for their performance. Eliminating this procedural restriction for testing PCIVs is acceptable because such details are unnecessary in the TS to ensure the testing is accomplished safely. This ~~change corresponds to less restrictive change type 3 as defined in the general~~

not moved ~~to Bases~~ - per type 3. - THIS IS DELETED.

~~discussion of less restrictive requirements~~ at the ~~beginning of Part III of this safety~~ evaluation.

(b) An actual containment isolation signal in addition to a test signal may be used to satisfy the testing of the automatic closing of each PCIV. The operability of a PCIV is adequately demonstrated in either case since the PCIV itself cannot discriminate between "actual" or "test" signals. Therefore, this additional flexibility in meeting PCIV functional testing requirements is acceptable.

(L.9) CTS 4.6.3.4 requires each excess flow check valve (EFCV) to check flow at > 10 psid differential pressure for hydraulic service valves and > 15 psid differential pressure for pneumatic service valves. The requirement to check flow along with the differential pressure limit is eliminated. Corresponding ITS SR 3.6.1.3.8 only requires the EFCVs to close on an actual or simulated instrument line break signal.

The requirements for the EFCVs are contained in 10 CFR 50 Appendix A, GDCs 55 and 56, and Regulatory Guide 1.11. These requirements state that there should be a high degree of assurance that the EFCVs will close or be closed if the instrument line outside containment is lost during normal reactor operation, or under accident conditions. The current differential pressure limits for the EFCVs are the manufacturers design capabilities. During normal operation, the hydraulic service EFCVs would experience full reactor pressure of 1035 psig. During the conditions of a design basis loss of coolant accident, primary containment pressure of up to 35 psig would be available to close the pneumatic service EFCVs. Thus, deleting the design values is appropriate because they are well bounded by the differential pressures the EFCVs are expected to see during operational and accident conditions. In place of the design values, the ITS Bases for SR ~~3.6.3.8~~ 3.6.1.3.8 state the actual test conditions for the two types of EFCVs (simulated reactor pressure ~~from 85 psig to 110 psig~~ for the hydraulic and simulated containment pressure of 35 psig for the pneumatic). ~~[Licensee should verify the proceeding sentence.]~~

The requirement to "check flow" is also deleted. The instrument line break analysis in the WNP-2 FSAR assumes that (a) both the EFCV and the manual block valve fail to close, and (b) the accident is terminated by cooling down the unit. Since the actual leakage is not an assumption of the accident analysis (the leakage is assumed to be the maximum allowed through the broken line), the leakage limit (to check flow) is not necessary to ensure the validity of the accident analysis. Therefore, deleting the check-flow requirement is acceptable.

DELETED IN Rev B. [L.10 ~~addressed under *administrative changes* even though it was deleted from Rev B because of Option B — Amendment No. 144]~~ not used

INSERT L.11 from page 19

3.6.1.4 Drywell Air Temperature

(LA.1) Details of the methods for performing the drywell average air temperature surveillance, given in CTS 4.6.1.7, are moved to the Bases for corresponding ITS SR 3.6.1.4.1. These details are not necessary to ensure that the drywell average air temperature is maintained within limits. The requirements of Specification 3.6.1.4 and SR 3.6.1.4.1 are adequate to ensure the drywell average air temperature is maintained within the limits. This change corresponds to change type 3 as defined in the general discussion of less restrictive requirements at the beginning of Part III of this safety evaluation.

3.6.1.5 RHR Drywell Spray

(LA.1) CTS 3.6.2.2 describes some of the conditions that must be satisfied for establishing the operability of the drywell spray mode of the RHR system. These conditions (that the drywell spray function shall have two "independent" loops, each with pumps and flow path) are moved to the Bases for ITS 3.6.1.5. This change is acceptable because the ITS definition of operability is adequate to ensure that all conditions necessary for establishing the operability of a system are met. This change corresponds to change type 7 as defined in the general discussion of less restrictive requirements at the beginning of Part III of this safety evaluation.

(LA.2) CTS 4.6.2.2.c contains procedural details for verifying that each drywell spray nozzel is unobstructed ("by performance of an air or smoke flow test"). Such details are not needed to ensure that the surveillance is performed properly, and are thus moved to the Bases for corresponding ITS SR 3.6.1.5.2. This change corresponds to change type 3 as defined in the general discussion of less restrictive requirements at the beginning of Part III of this safety evaluation.

(L.1) The surveillance interval for the drywell spray nozzle obstruction surveillance (CTS 4.6.2.2.c) is extended from 5 years to 10 years in corresponding ITS SR 3.6.1.5.2. This change is acceptable because (a) the nozzles are passive components, (b) industry operating experience shows few, if any, occurrences of nozzles becoming obstructed, and (c) obstruction of the RHR drywell spray nozzles is not a precursor to any accident.

3.6.1.6 Reactor Building-to-Suppression Chamber Vacuum Breakers

(LA.1) CTS 3.6.4.2 states one of the conditions that must be met for the operability of the reactor building-to-suppression chamber vacuum breakers—they must be closed. This condition is moved to the Bases for ITS 3.6.1.6. The requirement that the vacuum breakers be closed is explicitly required by ITS SR 3.6.1.6.1 and does not need repeating in the LCO statement. This change is acceptable because the ITS definition of operability is adequate to ensure that all conditions necessary for establishing the operability of a system are met. This change corresponds to change type 7 as defined in the general discussion of less restrictive requirements at the beginning of Part III of this safety evaluation.

4.6.4.2.b.2.b)

(LA.2) CTS ~~4.6.4.2.2.b~~ requires a "visual inspection" of each reactor building-to-suppression chamber vacuum breaker every 18 months. This explicit preventive maintenance requirement is eliminated from the TS. This is acceptable because the remaining requirements for cycling and setpoint verification in ITS SR 3.6.1.6.2 and SR 3.6.1.6.3 are sufficient to ensure the operability of the vacuum breakers. Licensee maintenance practices, which include this visual inspection, are adequate to maintain the vacuum breakers in accordance with the manufacturer's recommendations. This change corresponds to change type 6 as defined in the general discussion of less restrictive requirements at the beginning of Part III of this safety evaluation.

4.6.4.2.b.2.a)

(LD.1) The Frequency of the setpoint verification surveillance for the reactor building-to-suppression chamber vacuum breakers, CTS ~~4.6.4.2.2.a~~, is decreased from once per 18 months to once per 24 months in corresponding ITS SR 3.6.1.6.3. This change is acceptable for the reasons given in the section entitled "Surveillance Interval Extension from 18 to 24 Months" in the general discussion of less restrictive requirements at the beginning of Part III of this safety evaluation.

(L.1) In the event one of the two reactor building-to-suppression chamber vacuum breakers in a line is inoperable for opening and known to be closed, ACTION a of CTS 3/4.6.4.2 requires restoring the vacuum breaker to operable status within 72 hours. However, if both vacuum breakers in the same line are inoperable for opening and known to be closed, CTS 3.0.3 would require a unit shutdown to commence within one hour. This is because ACTION a does not explicitly address two vacuum breakers inoperable in the same line. However, in this event, corresponding ACTION C of ITS 3.6.1.6 specifies a 72-hour Completion Time to restore all vacuum breakers in the line to operable status. This is acceptable because the line is inoperable regardless of whether one or both vacuum breakers cannot be opened, and the line's pressure equalization function must still be restored to operable status within 72 hours.

In the event more than one line is inoperable for opening because one or both vacuum breakers in each affected line are closed and cannot be opened, CTS 3.0.3 would apply and would require a unit shutdown to commence within one hour. This action requirement is retained in ACTIONS D and E of ITS 3.6.1.6, as an administrative reformatting of the current action requirements.

NO change DISCUSSION OF ACTUATION INSTRUMENT.

SEE INSERT L.2

(L.2) The requirements of CTS 3/4.6.4.2, (ACTION c ~~and surveillances~~ 4.6.4.2.b.1.b), (4.6.4.2.b.2.c), and ~~4.6.4.2.b.3~~) regarding position indication instrumentation for the reactor building-to-suppression chamber vacuum breakers do not relate directly to the operability of the vacuum breakers. Therefore, these requirements are eliminated from the ITS. This is acceptable because control of the availability of, and necessary compensatory activities if not available, for indications and monitoring instruments are adequately addressed by plant operational procedures and policies. In addition, vacuum breaker position is required to be known to be able to satisfy the ITS SR 3.6.1.6.1, SR 3.6.1.6.2, and SR 3.6.1.3.3 for the vacuum breakers. If position indication is not available and vacuum breaker position cannot be

determined, then these surveillances cannot be satisfied and the appropriate action requirements must be taken. As a result, the requirements for the vacuum breaker position indication are adequately addressed by the requirements of ITS 3.6.1.6 and the associated surveillances.

Insert L.2

(L.3) The reactor building-to-suppression chamber vacuum breaker surveillance test intervals for CTS 4.6.4.2.a (position verification) and 4.6.4.2.b.1.a) (cycling test) are extended from 7 and 31 days to 14 and 92 days, respectively. A Frequency of 14 days for the position verification is acceptable because (a) the position of most other safety-related valves, including those that affect primary containment, are verified once per 31 days, and (b) operating history shows that the reactor building-to-suppression chamber vacuum breakers are normally found in their correct position. A Frequency of 92 days for the functional test requirement (cycling the vacuum breakers) is acceptable because (a) these vacuum breakers are located in the secondary containment, which is not a harsh environment, similar to many other PCIVs that are tested on a 92-day Frequency under the IST Program, and (b) an historical review by the licensee of the surveillance data from the past 4 years found no failures of a vacuum breaker to cycle. In addition, since the vacuum breakers are PCIVs and part of the IST Program, the Frequency is stated as "in accordance with the Inservice Testing Program."

3.6.1.7 Suppression Chamber-to-Drywell Vacuum Breakers

MOVE TO PAGE 9

(A.3 & A.4) In the event one disk of a single suppression chamber-to-drywell vacuum breaker line is open, ACTION c of CTS 3.6.4.1 requires verifying the other disk in the line is closed within 2 hours, and closing the open disk within 72 hours. These action requirements are retained in corresponding ACTIONS B and C of ITS 3.6.1.7 with the following admin changes:

CALLED 'A' IN OTHER SECTIONS OF SE

(a) ACTION B, for one open disk, omits the specific action to verify the other disk closed. Were the other disk found open, ACTION C would apply and require the disk to be closed within 2 hours. ~~This combination of ACTIONS in the ITS is less restrictive because the requirement to verify within 2 hours that the other disk is closed is removed~~. This is acceptable because the LCO, which requires all vacuum breakers (both disks) to be closed, must be continually met. It is expected that operators would quickly verify the position of the other disk upon discovery that one disk is open.

CTS applies Applied on per line basis.

(b) The Note to ACTION B states that separate Condition entry for each suppression chamber-to-drywell vacuum breaker line is allowed. This note is consistent with the directions given in ITS Section 1.3, "Completion Times," for use of such notes. ~~However, it is less restrictive than CTS because the CTS action requirement does not address the situation of more than one line with a vacuum breaker with one disk open. In such cases, CTS 3.0.3 would apply and require a unit shutdown.~~ This proposed allowance is acceptable because operation with two or more of the nine vacuum breakers with an open disk does not jeopardize the isolation function of the vacuum breakers. ~~[A similar Note to ACTION C initially proposed by the licensee was withdrawn.]~~

INSERT L.2 to subsection 3.6.b, LCO 3.6.1.6

CTS 4.6.4.2.b.3, the vacuum breaker actuation instrumentation surveillances, are deleted from the ITS. The requirement of ITS SR 3.6.1.6.3 to ensure the vacuum breakers are full open at ≤ 0.5 psid is sufficient. Vacuum breaker actuation instrumentation is required to be Operable to satisfy the setpoint verification Surveillance Requirement (ITS SR 3.6.1.6.3) for the vacuum breakers. If the vacuum breaker actuation instrumentation is inoperable, then the Surveillance Requirement cannot be satisfied and the appropriate actions must be taken for inoperable vacuum breakers in accordance with the ACTIONS of ITS 3.6.1.6. As a result, the requirements for the vacuum breaker actuation instrumentation are adequately addressed by the requirements of ITS 3.6.1.6 and SR 3.6.1.6.3 and are deleted from the ITS.

CHANGE DESCRIBED IN 'A' (page 8) DOES NOT DISCUSS TECHNICAL CHANGE MADE. SEE INSERT LA.1

[LA.1 - ~~not used~~]

IN ITS SR3.6.1.7.3

(LD.1) The test interval for CTS 4.6.4.1.b.3.a, suppression chamber-to-drywell vacuum breaker open setpoint verification, is increased from 18 months to 24 months. This change is acceptable for the reasons given in the section entitled "Surveillance Interval Extension from 18 to 24 Months" in the general discussion of less restrictive requirements at the beginning of Part III of this safety evaluation.

CTS 3.6.4.1, Action d, 4.6.4.1.b.2 & 4.6.4.1.b.3.b)

(L.1) The ~~requirements~~ for suppression chamber-to-drywell vacuum breaker position indication instrumentation are removed from CTS because this instrumentation does not necessarily relate directly to the respective system operability. Control of the availability of, and necessary compensatory activities if not available, for indications and monitoring instruments are addressed by plant operational procedures and policies. In addition, vacuum breaker position is required to be known to be able to satisfy the ITS SR 3.6.1.7.1, SR 3.6.1.7.2, and SR 3.6.1.7.3 for the vacuum breakers. If position indication is not available and vacuum breaker position cannot be determined, then the surveillances cannot be satisfied and the appropriate actions must be taken for inoperable vacuum breakers in accordance with the ACTIONS of ITS 3.6.1.7. As a result, the requirements for the vacuum breaker position indication are adequately addressed by the requirements of ITS 3.6.1.7. Therefore, removing them from the TS is acceptable.

(L.2) CTS 4.6.4.1.a requires verifying that the suppression chamber-to-drywell vacuum breakers are closed once per 7 days. This Frequency is relaxed to 14 days in corresponding ITS SR 3.6.1.7.1. The 14-day Frequency is acceptable because other indications of vacuum breaker status are available to operations personnel and because operating experience with the 7-day verification supports a longer interval between position verification. This Frequency is also reasonable because the positions of nearly all safety-related valves, including those that affect primary containment, are required to be verified by TS on a 31-day Frequency.

(L.3) The requirement of CTS 4.6.4.1.b.1 to cycle the vacuum breakers after an SRV lift is revised from 2 hours after the lift, to 12 hours after the lift in corresponding ITS SR 3.6.1.7.2. The current 2-hour limit was based upon verifying that the increase in the suppression chamber air space humidity postulated to accompany an SRV lift had not rendered the vacuum breakers inoperable. However, the operability of a vacuum breaker is not likely to be affected by an SRV lift because all steam discharged is condensed in the suppression pool preventing a significant increase in the humidity of the suppression chamber air space. In addition, this change is consistent with the recommendation in Generic Letter 93-05, item 8.4. Because of the negligible effect of an SRV lift on vacuum breaker operability, this change is not safety significant and is therefore acceptable.

3.6.1.8 Main Steam Isolation Valve Leakage Control (MSLC) System

INSERT LA.1 to subsection 3.6.b, LCO 3.6.1.7

CTS 3.6.4.1 provides details comprising the design of and how many suppression chamber-to-drywell vacuum breakers are installed. This information has been moved to the Bases for ITS 3.6.1.7. This change is acceptable because the ITS definition of Operability is adequate to ensure that all conditions necessary for establishing the Operability of these vacuum breakers are met. Changes to the Bases will be controlled by the provisions of the proposed Bases Control Program described in Chapter 5 of the ITS. This change corresponds to change type 7 as defined in the general discussion of less restrictive requirements at the beginning of Part III of this safety evaluation.

(LA.1) CTS 3.6.1.4 specifies that two independent main steam isolation valve leakage control (MSLC) system subsystems shall be operable. ITS 3.6.1.8 omits the design detail that the subsystems are independent. Details relating to system design are moved to the Bases for ITS 3.6.1.4. This change is acceptable because the TS need not include this system design detail to ensure the operability of the MSLC system. This change corresponds to change type 1 as defined in the general discussion of less restrictive requirements at the beginning of Part III of this safety evaluation.

(LA.2) CTS 4.6.1.4.a.1, 4.6.1.4.a.2, and 4.6.1.4.c contain details for performing these MSLC system surveillances. These procedural details are moved to the Bases for corresponding ITS SR 3.6.1.8.1, SR 3.6.1.8.2, and 3.6.1.8.3. This change is acceptable because the requirements retained in ITS 3.6.8.1 for these surveillances are sufficient to ensure the operability of the MSLC system. This change corresponds to change type 3 as defined in the general discussion of less restrictive requirements at the beginning of Part III of this safety evaluation.

(LA.3) CTS 4.6.1.4b requires demonstrating each MSLC system subsystem is operable by cycling each depressurizing valve and steam isolation valve through at least one complete cycle of full travel during each shutdown in MODE 4 if not performed within the previous 92 days. This surveillance is eliminated because cycling of these valves in accordance with the inservice test (IST) program will continue to be required by ITS 5.5.6, which implements 10 CFR 50.55a. Compliance with the requirements of 10 CFR 50.55a for the testing of ASME Code Class 1, 2, and 3 valves in accordance with Section XI of the ASME Code is also required by the WNP-2 Operating License. This change is acceptable because these IST requirements are sufficient to demonstrate the operability of valves associated with the MSLC system.

(LC.1) CTS 4.6.1.4.d specifies verifying the operability of flow, pressure, and temperature instrumentation for the MSLC system by performance of a channel function test every 31 days and a channel calibration every 18 months in order to demonstrate the operability of each MSLC system subsystem. These instrumentation surveillances are eliminated because the instrumentation is provided only for indication and thus does not relate directly to MSLC system operability. Indication and monitoring instrumentation availability control and compensatory activities if not available are adequately addressed by plant operational procedures and policies. This change is acceptable because ITS SR 3.6.1.8.3, the MSLC system functional test, will verify that this instrumentation functions properly every 18 months. This change corresponds to change type 4 as defined in the general discussion of less restrictive requirements at the beginning of Part III of this safety evaluation.

DELETED IN Rev B

(LD.1) The proposal to change the Frequency for performing CTS 4.6.1.4.c, the MSLC system functional test, from 18 to 24 months was withdrawn by the licensee.

(L.1) A new action requirement for when both MSLC subsystems are inoperable is specified in ITS 3.6.1.8. ACTION B requires restoring one of the two

subsystems to operable status within 7 days. Currently for this condition, a unit shutdown per CTS 3.0.3 would be required because CTS 3~~/4~~.6.1.4 contains no corresponding action requirement. The MSLC system is judged to be of low safety significance since the MSIVs are required to meet specific leakage criteria and the system serves to filter only a small portion of the complete primary containment leakage following an accident. Several studies have documented the minimal impact of increased unfiltered primary containment leakage; among these are NUREG-1273, "Technical Findings and Regulatory Analysis for Generic Safety Issue II.E.4.3, Containment Integrity Check," and NUREG/CR-3539, "Impact of Containment Building Leakage on LWR Accident Risk." These documents indicate that leakage rate increases significantly in excess of the allowed MSIV leakage rates would not result in significant increase in risk to the public. Therefore, a 7-day Completion Time in the event both subsystems are inoperable is acceptable.

(L.2) CTS 4.6.1.4.c contains procedural details, such as required flow, for performing the functional test of the MSLC system. In addition to moving these details to the Bases of corresponding ITS SR 3.6.1.8.3, the dilution flow corresponding to at least -17" H_2O at the suction blower is being changed from 30 cfm to 30 ± 6 cfm. The licensee indicates that measurement of flow rate is not precise enough to consistently measure 30 cfm, thus specifying a range of acceptable flows is more appropriate. Flow values from 24 to 36 cfm provide adequate margin to the flow necessary to create sufficient vacuum to maintain proper operation of the MSLC system and are sufficient to maintain adequate margin to preserve blower operation given worst case conditions of flow, temperature, and humidity. The proposed band is adequate to meet the design requirements for leakage accommodation and blower fan cooling. Additionally, the minimum flow value of 24 cfm has enough margin above the design required flow so that degrading conditions will be recognized and corrective actions initiated before the flow can degrade below the design requirements.

The MSLC functions to limit leakage through the main steam isolation valves (MSIV) such that offsite doses do not exceed 10 CFR Part 100 limits in the event of the most limiting recirculation line break. The system employs blowers to maintain a negative pressure in the steam lines relative to atmospheric pressure to ensure that MSIV leakage will pass through blowers and into the standby gas treatment (SGT) system prior to release to the atmosphere. Dilution air from the reactor building is the major component of flow to the blower suction, and helps decrease the temperature of the MSIV leakage before it passes to the SGT system. The licensee's analysis indicates that the proposed values for "acceptable" dilution flow will maintain, with adequate margin, sufficient vacuum and adequate flow for proper operation of the MSLC system. As stated in the Bases, ITS SR 3.6.1.8.3 will verify that the blowers develop the required flow rate and vacuum. Because the requirement for the MSLC system functional test is retained in SR 3.6.1.8.3 and the proposed "acceptable" dilution flow values, as stated in the associated Bases, are sufficient for ensuring the operability of the system, this change is acceptable. Note that moving the procedural details for this surveillance to the Bases corresponds to change type 3 as defined in the

THIS IS APPLICABLE TO LA.2

LA.2

general discussion of less restrictive requirements at the beginning of Part III of this safety evaluation.

3.6.2.1 Suppression Pool Average Temperature

(LA.1) In the event suppression pool average temperature is > 110°F, AC~~TION~~ b.2.b) of CTS 3~~/4~~.6.2.1 requires operating an RHR suppression pool cooling subsystem to reduce suppression pool average temperature within limits. This procedural detail is omitted from corresponding ACTION D of ITS 3.6.2.1. If temperature is not recovered within the specified time, a unit shutdown is required. Startup would then be prevented by ITS LCO 3.0.4 until temperature is within limit. Thus, omitting these details from the CTS is acceptable because they are not necessary for ensuring the unit is placed in a safe condition if suppression pool temperature is not reduced to within the limit within the specified Completion Time.

(L.1) ACTIONS c and d of CTS 3~~/4~~.6.2.1 address inoperable suppression pool water temperature instrumentation channels, and CTS 4.6.2.1.c requires verifying the operability of this instrumentation. This instrumentation does not necessarily relate directly to the operability of the suppression pool. Control of the availability of, and necessary compensatory activities if not available, for indication and monitoring instrumentation are addressed by plant operational procedures and policies. Suppression pool temperature instrumentation is required to be operable to satisfy the suppression pool temperature verification surveillance, ITS SR 3.6.2.1.1. If the suppression pool temperature instrumentation is inoperable, then the surveillance cannot be satisfied and the appropriate actions must be taken for suppression pool temperature not within limits in accordance with the ACTIONS of ITS 3.6.2.1. As a result, the requirements for the suppression pool temperature instrumentation are adequately addressed by the action and surveillance requirements of ITS 3.6.2.1. Therefore, deleting these specific action and surveillance requirements from the CTS is acceptable. ~~This change corresponds to change type 4 as defined in the general discussion of less restrictive requirements at the beginning of Part III of this safety evaluation.~~

THIS WAS DELETED - NOT MOVED) to Type 4.

(L.2) When suppression pool temperature is ≥ 90°F, CTS 4.6.2.1.b.2.a requires verifying the temperature is ≤ 110°F once per hour, and in the event temperature remains above 90°F for more than 24 hours, CTS 4.6.2.1.b.2.b) requires verifying thermal power is ≤ 1% RTP once per hour. After 24 hours with temperature > 90°F, ACTION b.2.a) of CTS 3~~/4~~.6.2.1 requires placing the unit in MODE 3 within 12 hours. This requirement to verify power level hourly is deleted. Knowledge of current power level is an inherent requirement for the operator at all times. Therefore, because there is minimal significance to removing the hourly power level verification requirement, this change is acceptable. It is not clear that proposed change L.2 involves more than omitting CTS 4.6.2.1.b.2.b. WNP-2 should clarify the scope of L.2. Also, CTS 4.6.2.1.b.3 does not correspond exactly to Required Action D.2; this change is not addressed by WNP-2.

SEE INSERT L2 For clarification

3.6.2.2 Suppression Pool Water Level

INSERT L.2 to subsection 3.6.b, LCO 3.6.2.1

In addition, CTS 4.6.2.1.b.3 requires a 30 minute verification, after a scram with suppression pool temperature ≥ 90°F, that the temperature is ≤ 120°F. This requirement is presented in ITS 3.6.2.2, Required Action D.2 and has been changed to only require the verification if temperature is ≥ 110°F. Following a scram, the unit is ≤ 1% RTP, so the LCO limit is 110°F, not 90°F. Therefore, this requirement will only be performed when the LCO is not met; i.e., ≥ 110°F.

(LA.1) CTS 3.6.2.1 states the suppression pool water volumes which correspond to the level limits. These volumes are design details that do not need to be in the LCO to ensure the level limits are met. Thus, they are moved to the Bases of corresponding ITS 3.6.2.2. The level limits are retained in the LCO because suppression pool level indication in feet is information that is readily available to the operator. The correct volume limits which correspond to the level limits (which are the actual limits assumed in the safety analysis), have been used in the Bases. Specifying limits that the operators can readily verify using control room indication and placing the corresponding water volumes in the Bases is acceptable because the CTS limit on suppression pool level is not changed. This change corresponds to change type 1 as defined in the general discussion of less restrictive requirements at the beginning of Part III of this safety evaluation.

(L.1) In the event suppression pool water level is outside limits, ACTION a of CTS 3~~/4~~.6.2.1 and ACTION a of CTS 3~~/4~~.5.3 both allow 1 hour to restore level to within limit. An unanticipated change in suppression pool level would require addressing the cause and aligning the appropriate system to raise or lower the pool level. These activities may require longer than 1 hour to accomplish. Thus, this time is increased to 2 hours in corresponding ACTION A of ITS 3.6.2.2. This change is acceptable because (a) 2 hours is usually sufficient time to correct level, (b) the probability of an event requiring the safety function of the system is low, and (c) the risks associated with a unit shutdown may be avoided.

3.6.2.3 Residual Heat Removal (RHR) Suppression Pool Cooling

(LA.1) CTS 3.6.2.3 specifies operability criteria for suppression pool cooling. These operability criteria are moved to the Bases for ITS LCO 3.6.2.3. Details relating to system operability (in this case the suppression pool cooling function is designed as two "independent" loops, each with pumps and flow path) do not need stating in the LCO because the definition of operability must be satisfied regardless of the operability information stated in an LCO. Thus, this change is acceptable. This change corresponds to change type 7 as defined in the general discussion of less restrictive requirements at the beginning of Part III of this safety evaluation.

(L.1) The 72-hour Completion Time of ACTION a of CTS 3~~/4~~.6.2.3 to restore one RHR suppression pool cooling subsystem to operable status is extended to 7 days in corresponding ACTION A of ITS 3.6.2.3. This is acceptable because of the redundant RHR suppression pool cooling capabilities afforded by the operable subsystem and the low probability of a design basis accident occurring during this period. ~~The proposed 8-hour Completion Time to restore an inoperable subsystem in the event both subsystems are inoperable is rejected.~~

(L.2) The suppression pool cooling water flow rate specified in CTS 4.6.2.3.b is reduced from 7450 gpm to 7100 gpm in corresponding ITS SR 3.6.2.3.2. ~~TS limits reflect parameter analytical assumptions with allowance for measurement errors, as described in NRC Inspection Manual Chapter 9900 "Interpretation~~

THE CTS of 7450 is RHR ~~ECCS~~ ASME FLOW, NOT ASSUMED S/P FLOW ANALYSIS

Acceptable Measurement Tolerances for Technical Specifications Limits." The allowances for measurement error should be identified in the Bases. However, it is not uncommon for a TS limit to represent the exact analytical limit or analytical assumption with no allowance for instrument calibration error, drift, and elevation pressure errors, etc. In the case of suppression pool cooling flow, no measurement allowance is identified in the Bases, thus, the flow limit is assumed to reflect the actual value used in the suppression-pool cooling analyses. The LCO specification of 7100 gpm is acceptable based on the fact that it exceeds the value assumed in the suppression pool cooling analysis as identified in the FSAR (the RHR heat exchanger flow value assumed in the containment analyses is 7067 gpm). This change is also acceptable based on the staff's expectation that actual surveillance procedures will specify test acceptance criteria that provide allowances for flow instrument error, instrument drift and postulated pump degradation during surveillance intervals. This will ensure subsequent plant operation is within analyzed bounds.

3.6.3.1 Primary Containment Hydrogen Recombiners

(LA.1) The fact that the two hydrogen recombiner subsystems are independent is a design detail in CTS 3.6.6.1 that is moved to the Bases for ITS LCO 3.6.3.1. This corresponds to change type 1 as defined in the general discussion of less restrictive requirements at the beginning of Part III of this safety evaluation.

(LA.2) Details of the methods for performing the hydrogen recombiner surveillances in CTS 4.6.6.1.b.2, 4.6.6.1.b.3, and 4.6.6.1.b.4 are moved to the Bases for ITS 3.6.3.1. These details are not necessary to ensure the operability of the primary containment hydrogen recombiners. The requirements of ITS LCO 3.6.3.1, SR 3.6.3.1.1, SR 3.6.3.1.2, and SR 3.6.3.1.3 are adequate to ensure the primary containment hydrogen recombiners are maintained operable. This corresponds to change type 3 as defined in the general discussion of less restrictive requirements at the beginning of Part III of this safety evaluation.

(LC.1) CTS 4.6.6.1.b.1 requires demonstrating each hydrogen recombiner subsystem is operable at least once per 18 months by performing a channel calibration of all recombiner operating instrumentation and control circuits. This surveillance is eliminated from the ITS because control of the availability of, and necessary compensatory activities if not available, for indication instruments, monitoring instruments, and alarms are addressed by plant operational procedures and policies. In addition, the system functional test required by ITS SR 3.6.3.1.1 will ensure that necessary controls will function properly. Therefore, this change is acceptable. It corresponds to change type 4 as defined in the general discussion of less restrictive requirements at the beginning of Part III of this safety evaluation.

(LD.1) The test interval for the following hydrogen recombiner surveillances is increased from 18 months to 24 months.

CTS	ITS	Description
4.6.6.1.b.2	SR 3.6.3.1.3	Resistance to ground test for each heater phase
4.6.6.1.b.3	SR 3.6.3.1.1	System functional test
4.6.6.1.b.4	SR 3.6.3.1.2	Visual examination

This change is acceptable for the reasons given in the section entitled "Surveillance Interval Extension from 18 to 24 Months" in the general discussion of less restrictive requirements at the beginning of Part III of this safety evaluation.

(L.1) In the event one hydrogen recombiner is inoperable, the action requirements of CTS 3/4.6.6.1 require restoring the recombiner to operable status within 30 days. This requirement is modified in corresponding ACTION A of ITS 3.6.3.1 by adding a Note which says the mode-entry restrictions of ITS LCO 3.0.4 do not apply. This LCO 3.0.4 exception does not have a significant impact on safety and is acceptable because (a) an operable recombiner remains available in this condition, and at least one other hydrogen control method is available to back up the remaining recombiner, and (b) the hydrogen recombiners do not impact normal operation of the plant in any way, and hence, would not provide any additional initiators for plant transients during startup or MODE changes.

(L.2) In the event both hydrogen recombiners are inoperable, the action requirements of the CTS would require a unit shutdown per CTS 3.0.3. ACTION B of ITS 3.6.3.1 is added to permit unit operation for 7 days provided the hydrogen and oxygen control function is maintained. WNP-2 uses the nitrogen inerting and purge system, which is designed to control hydrogen in a post-LOCA environment, to maintain the hydrogen control function in accordance with this action requirement. However, because redundancy for the hydrogen control function would be reduced with both recombiners inoperable, a Completion Time of 7 days is proposed to restore at least one of the recombiners to operable status before requiring a shutdown. ACTION B is acceptable because (a) the hydrogen and oxygen control function is required to be maintained, and (b) allowing time to restore a recombiner to operable status may avoid the risk of a transient occurring during an unit shutdown.

(L.3) The CTS require two hydrogen recombiner functional tests. One test, CTS 4.6.6.1.b.3, is conducted every 18 months and is a complete check of the recombiners, while a second, CTS 4.6.6.1.a, is conducted every 6 months and checks the heatup capability of the recombiners. This second test is eliminated based on the recommendation of Generic Letter 93-05, Item 8.5. This change is acceptable because of (a) the redundancy provided for the hydrogen control function, (b) the hydrogen recombiner system's high

reliability, and (c) the delayed nature of the requirements for the system following a DBA. In addition, the 18-month functional test adequately confirms system operability; thus deleting the 6-month functional test does not have a significant impact on safety.

3.6.3.2 Primary Containment Atmosphere Mixing System

There are no requirements for the primary containment atmosphere mixing system that are less restrictive than the CTS because ITS 3.6.3.2 is an entirely new specification.

3.6.3.3 Primary Containment Oxygen Concentration

CONSISTENCY There are no ~~None of the~~ requirements in ~~ITS 3.6.3.3~~ for the primary containment oxygen concentration that are less restrictive than the requirements given in CTS 3/4.6.6.2.

3.6.4.1 Secondary Containment

(LA.1) The requirement of CTS 4.6.5.1.b.1 to verify at least once per 31 days that all secondary containment blowout panels are closed and sealed is eliminated. The blowout panels are passive devices installed as part of the walls of the secondary containment; they are not manipulated during plant operation or used for personnel or equipment access. A blowout panel that is not closed or sealed will prevent maintaining the required negative pressure in the secondary containment. Thus the daily verification of secondary containment vacuum, CTS 4.6.5.1.a (ITS SR 3.6.4.1.1), would fail. Action to restore secondary containment operability would identify the inoperable blowout panel. Therefore, the monthly surveillance to check the blowout panels is not necessary to ensure secondary containment operability, and eliminating it from TS is acceptable.

(LD.1) The test interval for the following secondary containment surveillances is increased from 18 months to 24 months.

CTS	ITS	Description
4.6.5.1.c.1	SR 3.6.4.1.4	Draw down test using one standby gas treatment (SGT) subsystem
4.6.5.1.c.2	SR 3.6.4.1.5	Demonstration of capability to maintain secondary containment vacuum with one SGT subsystem

This change is acceptable for the reasons given in the section entitled "Surveillance Interval Extension from 18 to 24 Months" in the general discussion of less restrictive requirements at the beginning of Part III of this safety evaluation.

3.6.4.2 Secondary Containment Isolation Valves

(LA.1) The list of secondary containment isolation dampers, with their isolation times, in CTS Table 3.6.5.2-1 are removed from the CTS and placed in the Licensee Controlled Specifications Manual (LCSM) consistent with Generic Letter 91-08. The listing of valves which are subject to the secondary containment isolation valve specification are related to design and thus are not necessary for ensuring the secondary containment isolation valves are maintained operable. The requirements of ITS 3.6.4.2 are adequate to ensure each required SCIV, including each isolation damper, is maintained operable. In conjunction with this change, the name of the isolation dampers is changed to secondary containment isolation valves. This change corresponds to change type 1 as defined in the general discussion of less restrictive requirements at the beginning of Part III of this safety evaluation.

(LD.1) The test interval for CTS 4.6.5.2.b, the SCIV automatic actuation surveillance, is increased from 18 months to 24 months in corresponding ITS SR 3.6.4.2.3. This change is acceptable for the reasons given in the section entitled "Surveillance Interval Extension from 18 to 24 Months" in the general discussion of less restrictive requirements at the beginning of Part III of this safety evaluation.

(L.1) An allowance is added in Note 1 to the ACTIONS of ITS 3.6.4.2 and in Note 2 of ITS SR 3.6.4.2.1 to intermittently open, under administrative controls, SCIVs that are required to be closed. Opening secondary containment penetrations on a intermittent basis is necessary for many of the same reasons as primary containment penetrations and the potential impact on offsite dose consequences is less significant. This change is acceptable because (a) the administrative controls will ensure that SCIVs are opened for no longer than necessary and will be closed promptly if an event requiring the secondary containment function occurs, and (2) the potential impact of safety is small compared to that for PCIVs which have the same allowance.

(L.2) In the event both valves in a penetration are inoperable, the action requirements of CTS 3/4.6.5.2 would require an immediate shutdown because the requirement to maintain one isolation valve operable would not be met. Corresponding ACTION B of ITS 3.6.4.2 relaxes this requirement by allowing 4 hours to restore an SCIV to operable status or to isolate the penetration flow path before requiring a unit shutdown to commence. The 4-hour Completion Time is consistent with the existing time allowed for conditions when the secondary containment is inoperable. The proposed change will also provide consistency in ACTIONS for these various secondary containment degradations. Thus the impact of this change on safety is small and is, therefore, acceptable.

(L.3) CTS 4.6.5.2.a is removed from the CTS because it requires post-maintenance testing of SCIVs. This kind of provision is unnecessary in TS because the operability of an SCIV must be established following any maintenance that rendered the SCIV inoperable. This is normally done by performing the appropriate surveillances as required by ITS SR 3.0.1. Therefore, this change is acceptable. This corresponds to change type 5 as

defined in the general discussion of less restrictive requirements at the beginning of Part III of this safety evaluation.

(L.4) ITS SR 3.6.4.2.3, the functional test of each SCIV, omits the requirement to perform the surveillance only during MODE 4 or 5 that is contained in corresponding CTS 4.6.5.2.b. This restriction is not appropriate for all SCIVs because some SCIVS can be adequately tested during MODES 1, 2, and 3 without jeopardizing safe operation of the plant. The control of plant conditions appropriate to perform the test is an issue for procedures and scheduling, and has been determined by to be unnecessary as a TS restriction, as discussed in Generic Letter 91-04. Therefore, this change is acceptable.

(L.5) CTS 4.6.5.2.b specifies performing the functional test of the automatic SCIVs using a simulated ("test") containment isolation signal. Corresponding ITS SR 3.6.4.2.3 also allows taking credit for an SCIV isolation on an actual isolation. This allows satisfactory automatic SCIV isolations for other than intentional surveillance testing to fulfill the SCIV functional test requirement. This is acceptable because operability is adequately demonstrated in either case since the SCIV itself cannot discriminate between "actual" and "simulated" signals.

(L.6) A Note is added to the ~~action requirements of~~ CTS 3/4.6.5.1 and CTS 4.6.5.1.b.3 in corresponding Required Action A.2 of ITS 3.6.4.2 and SR 3.6.4.2.1, ~~respectively,~~ to allow administrative controls to be used to verify secondary containment isolation device position when the valves are in high radiation areas. The isolation devices are initially verified to be in the proper position and access to them is restricted during operation due to the high levels of radiation in the area. Therefore, the probability of misalignment of the isolation devices is acceptably small. For this reason, adding this note is acceptable.

3.6.4.3 Standby Gas Treatment System

(LA.1) The fact that the two standby gas treatment (SGT) subsystems are independent is a design detail in CTS 3.6.5.3 that is moved to the Bases for ITS LCO 3.6.4.3. This corresponds to change type 1 as defined in the general discussion of less restrictive requirements at the beginning of Part III of this safety evaluation.

(LA.2) Details (in CTS 4.6.5.3.a) of the methods for performing the SGT subsystem 31-day operational test (by initiating, from the control room, flow through the HEPA filters and charcoal absorbers) are moved to the Bases of ITS SR 3.6.4.3.1. The requirements of ITS LCO 3.6.4.3 and the associated surveillances are adequate to ensure the SGT subsystems are maintained operable. This corresponds to change type 3 as defined in the general discussion of less restrictive requirements at the beginning of Part III of this safety evaluation.

(LD.1) The test interval for the following SGT system surveillances is increased from 18 months to 24 months.

CTS	ITS	Description
4.6.5.3.d.2	SR 3.6.4.3.3	SGT automatic actuation
4.6.5.3.d.3	SR 3.6.4.3.4	SGT filter cooling recirculation operational test

This change is acceptable for the reasons given in the section entitled "Surveillance Interval Extension from 18 to 24 Months" in the general discussion of less restrictive requirements at the beginning of Part III of this safety evaluation.

(L.1) If at the end of 7 days, an inoperable SGT subsystem is not restored to operable status, ACTION a.2 of CTS 3/4.6.5.3 requires suspending the handling of irradiated fuel assemblies in secondary containment, core alterations, and OPDRVs. New Required Action C.1 of ITS 3.6.4.2 allows placing the operable SGT subsystem in operation as an alternative to these actions. This enables these activities to continue. This change is acceptable because (a) one SGT subsystem is sufficient for any accident requiring the secondary containment and SGT functions as described in the FSAR and (b) the chance that the operable subsystem will be unable to perform its intended function is significantly reduced if it is already in operation when called upon to function.

IF NOT IN MODE 1, 2, 3

(L.2) CTS 4.6.5.3.d.2 specifies performing the functional test of each SGT subsystem using a simulated ("test") initiation signal. Corresponding ITS SR 3.6.4.3.3 also allows taking credit for an automatic actuation on an actual signal. This allows satisfactory automatic SGT system actuations for other than intentional surveillance testing to fulfill the SGT subsystem automatic actuation test requirement. This is acceptable because operability is adequately demonstrated in either case since the SGT system itself (filter train and isolation dampers) cannot discriminate between "actual" and "simulated" signals.

B CTS 3/4.6.1.6. - L.1. NOT DISCUSSED

Insert V.1

Conclusion

The less restrictive requirements described in the preceding material have been found by the staff to be acceptable because they do not present a significant safety question in the operation of the plant. The TS requirements that remain are consistent with current licensing practices, operating experience and plant accident and transient analyses, and provide reasonable assurance that the public health and safety will be protected.

INSERT L.1 to subsection 3.6.b, CTS 3/4.6.1.6

CTS 3/4.6.1.6 Drywell and Suppression Chanber Internal Pressure

(L.1) CTS 3/4.6.1.6, Drywell and Suppression Chamber Internal Pressure, has been deleted. The CTS is based on the initial assumption of 0.75 psig in the safety analysis, and is required in MODES 1, 2, and 3. A recent GE evaluation (GE-NE-208-17-0993) shows that an initial drywell pressure of 2.0 psig is acceptable for ensuring containment pressure design limits are not exceeded. This initial pressure was utilized in determining a new P_a, and was submitted to the NRC to support the WNP-2 power uprate amendment (WNP-2 letter G02-93-180, dated July 9, 1993). This CTS is not needed since the RPS high drywell pressure scram will trip the unit prior to exceeding 2.0 psig (the Allowable Value is 1.88 psig, with a Trip Setpoint of 1.68 psig), effectively placing the unit in MODE 3. While the RPS trip is not required in MODE 3, the Emergency Operating Procedures (EOPs) will govern actions if the drywell pressure exceeds 1.68 psig (effectively bounding the 2.0 psig limit). The EOPs will require entry into the RPV Control and Primary Containment Control actions. These actions require steps to be taken to reduce primary containment pressure to less than 1.68 psig. The negative pressure limit (-1.0 psig) is essentially controlled by the proper operation of the reactor building-to-suppression chamber and the suppression chamber-to-drywell vacuum breakers. These vacuum breakers are designed to ensure the negative pressure design limit of the primary containment is not exceeded, and are designed to open at -0.5 psid. Thus, the internal pressure cannot exceed the current -1.0 psig limit (which is also in CTS to preclude the negative pressure design limit of the primary containment from being exceeded) under normal circumstances (i.e., non-accident conditions). Since the vacuum breakers and their setpoints are required by ITS during MODES 1, 2, and 3 (ITS 3.6.1.6 and ITS 3.6.1.7), the negative pressure limit part of the CTS LCO is also not needed.

c. More Restrictive Requirements

The licensee, in electing to implement the specifications of STS Section 3.6, "Containment Systems," proposed a number of more restrictive requirements than are allowed by CTS. These requirements are the following:

3.6.1.1 Primary Containment

Actions of

(M.1) In the event the containment leakage rate or the drywell-to-suppression chamber bypass leakage rate is discovered outside the specified limits, the ~~ACTIONS~~ of CTS 3/4.6.1.2 and CTS 3/4.6.2.1, respectively, restrict heating up the reactor coolant system above 200°F, ~~but~~ and would allow a startup and control rod withdrawal from cold conditions (e.g., ≤ 200°F). However, should leakage above limits be discovered while operating, the existing action requirements permit operation to continue while the leak rates are corrected because they do not specifically require a unit shutdown. In the ITS presentation, if containment leakage, including bypass leakage, is discovered outside limits, the primary containment is declared inoperable because ITS SR 3.6.1.1.1 or SR 3.6.1.1.2 would not be met. The ACTIONS of ITS 3.6.1.1 then require commencing a shutdown to a cold condition (MODE 4) if the leakage is not corrected within one hour. Because of this additional limitation to continued operation, ITS LCO 3.0.4 will not allow a reactor startup to commence with containment leakages outside limits. Thus, the presentation of ITS LCO 3.6.1.1 and the associated action requirements for containment and bypass leakage rates beyond limits will result in establishing and maintaining the reactor in a cold shutdown, all-rods-in, condition until the leakage is corrected. On this basis, this change is acceptable.

(M.2) By merging the primary containment structural integrity requirements from CTS 3/4.6.1.5 into ITS 3.6.1.1 as part of primary containment operability, the specified time to restore the primary containment structural integrity (i.e., to restore it to operable status) is decreased from 24 hours to 1 hour in Required Action A.1 of ITS 3.6.1.1. This allowed time to restore compliance before requiring a plant shutdown brings the allowed times for restoration for a loss of containment structural integrity into agreement with a loss of containment operability.

3.6.1.2 Primary Containment Air Lock

The ITS contain no requirements for the primary containment air lock that are more restrictive than requirements given in the CTS.

3.6.1.3 Primary Containment Isolation Valves

(M.1) The Applicability of CTS 3/4.6.3 (and the other CTS requirements related to PCIVs) is MODES 1, 2, and 3. The Applicability of ITS 3.6.1.3 contains the additional condition —

> When associated instrumentation is required to be OPERABLE per LCO 3.3.6.1, "Primary Containment Isolation Instrumentation."

This condition effectively adds MODE 4 and MODE 5 requirements to the RHR shutdown cooling system isolation valves. Action requirements appropriate for these PCIVs in MODES 4 and 5 are added as ACTION F of ITS 3.6.1.3, in the event the valves cannot be isolated or restored within the current 4-hour limit. This additional Applicability and associated action requirements are more restrictive than the CTS because in MODE 4 or 5 the CTS specify no restrictions.

(M.2) In the event an MSIV leakage rate is discovered to exceed 11.5 scf or the combined leakage rate for all ECCS and RCIC PCIVs in hydrostatically tested lines which penetrate the primary containment is discovered to exceed 1 gpm times the number of such valves, when the unit is shutdown with reactor coolant system (RCS) temperature ≤ 200°F, ACTIONS c and d of CTS 3~~/4~~.6.1.2 require restoring the leakage rate to within the limit "prior to increasing reactor coolant system temperature above 200°F." These action requirements contain no restriction on control rod withdrawal and unit startup when RCS temperature is ≤ 200°F. The ACTIONS of CTS 3~~/4~~.6.1.2 also do not require a unit shutdown in the event the excessive leakage rate is discovered when the unit is in MODE 1, 2, or 3. ACTIONS D and ~~F~~ E of corresponding ITS 3.6.1.3 contain additional requirements to shutdown the unit in the event of PCIV leakage if not corrected within 8 hours for a main steam line, or within 4 hours for the other PCIVs noted above. Because of this additional limitation on continued operation, ITS LCO 3.0.4 will not allow a reactor startup to commence with PCIV leakages outside limits. These more restrictive requirements are acceptable because they will result in establishing and maintaining the reactor in a cold shutdown, all-rods-in, condition until the MSIV or PCIV leakage is corrected. ~~Note the ACTIONS of ITS 3.6.1.3 are being contested; thus changes may be needed to the redlined sentence.~~

(M.3) ITS 3.6.1.3 contains two new surveillances for PCIVs. SR 3.6.1.3.1 verifies the 24- and 30-inch purge valves are closed every 31 days; SR 3.6.1.3.10 ensures the secondary containment bypass leakage is within limits at a Frequency in accordance with ITS 5.5.12, "Primary Containment Leakage Rate Testing Program."

3.6.1.4 Drywell Air Temperature

The ITS contain no requirements for the drywell air temperature that are more restrictive than the requirements given in the CTS.

3.6.1.5 RHR Drywell Spray

The ITS contain no requirements for the drywell spray function that are more restrictive than the requirements given in the CTS.

3.6.1.6 Reactor Building-to-Suppression Chamber Vacuum Breakers

INSERT M.1 from page 8

~~The ITS contain no requirements for the reactor building-to-suppression chamber vacuum breakers that are more restrictive than the requirements given in the CTS.~~

~~[M.1 is addressed under administrative changes for 3.6.1.6]~~

3.6.1.7 Suppression Chamber-to-Drywell Vacuum Breakers

(M.1) In the event one or more required suppression chamber-to-drywell vacuum breakers are inoperable for opening, ACTION b of CTS 3/~~4~~.6.4.1 allows 72 hours to restore 7 vacuum breakers to operable status (for opening). This action requirement is split in the ITS. Corresponding ACTION A of ITS 3.6.1.7 only addresses the Condition of one required vacuum breaker being inoperable for opening. For this Condition, the ITS allow 72 hours to restore the vacuum breaker to operable status, same as the CTS. The Condition of more than one vacuum breaker inoperable for opening is addressed by ITS LCO 3.0.3 because ITS 3.6.1.7 contains no ACTIONS for this Condition. ITS LCO 3.0.3, which requires an immediate unit shutdown, is more restrictive than the CTS allowance of 72 hours.

3.6.1.8 Main Steam Isolation Valve Leakage Control (MSLC) System

~~(M.1)~~ The ITS contain no requirements for the main steam isolation valve leakage control system that are more restrictive than the requirements given in the CTS.

3.6.2.1 Suppression Pool Average Temperature

(M.1) CTS 3.6.2.1.a.2.c) specifies maintaining suppression chamber water temperature less than 120 °F with the MSIVs closed following a scram. Corresponding ACTION D of ITS 3.6.2.1 specifies maintaining the water temperature less than 120°F without consideration for the MSIV position. This is appropriate because significant heat can still be added to the suppression pool regardless of MSIV position. Even with MSIVs open, there may be no heat rejection from the containment, as in the case of a loss of condenser vacuum. Applying the ACTIONS regardless of the status of the MSIVs does not introduce any operation that is unanalyzed. This change is more restrictive on plant operations because ....(?). In addition, this CTS LCO requirement is presented in the action requirements of ITS 3.6.2.1, for human factors considerations.

CURRENTLY only applies if MSIV closED

(M.2) The Applicability of CTS 3/4.6.2.1 for the 120°F limit is MODES 1, 2, and 3, but the CTS action requirement for when temperature exceeds 120°F only requires a depressurization to < 200 psig, which is still MODE 3. In ACTION E of ITS 3.6.2.1, when temperature exceeds 120°F, not only is the reactor vessel required to be depressurized to < 200 psig, but the unit must also be placed in MODE 4 within 36 hours.

3.6.2.2 Suppression Pool Water Level

~~(M.1)~~ The ITS contain no requirements on suppression pool water level that are more restrictive than the requirements given in the CTS.

3.6.2.3 Residual Heat Removal (RHR) Suppression Pool Cooling

The ITS contain no requirements for the RHR suppression pool cooling system that are more restrictive than the requirements given in the CTS.

3.6.3.1 Primary Containment Hydrogen Recombiners

The ITS contain no requirements for the primary containment hydrogen recombiners that are more restrictive than the requirements given in the CTS.

3.6.3.2 Containment Atmosphere Mixing System

SEE M.1 INSERT CONSISTENCY

ITS ~~3.6.3.2~~ is a new ~~specification~~, and is, ~~therefore~~, more ~~restrictive than CTS~~ requirements.

3.6.3.3 Primary Containment Oxygen Concentration

The ITS contain no requirements on primary containment oxygen concentration that are more restrictive than the requirements given in the CTS.

3.6.4.1 Secondary Containment

(M.1) CTS 4.6.5.1.c.1 and 4.6.5.1.c.2 require that one SGT subsystem be tested every 18 months in the containment timed drawdown test and in the negative pressure maintenance test of the secondary containment. However, the CTS do not preclude using the same SGT subsystem each time these surveillances are performed. Corresponding ITS SR 3.6.4.1.4 and SR 3.6.4.1.5 require both subsystems be tested in the course of ~~two outages~~ 48 months - as represented by the staggered test basis requirement specified in the Frequency. This is an additional restriction on plant operation that will ensure both subsystems routinely demonstrate the SGT system support function for secondary containment.

3.6.4.2 Secondary Containment Isolation Valves

The ITS contain no requirements on secondary containment isolation valves that are more restrictive than the requirements given in the CTS.

3.6.4.3 Standby Gas Treatment System

The ITS contain no requirements for the SGT system that are more restrictive than the requirements given in the CTS.

Conclusion

The staff has reviewed these more restrictive requirements and believes they strengthen the CTS. Therefore, these more restrictive requirements are acceptable.

INSERT M.1 to subsection 3.6.c, LCO 3.6.3.2

(M.1) A new Specification requiring two primary containment atmosphere mixing subsystems (head area return fans) to be Operable is being added. Appropriate ACTIONS and a Surveillance Requirement are also added, consistent with the STS. This is an additional restriction on plant operation to ensure the primary containment atmosphere is properly mixed as assumed in the design basis accident analysis.

Significant

d. ~~STS~~ Differences from 1434

The licensee, in electing to adopt the specifications of STS Section 3.6, "Containment Systems," proposed the following differences between the ITS and the STS. Unless otherwise stated, STS means NUREG-1433, not NUREG-1434.

General

( ) Certain details and references to Appendix J to 10 CFR Part 50 in a number of surveillances in STS 3.6.1.1, 3.6.1.2, and 3.6.1.3 are replaced by references to ITS 5.5.12, "Primary Containment Leakage Rate Testing Program." These differences are acceptable because WNP-2 has previously adopted Option B to Appendix J and the ITS specifications are consistent with staff guidance for implementing Option B.

(JD.14) The drywell pressure specification, STS 3.6.1.4, is not adopted. The current WNP-2 drywell and suppression chamber internal pressure specification is based on the initial assumption of 0.75 psig in the safety analysis, and is required in MODES 1, 2, and 3. A recent GE evaluation (GE-NE-208-17-0993) shows that an initial drywell pressure of 2.0 psig is acceptable for ensuring containment pressure design limits are not exceeded. This initial pressure was utilized in determining a new P_a, and has been approved by the NRC to support the WNP-2 power uprate amendment (NRC letter from J.W. Clifford to J.V. Parrish, "Issuance of Amendment 137 for the Washington Public Power Supply System Nuclear Project No. 2," dated May 2, 1995). This specification is not needed since the reactor protection system (RPS) high drywell pressure scram will trip the unit prior to exceeding 2.0 psig (the Allowable Value is 1.88 psig, with a Trip Setpoint of 1.68 psig), effectively placing the unit in MODE 3. While the RPS trip is not required in MODE 3, the Emergency Operating Procedures (EOPs) will govern actions if the drywell pressure exceeds 1.68 psig (effectively bounding the 2.0 psig limit). The EOPs will require entry into the reactor pressure vessel (RPV) control and primary containment control actions. These actions require steps to be taken to reduce drywell pressure to less than 1.68 psig. The negative pressure limit (-1.0 psig) is essentially controlled by the proper operation of the reactor building-to-suppression chamber and the suppression chamber-to-drywell vacuum breakers. These vacuum breakers are designed to ensure the negative pressure design limit of the primary containment is not exceeded, and are designed to open at -0.5 psid. Thus, the internal pressure cannot exceed the current -1.0 psig limit (which is also in the TS [where?] to preclude the negative pressure design limit of the drywell from being exceeded) under normal circumstances (i.e., non-accident conditions). Since the vacuum breakers and their setpoints are required by the TS during MODES 1, 2, and 3 (ITS 3.6.1.6 and 3.6.1.7), the negative pressure limit part of the LCO is also not needed.

SEE SE page 36.

(JD.17) The WNP-2 design does not include the low-low set function of the safety/relief valves. Therefore, STS 3.6.1.6 is not adopted.

NOT IN 1434

( ) The ~~CTS~~ requirements for suppression pool spray are relocated to the LCSM as addressed in Section 3.6.e of Part III of this safety evaluation.

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Therefore, the ITS do not include ~~Specification~~ 3.6.2.4, "RHR Suppression Pool Spray," of NUREG-1433.

NOT IN SS submittal SINCE NOT IN 1434

( ) STS 3.6.2.5, "Drywell-to-Suppression Chamber Differential Pressure," is not adopted because it does not apply to the WNP-2 design and is not contained in the CTS. [Licensee to verify]

( ) The WNP-2 design does not include the containment atmosphere dilution system. Therefore, Specification 3.6.3.4 of NUREG-1433 is not adopted.

NO DISCUSSION OF JFD 25, 30, 32, 36 or DELETING STS in 1434.

3.6.1.1 Primary Containment

JD.1 = DELETING [ ], not significant

~~(JD.1~~ & JD.2) ~~The~~ Certain requirements for primary containment in NUREG-1433 match the WNP-2 containment design more closely than NUREG-1434. The only difference between NUREG-1433 and the ITS is editorial in nature. The ITS language is more descriptive of the manner in which WNP-2 performs the surveillance for drywell-to-suppression chamber bypass leakage, SR 3.6.1.1.2. Since this is consistent with the CTS, this difference is acceptable.

3.6.1.2 Primary Containment Air Lock

(JD.3) The requirements for primary containment air lock in NUREG-1433 match the WNP-2 design more closely than NUREG-1434. In particular, the WNP-2 design only includes one primary containment air lock, similar to the BWR/4 design.

(JD.4) The word "primary" is added to clarify that the primary containment is addressed in Note 2 to ACTION B. This editorial difference clarifies the intent of Note 2 to ACTION B of Specification 3.6.1.2 in ~~NUREG-1433~~ and is acceptable.

~~( )~~ STS SR 3.6.1.2.3 ~~of NUREG-1433~~ requires testing the air lock interlock mechanism on a 184-day Frequency. ITS SR 3.6.1.2.2 specifies a Frequency of 24 months. This difference is acceptable for reasons given in discussion (L.4 under 3.6.1.2) of Section 3.6.b of Part III of this safety evaluation.

3.6.1.3 Primary Containment Isolation Valves

(JD.6 & JD.9) ~~The~~ Certain requirements for primary containment isolation valves in NUREG-1433 match the WNP-2 design more closely than NUREG-1434. In particular, at WNP-2, the drywell is part of the primary containment, the primary containment is inerted while operating, and WNP-2 includes reactor building-to-suppression chamber vacuum breakers, EFCVs, and TIPs, similar to the BWR/4 design.

(JD.7) Note 4 to the ACTIONS of Specification 3.6.1.3 ~~in NUREG-1433~~ requires entering the primary containment specification when PCIV leakage results in exceeding overall containment leakage rate acceptance criteria "in MODES 1, 2, and 3." Note 4 to the ACTIONS of ITS 3.6.1.3 omits the MODE restriction for this note. This difference is acceptable because there are no PCIV leakage

tests required in MODES other than MODES 1, 2, and 3 for WNP-2 (i.e., there are no PCIVs required to be operable in MODES other than MODES 1, 2, and 3 that have specific leakage limits). Similar notes restricting the Applicability of STS SR 3.6.1.3.2, SR 3.6.1.3.~~12~~, and SR 3.6.1.3.~~14~~ 11 are omitted from corresponding ITS SR 3.6.1.3.1, SR 3.6.1.3.10 9, and SR 3.6.1.3.12.

(JD.8) Open Item - treatment of purge valve, secondary containment bypass, and other PCIV leakage in the action requirements of ITS 3.6.1.3. Awaiting new proposal from licensee.

(JD.10) ~~NUREG-1433 Specification~~ STS 3.6.1.3, Required Action C.2, has a once-per-31-day Completion Time for verifying the affected penetration flow path is isolated for the Condition of one or more penetration flow paths with one PCIV inoperable in penetrations with only one PCIV. ITS Required Action C.1 only requires this monthly verification "for isolation devices outside primary containment." This difference is acceptable because it is consistent with STS ~~NUREG-1433~~ Required Action A.2 (for the same Condition in penetrations with two PCIVs). ~~The licensee committed to propose this difference as a generic change to the STS~~.

(JD.11) The time to restore MSIV leakage to within limit has been changed to 8 hours in ITS Required Action D.1, consistent with the time provided to restore an inoperable MSIV (for reasons other than leakage) in ACTION A. This discussion is affected by the issue regarding JD.8.

BRACKETED, NOT significant

( ) ACTION E of STS 3.6.1.3, SR 3.6.1.3.1, SR 3.6.1.3.7, and SR 3.6.1.3. are based on purge valves with resilient seals. These requirements are not adopted because WNP-2 purge valves do not have resilient seals. These valves are treated the same as other PCIVs. This discussion is affected by the issue regarding JD.8.

( ) ITS 3.6.1.3.12 contains a "≤" ≥ that is not contained in corresponding STS 3.6.1.3.14 11 in 1434. This modifier is unnecessary. - ~~we~~ → WNP-2 deleted entire sentence not just "≥".

3.6.1.4 Drywell Air Temperature

~~( )~~ ITS 3.6.1.4 contains no significant differences from corresponding STS 3.6.1.5.

3.6.1.5 RHR Drywell Spray

( ) Specification 3.6.1.7, "Residual Heat Removal (RHR) Containment Spray System ~~of NUREG-1434~~ is presented as ITS 3.6.1.5, "RHR Drywell Spray System." to conform to the WNP-2 nomenclature.

(JD.18) The WNP-2 design does not include an automatically actuated RHR drywell spray system. Therefore, the Note to STS SR 3.6.1.7.1 is not adopted in corresponding ITS SR 3.6.1.5.1. In addition, SR 3.6.1.7.3 of ~~NUREG-1434~~ is also not adopted. Since the system is manually initiated, the phrase "or can be aligned to the correct position" has been added to the valve position check

surveillance (ITS SR 3.6.1.5.1), consistent with other manual system valve position checks.

The WNP-2 design also does not include an accurate means of measuring drywell spray flow, nor is an actual value assumed in the safety analysis (it is just assumed to be turned on). Therefore, STS SR 3.6.1.7.2 ~~of NUREG-1434~~ is also not adopted.

3.6.1.6 Reactor Building-to-Suppression Chamber Vacuum Breakers

No DISCUSSION of JFD-19

(JD.21) ITS 3.6.1.6, which is consistent with STS 3.6.1.7 of 1433, specifies the Frequency of ITS SR 3.6.1.6.2, the vacuum breaker functional test, as "in accordance with the inservice test program" which is the same Frequency of 92 days as given by STS SR 3.6.1.7.2.

3.6.1.7 Suppression Chamber-to-Drywell Vacuum Breakers

(JD.22) The WNP-2 design for the suppression chamber-to-drywell vacuum breakers has two disks per vacuum breaker. With either disk closed, the isolation capability of the line is maintained. Therefore, the ACTIONS of ITS 3.6.1.7 differ from the ACTIONS of corresponding STS 3.6.1.8 1433 to reflect this design. In particular, ACTION B of ~~Specification~~ 3.6.1.8 of NUREG-1433 for the Condition of "One suppression chamber-to-drywell vacuum breaker not closed" is replaced by ACTIONS B and C of ITS STS 3.6.1.7.

In the event one of the two disks of a vacuum breaker are not closed, the vacuum breaker can still perform its isolation and vacuum relief functions, but is degraded. Thus the time allowed in ITS ACTION B to close the open vacuum breaker disk is 72 hours. In addition, because a vacuum breaker line with one disk not closed is still capable of performing its required functions, each vacuum breaker line in this Condition can be treated separately. Thus ITS Condition B contains a note to allow separate Condition entry for each vacuum breaker, and Condition B is stated as "One or more suppression chamber-to-drywell vacuum breakers with one disk not closed." These changes are consistent with the ACTION A of Specification 3.6.1.7 of NUREG-1433 which allows 72 hours for one or more lines with one of the two vacuum breakers in each line not closed.

In the event both disks of a vacuum breaker are not closed, the vacuum breaker is inoperable and must be closed within a short time. In addition, with more than one line open, the containment pressure suppression function cannot be accomplished. Thus separate condition entry for each line is not allowed. Two hours are allowed to close one of the two disks. ITS ACTION C is consistent with ACTION B of Specification 3.6.1.8 of NUREG-1433 which allows 2 hours to close an open suppression chamber-to-drywell vacuum breaker.

These differences are acceptable because they are consistent with the WNP-2 design and the action requirements for similar levels of degradation addressed in NUREG-1433.

~~WNP-2 proposed separate condition entry for ACTION C also; this proposal is rejected.~~

(JD.23 and JD.24) ITS SR 3.6.1.7.1, to verify each vacuum breaker is closed, and SR 3.6.1.7.2, the vacuum breaker functional test, do not include the second Frequency of SR 3.6.1.8.1 and the third Frequency of SR 3.6.1.8.2 of ~~NUREG-1433~~, respectively. In addition to not being required by the CTS, the licensee is not adopting these Frequencies for the following reasons: STS

STS

The second Frequency to NUREG-1433 SR 3.6.1.8.1 (ITS SR 3.6.1.7.1) requires the vacuum breakers to be verified closed after they may have been opened (within 2 hours after any discharge of steam to the suppression chamber from the SR/Vs or any operation that causes the drywell-to-suppression chamber differential pressure to be reduced by ≥ 0.5 psid). This Frequency is not needed because surveillances must be continually met as required by ITS SR 3.0.1. Thus, if the vacuum breakers become open for any reason (other than during surveillances) the surveillance would not be met, and appropriate action requirements must be taken.

The basis for STS SR 3.6.1.~~6~~8.1 is to ensure that the vacuum breakers do not inadvertently remain open if they have actuated during plant operation. Verifying that the vacuum breakers are closed helps to preclude the possibility of suppression pool bypass leakage in excess of that assumed in design basis LOCA analyses. Probabilistic Risk Assessments (PRAs) and operational experience have shown that the most credible creation of such a bypass pathway is through a stuck-open vacuum breaker.

The licensee's proposal not to adopt the surveillance was discussed at an appeals meeting between the NRC and WNP-2 on June 27, 1996, in Rockville, MD. Based on discussions held at the meeting, the NRC decided not to require the licensee to adopt the surveillance as part of the STS conversion, but to pursue, on a generic basis, adoption of the surveillance by all applicable BWRs. This decision was based on the fact that the surveillance is not currently part of the licensee's CTS, that there is a similar although less frequent (bi-weekly) surveillance to verify the valves are closed, and that control room indication of valve position should alert operators if a valve is incorrectly in an open position.

THIS PHRASE JUSTIFIES DIFFERENCE

~~Based on the aforementioned considerations~~, the staff finds the proposed deviation from the STS acceptable. However~~, the staff re-iterates that it will pursue adoption of the surveillance on a generic basis.~~

The third Frequency to NUREG-1433 SR 3.6.1.8.2 (ITS SR 3.6.1.7.2) requires a functional test of the vacuum breakers (i.e., cycle the vacuum breakers) within 12 hours after the vacuum breakers have cycled. Since the vacuum breakers are designed to operate and assumed to function after a LOCA blowdown, their operation as designed after some steam release or change in internal pressure should not raise questions regarding immediate operability of the vacuum breakers. In addition, the WNP-2 design includes two disks per vacuum breaker, thus if one disk sticks open during an operation, the other

closed disk would still ensure isolation capability is maintained. Therefore, this Frequency, which is not in the CTS, is not adopted.

SINCE WNP-2 ITS will not INCLUDE THE REQUIREMENT DELETE

The basis for STS SR 3.6.1.~~7~~8.2 is to ensure vacuum breakers are capable of performing their intended function after being challenged by events that could cause the breakers to open, such as SRV discharge, cooling cycles, or inadvertent drywell spray actuation. ~~BWR operating experience has shown that a credible potential exists for vacuum breakers not to function or re-seat properly following such events.~~

The licensee's proposal not to adopt the surveillance was discussed at an appeals meeting between the NRC and WNP-2 on June 27, 1996, in Rockville, MD. Based on discussions held at the meeting, the NRC decided not to require the licensee to adopt the surveillance as part of the STS conversion, but to pursue, on a generic basis, adoption of the surveillance by all applicable BWRs. This decision was based on the fact that the surveillance is not currently part of the licensee's CTS and that there is a similar although less frequent (monthly) surveillance to verify valve operability.

THIS PHRASE JUSTIFIES DIFFERENCE

~~Based on the aforementioned considerations~~, the staff finds the proposed deviation from the STS acceptable. ~~However, the staff re-iterates that it will pursue adoption of the surveillance on a generic basis~~.

3.6.1.8 Main Steam Isolation Valve Leakage Control (MSLC) System

( ) ITS 3.6.1.8 contains no significant differences from corresponding STS 3.6.1.9.

3.6.2.1 Suppression Pool Average Temperature

(JD.27) The temperature limits in STS LCO 3.6.2.1 ~~of NUREG-1433~~ are based on power level as indicated on Range 7 of the intermediate range monitors (IRMs). Corresponding ITS LCO 3.6.2.1 bases the temperature limits on percentage of thermal power. Thermal power in the range of 1% rated thermal power (RTP) is not readily quantified with much accuracy. While range 7 on IRMs approximates 1% RTP, this power level can also be approximated from SRMs and even by determining the point of adding heat. These acceptable options are desired to be maintained in plant procedures, with the ITS requirement as it is in the CTS; i.e., 1% RTP. Therefore, ITS 3.6.2.1 reflects the 1% RTP requirement. This difference is acceptable because it is consistent with the intent of STS ~~NUREG-1433~~ and the CTS.

3.6.2.2 Suppression Pool Water Level

( ) ITS 3.6.2.2 contains no significant differences from corresponding STS 3.6.2.2.

3.6.2.3 Residual Heat Removal (RHR) Suppression Pool Cooling

( ) ITS 3.6.2.3 contains no significant differences from corresponding STS 3.6.2.3.

(JD.29) The proposal to allow 8 hours in the event both suppression pool cooling subsystems are inoperable before requiring a unit shutdown is rejected.

3.6.3.1 Primary Containment Hydrogen Recombiners

NO DISCUSSION OF JFD 33

JFD-16

( ) The WNP-2 design includes oxygen as well as hydrogen control in the drywell. Thus ITS 3.6.3.1, Required Action B.1, requires verifying that the hydrogen *and oxygen* control function is maintained in the event both hydrogen recombiners are inoperable. This difference from ~~Specification~~ 3.6.3.1 of ~~NUREG-1433~~ STS is acceptable because it is based on WNP-2 design and the CTS.

STET

3.6.3.2 Primary Containment Atmosphere Mixing System

BRACKETED, NOT SIGNIFICANT

( ) The title of ~~Specification~~ STS 3.6.3.2, "Drywell Cooling System Fans," of NUREG-1433 is replaced with "Primary Containment Atmospheric Mixing System" in ITS 3.6.3.2 to match the WNP-2 terminology. This is a new specification for WNP-2 TS. Other differences include nomenclature for the fans (head area return fans) and reference to the oxygen control function in Required Action B.1.

(JD.34) The periodic Completion Time of "once per 12 hours" for Required Action B.1 of ~~Specification~~ STS 3.6.3.2 of NUREG-1433 is not adopted based on the Reviewer's Note in the Bases for Required Action B.1 which states—

> The following is to be used if a non-TS alternate hydrogen control function is used to justify this Condition: In addition, the alternate hydrogen control system capability must be verified once per 12 hours thereafter to ensure its continued availability.

The alternate hydrogen control function used for Required Action B.1 is the RHR drywell spray system, which is required by ITS 3.6.1.5. Thus, because this additional periodic Completion Time is not needed, this difference is acceptable.

( ) SR 3.6.3.2.2 of NUREG-1433, to verify each fan flow rate is ≥ the required limit, is not adopted because it is not currently required. [Licensee to verify]

3.6.3.3 Primary Containment Oxygen Concentration

( ) ~~New~~ specification ITS 3.6.3.3 contains no significant differences from corresponding ~~STS~~ 3.6.3.3.

SEE JFD 33

3.6.4.1 Secondary Containment

( ) ITS 3.6.4.1 contains no significant differences from corresponding STS 3.6.4.1.

3.6.4.2 Secondary Containment Isolation Valves

( ) ITS 3.6.4.2 contains no significant differences from corresponding STS 3.6.4.2.

3.6.4.3 Standby Gas Treatment System

JFD-16

Nomenclature usually not considered significant

( ) ITS SR 3.6.4.3.4 replaces the STS nomenclature "SGT filter cooler bypass damper" with the WNP-2 nomenclature "SGT filter cooling recirculation valve."

Conclusion

The preceding differences from Section 3.6 of NUREG-~~1433~~ 1434 are consistent with the WNP-2 design and existing requirements and commitments or proposed changes found to be acceptable as discussed elsewhere in this safety evaluation. Therefore, these differences are acceptable.

e. Relocated Specifications

In accordance with the criteria in the Final Policy Statement, the licensee has proposed to entirely remove the following containment system specifications from CTS Section 3/4.6 and place them in licensee-controlled documents.

3/4.6.2.2 Suppression Pool Spray

(R.1 under 3.6.1.5) The requirements for the suppression pool spray mode of the RHR system in CTS 3/4.6.2.2 are relocated to the LCSM. The suppression pool spray is not credited in any DBA (i.e., it is not needed to function to mitigate the consequences of any design basis accidents). Although this mode of RHR is utilized in the emergency operating procedures, the licensee stated in its submittal that it determined suppression pool spray to be non-risk significant.

NOT APPLICABLE AT WNP-2

Suppression pool spray is needed in BWRs to cool bypass steam that has leaked from the drywell to the suppression chamber. This bypass steam pressurizes the suppression chamber instead of being condensed in the suppression pool, thereby increasing the backpressure of the wetwell and resulting in peak containment pressures in excess of the design limit if not mitigated. The basis for the suppression pool spray surveillance proposed for removal is to confirm operability and detect incipient failure of the spray pump such that it remains capable of performing its safety function.

Suppression pool spray is also credited in certain BWR containment designs for the mitigation and control of suppression pool dynamic loads. Such loads

NOT APPLICABLE AT WNP-2

result from the blowdown of steam into the suppression pool during a Loss of Coolant Accident (LOCA) and, if not controlled, can result in damagingly high forces on the suppression chamber boundary, the downcomers, and submerged structures. ~~In particular, the wetwell sprays were credited in determining the maximum number of chugging load cycles for Mark I containments.~~ MARK III ASSUMED DRYWELL SPRAY.

With regard to suppression chamber bypass leakage, an analysis is summarized in Ch. 6.2.1 of the WNP-2 Final Safety Analysis Report (FSAR). For large breaks (greater than 0.122 m^2 (0.4 ft^2)), the reactor is expected to naturally and rapidly depressurize; therefore, the transient would be rapidly terminated and neither the suppression chamber nor drywell sprays would be needed for longer-term bypass leakage/pressure control. However, for break sizes less than 0.122 m^2 (0.4 ft^2), depressurization does not automatically occur. The FSAR analysis considers a small break in the recirculation line to be the limiting case for bypass leakage, and further assumes that the drywell sprays are actuated at 206.8 kPa gage (30 psig) containment pressure and that the bypass leakage is .015 m^2 (.05 ft^2). After initiation of the drywell sprays, the plant is cooled down at a rate of 100°F per hour. Under these assumptions, containment design pressure is not exceeded.

While the staff is aware of the conclusions reached in the FSAR analysis, it has requested that the licensee provide greater detail than is contained in the FSAR. The information should include, as a minimum, the technical justification for use of the drywell as opposed to wetwell sprays, the applicable accident scenarios, and the input assumptions.

PROVIDE IN LETTER DELETE FROM SE

With regard to the use of suppression chamber spray for the mitigation of suppression pool dynamic loads, the licensee states that the suppression chamber sprays are not credited in the determination of suppression pool dynamic loads, and in particular are not used in determining the number of chugging load cycles. However, the staff has requested that the licensee submit the analysis for suppression pool loads detailing the assumptions used in determining the loads.

In conclusion, the staff finds the proposed change acceptable~~; contingent upon the licensee's submittal of the aforementioned information showing that~~ the wetwell sprays are not necessary for the mitigation of the suppression chamber bypass leakage and are not credited in the analysis of suppression pool dynamic loads.

Conclusion

The current specifications described in the preceding material are not required to be in the TS under 10 CFR 50.36, and are not required to obviate the possibility of an abnormal situation or event giving rise to an immediate threat to the public health and safety. Further, they do not fall under any of the four criteria in the Final Policy Statement. In addition, the staff finds that sufficient regulatory controls exist under the regulations cited to maintain the effectiveness of the provisions in these specifications. Accordingly, these current specifications may be removed from the CTS and

placed in the licensee controlled documents cited in the preceding material.

3.7 ~~Instrumentation~~ PLANT SYSTEMS

The licensee has proposed administrative and technical changes to the CTS to bring them into conformance with with 10 CFR 50.36 and with STS Section 3.3 specifications. The discussion of changes provided below follow the order of the individual specifications within STS Section 3.3 with the ITS Section 3.3 specification titles listed in italics before the applicable discussions.

a. Administrative Changes

Those specifications of CTS Section 3/4.3 that have been retained in corresponding ITS Section 3.3, have been reworded to conform to the STS presentation. The most significant administrative changes that were made are as follows:

3.7.1 Standby Service Water (SW) System and Ultimate Heat Sink (UHS)

A.1 CTS 3.7.1.1, action a.2, has footnote "**" which requires that if as a result of the loss of both standby service water subsystems the plant is unable to attain cold shutdown, then reactor coolant temperature is to be maintained as low as practical by alternate heat removal methods. ITS 3.7.1, Required Action C, does not contain this requirement. The CTS footnote provides unnecessary duplication of ITS 3.4.10 ~~and 3.4.11~~ that require verification that an alternate decay heat removal is available without additional restrictions on operating the plant. Both the CTS action and the ITS action require efforts to "maintain reactor coolant temperature as low as practical." If conditions prevent attaining Mode 4, the actions remain in effect, essentially requiring continuing efforts to reach Mode 4. Therefore, not including the footnote but adopting the STS results in the same requirements and is acceptable.

A.2 CTS 4.7.1.1.a demonstrates the operability of the standby service water system by verifying valve position. ITS ~~3.7.1,~~ SR 3.7.1.3 verifies the correct valve position of the manual, power-operated, and automatic valves in the flow path. The ITS has a note clarifying that the isolation of single components supported by the standby service water system does not make the standby service water system inoperable. The CTS could be interpreted to already allow operation consistent with the position stated in the ITS Note. Therefore, this addition to the CTS results in the same requirements and is acceptable.

CONFUSING SENTENCE SEE INSERT A.3

Insert A.3

A.3 The CTS 3.7.1.3, ~~action~~ d requirement to ~~reduced~~ the average sediment level ~~from ≥ 0.5 ft but ≤ 1 ft to ≤ 0.1 ft~~ has been changed to < 0.5 ft. The CTS requirement is for the average sediment level to be maintained ≤ 0.5 ft. Therefore when action ~~is~~ taken to reduce sediment buildup results in a sediment level ≤ 0.5 ft, then LCO is met and performing further work to meet the action is not required in accordance with current LCO 3.0.2. Therefore, this change retain current TS requirements and is acceptable.

3.7.2 High Pressure Core Spray (HPCS) Standby Service Water (SW)

INSERT A.3 to subsection 3.7.a, LCO 3.7.1

to $\leq$ 0.1 ft, when the average sediment level is $\geq$ 0.5 ft but $\leq$ 1.0 ft,

A.1 CTS 4.7.1.2.a demonstrates operability of the high pressure core spray service water system by verifying valve position. ITS SR 3.7.2.1 verifies the correct valve position of the manual, power-operated, and automatic valves in the flow path. The ITS has an additional note that clarifies that the isolation of single components supported by the high pressure core spray service water system does not make the high pressure core spray service water system inoperable. The CTS could be interpreted to already allow operation consistent with the position stated in the ITS Note. Therefore, this addition to the CTS results in the same requirements and is acceptable.

3.7.3 Control Room Emergency Filtration (CREF) System

A.1 CTS 3.7.2, action b.2, specifies that with both control room emergency filter trains inoperable, suspend operations with a potential for draining the reactor vessel. The intent of this action is to immediately comply with the TS requirement. ITS 3.7.3, Required Action E.3, requires plant personnel to immediately initiate action to suspend operations with a potential for draining the reactor vessel. The CTS action of "immediately suspending operations with a potential for draining the reactor vessel" may not be possible for certain plant conditions. If the immediate requirement is not met, then "non-compliance" with the TS exists and this results in the requirement for an LER in accordance with 10 CFR 50.72. ITS Required Action E.3 conveys the intent of this action. This required action includes the understanding that best efforts to suspend operations with the potential for draining the reactor vessel must continue until suspended. This change clarifies the distinction between immediate suspension and immediate initiation of suspension of activities and is acceptable.

A.2 CTS 3.7.2 does not include specific requirements for the inoperability of both control room emergency filtration subsystems in Modes 1, 2, and 3. ITS 3.7.3, Required Action D, directs entry into ITS 3.0.3, controlled plant shutdown, for this condition. This provides the correct action if in Modes 1, 2, or 3 when the control room emergency filtration subsystems are required to ensure control room operator do not receive doses in excess of 5 rem in the event of a DBA. Since this results in the same action as the CTS, this change is administrative and acceptable.

A.3 minor administrative , Not Always - SEE INSERT A.3

A.4 CTS 4.7.2.b verifies the control room emergency filtration system heaters are operable. ITS SR 3.7.3.1 verifies the same heaters are in operation. The ITS therefore revises the SR for the control room emergency filtration system heaters from 'OPERABLE' to 'operating.' The heaters must operate, by periodically cycling properly when required to reduce moisture from the absorbers and the HEPA filters. The TS change does not change operating practices. Therefore, verifying heater operation assures the heaters are operable. Since the ITS requirements result in the same CTS limits this change is acceptable.

A.5 CTS 4.7.2.c and d specify testing requirements for the control room ventilation filters. The ITS moves these requirements to the ~~administrative controls specification~~ ITS 5.5.7, Ventilation Filter Testing Program. ITS SR

INSERT A.3 to subsection 3.7.a, LCO 3.7.3

CTS 4.7.2.a, relating to control room air temperature, is being moved to ITS 3.7.4 in accordance with the format of the STS. Evaluations of any technical changes are addressed in the ITS 3.7.4 evaluation. This is an acceptable administrative change.

Evaluations of any technical changes are addressed in ITS 5.5 ~~and~~ evaluation.

3.7.3.2 is added to clarify that the tests of the Ventilation Filter Testing Program must also be completed and passed to establish operability of the CREF System. This reformatting of CTS requirements is consistent with the STS. Since the ITS requirements result in the same CTS limits this change is acceptable.

A.6 CTS 4.7.2.e.2 assures proper control room emergency ventilation system actuation from the pressurization mode actuation test signals which are drywell pressure-high, reactor vessel water level-low, level 2, and reactor building exhaust plenum-high radiation. The ITS divides this actuation testing requirement into two surveillances, SR 3.7.3.3, actuation on actual or simulated initiation signal and SR 3.3.7.1.4 logic system functional tests. ITS SR 3.3.7.1.4 covers the majority of this instrumentation testing. Further, the system functional test, SR 3.7.3.4, verifies system performance without requiring actuation testing. These requirements provide testing for the entire system with proper overlap. Since the ITS result in the same CTS requirements for testing, this change is acceptable.

not significant in others DELETE

3.7.6 Main Turbine Bypass System

A.1 CTS 3.7.9 requires the main turbine bypass system to be operable in "OPERATIONAL CONDITION 1 when the thermal power at ≥ 25% of RATED THERMAL POWER." ITS 3.7.6 changes the applicability requirement to when "THERMAL POWER is ≥ 25%." Relating the applicability to thermal power in the ITS encompasses the mode statement in the CTS because the plant is always operating in Mode 1 when thermal power is above 25% rated thermal power. Therefore, stating both conditions in the applicability is not necessary. Therefore, the STS results in the same requirements and is acceptable.

A.2 CTS 4.7.9.b.3 relates the requirement to demonstrate the turbine bypass system response time is within limits to valve position as "to a valve position equivalent to 80% of rated bypass flow." The ITS moves this requirement to the ITS 1.0 definition of turbine bypass system response time. ~~This is consistent with the STS format while retaining the CTS requirements and is acceptable~~. See insert A.2 (for consistency)

NOT ITS 3.7.3 move to page 4

3.7.3 RCIC System

A.1 [minor administrative]

3.7.7 Spent Fuel Storage Pool

A.1
CTS 3.9.9 requires the spent fuel pool water level to be within limits "whenever irradiated fuel assemblies are in the spent fuel storage pool." ITS 3.7.7 requires the same pool water level limits, however; only "during movement of irradiated fuel assemblies in the spent fuel storage pool." This changes the applicability of maintaining a ≥ 22 foot water cover from at any time the pool is in use to conditions when irradiated fuel assemblies are being moved within the spent fuel storage pool. The ITS Bases contain a note that allows completion of fuel movement after finding the water level below the specified limit. The bounding design basis fuel handling accident assumes

INSERT A.2 to subsection 3.7.a, LCO 3.7.6

in accordance with the format of the STS. Evaluations of any technical changes are addressed in the ITS 1.0 evaluation. This is an acceptable administrative change.

dropping an irradiated fuel assembly onto an array of irradiated fuel assemblies seated within the reactor pressure vessel. Once fuel movement ceases, as required by the CTS action and ITS Required Action A.1, a fuel handling accident in the spent fuel storage pool cannot occur and continued operation with the spent fuel pool water level not within limits is allowed. Both the CTS and the ITS require suspension of fuel movement. Thus, with fuel movement suspended, ITS 3.7.7 is no longer applicable. Therefore, this change is administrative.

INSERT CTS 3/4.7.3

Since these requirements result in the same limits as the current requirements, the changes are purely administrative and are therefore acceptable.

b. Less Restrictive Requirements

The licensee in electing to implement STS Section 3.7 has adopted a number of less restrictive conditions than are allowed by CTS. Several of these conditions had elements of change that were common to more than one specification and as such were presented as generic changes. The more significant conditions are the following:

3.7.1 Standby Service Water (SW) System and Ultimate Heat Sink (UHS)

LA.1 CTS 3.7.1.1 and CTS 3.7.1.3 specify details relating to components that make up the standby service water system and the ultimate heat sink, respectfully. ITS 3.7.1 requires the Division 1 and 2 standby service water and the ultimate heat sink to be operable. The ITS moves the CTS details on system design and operability to the ITS Bases. Including system details in the body of the ITS is not necessary. The definition of operability as related to the requirements of Specification 3.7.1 and the associated SRs are adequate to ensure the standby service water system and the ultimate heat sink are maintained operable. Changes to the Bases are controlled by the provisions of the Bases Control Program described in ITS Chapter 5.0. Removal of these operational details to the ITS Bases is consistent with the STS, and is acceptable.

LA.2 CTS 3.7.1.1 and CTS 3.7.1.3 apply to ~~operational~~ Modes 1, 2, 3, 4, 5, and *. In Modes 4 and 5, those portions of the standby service water system required to support equipment required to be operable elsewhere in the CTS must also be operable. ITS 3.7.1 applies only to Modes 1, 2, and 3. The ITS moves the CTS requirements for the standby service water and ultimate heat sink systems in Modes 4 and 5 to the ITS Bases for the supported systems. Since this system and the ultimate heat sink are support systems for other required equipment with their own specifications, the definition of equipment operability provides assurance the supported system can perform its required support function. Changes to the Bases are controlled by the provisions of the Bases Control Program described in ITS Chapter 5.0. Removal of these operational details to the ITS Bases is consistent with the STS, and is acceptable.

LD.1 CTS 4.7.1.1.b verifies that an actuation test signal properly actuates

INSERT A.1 to subsection 3.7.a, CTS 3/4.7.3

CTS 3/4.7.3 RCIC System

A.1 CTS 3/4.7.3, RCIC System, is being moved to ITS 3.5.3 in accordance with the format of the STS. Evaluations of any technical changes are addressed in the ITS 3.5.3 evaluation. This is an acceptable administrative change.

each automatic valve servicing safety-related equipment on a service water actuation test signal every 18 months. ITS SR 3.7.1.5 verifies the proper actuation of each standby service water subsystem on an actual or simulated initiation signal every 24 months. ~~The basis for accepting this test inteval change is discussed in Section III of this SE.~~ SEE INSERT LD.1 (for consistency)

L.1 ~~*Item #100 – reject*~~ Not used

L.2 CTS 4.7.1.1.b verifies that an actuation test signal properly actuates each automatic valve servicing safety-related equipment every 18 months, "during shutdown." ITS SR 3.7.1.5 verifies the proper actuation of each standby service water subsystem on an actual or simulated initiation signal every 24 months. The ITS does not specify the "during shutdown" requirement. Requirements prohibiting testing during power operations as provided in CTS 4.7.1.1.b may not apply to all conditions of plant operation and may not jeopardize safe operation of the plant. Therefore, specifying plant conditions in the TS for conducting the test is unnecessary and can be adequately controlled in procedures and is acceptable.

L.3 CTS 4.7.1.1.b requires an actuation test to verify that a signal properly actuates each automatic valve servicing safety-related equipment. ITS ~~3.7.1,~~ SR 3.7.1.5 verifies the proper actuation of each standby service water subsystem on an actual or simulated initiation signal. The ITS adds the phrase "actual or," referring to the actuation test signal. This allows automatic actuations or simulated actuations to fulfill the SR. During plant operations either signal type will verify equipment operability since the standby service water subsystem cannot differentiate between an "actual" or "test" signal. Since either of the actuation signals confirm satisfactory operation of the standby service water system, this change is acceptable.

3.7.2 High Pressure Core Spray (HPCS) Standby Service Water (SW)

LA.1 CTS 3.7.1.2 specifies details on what components make up the HPCS service water system. ITS 3.7.2 requires the high pressure core spray service water system to be operable. The ITS moves the CTS details on system design and operability to the ITS Bases. Including system details in the body of the ITS is not necessary. The definition of operability as related to the requirements of Specification 3.7.2 and the associated SRs are adequate to ensure the HPCS service water system is maintained operable. Changes to the Bases are controlled by the provisions of the Bases Control Program described in ITS Chapter 5.0. Removal of these operational details to the ITS Bases is consistent with the STS, and is acceptable.

LA.2 CTS 3.7.1.2 requires the HPCS service water system to be operable when the diesel generator is required to be operable whereas ITS 3.7.2 includes Modes 1, 2, and 3 requirements but deletes the operability requirements associated with the diesel generator during non-operating or shutdown operations. Thus requirements for operability in Modes 4 and 5 are relocated to the Bases of the supported systems. ~~Shutdown onsite electrical power requirements are specified in ITS 3.8.2. The Division 3 diesel generator is~~

Insert LD.1 to subsection 3.7.6, LCO 3.7.1

This change is acceptable for the reasons given in the section entitled "Surveillance Interval Extension from 18 to 24 months" in the general discussion of less restrictive requirements at the beginning of Part III of this safety evaluation.

and other ~~required~~ supported equipment

~~required to be operable when equipment associated with the DG is required to be operable.~~ Since HPCS service water is a support system for the Division 3 DG and for other required equipment, the definition of equipment operability for the Division 3 diesel generator provides adequate assurance that the supported system can perform its required support function. Changes to the Bases are controlled by the provisions of the Bases Control Program described in ITS Chapter 5.0. The provisions of equipment operability as stated in ITS ~~3.7.1.2 and 3.8.2~~ are consistent with the STS, and are acceptable.

List isn't ALL inclusive

LD.1 [Replaced with HICB SER input] SEE insert to match LD.1 from 3.7.1

L.1 CTS 4.7.1.2.b assures that an actuation test signal properly actuates each automatic valve servicing safety-related equipment every 18 months, "during ~~refueling~~." ITS ~~3.7.2,~~ SR 3.7.~~1~~2.2 verifies proper actuation of the HPCS SW system once every 24 months. The ITS does not specify the "during ~~refueling~~" shutdown requirement. Requirements prohibiting testing during power operations as provided in CTS 4.7.1.2.b may not apply to all conditions of plant operation and may not jeopardize safe operation of the plant. Therefore, specifying plant conditions in the TS for conducting the test is unnecessary and can be adequately controlled in procedures and is acceptable.

L.2 CTS 4.7.1.2.b requires an actuation test to verify that a signal properly actuates each automatic valve servicing safety-related equipment. ITS SR ~~3.7.1.5,~~ 3.7.2.2 verifies the proper actuation of each HPCS service water system on an actual or simulated initiation signal. The ITS adds the phrase "actual or," referring to the actuation test signal. This allows automatic actuations or simulated actuations to fulfill the SR. During plant operations either signal type will verify equipment operability since the HPCS service water system cannot differentiate between an "actual" or "test" signal. Since either of the actuation signals confirm satisfactory operation of the HPCS service water system, this change is acceptable.

3.7.3 Control Room Emergency Filtration (CREF) System

LA.1 CTS 3.7.2 requires two operable "independent" control room emergency filtration system trains. ITS 3.7.3 requires two control room emergency filtration subsystems. The ITS moves the CTS details on system independence to the ITS Bases. Including system details in the body of the ITS is not necessary. The definition of operability as related to the requirements of Specification 3.7.3 and the associated SRs are adequate to ensure the control room emergency filtration system trains are maintained operable. Changes to the Bases are controlled by the provisions of the Bases Control Program described in ITS Chapter 5.0. Removal of these operational details to the ITS Bases is consistent with the STS, and is acceptable.

LA.2 CTS 4.7.2.b requires performance of the SR "by initiating from the control room, flow through the HEPA filters and charcoal absorbers." The ITS moves these details to ITS Bases 3.7.3. This detail is not necessary for assuring the operability of the control room emergency filtration system trains. Specification 3.7.3 and the associated SRs are adequate to ensure the control room emergency filtration system trains are maintained operable. Changes to the Bases are controlled by the provisions of the Bases Control Program

INSERT LD.1 to subsection 3.7.b, LCO 3.7.2

CTS 4.7.1.2.b verifies that an actuation test signal properly actuates each automatic valve servicing safety-related equipment on a service water actuation signal every 18 months. ITS SR 3.7.2.2 verifies the proper actuation of the HPCS SW System on an actual or simulated signal every 24 months. This change is acceptable for the reasons given in the section entitled "Surveillance Interval Extension from 18 months to 24 months" in the general discussion of the less restrictive requirements at the beginning of Part III of this safety evaluation.

Program described in ITS 5.0. Removal of these operational details to the ITS Bases is consistent with the STS, and is acceptable.

LD.1 [Replaced with HICB SER input] see insert to match LD.1 from 3.7.1

L.1 CTS 3.7.2 requires the control room emergency filtration system to be operable in all operational conditions and when handling irradiated fuel in secondary containment. ITS 3.7.3 applies in Modes 1, 2, and 3, and during movement of irradiated fuel assemblies in secondary containment, during core alterations, and during operations with a potential for draining the reactor vessel. The ITS do not require the CREF to be operable during Modes 4 and 5 unless core alterations or operations with a potential for draining the reactor vessel are being conducted because these are the only operations outside of power operations that could lead to a need for control room isolation. Pressure and temperature limitations in these modes reduce the probability and consequences of a design basis accident and this change is acceptable.

In addition, ITS Required Actions C.2.1, C.2.2, and C.2.3, include the option to exit the LCO applicability by immediately suspending the movement of irradiated fuel assemblies in secondary containment, core alterations, and operations with a potential for draining the reactor vessel if appropriate compensatory measures are incomplete before the action to restore the CREF system expires. As either compensatory measure, Required Action C.1 or exiting the applicability provides adequate protective action for the condition, this change is also acceptable.

L.2 CTS 4.7.2.b requires a start and heater operational test of each CREF subsystem on a staggered test basis. ITS SR 3.7.3.1 does not require staggered testing. The CTS requirement to perform testing on a staggered basis is an unnecessary requirement for verifying the CREF subsystems heaters are operable because the monthly CTS test frequency is unchanged in the ITS, these tests are independent and appropriate actions are required in the ITS for multiple inoperable subsystems. There is no change to the safe operation of the plant, therefore, change is acceptable.

L.3 CTS 4.7.2.e.2 requires testing each CREF subsystem to verify that the subsystem will maintain control room pressure at 1/8 inch positive pressure. ITS 3.7.3.4 requires testing each CREF subsystem on a staggered test basis to show that the control room pressure remains at ≥ 1/8 inch positive pressure. The control room pressure test requirement is a test of the integrity of the control room structure, and as such this operability requirement can be confirmed using either subsystem to perform the test. Because the ITS SR 3.7.3.3 verifies CREF subsystem actuation and therefore proper subsystem operation, the control room structure test needs only to be verified using one subsystem as required by ITS 3.7.3.4. To assure no undetected subsystem failures will result in failure to meet control room structure system integrity requirements, SR 3.7.3.4 requires alternating the CREF subsystems used to perform the test, "on a STAGGERED TEST BASIS". The changes to CTS testing is acceptable because the combination of testing required by SR 3.7.3.3 and 3.7.3.4 provide adequate assurance of CREF operability.

INSERT LD.1 to subsection 3.7.b, LCO 3.7.3

CTS 4.7.2.e.2 verifies that on a proper initiation signal, certain Control Room Emergency Filtration System actions take place every 18 months. ITS SR 3.7.3.3 and SR 3.7.3.4 performs these same verifications every 24 months. This change is acceptable for the reasons given in the section entitled "Surveillance Interval Extension from 18 months to 24 months" in the general discussion of the less restrictive requirements at the beginning of Part III of this safety evaluation.

L.4 CTS 3.7.2.e.2 requires an actuation test to verify that each CREF subsystem actuates on three pressurization mode actuation test signals. ITS SR 3.7.3.3 verifies proper actuation of each CREF subsystem on an actual or simulated initiation signal. The ITS adds the phrase "actual or," referring to the actuation test signal. This allows automatic actuations or simulated actuations to fulfill the SR. During plant operations either signal type will verify equipment operability since the standby service water subsystem cannot differentiate between an "actual" or "test" signal. Since either of the actuation signals confirm satisfactory operation of the CREF subsystem, this change is acceptable.

3.7.4 Control Room Air Conditioning (AC) System

L.1 CTS 4.7.2.a requires that the control room emergency filtration system train shall be demonstrated to be operableonce every 12 hours by verifying the control room air temperature is ≤ 85°F. The temperature limit requirement is deleted in ITS 3.7.4, Control Room Air Conditioning (AC) System.

The control room air conditioning system consists of two 100% capacity air conditioning subsystems. The two subsystems share a common outside air intake system and a common duct distribution system within the control room. Each subsystem consists of a control room recirculation fan, an air filter, water cooling coils, and the associated ductwork and dampers. Two cooling coils are in each subsystem, with the air flow through both coils. One cooling coil is non-safety related, and uses radwaste chilled water during normal operation. The second cooling coil is safety-related for emergency chilled water or service water during emergency operations. During normal operation, one subsystem distributes chilled and filtered air to the control room. Electronic controllers regulate the temperature and humidity in the control room. The controllers modulate chilled water flow from the radwaste building chilled water system to the normal operation cooling coil. An ambient temperature of ≤ 78°F is maintainable in the control room in this mode of operation, well below the 85°F limit.

With emergency chilled water or service water supplied to the emergency operation cooling coils, the control room air conditioning maintains ambient temperature low enough to assure that critical equipment remains operable. The environmental qualification temperature for control room equipment is 104°F. When emergency chilled water is supplied to the cooling coils, the control room temperature can be maintained at ≤ 85°F. This ensures equipment operability while providing cooling capacity for personnel comfort. When service water is supplied to the cooling coils the control room temperature is maintained at ≤ 104°F, a temperature that is sufficient for maintaining equipment operability. With control room temperatures greater than 85°F, action is needed ensure control room personnel performance and efficiency is not impaired.

The ability of the control room air conditioning system to maintain control room temperature within limits is an implicit assumption of the safety analysis in FSAR Chapter 6, Engineered Safety Features, and Chapter 15, Accident Analyses. Any analysis assuming the CREF system operates in the pressurization mode also implicitly assumes maintaining the control room

temperature so safety-related control room equipment remains operable. The CTS 4.7.2.a control room temperature limit is a limit related to personnel comfort. This temperature is not an assumption for design basis accidents at WNP-2. Operability of the CREF system does not depend on the control room air conditioning system. Because the control room air temperature is normally less than 78°F and staff are continuously present in the control room, the assumptions are that control room personnel will easily detect temperature increases. The changes are acceptable since either subsystem is capable of maintaining the control room temperature and control room personnel can readily notice a temperature deviation and take corrective action before reaching any equipment temperature limits.

3.7.5 Main Condenser Offgas

LA.1 CTS 3/4.11.2.7 specifies details such as gross activity includes, "beta and/or gamma," and the frequency for determining radioactivity is within limits,"by performing an isotopic analysis of a representative sample of gases taken at discharge (prior to dilution and/or discharge) of the main condenser air." and "as indicated by the condenser air ejector noble gas activity monitor," ITS 3.7.5 requires a gross gamma activity rate of the noble gases measured at the main condenser air ejector of ≤ 332 mCi/second after 30 minutes decay. The ITS moves details defining the radioactivity involved, or the methods for performing this surveillance, or the methods for determining when an increase has occurred to the ITS Bases. Including system details in the body of the ITS is not necessary for determining the main condenser offgas activity is within limits. ITS 3.7.5 and SR 3.7.5.1 assure the main condenser offgas activity rate remains within limits. Changes to the Bases are controlled by the provisions of the Bases Control Program described in ITS Chapter 5.0. Removal of these operational details to the ITS Bases is consistent with the STS, and is acceptable.

LA.2 CTS 4.11.2.7 requires monitoring the radioactivity rate of the noble gases at the main condenser air ejector. ITS 3.7.5 requires a gross gamma activity limit of ≤ 332 mCi/second after 30 minutes decay of the noble gases at the main condenser air ejector. The ITS moves the CTS ~~SR~~ 4.11.2.7 to the Offsite Dose Calculation Manual (ODCM). The CTS requirement is not necessary to ensure that main condenser offgas activity rate is within limits. ITS SR 3.7.5.1 ensures the main condenser offgas activity rate is within limits. The ODCM contains requirements on monitoring the main condenser air ejector activity release rate. The provisions of the ODCM Control Process, described in ITS 5.5.1, control changes to the ODCM. Because the ODCM Control Process controls changes to monitoring the radioactivity rate of the noble gases at the main condenser air ejector, and because the requirement for monitoring gross activity limits remains in the ITS, moving design details and requirements to the ODCM is acceptable.

3.7.6 Main Turbine Bypass System

LA.1 CTS 4.7.9.b requires the main turbine bypass system to be demonstrated to be operableevery 18 months by performance of a system functional test and channel functional test. The SR also specifies criteria that detail how to successfully meet the testing requirement. ITS 3.7.6 requires the main turbine

bypass system operable. The ITS moves details to the ITS Bases. Including system details in the body of the ITS is not necessary because ITS 3.7.6 and SRs 3.7.6.1, 3.7.6.2 and 3.7.6.3 ensure the main turbine bypass system is operable. Changes to the Bases are controlled by the provisions of the Bases Control Program described in ITS Chapter 5.0. Removal of these operational details to the ITS Bases is consistent with the STS, and is acceptable.

LA.2 CTS 4.7.9.b.3 requires demonstration that the main turbine bypass system response time requirement is "less than or equal to 300 milliseconds." The ITS SR 3.7.6.3 requires response time testing however the response time limit is moved to the ~~Specification~~ LCS Manual. Main turbine system response time is an integral part of the main turbine bypass system operability requirements. As such, ITS 3.7.6 and associated SR 3.7.6.3 ensure the response time of the main turbine bypass system is within limit and the main turbine bypass system is operable. The provisions of 10 CFR 50.59 control changes to the Specification Manual and the response time requirement. Because the Specification Manual controls the details and requirements of the SR, the operability of the main turbine bypass system is ensured without that additional detail in the ITS, therefore moving the limit to the Specification Manual is acceptable.

LD.1 ~~[Replaced with HICB SER input]~~ see insert to match LD.1 from 3.7.1

L.1 CTS 3.7.9 requires the main turbine bypass system operable. ITS 3.7.6 has, in addition to that requirement, an option of applying the minimum critical power ratio (MCPR) limits of ITS 3.2.2, if the main turbine bypass system becomes inoperable. The main turbine bypass system ensures that the MCPR safety limits are maintained during a feedwater transient. Therefore, ITS 3.7.6 provides an option permitting application of a MCPR penalty instead of maintaining the main turbine bypass system operable. The MCPR penalty, specified in the Core Operating Limits Report, is similar to other MCPR penalties (such as if the EOC-RPT is inoperable). In addition, the ITS increases the time to restore the main turbine bypass system to operable status or the time to apply the MCPR main turbine bypass system inoperable limit to satisfy the requirements of the ITS 3.7.6 from 1 hour to 2 hours, consistent with the time provided in CTS 3.2.3 to restore a MCPR ~~limit.~~ (in CTS) Therefore adopting the MCPR penalty in place of an operable main turbine bypass system is acceptable.

we evaluated CDF not "operational risk" or change to NRC evaluation

L.2 CTS SR 4.7.9.a requires cycling each turbine bypass valve at least once per 7 days. ITS SR 3.7.6.1 tests one complete cycle of each main turbine bypass valve every 31 days. The ITS changes the frequency for cycling the main turbine bypass valves from 7 days to 31 days. A report on the historical maintenance and surveillance data shows no turbine bypass valve failures. The licensee's evaluation of this data shows the effect on safety due to the extended surveillance interval is small; the decrease in operational risk ~~core damage frequency~~ due to the decrease in the potential for a turbine or plant trip from testing the valves less frequently offsets, and is greater than, the increase in operational risk ~~core damage frequency~~ due to reduced reliability as a result of testing the valves less frequently. In addition, the licensee states that Westinghouse, the turbine vendor, General Electric, the bypass valve vendor and Control Components, Inc., the vendor for bypass valve internals can support the interval extension. The licensee states these

INSERT LD.1 to subsection 3.7.b, LCO 3.7.6

CTS 4.7.9.b requires performance of a system functional test, Channel Calibration, and Turbine Bypass System Response Time test every 18 months. ITS SR 3.7.6.2 and SR 3.7.6.3 performs these tests every 24 months. This change is acceptable for the reasons given in the section entitled "Surveillance Interval Extension from 18 months to 24 months" in the general discussion of the less restrictive requirements at the beginning of Part III of this safety evaluation.

vendors agree that the increased surveillance interval decreases wear and tear on the valves with no significant increase in the probability that the valves will fail to open when required. The NSSS vendor (GE) supports a 31 day bypass valve test for GE design valves, stating that a 31 day Frequency does not increase any NSSS safety concerns.

3.7.7 Spent Fuel Storage Pool

LA.1 The action associated with CTS 3.9.9 for the spent fuel storage pool water limits not met specifically suspends "crane operations with loads." The requirement to suspend crane operations is moved to plant procedures. The movement of loads other than fuel assemblies have administrative controls based on the heavy loads analysis for the individual load. The bounding design basis fuel handling accident assumes dropping an irradiated fuel assembly onto an array of irradiated fuel assemblies seated within the reactor pressure vessel. The FSAR describes the load analysis methodology and crane operation controls. The provisions of 10 CFR 50.59 control the changes to the FSAR and procedures. Since the provisions of 10 CFR 50.59 control future changes to fuel movement activity whenever the spent fuel water levels limits are not met then these CTS requirements will be adequately controlled in plant procedures and the changes are acceptable.

LA.2 The action associated with CTS 3.9.9 clearly notes that suspension of the movement of fuel assemblies and crane operations with loads occurs "after placing the fuel assemblies and crane load in a safe condition." The ITS moves this information to the ITS Bases. The instruction to place fuel assemblies in a safe condition before suspending fuel movement is not necessary for establishing actions that ensure minimum water level in the spent fuel pool meets the assumptions of iodine decontamination factors following a fuel handling accident. ITS Required Action A.1 prevents a spent fuel handling accident from occurring by suspending the movement of irradiated fuel assemblies in the spent fuel storage pool. Changes to the Bases are controlled by the provisions of the Bases Control Program described in ITS Chapter 5.0. Removal of these operational details to the ITS Bases is consistent with the STS, and is acceptable.

INSERT CTS 3/4.7.4 from page 14. →

The above less restrictive requirements have been reviewed by the staff and have been found to be acceptable, because they do not present a significant safety question in the operation of the plant. The TS requirements that remain are consistent with current licensing practices, operating experience and plant accident and transient analyses, and provide reasonable assurance that the public health and safety will be protected.

c. <u>More Restrictive Requirements</u>

By electing to implement STS Section 3.7, the licensee has proposed a number of more restrictive conditions than are allowed by the existing TS. The more significant conditions are the following:

3.7.1 Standby Service Water (SW) System and Ultimate Heat Sink (UHS)

M.1 CTS 3.7.1.1, action a.2 allows 8 hours to restore one of the inoperable

requires

subsystems if both standby service water subsystem are inoperable. For the same condition, ITS 3.7.1, ~~Required~~ Action C, ~~allows~~ a controlled shutdown from Modes 1, 2, or 3, to Mode ~~4~~3 within 12 hours and to Mode 4 within 36 hours. The ITS does not include the CTS 8 hour repair time period before a shutdown is required. With both standby service water subsystems inoperable, all low pressure ECCS and diesel generators are inoperable. Taking the associated required actions of these safety systems requires an immediate shutdown. This change is consistent with the STS. The CTS 8 hour allowance is actually only a 2 hour allowance, because CTS 3.7.1.1, action d, requires declaring the diesel generators inoperable and its associated actions taken. The diesel generator actions allow 2 hours to operate with two diesel generators inoperable (in this case, because of lack of standby cooling water) before requiring a unit shutdown. The ITS actions result in restrictions to plant operations that are acceptable corrective actions for the condition where the plant no longer has standby service water subsystems operable.

M.2 CTS 3.7.1.3.c requires a maximum average sediment depth on the floors of the spray ponds of "less than or equal to 0.5 feet." ITS ~~3.7.1,~~ SR 3.7.1.4 requires a verification that the average sediment depth in each UHS spray pond is < 0.5 feet. The ITS changes the limit from ≤ 0.5 ft to < 0.5 ft, which is consistent with the licensing basis analysis assumptions. This change is more restrictive on plant operations since sediment level of exactly 0.5 ft requires correction (ITS 3.7.1, Required Action A.1). Additionally, the CTS "maximum average sediment depth" becomes "average sediment depth" in the ITS. Taken together with the calculated average, these two changes are incrementally neutral, and acceptable.

3.7.2 High Pressure Core Spray (HPCS) Standby Service Water (SW)

M.1 The CTS 3.7.1.2 action associated with an inoperable high pressure core spray (HPCS) service water system requires the associated diesel generator to be declared inoperable. This requirement results in a 72 hour allowed outage time for the HPCS diesel generator before HPCS is declared inoperable according to CTS 3.8.1.1. ITS 3.7.2, Required Action A.1, declares the HPCS inoperable immediately because the HPCS service water system provides cooling not only to the HPCS diesel generator, but also to the HPCS pump and room cooler. Thus, the current 72 hour repair allowed outage time for the HPCS diesel generator before declaring the HPCS inoperable is eliminated and this restriction on plant operation is acceptable.

3.7.4 Control Room Air Conditioning (AC) System

M.1 The CTS has no specific requirements for operability of the control room air conditioning system, rather the control room temperature is verified to be ≤ 85°F every 12 hours by CTS 4.7.2.a. ITS 3.7.4 requires the control room air conditioning system to be operable, however control room temperature limits are not specified. The design function of the control room air conditioning system is to ensure the control room remains habitable in a post-design basis accident environment. ITS 3.7.4 requires two operable subsystems in Modes 1, 2, and 3, during movement of irradiated fuel assemblies in the secondary containment, during core alterations, and during operations with the potential for draining the reactor vessel to meet single failure criterion for assumed

accident scenarios. The ITS also adds appropriate required actions and SR 3.7.4.1. This change is consistent with the STS and is more restrictive on plant operations. The additional requirements are appropriate and acceptable.

3.7.5 Main Condenser Offgas

M.1 CTS 3.11.2.7 specifies the applicability for radioactive effluents measured at the main condenser as "During main condenser offgas treatment system operation as specified in Section 3.3.7.12." The CTS places the plant in Hot Standby (MODE 2) if CTS 3.11.2.7 is not met. ITS 3.7.5 changes the applicability to "MODE 1" and "MODES 2 and 3 with any steam line not isolated and steam jet air ejector (SJAE) in operation." The ITS requires the plant to exit the applicability for ITS 3.7.5, by isolating all main steam lines (Required Action B.1) or the SJAE (Required Action B.2) in 12 hours. To perform these two required actions, the unit must be in Mode 2, consistent with CTS requirements. Alternately, placing the plant in Mode 3 in 12 hours and Mode 4 in 36 hours (Required Actions B.3.1 and B.3.2) are required actions that are more restrictive than the CTS requirements. These changes provide appropriate operational limits and are acceptable.

M.2 CTS 4.11.2.7.2.b requires the determination of the gross activity rate from the main condenser air ejector within 4 hours following an increase "of greater than 50%" in the nominal steady-state fission gas release from the primary coolant. ITS SR 3.7.5.1 requires the same surveillance following an increase of "≥ 50%." The ITS changes the amount of increase from "greater than 50%" to include an increase equivalent to 50%. This difference between the requirements is negligible considering measurement of the nominal steady-state fission gas release from the primary coolant contains an uncorrectable measurement error. While the change increases the range of releases requiring action, there are expected to be however, no need to perform additional surveillances since the increase is small. Therefore, this change is acceptable.

The staff has reviewed the more restrictive requirements and concludes that they result in an enhancement to the improved TS. Therefore, the more restrictive requirements are acceptable.

d. Significant difference from NUREG 1434. NONE

e. ~~d.~~ Relocated ~~Requirements~~ Specification

(or NRC)

In accordance with the guidance in 10 CFR 50.36 the licensee has proposed to relocate or reorganize all or portions of the following current TS to other licensee-controlled documents:

~~on~~ S.S. submittal DID NOT evaluate AGAINST 50.36

Current TS	Title
~~3/4.7.4~~	~~Snubbers~~
3/4.7.5	Sealed Source Contamination
3/4.7.8	Area Temperature Monitoring

The more significant changes resulting from relocated items are as follows:

LA.1

1. ~~Item #108~~ CTS 3.7.4, "Snubbers," states that all mechanical and hydraulic snubbers shall be operable. Snubbers are passive devices used for supporting piping systems and the associated TS action statement only requires that an inoperable snubber be replaced or repaired within 72 hours. The CTS surveillance requirements for snubbers is that they be periodically examined under the inservice inspection program. The examination follows ASME OM Code, 1995, and applicable addenda, including snubber service life monitoring. The requirements of CTS 3/4.7.4 that all snubbers are to be operable are requirements that do not impact reactor operation, do not identify a parameter that is an initial condition assumption for a Design Basis Accident (DBA) or transient, do not identify a significant abnormal degradation of the reactor coolant pressure boundary, and do not form part of the primary success path which functions or actuates to mitigate a design basis accident or transient. Therefore, the requirements specified in the existing TS have been relocated ~~to the Snubber Program document~~ LCS and will be controlled in accordance with 10 CFR 50.59.

MOVE to LA.1 page 11

Rev C change

2. CTS 3.7.5, "Sealed Source Contamination," requires that sealed sources containing radioactive material shall be free of a specified removable contamination. The associated action statement requires that if the removable contamination exceeds limitations, the sealed source shall be either decontaminated or disposed of. The limitations expressed in this TS do not impact reactor operation, do not identify a parameter which is an initial condition assumption for a DBA or transient, do not identify a significant abnormal degradation of the reactor coolant pressure boundary and do not provide any mitigation of a design basis event. Therefore, the requirements specified in the existing TS have been relocated to plant documents and will be controlled in accordance with 10 CFR 50.59.

3. CTS 3/4.7.8, "Area Temperature Monitoring," specifies temperature limits for various rooms and areas inside containment. The areas covered are the control room, the auxiliary electric equipment rooms, the primary containment (drywell), the high pressure core spray, low pressure core spray room, residual heat removal system, and the reactor core isolation cooling rooms, the primary containment beneath the reactor pressure vessel, and the switchgear rooms. The limitations expressed in this TS do not impact reactor operation, do not identify a parameter which is an initial condition assumption for a DBA or transient, do not identify a significant abnormal degradation of the reactor coolant pressure boundary and do not provide any mitigation of a design basis event. Therefore, the requirements specified in the existing TS have been relocated to ~~plant documents~~ LCS and will be controlled in accordance with 10 CFR 50.59.

The above relocated requirements relating to installed plant instrumentation are not required to be in the TS under 10 CFR 50.36, and are not required to obviate the possibility of an abnormal situation or event giving rise to an immediate threat to the public health and safety. Further, they do not fall within any of the four criteria set forth in the Commission's Final Policy Statement, discussed in the Introduction above. In addition, the staff finds that sufficient regulatory controls exist under 10 CFR 50.59. Accordingly, the staff has concluded that these requirements may be relocated from the TS

to the licensee's ~~TS Bases~~ LCS, or ~~U~~FSAR, as applicable.

3.8 Electrical Power Systems

In accordance with the guidance in the Final Policy Statement, the licensee has proposed administrative and technical changes to the CTS to bring them into conformance with STS Section 3.8 specifications. For each category of change, the discussions generally follow the presentation order of the individual specifications within STS Section 3.8. As appropriate, the ITS Section 3.8 specifications are listed in italics before the applicable discussions.

a. Administrative Changes

Consistency

The specifications of CTS Section 3/4.8 that have been retained in corresponding improved TS Section 3.8, have been reworded to conform to the STS presentation. In particular, the ~~following~~ most significant administrative changes that were made are as follows

3.8.1 AC Sources—Operating

( ) The requirements of CTS 3/4.8.1.1 are presented in ITS 3.8.1, 3.8.3, and 5.5.9 in accordance with the format of the STS.

(A.1) The requirements of CTS 3.8.1.1.b.1 (DG fuel day tank minimum volume) and CTS 3.8.1.1.b.3 (fuel transfer system capability) are moved to ITS SR 3.8.1.4 and SR 3.8.1.6, respectively. Changing the location of these requirements within the TS is purely administrative.

SEE INSERT A.3 for consistency

[A.2 is addressed under *3.8.3 as a less restrictive change*] A.2 is moved, TECHNICAL CHANGES ARE DISCUSSED else where

(A.3 and A.5) In the event DG-3 is inoperable, ACTION c of CTS 3/4.8.1.1 requires restoring DG-3 to operable status within 72 hours or declaring the HPCS inoperable and taking the action specified in CTS 3/4.5.1 for an inoperable HPCS system. This action requirement is retained in ITS 3.8.1 by the combination of the Applicability Note and ACTION B. The Note states that if the HPCS System is inoperable, the Division 3 AC electrical power sources are not required to be operable. As explained in the associated Bases for the Note, in the event HPCS is required and DG-3 is inoperable, then within 72 hours HPCS must be declared inoperable (requiring entry into ITS 3.5.1) or DG-3 must be restored to operable status. This change in presentation to conform to the STS format does not change the current action requirement. It is therefore purely administrative.

(A.4) In ITS 3.8.1, the Note to ACTION D, for the condition of one required offsite circuit inoperable and one required DG inoperable, is needed in order to retain the action requirement of CTS 3/4.8.3.1 in the event a required electrical power distribution subsystem is deenergized (i.e., inoperable). Without this note, ITS LCO 3.0.6 would only require taking the ACTIONS of the AC sources specification. Thus, because this note ensures the existing requirement to enter the distribution system specification for deenergized

INSERT A.2 to subsection 3.8.a, LCO 3.8.1

CTS 3.8.1.1.b.2, 4.8.1.1.2.a.2, 4.8.1.1.2.a.7, 4.8.1.1.2.b.2, 4.8.1.1.2.c, 4.8.1.1.2.d, and 4.8.1.1.2.g, relating to fuel oil storage tank, air receiver, and fuel oil property requirements, are being moved to ITS 3.8.3 in accordance with the format of the STS. Evaluations of any technical changes are addressed in the ITS 3.8.3 evaluation. This is an acceptable administrative change.

distribution subsystems are followed, it is just an administrative change in presentation and is acceptable.

(A.6) CTS 3/4.8.1.1 contains no specific action requirements when three or more AC sources (any combination of required offsite sources and diesel generators) are inoperable; thus CTS 3.0.3 would apply and require an immediate unit shutdown. Corresponding ACTION G of ITS 3.8.1 requires immediate entry into ITS LCO 3.0.3, which is equivalent. Therefore, this change is administrative.

(A.7) CTS 4.8.1.1.1.b and 4.8.1.1.2.e require performing the 18-month surveillances for the offsite power circuits and diesel generators during shutdown. This restriction is retained in a Note in each corresponding ITS surveillance as follows:

- SRs 3.8.1.8, 3.8.1.9, 3.8.1.10, 3.8.1.12, and 3.8.1.14 cannot be performed while in MODES 1 and 2.

- SRs 3.8.1.11, 3.8.1.13, 3.8.1.16, 3.8.1.17, 3.8.1.18, and 3.8.1.19 cannot be performed while in Modes 1, 2, and 3.

These notes clarify the intent of this restriction. Thus this change is administrative. Additionally, each note add~~s the less restrictive a~~llowance clearly presents allowance of current practice ~~(discussed below)~~ to take credit for unplanned events for the surveillance, provided the event produces the necessary data.

where?

[A.8 not ~~used~~] significant

(A.9) Note * to CTS 4.8.1.1.2.a.4, the monthly diesel generator start test, allows the start to be preceded by an "engine prelube period and/or other warmup procedures recommended by the manufacturer so that mechanical stress and wear on the diesel engine is minimized." Corresponding Note 1 of ITS SR 3.8.1.2 retains this allowance. It states "all DG starts may be preceded by an engine prelube period and followed by a warmup period prior to loading." In addition, Note 2 has been added to explicitly state the current practice based on the manufacturer's recommendation (presently followed) for gradual acceleration to synchronous speed for testing. This administrative change is acceptable. Notice that the provision of Note 2 is not permitted for a timed diesel start to meet ITS SR 3.8.1.7, the 184-day start from ambient conditions. This is consistent with the current Note * and is thus also an administrative change.

(A.10) CTS 4.8.1.1.2.a.4 requires testing of the diesel generator to assure the capability of the diesel to start and accelerate to at least 900 rpm (60 Hz). ITS SR 3.8.1.2 only requires verifying each diesel generator starts and achieves steady state operation at a frequency $\geq$ 58.8 Hz and $\leq$ 61.2 Hz; it does not contain the engine speed limit. This is acceptable because the engine is mechanically coupled to the generator; thus it is redundant to specify both speed and frequency—they are equivalent. Specifying only the frequency is acceptable because achieving the specified frequency is an

adequate indication of proper operation of the diesel engine governor. This change is administrative because the CTS speed/frequency limit is retained.

A.11 During the load rejection test of the single largest load, CTS 4.8.1.1.2.e.2 specifies maintaining the diesel generator engine speed "≤ 75% of the difference between nominal speed and the overspeed trip setpoint or 15% above nominal, whichever is less." Corresponding ITS SR 3.8.1.9 specifies a diesel generator speed limit following the load rejection that is the most limiting speed of these two limits: ≤ 66.75 Hz (75% of the difference between nominal speed of 60 Hz and the overspeed trip setpoint of 69 Hz). The explanation of the value of the speed limit is moved to the Bases for SR 3.8.1.9. This change in presentation of the CTS limit is administrative because the CTS requirement is retained.

SEE INSERT A.12 from page 8 of SE

[A.12 is less restrictive] CTS SR says verify auto trip, except manual, is bypassed. ITS says verify Auto trip is bypassed. No change in Req't, ∴ ADMIN

A.13 CTS 4.8.1.1.2.e.8 verifies an auto-start signal will restart the diesel generator within 5 minutes of completing a 24-hour run test. Note * to this surveillance also permits performing the hot-restart test following 1 hour of operation at the specified load or until operating temperature has stabilized. Specifically requiring the hot restart test following the 24-hour run test is deleted from corresponding ITS SR 3.8.1.14. The provision of Note * is retained as Note 1 in ITS SR 3.8.1.15, which verifies the automatic restart capability of a hot diesel generator. Note 1 specifically requires the restart surveillance within 5 minutes of shutting down the diesel generator after one or more hours of operation at the full diesel generator load rating. As stated by CTS Note *, it is acceptable to perform the test after a ≥ 1 hour run at a load equivalent to the continuous rating of the diesel generator, or until operating temperature has stabilized. Therefore, since the CTS already allows testing the hot restart capability in this manner, this change is administrative and acceptable.

3.8.2 AC Sources—Shutdown

~~(✓) The requirements of CTS 3/4.8.1.2 are presented in ITS 3.8.2, 3.8.3, and 5.5.9 in accordance with the format of the STS.~~

(A.1) The LCO requirements supporting diesel generator operability in CTS 3.8.1.2.b.1 (minimum volume in the diesel fuel day tanks) and CTS 3.8.1.2.b.3 (requires operable fuel transfer pump), are retained in ITS SR 3.8.2.1 (verifies day tank volume and fuel oil transfer system operability) which requires meeting ITS SR 3.8.1.4 and SR 3.8.1.6. This change is administrative because it does not modify the existing technical requirements.

[A.2 is addressed in *3.8.3*] - SEE INSERT A.2, for consistency

(A.3) ACTION A of ITS 3.8.2 contains a new Note specifying entry into the applicable Conditions and Required Actions of ITS 3.8.8 when any required division is deenergized as a result of an inoperable offsite power source.

INSERT A.2 to subsection 3.8.a, LCO 3.8.2

CTS 3.8.1.2.b.2, relating to fuel oil storage tank requirements, is being moved to ITS 3.8.3 in accordance with the format of the STS. Evaluations of any technical changes are addressed in the ITS 3.8.3 evaluation. This is an acceptable administrative change.

This note is necessary in the ITS presentation because the provisions of ITS LCO 3.0.6 would otherwise require only following the action requirements of ITS 3.8.2. However, in the event of an inoperable offsite power source, it may also be necessary to take appropriate distribution system action requirements because the AC source action requirements are not sufficiently conservative (for example, RHR-SDC could be inoperable). Corresponding ACTION a of CTS 3~~/4~~.8.1.2 does not contain this note because in the CTS the operators would know to also enter the distribution system action requirements for busses that become deenergized. Because this note is necessary to retain the existing electrical power source and distribution system action requirements, it is an acceptable administrative change.

(A.4) In the event DG-3 is inoperable, ACTION b of CTS 3~~/4~~.8.1.2 requires declaring the HPCS system inoperable and taking the action required by CTS 3~~/4~~.5.2 and 3~~/4~~.5.3. Because under the ITS format declaring the HPCS system inoperable will require entering the ACTIONS of the ECCS specification (ITS 3.5.2), corresponding ACTION C of ITS 3.8.2 omits the unnecessary statement requiring the actions of the ECCS specification to be taken. The existing requirement is retained, therefore, this is an administrative change in presentation.

[A.5 not used - redundant to discussion of 3.8.3] SEE INSERT, for CONSISTENCY

(A.6) For clarity, an exception to performing CTS 4.8.1.1.1.b (ITS SR 3.8.1.8, verification of automatic and manual transfer capability between normal and alternate offsite power sources) and CTS 4.8.1.1.2.f (ITS SR 3.8.1.20, simultaneous start of the diesel generators) is added. These surveillances are currently not required since they ensure all the offsite circuits and DGs are operable (and only one circuit and no more than two DGs are required while in MODES 4 and 5 and handling irradiated fuel assemblies in the secondary containment). Adding this explicit exception in ITS SR 3.8.2.1 does not change the current requirements for performing these surveillances and is thus a purely administrative change.

3.8.3 Diesel Fuel Oil, Lube Oil, and Starting Air

~~( ) The requirements of CTS 3/4.8.1.1 and 3/4.8.1.2 for diesel generator fuel oil and starting air are presented in new specifications, ITS 3.8.3 and 5.5.9 in accordance with the format of the STS. ITS 3.8.3 also contains new limits on diesel lube oil inventory with appropriate action and surveillance requirements.~~

(~~3.8.1 - A.2 and 3.8.2 - A.2 and 3.8.3~~ - A.1) The requirements for diesel generator fuel oil in CTS 3.8.1.1.b.2 and 3.8.1.2.b.2 (minimum amount of fuel oil in the fuel oil storage system for each diesel generator) and CTS 4.8.1.1.2.a.2 (verification of the minimum amount of fuel in each fuel storage tank for each diesel generator) are presented in ITS SR 3.8.3.1. The requirements for the minimum air start receiver pressure for each diesel generator in CTS 4.8.1.1.2.a.7 (230 psig for DG-1 and DG-2 and 200 psig for DG-3) are presented in ITS SR 3.8.3.4, which verifies that each diesel generator air start receiver pressure is ≥ 230 psig for DG-1 and DG-2, and

INSERT A.5 to subsection 3.8.a, LCO 3.8.2

CTS 4.8.1.2, as it relates to fuel oil and air receiver requirements, is being moved to ITS 3.8.3 in accordance with the format of the STS. Evaluations of any technical changes are addressed in the ITS 3.8.3 evaluation. This is an acceptable administrative change.

≥ 223 psig (higher than now required) for DG-3 every 31 days. The requirements for sampling and testing of the diesel fuel oil in CTS 4.8.1.1.2.b.2, 4.8.1.1.2.c, and 4.8.1.1.2.d are presented in ITS SR 3.8.3.3 (requires monitoring the fuel oil properties under the diesel fuel oil testing program) and SR 3.8.3.5 (check for and removal of accumulated water from each diesel fuel oil in each fuel oil storage tank). ITS LCO 3.8.3 requires fuel oil storage and starting air when associated DG is required to be operable. This covers the current MODES 1, 2, 3, 4, and 5 and fuel handling LCO Applicability requirements. Moving these requirements to ITS 3.8.3 is an administrative change in presentation.

(A.2) CTS 3.8.1.1.b.~~3~~ 2 and 3.8.1.2.b.2 require a minimum amount of fuel oil in storage for each diesel generator. These requirements are presented in ITS SR 3.8.3.1 which requires verifying that each fuel oil storage tank contains ≥ 55,500 gallons for DG-1, ≥ 55,500 gallons for DG-2, and ≥ 33,000 gallons for DG-3. Moving these fuel volume storage requirements to the surveillances is an administrative change in presentation.

(A.3) The requirements of CTS 4.8.1.1.2.c & 4.8.1.1.2.d for sampling diesel fuel oil are presented in ITS SR 3.8.3.3, which requires fuel oil testing, and ITS 5.5.9, "Diesel Fuel Oil Testing Program," which contains the test details. The ITS presentation makes it clear that meeting the diesel fuel oil testing program requirements is necessary for DG operability. This change in presentation is administrative because it maintains the current fuel oil testing requirements.

3.8.4 DC Sources—Operating

( ) ~~The requirements of CTS 3/4.8.2.1 are presented in ITS 3.8.4 and new specification ITS 3.8.6 in accordance with the format of the STS.~~

[A.1 is addressed in *3.8.6*] ~~was~~ INSERT A1 for consistency

(A.2) In the event either the Division 3 battery or its charger is inoperable, ACTION b of CTS 3~~/4~~.8.2.1 requires declaring the HPCS system inoperable and taking the action required by CTS 3~~/4~~.5.1. Because under the ITS format declaring the HPCS system inoperable will require entering the ACTIONS of the ECCS specification (ITS 3.5.1), corresponding ACTION B of ITS 3.8.4 omits this unnecessary statement requiring the actions of the ECCS specification to be taken. The existing requirement is retained, therefore this is an administrative change in presentation.

(A.3) The requirements of CTS 4.8.2.1.d to perform the battery capacity (battery service) test and CTS 4.8.2.1.e to perform the battery performance discharge test during shutdown are retained in corresponding ITS SR 3.8.4.7 and SR 3.8.4.8 with a note prohibiting performance of these surveillances while in MODE 1, 2, or 3. This is an administrative change because the Notes are equivalent to the existing restrictions.

(L.8 from 3.8.4) CTS 4.8.2.1.e states the battery performance discharge test
CONSIDERED AN L change, move to page 25.

INSERT A.1 to subsection 3.8.a, LCO 3.8.4

CTS 4.8.2.1.a.1, 4.8.2.1.b.1, 4.8.2.1.b.3, and Table 4.8.2.1-1, relating to the battery cell parameter limits, are being moved to ITS 3.8.6 in accordance with the format of the STS. Evaluations of any technical changes are addressed in the ITS 3.8.6 evaluation. This is an acceptable administrative change.

may be substituted for the battery service test once in a 60 month period. ITS SR 3.8.4.7 retains this provision as Note 1, but only allows the "modified" performance discharge test, SR 3.8.4.8 to substitute for the battery service test once per 60 months. This change only clarifies the existing allowance which is consistent with IEEE Standard 450-1987. In addition, this existing provision is acceptable, because the modified battery performance discharge test is a more severe test of battery capacity than the battery service test. ~~Is this administrative or more restrictive?~~ L = not currently allowed, even though more severe

3.8.5 DC Sources—Shutdown

( ) ~~The requirements of CTS 3/4.8.2.2~~ are presented ~~in ITS 3~~.8.5 and new specification ITS 3.8.6 in accordance with the format of the STS.

[A.1 add~~ressed in 3.8.6~~] not significant

(A.2) In the event either the Division 3 battery or its charger is inoperable, ACTION b of CTS 3/~~4~~.8.2.2 requires declaring the HPCS system inoperable and taking the action required by CTS 3/~~4~~.5.2 and 3/~~4~~.5.3. Because under the ITS format declaring the HPCS system inoperable will require (ITS 3.5.2) entering the ACTIONS of the appropriate ECCS specification~~s,~~ corresponding ACTION A of ITS 3.8.5 omits this unnecessary statement requiring the actions of the ECCS specification to be taken. Rather Required Action A.1 specifies declaring affected required features inoperable; for an inoperable Division 3 DC source, the affected feature would be the HPCS system. The existing requirement is retained, therefore this is an administrative change in presentation.

3.8.6 Battery Cell Parameters

~~(3.8.4 - A.1, 3.8.5 - A.1, and 3.8.6 -~~ (A.1 and A.2) The requirements of CTS 3/4.8.2.1 and 3/4.8.2.2 for battery cell parameters are presented in new specification ITS 3.8.6 in accordance with the format of the STS. Reorganizing the battery cell parameter requirements is an administrative change in presentation.

(A.3) In the event battery cell parameters are outside the limits of CTS Table 4.8.2.1-1, Notes (1), (2), and (3) to this table specify action requirements. The ACTIONS Note of ITS 3.8.6 clarifies the intent of the CTS that these action requirements apply separately to each battery. This clarification of the CTS intent is an administrative change.

(A.4) In the event battery average electrolyte temperature is ≤ 60°F, the intent of the ACTIONS of CTS 3/~~4~~.8.2.2 is to declare the affected battery inoperable because CTS 4.8.2.1.b.3, which requires the average temperature to be > 60°F, would not be met. This CTS surveillance is retained as ITS SR 3.8.6.3 and the intended action requirement is retained explicitly in ACTION B of ITS 3.8.6. ACTION B requires immediately declaring the battery inoperable when the average electrolyte temperature is not within limit. Thus, failure

A.4 ALSO DISCUSSED ACTION FOR CAT A & B Limits. SEE INSERT.

Insert A.4

of the surveillance will result in an inoperable battery. This change is administrative because it simply clarifies the intent of the CTS action requirements.

3.8.7 Distribution Systems—Operating

( ) The requirements of CTS 3/4.8.3.1 are ~~presented in~~ ITS 3.8.7 in accordance with the format of the STS.

(A.1) In the event a Division 3 AC or DC distribution system is deenergized (inoperable), ACTIONS a.2 and b.2, respectively, of CTS 3/4.8.3.1 require declaring the HPCS system inoperable and entering the action requirements of the ECCS specification CTS 3/4.5.1. Because under the ITS format declaring the HPCS system inoperable will require entering the ACTIONS of the ECCS specification, corresponding ACTION E of ITS 3.8.7 omits this unnecessary statement requiring the actions of the ECCS specification to be taken. Because the existing requirement is retained, this is an administrative change in presentation.

(ITS 3.5.1)

[A.2 ~~is addressed under less restrictive~~ changes] SEE INSERT A.2

3.8.8 Distribution Systems—Shutdown

( ) The requirements of CTS 3/4.8.3.2 are ~~presented in ITS~~ 3.8.8 in accordance with the format of the STS.

(A.1) In the event a Division 3 AC or DC distribution system is deenergized (inoperable), ACTIONS a.2 and b.2, respectively, of CTS 3/4.8.3.2 require declaring the HPCS system inoperable and entering the action requirements of ECCS ~~and RCIC~~ specifications CTS 3/4.5.2 and 3/4.5.3. Because declaring the HPCS system inoperable will require entering the ACTIONS of the ECCS ~~and RCIC~~ specifications, corresponding ACTION A of ITS 3.8.8 omits this unnecessary statement requiring the actions of the ECCS ~~and RCIC~~ specifications to be taken. Because the existing requirement is retained, this is an administrative change in presentation.

(ITS 3.5.2)

CTS 3/4.8.4.4, A.1, for consistency

Insert

Conclusion

The preceding changes to CTS Section 3/4.8 result in limits that are unchanged from the current requirements cited. In some cases, these changes result in a clearer presentation of the intent of current requirements. Accordingly, these changes are purely administrative. Therefore, they are acceptable.

b. Less Restrictive Requirements

The licensee, in electing to implement the specifications of STS Section 3.8, "Electrical Power Systems," proposed a number of less restrictive requirements than are allowed by CTS Section 3/4.8. These requirements are the following:

INSERT A.4 to subsection 3.8.a, LCO 3.8.6

In addition, when the Category A or B limits are not restored within the time provided in CTS Table 4.8.2.1-1, Notes (1) and (2), there is no specific requirement to declare the battery inoperable. However, since this is obviously the intent, ITS Action B requires immediately declaring the battery inoperable.

INSERT A.2 to subsection 3.8.a, LCO 3.8.7

The CTS requires entry in CTS 3.0.3 when three or more distribution subsystems are inoperable. The format of the ITS would allow multiple Conditions to be simultaneously entered. With three or more distribution subsystems inoperable, the distribution subsystems cannot perform their required function. However, the ITS Actions would allow entry into all applicable Conditions and not require an immediate LCO 3.0.3 entry. To preserve the existing intent of the CTS, a specific Action has been provided (ITS Action F) requiring entry into ITS 3.0.3 when three or more distribution subsystems are inoperable.

INSERT A.1 to subsection 3.8.a, CTS 3/4.8.4.4

CTS 3/4.8.4.4 Reactor Protection System Electric Power Monitoring

(A.1) CTS 3/4.8.4.4, Reactor Protection System Electric Power Monitoring, is being moved to ITS 3.3.8.2 in accordance with the format of the STS. Evaluations of any technical changes are addressed in the ITS 3.3.8.2 evaluation. This is an acceptable administrative change.

General

Currently ALLOWED. NOT LESS RESTRICTIVE

(1) Notes that allow credit to be taken for unplanned events to satisfy surveillances have been added to the following surveillances for the diesel generators and batteries. This allowance is acceptable because data obtained during the normal performance of each surveillance must still be obtained and the acceptance criteria must be satisfied before credit can be taken for the unplanned event. As described in the Bases, an unplanned event may include unexpected operational events and testing following corrective maintenance.

CTS Surveillance	Improved TS SR	Description
4.8.1.1.2.e.2	SR 3.8.1.9 Note	DG single load rejection.
4.8.1.1.2.e.3	SR 3.8.1.10 Note	DG full load rejection.
4.8.1.1.2.e.4	SR 3.8.1.11 Note 2	DG LOSP test.
4.8.1.1.2.e.5	SR 3.8.1.12 Note 2	DG ECCS start test.
4.8.1.1.2.e.6	SR 3.8.1.19 Note 2	DG ECCS with LOSP test.
4.8.1.1.2.e.7	SR 3.8.1.13 Note	DG automatic trip bypass test.
4.8.1.1.2.e.8	SR 3.8.1.14 Note 2	DG 24-hour full load run.
4.8.1.1.2.e.10	SR 3.8.1.16 Note	Test of capability to transfer emergency loads from the DG to an offsite circuit.
4.8.1.1.2.e.11	SR 3.8.1.17 Note	Test of DG response to ECCS when operating the DG in test mode.
4.8.1.1.2.e.12	SR 3.8.1.18 Note	Verification of load sequencer timer settings.
4.8.2.1.d	SR 3.8.4.7 Note 2	Battery service test.
4.8.2.1.e	SR 3.8.4.8 Note	Battery performance discharge test.

specific 'L' in 3.8.4

3.8.1 AC Sources—Operating

move to page 3

(A.12) CTS 4.8.1.1.2.e.7 requires verifying that a simulated ECCS actuation signal automatically bypasses diesel generator automatic trips except (a) engine overspeed, (b) generator differential current, (c) incomplete starting sequence, and (d) emergency manual stop. Corresponding ITS SR 3.8.1.13 omits the exception to the emergency manual stop function. This is acceptable because the emergency manual stop is not an automatic diesel generator trip, but trips the diesel fuel racks on a ~~manu~~ manual signal. Other auto signals also trip the racks.

(LA.1) CTS 3.8.1.1.a describes the required offsite circuits as "physically independent" and CTS 3.8.1.1.b describes the diesel generators as "separate and independent." These design details do not need to be stated in corresponding ITS LCO 3.8.1.a and LCO 3.8.1.b to ensure the operability of the AC power sources. These details are thus moved to the Bases for ITS 3.8.1. This change corresponds to change type 1 as defined in the general discussion of less restrictive requirements at the beginning of Part III of this safety evaluation.

(LA.2) The diesel generator accelerated test frequency requirements of CTS

Table 4.8.1.1.2-1 are moved without change to plant procedures, leaving the CTS 31-day Frequency requirement. Generic Letter 94-01, "Removal of Accelerated Testing and Special Reporting Requirements for Diesel Generators," allows licensees to request removal of provisions for DG accelerated testing from the TS, provided certain conditions stated in the generic letter are met. In its submittal, the licensee committed to meet those conditions before making any changes to the current schedule (which is more restrictive than the STS schedule). In particular, in accordance with the generic letter, the licensee has committed to implement a maintenance program for monitoring and maintaining emergency diesel generator performance in accordance with the provisions of the maintenance rule and consistent with the guidance of Regulatory Guide 1.160, within 90 days of issuance of the license amendment that removes the accelerated testing and special reporting requirements for emergency diesel generators from the TS (i.e., the amendment approving the ITS). Based on this commitment, this change is acceptable.

(LA.3) CTS 4.8.1.1.~~1~~2.a.4 gives four specific diesel generator start signals for starting tests—manual, simulated loss of offsite power, an ESF actuation test signal, and a simulated loss of offsite power with an ESF actuation test signal. Corresponding ITS SR 3.8.1.2 and 3.8.1.7 do not list the various diesel generator start signals because which signal is used is a matter for procedures and does not contribute to verifying the capability of the DG to start. This change is acceptable because the other DG test requirements that are retained in ITS 3.8.1 are adequate to ensure the operability of the diesel generators.

IN ADDITION ~~(LA.3)~~ The explicit requirement of CTS 4.8.1.1.~~1~~2.a.6 to verify alignment of the diesel generators to provide standby power to the associated emergency bus~~s~~es is deleted. The definition of operability ensures the diesel generator remains aligned to provide standby power when needed. Thus, removal of this surveillance from the CTS is acceptable.

(LA.4) The preventive maintenance requirement of CTS 4.8.1.1.2.e.1 to inspect the DGs in accordance with procedures prepared in accordance with the manufacturer's recommendations is removed from the CTS. This is acceptable because (a) performance of this requirement does not have an immediate impact on DG operability, and (b) DG operability is ensured by the other surveillances retained in ITS 3.8.1. This corresponds to change type 6 as defined in the general discussion of less restrictive requirements at the beginning of Part III of this safety evaluation.

(LA.5) The specific kilowatt value of the single largest post-accident load for the single load rejection surveillance specified in CTS 4.8.1.1.2.e.2 for each DG, is omitted from corresponding ITS 3.8.1.9, but is moved to the associated Bases. This design detail is not necessary for ITS 3.8.1 to ensure the operability of the DGs. This change is acceptable because the requirements of ITS LCO 3.8.1 and the associated surveillances (including SR 3.8.1.9) for the diesel generators are adequate to ensure the diesel generators are maintained operable. This corresponds to change type 1 as defined in the general discussion of less restrictive requirements at the

beginning of Part III of this safety evaluation.

(LA.5) CTS 4.8.1.1.2.e.9 specifies the maximum auto-connected loads for the 2000-hour rating of the diesel generators as 4650 kW for DG-1 and DG-2 and 2850 kW for DG-3. This surveillance is deleted because the value of the maximum auto connected loads for each DG is adequately described in the electrical system design information in the FSAR. ITS SR 3.8.1.11.c~~)~~ will continue to verify the diesel generator auto-start capacity from the standby condition and the automatic connection of the shutdown loads. This corresponds to change type 1 as defined in the general discussion of less restrictive requirements at the beginning of Part III of this safety evaluation.

(LA.6) The requirements that the autoconnected loads be energized "through the load sequencer" for Division 1 and 2 and that the autoconnected loads be energized "within 30 seconds" for Division 3 in CTS 4.8.1.1.2.e.4.a)2) (loss of offsite power (LOSP) test) and 4.8.1.1.2.e.6.a)2) (LOSP in conjunction with an ECCS actuation signal) are moved to the Bases discussion of the DG loading logic. These loads are designed to be connected only through the loading logic; thus if they are not energized, the SR has failed, and the associated DG is considered inoperable. Therefore, this design detail does not need to be stated in the surveillances to ensure the operability of the diesel generators. The DG requirements of ITS LCO 3.8.1 and the associated surveillances are adequate to ensure the operability of the DGs. This corresponds to change type 1 as defined in the general discussion of less restrictive requirements at the beginning of Part III of this safety evaluation.

In addition, the 30-second requirement for Division 3 in CTS 4.8.1.1.2.e.6.b)2) is based upon the HPCS system response time requirement, not the actual loading of DG-3. The HPCS system response time is already required by LCO 3.5.1, "ECCS—Operating," and does not need to be repeated in this the AC sources specification. This corresponds to change type 8 as defined in the general discussion of less restrictive requirements at the beginning of Part III of this safety evaluation.

(LA.7) The manner in which the DG is started for the DG 24-hour run surveillance (CTS 4.8.1.1.2.e.8 and ITS SR 3.8.1.14) is deleted. Since this test can be performed after either a slow start or a fast start, the manner in which the DG is started does not affect the test. Deleting this procedural detail from the CTS is acceptable because it is not needed to demonstrate the capability of the DG to run loaded for 24 hours. In addition, the CTS requirement to maintain voltage and frequency may also be deleted because they must be within limits to ensure the loads are maintained within the necessary limits. These changes correspond to change type 3 as defined in the general discussion of less restrictive requirements at the beginning of Part III of this safety evaluation.

(LA.8) The surveillance to verify that the DG lockout features prevent DG

starting only when required (CTS 4.8.1.1.e.13) is deleted from the CTS because the LOCA, LOSP, and LOCA/LOOP DG surveillances (ITS SR 3.8.1.11, SR 3.8.1.12, and SR 3.8.1.19) will detect if a DG lockout feature incorrectly prevents the DG from operating. Failure of a lockout feature to properly lockout a DG is not a concern for meeting the accident analysis assumptions, since the DG would already be inoperable (the lockout feature prevents the DG from starting on an accident signal). Therefore, removal of this surveillance from the CTS has no effect on DG operability and is acceptable.

Each SR is listed in other sections of SE

(LD.1) The 18-month Frequencies of the surveillances in CTS ~~3/~~4.8.1.1 Insert LD.1 retained in ITS 3.8.1 are changed to 24 months. These changes are acceptable for the reasons given in the section entitled "Surveillance Interval Extension from 18 to 24 Months" in the general discussion of less restrictive requirements at the beginning of Part III of this safety evaluation.

(L.1 and L.2) The action requirements of CTS 3/4.8.1.1 require performing the DG start test (CTS 4.8.1.1.2.a.4) on the remaining operable DGs within 4 hours and once per 8 hours thereafter in the event—

- One offsite circuit or one DG (DG-1 or DG-2) is inoperable (ACTION a)
- One offsite circuit and one DG (DG-1 or DG-2) are inoperable (ACTION b)
- DG-3 is inoperable (ACTION c)
- Two offsite circuits are inoperable (ACTION e)

In addition, in the event DG-1 and DG-2 are inoperable, ACTION f requires a start test of DG-3 within 2 hours and once per 8 hours thereafter. In the corresponding action requirements of ITS 3.8.1, the DG start test performance requirement is deleted for those cases involving inoperable offsite circuits and is retained as an optional action requirement for those cases involving inoperable DGs. These changes are acceptable because the normal DG surveillance schedule gives adequate assurance of the operability of the remaining DGs. In addition, the wear and tear of additional DG starts and the potential decrease in DG reliability are avoided, as addressed in Generic Letter 84-15. Starting the DGs without loading them is contrary to manufacturer recommendations. Thus, the DGs would be connected to offsite sources and non-vital loads following the start test. Disturbances in these loads can adversely affect DG reliability as stated in NRC Information Notice 84-69 which cautions against operating DGs tied to offsite power when the unit's AC sources are abnormally degraded or threatened.

For cases involving inoperable DGs, ACTION B (one DG inoperable) of ITS 3.8.1 allows 24 hours to either (a) determine the operable DGs are not inoperable due to common cause failure, or (b) to perform the DG start test (ITS SR 3.8.1.2) on the operable DGs. If a common failure mode cannot be ruled out, then the start test provides adequate assurance that the other DGs are not affected by the same mode of failure as the inoperable DGs, and are still operable. Relaxing the time to complete these actions from ~~4 hours~~ 2 hours or 4 hours to 24 hours is reasonable to allow sufficient time to address common cause failure. If a common cause failure mode can be ruled out, an unnecessary DG start can be avoided, thus reducing engine wear. The DGs are generally independent;

INSERT LD.1 to subsection 3.8.b, LCO 3.8.1

(CTS 4.8.1.1.b, 4.8.1.1.2.e.2, 4.8.1.1.2.e.3, 4.8.1.1.2.e.4, 4.8.1.1.2.e.5, 4.8.1.1.2.e.6, 4.8.1.1.2.e.7, 4.8.1.1.2.e.8, 4.8.1.1.2.e.10, 4.8.1.1.2.e.11, and 4.8.1.1.2.e.12)

once the common failure is ruled out—either by testing or by evaluation-an additional DG failure is unlikely to occur before other action requirements would shut down the unit. Thus deleting the 8-hour periodic performance requirement for these actions is also acceptable.

[L.3 ~~rejected~~] NOT USED

(L.4) In the event an offsite circuit and a DG (DG-1 or DG-2) are concurrently inoperable ACTION b of CTS 3~~/4~~.8.1.1 specifies restoring all AC sources to operable status within 72 hours from the time the first AC source was discovered to be inoperable. Thus, if a second AC source is discovered to be inoperable just prior to restoring the operability of the first AC source near the expiration of the 72-hour Completion Time, little or no time would be left to restore the operability of the second AC source before a unit shutdown would be required. The action requirements of CTS 3.8.1 address this situation by specifying an extension of the 72-hour Completion Time of up to 6 days from discovery of failure to meet the LCO (the time the first AC source was discovered to be inoperable). While these simultaneous inoperabilities are expected to occur very infrequently, operating experience has shown that AC source inoperabilities are usually corrected within the specified allowed outage time (≤ 72 hours). This new allowance is acceptable because of (a) the small probability of an event during the repair of the subsequent inoperability, (b) the likelihood of restoring the second AC source to operable status thus avoiding the risk of a transient associated with a unit shutdown, and (c) the 6-day limit on continuous operation with the AC sources LCO not met—just twice the normal Completion Time.

In the event two offsite circuits are concurrently inoperable or two DGs (DG-1 and DG-2) are concurrently inoperable, ACTION e and ACTION f, respectively, of CTS 3~~/4~~.8.1.1 require restoring both AC sources to operable status within 72 hours from the time the first AC source was discovered to be inoperable. Thus, the situation described above could also occur in this context. The ITS address this situation in general in Section 1.3, "Completion Time." This specification allows an extension of the specified Completion Time (72 hours in this case) for one inoperable redundant subsystem or component (AC source) by up to 24 hours, not to exceed the specified Completion Time (in this case 72-hours) from the time the second subsystem or component (AC source) was discovered to be inoperable. In addition, this Completion Time extension may be used only once for the second discovery of an inoperable subsystem or component (AC source), but not a third or subsequent discovery (even if the same subsystem (AC source) is involved). This allowance is acceptable for reasons (a) and (b) given above.

(L.5 and L.6) In the event ~~(~~a~~)~~ ~~one~~ DG is inoperable, ~~and (b) an offsite circuit or a second DG is inoperable,~~ ACTION d of CTS 3~~/4~~.8.1.1 requires a cross-train check (verification that required systems, subsystems, trains, components, and devices that depend on the remaining operable DG(s) as a source of emergency power are operable) within 2 hours. If a discovered inoperability cannot be corrected before the 2 hour period expires, a unit shutdown is required. Corresponding Required Action B.2 of ITS 3.8.1 requires

this cross-train check by stating "Declare required feature(s), supported by the inoperable DG, inoperable when the redundant required feature(s) are inoperable." This declaration of inoperability is required within "4 hours of discovery of Condition B (one inoperable DG) concurrent with inoperability of redundant required feature(s)." This less restrictive ITS action requirement is acceptable because (a) it allows the operator a total of 4 hours which is a more reasonable time period to evaluate and repair any discovered inoperabilities thereby avoiding the risk of a transient associated with a unit shutdown, (b) the probability of a design basis accident occurring during the 4 hour period is small, and (c) other required AC sources are still operable. In addition, if both DG-1 and DG-2 are inoperable, ACTION E of ITS 3.8.1 allows only 2 hours to restore one of the DGs to operable status before a unit shutdown is required; thus in this case, the ITS action requirements are as restrictive as the CTS requirements.

As noted previously, ITS Required Action B.2 provides an allowance to avoid an immediate forced shutdown when a DG is inoperable concurrent with a required "feature" (i.e., system, subsystem, component) inoperability in the redundant train or division. By allowing "features" associated with the inoperable diesel generator to be declared inoperable, the appropriate ACTIONS in the associated specifications can be taken in lieu of the shutdown action specified in ITS 3.8.1. Certain combinations of inoperable components may allow for satisfactory compensatory actions or may have been justified for some allowed restoration time. For these combinations, the risk of a transient associated with a unit shutdown may be avoided, while ensuring the performance of more appropriate action requirements previously established concerning the specific circumstances. However, in most cases, the associated specifications require a unit shutdown if both redundant subsystems are declared inoperable. Therefore, this allowance to declare required feature(s) inoperable is acceptable.

(L.7) The DG surveillances under CTS 4.8.1.1.2.a (only a.1, a.3, a.4, a.5) are required to be performed on a staggered test basis. This requirement is deleted from the corresponding DG surveillances in the ITS. Several studies show staggered testing has negligible impact on component reliability. These analytical and subjective analyses show that staggered testing (a) is operationally difficult, (b) has negligible impact on component reliability, (c) is not as significant as initially thought, (d) has no impact on failure frequency, (e) introduces additional stress on components such as diesel generators, potentially causing increased component failure rates and component wearout, (f) results in reduced redundancy during testing, and (g) increases likelihood of human error by increasing testing intervals. Therefore, eliminating the staggered testing requirements for the DGs is acceptable.

(L.8) CTS 4.8.1.1.2.a.1 and 4.8.1.1.2.a.3 require verifying the diesel generator day tank level and the operability of the fuel transfer pump (storage system to the day tank), respectively, on the same frequency that each DG is required to be tested (every 31 days or every 7 days, dependent on the failure history of the associated diesel generator). As noted previously, requirements for accelerated testing based on DG failure history are removed

from the CTS. Thus, corresponding ITS SR 3.8.1.4, for day tank level, only specifies the 31-day Frequency. This is acceptable because DG failures have no impact on the day tank's ability to perform its intended function, since the day tank holds more than 3 hours worth of fuel oil above the day tank level limit. Similarly, ITS SR 3.8.1.6 for the fuel oil transfer system specifies a 92-day Frequency in place of the 31-day Frequency. This is acceptable because DG failures have no impact on the auto start setpoint of the fuel oil transfer pump, and the 92-day Frequency for the fuel oil transfer system is consistent with ASME Section XI requirements for similar pumps.

(L.9) The allowance in the monthly DG start surveillance (CTS 4.8.1.1.2.a.4 Note * and ITS SR 3.8.1.2 Note 1) to conduct an engine prelube prior to starting the DG is added to the following other DG surveillances:

CTS	ITS	Description
4.8.1.1.2.a.4	SR 3.8.1.7	Ambient start test
4.8.1.1.2.e.4	SR 3.8.1.11	LOSP start test
4.8.1.1.2.e.5	SR 3.8.1.12	ECCS start test
4.8.1.1.2.e.8	SR 3.8.1.15	Hot restart test
4.8.1.1.2.e.6	SR 3.8.1.19	LOSP-ECCS start test
4.8.1.1.2.f	SR 3.8.1.20	Simultaneous start test

for CTS ORDER

DG starts without prior engine prelube create unnecessary engine wear, thereby reducing overall reliability. The engine prelube does not result in an enhanced start performance that could mask the engine's inability to start in accident conditions without a prelube. Therefore, adding this allowance is acceptable.

(L.10) CTS 4.8.1.1.2.a.4 (DG monthly start test) and 4.8.1.1.2.e.5 (ECCS start test) contain both upper and lower voltage and frequency limits that must be achieved within the specified time limits following a DG start signal. The upper voltage and frequency limits are omitted from corresponding ITS SR 3.8.1.7 and SR 3.8.1.12. Once steady state conditions are reached, the minimum and maximum voltage and frequency limits must be maintained. The tests in question are those that automatically start the DG but do not tie it to a bus. When called upon, the DG must start and tie within the specified time limits. Once the minimum voltage and frequency limits are met, the DG can tie to the bus. When a test is performed that does not result in tieing the DG to the bus, a voltage or frequency overshoot can occur since no loads are connected (the loading tends to minimize the overshoot). This overshoot could be such that the voltage or frequency exceeds the upper limit of the band when the time limit expires. The fact that an overshoot condition occurs is not indicative of an inoperable DG, provided that steady state voltage and frequency are maintained. The steady state voltage and frequency limits have not been changed because verification that the minimum voltage and frequency limits are met within the proper time is sufficient to ensure the DG can perform its design function.

(L.11 ~~and L.14~~) The load requirements of CTS 4.8.1.1.2.a.5, the 1-hour DG

load test are relaxed to ensure that the DG's continuous rating is not required to be exceeded on a routine basis. The new load range is 90%-100% of the continuous rating for the DGs. This change is acceptable because (a) Regulatory Guide 1.9, Revision 3, recommends a load range of 90%-100%, (b) corresponding ITS SR 3.8.1.3 still provides assurance that the DGs will carry normal loads, and (c) the 24-hour run test (ITS SR 3.8.1.14) will continue to ensure that the DGs can carry rated load.

The load requirements of the Note to CTS 4.8.1.1.2.e.8 (ITS SR 3.8.1.15), the hot restart test, are also changed to conform to this load value (the minimum value). This change is acceptable because (a) routine overloading of the DG for this test is precluded and (b) the lower value will still ensure the DG is at operating temperatures.

AS WRITTEN DISCUSSES 3 SURVEILLANCES | NOTE IS ADDED TO ALL 3 (3rd IS L.14)

COPY ~~MOVE~~ to L.14 COMBINING W/L.11 CONFUSES ISSUE

In addition, a Note is added to both surveillances stating that momentary transients outside the load range do not invalidate the surveillance. This is to account for momentarily changing bus loads and precludes re-performance of the surveillance solely due to the load being outside the load range as a result of momentary transients. This practice is acceptable because demonstration of the DG's load carrying capability continues to be adequately tested because momentary transients in of themselves do not render a DG inoperable and these transients are short duration events when compared to the duration of a surveillance test.

(L.12) CTS 4.8.1.1.2.a.5 (1-hour DG load test) requires DG synchronization and loading in ≤ 60 seconds. Corresponding ITS SR 3.8.1.3 has a note specifically allowing the gradual loading of the diesel generator for this test. Deleting the 60 second requirement for attaining full load is acceptable because (a) the DG manufacturer recommends the gradual increase of the load for this testing, and (b) the starting, loading, and subsequent full load operation, as well as the automatic start and loading tests required by other DG surveillances provide adequate assurance of the capability of each diesel generator to accept accident loads without the 60-second manual loading requirement.

(L.13) CTS 4.8.1.1.2.b.1 requires checking the diesel generator fuel oil day tanks for any accumulated free water, and draining any such water, every 31 days and whenever the DG operates for greater than one hour. Corresponding ITS SR 3.8.1.5 omits the Frequency of whenever the DG operates for greater than one hour. Water condensation within fuel oil tanks is a time dependent process, not dependent on the transfer of fuel oil during DG operation. Furthermore, the fuel oil storage tank is kept free of accumulated water in accordance with CTS 4.8.1.1.2.b.2 (ITS SR 3.8.3.5). Thus, checking for and removing accumulated water at the normal 31-day interval of the monthly DG 1-hour load test is sufficient. Therefore, this change is acceptable.

SEE INSERT L.14

[L.14 is addressed with L.11] L.14 ADDS NOTE TO SR 3.8.1.14, ONLY

(L.15) CTS 4.8.1.1.2.e.8, the DG hot restart test, requires verifying that the DG starts on a simulated loss of offsite power (LOSP) signal and energizes

INSERT L.14 to subsection 3.8.b, LCO 3.8.1

A new Note has been added to CTS 4.8.1.1.2.e.8, the 24-hour run test, (ITS 3.8.1.14) stating that momentary transients outside the load range do not invalidate the surveillance. This is to account for momentarily changing bus loads and precludes re-performance of the surveillance solely due to the load being outside the load range as a result of momentary transients. This practice is acceptable because demonstration of the DG's load carrying capability continues to be adequately tested because momentary transients are short duration events when compared to the duration of a surveillance test.

the emergency bus~~s~~es with permanently connected loads and the autoconnected shutdown loads, and operates for ≥ 5 minutes. Corresponding ITS SR 3.8.1.15 does not specify how the DG is started, similar to the monthly start test, and omits the loading requirements. These omissions are acceptable because (a) the ability of the DG to start on a LOSP signal is adequately demonstrated by ITS 3.8.1.11, and to power loads while "hot" is demonstrated during the 24-hour run, ITS SR 3.8.1.14, and (b) automatic loading is an unnecessary repetition of other SRs which confirm the DG's ability to accept sequenced loads. This change allows greater flexibility in scheduling DG testing while not compromising any necessary demonstration of DG capability.

(L.16) The phrase "actual or", in reference to the loss of offsite power (LOSP) signal or the ECCS actuation signal, as applicable, is added to the following surveillances:

IN CTS ORDER

CTS	ITS	Description
4.8.1.1.2.e.4	SR 3.8.1.11	LOSP start test
4.8.1.1.2.e.5	SR 3.8.1.12	ECCS start test
4.8.1.1.2.e.7	SR 3.8.1.13	Automatic DG trip bypass verification
4.8.1.1.2.e.11	SR 3.8.1.17	ECCS actuation signal override of DG test mode
4.8.1.1.2.e.6	SR 3.8.1.19	LOSP-ECCS start test

This allows satisfactory LOSP or ECCS actuations for other than surveillance purposes to be used to fulfill the surveillance requirement. Operability is adequately demonstrated in either case since the DG cannot discriminate between "actual" or "simulated" signals. Therefore, this change is acceptable.

(L.17) CTS 4.8.1.1.2.f requires a simultaneous start of each DG at least once every ten years or "after any modifications that could affect diesel generator interdependence." Corresponding ITS SR 3.8.1.20 omits the post modification test requirement. Any time repair, maintenance, or replacement of a component potentially affects the operability of a system or component, appropriate post-maintenance testing is required to demonstrate the operability of the affected system or component. This includes meeting the specified surveillances for the component, according to ITS SR 3.0.1. Therefore, because post-maintenance surveillance requirements are implicit requirements in the ITS, this change is acceptable. This corresponds to change type 5 as defined in the general discussion of less restrictive requirements at the beginning of Part III of this safety evaluation.

(L.18) In the simultaneous DG start test, CTS 4.8.1.1.2.f requires the DGs to achieve a minimum frequency of 60 Hz. ITS SR 3.8.1.20 requires a minimum frequency of 58.8 Hz. With this change of the minimum achieved frequency, all DG tests that confirm frequency will require the same minimum of 58.8 Hz. This is acceptable because it meets the recommendations of Regulatory Guide 1.9, Revision 3.

(L.19) CTS 4.8.1.1.3 requires reporting all valid and non-valid DG failures to the NRC in a special report. The report must include the information recommended by Position C.3.b of Regulatory Guide 1.108. The report requires additional information if the failure rate for the last 100 valid tests is ≥ 7 per diesel generator. This reporting requirement is deleted in accordance with the guidance of Generic Letter 94-01. Generic Letter 94-01 allows the removal of diesel generator failure reporting requirements because they are redundant to the reporting requirements of 10 CFR 50.72 and 50.73, which require notifying and reporting certain diesel generator failures to the NRC. Also, this change does not impact the safe operation of the plant because the report submittal follows the diesel generator failure and the report does not require NRC approval. Therefore, this deletion is acceptable. This change corresponds to change type 9 as defined in the general discussion of less restrictive requirements at the beginning of Part III of this safety evaluation.

NOT EXACTLY "REDUNDANT" ~~44A~~

(L.20) The following DG surveillances that specify DG starting time limits are revised with new updated time limits described below:

CTS	ITS	Description
4.8.1.1.2.a.4	SR 3.8.1.7	Ambient start test
4.8.1.1.2.e.4	SR 3.8.1.11	LOSP start test
4.8.1.1.2.e.5	SR 3.8.1.12	ECCS start test
~~4.8.1.1.2.e.8~~	~~SR 3.8.1.15~~	~~Hot restart test~~ .e.8 DOES NOT SPECIFY TIME
4.8.1.1.2.e.6	SR 3.8.1.19	LOSP-ECCS start test
4.8.1.1.2.f	SR 3.8.1.20	Simultaneous start test

The start times for DG-1 and DG-2 to achieve rated voltage and frequency, or to load connection, are increased from 10 seconds to 15 seconds. The start time for DG-3 is increased from 13 to 15 seconds for other than a loss of offsite power start signal by itself. For a loss of offsite power start signal by itself, the DG-3 start time is increased from 13 to 18 seconds. These changes are based on the relaxed response times assumed for Emergency Core Cooling System (ECCS) parameters in the 10 CFR 50.46 and 10 CFR 50, Appendix K analyses (SAFER/GESTR-LOCA analysis) performed in support of the WNP-2 power uprate approved by the NRC in Amendment No. 137, dated May 2, 1995. This analysis, NEDC-32115P, Revision 2, assumes the following ECCS response times (as shown in Table 4-3 of the analysis):

- HPCS - 37 seconds (15 seconds DG start time, 19 seconds valve stroke time, and 3 seconds instrument response time)
- LPCS - 42 seconds (15 seconds DG start time, 24 seconds valve stroke time, and 3 seconds instrument response time)
- LPCI - 46 seconds (15 seconds DG start time, 28 seconds valve stroke time, and 3 seconds instrument response time)

The relaxation of the DG start times is the result of a change in the plant design basis. Since the DG start and loading times assumed in the current NRC approved design basis SAFER/GESTR-LOCA analysis are unchanged, there will be no affect on the capability of the DGs to support equipment required to mitigate the consequences of the design basis event (i.e., a large break LOCA coincident with a loss of offsite power). Furthermore, these changes will not reduce the effectiveness of the surveillances to demonstrate DG operability, detect equipment degradation, or assure reliability since the surveillances continue to satisfy the recommendations of Regulatory Guide 1.9, "Selection of Diesel Generator Set Capacity for Standby Power Supplies," March 10, 1971, and Regulatory Guide 1.108, "Periodic Testing of Diesel Generator Units Used as Onsite Electric Power Systems at Nuclear Power Plants," Revision 1, August 1977, which are the bases for the CTS DG surveillances. Moreover, these changes will not affect current commitments related to DG reliability and the Maintenance Rule which are designed to identify and correct equipment deficiencies and degradation to maintain DG operability and reliability.

ALSO CHANGED TIME ON ~~AS~~ AMBIENT & SIMULTANEOUS STARTS.

The stated increases in the start times and Loading times (if Applicable) for all three DGs ~~on an ECCS initiation start signal, and the stated increases in the start and loading times for all three DGs on an ECCS initiation start signal in conjunction with a loss of offsite power start signal~~ are acceptable based on the above and on the results of the NRC approved SAFER/GESTR-LOCA analysis.

3.8.2 AC Sources—Shutdown

(LA.1) In the event the one required offsite circuit or DG (DG-1 or DG-2) is inoperable, ACTION a of CTS 3/~~4~~.8.1.2 requires, among other things, suspending "crane operations over the spent fuel storage pool when fuel assemblies are stored therein." This requirement is omitted from the action requirements of corresponding ITS 3.8.2 because crane operation over the spent fuel storage pool is not directly affected by the loss of safety-related power sources. Movement of loads other than fuel assemblies is administratively controlled in accordance with the WNP-2 heavy loads analyses and the design of the reactor building crane as described in FSAR Section 9.1.4.2.2. As discussed in FSAR Section 15.7.4.2.1, the bounding design basis fuel handling accident, from a radiological point of view, assumes an irradiated fuel assembly is dropped onto an array of irradiated fuel assemblies seated within the RPV. The movement of other loads over irradiated fuel assemblies is administratively controlled based on available analysis for the individual load. In addition, CTS 3/4.9.7, which contains crane travel limitations over the spent fuel storage pool, is relocated to the Licensee Controlled Specifications Manual (LCSM). Thus, crane operation over the spent fuel storage pool following a loss of one or both required AC power sources will be adequately addressed in plant procedures and the LCSM. Therefore, this change is acceptable.

[L.1 ~~rejected~~] not used

(L.2) CTS 4.8.1.2 requires meeting all of the surveillances specified in CTS 4.8.1.1.1, 4.8.1.1.2 (except for 4.8.1.1.2.a.3), and 4.8.1.1.3 in MODES 4 and 5 and when handling irradiated fuel in the secondary containment. This means

SHOULD only be "Not required" (BOLD)
IF it is "Applicable" (i.e. Not BOLD AND *)
3* SR ARE Not listed - in Note. ADDing TO
this is confusing

PLEASE NOTE - CTS

that the surveillances listed in the first column below are applicable. The corresponding surveillances required by the ITS during these operational conditions are given in the second column (if required by other than SR 3.8.2.1, italic type is used). Surveillances not required to be performed are denoted by bold type. In addition, the three surveillances marked by an asterisk are not applicable.

DELETE 'BOLD'

CTS	ITS	Description
4.8.1.1.1.a	SR 3.8.1.1	Offsite circuit alignment verification
→ 4.8.1.1.1.b	SR 3.8.1.8 *	Auto and manual bus transfer test
4.8.1.1.2.a.1	SR 3.8.1.4	DG day tank fuel oil volume check
4.8.1.1.2.a.2	*SR 3.8.3.1*	*DG storage tank fuel oil volume check*
4.8.1.1.2.a.3	SR 3.8.1.6	Fuel oil transfer system test
4.8.1.1.2.a.4	SR 3.8.1.2	DG start test
	SR 3.8.1.7	DG ambient start test
4.8.1.1.2.a.5	SR 3.8.1.3	DG 1-hour load test
4.8.1.1.2.a.6	-	deleted; see discussion 3.8.b(✓) LA.3 ITS 3.8.1
4.8.1.1.2.a.7	*SR 3.8.3.~~3~~4*	~~*Fuel oil testing per ITS 5.5.9*~~ Air receiver CHECK
4.8.1.1.2.b.1	SR 3.8.1.5	DG fuel oil day tank water check
4.8.1.1.2.b.2	*SR 3.8.3.5*	*DG Fuel oil storage tank water check*
4.8.1.1.2.c	*SR 3.8.3.3*	*Fuel oil testing per ITS 5.5.9*
4.8.1.1.2.d	*SR 3.8.3.3*	*Fuel oil testing per ITS 5.5.9*
4.8.1.1.2.e.1	-	deleted; see discussion 3.8.b( ) LA.4 ITS 3.8.1
4.8.1.1.2.e.2	SR 3.8.1.9	DG single largest load rejection
4.8.1.1.2.e.3	SR 3.8.1.10	DG full load rejection — MAKE BOLD
4.8.1.1.2.e.4	SR 3.8.1.11	DG LOSP start test
4.8.1.1.2.e.5	SR 3.8.1.12	DG ECCS start test - DELETE BOLD
4.8.1.1.2.e.6	SR 3.8.1.19	DG LOSP-ECCS start test
4.8.1.1.2.e.7	SR 3.8.1.13	DG automatic trip bypass test
4.8.1.1.2.e.8	SR 3.8.1.14	DG 24-hour full load run
	SR 3.8.1.15	DG hot restart test
4.8.1.1.2.e.9	-	deleted; see discussion 3.8.b(✓) LA.5 ITS 3.8.1
4.8.1.1.2.e.10	SR 3.8.1.16	Test of capability to transfer emergency loads from the DG to an offsite circuit
DELETE BOLD — 4.8.1.1.2.e.11	SR 3.8.1.17 *	ECCS actuation signal override of DG test mode
4.8.1.1.2.e.12	SR 3.8.1.18	Load sequence timing verification
4.8.1.1.2.e.13	-	deleted; see discussion 3.8.b( ) LA.8 ITS 3.8.1
DELETE BOLD — 4.8.1.1.2.f	SR 3.8.1.20 *	DG simultaneous start test
4.8.1.1.2.g	-	deleted; see discussion 3.8.b( ) LA.1 - 3.8.3
4.8.1.1.3	-	deleted; see discussion 3.8.b( ) L.19 - 3.8.1

Many of the currently required surveillances involve tests that would require the DG to be paralleled to offsite power. This requirement places the plant

in a condition in which the only required DG and the only required offsite circuit are connected and this presents a significant risk of a single fault resulting in a station blackout. Therefore, surveillances such as these are excepted from performance requirements by the Note to ITS SR 3.8.2.1. This Note does not take exception to the requirement for the DG to be capable of performing the particular function; just to the requirement to demonstrate it while that source of power is being relied on to support meeting the LCO. This change is acceptable because it avoids the risk associated with connecting the only required onsite and offsite AC power sources during shutdown conditions while retaining the requirement that the excepted surveillances be met.

The three surveillances marked by an asterisk are not applicable and do not have to be current during shutdown conditions for the following reasons: SR 3.8.1.8 is not required because only one offsite circuit is required to be operable, thus the capability to transfer between required offsite sources is not necessary. SR 3.8.1.17 is not required because the operable DG is not required to undergo periods of being synchronized to the offsite circuit during shutdown conditions to demonstrate compliance with analysis assumptions; thus the capability of an ECCS actuation signal to override the DG operating in test mode is not necessary. SR 3.8.1.20 is not required because DG starting independence is not required with the DG(s) not required to be operable. Therefore, deleting the requirement that these surveillances be met during shutdown conditions is acceptable.

[L.3 - ~~addressed under 3.8.1~~] for consistency; SEE INSERT L.3

3.8.3 Diesel, Fuel Oil, Lube Oil, and Starting Air

LA.1

(~~from 3.8.1 - A.2~~) The preventive maintenance requirements of CTS 4.8.1.1.2.g to drain and clean the diesel fuel oil storage tanks and to conduct a pressure test of the fuel oil system, are removed from the CTS. This is acceptable because these preventive maintenance requirements do not directly support fuel oil system operability. This change corresponds to change type 6 as defined in the general discussion of less restrictive requirements at the beginning of Part III of this safety evaluation.

NOT CLB

(L.1) In the event the limits on fuel oil volume, ~~lube oil volume~~, or Fuel oil property limits starting air pressure are not satisfied, the action requirements for an inoperable DG in CTS 3~~/4~~.8.1.1 allow 72 hours to correct the condition before a unit shutdown is required. However, the specified volume ~~and~~ pressure, property limits are actually greater than the volume ~~and~~ pressure, & property values necessary to ensure DG operability. Therefore, certain levels of degradation in these parameters are warranted to allow more time for correcting the out-of-limit condition. Thus, in the event one of these parameters is outside the specified limit but within the necessary limit, the ACTIONS of ITS 3.8.3 allow 48 hours to restore fuel oil inventory in the storage tanks (ACTION A), ~~48 hours to restore lube oil inventory (ACTION B)~~, 7 days to restore fuel oil total particulates to within limits (ACTION C), 30 days to restore other fuel

Not CLB

INSERT L.3 to subsection 3.8.b, LCO 3.8.2

CTS 4.8.1.2 requires meeting CTS 4.8.1.1.2 in Modes 4 and 5 when handling irradiated fuel in the secondary containment. CTS 4.8.1.1.3 requires reporting all valid and non-valid DG failures to the NRC in a special report. The report must include the information recommended by Position C.3.b of Regulatory Guide 1.108. The report requires additional information if the failure rate for the last 100 valid tests is $\geq$ 7 per diesel generator. This reporting requirement is deleted in accordance with the guidance of Generic Letter 94-01. Generic Letter 94-01 allows the removal of diesel generator failure reporting requirements because they are redundant to the reporting requirements of 10 CFR 50.72 and 50.73, which require notifying and reporting certain diesel generator failures to the NRC. Also, this change does not impact the safe operation of the plant because report submittal follows diesel generator failure and the report does not require NRC approval. Therefore, this deletion is acceptable.

oil properties to within limits (ACTION D), and 48 hours to restore starting air pressure (ACTION E). These allowances are acceptable because during the extended restoration periods for these parameters, the diesel generator would still be capable of performing its intended function, and unnecessary unit shutdown transients may be avoided by this incremental increase in repair times without adversely affecting safe operation of the plant.

4.8.1.1.2.a.7
(L.2) CTS 4.8.1.1.2.a.2 and ~~4.8.1.1.2.7~~, respectively, require verifying the inventory of the fuel oil in each DG fuel oil storage tank and the air pressure in each DG air start receiver at the Frequency specified in CTS Table 4.8.1.1.2-1 (31 days or 7 days, dependent on the diesel failure rate). More frequent DG testing resulting from DG failures caused by noncompliance with these SR have no impact on the ability of these supporting systems to perform their intended function. Thus, more frequent testing is unwarranted and is omitted from corresponding ITS SR 3.8.3.1 for the storage tank inventory and SR 3.8.3.4 for the air receiver pressure. This change is acceptable because the 31-day Frequency is adequate to ensure the operability of these DG support functions.

SEE INSERT L.3
[L.3 ~~is addressed in general in discussion 3.8.b(L.7) under 3.8.1~~] For CLARITY

(L.4) The Frequency of CTS 4.8.1.1.2.b.2, to check for accumulated water in the bottom of the fuel oil storage tanks, is relaxed from 31 days to 92 days in corresponding ITS SR 3.8.3.5. This is acceptable at WNP-2 because the bottom of the tanks are approximately 40 feet above the ground water table; thus ground water will not leak into the tanks. This is consistent with the recommendation of Regulatory Guide 1.137 that checking for water accumulation be performed every 92 days, provided the ground water table is lower than the bottom of the storage tanks (a 31-day Frequency is recommended if the ground water table is above the bottom of the storage tanks). This change is also acceptable because (a) as stated in the licensee's submittal, no accumulated water has been found by this surveillance for the past 3 years (a total of 116 surveillances), and (b) a filter polisher unit has been installed that will further decrease the potential for accumulated water in the storage tanks.

3.8.4 DC Sources—Operating

(LA.1) CTS 3.8.2.1 contains a detailed listing of DC electrical power sources, including component numbers, that are required to be operable. These design details are moved to the Bases for corresponding ITS LCO 3.8.4. ITS LCO 3.8.4 simply requires that the Division 1, Division 2, and Division 3 DC electrical power subsystems be operable. This is acceptable because these design details are adequately addressed by other requirements outside the TS and do not need to be included in the TS to ensure the operability of the DC sources. This change corresponds change type 1 as defined in the general discussion of less restrictive requirements at the beginning of Part III of this safety evaluation. L-7

(LA.2) The 24-volt batteries (BO-1A, BO-1B, BO-2A, and BO-2B) and their

INSERT L.3 to subsection 3.8.b, LCO 3.8.3

CTS 4.8.1.1.2.a and 4.8.1.1.2.a.7 are required to be performed on a staggered test basis. This requirement is deleted from corresponding surveillances in the ITS. Several studies show staggered testing has negligible impact on component reliability. These analytical and subjective analyses show staggered testing (a) is operationally difficult, (b) has negligible impact on component reliability, (c) is not as significant as initially thought, (d) has no impact on failure frequency, (e) introduces additional stress on components such as diesel generators, potentially causing increased component failure rates and component wearout, (f) results in reduced redundancy during testing, and (g) increases likelihood of human error by increasing testing intervals. Therefore, eliminating the staggered testing requirements for these surveillances is acceptable.

(or shutdown)

associated chargers are required to be OPERABLE by CTS 3.8.2.1. These LCO requirements are moved to the LCSM. The 24-volt batteries and their associated chargers are the power sources for the intermediate range monitor (IRM) and the source range monitor (SRM). These monitors are only needed during a plant startup and their operability is required by ITS Section 3.3, "Instrumentation." This change is acceptable because the safety function of the 24-volt batteries and their associated battery chargers are adequately addressed through the definition of operability as applied to the IRM and SRM.

[LA.3 ~~Rejected~~] not used

Fixed in Rev C

(LA.4) (This change is not acceptable because (a) it deviates from the STS which keeps the load value in the SR, (b) the corresponding Bases do not contain the load values, in amps, and (c) WNP-2 design of the battery chargers is not unique. The load profiles in terms of current and time constraints should be stated in the SR.) CTS 4.8.2.1.c.4, the battery charger capacity test, ~~species~~ specifies a load of at least 200 amperes for the 125-Vdc battery chargers and at least 400 amperes for the 250-Vdc battery chargers. Corresponding ITS SR 3.8.4.6 omits the load details only specifying that the test be accomplished at "the required load." The details of the loading profiles are moved to the Bases for ITS SR 3.8.4.6. ~~The preceding sentence is not true.~~ This is appropriate because as the licensee stated in its submittal, the battery charger vendor recommends load tests of the battery chargers at three distinct loads, not just a test at the 100% rating (as currently specified). In addition, the requirements of ITS LCO 3.8.4 and ITS SR 3.8.4.6 are adequate to ensure the battery chargers are operable. Therefore, this change is acceptable because the details of the load profiles are not necessary to ensure the operability of the battery chargers. This change corresponds to change type 1 as defined in the general discussion of less restrictive requirements at the beginning of Part III of this safety evaluation.

and ~~includes~~ the 100% load rating

including the 100% load rating

In addition, the 100% load ratings (200 amperes for the 125-Vdc battery chargers and 400 amperes for the 250-Vdc battery chargers) are also described in the FSAR.

(LA.5) CTS 4.8.2.1.d is retained as ITS SR 3.8.4.7 with certain details concerning the nature and duration of the service test omitted. These details, such as design load, the 2-hour length of the test, and the minimum voltage that must be maintained to ensure operability of the supported emergency DC loads, is moved to the FSAR. ITS SR 3.8.4.7 requires verifying each battery can supply the 2 design duty cycle. 2 This change is acceptable because the requirement for performance of the service test implies that the test duration must be consistent with the plant specific licensed service duration. This change corresponds to change type 1 and type 3 as defined in the general discussion of less restrictive requirements at the beginning of Part III of this safety evaluation.

(LA.6) CTS 4.8.2.1.f defines when battery degradation is indicated in order to trigger a decrease in the test interval of the battery performance discharge test (CTS 4.8.2.1.e) from 60 months to 18 months (note this is changed to 12 months in the ITS). The definition of degradation is moved to the Bases for the second Frequency of corresponding ITS SR 3.8.4.8. This information is not necessary for performance of SR 3.8.4.8 because it is only used to determine when the surveillance is required. This information will only be changed in accordance with ITS 5.5.[illegible] 10, "TS Bases Control Program." Therefore, this change is acceptable.

(LD.1) The Frequencies of CTS 4.8.2.1.c.4 and 4.8.2.1.d.1, to verify the capacity of the battery chargers and the batteries, respectively, are relaxed from 18 months to 24 months in corresponding ITS SR 3.8.4.6 and SR 3.8.4.7. These changes are acceptable for the reasons given in the section entitled "Surveillance Interval Extension from 18 to 24 Months" in the general discussion of less restrictive requirements at the beginning of Part III of this safety evaluation.

(L.1) ACTION C of ITS 3.8.4 is added to the DC sources action requirements to clarify the appropriate action in the event the 250-volt electrical power subsystem is inoperable (only Division 1 has a 250-volt subsystem). As such, ACTION C requires immediately declaring the associated supported features inoperable. The 250-volt battery and charger provide power to various reactor core isolation cooling (RCIC) system, ~~and~~ residual heat removal (RHR), and and to non-TS equipment such as reactor water cleanup (RWCU) system ~~valves~~ PCIVs, plant controls, instrumentation, computer and communication equipment through a solid state inverter. Therefore, the 250-volt electrical power subsystem only supports two TS-related functions. Although the resulting allowed outage times are greater than the CTS 2-hour time allowed to restore the subsystem to operable status, this change is acceptable because the specifications for RCIC (ITS 3.5.3) and RCIC, RHR and RWCU PCIVs (ITS ~~3.4.10, 3.5.1, 3.6.1.5, and 3.6.2.3~~ 3.6.1.3) will ensure the appropriate actions are taken.

(L.2) ~~(EELB contribution)~~ The battery terminal float voltages for the 250-volt and 125-volt batteries are required to be ≥ 258 volts and ≥ 129 volts respectively by CTS 4.8.2.1.a.2 ~~and~~ 4.8.2.1.c.4.2, & 4.8.2.1.c.4.3. In corresponding ITS SR 3.8.4.1 and SR 3.8.4.6, respectively, these values are changed to ≥ 252 volts

and ≥ 126 volts. This change is acceptable because the licensee has replaced the previous station batteries with new batteries and the proposed change is consistent with the design of the new batteries which utilize 116 cells and 58 cells respectively, and with the battery manufacturer's technical manuals which recommend that the battery cells be maintained at 2.17 volts per cell while on float charge.

(L.3) The requirement to perform CTS 4.8.2.1.b (verification of no visible corrosion at either terminals or connectors, or connection resistance of less than 250 x 10E-6 ohms) within 7 days after a specified battery discharge or overcharge, is deleted. Deleting this performance-based requirement is acceptable because battery resistance does not degrade significantly during discharge or overcharging, since corrosion rates and connection resistance are not immediately and significantly affected by a severe discharge or overcharge condition.

(L.4) The "clean" and "tight" criteria for the cell-to-cell and terminal connections of the batteries specified in CTS 4.8.2.1.c.2 (battery corrosion inspection) are deleted. Corresponding ITS SR 3.8.4.4 only requires removing visible corrosion and that the connections are coated with anti-corrosion material. The "clean" criterion is deleted because it is redundant to the "free of corrosion" requirement of CTS 4.8.2.1.b.2 (ITS SR 3.8.4.2). The "tight" criterion is deleted because it may require torquing the connecting bolts to confirm tightness, which can lead to overstressing the bolted connection. The torque on the connection may be assumed to be appropriate if the connection satisfies the resistance requirements of CTS ~~4.8.2.c.3~~ 4.8.2.1.c.3 (ITS SR 3.8.4.5).

(L.5) ~~*(EELB contribution)*~~ CTS 4.8.2.1.c.4.3 requires ~~that the licensee conduct~~ a 4-hour load test of the station battery chargers. The licensee has proposed to reduce the duration of the load test to 1.5 hours and to perform the test by loading the chargers to at least 50% full load for 30 minutes, at least 75% full load for 30 minutes, and at least 100% full load for 30 minutes. The proposed change is acceptable because the duration of the load test is sufficient to determine charger operability and should detect any problems normally detected by the longer 4-hour load test. The proposed test duration is sufficient to allow the temperature of the charger components to stabilize, and the step load-changes during the test are intended to better verify proper operation of all charger components.

[L.6 ~~is addressed generally in discussion 3.8.b(1) under *General*]~~ SEE INSERT L.6 for clarity

(L.7) CTS 4.8.2.1.e and 4.8.2.1.f require a battery performance discharge test, and permit performing this test in lieu of the service test (CTS 4.8.2.1.d and ITS SR 3.8.4.7) when performed at its specified 60-month interval. This provision is revised in Note 1 to ITS SR 3.8.4.7 by only allowing a "modified" performance discharge test to satisfy the service test requirement. Accordingly, corresponding ITS SR 3.8.4.8 contains the option to perform a modified performance discharge test in lieu of the currently

INSERT L.6 to subsection 3.8.b, LCO 3.8.4

CTS 4.8.2.1.d and 4.8.2.1.e are required to be performed while shutdown. The Notes associated with ITS SR 3.8.4.7 and SR 3.8.4.8 have been modified to allow credit to be taken for unplanned events that satisfy the requirements of the associated SR. These notes are required to clarify that should circulstances occur during operation which result in an unplanned event which results in performance of the surveillance requirements, credit may be taken for the SR. This is acceptable because data obtained during the normal performance of each surveillance must still be obtained and the acceptance criteria must be satisfied before credit can be taken for the unplanned event.

required performance discharge test. The modified performance discharge test is a simulated duty cycle consisting of just two rates: First, a 1-minute discharge at the 1-minute rate published for the battery or the largest current load duty cycle load, followed by the test rate employed for the performance test. A small portion of the battery ampere-hour capacity is removed during the high rate 1-minute discharge. Since the ampere-hours removed by a rated 1-minute discharge represent a very small portion of the battery capacity, the test rate can be changed to that for the performance test without compromising the results of the performance discharge test. ~~This change appears more restrictive because the modified test is more severe than the test now required .... ?~~

TRUE - BUT NOT ALLOWED TO BE USED

[L.8 ~~is addressed in discussion 3.8.a( ) under 3.8.4 but may be more restrictive also; if it is, discuss it with L.7 in section 3.8.e~~]

MOVE FROM page 5

(L.9) CTS 4.8.2.1.f requires performing the battery discharge test once per 18 months if the battery shows signs of degradation or has reached 85% of the service life expected for the application. However, if the battery has reached 85% of the expected life with capacity ≥ 100% of the manufacturer's rating, a longer test interval is justified. Thus, a 24-month Frequency for corresponding ITS SR 3.8.4.8 is specified for a battery in the situation described.

3.8.5 DC Sources—Shutdown

(LA.1) CTS 3.8.2.2 contains a detailed listing of DC electrical power sources, including component numbers, that are required to be operable. These design details are moved to the Bases for corresponding ITS LCO 3.8.5. ITS LCO 3.8.5 simply requires the Division 1, Division 2, and Division 3 DC electrical power subsystems to be operable as required to support the electrical power distribution subsystems required by ITS 3.8.8 for shutdown conditions. This is acceptable because these design details are adequately addressed by other requirements outside the TS and do not need to be included in the TS to ensure the operability of the DC sources. This change corresponds change type 1 as defined in the general discussion of less restrictive requirements at the beginning of Part III of this safety evaluation.

(LA.2) For the reasons given in discussion 3.8.b(LA.2 - ITS 3.8.4) above, the explicit requirements for the ±24-volt batteries and battery chargers are removed from CTS 3/4.8.2.2.

(L.1) CTS 4.8.2.2 requires demonstrating that at least the required battery and battery charger are operable per the surveillance requirements of CTS 4.8.2.1, with no exceptions. Corresponding ITS SR 3.8.5.1 requires the same surveillances to be met during shutdown conditions (SR 3.8.4.1, 3.8.4.2, 3.8.4.3, 3.8.4.4, 3.8.4.5, 3.8.4.6, 3.8.4.7, and 3.8.4.8). However, a Note to SR 3.8.5.1 states that SR 3.8.4.7 and 3.8.4.8 are not required to be performed. Performance of either of these surveillances (the battery service

test or the battery performance test) on the only required operable battery would ~~may~~ render that battery inoperable, and would present a significant safety risk were an event to occur during the test. This Note does not except the requirement for the battery to be capable of meeting the test criteria of the surveillance; it only excepts the requirement to demonstrate that capability while that battery is being relied on to meet the LCO. Therefore, this Note is acceptable.

3.8.6 Battery Cell Parameters

LA.2 Doesn't "address" parameters -

[LA.1 - addressed in *LA.2 - 3.8.4*] For clarity see insert LA.1

6th cell = suggested

(LA.2) CTS 4.8.2.1.b.3, for determining each battery's average electrolyte temperature, is based on IEEE-450 which recommends measuring ~~every sixth cell (the~~ representative cells~~)~~ for determining the average electrolyte temperature. Application of this recommendation to the batteries at WNP-2 is explicitly stated in CTS 4.8.2.1.b.3 (i.e., 10 cells for the 125-volt batteries and 20 cells for the 250 volt battery). These procedural details relating to the plant specific determination of "representative" are moved to the Bases for corresponding ITS SR 3.8.6.3. This change is acceptable because the requirements retained in ITS 3.8.6 are adequate to ensure battery cell average electrolyte temperature is properly determined and maintained > 60°F. This corresponds to change type 3 as defined in the general discussion of less restrictive requirements at the beginning of Part III of this safety evaluation.

(L.1) Every 92 days and within 7 days after a battery discharge or overcharge, CTS 4.8.2.1.b.3 requires verifying the average electrolyte temperature of selected battery cells is > 60°F. Corresponding ITS SR 3.8.6.3 omits the within-7-days Frequency. This is reasonable because battery electrolyte temperature generally increases with severe discharging and overcharging. Thus, not monitoring for a temperature decrease is acceptable.

DISCUSSED AS OPEN ITEM

(L.2) The added words to Note (a) are not acceptable; the Bases adequately explain what is meant by "during." The limits on the cell electrolyte level in CTS Table 4.8.2.1-1 are retained in ITS Table 3.8.6-1 with the addition of Note (a) to allow a temporary increase above the specified maximum level during and following an equalizing charge, provided the electrolyte is not overflowing. The level excursion is due to gas generation during the equalizing charge. The level returns to normal within 3 days following completion of the equalizing charge (reestablishing the float charge). This Note is based on the guidance in Appendix A of IEEE Standard 450, 1987, which recognizes the high-level condition that may accompany an equalizing charge as temporary. The exception to the high level limit specified in Note (a) is acceptable because a high electrolyte level caused by an equalizing charge is temporary and self correcting and has no effect on battery operability.

(L.3) Note (b) to CTS Table 4.8.2.1-1 allows the substitution of a battery charging current of less than 2 amperes when on float charge for the specific

INSERT LA.1 to subsection 3.8.b, LCO 3.8.6

As addressed in subsection 3.8.b, LCO 3.8.4, LA.2, the requirement for the ± 24-volt battery parameters are removed from CTS 3/4.8.2.1 and 3/4.8.2.2.

B, SECOND COLUMN

gravity measurements of Category A (pilot cells) and Category ~~A~~ B, SECOND COLUMN (each connected cell). Corresponding Note (c) to ITS Table 3.8.6-1 also allows use of charging current for Category B limits on each connected cell. A battery charge affects all connected cells, and the charging current is an accurate indication of battery state following a charge that is directly related to specific gravity. ~~As part of extending this allowance the ITS also limits~~ use ~~of charging current to 7 days; after which specific gravity must be measured to verify the specific gravity of all cells are within limits in order to satisfy ITS SR 3.8.6.1 and SR 3.8.6.2. Because of the 7-day limit, and~~ BECAUSE the fact that the float charge current for a freshly charged battery is an accurate indication of the cell strength, this change is acceptable.

(L.4) Notes (1), (2), and (3) of CTS ~~Tale~~ TABLE 4.8.2.1-1 specify action requirements for battery cell parameters not within limits. These requirements are relaxed as follows:

In the event any Category A battery cell parameters are outside the limits, Note (1) states the battery may be considered operable provided that within 24 hours all Category B parameters are verified to be within their allowable values (Category C limits in the ITS), and all Category A and B parameters are restored to within limits within the next 6 days. Corresponding Required Action A.3 of ITS 3.8.6 relaxes the restoration time to 31 days.

In the event any Category B parameters are outside the limits, the battery may be considered operable provided the Category B parameters are within their allowable values (Category C limits in the ITS) and provided the Category B parameters are restored to within limits within 7 days. Corresponding Required Action A.3 of ITS 3.8.6 relaxes the restoration time to 31 days.

Taken together, these two changes can be viewed as a single Completion Time increase from 7 days to 31 days. This change is acceptable because (a) enough battery capacity exists to perform its intended function, as long as the battery meets the Category C limits, (b) Required Action A.2 requires verifying that the battery meets the Category C limits every 7 days in addition to the currently required verification within the initial 24 hours, and (c) it is consistent with IEEE battery working group recommendations in a letter from B.M. Radimer (IEEE) to S.K. Aggarwal (NRC) dated August 2, 1988.

3.8.7 *Distribution Systems—Operating*

THIS DISCUSSION IS "MORE RESTRICTIVE"

(A.2) In the event two or more electrical power distribution subsystems are inoperable and result in loss of a safety function, the ACTIONS of CTS 3/4.8.3.1 may not require an appropriate course of action. For example, if an AC subsystem from one division and a DC subsystem from the redundant division are inoperable, safety related components in both divisions may be without the necessary electrical power resulting in a loss of function; the CTS allowed outage times of 8 hours for the AC subsystem and 2 hours for the DC subsystem would still apply; an immediate shutdown is more appropriate. ~~In contrast, if 3 subsystems are inoperable, but no loss of function exists, the CTS would require an immediate shutdown in accordance with CTS 3.0.3; however, that may~~

ONLY FOUR SUBSYSTEMS, 6 W/ DIV 3
A LOSS OF 3 WOULD ALWAYS CAUSE LOSS OF FUNCTION, 3.0.3 IS REQUIRED

NOT A WEAKNESS - DOESN'T EXIST, SEE A. INSERT A.2 ON page 7.

~~be too restrictive if a loss of function has not occurred~~. This weakness in the CTS action requirements is corrected in the ITS by adding ACTION F to corresponding ITS 3.8.7. ACTION F requires immediate entry into ITS LCO 3.0.3 (controlled shutdown) for a loss of function. The format of the STS allows entry into multiple Conditions simultaneously. Three or more distribution subsystems could be inoperable and the required actions for entry into ITS LCO 3.0.3 would not be required. This change is both less restrictive and more restrictive, but is acceptable because it results in action requirements appropriate for each situation.

(LA.1) CTS 3.8.3.1 contains a detailed list of buses, motor control centers (MCCs), power panels and distribution panels contained in the Division 1, 2, and 3 subsystems of the AC and DC electrical power distribution systems at WNP-2. In addition, it requires tie breakers between redundant buses to be open for the busses to be operable. These details are moved to the Bases for ITS 3.8.7. Including system design details in an LCO statement is not necessary because the definition of operability is sufficient. This change corresponds to change types 1 and 7 as defined in the general discussion of less restrictive requirements at the beginning of Part III of this safety evaluation.

(LA.2) As addressed in discussion 3.8.b(*LA.2* - ITS *3.8.4*), requirements for the ±24-volt DC ~~electrical power sources in CTS 3/4.8.2) and~~ distribution system in CTS 3/4.8.3, are removed from the CTS.

[LA.3 ~~is addressed in L.2 below~~] SEE INSERT LA.3, for completeness.

(L.1) ACTION D of ITS 3.8.7 is added to the DC electrical power distribution system action requirements of CTS ~~3/4.3.1~~ 3.8.3.1 to clarify the appropriate action in the event the 250-volt electrical power distribution subsystem is inoperable (deenergized) (only Division 1 has a 250-volt subsystem). As such, ACTION D requires immediately declaring the associated supported features inoperable. The 250-volt subsystem support various reactor core isolation cooling (RCIC) system, ~~and~~ residual heat removal (RHR) system, valves, and non-TS equipment such as ~~reactor water cleanup (RWCU) system valves~~, plant controls, instrumentation, computer and communication equipment through a solid state inverter. Therefore, the 250-volt subsystem only supports two TS-related functions. Although the resulting allowed outage times are greater than the CTS 2-hour time allowed to restore the subsystem to operable status, this change is acceptable because the specifications for RCIC (ITS 3.5.3) and RHR, (ITS ~~3.4.10, 3.5.1, 3.6.1.5, and 3.6.2.3~~ 3.6.1.3) will ensure the appropriate actions are taken. AND RWCU SYSTEM ~~RSI~~ PCIVs RCIC, AND RWCU PCIVs

MOVED LIST TO BASES - NOT DISCUSSED

(L.2 ~~and LA.3~~) CTS 4.8.3.1 verifies energization of electrical power distribution system busses, MCCs, and panels by two methods - circuit breaker alignment and the presence of voltage on the bus, MCC, or panel. Corresponding ITS SR 3.8.7.1 verifies energization by two methods - circuit breaker alignment and indicated power availability. The surveillance removes the requirement to verify the subsystem voltages, requiring power availability

INSERT LA.3 to subsection 3.8.b, LCO 3.8.7

CTS 4.8.3.1 requires energization checks "on the busses/MCCs/panels." Details of the methods for performing the Surveillance (on the busses/MCCs/panels) to verify the required Distribution Systems are OPERABLE are moved to the Bases. These details are not necessary to ensure the OPERABILITY of the Distribution Systems. The requirements of ITS 3.8.7 and SR 3.8.7.1 are adequate to ensure the required Distribution Systems are maintained OPERABLE. Changes to the Bases will be controlled by the provisions of the proposed Bases Control Program described in Chapter 5 of the Technical Specifications.

indication instead. Voltage indication is not available on all AC and DC buses. By requiring verification of indicated power availability, the surveillance more accurately states the intent of the CTS requirement to verify voltage and also permits flexibility in ascertaining the availability of power on the required AC and DC busses, MCCs, and panels. For example, the licensee currently verifies proper power availability on a bus with no voltage indication by verifying a load powered from the bus is operating or verifying the absence of a low voltage alarm on the bus. This change is acceptable because the effectiveness of the CTS surveillance to verify the LCO is met is not affected by the additional flexibility afforded by the ITS surveillance.

3.8.8 Distribution Systems—Shutdown

(LA.1) CTS 3.8.3.2 contains a detailed list of buses, motor control centers (MCCs), power panels and distribution panels contained in the Division 1, 2, and 3 subsystems of the AC and DC electrical power distribution systems at WNP-2. In addition, it requires tie breakers between redundant buses to be open for the busses to be operable. These details are moved to the Bases for ITS 3.8.7. This change is acceptable for the reasons given in discussion 3.8.b(LA.1 - ITS 3.8.7) above.

[LA.2 is addressed in L.1] NOT DISCUSSED IN L.1 SEE INSERT LA.2

(L.1) Similar to CTS 4.8.3.1, CTS 4.8.3.2 verifies energization by two methods - circuit breaker alignment and the presence of voltage on the bus, MCC, or panel. This is revised in ITS SR 3.8.8.1, which has language identical to that of ITS SR 3.8.7.1. This change is acceptable for the reasons given above in discussion 3.8.b(L.2 - ITS 3.8.7).

Conclusion

The less restrictive requirements described in the preceding material have been found by the staff to be acceptable because they do not present a significant safety question in the operation of the plant. The TS requirements that remain are consistent with current licensing practices, operating experience and plant accident and transient analyses, and provide reasonable assurance that the public health and safety will be protected.

c. More Restrictive Requirements

The licensee, in electing to implement the specifications of STS Section 3.8, "Electrical Power Systems," proposed a number of more restrictive requirements than are allowed by CTS Section 3/4.8. These requirements are the following:

3.8.1 AC Sources—Operating

(M.1) ACTIONS a and c of CTS 3.8.1.1 together allow DG-3 and either DG-1 or DG-2 to be concurrently inoperable for 72 hours (the individual allowed outage times) before requiring a unit shutdown, provided within 2 hours a loss-of-function condition is verified not to exist (i.e., provided ACTION d is met).

INSERT LA.2 to subsection 3.8.b, LCO 3.8.8

CTS 4.8.3.2 requires energization checks "on the busses/MCCs/panels." Details of the methods for performing the Surveillance (on the busses/MCCs/panels) to verify the required Distribution Systems are OPERABLE are moved to the Bases. These details are not necessary to ensure the OPERABILITY of the Distribution Systems. The requirements of ITS 3.8.8 and SR 3.8.8.1 are adequate to ensure the required Distribution Systems are maintained OPERABLE. Changes to the Bases will be controlled by the provisions of the proposed Bases Control Program described in Chapter 5 of the Technical Specifications.

In ITS 3.8.1, ~~corresponding Required Action B.2 (no-loss-of-function verification in the event of an inoperable DG) and~~ Required Action E.1 (in the event DG-3 and another DG are inoperable) reduce the time to repair one of the two inoperable DGs to 24 hours before requiring a unit shutdown (per ACTION E).

(M.2) In the event a DG is inoperable, ACTION d of CTS 3~~/4~~.8.1.1 requires verifying within 2 hours (4 hours in corresponding Required Action B.2 of ITS 3.8.1) that "all required systems, subsystems, trains, components, and devices that depend on the remaining operable DGs as a source of emergency power are also operable (this is referred to as a no-loss-of-function check). The ITS add similar action requirements in the event an offsite circuit is inoperable (Required Action A.2) and in the event two required offsite circuits are inoperable (Required Action C.1).

Required Action A.2 requires declaring required features with no offsite power available inoperable within 24 hours from discovery of no offsite power to one division concurrent with inoperability of redundant required features.

Required Action C.1 requires declaring required features inoperable within 12 hours from discovery of two inoperable required offsite circuits concurrent with inoperability of redundant required features.

These additional requirements are acceptable because they will ensure that all necessary supported systems are operable to respond to a DBA or transient by limiting the time that offsite power is not available to one of the two redundant systems.

(M.3) In the event DG-1 and DG-2 are inoperable, ACTION f of CTS 3.8.1 allows 2 hours to verify correct breaker alignment and indicated power availability for each offsite circuit (CTS 4.8.1.1.1.a). The corresponding action requirement in ITS 3.8.1 (Required Action A.1) only allows 1 hour to perform corresponding SR 3.8.1.1. This is acceptable because 1 hour is sufficient time to perform this verification ~~and because it falls within the 2-hour period allowed by ITS Required Action E.1 to restore one of the DGs to operable status in the event DG-1 and DG-2 are inoperable~~ and is consistent w/similar AOTs.

(M.4) In the following DG surveillances, the frequency range criterion is changed from 60 ± 3.0 Hz to 60 ± 1.2 Hz. This is acceptable because it is consistent with Regulatory Guide 1.9, Revision 3. In addition, the upper voltage limit is reduced from 4580 V to 4400 V. This is acceptable because it will ensure that when a bus is lightly loaded, the maximum voltage rating of components powered by the bus will not be exceeded.

CTS	ITS	Description
4.8.1.1.2.a.4	SR 3.8.1.2	DG ~~standby~~ start test
	SR 3.8.1.7	DG ambient start test
~~4.8.1.1.2.a.5~~	~~SR 3.8.1.3~~	~~DG 1 hour load test~~ → not in M.4.
4.8.1.1.2.e.4	SR 3.8.1.11	DG LOSP start test

4.8.1.1.2.e.5	SR 3.8.1.12	DG ECCS start test
4.8.1.1.2.e.6	SR 3.8.1.19	DG LOSP-ECCS start test
~~4.8.1.1.2.e.8~~	~~SR 3.8.1.15~~	~~DG hot restart test~~ Not in M.4
~~4.8.1.1.2.f~~	~~SR 3.8.1.20~~	~~DG simultaneous start test~~ SEE ~~NEW~~ M.10

(M.5) Two Notes are added to CTS 4.8.1.1.2.a.5, the DG 1-hour load test, in corresponding ITS SR 3.8.1.3. Note 3 precludes performing this surveillance on more than one DG at a time, and Note 4 requires performing this surveillance immediately following the successful performance of SR 3.8.1.2 or SR 3.8.1.7 (the DG start test). These Notes are acceptable because they conform to the intent of the CTS and current DG testing practice at WNP-2. They are more restrictive than the CTS which do not (a) prohibit testing more than one DG at a time and (b) require performing the 1-hour load test in conjunction with the DG start test.

(M.6) Limits on the operating power factor are added to the following DG surveillances:

SEE DISCUSSION

CTS	ITS	Description
4.8.1.1.2.e.2	SR 3.8.1.9 Note ~~1~~2	Single load rejection test
4.8.1.1.2.e.3	SR 3.8.1.10 Note 2	Full load rejection test
~~4.8.1.1.2.e.8~~	~~SR 3.8.1.14 Note 3~~	~~24-hour full load run~~

These limits ensure the DG is conservatively tested under conditions as close to accident conditions as reasonable, provided the power factor can be attained. The actual power factor value has been added to the Bases. ~~In conjunction with adding the power factor limits, a note is added to SR 3.8.1.14 to clarify that a momentary transient that results in the power factor not being met does not invalidate the 24-hour full load run.~~

(M.7) CTS 4.8.1.1.2.e.4.b requires a loss of offsite power (LOSP) start test for DG-3. However, this surveillance requirement does not require energizing the "auto-connected" shutdown loads, only the "permanently-connected" loads, within the specified time limit. Similarly, for the LOSP-ECCS combined start test for DG-3, CTS 4.8.1.1.2.e.6.b ~~only~~ requires DG-3 to energize the "permanently-connected" and auto loads; however, in this case, no time limit is specified. A requirement to energize the "auto-connected loads," with no time ~~limit~~ is added in corresponding ITS SR 3.8.1.11. ~~and SR 3.8.1.19~~. In addition, a requirement to energize the "permanently-connected loads" within 15 seconds is added in SR 3.8.1.~~11~~19 for permanent loads. These additional requirements are acceptable because they ensure that Division 3 auto-connected loads, such as the HPCS service water pump, will be energized from DG-3 in the event of a LOSP or a LOSP with an ECCS actuation signal.

(M.8) In CTS 4.8.1.1.2.e.5, the DG-ECCS ~~The following DG~~ start surveillance~~s~~ (loading not required) allows the steady state output voltage for DG-1 and DG-2 to be as low as 3740 V (420 volts below the nominal value of 4160 V). The minimum voltage to be achieved in ~~these~~ this test~~s~~ is increased to 3910 V in the corresponding ITS surveillance~~s~~. (ITS SR 3.8.1.12) This change is acceptable because the new value is consistent with the DG output breaker closure permissive voltage. ~~The value for DG-3 is unchanged.~~

THESE ALREADY HAD 250 limit -
f is M.10, below

CTS	ITS	Description
4.8.1.1.2.a.4	SR 3.8.1.2	DG standby start test
	SR 3.8.1.7	DG ambient start test
4.8.1.1.2.e.5	SR 3.8.1.12	DG ECCS start test
4.8.1.1.2.e.8	SR 3.8.1.15	DG hot restart test
4.8.1.1.2.f	SR 3.8.1.20*	DG simultaneous start test

DG tests requiring the DG-1 or DG-2 to be connected to the bus retain the current value.

~~* Note, for this surveillance, the minimum voltage is a new requirement.~~

(M.9) CTS 4.8.1.1.2.e.5, the DG ECCS start test, does not require verifying (a) that permanently connected loads remain energized from the offsite power system, or (b) that emergency loads are auto-connected to the offsite power system. These two requirements are added in corresponding ITS SR 3.8.1.12. These verifications are necessary because separate load timers auto-connect some of the emergency loads to the offsite power system. Therefore, adding them in SR 3.8.1.12 is acceptable.

(M.10) CTS 4.8.1.1.2.f, the simultaneous start test of all three DGs, does not specify an acceptance criterion for minimum DG output voltage. This criteria are added in corresponding ITS SR 3.8.1.20 consistent with the other DG start tests ~~(see discussion above)~~. This change is acceptable because the minimum generated voltage criterion ensures the generator voltage regulator, field, stator and other diesel generator components are functioning properly with no interdependence. where loading is not req'd.

3.8.2 AC Sources—Shutdown

(M.1) CTS 3.8.1.2.a requires one operable circuit between the offsite transmission network and the onsite Class 1E distribution system. This LCO is stated more precisely in ITS LCO 3.8.2.a by adding the qualification that the operable offsite circuit must be supplying the onsite Class 1E electrical power distribution subsystems required by ITS 3.8.8. This change is acceptable because (a) for a distribution subsystem to be operable it must be energized from an operable power source, and (b) it ensures the single circuit is performing a vital function. With the circuit supplying power to all necessary loads, if one or more required load centers, MCCs, busses, or panels do not receive power from an operable offsite circuit, that circuit is inoperable (and so is the associated deenergized distribution subsystem).

In the event the required offsite circuit is inoperable, the ITS contain an option to the CTS action requirements. This new requirement, to "declare affected features with no offsite power inoperable" (Required Action A.1), is appropriate because it may not be necessary to suspend all core alterations, irradiated fuel handling, and operations with the potential for draining the reactor vessel. Declaring all required equipment without offsite power inoperable and taking the action requirements of the associated specifications ensures conservative actions are taken. Therefore, Required Action A.1 is

acceptable.

state

(M.2) CTS 3.8.1.2.b requires either DG-1 or DG-2 to be operable, but does not specify power availability to any given loads. Corresponding ITS ~~LCO~~ 3.8.2.b adds the qualification that the operable DG must be capable of supplying the electrical power distribution subsystems required by ITS 3.8.8~~. for shutdown conditions.~~ This added restriction is acceptable because it ensures the DG can perform a vital function, and is consistent with current operating practices.

(M.3) In the event the required offsite circuit and/or the required DG (DG 1 or DG-2) are inoperable during MODE 5 with water level less than 22 feet above the reactor pressure vessel (RPV) flange, ACTION a of CTS 3.8.1.2 requires immediately initiating corrective action to restore the required power sources to operable status "as soon as practical." Corresponding Required Actions A.2.4 and B.4 of ITS 3.8.2 require immediately initiating action to restore the required power source to operable status in Modes 4 and 5 and during movement of irradiated fuel assemblies, regardless of whether water level is less than 22 feet above the RPV flange. This change is acceptable because requiring action to continue until the required AC power sources are restored to operable status minimizes the time that the required plant safety systems may be without sufficient electrical power during shutdown conditions and during movement of irradiated fuel assemblies in secondary containment.

3.8.3 Diesel, Fuel Oil, Lube Oil, and Starting Air

(M.1) New requirements for diesel lube oil inventory and appropriate action and surveillance requirements are added to the CTS in ITS LCO 3.8.3, ACTION B and Surveillance Requirement 3.8.3.2 to ensure a 7-day supply of lube oil for each diesel generator.

(M.2) The air start receiver pressure for DG-3 of ≥ 200 psig in CTS 4.8.1.1.2.a.7 is increased to ≥ 223 psig in corresponding ITS SR 3.8.3.4. The current licensing basis requires that the air receiver for DG-3 have sufficient capacity for three successive start attempts without recharging. Recent calculations by the licensee found that the minimum air receiver pressure needed to meet this requirement is 223 psig. Therefore, this change is acceptable.

(M.3) CTS 4.8.1.1.2.b.2 requires initiating the procedure for pumping off accumulated water within 48 hours of detection of accumulated water at the bottom of a diesel fuel oil storage tank below the transfer pump. This specific time limit for initiating action to remove the water is omitted from corresponding ITS SR 3.8.3.5 which simply includes removing any water as part of checking for water. This change to this preventive maintenance requirement is acceptable because any detected water is removed as part of the surveillance; if not removed, the surveillance is failed and the associated DG is inoperable. That is, deferring the removal of any accumulated water is no longer permitted.

3.8.4 DC Sources—Operating

(M.1) CTS 4.8.2.1.f requires the battery performance discharge test every 18 months if the battery shows degradation or has reached 85% of its service life. The second Frequency of corresponding ITS SR 3.8.4.8 requires this test every 12 months when a battery either (a) shows degradation or (b) has reached 85% of expected life with capacity < 100% of the manufacturer's rating.

In addition, the Frequencies of CTS 4.8.2.1.c.1 (ITS SR 3.8.4.3), CTS 4.8.2.1.c.2 (ITS SR 3.8.4.4), and CTS 4.8.2.1.c.3 (ITS SR 3.8.4.5) are all changed from 18 months to 12 months.

The 12-month Frequency is more restrictive and is acceptable because (a) it is the licensee's current practice and (b) it is consistent with the recommendations of IEEE-450.

NO DISCUSSION OF M.2, from Rev B.

3.8.5 DC Sources—Shutdown

(M.1) CTS 3.8.2.2 requires Division 1 or Division 2 DC power sources to be operable during operation in MODES 4 and 5 and when handling irradiated fuel in secondary containment (it also requires the Division 3 DC power source to be operable during these conditions whenever the high pressure core spray system is required to be operable). However, this LCO does not specify what loads the required operable DC source must power. ITS 3.8.5 specifies that the sources necessary to supply DC power to all electrical power distribution subsystems required operable by ITS 3.8.8 must be operable. This added restriction is acceptable because it ensures the required operable power source is supplying the required loads, even if this results in requiring both the Division 1 and Division 2 sources to be operable, and because it is consistent with current operating practices.

In conjunction with this added restriction in ITS LCO 3.8.5, ACTION a of CTS 3.8.2.2 is revised to address one or more inoperable DC sources (ACTION A of ITS 3.8.5). Since the DC source operability requirements in ITS LCO 3.8.5 demand supplying power to all necessary loads, one or more required DC loads not having the required DC power renders the DC source inoperable. In this event, it may not be necessary to suspend all core alterations, irradiated fuel handling, and operations with the potential for draining the reactor vessel (OPDRV). Conservative actions are also ensured by immediately declaring all required equipment without the necessary DC power inoperable and performing the specified action requirements of the associated specifications. Therefore, this option, specified by Required Action A.1, is acceptable.

(M.2) In the event the required DC sources are not operable, plant conditions are conservatively restricted by following the CTS 3.8.2.2 ~~action~~ requirements to suspend core alterations, irradiated fuel handling in secondary containment, and OPDRVs (retained in ITS 3.8.5 Required Actions A.2.1, A.2.2, and A.2.3). However, continued operation in MODE 4 or 5 without the necessary DC sources is not desirable. Therefore, a Required Action A.2.4, to immediately initiate

action to restore the required DC sources to operable status, is added to the action requirements. These ACTIONS AREN'T NEEDED IF

~~As previously discussed,~~ the new optional action requirement (Required Action A.1) to immediately declare affected DC loads (required features) inoperable, ~~is acceptable because it will ensure sufficiently conservative measures are taken, even without requiring efforts to restore the inoperable source~~. IS TAKEN

(AS DISCUSSED IN M.1 above)

(M.3) In lieu of declaring the HPCS system inoperable and taking the ACTIONS of the appropriate specification (CTS ~~3/4.2.2~~ 3.8.2.2, ACTION b, and ITS 3.8.5, Required Action A.1), new action requirements are specified in the event the Division 3 DC source is inoperable, consistent with the Required Actions for inoperable Division 1 and 2 DC sources. These action requirements (Required Actions A.2.1, A.2.2, A.2.3, and A.2.4) immediately require suspension of core alterations, handling of irradiated fuel assemblies in the secondary containment, OPDRVS, and initiation of action to restore the inoperable DC source to operable status. These action requirements are more restrictive than currently required, because the ACTION a of CTS 3~~/4.~~5.2 only requires suspending OPDRVs within 4 hours, and if applicable, ACTION b of CTS 3~~/4.~~5.3 requires suspending core alterations as well as OPDRVs, but specifies no time limit.

3.8.6 Battery Cell Parameters

(M.1) Note (c) to CTS Table 4.8.2.1-1 allows correcting the Category B (1st column) ~~(individual cell) cell~~ float voltage for the average electrolyte temperature. This allowance is omitted from corresponding ITS Table 3.8.6-1 based on the recommendations in IEEE Standard 450, 1987. Appendix C3 of this standard discusses the relation between cell voltage and temperature. Temperature differences show the need for an equalizing charge. Further, the warmer cell has a lower cell voltage for the same float current. Temperature-corrected voltages only apply when the warmer cell is below 2.13 volts, while the Category B limits are ≥ 2.13 volts. Temperature compensated voltage does not apply to a cell that is above the Category B cell voltage limit. Thus, elimination of this allowance is acceptable.

(M.2) Note (b) to CTS Table 4.8.2.1-1 allows substituting a battery charging current of less than 2 amperes when on float charge for the specific gravity measurements of pilot cells for Category A specific gravity limits and each connected cell for Category B specific gravity allowable values. ~~In addition to these provisions, Note (c) of corresponding ITS Table 3.8.6-1 also~~ allows ~~substituting charging current for measurements of each connected cell for Category B specific gravity limits. However,~~ Note (c) of ITS TABLE 3.8.6-1 limits the time that charging current may be used to 7 days and requires specific gravity measurements of each connected cell within 7 days of the completion of the battery charge. These changes are acceptable for the reasons given in discussion 3.8.b(L.3 - 3.8.6). because they avoid excessive reliance on charging limit.

(M.3) A new requirement has been added (proposed Required Action A.1) for when a Category A or B limit is not met. It requires a check within 1 hour

that the pilot cell electrolyte level and float voltage are within the Category C limits (current Category B allowable values). This change is acceptable because it ensures that if the pilot cell is exceeding Category C limits, the battery will be declared inoperable immediately.

3.8.7 Distribution Systems—Operating

(M.1) CTS 3.8.3.1, ACTIONS a.1 and b.1, require the restoration of the deenergized AC distribution subsystems to operable status within 8 hours and the restoration of the de-energized DC distribution subsystems within 2 hours, respectively. ITS 3.8.7, Required Actions A.1 (Division 1 or 2 AC) and B.1 (Division 1 or 2 125-volt DC) retain these action requirements but also specify a 16-hour limit on unit operation with LCO 3.8.7.a (Division 1 and 2 AC subsystems) and/or LCO 3.8.7.b (Division 1 and 2 125-volt DC subsystems) not met. For instance, if a Division 1 AC distribution subsystem is inoperable while a Division 2 125-volt DC bus is inoperable, and the Division 1 subsystem is later restored, the initial inoperability may already have existed for up to 8 hours. This situation could lead to a total duration of up to 10 hours (8 hours for the AC distribution subsystem and 2 hours for the DC distribution subsystem) since the initial subsystem failure. Continuing the example, a Division 1 AC distribution subsystem could again become inoperable followed by a restoration of the Division 2 125-volt DC distribution subsystem to operable status. To prevent these alternating inoperabilities from continuing indefinitely, an appropriate restriction is placed in the action requirements: "16 hours from discovery of failure to meet LCO 3.8.7.a or b."

3.8.8 Distribution Systems—Shutdown

THIS SENTENCE IS MISLEADING BECAUSE CTS ACTUALLY required ONE of each AC/DC.

(M.1) CTS 3.8.3.2 requires ~~entire~~ ONE AC and DC power distribution subsystems + DIV 3 if HPCS is Req'd. (divisions) to be energized during shutdown and when handling irradiated fuel in the secondary containment. ~~More precisely;~~ ITS LCO 3.8.8 requires the "necessary portions of the Division 1, Division 2, and Division 3 AC and DC electrical power distribution subsystems" to be operable "to support equipment required to be operable." This change is acceptable because it ensures the needed sources of power are available.

In the event one or more required AC or DC subsystems are inoperable, ITS Required Action A.1 specifies declaring associated supported required features inoperable, as an option to the action requirements of CTS 3~~/4~~.8.3.2. If one or more required loads do not have the required power due to an inoperable bus, that distribution subsystem is inoperable. In this event it may not be necessary to suspend all core alterations, irradiated fuel handling, and operations with the potential for draining the reactor vessel. Conservative actions are ensured by declaring all required equipment without the necessary power inoperable, and taking the applicable action requirements of the associated specifications for the affected equipment.

(M.2) In the event the required AC or DC distribution subsystems are inoperable, plant conditions are conservatively restricted by following the

a.1 and b.1
Actions ~~requirements~~ of CTS 3/4.8.3.2 to suspend core alterations/ irradiated fuel handling in secondary containment, and OPDRVs (retained in Required Actions A.2.1, A.2.2, and A.2.3 of ITS 3.8.8). However, continued operation in MODE 4 or 5 without the necessary distribution subsystems is not desirable. Therefore, a Required Action A.2.4, to immediately initiate action to restore the required subsystems to operable status, is added to the action requirements. In addition, Required Action A.2.5 is added to immediately declare associated shutdown cooling subsystems inoperable and not in operation. This allows taking the actions for inoperable distribution systems without requiring actions for each inoperable supported component (that would be necessary if the option of Required Action A.1, previously discussed, were to be taken). This is acceptable because it ensures that (a) proper measures are taken in response to the loss of shutdown cooling and (b) power will be restored to the shutdown cooling systems that are without required power as soon as possible.

(M.3) In lieu of declaring the HPCS system inoperable and taking the ACTIONS of the appropriate specification (CTS 3/4.8.3.2, ACTIONS a.2 and b.2, and ITS 3.8.8, Required Action A.1), new action requirements are specified in the event one or more Division 3 AC and/or DC power distribution subsystems are inoperable, consistent with the Required Actions for inoperable Division 1 and 2 AC and DC distribution subsystems. These action requirements (Required Actions A.2.1, A.2.2, A.2.3, ~~and A.2.4~~) immediately require suspension of core alterations, handling of irradiated fuel assemblies in the secondary containment, OPDRVS, an~~d initiation of action to restore the inoperable DC distribution subsystems to operable status~~. These action requirements are more restrictive than currently required, because the ACTION a of CTS 3/4.5.2 only requires suspending OPDRVs within 4 hours, and if applicable, ACTION b of CTS 3/4.5.3 requires suspending core alterations as well as OPDRVs, but specifies no time limit. M.2 covers A.2.4

Conclusion

The staff has reviewed these more restrictive requirements and believes they strengthen the CTS. Therefore, these more restrictive requirements are acceptable.

d. Significant ~~STS~~ Differences from 1434

The licensee, in electing to adopt the specifications of STS Section 3.8, "Electrical Power Systems," proposed the following differences between the ITS and the STS. Note that STS 3.8.7 and STS 3.8.8 for inverters are not adopted because they are not part of the WNP-2 design. ~~Unless otherwise stated, STS means NUREG-1434, not NUREG-1433.~~

3.8.1 AC Sources—Operating

Not significant CJ ed Reg'd

(JD1) In accordance with the reviewer's note in the STS, ACTION F of STS 3.8.1, for an inoperable automatic load sequencer and the associated operability requirements in STS LCO 3.8.1.c are omitted from ITS 3.8.1.

(JD3) STS 3.8.1, Required Action A.3 (for an inoperable offsite circuit) requires restoring the required offsite circuit to operable status within 24 hours from discovery of two divisions with no offsite power. ITS 3.8.1, Required Action A.3, omits this conditional Completion Time because the WNP-2 design is such that the loss of one offsite circuit will result in, at most, only one division losing offsite power. When two divisions are without offsite power, both offsite circuits would have to be inoperable; thus ACTION C would apply, which requires one of the circuits to be restored within 24 hours. Therefore, the 24-hour Completion Time of STS Required Action A.3 is not needed.

(JD6) Note 1 to STS SR 3.8.1.2 ("Performance of SR 3.8.1.7 satisfies this SR.") is omitted from ITS SR 3.8.1.2 because it is unnecessary to state this allowance in this case when for most SRs in the STS where this allowance is acceptable, it is not explicitly stated. Omitting this note is acceptable because it avoids confusion regarding when such an allowance is not permitted. ~~(The licensee committed to propose this difference as a generic change to the STS.)~~

(JD8) The Frequency for ITS ~~several~~ SRs in STS 3.8.1 refers to the Table 3.8.1-1 which contains accelerated test schedules for the DGs. The CTS accelerated test requirements for the DGs are moved to the ~~LCSM~~ FSAR, as addressed in discussion 3.8.b(LA.2-3.8.1) above and the reviewer's note on page 3.8-19 of NUREG-1434; thus the corresponding ITS SRs only specify the nominal 31-day Frequency, and STS Table 3.8.1-1 is omitted. The industry has proposed removing the test schedule from all STS NUREGs in pending change TSTF-37.

(JD11) STS SR 3.8.1.7, SR 3.8.1.12, & 15 and SR 3.8.1.20, timed DG starts without loading, contain upper and lower voltage and frequency limits that must be met within the specified time limits. ITS SR 3.8.1.7, SR 3.8.1.12, ~~and SR~~ & 15 3.8.1.20 require achieving only the lower values of these voltage and frequency limits within the specified times. This difference is acceptable for reasons given in discussion 3.8.b(L.10 - 3.8.1). ~~WNP-2 has committed to propose a generic change to the STS to adopt this change.~~ ITS

Rev C - will DELETE P.F. From SR 3.8.1.14

(JD12) STS SR 3.8.1.9, SR 3.8.1.10, and SR 3.8.1.14 contain limits on power factor that must be met during these DG load rejection and run tests. ~~The~~ ITS SRs 3.8.1.9 & .10 ~~corresponding ITS SRs~~ require performing these tests within the "power factor limit" but do not contain a value for the limit; rather the value is given in the associated ITS Bases. ~~Omitting the values of the power factor limits from these SRs is an open issue.~~

In addition, these ITS SRs include the following note not contained in the STS: "If grid conditions do not permit, the power factor limit is not required to be met. Under this condition, the power factor shall be as close to the limit as practicable." This difference is acceptable because the intent of the power factor limit is still satisfied. ~~WNP-2 has committed to propose a generic change to the STS to adopt this note.~~

(JD13) In ~~NUREG-1434~~ STS, SR 3.8.1.9, the DG single load rejection test, states a

load value ≥ the single largest post-accident load for each DG. ITS SR 3.8.1.9 omits these load values because they are not contained in Revision 1 to NUREG-1430, 1431, 1432, and 1433, but are stated in the associated Bases. This difference is acceptable because Revision 1 to NUREG-1434 apparently retained these load values in SR 3.8.1.9 in error. The ITS states the correct load values and the actual loads in the Bases for SR 3.8.1.9.

(JD14) STS SR 3.8.1.9, the DG single load rejection test, requires the DG to achieve voltage and frequency within specified limits within a specified time following the load rejection (in addition to the transient upper frequency limit). ITS SR 3.8.1.9 omits these additional criteria because CTS do not specify them and ~~the licensee will not backfit~~. response time is not assumed in any accident analysis

(JD15) STS 3.8.1.19, the DG automatic start on a LOSP signal in conjunction with an ECCS initiation signal, requires verifying the DG "achieves" steady state voltage and frequency within the specified limits. ITS SR 3.8.1.9 replaces the word "achieves" with "maintains" to be consistent with STS and ITS SR 3.8.1.11, the DG automatic start on a LOSP signal, which uses the word "maintain." This difference is not significant because the intent of the STS and the ITS is the same. Therefore, it is acceptable. if not significant delete JFD'15?

3.8.2 AC Sources—Shutdown

(JD16) STS LCO 3.8.2.c requires supplying the Division 3 onsite Class 1E electrical power distribution subsystem from the offsite circuit that is not being used to supply Division 1 and/or Division 2 subsystems. This specific requirement is omitted in ITS LCO 3.8.2.c because the WNP-2 design only provides for one offsite circuit to the Division 3 onsite Class 1E electrical power distribution subsystem. This offsite circuit is common to one of the offsite circuits powering Division 1 and 2. Therefore, this statement has been deleted and the offsite circuit requirement for Division 3 is now covered by ITS LCO 3.8.2.a. Due to this deletion, Condition A of the STS 3.8.2 ACTIONS is reworded to specifically state that it covers an inoperable offsite circuit, instead of referencing LCO item a. In addition, for clarity, Conditions B and C of STS 3.8.2 are reworded to specifically state that they cover an inoperable Division 1 or 2 DG, and a Division 3 DG, respectively. These differences are acceptable because they are based on WNP-2 specific electrical system design and are consistent with the CTS.

significant?

(JD17) The Note in the Required Action for Condition A of STS 3.8.2 requires entering applicable Condition and Required Actions of the shutdown electrical power distribution specification (STS 3.8.10, ITS 3.8.8), "with one" required division de-energized as a result of Condition A (required Division 1 or Division 2 offsite circuit inoperable). This note in ACTION A of ITS 3.8.2 requires entering the action requirements of ITS 3.8.8 "when any" required division "is" de-energized as a result of Condition A (required offsite circuit—Division 1, 2, or 3) inoperable. As applied to WNP-2, the STS language could be misinterpreted to mean that the shutdown electrical distribution specification is entered when only one division is de-energized. This difference is acceptable because (a) it is consistent with the intent of

the STS note, and (b) it will ensure that ITS 3.8.8 is entered when one or more required divisions are de-energized.

NOT REJECTED IN L.C.O. -

( ) ITS 3.8.2 appears to add an ACTIONS Note to STS 3.8.2 that states "LCO 3.0.3 is not applicable." This addition is based on pending STS change proposal TSTF-36. It is unacceptable because ITS LCO 3.0.3 does not apply during shutdown conditions.

3.8.3 Diesel, Fuel Oil, Lube Oil, and Starting Air

DELETE?

TSTF-02
(✓) ITS 3.8.3 omits STS SR 3.8.3.6, the 10-year diesel fuel storage tank cleaning, based on pending STS change proposal TSTF-02. This omission is acceptable for the reasons given in discussion 3.8.b(~~A.2 - 3.8.1 under~~ LA.1 - ITS 3.8.3).

3.8.4 DC Sources—Operating

(JD20) ITS 3.8.4 and ITS 3.8.7 contain a separate ACTION for the 250-volt DC power source and distribution subsystems, respectively because the STS do not account for this WNP-2 design feature. These differences are acceptable for the reasons given in discussion 3.8.b(L.1 - ITS 3.8.4) and 3.8.b(L.1 - ITS 3.8.7).

TSTF-38
(✓) ITS SR 3.8.4.~~2~~ 3 adds the following phrase to STS SR 3.8.4.3, as indicated: Verify battery cells, cell plates, and racks show no visual indication of physical damage or abnormal deterioration "that degrades battery performance." This difference is acceptable because it only clarifies the intent of the STS. Note that no specific justification for this change to CTS 4.8.2.1.c.1 and difference from STS SR 3.8.4.3 is provided in the submittal. The change is not even indicated on the CTS markup. This change corresponds to pending TSTF-38.

(JD22) STS SR 3.8.4.6, the battery charger load test, contains a note that states the surveillance shall not be performed in MODE 1, 2, or 3. Due to the WNP-2 design (spare 100% charger for the Division 1 and 2 batteries), individual battery chargers can be tested without compromising compliance with the Division 1 and 2 requirements of the LCO. The Division 3 battery would only affect the HPCS system, which is allowed to be inoperable for 14 days in accordance with ITS 3.5.1. Therefore, the Mode restriction is not needed (and is not currently specified in the CTS). In addition, since the test can be performed without compromising the Division 1 and 2 DC loads, SR 3.8.4.6 is not excepted from performance when the unit is shutdown (per the Note to STS SR 3.8.5.1). Therefore, this difference from the STS is acceptable.

100% LOAD IN ~~BASES~~ SR.- REMAINER IS IN BASES IN Rev C.

(JD23) STS SR 3.8.4.6 and corresponding CTS 4.8.2.1.c.4 state the required loads in amperes for testing the battery chargers. ITS SR 3.8.4.6 moves the description of the required loads to the Bases for this surveillance and ~~apparently deletes the existing ampere values of these loads altogether, only providing percentages of some unstated load value in the Bases. This change to the CTS and difference from the STS is unacceptable.~~

3.8.5 DC Sources—Shutdown

NOT REJECTED IN LCO

( ) ITS 3.8.5 appears to add an ACTIONS Note to STS 3.8.5 that states "LCO 3.0.3 is not applicable." This addition is based on pending STS change proposal TSTF-36. It is unacceptable because ITS LCO 3.0.3 does not apply during shutdown conditions.

(JD22) As stated previously, ITS SR 3.8.5.1 does not specify the performance exception for the battery charger surveillance, SR 3.8.4.6, during shutdown conditions that is specified in STS SR 3.8.5.1.

3.8.6 Battery Cell Parameters

Significant?

(JD24) The word "values" in the third Condition of Condition B of STS 3.8.6 is changed to "limits" to more closely match the LCO wording (parameters shall be within limits ...). In addition, the word "Allowable" in STS Table 3.8.6-1 is omitted to be consistent with the manner in which Category C "Limits" are described in the ACTIONS. These differences from the STS are not significant because the intent of the STS language is not changed. This difference is beneficial because it precludes any confusion with the term "Allowable Value" that is used in the Instrumentation Section of the TS. Therefore, this difference is acceptable. ~~WNP-2 has committed to propose a generic change to the STS to replace "values" with limit and to remove "allowable" from STS Table 3.8.6-1.~~

DISCUSSED IN OPEN ISSUES

(JD25) Note (a) to ITS Table 3.8.6-1 adds words indicated by italics to the STS wording of this note: It is acceptable for the electrolyte level to temporarily increase above the specified maximum level during "and following" equalizing charges provided it is not overflowing. This difference is unnecessary; the STS Bases for this note adequately convey the intent. The proposed addition could be interpreted to mean that following an equalizing charge, the electrolyte level limits are no longer required to be met. Therefore, this difference is unacceptable.

3.8.7 Distribution Systems—Operating

DISCUSSED IN OPEN ISSUES

(JD26) The Note to the ACTIONS of STS 3.8.9 is omitted from corresponding ITS 3.8.7 because the licensee believes it to be confusing. The example given by the licensee in its submittal is not compelling. The Note is not intended to be used as indicated in the licensee's example. The Note simply allows an exception to the LCO, action, and surveillance requirements for the Division 3 distribution subsystem in the event the HPCS system is inoperable. Required Action E.1 is how the STS requires entry into a supported system specification when the support system is inoperable—to override the provisions of LCO 3.0.6. Therefore, this change is an unacceptable difference from the STS.

3.8.7 Distribution Systems—Operating and
3.8.8 Distribution Systems—Shutdown

(JD27) STS SR 3.8.9.1 and SR 3.8.10.1 require verifying correct breaker alignments "and voltage" to required AC and DC electrical power distribution subsystems. Corresponding ITS SR 3.8.7.1 and 3.8.8.1 replace "voltage" with

"indicated power availability." This difference is acceptable for reasons given in discussion 3.8.b(L.2 - 3.8.7). ITS

(JD28) Required Action A.2.2 of STS 3.8.10 requires suspending "handling" of irradiated fuel assemblies in secondary containment. Required Action A.2.2 of corresponding ITS 3.8.8 replaces "handling" with "movement" for consistency with other places in the ITS where this action requirement appears. This difference is not significant because the intent of the STS requirement is retained. Therefore, this difference is acceptable.

THEN DELETE ?

Conclusion

The preceding differences from STS Section 3.8 are consistent with the WNP-2 design and existing requirements and commitments or proposed changes found to be acceptable as discussed elsewhere in this evaluation. Therefore, these differences are acceptable.

e. Relocated Specifications

In accordance with the criteria in the Final Policy Statement, the licensee has proposed to entirely remove the following containment system specifications from CTS Section 3/4.8.4 and place them in licensee-controlled documents.

(1) CTS <u>3/4.8.4.1 A.C. Circuits Inside Primary Containment</u> [R.1] During operation in MODES 1, 2, and 3, CTS 3/4.8.4.1 requires, as a minimum, the following AC circuits inside primary containment to be deenergized: circuits supplied by breakers 2AR and 8AR ~~by~~ MCC E-MC-8C, by panel E-LP-6BAG, by panel E-LP-3DAG, and by breakers in cubicles 2BL, 1D, and 2CR of MC-3DA. These AC circuits primarily supply lighting, utility outlets, and convenience power outlets inside primary containment during plant shutdown conditions. These AC circuits are de-energized during plant operation to prevent the chance of an electrical fault during an accident that could potentially lead to degradation of the primary containment electrical penetration associated with the faulted circuit. However, these circuits do not participate in plant safety actions, and have no impact on plant safety systems. They are separated from all Class 1E circuits, and their failure will not degrade any Class 1E circuits. Thus, the CTS 3/4.8.4.1 requirement to maintain those circuits and verify daily that they are de-energized when the plant is in MODES 1, 2, and 3, do not satisfy the criteria of 10 CFR 50.36(c)(2)(ii) for inclusion in the TS as an LCO. Therefore, relocating these requirements to the LCSM, for which changes are governed by the provisions of 10 CFR 50.59, is acceptable. ?

(2) CTS <u>3/4.8.4.2 Primary Containment Penetration Conductor Overcurrent Protective Devices</u> [R.] The primary containment penetration conductor overcurrent protective devices provide protection for the circuit conductors against damage or failure; however, they are not considered in any design basis accident or transient. These protective devices are used to automatically open control and power circuits whenever load conditions exceed preset current demands in order to prevent damage to the circuit conductors from overcurrent

and/or

heating effects. All penetrations are provided with primary and backup electrical protection against short circuits. If the primary protective device were to fail to isolate the faulty circuit, the upper level backup protective device would isolate the circuit and prevent loss of the redundant power source. These protective devices also ensure the pressure integrity of the containment penetration through which the circuit passes. With failure of the device, it is postulated that the wire insulation would degrade resulting in a containment leak path. However, containment penetration degradation should be identified during containment leak rate tests performed in accordance with Appendix J to of 10 CFR Part 50. In addition, containment leakage is not a process variable and is not considered as part of the primary success path. Therefore, the requirements specified in CTS 3/4.8.4.2 do not satisfy the criteria of 10 CFR 50.36(c)(2)(ii) for inclusion in the TS as an LCO. Therefore, relocating these requirements to the LCSM, for which changes are governed by the provisions of 10 CFR 50.59, is acceptable. LCS &

(3) CTS 3/4.8.4.3 Motor-Operated Valves Thermal Overload Protection [R.1] The thermal overload protection devices prevent damage to motor-operated valves (MOVs) if overloaded, thereby maintaining the capability of the motor operator to open and close the valve once the cause of the overload condition is corrected or removed. However, no credit is given for thermal overload protection in any design basis accident (DBA) or transient. The function of the thermal overload protection devices is to prevent damage to the motor operator of a valve in the event the motor is overloaded which is not part of the primary success path for mitigating any DBA or transient. In addition, the thermal overload protection devices are not used to detect degradation of the reactor coolant pressure boundary. Thus, the requirements specified in CTS 3/4.8.4.3 for MOV thermal overload protection do not satisfy the criteria of 10 CFR 50.36(c)(2)(ii) for inclusion in the TS as an LCO. Therefore, relocating these requirements to the LCSM, for which changes are governed by the provisions of 10 CFR 50.59, is acceptable. & LCS

Conclusion

The current specifications described in the preceding material are not required to be in the TS under 10 CFR 50.36, and are not required to obviate the possibility of an abnormal situation or event giving rise to an immediate threat to the public health and safety. Further, they do not fall under any of the four criteria in 10 CFT 36(c)(2)(ii). In addition, the staff finds that sufficient regulatory controls exist under 10 CFR 50.59 to maintain the effectiveness of the provisions in these specifications. Accordingly, these current specifications may be removed from the CTS and placed in the licensee controlled specifications manual.

3.9 REFUELING OPERATIONS

a. Administrative Changes

The specifications of the CTS that have been retained in ITS Section 3.9 have been reworded to conform to the STS presentation. In particular, the ~~most~~ significant ~~following~~ administrative changes that were made. are as follows:

3.9.1 Refueling Equipment Interlock

[A.1 Below threshold for discussion.] NOT "BELOW" IN OTHER SE SECTIONS. SEE INSERT A.1 & A.2

[A.2 Below threshold for discussion.]

[A.3 ~~Below threshold for discussion.]~~ Not significant.

A.4 CTS 3.9.1.b.~~3~~ 4 requires mode switch refuel position interlocks for the service platform hoist to be operable. The ITS deletes this requirement as the service platform hoist is not installed at WNP-2. Further, there are no plans to install a service platform hoist. Including this requirement for the service platform hoist in the CTS was inadvertent and occurred during the original WNP-2 licensing. As this change deletes requirements for equipment that is not installed, the change is purely administrative and is acceptable.

A.5 The applicability for CTS 3.9.1 covers any operation in MODE 5. ITS 3.9.1 applies during in-vessel fuel movement with equipment associated with the refueling equipment interlocks. Core alterations are the only operations that require the interlocks (in-vessel fuel movements only). Thus, the ITS changes the Applicability to specify this explicitly. In addition, the ITS Applicability is consistent with CTS 3.9.1, ACTION c, which only suspends core alterations for equipment with inoperable interlocks. Thus, this change is purely administrative, since it ensures that the ACTIONS and Applicability match, and is acceptable.

A.6 CTS 3.9.1 Applicability footnote "*" refers to special test exceptions in CTS 3.10.1 and 3.10.3. The ITS format does not provide cross references. ITS 3.0.7 prescribes the use of the ITS Special Operations without references. Therefore, the CTS reference to Special Test Exceptions serves no functional purpose. This change is purely administrative and is acceptable.

A.7 CTS 3.9.1 Applicability footnote "#" requires being in OPERATIONAL CONDITION 5 if the reactor vessel contains fuel with the vessel head closure bolts less than fully tensioned or with the head removed. This footnote is an explicit part of the definition of MODE 5, as defined in CTS Table 1.2 and ITS Table 1.1-1. As such, ITS 3.9.1 does not repeat the definition. Since there is no change in requirements, the deletion of the footnote is a purely administrative change, and is acceptable.

[A.8 Below threshold for discussion.] NOT "BELOW" IN OTHER SE SECTIONS. SEE INSERT A.8

INSERT A.1 to subsection 3.9.a, LCO 3.9.1

The Refuel Position One-Rod-Out Interlock requirements of CTS 3/4.9.1 are being moved to ITS 3.9.2 in accordance with the format of the STS. Evaluations of any technical changes are addressed in the ITS 3.9.2 evaluation. This is an acceptable administrative change.

INSERT A.2 to subsection 3.9.a, LCO 3.9.1

The Applicability for CTS 3.9.1 specifies refueling interlock requirements for all operations in MODE 5. CTS 3.9.1.b specifies that Core Alterations shall not be performed using equipment associated with a refuel position interlock unless the interlocks are Operable for the equipment. ITS 3.9.1 Applicability addresses fuel movement, which is the only Core Alterations that is applicable to the interlocks associated with the equipment (the only other possible Core Alterations involve control rod withdrawal, and they are addressed in ITS 3.9.2). Therefore, this change is purely administrative.

INSERT A.8 to subsection 3.9.a, LCO 3.9.1

The allowance in footnote "*" to CTS 4.9.1.2 and 4.9.1.3 to place the reactor mode switch in the run or startup/hot standby position while in Mode 5 is being moved to ITS 3.10.2 in accordance with the format of the STS. Evaluations of any technical changes are addressed in the ITS 3.10.2 evaluation. This is an acceptable administrative change.

3.9.2 Refuel Position One-Rod-Out Interlock

A.1 CTS 3.9.1 applies in MODE 5 with the reactor mode switch in the shutdown or refuel position. The ITS deletes this explicit requirement. Requiring the reactor mode switch in the Shutdown or Refuel position is an explicit part of the definition of MODE 5, as defined in CTS Table 1.2 and ITS Table 1.1-1. As such, ITS 3.9.2 does not repeat the definition. Since there is no change in requirements, the deletion of the footnote is a purely administrative change, and is acceptable.

[A.2 Below threshold for discussion.] ~~to~~ INSERT A.2, FOR CONSISTENCY

A.3 The applicability for CTS 3.9.1 specifies refueling interlock requirements for all operations in MODE 5. CTS 3.9.1.a specifies that, when the reactor mode switch is locked in the Refuel position, a control rod shall not be withdrawn unless the Refuel position one-rod-out interlock is operable. ITS 3.9.2 specifies requirements for the one-rod-out interlock and applies in MODE 5 with the reactor mode switch in the Refuel position and any control rod withdrawn. Thus, the ITS Applicability reflects the CTS requirements for the one-rod-out interlock. This change is purely administrative, since it ensures that the ACTIONS and Applicability match, and is acceptable.

[A.4 Below threshold for discussion.] Not "Below" in other sections of SE. SEE INSERT A.4 & A.5

[A.5 Below threshold for discussion.]

[A.6 Below threshold for discussion.] SEE INSERT, For consistency

3.9.3 Control Rod Position

A.1 CTS 3.9.3 has footnotes referencing CTS 3.9.10.1 or 3.9.10.2 and Special Test Exception 3.10.3. The ITS format does not provide cross references. ITS 3.0.7 prescribes the use of the ITS Special Operations without references. Therefore, the CTS reference to Special Test Exceptions serves no functional purpose. This is purely administrative and is acceptable.

3.9.4 Control Rod Position Indication

A.1 CTS 3.1.3.7 provides requirements for control rod position indication. ITS 3.9.4 adds a Note to the ACTIONS, allowing separate condition entry for each required channel. This change gives explicit instructions for applying the ACTIONS. With ITS 1.3, "Completion Times," the Note provides direction consistent with the intent of the existing ACTION for an inoperable control rod position indication instrumentation channels. Since this change provides more explicit guidance and preserves the current CTS requirements, this change is purely administrative and is acceptable.

A.2 CTS 3.1.3.7, Applicability, footnote "*" refers to controls rods removed per CTS 3.9.10.1 and 3.9.10.2. The ITS format does not provide cross

INSERT A.2 to subsection 3.9.a, LCO 3.9.2

The Refueling Equipment Interlock requirements of CTS 3/4.9.1 are being moved to ITS 3.9.1 in accordance with the format of the STS. Evaluations of any technical changes are addressed in the ITS 3.9.1 evaluation. This is an acceptable administrative change.

INSERT A.4 to subsection 3.9.a, LCO 3.9.2

CTS 3.9.1 Applicability footnote "*" refers to special test exceptions in CTS 3.10.1 and 3.10.3. The ITS format does not provide cross references. ITS 3.0.7 prescribes the use of the ITS Special Operations without references. Therefore, the CTS reference to Special Test Exceptions serves no functional purpose. This change is purely administrative.

INSERT A.5 to subsection 3.9.a, LCO 3.9.2

CTS 3.9.1 Applicability footnote "#" requires being in OPERATIONAL CONDITION 5 if the reactor vessel contains fuel with the vessel head closure bolt less than fully tensioned or with the head removed. This footnote is an explicit part of the definition of MODE 5, as defined in CTS Table 1.2 and ITS Table 1.1-1. As such, ITS 3.9.2 does not repeat the definition. Since there is no change in requirements, the deletion of the footnote is a purely administrtative change, and is acceptable.

INSERT A.6 to subsection 3.9.a, LCO 3.9.2

The Refuel Position One-Rod-Out Interlock requirements for MODES 3 and 4 in the Applicability of CTS 3/4.9.1 are being moved to ITS 3.10.3 and 3.10.4, respectively, in accordance with the format of the STS. In addition, the allowance in footnote "*" to CTS 4.9.1.2 and 4.9.1.3 to place the reactor mode switch in the run or startup/hot standby position to test the reactor mode switch interlock functions is being moved to ITS 3.10.2 in accordance with the format of the STS. Evaluations of any technical changes are addressed in the ITS 3.10.2, ITS 3.10.3, and ITS 3.10.4 evaluations. This is an acceptable administrative change.

references. ITS 3.0.7 prescribes the use of the ITS Special Operations without references. Therefore, the CTS reference to these exceptions serves no functional purpose. This change is purely administrative and is acceptable.

3.9.5 Control Rod OPERABILITY-Refueling

A.1 CTS 3.1.3.5 provides requirements for control rod scram accumulators. ITS 3.9.5 requires each withdrawn control rod to be operable, without specifically calling out scram accumulators in the LCO. The ITS requirements for the accumulators are consistent with the CTS requirements, since CTS 3.1.3.5 only requires that scram accumulators be OPERABLE in MODE 5 with the associated, control rod withdrawn (addressed in footnote "*"). The ITS Bases describe control rod OPERABILITY as including accumulator OPERABILITY. The accumulator requirement is also contained in ITS SR 3.9.5.2. This SR requires an accumulator pressure of ≥ 940 psig for the scram accumulator of each withdrawn control rod. As such, this change is purely administrative and is acceptable.

A.2 CTS 3.1.3.5, ACTION b.1, details disarming a control rod directional control valve associated with an inoperable scram accumulator in MODE 5. The ITS deletes the requirement of disarming the directional control valves. During MODE 5 with an accumulator associated with a withdrawn control rod inoperable, CTS 3.1.3.5, ACTION b.1, and ITS 3.9.5, Required Action A.1, both require insertion of the inoperable control rod. Once fully inserted, there is no OPERABILITY requirement on a control rod accumulator (CTS Footnote "*" and ITS 3.9.5 Applicability). Thus, consistent with both CTS 3.0.2 and ITS 3.0.2, no further actions apply to an inoperable control rod scram accumulator. Therefore, the deletion of the action to disarm the associated directional control valves is purely administrative and is acceptable.

[A.3 Below threshold for discussion.] SEE INSERT A.3, for consistency

A.4 CTS 3.1.3.5, ACTION b , footnote "*," notes that the ACTION does not apply to control rods removed per ~~S~~specification 3.9.10.1 or 3.9.10.2. The ITS format does not provide cross references. ITS 3.0.7 prescribes the use of the ITS Special Operations without references. Therefore, the CTS reference to Special Test Exceptions serves no functional purpose. This change is purely administrative and is acceptable.

A.5 CTS 4.1.3.5.a allows not verifying the scram accumulator pressure if an inserted control rod is disarmed or scrammed. ITS Surveillance Requirement 3.9.5.2 does not have this allowance. Stating both the conditions allowing an exception to performing the accumulator surveillance and equivalent actions for an inoperable accumulator are not necessary. If the accumulator is inoperable, CTS 4.0.3 and ITS SR 3.0.1 state surveillances are not required. Therefore, this deletion is purely administrative and is acceptable.

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

INSERT A.3 to subsection 3.9.a, LCO 3.9.5

The CTS 3.1.3.5, Action b.2 requirements for when more than one control rod is withdrawn with the associated scram accumulators inoperable in MODE 5 are being moved to ITS 3.10.8 in accordance with the format of the STS. Evaluations of any technical changes are addressed in the ITS 3.10.8 evaluation. This is an acceptable administrative change.

There are no significant administrative changes to the CTS associated with ITS 3.9.6.

[A.1 Below threshold for discussion.] SEE INSERT A.1, for consistency

3.9.7 Reactor Pressure Vessel (RPV) Water Level-New Fuel or Control Rods

There are no significant administrative changes to the CTS associated with ITS 3.9.7.

3.9.8 Residual Heat Removal (RHR)-High Water Level

A.1 CTS 3.9.11.1, ACTION a, requires stopping all operations that increase the reactor decay heat load if no residual heat removal loop is OPERABLE in the cooling mode. ITS 3.9.8, Required Action B.1, suspends loading irradiated fuel assemblies into the reactor pressure vessel for the same condition. Loading irradiated fuel into the reactor pressure vessel is the only practical method of increasing reactor decay heat load. Movement of a single control rod is the only other type of positive reactivity change. Control rod motion does not increase heat load. The ITS requirement results in the same requirement as the CTS requirement. Therefore, the change is purely administrative and is acceptable.

A.2 CTS 3.9.11.1, ACTION a, requires establishing secondary containment integrity if no residual heat removal loop is OPERABLE in the cooling mode. ITS 3.9.8, Required Action B.2, restores secondary containment for the same condition. ITS 3.9.8, Required Action B.3, restores standby gas treatment for the same condition. ITS 3.9.8, Required Action B.4, restores required secondary containment flow path isolation for the same condition. Together, the ITS Required Actions for Condition B accomplish the essential elements of containment integrity. Therefore, the change is a presentation preference that follows the STS format, is purely administrative and is acceptable.

A.3 CTS 3.9.11.1, ACTION a, allows 4 hours to establish secondary containment integrity if no residual heat removal loop is OPERABLE in the cooling mode. ITS 3.9.8, Required Actions B.2, B.3, and B.4, do not allow 4 hours when secondary containment integrity could be violated, even if secondary containment is intact. ITS 3.9.8 presents the intent of the action properly in Required Actions B.2, B.3, and B.4. These required actions impose the more conservative requirement of initiating action to establish and maintain the secondary containment boundary immediately, with no explicit Completion Time for these actions specified. This change removes the delay in implementing the necessary actions allowed by the CTS without imposing a TS violation if the actions cannot be completed within a certain time. Since there is no difference in the intent of the Actions, this change is purely administrative and is acceptable.

3.9.9 Residual Heat Removal (RHR)-Low Water Level

There are no significant administrative changes to the CTS associated with ITS

[illegible]

INSERT A.1 to subsection 3.9.a, LCO 3.9.6

The CTS 3/4.9.8 requirements for handling new fuel assemblies and control rods are being moved to ITS 3.9.7 in accordance with the format of the STS. Evaluations of any technical changes are addressed in the ITS 3.9.7 evaluation. This is an acceptable administrative change.

3.9.9.

[3/4.9.2-A.1 Below threshold for discussion.] SEE INSERTS, FOR
[3/4.9.9-A.1 Below threshold for discussion.] CONSISTENCY
[3/4.9.10.1-A.1 Below threshold for discussion.]
[3/4.9.10.2-A.1 Below threshold for discussion.]

The preceding changes to the CTS result in limits that are unchanged from the current requirements. In some cases, these changes result in a clearer presentation of the intent of current requirements. Accordingly, these changes are purely administrative. Therefore, they are acceptable.

b. Less Restrictive Requirements

The licensee, in electing to implement the specifications of STS Section 3.9, proposed a number of less restrictive requirements than are allowed by the CTS. These requirements are described in the following:

3.9.1 Refueling Equipment Interlock

L.1 CTS 4.9.1.2 requires interlock functional tests in the 24 hour period before core alterations. ITS SR 3.9.1.1 deletes this explicit requirement. The normal 7 day Surveillance Frequency for the component tests ensures OPERABILITY of the required reactor mode switch refuel position interlocks. As such, the ITS deletes the requirement for performing this surveillance "within 24 hours prior to the start of" use of the component. If the Surveillance has not been performed within the specified interval, use of the component is not allowed since ITS SR 3.0.1 requires a Surveillance be met within the specified Frequency while in the applicable MODE or condition. ITS SR 3.0.1 also states that failure to meet the Surveillance constitutes failure to meet the LCO, which would then require the ACTIONS of the LCO to be taken. If this SR is not performed within the specified Frequency prior to entering the applicable condition, then as soon as the applicable condition is entered, the LCO would not be met. The ACTIONS for the LCO require immediate action to be taken to exit the Applicability of the LCO. Therefore, this effectively ensures that the Applicability of the LCO is not entered with the Surveillance not current.

L.2 CTS 4.9.1.3 demonstrates the OPERABILITY of the refuel position interlock any time repair, maintenance, or component replacement could affect OPERABILITY. ITS 3.9.1 deletes this explicit requirement. Anytime repair, maintenance, or component replacement could affect system or component OPERABILITY, post-maintenance testing demonstrates OPERABILITY of that system or component. After restoring a component that caused failure of a surveillance requirement, ITS SR 3.0.1 requires performing the appropriate surveillance (in this case, ITS SR 3.9.1.1) to demonstrate the OPERABILITY of the affected components. Therefore, explicit post-maintenance surveillance testing is not necessary. ITS SR 3.0.1 prevents entry into the applicable specified condition without performing this post-maintenance testing except where allowed as discussed in the Bases for ITS SR 3.0.1. As either the CTS or the ITS

INSERT A.1 to subsection 3.9.a, CTS 3/4.9.2

CTS 3/4.9.2 Instrumentation

CTS 3/4.9.2, relating to the source range monitoring instrumentation, is being moved to ITS 3.3.1.2 in accordance with the format of the STS. Evaluations of any technical changes are addressed in the ITS 3.3.1.2 evaluation. This is an acceptable administrative change.

INSERT A.1 to subsection 3.9.a, CTS 3/4.9.9

CTS 3/4.9.9 Water Level - Spent Fuel Storage Pool

CTS 3/4.9.9, relating to the spent fuel storage pool water level, is being moved to ITS 3.7.7 in accordance with the format of the STS. Evaluations of any technical changes are addressed in the ITS 3.7.7 evaluation. This is an acceptable administrative change.

INSERT A.1 to subsection 3.9.a, CTS 3/4.9.10.1

CTS 3/4.9.10.1 Single Control Rod Removal

CTS 3/4.9.10.1, relating to the removal of a single control rod in MODE 4 and 5, is being moved to ITS 3.10.4 and 3.10.5 in accordance with the format of the STS. Evaluations of any technical changes are addressed in the ITS 3.10.4 and ITS 3.10.5 evaluations. This is an acceptable administrative change.

INSERT A.1 to subsection 3.9.a, CTS 3/4.9.10.2

CTS 3/4.9.10.2 Multiple Control Rod Removal

CTS 3/4.9.10.2, relating to removal of multiple control rods in MODE 5, is being moved to ITS 3.10.6 in accordance with the format of the STS. Evaluations of any technical changes are addressed in the ITS 3.10.6 evaluation. This is an acceptable administrative change.

requirements ensure demonstration of satisfactory operation following repair, maintenance or component replacement, this change is acceptable. This change corresponds to change type 5 as defined in the general discussion of less restrictive requirements at the beginning of Part III of this safety evaluation.

3.9.2 Refuel Position One-Rod-Out Interlock

L.1 CTS 3.9.1 specifies the reactor mode switch, for refueling operations, shall be OPERABLE and locked in the shutdown or refuel position. ITS 3.9.2 requires OPERABLE refueling equipment interlocks. Further, CTS 3.9.1, ACTION a, ensures the reactor mode switch is in either the Shutdown or Refuel positions and CTS 4.9.1.1 specifies when to verify the mode switch position (shutdown or refuel, as specified) and locking provisions. ITS 3.9.2 has no corresponding requirements for shutdown position. ~~The ITS includes these requirements as part of the OPERABILITY of the one-rod-out interlock required by ITS 3.9.2.~~ ITS Table 1.1-1 controls movement of the reactor mode switch from the shutdown position. Reactor mode switch positions other than refuel and shutdown result in the unit entering some other MODE with the associated compliance for that MODE and ITS 3.0.4. Withdrawal of a control rod is not possible with the reactor mode switch in shutdown. This prevents the mode switch being placed in the shutdown position for ITS 3.9.2, as that would exit the Applicability. Therefore, the ITS deletes the requirement to 'lock' the mode switch in shutdown from ITS 3.9.2.

DELETE SENTENCE - NOT SURE OF MEANING - DOES NOT "INCLUDE", L.1 "DELETES"

L.2 CTS 3.9.1, ACTION a, with the reactor mode switch not locked in shutdown or refuel, prohibits core alterations and requires the locking of the mode switch in the shutdown or refuel position. With the one-rod-out interlock inoperable, ACTION b requires locking the mode switch in the shutdown position. With the one-rod-out interlock inoperable, the ITS ACTIONS (Required Actions A.1 and A.2) immediately suspend control rod withdrawal and begin action to insert all insertable control rods in core cells containing one or more fuel assemblies. These actions compensate for an inoperable one-rod-out interlock and protect against potential reactivity excursions.

L.3 CTS 4.9.1.1 ensures the reactor mode switch is locked in the refuel position within 2 hours of beginning core alterations or resuming core alterations if the mode switch was unlocked. CTS 4.9.1.2 requires reactor mode switch interlock functional tests in the 24 hour period before withdrawing control rods. The ITS deletes these explicit requirements. The normal 12 hour Surveillance Frequency of SR 3.9.1.1 provides adequate verification of the reactor mode switch position and the normal 7 day Surveillance Frequency of SR 3.9.1.2 ensures OPERABILITY of the refuel position one-rod-out interlock. If the Surveillance has not been performed within the specified interval, use of the component is not allowed since ITS SR 3.0.1 requires a Surveillance be met within the specified Frequency while in the applicable MODE or condition. ITS SR 3.0.1 also states that failure to meet the Surveillance constitutes failure to meet the LCO, which would then require the ACTIONS of the LCO to be taken. If this SR is not

performed within the specified Frequency prior to entering the applicable condition, then as soon as the applicable condition is entered, the LCO would not be met. The ACTIONS for the LCO require immediate action to be taken to exit the Applicability of the LCO. Therefore, this effectively ensures that the Applicability of the LCO is not entered with the Surveillance not current.

L.4 CTS 4.9.1.2 requires interlock functional tests every 7 days during control rod withdrawal. ITS SR 3.9.2.2 adds a note for the channel functional tests allowing 1 hour after any control rod withdrawal to perform the required surveillance. To test the one-rod-out interlock, the operator must withdraw a control rod. However, ITS SR 3.0.1 requires a Surveillance to be met within the specified Frequency while in the applicable MODE or condition. This ensures that the Applicability of the LCO is not entered with the Surveillance not current. For this specification, this would result in immediate action being required due to the LCO not being met as soon as the Applicability were entered. Therefore, an allowance is provided in the ITS to enter the Applicability for a short time to provide adequate time to perform the required Surveillance. The 1 hour allowance is considered adequate considering the procedural controls on control rod withdrawals and the indications available in the control room to alert the operators to control rods that are not fully inserted. Because the ITS performs the surveillance in a reasonable time after achieving the conditions necessary for performance (i.e., control rod withdrawal), this change is acceptable.

[L.5 Addressed under 3.9.1-L.2]. For future clarity - copy L.2 to L.5

3.9.3 Control Rod Position

L.1 CTS 3.9.3 applies during CORE ALTERATIONS in OPERATIONAL CONDITION 5. With any control rod withdrawn, the action requires suspending all other CORE ALTERATIONS with the exception of allowing withdrawal of one control rod under the control of the reactor mode switch refuel position one-rod-out interlock. ITS 3.9.3 requires all control rods fully inserted when loading fuel assemblies into the reactor core. The ITS changes the applicability of the requirement for the full insertion of all control rods to "when loading fuel assemblies into the core." This change is consistent with the accident analysis. The control rod removal error during refueling analysis assumes the insertion of all control rods, but only during fuel loading, not unloading or other CORE ALTERATIONS. A fuel unloading error (incorrect bundle withdrawn) cannot increase the reactivity of the core or cause inadvertent criticality. Therefore, the ITS limits the Applicability specifically to loading fuel assemblies into the core. Consistent with accident analysis assumptions, the ITS ACTIONS and ITS SR 3.9.3.1 also reflect this change. As the accident analysis bounds these changes, they are acceptable.

L.2 CTS 4.9.3 verifies the insertion of all control rods within 2 hours before core alterations or withdrawing one control rod under control of

the reactor mode switch refuel position one-rod-out interlock. ITS 3.9.3 deletes these requirements. The normal 12 hour Surveillance Frequency ensures that all control rods are verified to be inserted. If the Surveillance has not been performed within the specified interval, use of the component is not allowed since ITS SR 3.0.1 requires a Surveillance be met within the specified Frequency while in the applicable MODE or condition. ITS SR 3.0.1 also states that failure to meet the Surveillance constitutes failure to meet the LCO, which would then require the ACTIONS of the LCO to be taken. If this SR is not performed within the specified Frequency prior to entering the applicable condition, then as soon as the applicable condition is entered, the LCO would not be met. The ACTIONS for the LCO require immediate action to be taken to exit the Applicability of the LCO. Therefore, this effectively ensures that the Applicability of the LCO is not entered with the Surveillance not current.

3.9.4 Control Rod Position Indication

L.1 CTS 3.1.3.7 requires the "control rod position indication system" to be OPERABLE in MODE 5 and CTS 4.1.3.7 specifies surveillances for the control rod position indication system. ITS 3.9.4 requires each "control rod "full-in" position indication channel" to be OPERABLE in MODE 5 but deletes the CTS position indication requirement for MODE 5 because there is no need for indication other than the "full-in" position indication.

The requirements of ITS 3.9.4 for the "full-in" position indication for each control rod to be operable are consistent with the refueling interlock (ITS 3.9.1) and the one-rod-out interlock (ITS 3.9.2) operability requirements. Since only one control rod can be withdrawn while in MODE 5 and the position of the control rod is not a factor in any accident or transient when in this condition, TS requirements on the precise position of the control rods are unnecessary. ITS 3.9.4 addresses the critical safety issue of whether or not the control rod is fully inserted.

The ITS also changes the surveillance requirements for consistency with the LCO which only requires the "full-in" indicator to be OPERABLE. ITS SR 3.9.4.1 requires verifying, each time a control rod is withdrawn from the "full-in" position, that the "full-in" indication displays correctly (that is, no "full-in" indication with a withdrawn control rod). The CTS Surveillances to verify the position of the control rod every 24 hours (CTS 4.1.3.7.a), that the control rod position changes during exercise tests (CTS 4.1.3.7.b), and that the full-out indicator functions during rod coupling checks (CTS 4.1.3.7.c) have been deleted. CTS 4.1.3.7.a is not necessary since only the "full-in" position indication is needed, as described above. CTS 4.1.3.7.b has been deleted since it is only required when performing CTS 4.1.3.1.2 and CTS 4.1.3.1.2 is not required in MODE 5. CTS 4.1.3.7.c has been deleted since it is only required when performing CTS 4.1.3.6.b and the MODE 5 requirement for this SR is also being deleted in the ITS.

3.9.5 Control Rod OPERABILITY-Refueling

LC.1 CTS 4.1.3.5.b.1 requires channel functional tests of the control rod scram accumulator leak detector channels, channel calibrations of the accumulator pressure detectors, and verification of the alarm setpoints. The scram accumulator leak detectors, pressure detectors, and associated alarm do not directly support accumulator OPERABILITY. Therefore, the requirements and surveillances associated with these detectors and alarms are being moved to plant procedures. Indication-only instrumentation, test equipment, and alarms are usually not required to be OPERABLE to support the OPERABILITY of a system or component. Thus, the STS generally contain no OPERABILITY requirements for indication-only equipment. The availability of such indication instruments, monitoring instruments, and alarms, and necessary compensatory activities if they are not available, are more appropriately specified in plant operational, maintenance, and annunciator response procedures required by ITS 5.4.1. This change corresponds to change type 4 as defined in the general discussion of less restrictive requirements at the beginning of Part III of this safety evaluation.

L.1 CTS 4.1.3.5.b.2 requires measuring and recording the time, for up to ten minutes, that the individual accumulator check valves maintain the associated accumulator pressure above the accumulator alarm setpoint with no control rod drive pump operating. ITS 3.9.5 does not contain this requirement. There are no accident or transient analytical assumptions for maintaining the scram accumulator pressure with the check valves should no control rod drive pump operate. With no operating control rod drive pump, the ITS requires insertion of the withdrawn control rod as soon as the associated accumulator pressure decreases to < 940 psig. In addition, the refueling interlocks permit only one withdrawn control rod. The accident analysis assumes one control rod stuck fully out of the core. Thus, even with a withdrawn control rod that cannot insert, analysis confirms the reactor will remain subcritical. As a result, the ITS deletes the CTS 4.1.3.5.b.2 requirement to verify the capability of the accumulator check valves to maintain accumulator pressure above the alarm setpoint with no control rod drive pump running. As the CTS alarm setpoint is not a value that establishes any known or required safety analysis limit, this less restrictive change is acceptable.

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

LA.1 The ACTION for CTS 3.9.8 requires placing all fuel assemblies in a safe condition before suspending fuel handling if the reactor pressure vessel water level is low. The ITS moves this allowance to the ITS 3.9.6 Bases because this requirement does not ensure actions are taken to prevent a fuel handling accident. ITS 3.9.6, Required Action A.1, provides the proper actions to preclude a fuel handling accident. The provisions of the Bases Control Program, described in ITS Chapter 5.0, will control changes to these details.

L.1 CTS 4.9.8 requires the determination of the reactor pressure vessel

water level within 2 hours before handling irradiated fuel assemblies and every 24 hours while handling fuel assemblies within the reactor pressure vessel. ITS 3.9.6 requires this surveillance every 24 hours while moving irradiated fuel within the reactor pressure vessel. The ITS deletes the requirement to do this surveillance "within 2 hours prior to the start of" handling fuel assemblies. The normal 24 hour surveillance frequency provides assurance of the correct water level. If the Surveillance has not been performed within the specified interval, use of the component is not allowed since ITS SR 3.0.1 requires a Surveillance be met within the specified Frequency while in the applicable MODE or condition. ITS SR 3.0.1 also states that failure to meet the Surveillance constitutes failure to meet the LCO, which would then require the ACTIONS of the LCO to be taken. If this SR is not performed within the specified Frequency prior to entering the applicable condition, then as soon as the applicable condition is entered, the LCO would not be met. The ACTIONS for the LCO require immediate action to be taken to exit the Applicability of the LCO. Therefore, this effectively ensures that the Applicability of the LCO is not entered with the Surveillance not current.

3.9.7 Reactor Pressure Vessel (RPV) Water Level - New Fuel or Control Rods

LA.1 The ACTION for CTS 3.9.8 requires placing all fuel assemblies in a safe condition before suspending fuel handling if the reactor pressure vessel water level is low. The ITS moves this allowance to the ITS 3.9.7 Bases because this requirement does not ensure actions to prevent a fuel handling accident. ITS 3.9.7, Required Action A.1, provides the proper actions to preclude a fuel handling accident. The provisions of the Bases Control Program, described in ITS Chapter 5.0, will control changes to these details.

L.1 CTS 3.9.8 requires at least 22 feet of water over the top of the reactor vessel flange when handling fuel assemblies or control rods. ITS 3.9.6 addresses the reactor pressure vessel level when moving irradiated fuel assemblies within the reactor pressure vessel and ITS 3.9.7 addresses the reactor pressure vessel level when moving new fuel assemblies or handling control rods when irradiated fuel assemblies are within the reactor pressure vessel. The ITS changes follow the format of the STS. In ITS 3.9.7, the required water level is from the top of irradiated fuel assemblies seated within the reactor pressure vessel rather than the CTS 3.9.8 from the top of the reactor pressure vessel flange. The basis for changing the referenced water level is to require enough water to retain iodine fission product activity should a fuel handling accident occur. The fuel handling accident is postulated to release fission products at the top of the irradiated fuel seated within the reactor pressure vessel when a new fuel assembly or control rod damages the irradiated fuel. If the new fuel assembly or control rod drops on the reactor pressure vessel flange, it would not create a release of fission products since these components (new fuel assembly or control rod) do not contain fission products. Therefore, the reduction of water level still ensures meeting the assumed iodine retention factors. In addition, the number of irradiated fuel pins damaged in dropping a new

fuel assembly or control rod is less than assumed in dropping an irradiated fuel assembly. Thus, the amount of fission products released is less under ITS 3.9.7. Because the present fuel handling accident analysis bounds the postulated accidents for this change, and it conforms to the STS, this less restrictive change is acceptable.

L.2 CTS 4.9.8 requires the determination of the reactor pressure vessel water level within 2 hours before handling irradiated fuel assemblies every 24 hours while handling fuel assemblies within the reactor pressure vessel. ITS 3.9.7 requires this surveillance every 24 hours while moving new fuel assemblies or control rods within the reactor pressure vessel with irradiated fuel assemblies in the reactor pressure vessel. The ITS deletes the requirement to do this surveillance "within 2 hours prior to the start of" handling fuel assemblies. The normal 24 hour surveillance frequency provides assurance of the correct water level. If the Surveillance has not been performed within the specified interval, use of the component is not allowed since ITS SR 3.0.1 requires a Surveillance be met within the specified Frequency while in the applicable MODE or condition. ITS SR 3.0.1 also states that failure to meet the Surveillance constitutes failure to meet the LCO, which would then require the ACTIONS of the LCO to be taken. If this SR is not performed within the specified Frequency prior to entering the applicable condition, then as soon as the applicable condition is entered, the LCO would not be met. The ACTIONS for the LCO require immediate action to be taken to exit the Applicability of the LCO. Therefore, this effectively ensures that the Applicability of the LCO is not entered with the Surveillance not current. This change conforms to the STS and is acceptable.

3.9.8 Residual Heat Removal (RHR)-High Water Level

LA.1 CTS 3.9.11.1.a and 3.9.11.1.b specify the minimum required residual heat removal shutdown cooling mode loop equipment. The ITS LCO 3.9.8 does not provide these details. The details about what makes up an OPERABLE residual heat removal shutdown cooling subsystem are being moved to the Bases in conjunction with the OPERABILITY definition in Chapter 1.0. This change was made because it is not necessary to include these details in the TS to ensure system OPERABILITY because the definition of operability in the ITS will provide equivalent requirements. Changes to the Bases will be controlled by the provisions of the Bases Control Program described in ITS Chapter 5.0. This change corresponds to change type 7 as defined in the general discussion of less restrictive requirements at the beginning of Part III of this safety evaluation.

LA.2 CTS 4.9.11.1 verifies at least one shutdown cooling mode loop is in operation and circulating reactor coolant. ITS 3.9.8 does not verify circulating reactor coolant via the residual heat removal system. Implementing the ITS moves this detail of the method of verifying operation of the residual heat removal shutdown cooling subsystem (circulating reactor coolant) to the Bases. Inclusion of this detail in TS is not necessary for ensuring the residual heat removal shutdown cooling subsystem is in operation. ITS SR 3.9.8.1 verifies operation of

a residual heat removal shutdown cooling subsystem. The provisions of the Bases Control Program, described in Chapter 5.0 of the ITS, will control changes to these details. This change corresponds to change type 3 as defined in the general discussion of less restrictive requirements at the beginning of Part III of this safety evaluation.

3.9.9 Residual Heat Removal (RHR)-Low Water Level

LA.1 CTS 3.9.11.2.a and 3.9.11.2.b specify the minimum required residual heat removal shutdown cooling mode loop equipment. These details are moved to the Bases for ITS 3.9.9 in conjunction with the OPERABILITY definition in Chapter 1.0. This change was made because it is not necessary to include these details in the TS to ensure system OPERABILITY. Changes to the Bases will be controlled by the provisions of the Bases Control Program described in ITS Chapter 5.0. This change corresponds to change type 7 as defined in the general discussion of less restrictive requirements at the beginning of Part III of this safety evaluation.

LA.2 CTS 4.9.11.2 verifies at least one shutdown cooling mode loop is in operation and circulating reactor coolant. ITS 3.9.9 does not verify circulating reactor coolant via the residual heat removal system. Implementing the ITS moves this detail of the method of verifying operation of the residual heat removal shutdown cooling subsystem (circulating reactor coolant) to the Bases. This detail is not necessary for ensuring the residual heat removal shutdown cooling subsystem is in operation. ITS SR 3.9.9.1 verifies operation of a residual heat removal shutdown cooling subsystem. The provisions of the Bases Control Program, described in Chapter 5.0 of the ITS, will control changes to these details. This change corresponds to change type 3 as defined in the general discussion of less restrictive requirements at the beginning of Part III of this safety evaluation.

The above less restrictive requirements have been reviewed by the staff and have been found to be acceptable, because they do not present a significant safety question in the operation of the plant. The TS requirements that remain are consistent with current licensing practices, operating experience and plant accident and transient analyses, and provide reasonable assurance that the public health and safety will be protected.

c. More Restrictive Requirements

The licensee, in electing to implement the specifications of STS Section 3.9, proposed a number of more restrictive requirements than are required by the CTS. These requirements are described in the following:

3.9.1 Refueling Equipment Interlock

There are no more restrictive requirements to the CTS associated with ITS 3.9.1.

3.9.2 Refuel Position One-Rod-Out Interlock

There are no more restrictive requirements to the CTS associated with ITS 3.9.2.

3.9.3 Control Rod Position

There are no more restrictive requirements to the CTS associated with ITS 3.9.3.

3.9.4 Control Rod Position Indication

M.1 In MODE 5, CTS 3.1.3.7, ACTION b, requires moving any control rod with inoperable position indication to a position with OPERABLE position indication or, alternatively, inserting the control rod. ITS 3.9.4, ACTION A, provides requirements for inoperable control rod position indication channels. Required Action A.1.1, suspends all in-vessel fuel movement. Required Actions A.1.2 and A.1.~~4~~ 3, dictate stopping rod withdrawal, require full control rod ~~insertion~~, and do not permit further control rod withdrawal. Optionally, Required Actions A.2.1 and A.2.2, require operators to fully insert and disarm the control rod associated with the inoperable "full-in" position indication. Finally, the ITS Completion Time specifies immediate action. CTS 3.1.3.7 Action b does not specify a Completion Time for the action. ITS Required Actions A.1.1 and A.1.2 prevent additional core reactivity changes while actions are being taken to insert the control rod with the inoperable position indication channel. The alternative ITS Required Actions (A.2.1 and A.2.2) require immediate initiation of insertion of the control rod associated with the inoperable position indication channel and disarming of the associated fully inserted control rod drive. These required actions ensure the control rod associated with the inoperable position channel will not be withdrawn, thus preventing inadvertent withdrawal of two control rods due to control rod position indication channel failure. As the ITS require additional actions to prevent inadvertent reactivity additions, this change is more restrictive and is acceptable.

INITIATE ACTION TO fully insert

3.9.5 Control Rod OPERABILITY-Refueling

M.1 CTS 3.1.3.5 requires CTS all control rod scram accumulators to be OPERABLE in MODE 5, but ~~does~~ not require control rods to be operable. ITS 3.9.5 requires each withdrawn control rod to be OPERABLE, and also requires insertion capability for each withdrawn control rod. ACTION A requires initiation of full insertion of any inoperable withdrawn control rod. ITS SR 3.9.5.1 verifies each withdrawn control rod can insert at least one notch. This change provides additional requirements on the control rods during MODE 5 provide additional assurance of control rod OPERABILITY when needed and is acceptable.

NO CTS REQUIRES RODS IN MODE 5

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

There are no more restrictive requirements to the CTS associated with ITS 3.9.6.

3.9.7 Reactor Pressure Vessel (RPV)

There are no more restrictive requirements to the CTS associated with ITS 3.9.7.

3.9.8 Residual Heat Removal (RHR)-High Water Level

There are no more restrictive requirements to the CTS associated with ITS 3.9.8.

3.9.9 Residual Heat Removal (RHR)-Low Water Level

M.1 is only applicable to ACTION A. to CTS

ITS DOES NOT ADD ADDITIONAL ACTION for CTS (or ITS) ACTION B

M.1 CTS 3.9.11.2 specifies requirements for the INOP shutdown cooling mode of the RHR System, including ACTIONS if the LCO is not met. Action a requires that operators demonstrate the operability of at least one alternative method of decay heat removal for each RHR shutdown cooling mode loop. ~~With no RHR shutdown cooling mode loop in operation, Action b requires operators to establish reactor coolant circulation by an alternate method and to monitor reactor coolant temperature.~~ CTS 3.9.11.2 has no additional ACTION if ACTION~~S~~ a ~~and b are~~ is not completed. ITS 3.9.9 adds ACTION B. If ITS Action A (CTS Action a) is not successful in establishing an alternate method of decay heat removal, Action B requires the following actions:

a) restore secondary containment to OPERABLE status (Required Action B.1); and

b) restore one standby gas treatment subsystem to OPERABLE status (Required Action B.2); and

c) restore isolation capability in each required secondary containment penetration flow path not isolated (Required Action B.3).

These requirements ensure the integrity of the secondary containment boundary if loss of shutdown cooling should result in releasing fission products. Therefore, these additional requirements are acceptable.

The staff has reviewed these more restrictive requirements and concludes that they result in an enhancement to the CTS. Therefore, these more restrictive requirements are acceptable.

d. Significant Differences from the STS (NUREG-1434)

The licensee, in electing to adopt the specifications of STS Section 3.9, proposed the following differences between the ITS and the STS.

JFD 1. STS SR 3.9.1.1 specifies performance of a CHANNEL FUNCTIONAL TEST of the refueling interlocks namely, the all-rods-in, refuel platform position,and refuel platform main hoist, fuel loaded interlocks. ITS SR 3.9.1.1 specifies the current licensing basis for the WNP-2 refueling equipment interlocks which includes additional interlocks.

JFD 2. STS 3.9.4 requires one control rod "full-in" position indication channel for each control rod to be OPERABLE. ITS 3.9.4 requires each control rod "full-in" position indication channel to be OPERABLE. The WNP-2 design includes more than one "full-in" position indication channel; therefore, the words have been changed to reflect this design.

JFD 7. ~~[OPEN ITEM -- Under review by the technical staff.]~~ STS 3.9.1 specifies requirements for refueling equipment interlocks. The current wording of STS LCO 3.9.1 and the associated Applicability could imply that all the refueling equipment interlocks are required at all times during in-vessel fuel movement. The WNP-2 current licensing basis only requires operability of the interlocks associated with the refuel position, not those associated with other positions of the reactor mode switch, and only when the reactor mode switch is in the refuel position, not when it is in the shutdown position. Therefore, to avoid confusion, the LCO and Applicability in ITS 3.9.1 have been modified to specifically state that the refueling interlocks are those interlock, that are associated with the refuel position, and that the requirements of ITS 3.9.1 are applicable when the reactor mode switch is in the refuel position. This difference is consistent with the intent of the STS, but provides further clarification.

The preceding differences from STS Section 3.9 are consistent with the WNP-2 design and existing requirements and commitments or proposed changes found to be acceptable as discussed elsewhere in this evaluation. Therefore, these differences are acceptable.

e. Relocated ~~Requirements~~ Specifications

In accordance with 10 CFR 50.36, the NRC Final Policy Statement, and the STS, the licensee proposed relocating the following CTS to licensee-controlled documents.

3/4.9.4 Decay Time

CTS 3/4.9.4 requires a 24-hour subcritical decay time before moving irradiated fuel in the reactor pressure vessel. Prior to moving fuel in the reactor vessel, certain operational steps must be completed. These steps include containment entry, removal of drywell head, removal of vessel head, removal of vessel internals. The licensee stated that the 24 hours decay time following subcriticality will always be met for a refueling outage because of the need to perform these operational steps. Therefore, it is not necessary to retain this requirement in the TS. Based on this and the time needed to complete the steps prior to moving fuel within the reactor vessel, relocation of this requirement will have no impact on plant safety. Therefore, the requirement in CTS 3/4.9.4 is being relocated to plant procedures and will be controlled in accordance with 10 CFR 50.59. ~~This requirement does not meet any of the criteria of 10 CFR 50.36 for inclusion in TS and this change conforms to the STS.~~ Therefore, this relocation is acceptable.

MEETS - #2

CTS 3/4.9.5 Communications

Communication between the control room and refueling floor personnel is maintained to ensure that refueling personnel can be promptly informed of significant changes in the plant status or core reactivity condition during refueling. The communications allow for coordination of activities that require interaction between the control room and refueling floor personnel (such as the insertion of a control rod prior to loading fuel). However, the refueling system design accident or transient response does not take credit for communications, and is designed to ensure safe refueling operations. Therefore, the requirements specified in current Specification 3/4.9.5 will be relocated to plant procedures controlled in accordance with 10 CFR 50.59. These requirements do not meet any of the criteria of 10 CFR 50.36 for inclusion in TS, and this change conforms to the STS. Therefore, this relocation is acceptable.

CTS 3/4.9.6 Refueling Platform

Refueling platform OPERABILITY ensures that appropriate controls are in place for handling of radioactive components and core internals. Although interlocks are designed to prevent damage to these components, the interlocks are not assumed to function to mitigate the consequences of a design basis accident or transient. Therefore, the requirements specified in current Specification 3/4.9.6 will be relocated to the LCS and controlled in accordance with 10 CFR 50.59. These requirements do not meet any of the criteria of 10 CFR 50.36 for inclusion in TS and this change conforms to the STS. Therefore, this relocation is acceptable.

CTS 3/4.9.7 Crane Travel-Spent Fuel Storage Pool

The crane travel limits are provided by physical design and administrative controls, and are not process variables which are monitored and controlled by the operator; neither are they components which are part of the primary success path to mitigate a design basis accident. Therefore, the requirements specified in current Specification 3/4.9.7 will be relocated to the FSAR and controlled in accordance with 10 CFR 50.59. These requirements do not meet any of the criteria of 10 CFR 50.36 for inclusion in TS and this change conforms to the STS. Therefore, this relocation is acceptable.

The above relocated requirements relating to refueling operations are not required to be in the TS under 10 CFR 50.36, and are not required to obviate the possibility of an abnormal situation or event giving rise to an immediate threat to the public health and safety. Further, the scope of ITS Section 3.9 provides sufficient controls on the safety functions that remain in the TS. In addition, the staff finds that sufficient regulatory controls under 10 CFR 50.59 for the relocated requirements. Accordingly, the staff has concluded that these requirements may be relocated from the TS to the FSAR, the LCS, and plant procedures.

3.10 SPECIAL OPERATIONS

The licensee has proposed administrative and technical changes to the CTS to bring them into conformance with 10 CFR 50.36 and with STS Section 3.10 specifications. The discussion of changes provided below follow the presentation order of the individual specifications within STS Section 3.10. The ITS Section 3.10 specification titles are listed in italics before the applicable discussions.

a. Administrative Changes

The specifications of CTS Section 3/4.10 that have been retained in corresponding improved TS Section 3.10, have been reworded to conform to the STS presentation. In particular, the most significant administrative changes that were made are as follows:

3.10.1 Inservice Leak and Hydrostatic Testing Operation

[A.1] CTS 3.10.7 requires meeting the following Mode 3 LCOs when conducting inservice leak or hydrostatic testing: LCO 3.1.3.8, "Control Rod Drive Housing Support" and LCO 3.8.4.3, "Motor-Operated Valves Thermal Overload Protection". The ITS deletes these CTS requirements. Removing these requirements from ITS 3.10.1 is acceptable based on the removal of the referenced LCOs. Refer to the change discussion for ITS sections 3.1 and 3.8 for technical issues associated with these LCOs.

THIS A CHANGE IS NOT ABOUT THE NOTE FOR MODE 4. THIS SHOULD BE DELETED TO AVOID CONFUSION

CTS 3.4.9.1 and 3.4.9.2 contain note "##" which allow removing RHR shutdown cooling during hydrostatic testing. ITS 3.4.10 and 3.4.11 do not contain these notes and the requirements have been moved to ITS 3.10.1. ITS 3.10.1 specifies that during inservice leak and hydrostatic testing, "operations are not considered to be in Mode 3", ~~and the requirements of ITS 3.4.11 may be suspended. ITS 3.10.1 addresses the notes contained in CTS 3.4.9.1 and 3.4.9.2;~~ therefore, this change is acceptable.

AND therefore THE NOTE for MODE 3 ISN'T NEEDED

[A.2] ITS 3.10.1, ACTIONS added two notes to the requirements in CTS 3.10.7, for clarification. The first note to the ACTIONS allows Separate Condition entry for each requirement of the LCO. The second note added to REQUIRED ACTION A.1 specifies that if the Required Actions require entering Mode 4, this includes reducing average reactor coolant temperature to ≤ 200°F. Since these changes are clarifications, these are an acceptable administrative change.

→ 3.10.2 - NO ADMIN CHANGES (for consistency)

3.10.3 Single Control Rod Withdrawal - Hot Shutdown

[A.1] CTS surveillance requirements 4.9.1.2 and 4.9.1.3 require testing the Refuel position one-rod-out interlock. ITS SR 3.10.3.1 is a generic requirement to perform the SRs for the required LCOs. Since the ITS SR incorporates surveillance requirements equivalent to the CTS surveillance requirement, this is an acceptable administrative change.

3.10.4 Single Control Rod Withdrawal - Cold Shutdown

[A.1; ~~not significant, consider excluding from SER~~] CTS 3.9.10.1 allows removing of one control rod and/or associated rod drive mechanism provided certain requirements are met. The CTS also states these requirements must be met until a control rod and/or associated control rod drive mechanism are reinstalled and the control rod is fully inserted in the core. CTS surveillance requirement 4.9.10.1 also contains the statement addressing reinstallation of the control and/or the associated mechanisms. ITS 3.10.4 does not include the statement addressing reinstallation of the control rod and/or associated mechanism. Deleting this statement is editorial since LCO requirements apply until the conditions under which they are required no longer exist. This administrative change is acceptable.

INCLUDED IN OTHER SE SECTIONS

[A.2] CTS 3.9.10.1.b allows removing one control rod and/or associated rod drive mechanism provided source range monitors are operable. CTS surveillance requirement 4.9.10.1.b requires verifying that this requirement is met. ITS 3.10.4 does not include the requirement that source range monitors are operable. The ITS Mode 4 requirements for SRM OPERABILITY and Surveillance testing are required to be met without explicit reference to them. ITS 3.10.4 does not modify the normal requirements, and therefore, ITS 3.3.1.2 "Source Range Monitor Instrumentation", must also be met during this Special Operation. Deleting this requirement removes a redundant requirement and therefore is an administrative change. This change is acceptable.

[A.3] CTS 3.9.10.1.c includes statements which clarify an exception to the current SHUTDOWN MARGIN requirements, which require additional shutdown margin for immoveable control rods. ITS 3.10.4.c.2 does not include this clarification but identifies that the withdrawn rod is "assumed to be the highest worth control rod." The ITS identifies that the withdrawn rod is considered to be the "highest worth control rod," which in the ITS definition of SHUTDOWN MARGIN is assumed to be fully withdrawn. Since the rod need only be considered once in the SDM calculations, this rod is not required to also be considered as a stuck rod and the additional wording is unnecessary. The additional wording in the CTS is unnecessary and is deleted from the ITS. This administrative change is acceptable.

[A.4] CTS 3.9.10.1.d allows an option for removing the four fuel assemblies surrounding the control rod or drive mechanism which is to be removed instead of disarming the control rods in a five-by-five array. ITS 3.10.4.c.2 does not provide this option, since during Mode 4 this optional requirement cannot be physically met. This administrative change is acceptable.

Agree- NOT INCLUDED IN OTHER

[A.5; not significant, ~~consider excluding from SER] CTS 3.9.10.1 ACTION~~ requires suspending control rod and/or mechanism removal and initiating actions to satisfy the LCO requirement. ITS 3.10.4 ACTIONS contains the CTS ACTIONS (in addition to others) but separates them into two ACTIONS, dependent on whether the affected control rod is insertable or not. Since the ITS requirements are the same as the CTS, the more detailed presentation represents an administrative change. This change is acceptable.

[A.6] ITS 3.10.4 adds four new Notes for clarity to the ACTIONS and SURVEILLANCE REQUIREMENT sections. These notes do not exist in the CTS. The Note in the ACTIONS section clarifies the requirements to enter the applicable

condition of the affected Specification and applies to each of the affected Specifications. Required Action A.1, Note 1, clarifies that if an affected Specification's ACTIONS require fully inserting all insertable control rods, this includes placing the reactor mode switch in the Shutdown position. Required Action A.1 Note 2 clarifies that this Required Action is only applicable if the requirement not met is an LCO. ITS SR 3.10.4.2 Note clarifies that if ITS SR 3.10.4.1 is satisfied for ITS 3.10.4.c.1 requirements, then it is not required to perform ITS SR 3.10.4.2. Since these changes are clarifications, these are acceptable administrative changes.

[A.7] CTS surveillance requirements 4.9.1.2 and 4.9.1.3 require testing the Refuel position one-rod-out interlock listed in CTS 3.9.1.a. ITS SR 3.10.4.1 is a generic requirement to perform the SRs for the required LCOs contained in LCO 3.10.4. Since the ITS SR incorporates the CTS surveillance requirement, this is an acceptable administrative change.

3.10.5 Single Control Rod Drive Removal - Refueling

INCLUDED OTHER PLACES

[A.1; not significant, ~~consider excluding from SER]~~ CTS 3.9.10.1 allows removing one control rod and/or associated rod drive mechanism provided certain requirements are met. The CTS states these requirements must be met until a control rod and/or associated control rod drive mechanism are reinstalled and the control rod fully inserted in the core. CTS surveillance requirement 4.9.10.1 contains the statement addressing reinstallation of the control and/or the associated mechanisms. ITS 3.10.5 does not include the statement addressing reinstallation of the control rod and/or associated mechanism. Deleting of this statement is editorial since LCO requirements apply until the conditions under which they are required no longer exist. This administrative change is acceptable.

[A.2] CTS 3.9.10.1.b allows removing one control rod and/or associated rod drive mechanism provided source range monitors are operable. CTS surveillance requirement 4.9.10.1.b requires verifying that this requirement is met. ITS 3.10.5 does not include the requirement that source range monitors are operable. The ITS Mode 5 requirements for SRM OPERABILITY and Surveillance testing are required to be met without explicit reference to them. ITS 3.10.5 does not modify the normal requirements, and therefore; ITS 3.3.1.2 must also be met during this Special Operation. Deleting this requirement removes a redundant requirement and therefore is an administrative change. This change is acceptable.

[A.3] CTS 3.9.10.1.c includes statements which clarify an exception to the current SHUTDOWN MARGIN requirements, which require additional shutdown margin for immoveable control rods. ITS 3.10.5.c does not include this clarification but identifies that the withdrawn rod is "assumed to be the highest worth control rod." The ITS identifies that the withdrawn rod is considered to be the "highest worth control rod," which in the ITS definition of SHUTDOWN MARGIN is assumed to be fully withdrawn. Since the rod need only be considered once in the SDM calculations, this rod is not required to also be considered as a stuck rod and the additional wording is unnecessary. The additional wording in the CTS is unnecessary and is deleted from the ITS. This administrative change is acceptable.

[A.4] CTS 3.9.10.1.d allows an option for removal of the four fuel assemblies surrounding the control rod or drive mechanism to be removed instead of disarming the control rods in a five-by-five array. ITS 3.10.5.b does not provide this option. During Mode 5, multiple control rods can only be removed if the requirements of ITS LCO 3.10.6 (CTS LCO 3.9.10.2) are followed. Since this LCO controls a single control rod removal, all other control rods must be fully inserted regardless of the status of the surrounding fuel assemblies. This administrative change is acceptable.

[A.5] CTS 3.9.10.1 APPLICABILITY specifies that this LCO applies during Modes 4 and 5. ITS 3.10.4 addressed the changes for Mode 4. ITS 3.10.5 APPLICABILITY addresses the changes for Mode 5 and adds a statement "with LCO 3.9.5 not met". The Mode 5 Applicability addition ("with LCO 3.9.5 not met") is derived from the intent of CTS 3.9.10.1, which says "the associated control rod drive mechanism may be removed from ... the reactor pressure vessel...". When the control rod drive mechanism is removed as specified in CTS 3.9.10.1, ITS LCO 3.9.5, which requires all withdrawn control rods to be OPERABLE, is not met. Since the intent of this APPLICABILITY was addressed in the CTS, this change is considered an administrative. This change is acceptable.

[A.6] CTS 3.9.10.1 ACTION requires suspending the removal of a drive mechanism and initiating action to satisfy the LCO requirement, if the LCO requirements are not met. ITS 3.10.5 ACTIONS requires suspending the removal of a drive mechanism but also provides an option of fully inserting all control rods or initiating action to meet the LCO requirement. This alternative Required Action takes the Unit outside the Applicability of ITS LCO 3.10.5, therefore it is an administrative change, since leaving the Applicability is always an option. This change is acceptable.

3.10.6 Multiple Control Rod Withdrawal - Refueling

INCLUDED IN OTHERS

[A.1; not significant, ~~consider excluding from SER~~] CTS 3.9.10.2 allows removing any number of control rods and/or associated rod drive mechanisms provided certain requirements are met. The CTS also states these requirements must be met until all control rods and/or associated control rod drive mechanisms are reinstalled and all control rods fully inserted in the core. CTS Surveillance Requirement 4.9.10.2.1 also contains the statement addressing reinstalling the control rods and/or the associated mechanisms. ITS 3.10.6 does not include the statement addressing reinstalling the control rods and/or associated mechanisms. Deleting this statement is editorial since the requirements apply until conditions under which they are required to apply no longer exist. This administrative change is acceptable.

[A.2] CTS 3.9.10.2.b allows removing any number of control rods and/or associated rod drive mechanisms provided source range monitors are operable. CTS surveillance requirement 4.9.10.2.1.b requires verifying that this requirement is met. ITS 3.10.6 does not specifically include the source range monitor operability requirement. The CTS Mode 5 requirements for SRM OPERABILITY and Surveillance testing ensure operability without the explicit reference. ITS 3.10.6 does not modify the normal requirements, and therefore, ITS 3.3.1.2 "Source Range Monitor Instrumentation" must also be met during this Special Operation. Deleting this requirement removes a redundant

requirement and therefore is an administrative change. This change is acceptable.

[A.3] CTS 3.9.10.2.c allows removing any number of control rods and/or associated rod drive mechanisms provided the SHUTDOWN MARGIN requirements of CTS 3.1.1 are satisfied. CTS surveillance requirement 4.9.10.2.1.c requires verifying that this requirement is met. ITS 3.10.6 does not specifically include the statement that SHUTDOWN MARGIN requirements be satisfied. ITS 3.10.6 does not modify the normal requirements, and therefore, ITS 3.1.1 must also be met during this Special Operation. Deleting this requirement removes a redundant requirement and therefore is an administrative change. This change is acceptable.

[A.4] CTS 3.9.10.2 APPLICABILITY specifies that this LCO applies during Mode 5. ITS 3.10.6 APPLICABILITY specifies that this LCO applies during Mode 5 and adds a statement "with LCO 3.9.3, LCO 3.9.4, or LCO 3.9.5 not met:" an explicit statement of applicability that conforms to the LCO which permits more than one control to be withdrawn or inoperable. These changes are strictly administrative and do not modify the requirements.

[A.5] CTS 3.9.10.2 ACTION requires suspending the removal of the control rods and/or drive mechanisms and initiating action to satisfy the LCO requirement, if the LCO requirements are not met. ITS 3.10.6 ACTIONS requires suspending the removal of the drive mechanism, but provides an option of initiating action to fully insert all control rods in core cells containing one or more fuel assemblies or initiating action to meet the LCO requirement. This alternative Required Action takes the plant outside the Applicability of ITS LCO 3.10.6, therefore it is an administrative change, since leaving the Applicability is always an option. This change is acceptable.

3.10.7 Control Rod Testing - Operating

[A.1] CTS 3.10.2 allows suspending the constraints imposed by the Rod Sequence Control System (RSCS) during special testing performance provided the rod worth minimizer is OPERABLE. ITS 3.10.7 allows suspending the requirements of LCO 3.1.6, "Rod Pattern Control" during performance of special testing, provided the banked position withdrawal sequence is changed or the rod worth minimizer is bypassed, requirements of control rod block instrumentation are suspended, and the rod sequence is verified by a second operator. The ITS deletes the CTS 3/4.1.4.2 RSCS requirements. Refer to Section 3.1 Discussion of Change for CTS 3/4.1.4.2 for a technical review of this change. Reference to the RSCS is removed from ITS 3.10.7 since the RSCS requirements are no longer included in ITS Section 3.1. This change is acceptable.

[A.2] CTS 3.10.2 allows suspending the constraints imposed by the Rod Sequence Control System (RSCS) during performance of special testing provided the Rod Worth Minimizer (RWM) is OPERABLE. ITS 3.10.7 allows suspending the requirements of LCO 3.1.6, "Rod Pattern Control" during performance of special testing, provided the banked position withdrawal sequence is changed or the RWM is bypassed, requirements of control rod block instrumentation are suspended, and the rod sequence is verified by a second operator. These

requirements specify that with the test sequence deviating from normal requirements, the RWM will either be bypassed or re-programmed with the new sequence. These options meet the intent of the requirement for RWM being "OPERABLE per Specifications 3.1.4.1," since CTS 3.1.4.1 allows continued control rod withdrawal with the RWM bypassed. These requirements are consistent with ITS 3.3.2.1 Required Actions with the RWM inoperable. This change is acceptable.

[A.3] CTS 3.10.2 APPLICABILITY specifies that this LCO applies during Modes 1 and 2. ITS 3.10.7 APPLICABILITY specifies that this LCO applies during Modes 1 and 2 and adds a statement "with LCO 3.1.6 not met". In performing the ITS 3.10.7 control rod tests, it will not be possible to comply with the requirements of the BPWS specified in ITS 3.1.6. The Applicability has been revised to clarify actual applicable conditions for the proposed LCO. This change is strictly administrative and does not modify the requirements.

[A.4] CTS 3.10.2 ACTION requires suspending the test and exception to the BPWS requirements if the LCO requirements are not met (by requiring the RSCS to be OPERABLE, which suspends the exception to the LCO). ITS 3.10.7, Required Action A.1, requires suspension of the test and suspends the exception to ITS 3.1.6. The ITS required action is equivalent to the CTS action, therefore this is an administrative change. This change is acceptable.

[A.5] ITS 3.10.7 adds two new Notes for clarity to the SURVEILLANCE REQUIREMENT section. These notes do not exist in the CTS. ITS SR 3.10.7.1 Note clarifies that if ITS SR 3.10.7.2 is satisfied, performing ITS SR 3.10.7.1 is not required. ITS SR 3.10.7.2 Note clarifies that if ITS SR 3.10.7.1 is satisfied, performance of ITS SR 3.10.7.2 is not required. This is allowed since LCO 3.10.7.a, which is verified by SR 3.10.7.2, is one option and LCO 3.10.7.b, which is verified by SR 3.10.7.1, is the other option. Since these changes are clarifications, this is an acceptable administrative change.

[M.1/A] CTS 3.10.2.d lists the Startup Test Program as one of the special tests for which this LCO exception is applied. ITS 3.10.7 also has the Startup Test Program reference deleted. The Startup Test Program has been completed at WNP-2, therefore the exception is no longer needed and this LCO can be deleted. This is an administrative change and is acceptable.

3.10.8 SDM Test - Refueling

[A.1] CTS 3.10.3 allows suspending the provisions of CTS 3.9.1 and 3.9.3 to permit the reactor mode switch to be in the Startup position and allow more than one control rod be withdrawn for shutdown margin demonstration if certain requirements are satisfied. ITS 3.10.8 does not refer to suspending these LCOs. The exception to CTS 3.9.1 is not needed since the requirement to lock the reactor mode switch in Refuel at all times while in Mode 5 has been deleted. The exception to CTS 3.9.3 cannot be used, since CTS 3.10.3 precludes all other CORE ALTERATIONS from taking place. Deleting these two exceptions is administrative since the requirements of CTS 3.9.1 no longer exist and the reference to CTS 3.9.3 does not change previous restrictions.

This change is acceptable.

[A.2] CTS 3.10.3 allows suspending the provisions of CTS 3.9.1, CTS 3.9.3, and Table 1.2 to permit the reactor mode switch to be in the Startup position and allow withdrawing more than one control rod for shutdown margin demonstration provided certain requirements are met including that the source range monitors are operable. CTS surveillance requirement 4.10.3.a requires verifying that this requirement is met. ITS 3.10.8 does not specifically include the requirement that source range monitors are operable. The current Mode 5 requirements for SRM OPERABILITY and Surveillance testing ensure the requirements are met without explicit reference to them. ITS 3.10.8 does not modify the normal requirements, and therefore, ITS 3.3.1.2 "Source Range Monitor Instrumentation" must also be met during this Special Operation. Deleting the requirement removes a redundant requirement and therefore is an administrative change. This change is acceptable.

[A.3] CTS 3.3.1 "RPS Instrumentation" requires OPERABILITY of APRMs in Mode 5. ITS 3.3.1.1 "RPS Instrumentation" deletes APRM requirements in Mode 5. CTS 3.10.3 "Shutdown Margin Demonstration" does not include APRM requirements. ITS 3.10.8 "Shutdown Margin Test - Refueling" and SR 3.10.8.1 include APRM requirements. Since the APRM requirements contained in CTS 3.3.1 are moved to ITS 3.10.8 for shutdown margin test, this is an administrative change. This change is acceptable.

CTS 3.1.3.6 "Control Rod Drive Coupling" requires all control rods coupled in Mode 5. ITS 3.1.3 "Control Rod OPERABILITY" deletes control rod coupling requirements in Mode 5. CTS 3.10.3 "Shutdown Margin Demonstration" does not include control rod coupling requirements. ITS 3.10.8 "Shutdown Margin Test - Refueling," ACTIONS Condition A and SR 3.10.8.5 include control rod coupling requirements. Since the control rod coupling requirements contained in CTS 3.3.1 are moved to ITS 3.10.8 for shutdown margin testing, this is an administrative change. This change is acceptable.

[A.4] CTS 3.10.3 APPLICABILITY specifies that this LCO applies during Mode 5, during shutdown margin demonstrations. ITS 3.10.8 APPLICABILITY specifies that this LCO applies during Mode 5 and adds a statement "with the reactor mode switch in startup/hot standby position." The Applicability has been revised to clarify actual applicable conditions for the proposed LCO. This change is strictly administrative and does not modify the requirements.

[A.5] ITS 3.10.8 adds two new Notes for clarity to the SURVEILLANCE REQUIREMENT section. These notes do not exist in the CTS. ITS SR 3.10.8.2 Note clarifies that if ITS SR 3.10.8.3 is satisfied, performing ITS SR 3.10.8.2 is not required. ITS SR 3.10.8.3 Note clarifies that if ITS SR 3.10.8.2 is satisfied, performing ITS SR 3.10.8.3 is not required. This is allowed since LCO 3.10.8.b.1, which is verified by SR 3.10.8.2, is one option and LCO 3.10.8.b.2, which is verified by SR 3.10.8.3, is the other option. Since these changes are clarifications this is an acceptable administrative change.

[A.6] CTS 3.1.3.5, "Control Rod Scram Accumulators" ACTION b.2 describes the actions required in Mode 5 "with more than one withdrawn control rod with the

associated scram accumulator inoperable or no control rod drive pump operating." ~~In~~ ITS 3.9.5 "Control Rod OPERABILITY - Refueling," provides required actions for inoperable withdrawn control rods in Mode 5; SR 3.9.5.2 requires verifying accumulator pressure; and accumulator operability is an element of CR operability. Since these changes result in the same effective requirements, these changes are administrative and acceptable.

3/4.10.1 Primary Containment Integrity

[M.1/A] CTS 3.10.1 allows exceptions during low power PHYSICS TESTS. The ITS deletes these exceptions since all low power PHYSICS TESTS are complete. This LCO is no longer relevant to the plant and its deletion is therefore an acceptable administrative change.

3/4.10.4 Recirculation Loops

[M.1/A] CTS 3.10.4 allows exceptions during low power PHYSICS TESTS and the Startup Test Program. The ITS deletes these exceptions since all low power PHYSICS TESTS and the Startup Test Program are complete. This LCO is no longer relevant to the plant and its deletion is therefore an acceptable administrative change.

3/4.10.5 Oxygen Concentration

[M.1/A] CTS 3.10.5 allows exceptions during the Startup Test Program. The ITS deletes these exceptions since the Startup Test Program is complete. This LCO is no longer relevant to the plant and its deletion is therefore an acceptable administrative change.

3/4.10.6 Training Startups

TRAINING START-UPS ARE NOT TIED TO INITIAL PLANT STARTUP THIS IS REALLY AN 'M' CHANGE - MOVE TO PAGE 14

[M.1/A] CTS 3.10.6 allows exceptions during training startups. The ITS, deletes these exceptions since training startups are no longer performed. This LCO is no longer relevant to the plant and its deletion is therefore an acceptable administrative change.

BUT ARE "ALLOWED" by LCO

The preceding changes to CTS Section 3/4.10 result in limits that are unchanged from the current requirements cited. In some cases, these changes result in a clearer presentation of the intent of current requirements. Accordingly, these changes are purely administrative. Therefore, they are acceptable.

b. Less Restrictive Requirements

The licensee, in electing to implement the specifications of STS Section 3.10, "Special Operations," proposed a number of less restrictive requirements than are allowed by CTS Section 3/4.10. These requirements are the following:

3.10.1 Inservice Leak and Hydrostatic Testing Operation

[LA.1] CTS 3.10.7 limits the maximum reactor coolant temperature to 212°F

during inservice leak and hydrostatic testing. Inservice leak and hydrostatic tests are very controlled evolutions involving strict procedural compliance. ITS 3.10.1 does not contain a limitation on the maximum reactor coolant temperature. Plant procedures contain the requirement on maximum temperature limitation. This change is acceptable.

3.10.2 Reactor Mode Switch Interlock Testing

.2 ¢ 4.9.1.3

[LA.1] CTS Section 1.0, Table 1.2, note "#" and CTS ~~LCO~~ 4.9.1.~~2~~ note "*" allow placing the reactor mode switch in the Run or Startup/Hot Standby position to test the switch interlock functions provided the control rods are verified to remain fully inserted by a second licensed operator or other qualified staff member. ITS SR 3.10.2.1 does not specify a method to verify control rods are inserted, but does require verifying control rods are fully inserted, which is adequate. The detailed method for conducting the SR is in the ITS Bases B 3.10.2. Describing the method for verifying that the control rods remain fully inserted in the Bases is a less restrictive change which is acceptable.

.2 ¢ 4.9.1.3

[L.1] CTS Section 1.0, Table 1.2, note "#" and CTS 4.9.1.~~2~~ note "*" allow placing the reactor mode switch in the Run or Startup/Hot Standby position to test the switch interlock functions provided control rods are verified to remain fully inserted by a second licensed operator or other qualified staff member. ITS 3.10.2 allows testing, provided all control rods remain fully inserted in core cells containing one or more fuel assemblies. Allowing testing even if control rod(s) are not fully inserted, provided these non-fully inserted control rods are in cells containing no fuel assemblies, provides sufficient SHUTDOWN MARGIN. This less restrictive change is acceptable.

.2 ¢ 4.9.1.3

CTS Section 1.0, Table 1.2, note "#" and CTS 4.9.1.~~2~~ note "*" allow placing the reactor mode switch in the Run or Startup/Hot Standby position to test the switch interlock functions. ITS 3.10.2 allows changing the mode switch position to the refuel position. The same protection provided for testing with the reactor mode switch in Run or Startup/Hot Standby (e.g., "all control rods remain fully inserted") applies to the Refuel position. Any possible errors resulting in inadvertent control rod withdrawals would lead to fewer control rods having the potential to be withdrawn with the reactor mode switch in Refuel (due to the one-rod-out interlock) than with the reactor mode switch in one of the other allowed positions. This less restrictive change is acceptable.

3.10.3 Single Control Rod Withdrawal - Hot Shutdown

CTS

[L.1] CTS 3.9.1, Action ~~Statement~~ b, and ~~surveillance requirement~~ 4.9.1.1 require the reactor mode switch locked in Shutdown or Refuel position. ITS 3.10.3 does not require locking the mode switch. Locking the reactor mode switch in Refuel would require additional actions by the operators to return it to the normal position (Shutdown). Also, to exit the LCO, the reactor mode switch needs to be unlocked to move it to the Shutdown position; but the action of unlocking the reactor mode switch would result in noncompliance with the LCO. Thus to exit the LCO, the plant must currently violate the LCO

requirements. The CTS requirements are deleted for consistency with the STS. Moving the reactor mode switch from the Refuel position is adequately controlled by Table 1.1-1 and ITS 3.10.3. This less restrictive change is acceptable.

3.10.4 Single Control Rod Withdrawal - Cold Shutdown

[LA.1] CTS 3.9.10.~~4~~1.d and 4.9.10.1.d describe the method for disarming control rods. ITS 3.10.4.c.2 and SR 3.10.4.2 require disarming the control rod but do not describe the methods of disarming. This description is moved to the ITS Bases of ~~B~~ 3.10.4.~~c.2.~~ Describing the method of disarming control rods in the Bases is a less restrictive change which is acceptable.

[L.1] CTS 3.9.1.~~b~~, & 3.9.1 Action ~~Statement~~ b, 3.9.10.1.a, ~~and surveillance requirements~~ 4.9.1.1, and 4.9.10.1.a require the reactor mode switch OPERABLE and locked in the Shutdown or Refuel position. ITS 3.10.4 does not require the mode switch locked or specifically state it must be OPERABLE. The CTS requirements are deleted consistent with the STS. Locking the reactor mode switch in Refuel would require additional actions by the operators to return it to the normal position (Shutdown). Also, to exit the LCO, the reactor mode switch needs to be unlocked to move it to the Shutdown position; but the action of unlocking the reactor mode switch would result in noncompliance with the LCO. Thus to exit the LCO, the plant must currently violate the LCO requirements. Moving the reactor mode switch from the Refuel position is adequately controlled by Table 1.1-1 and ITS 3.10.4. Reactor mode switch OPERABILITY is included as part of the OPERABILITY of various interlocks, trip functions, and control rod blocks. These less restrictive changes are acceptable.

[L.2] CTS 3.9.10.1.c and 3.9.10.1.d require satisfying SHUTDOWN MARGIN requirements and disarming a control rod five-by-five array prior to removing one control rod or drive mechanism. ITS 3.10.4.c allows fulfilling the above CTS requirements or requires RPS functions (LCO 3.3.1.1) and control rods (LCO 3.9.5) be OPERABLE. These requirements ensure that if an inadvertent criticality occurs, the RPS initiates a scram and inserts withdrawn control rods. The appropriate surveillance requirements were added to verify implementation of these requirements. This less restrictive change is acceptable.

CTS Section 1.0, Table 1.2 note "***," allows placing the reactor mode switch in the Refuel position to move a single control rod provided the one-rod-out interlock is OPERABLE. ITS 3.10.4.b allows the option of requiring OPERABILITY of the one-rod-out interlock (LCO 3.9.2) and control rod position indication (LCO 3.9.4) or inserting a control rod withdrawal block. Inserting a rod withdrawal block also ensures that no additional rods are withdrawn, similar to the one-rod-out interlock. The appropriate surveillance requirements were added to verify implementation of these requirements. This less restrictive change is acceptable.

[L.3] CTS ~~surveillance requirement~~ 4.9.10.1 requires verifying requirements within 4 hours prior to the start of removal of a control rod and/or drive mechanism and at least once per 24 hours thereafter. ITS 3.10.4, ~~SURVEILLANCE~~,

REQUIREMENTS, does not require the verifying the requirements within 4 hours prior to start of removal. Special Ops Conditions and SRs of associated LCOs must be met prior to entry, in order to enter and remain in conditions of ITS 3.10.4. This is an acceptable less restrictive change.

3.10.5 Single Control Rod Drive Removal - Refueling.

[LA.1] CTS 3.9.10.1.d and 4.9.10.1.d describe the method for disarming control rods. ITS 3.10.5.b and SR 3.10.5.2 require disarming the control rod but do not describe the methods. This description is moved to the ITS Bases. Describing the control rod disarming method in the Bases B 3.10.5 is a less restrictive change that is acceptable.

[L.1] CTS 3.9.10.1.a and ~~Surveillance Requirement~~ 4.9.10.1.a require the reactor mode switch OPERABLE and locked in the Shutdown or Refuel position. ITS 3.10.5 does not include the requirements for the mode switch locked or OPERABLE. The CTS requirements are deleted for STS consistency. Moving the reactor mode switch from the Refuel position is adequately controlled by ITS Table 1.1-1. A reactor mode switch position other than Refuel and Shutdown results in the unit entering some other mode; mandating the associated requirements of that mode and of ITS 3.0.4. Reactor mode switch OPERABILITY is included as part of the OPERABILITY of various interlocks, trip functions, and control rod blocks. These less restrictive changes are acceptable.

[L.2] CTS ~~surveillance requirement~~ 4.9.10.1 requires verifying requirements within 4 hours prior to the start of a control rod and/or drive mechanism removal and at least once per 24 hours thereafter. ITS 3.10.5 SURVEILLANCE REQUIREMENTS do not require verification within 4 hours prior to starting control rod and/or drive mechanism removal. Special Ops Conditions and SRs of associated LCOs must be met prior to entry, in order to enter and remain in conditions of ITS 3.10.5. This is an acceptable less restrictive change.

3.10.6 Multiple Control Rod Withdrawal - Refueling

[L.1] CTS 3.9.10.2.a and ~~surveillance requirement~~ 4.9.10.2.1.a require the reactor mode switch OPERABLE and locked in the Shutdown or Refuel position. ITS 3.10.6 does not require locking the mode switch or that it be OPERABLE. The CTS requirements are deleted consistent with the STS. Moving the reactor mode switch from the Refuel position is adequately controlled by ITS Table 1.1-1. A reactor mode switch position other than Refuel and Shutdown results in the plant entering some other mode; mandating requirements of that mode and ITS 3.0.4. Reactor mode switch OPERABILITY is included as part of the OPERABILITY of various interlocks, trip functions, and control rod blocks. These less restrictive changes are acceptable.

[L.2] CTS ~~surveillance requirement~~ 4.9.10.2.1 requires verifying LCO requirements are met within 4 hours prior to the start of removing control rods and/or drive mechanisms and at least once per 24 hours thereafter. ITS 3.10.6 SURVEILLANCE REQUIREMENTS do not verify LCO requirements within 4 hours prior to start of removal. Special Ops Conditions and SRs of associated LCOs must be met prior to entry, in order to enter and remain in conditions of ITS 3.10.6. This is an acceptable less restrictive change.

[L.3] CTS 4.9.10.2.2 requires a functional test of the one-rod-out Refuel~~ing~~ Position interlock following replacement of all control rods and/or drive mechanisms, if this function had been bypassed. ITS 3.10.6 does not contain this surveillance requirement. Anytime the OPERABILITY of a system or component has been affected by repair, maintenance, or replacement of a component, post maintenance testing is required to demonstrate OPERABILITY of the system or component. The CTS explicit post maintenance Surveillance Requirements are deleted since they are controlled by plant procedures. This less restrictive change is acceptable.

3.10.7 - ~~to~~ No Less Restrictive (for consistency)

3.10.8 SDM Test - Refueling

[L.1] ~~- review~~] CTS ~~Surveillance Requirement~~ 4.10.3.b requires verifying that the rod worth minimizer (RWM) is OPERABLE or a second operator verifies compliance with shutdown margin procedures "within 30 minutes prior to and at least once per 12 hours during performance of shutdown margin demonstration." ITS SR 3.10.8.2 requires performing the Mode 2 applicable Surveillance Requirements for the RWM with a Frequency according to the applicable Surveillance Requirements. CTS ~~Surveillance Requirement~~ 4.10.3.c requires verifying that no CORE ALTERATIONS are in progress "within 30 minutes prior to and at least once per 12 hours during performance of shutdown margin demonstration." ITS SR 3.10.8.4 requires verifying no other CORE ALTERATIONS are in progress every 12 hours, without the requirement of once within 30 minutes prior to the start of the SDM test. This will allow the verification to be performed up to 12 hours prior to the start (as described in ~~proposed~~ ITS SR 3.0.4). ~~CTS Surveillance Requirement 4.10.3.b requires verifying that the rod worth minimizer (RWM) is OPERABLE or a second operator verifies compliance~~ with shutdown margin procedures "within 30 minutes prior to and at least once per 12 hours during performance of shutdown margin demonstration." ITS SR 3.10.8.3 requires verifying ~~movement of control rods by a second operator during control rod movement.~~ The 30 minute RWM Surveillance was effectively a "paper-check", in that the Surveillances required by current Specification 3.1.4.1 were verified current, but not actually required to be performed within 30 minutes prior to the SDM test. The proposed Surveillance deletes this 30 minute paper check, but maintains the requirement to actually perform the tests. This paper check is administrative and is generally governed by plant procedures. The Surveillance required if the RWM is inoperable has been changed from verifying a second licensed operator is present within 30 minutes of the start of the SDM test to actually requiring the rod movement to be verified correct every time a rod is moved. In this regard, this check is more restrictive than current requirements. The deletion of the 30 minute check is an acceptable less restrictive change.

The less restrictive requirements described in the preceding material have been found by the staff to be acceptable because they do not present a significant safety question in the operation of the plant. The TS requirements that remain are consistent with current licensing practices, operating experience and plant accident and transient analyses, and provide reasonable assurance that the public health and safety will be protected.

c. More Restrictive Requirements

The licensee, in electing to implement the specifications of STS Section 3.10, "Special Operations," proposed a number of more restrictive requirements than are allowed by CTS Section 3/4.10. These requirements are the following:

3.10.1 – No more restrictive (for consistency)

3.10.2 Reactor Mode Switch Interlock Testing

Included in other

[M.1; ~~not significant, consider excluding from SER~~] CTS Section 1.0, Table 1.2, note "#" and CTS 4.9.1.1 note "*" allow placing the reactor mode switch in the Run or Startup/Hot Standby position to test the switch interlock functions. ITS 3.10.2 includes ACTIONS and SURVEILLANCE REQUIREMENTS for this situation which do not exist in the CTS notes. This change is acceptable.

3.10.3 Single Control Rod Withdrawal - Hot Shutdown

[M.1] CTS Section 1.0, Table 1.2 note "***," allows placing the reactor mode switch in the Refuel position to move a single control rod provided the one-rod-out interlock is OPERABLE. ITS 3.10.3 allows changing the reactor mode switch position to Refuel to move a single control rod; however, it includes more restrictions than provided in the CTS. The change incorporates additional restrictions to address issues such as control rod position indication, all other rods being fully inserted, ~~and~~ reactor protection system instrumentation operability, ~~and~~ control rod operability, disarming rods, & modifying SDM Limit. In addition, ITS 3.10.3 includes ACTIONS and SURVEILLANCE REQUIREMENTS associated with new LCO requirements which do not exist in the CTS note. These more restrictive changes are acceptable.

3.10.4 Single Control Rod Withdrawal - Cold Shutdown

[M.1] ITS Required Actions A.2.1 and A.2.2 provide actions in the event LCO requirements are not met and the withdrawn control rod is insertable. Required Action A.2.1 requires initiating action immediately to fully insert all insertable control rods. Required Action A.2.2 requires placing the reactor mode switch in the Shutdown position, which precludes withdrawing any control rod. ITS Required Actions B.2.1 provides actions in the event LCO requirements are not met and the withdrawn control rod is not insertable. Required Action B.2.1 requires initiating action immediately to fully insert all control rods. These required actions are not in CTS; however, they provide actions to be taken if the LCO are not met. The addition of required actions is a more restrictive change. This change is acceptable.

[M.2] ITS 3.10.4.b.1 adds a new requirement to ensure the control rod position indication is OPERABLE. The control rod position indication must be OPERABLE to support the one-rod-out interlock. This requirement does not exist in the CTS. The addition of this requirement is a more restrictive change. This change is acceptable.

3.10.5 Single Control Rod Drive Removal - Refueling

[M.1] ITS 3.10.5 adds two requirements (c and d) not contained in the CTS, inserting a control rod withdrawal block and not allowing other CORE ALTERATIONS. Inserting the rod block compensates for the inoperable one-rod-out interlock. To ensure no fuel is loaded (since refueling interlocks

precludes fuel movement with a withdrawn control rod), no other CORE ALTERATIONS can be in progress. These requirements ensure no inadvertent criticality occurs. In addition, surveillances SR 3.10.5.3 and SR 3.10.5.5 were added to verify a control rod withdrawal block is inserted and no other CORE ALTERATIONS are in progress. These Surveillance Requirements ensure the requirements of the LCO are met. These changes represent an additional restriction on plant operations. These changes are acceptable.

3.10.6 Multiple Control Rod Withdrawal - Refueling

[M.1] ITS 3.10.6.c adds a requirement to allow removing multiple control rods and/or the associated drive mechanisms ~~and~~ PROVIDED that the fuel assemblies shall only be loaded in an approved spiral sequence. ITS also adds Required Action A.2 and SR 3.10.6.3 associated with this new requirement. CTS 3.9.10.2 provides requirements which must be met before removing multiple control rods and/or mechanisms, but does not ~~include~~ preclude reloading fuel. This change is more restrictive, placing additional restrictions on plant operations. This change is acceptable.

3.10.7 Control Rod Testing - Operating

[M.2] CTS surveillance requirement 4.10.2.a.2 requires verifying moving control rods from 75% ROD DENSITY to the RSCS low power setpoint is limited to the approved rod withdrawal sequence during scram and friction tests. CTS 4.10.2.a requires this verification 8 hours prior to bypassing a sequence constraint, and once per 12 hours thereafter. ITS SR 3.10.7.1 requires verifying that control rod movement complies with the approved control rod sequence with a frequency of "during control rod movement". The restriction of limiting verification to between 75% ROD DENSITY and the RSCS low power setpoint is being deleted since it is appropriate to verify control rod movement at all rod densities below the low power setpoint of the RWM when control rods are bypassed. In addition, verifying conformance by a second licensed operator is a continuous activity as each control rod is withdrawn and should not be limited to any 8 or 12 hour frequency. These more restrictive requirements are acceptable.

3.10.8 SDM Test - Refueling

[M.1] CTS 3.1.3.5, "Control Rod Scram Accumulators" ACTION b.2 describes the actions taken in Mode 5 "with more than one withdrawn control rod with the associated scram accumulator inoperable or no control rod drive pump operating." ITS 3.10.8.f requires sufficient control rod drive charging water header pressure available. This ensures scram pressure is available, if needed. Also added is an appropriate Surveillance Requirement, ITS SR 3.10.8.6. This new requirement is more restrictive since a specific drive water pressure is now required. This change is acceptable.

The staff has reviewed these more restrictive requirements and believes they strengthen the CTS. Therefore, these more restrictive requirements are acceptable.

3/4.10.6 - INSERT M.1 from page 8

d. Significant Differences from the STS (NUREG-1434)

* The licensee, in electing to adopt the specifications of STS Section 3.10, "Special Operations," proposed the following differences between the ITS and the STS.

3.10.4 - JFD 9 (CONSIDERED SIGNIFICANT IN 3.3.8.2)

3.10.7 Control Rod Testing - Operating & 3.10.8 SDM Test - Refueling

[JFD 6] The WNP-2 rod pattern control design does not include a Rod Action Control System, but a rod worth minimizer (RWM), similar to the BWR/4 design. Therefore, the LCO, ACTIONS, and Surveillances have been modified to reflect the RWM design, and are consistent with NUREG-1433.

The preceding differences from STS Section 3.10 are consistent with the WNP-2 design and existing requirements and commitments or proposed changes found to be acceptable as discussed elsewhere in this evaluation. Therefore, these differences are acceptable.

e. Relocated Specifications

None

4.0 DESIGN FEATURES

NOT CONSISTENT WITH OTHER SE SECTIONS - SEE INSERT 4.0

This section contains the same material as found in the CTS except for those less restrictive changes adopting NUREG-1434, which if altered in accordance with 10 CFR 50.59, would not result in a significant impact on safety (the criteria of 10 CFR 50.36(c)(4) for including an item in the TS as a design feature). In addition, one more restrictive change was adopted in the ITS.

a. Administrative Changes

The specifications of CTS Chapter 5.0 that have been retained in ITS Chapter 4.0 have been reworded to conform to the STS presentation. In particular, the most significant ~~following~~ administrative changes that were made are as follows:

A.1 CTS 5.1.1 and 5.1.2 reference Figures 5.1-1 and 5.1-2 for the exclusion area and the low population zone, respectively. The ITS does not include these figures and ITS 4.1.1 and 4.1.2 provide written descriptions of the corresponding areas. The Figures for the exclusion area and low population zone are not needed since a description of the areas will continue to provide the information pertinent to 10 CFR 100 requirements. Therefore, this change is purely administrative. This change conforms to the STS and is acceptable.

DELETED IN REV C. A.2 CTS 5.3.1 provides design features for fuel assemblies. ITS 4.2.1 includes the fuel assembly design features and also includes a specific description of the fuel rods. The ITS adds information to better describe the fuel assemblies and control rods. This wording is consistent with the STS. Since the NRC must approve modifications to the design, adding detail does not result in a technical change. Therefore, this is a purely administrative change that conforms to the STS and is acceptable.

[A.~~3~~ 2 Below threshold for discussion.] NOT "BELOW" IN OTHER SECTIONS SEE INSERT A.2

The preceding changes to CTS Chapter 5.0 result in limits that are unchanged from the current requirements cited. In some cases, these changes result in a clearer presentation of the intent of current requirements. Accordingly, these changes are purely administrative. Therefore, they are acceptable.

b. Less Restrictive Requirements

The licensee, in electing to implement the specifications of STS Chapter 4.0, "Design Features," proposed a number of less restrictive requirements than are allowed by CTS Chapter 5.0. These requirements are described in the following:

LA.1 IS ONLY APPLICABLE TO CHANGES MADE TO U.A.

LA.1 CTS 5.1.3 includes a boundary ~~boundaries~~ for the UNRESTRICTED AREAS ~~AND the SITE BOUNDARY~~ for radioactive gaseous and liquid effluents. ~~and references Figure 5.1-3.~~ The ITS does not include ~~the~~ this same boundary ~~boundaries and figure~~. The specific boundary for the UNRESTRICTED AREAS for radioactive gaseous and liquid effluents remains detailed in the FSAR, Section 2.1.1.3. The requirements for and restrictions on locating the UNRESTRICTED AREAS must

INSERT 4.0 to subsection 4.0

The licensee has proposed administrative and technical changes to the CTS to bring then into conformance with 10 CFR 50.36 and with STS Chapter 4.0 Specifications. For each category of change, the discussions geberally follow the presentation order of the individual specifications within the STS Chapter 4.0.

INSERT A.2 to subsection 4.0.a

The CTS 5.7 requirement to maintain limits on component cyclic and transient stresses, including Table 5.7.1-1, is being moved to ITS 5.5.5 in accordance with the format of the STS. Evaluations of any technical changes are addressed in the ITS 5.5 evaluation. This is an acceptable administrative change.

conform to regulations in 10 CFR 20. Compliance with 10 CFR 20 is required by the WNP-2 Operating License. Any changes to this design feature must also conform to the requirements of 10 CFR 50.59. If this design feature of the facility were altered in accordance with 10 CFR 50.59 and 10 CFR 20, there would not be a significant impact on safety, which is the criteria of 10 CFR 50.36(c)(4) for inclusion as a Design Feature. Therefore, removing these details from the TS, while maintaining the details in the FSAR, will not impact safe operation of the facility. This change conforms to the STS and is acceptable.

PARAMETERS PRIMARY & SECONDARY AND 5.4-RCS.

LA.2 CTS 5.2 provides design ~~features~~ for the containments. The ITS does not contain these same features. Configurations, design temperatures and pressures, Secondary Containment, and Primary Containment and Reactor Coolant System volumes remain detailed in FSAR Sections 5.1, 5.2, 6.2.1, and 6.2.3. Any changes to these design parameters must conform to the requirements of 10 CFR 50.59. Furthermore, details relating to these ~~features~~ exist in the ITS to ensure any changes that affect safety require prior NRC review and approval. Since the ~~features~~ with a potential to impact safety are sufficiently addressed by LCOs, and other features, if altered in accordance with 10 CFR 50.59, would not result in a significant impact on safety, the criteria of 10 CFR 50.36(c)(4) for including as a Design Feature are not met. Removing these details from the ITS, while maintaining the detail in the FSAR, does not impact safe plant operation. This change conforms to the STS and is acceptable.

Features PARAMETERS PARAMETERS

DELETED IN REV C.

LA.3 CTS 5.3.1 provides the fuel assembly design features active length, nominal enrichment and number of fuel pins. The ITS deletes these specific design features and they remain detailed in the FSAR, Section 4.2. Any changes to these design parameters must conform to the requirements of 10 CFR 50.59. Furthermore, sufficient detail relating to these features exists in LCOs (e.g., SHUTDOWN MARGIN and thermal limits) to ensure changes that may impact safety would require prior NRC review and approval. Since the features with a potential to impact safety are sufficiently addressed by LCOs, and other features, if altered in accordance with 10 CFR 50.59, would not result in a significant impact on safety, the criteria of 10 CFR 50.36(c)(4) for including as a Design Feature are not met. Therefore, allowing the removal of these details from TS, while maintaining the details in the FSAR, will not impact safe operation of the facility. This change conforms to the STS and is acceptable.

LA.~~4~~ 3 CTS 5.5.~~X~~ specifies the location of the meteorological tower by referencing Figure 5.1-1. The ITS does not include this design feature. The Meteorological Tower location remains detailed in FSAR Section 2.3.3. Any changes to this design parameter must conform to the requirements of 10 CFR 50.59. Changes to this design feature, if altered in accordance with 10 CFR 50.59, will not have a significant effect on safety, and the criteria of 10 CFR 50.36(c)(4) for including as a design feature are not met. Therefore, removing this detail from the TS, while maintaining the detail in the FSAR, will not impact safe operation of the facility. This change conforms to the STS and is

acceptable.

L.1 CTS 5.6.2 provides the level for which the spent fuel storage pool is designed and is to be maintained to prevent inadvertent draining. CTS 5.6.2 specifies this level as 605 feet 7 inches. ITS 4.3.2 changes this level to 583 feet 1.25 inches. The CTS level is the design level to which the pool can be drained with the fuel pool gates installed. The ITS level is the minimum design level to which the pool can be drained with the gates removed. The gates are removed during refueling outages to transfer fuel between the spent fuel storage pool and the reactor vessel. The minimum design level provides a safe shielding level (i.e., the fuel will remain covered, as required by Regulatory Guide 1.13, Revision 1) as stated in NUREG-0892, "Safety Evaluation Report related to the operation of WPPSS Nuclear Project No. 2." This change conforms to the STS and is acceptable.

The above less restrictive requirements have been reviewed by the staff and have been found to be acceptable because they do not present a significant safety question in the operation of the plant. The TS requirements that remain are consistent with current licensing practices, operating experience and plant accident and transient analyses, and provide reasonable assurance that the public health and safety will be protected.

c. More Restrictive Requirements

The licensee, in electing to implement the specifications of STS Chapter 4.0, proposed one more restrictive condition than is required by CTS Chapter 5.0. This condition is described in the following:

M.1 ITS 4.3.1.2.b includes a new requirement regarding the nominal distance between fuel bundles in the new fuel storage racks. The CTS does not include this requirement. The ITS specifies the nominal distance between fuel bundles seated in the new fuel storage racks. The new ITS restrictions result in the need for NRC approval to modify the new fuel storage rack design. This will ensure any changes to this design feature receive the appropriate reviews and approvals. Therefore, this change is an additional restriction on plant operation. This change conforms to the STS and is acceptable.

The staff has reviewed the more restrictive requirement and concludes that it results in an enhancement to the ITS. Therefore, this more restrictive requirement is acceptable.

d ~~e~~. significant ~~STS~~ Differences from 1434

The licensee, in electing to adopt the specifications of STS Chapter 4.0, "Design Features," proposed the following differences between the ITS and the STS.

JFD 3. ~~[OPEN ITEM - The staff believes that STS 4.3.1.1.a should be adopted by WNP-2. A more restrictive DOC also needs to be generated.]~~ STS 4.3.1.1.a provides the choice of specifying either the maximum k_∞ in the

normal reactor core configuration at cold conditions or the average U-235 enrichment of the fuel assemblies stored in the spent fuel storage racks. The requirement to specify the k_∞ or the average U-235 enrichment is not included in the ITS. The WNP-2 CTS, as well as NUREG-1434, include a limit on k_{eff} for the spent fuel storage racks. In order to demonstrate compliance with this requirement, calculations have been performed, as described in the FSAR, to determine the maximum K_{eff} of the racks. These calculations are dependent on the actual U-235 enrichment of the fuel stored in the racks. For ease of demonstrating compliance with the k_{eff} limit for the WNP-2 rack design, a bounding compliance criterion on the k_∞ or U-235 enrichment of each fuel type that can be stored in the spent fuel storage racks has been established such that the k_{eff} limit is still met. Because WNP-2 is required to maintain the $k_{eff} \leq 0.95$, each new fuel assembly loaded into the reactor must be compared to the storage racks bounding compliance criterion (k_∞ or U-235 enrichment). Design reviews for reloads will also verify continued compliance with the bounding enrichment requirements prior to using the new fuel. This ensures continued compliance with the current k_{eff} limit for the spent fuel storage racks as required by the current licensing basis.

JFD 5. ~~[OPEN ITEM - The staff believes that STS 4.3.1.2.a should be adopted by WNP-2. A more restrictive DOC also needs to be generated.]~~ STS 4.3.1.2.a provides the choice of specifying either the maximum k_∞ in the normal reactor core configuration at cold conditions or the average U-235 enrichment of the fuel assemblies stored in the new fuel storage racks. This requirement is not included in the ITS since it is not contained in the current licensing basis. The current licensing basis, as described in the FSAR, only requires a $k_{eff} \leq 0.95$ if fully flooded with unborated water.

JFD 6. STS 4.3.3.2 has been deleted since it is not applicable to WNP-2. WNP-2 does not have an upper containment pool.

The preceding differences from STS Chapter 4.0 are consistent with the WNP-2 design and existing requirements and commitments or proposed changes found to be acceptable as discussed elsewhere in this evaluation. Therefore, these differences are acceptable.

C. Relocated Specs - None (for consistency)

5.0 ADMINISTRATIVE CONTROLS

a. Administrative Changes

The specifications of CTS Chapter 6.0 that have been retained in ITS Chapter 5.0 have been reworded to conform to the STS presentation. In particular, the most significant ~~following~~ administrative changes that were made. are as follows:

5.1 Responsibility

A.1 CTS 6.1.1 defines the Plant Manager's responsibilities. The ITS changes the title to Plant General Manager. Since the same individual who filled the Plant Manager position holds this new position, and the responsibility of the position has not changed, this change is purely administrative and is acceptable.

A.2 CTS 6.1.2 states that the Shift Manager shall be responsible for the control room command function. CTS 6.1.2 also contains an annual requirement for the Assistant Managing Director for Operations to issue a management directive to this effect. ITS 5.1.2 provides the responsibilities for the Shift Manager and deletes the annual directive requirement. The ITS state who is responsible for the control room command function. In addition, the FSAR delineates the responsibilities of the Shift Manager. This requirement serves only as a "reminder" to personnel as to who is in charge. The CTS require no other management directives to remind personnel of a TS requirement, and this requirement does not directly impact safety. Since the responsibility requirement is not changed, deleting the directive requirement is purely administrative. This change conforms to the STS and is acceptable.

~~[A.3 Below threshold for discussion.]~~ No A.3

5.2 Organization

UNIT STAFF

A.1 CTS 6.2.1 and 6.2.2, OFFSITE AND ONSITE ORGANIZATIONS, provide the responsibilities for the Plant Manager and Assistant Managing Director of Operations. ITS 5.2.1.b and 5.2.1.c change the titles to match the individual's current titles. The current titles are Plant General Manager and Vice President, Nuclear Operations. Since the same individuals who held the Plant Manager and Assistant Managing Director for Operations positions hold these new positions, and the responsibilities of the positions have not changed, this change is purely administrative and is acceptable.

Rev C

A.2 CTS 6.2.2.c specifies that a Health Physics Technician shall be on site (when fueled). The ITS does not include a reference to a specific title but requires an individual qualified to implement radiation protection procedures. The ITS changes the individual's title to description of the individual's function. The only individuals currently qualified are Health Physics Technicians. If other individuals are considered in the future, they will meet the same qualifications. Therefore, this change is purely administrative and is acceptable.

A.3- SEE INSERT A.3

INSERT A.3 to subsection 5.0.a, ITS 5.2

The requirements of the second paragraph of the footnote to CTS Table 6.2.2-1 are being moved to ITS 5.1 in accordance with the format of the STS. Evaluations of any technical changes are addressed in the ITS 5.1 evaluation. This is an acceptable administrative change.

A.4 CTS 6.2.4.1 specifies that the STA shall provide advisory technical support to the Shift Manager. The ITS changes the requirement to specify that the STA shall provide support to the operating shift. The ITS replaces the person to whom the STA provides advisory technical support with a more generic statement. Since the Control Room Supervisor (CRS) is in charge of supervising unit operation, the STA also provides advisory technical support to the CRS. To provide a more generic statement as to whom the STA provides advisory technical support, the words "Shift Manager" have been replaced with "operating shift." This includes the Shift Manager and the CRS, both of whom are members of the operating shift. This change is purely administrative and is acceptable.

A.5 CTS 6.2.4.1 provides administrative controls for the STA which include specifying qualification requirements. ITS 5.2.2.g modifies the qualification requirements to reference the Commission Policy Statement on Engineering Expertise on Shift. Since the policy statement encompasses the current requirements, this change is purely administrative. This change is an conforms to the STS and is acceptable.

5.3 Unit Staff Qualifications

There are no significant administrative changes to the CTS associated with ITS 5.3.

5.4 Procedures

A.1 CTS 6.8.1.a requires that written procedures recommended in Appendix A of Regulatory Guide 1.33, Revision 2, be established, implemented, and maintained.. CTS 6.8.1.c, 6.8.1.d, and 6.8.1.h requires the same for specific procedures described in Regulatory Guide 1.33. ITS 5.4.1.a retains the requirement in CTS 6.8.1.a but removes the specification of individual procedures already covered by the Regulatory Guide 1.33 requirement. This is a change in presentation only, and therefore, is a purely administrative change. This change conforms to the STS and is acceptable.

A.2 CTS 6.8.1.e and 6.8.1.f require procedures for implementing the Security and Emergency Plans. The ITS does not include these requirements. 10 CFR 50, Appendix E and 10 CFR 50.54(p) require procedures to implement the Emergency Plan and the Security Plan, respectively. Since conformance with 10 CFR Chapter 1 is a license condition, and 10 CFR Chapter 1 requires implementing the Emergency Plan and Security Plan, specific identification of these plans in the TS is an unnecessary duplication. This is a change in presentation only, and therefore, is a purely administrative change. This change conforms to the STS and is acceptable.

A.3 CTS 6.8.1.i requires procedures for implementing an Offsite Dose Calculation Manual (ODCM). ITS 5.4.1.e requires written procedures for all programs specified in ITS 5.5 (including the ODCM). Since the

requirements remain, this change is a change in presentation only and, therefore, is a purely administrative change. This change conforms to the STS and is acceptable.

5.5 Programs and Manuals

A.1 CTS 6.8.4.d.1) and 6.8.4.d.6) specify limitations on the operability of the radioactive liquid and gaseous monitoring instrumentation. ITS 5.5.4.a changes the words to "limitations on functional capability," to preclude confusion with the defined term "OPERABILITY." This is consistent with current practice since equipment referred to is no longer in the CTS. It was relocated in Amendment No. 98, dated December 26, 1991. Because there are no change in actual requirements, this is a purely administrative change. This change conforms to the STS and is acceptable.

A.2 CTS 6.8.4.d.2), 6.8.4.d.3), 6.8.4.d.7), 6.14.1.a.2), and 3.11.1.4 include references to 10 CFR Part 20 and requirements therein. The ITS include updates to these references. The ITS conform to the wording of the latest revision to 10 CFR Part 20 and provide the proper references to 10 CFR Part 20. The ITS does not change the technical requirements, therefore this change is purely administrative. These changes do not conform to the current version of the STS, but do conform to the latest draft of the staff's intended changes to the STS, and are acceptable.

[A.3 Below threshold for discussion.] No "BELOW" in others SEE INSERT A.3

A.4 CTS 6.14.b refers to the Plant Manager. ITS 5.5.1.c.2 refers to the Plant General Manager. The ITS changes the title to Plant General Manager. Since the same individual who filled the Plant Manager position holds this new position, and the responsibility of the position has not changed, this change is purely administrative and is acceptable.

[A.5 ~~Below threshold for discussion~~.] not significant

[A.6 ~~Below threshold for discussion~~.] not significant

A.7 CTS 6.8.4.a specifies requirements for primary coolant sources outside containment. ITS 5.5.2 adds a statement that the provisions of ITS 3.0.2 are applicable to the 24 month Frequency for performing integrated system leak testing activities.

CTS 4.0.5 specifies requirements for inservice testing of ASME Code Class 1, 2, and 3 components. ITS 5.5.6.c adds a statement that the provisions of SR 3.0.3 are applicable to inservice testing activities.

A statement of applicability of SR 3.0.2 for ITS 5.5.2 and SR 3.0.3 for ITS 5.5.6 maintains allowances for Surveillance Frequency extensions contained in the ITS. These SRs are not normally applied to Frequencies identified in the Administrative Controls Section of the ITS. Since this change is a clarification required to maintain provisions that

INSERT A.3 to subsection 5.0.a, ITS 5.5

CTS 6.14.a contains a cross reference to CTS 6.10.3.n for record retention. This cross reference is not included in the ITS. The removal of this cross reference is not necessary and is a presentation preference only. Therefore, this change is an acceptable administrative change.

would be allowed in the LCO sections of the ITS, it is a administrative change. (or list?)

A.8 CTS 4.6.5.3 and 4.7.2 specify the standby gas treatment (SGT) and certain of control room emergency filtration (CREF) systems surveillance requirements for filter testing. The ITS moves these SGT and CREF surveillance requirements to ITS 5.5.7, "Ventilation Filter Testing Program (VFTP)." As such, ITS 5.5.7 includes a general program statement. Also, the ITS includes a statement of applicability of SR 3.0.2 and SR 3.0.3 to clarify that the allowances for surveillance frequency extensions do apply, since these SRs are not normally applied to frequencies identified in the ITS Administrative Controls Chapter. Since this change represents a presentation preference and a clarification that maintains provisions allowed in the LCO sections of the TS, it is purely administrative. This change conforms to the STS and is acceptable.

THIS A.8 only moves certain SRs - Not all of 4.6.5.3 & 4.7.2

A.9 ~~[OPEN ITEM - technical staff is verifying references.]~~ CTS 4.6.5.3 and 4.7.2 specify requirements for in-place charcoal adsorber testing of the SGT and CREF Systems, which reference Regulatory Position C.5.a and C.5.d of Regulatory Guide (RG) 1.52, Revision 2, March 1978, respectively. ITS 5.5.7.b references RG 1.52, Revision 2, Section C.5.d and ANSI N510-1989, Section 11. The CTS for laboratory testing of the SGT and CREF Systems reference the testing criteria of RG 1.52, Revision 2, Section C.6.a. ITS 5.7.7.c references ASTM D3803-1986 at a specific method and relative humidity. The CTS for the flow rate, pressure drop, and heater tests reference ANSI N510-1980. ITS 5.5.7.a through 5.5.7.e reference ANSI N510-1989. The changes to the new references are an update to the latest revision but do not change the current testing requirements or acceptance criteria. Therefore, these changes are purely administrative.

A.10 CTS 3.11.1.4 and 3.11.2.6 provide requirements for liquid holdup tanks and explosive gas mixtures. In the ITS, the outside temporary liquid radwaste tank requirements and offgas system hydrogen requirements have been placed in a program in the proposed Administrative Controls Chapter (ITS 5.5.8). As such, a general program statement has been added. In addition, a statement of applicability of SR 3.0.2 for and SR 3.0.3 has been added which maintains allowances for Surveillance Frequency extensions contained in the ITS. These SRs are not normally applied to Frequencies identified in the Administrative Controls ~~Section~~ Chapter of the ITS. Since this change represents a presentation preference and a clarification that maintains provisions allowed in the LCO sections of the TS, it is purely administrative. This change conforms to the STS and is acceptable.

-A.11, A.12 / SEE INSERTS (for consistency)

5.6 Reporting Requirements

[A.1 ~~Below threshold for discussion.]~~ Not significant

A.2 CTS 6.9.1 requires submitting the subject reports to the Regional Administrator of the Regional Office of the NRC. CTS 6.9.1.6 requires

INSERT A.11 to subsection 5.0.a, ITS 5.5

A.11 CTS 4.8.1.1.c and 4.8.1.1.d provide requirements for diesel fuel oil testing. In the ITS, the diesel fuel oil testing requirements have been placed in a program in the proposed Administrative Controls Chapter (ITS 5.5.9). As such, a general program statement has been added. Also, a statement of applicability of SR 3.0.2 and SR 3.0.3 is needed to clarify that the allowances for Surveillance Frequency extensions do apply, since these SRs are not normally applied to frequencies identified in the Administrative Controls Chapter of the ITS. Since this change represents a presentation preference and a clarification that maintains provisions allowed in the LCO sections of the CTS, it is purely administrative.

INSERT A.12 to subsection 5.0.a, ITS 5.5

A.12 The limits in Appendix J is $< 0.60\ L_a$ and $< 0.75\ L_a$, not $\leq 0.60\ L_a$ and $\leq 0.75\ L_a$ as listed in CTS 4.6.1.1.a, 3.6.1.2.b, and 3.6.1.2, Actions a and b. Thus, the limits in ITS 5.5.12.a are reflected in accordance with Appendix J requirements.

submitting monthly reports to the Director of the NRC Office of Resource Management with a copy to the Regional Administrator. CTS 6.9.3.4 requires submitting the Core Operating Limits Report to the NRC Document Control Desk, with copies to the Regional Administrator and Resident Inspector. ITS 5.6 requires submittal of reports in accordance with 10 CFR 50.4. Requiring report submittal details in the ITS is unnecessary since this material is subject to change and such changes require a technical specification amendment. The ITS report submittal requirements have sufficient guidelines without including unnecessary details. Therefore, this change is purely administrative and is acceptable.

[A.3 ~~Below threshold for discussion.]~~ not significant

A.4 CTS 6.9.1.5.c requires an annual report of events where the specific ~~De~~activity analysis shows the primary coolant exceeded the limits of CTS 3.4.5. The ITS does not include this requirement. This reporting requirement is included in the Licensee Event Reporting requirements for reporting fuel cladding failures that exceed expected values or are caused by unexpected factors such as seriously degraded fuel cladding. Since the criteria of 10 CFR 50.73 cover the area of degraded boundaries that necessitate reporting, any minor differences from the CTS requirements are negligible with regard to safety. For all practical purposes, the CTS reporting requirement duplicates the 10 CFR 50.73 reporting requirement. Therefore, this deletion is purely administrative and is acceptable.

[A.5 ~~Below threshold for discussion.~~] not significant

A.6 CTS 6.9.3.1 provides requirements for the Core Operating Limits Report (COLR) and CTS 6.9.3.1.a specifies that limits be established for the AVERAGE PLANAR LINEAR HEAT GENERATION RATES (APLHGR) for Specifications 3.2.1 and 3.4.1. ITS LCO 3.4.1 no longer contains APLHGR limits but just references the APLHGR LCO (3.2.1). Therefore, this reference to LCO 3.4.1 is not needed.

In addition, ITS 5.6.5.a.4 adds the power-to-flow map for ITS 3.4.1 as part of the Core Operating Limits Report, since the power-to-flow map for ITS 3.4.1 is being moved to the COLR. Since these changes are just referencing changes with no change in applicable requirements, they are purely administrative and are acceptable.

A.7 Another name for a new type of pocket dosimeter currently in use at WNP-2 ("electronic" dosimeter) has been provided. CTS 6.9.~~X~~.5.a allows basing the report estimates of dose assignments for various duty functions on pocket dosimeters, thermoluminescent dosimeters, or film badge measurements. WNP-2 now uses an electronic dosimeter. Therefore, ITS 5.6.1 specifically adds electronic dosimeter to the list of acceptable methods. Since this change does not change the reporting requirements but only adds another means of measuring dose, it is a purely administrative change and is acceptable.

5.7 High Radiation Area

There are no significant administrative changes to the CTS associated with ITS 5.7.

See INSERT A.1 for CTS 6.7

The preceding changes to CTS Chapter 6.0 result in limits that are unchanged from the current requirements cited. In some cases, these changes result in a clearer presentation of the intent of current requirements. Accordingly, these changes are purely administrative. Therefore, they are acceptable.

b. Less Restrictive Requirements

The licensee, in electing to implement the specifications of STS Chapter 5.0, proposed a number of less restrictive requirements than are allowed by CTS Chapter 6.0. These requirements are described in the following:

5.1 Responsibility

L.1 CTS 6.2.2, Table 6.2.2-1, TABLE NOTATION, specifies that when the Shift Manager leaves the control room while the unit is in OPERATIONAL CONDITION 1, 2, or 3, an individual with a valid Senior Reactor Operator license (SRO) other than the Shift Technical Advisor (STA) shall be designated to assume the control command function. The ITS changes this provision to allow the STA to fulfill the control room command function provided the individual has an active SRO license. The CTS excluded the STA because the STA position was formerly not a member of the Operations Department. Since approving the CTS requirement, the Operations Department assumed responsibility for the STA position. Therefore, the STA is appropriately qualified to fulfill the control room command function provided the STA holds an active SRO license. This change conforms to the STS format and is acceptable.

5.2 Organization

MOVED TO FSAR 13.1 / 50.54

LA.1 CTS 6.2.1.e specifies that the organization responsible for the overall quality assurance functions shall report to the Assistant Managing Director, Operations. This requirement is being moved to the Quality Assurance Program description in the FSAR, where it currently resides. This level of detail for a specific department is not necessary in TS. ITS 5.2.1.a adequately addresses the reporting requirements for onsite and offsite organizations, including the quality assurance function. These requirements, under ~~the control of the Quality Assurance Program (which implements 10 CFR 50.54 and 10 CFR 50 Appendix B) will be controlled by the provisions of 10 CFR 50.54(a~~). This change is change conforms to the STS and is acceptable.

LA.2 CTS 6.2.2.a specifies a minimum shift crew size and references Table 6.2.2-1 for crew composition. The ITS removes the crew size requirement and deletes the table. The FSAR (Section 13.1) includes the details of the minimum shift crew requirements in the CTS Table 6.2.2-1. Also, 10 CFR 50.54 (k), (l), and (m) contain the minimum shift crew requirements for licensed operators and senior operators, and repeating them in the

INSERT A.1 to subsection 5.0.a, CTS 6.7

CTS 6.7 Safety Limit Violation

A.1 The Safety Limit Violation requirements of CTS 6.7.1, as they relate to NRC notification (portions of CTS 6.7.1.a, 6.7.1.b, and 6.7.1.c) and permission to restart the unit (CTS 6.7.1.d) are duplicative of requirements located in 10 CFR 50.36(c)(1). These requirements are not in the ITS since WNP-2 is required by the WNP-2 Operating License to comply with 10 CFR 50. Therefore, the removal of these requirements from the ITS is considered administrative.

TS is unnecessary. The ITS transfers the minimum shift crew requirements for non-licensed plant equipment operators from CTS Table 6.2.2-1 to ITS 5.2.2.a. In addition, ITS 5.1.2 contains requirements for the control room command function, ITS 5.2.2.c contains minimum requirements for licensed Reactor Operators and Senior Operators in the control room, and ITS 5.2.2.g contains STA requirements. Moving the details of the minimum shift crew requirements to the FSAR is acceptable considering the controls provided by regulations, the remaining requirements in the ITS, and the 50.59 change control process. This change conforms to the STS and is acceptable.

LA.3 CTS 6.2.2.c specifies that at least one fully qualified chemistry technician shall be on site in OPERATIONAL CONDITION 1, 2, or 3. The ITS deletes this requirement and moves it to plant procedures. The requirements for RCS chemistry (CTS 3/4.4.4) are being relocated to plant procedures in accordance with the Commission's Final Policy Statement and 10 CFR 50.36. Therefore, the chemistry personnel requirements are also being moved from TS to plant procedures, since they do not have a direct impact of plant safety.

In addition, the ~~Note~~ Footnote "#" to CTS 6.2.2.c specifies that the fire brigade composition may be less than the minimum under certain conditions. This requirement is deleted from the ITS and is being moved to the Fire Protection Plan. The Fire Protection requirements have already been moved to the Fire Protection Plan, in accordance with Generic Letter 88-12, "Removal of Fire Protection Requirements from Technical Specifications." Therefore, it is unnecessary to include the fire brigade provision (to be below the minimum composition requirement for a period of up to 2 hours to accommodate unexpected absence) in the ITS.

These less restrictive changes conform to the STS and are acceptable.

LA.4 CTS 6.2.2.d specifies that all CORE ALTERATIONS shall be observed and directly supervised by either a licensed Senior Operator or licensed Senior Operator Limited to Fuel Handling. This requirement is being moved to plant procedures. 10 CFR 50.54 (m)(2)(iv) contains this requirement and, therefore, it is not necessary to retain duplicative requirements in the TS. This change conforms to the STS and is acceptable.

LA.5 CTS 6.2.2.f specifies that the Shift Managers and Control Room Supervisors hold a senior operator license and that Reactor Operators hold either a senior reactor operator license or a reactor operator license. The details of the operator license requirements for these positions is being moved to the FSAR, where they currently reside (Section 13.1). This level of detail is unnecessary in the ITS to ensure plant safety. The minimum shift crew requirements in 10 CFR 50.54 (k), (l), and (m) and the qualification requirements in ITS 5.3, "Unit Staff Requirements," adequately address unit staff qualifications. These changes conform to the STS and are acceptable.

LA.6 CTS 6.2.3 provides administrative controls for the Nuclear Safety

Assurance Division (NSAD). These requirements are being moved to the Quality Assurance Program description in the FSAR. The NSAD performs independent safety reviews. Since the NSAD provides after-the-fact recommendations to improve safety, this organization is unnecessary to ensure safe operation. The NSAD requirements, under the control of the Quality Assurance Program (which implements 10 CFR 50.54 and 10 CFR 50 Appendix B) will be controlled by the provisions of 10 CFR 50.54(a). Therefore, including the NSAD requirements in the ITS is not necessary. This change conforms to the STS and is acceptable.

L.1 CTS 6.2.2.e specifies that the objective shall be to have operating personnel work a normal 8-hour day, 40-hour week while the unit is operating. ITS 5.2.2.e replaces this with a nominal 40 hour week requirement. The change eliminates reference to an 8-hour day, thereby providing for a more flexible shift schedule with normal shift durations of up to 12 hours. Other provisions of the TS regarding overtime including maximum shift lengths and minimum break time between work periods remain unchanged. Although the STS specifies the length of the workday, this change does not change the intent of the guidance in Generic Letter 82-16 with regards to the number of hours worked per work week and the remaining requirements will continue to ensure that routine use of heavy overtime will not be used. This change conforms to the STS and is acceptable.

5.3 Unit Staff Qualifications

LA.1 CTS 6.3.1 specifies that licensed Operators and Senior Operators shall meet or exceed the minimum qualifications of the supplemental requirements specified tin Sections A and C of Enclosure 1 of the March 28, 1980 NRC letter to all licensees. These qualification requirements have been updated to reflect current regulations for licensed operators (i.e., Appendix A and the 1980 NRC letter have been incorporated into the current revision of 10 CFR Part 55), which are more restrictive than the CTS requirements. However, since regulations are already required, they need not be repeated in the ITS. Therefore, the details of operator qualification requirements are being moved to the FSAR. This change conforms to the STS and is acceptable.

5.4 Procedures

including temporary changes

LA.1 CTS 6.8.2 and 6.8.3 specify that the Plant Operations Committee (POC) shall review, and the Plant Manager approve, each procedure specified in CTS 6.8.1 and changes thereto. These procedure review and approval details are being moved to the Quality Assurance Program description in the FSAR. 10 CFR 50, Appendix B, Criterion II and Criterion V, ANSI N18.7-1976, and ANSI N45.2-1971 contain the requirements for establishing, maintaining, and implementing procedures related to activities affecting quality. In accordance with these requirements, the Quality Assurance Program description in the FSAR includes adequate detail with respect to the administrative control of procedures related to activities affecting quality and nuclear safety. In addition, changes to the Quality Assurance Program description in the FSAR will be

controlled by the provisions of 10 CFR 50.54(a) to ensure that proper reviews affecting safe operation of the plant are performed. This change conforms to the STS and is acceptable.

5.5 Programs and Manuals

LA.1 CTS 6.8.4.b provides controls for the in-plant radiation monitoring program. The details contained in CTS 6.8.4.b are being removed from the TS and will be retained in the FSAR, where they currently reside (FSAR, Appendix B). This program is required by the WNP-2 commitment to NUREG-0737, Item III.D.3.3, as stated in the FSAR, Appendix B. This program contains controls to ensure the capability to accurately determine the airborne iodine concentration in vital areas under accident conditions. This program is designed to minimize radiation exposure to plant personnel post-accident and has no impact on nuclear safety or the health and safety of the public. The training aspect of the program is accomplished as part of the continual training program for personnel in the cognizant organizations, as well as during the training for those individuals responsible for implementing the Radiological Emergency Planning procedures. Provisions for monitoring and performing maintenance of the sampling and analysis equipment are addressed in chemistry and radiation protection procedures. Changes to the FSAR are controlled by the provisions of 10 CFR 50.59. This change conforms to the STS and is acceptable.

LA.2 CTS 6.8.4.e provides administrative controls for the Radiological Environmental Monitoring Program. The Radiological Environmental Monitoring Program details in CTS 6.8.4.e are being moved to the Offsite Dose Calculation Manual (ODCM). This program is a redundant verification of the effectiveness of the effluent monitoring program contained in the ODCM and specified in the Administrative Controls Chapter of the ITS (ITS 5.5.1). The requirements being moved have no impact on nuclear safety of the plant. ITS 5.5.1 requires the ODCM to contain the radioactive effluent controls and radiological environmental monitoring activities specified in CTS 6.8.4.e. Changes to the ODCM will be controlled by the provisions of ITS 5.5.1.c.

LA.3 CTS 5.7.1 specifies requirements for component cyclic or transients limits. ~~Details of~~ the list of (TABLE 5.7.1-1) of the components governed by this Specification ~~are~~ is being relocated to the FSAR. Inclusion of these details in TS is not necessary to ensure safe operation of the plant. The requirement to monitor the cyclic and transient occurrences is maintained as a program in ITS 5.5.5. Changes to the FSAR are controlled by the provisions of 10 CFR 50.59.

LA.4 CTS 4.0.5 specifies requirements for inservice inspection (ISI) of ASME Code Class 1, 2, & 3 components. The details in CTS 4.0.5 related to ISI are being moved to the licensee's ISI Program. The ISI Program is required by 10 CFR 50.55a to be performed in accordance with ASME Section XI. Compliance with 10 CFR 50.55a is required by the WNP-2 Operating License. The WNP-2 ISI Program implements the applicable provisions of ASME Section XI. Generic Letter 88-01, "NRC Position on

IGSCC in BWR Austenitic Stainless Steel Piping," provides an ISI Program for piping in accordance with the NRC staff positions on schedule, methods, personnel, and sample expansion or in accordance with alternate measures approved by the NRC staff. WNP-2 commitments to Generic Letter 88-01 are documented in letters to the NRC dated July 26, 1988, and July 20, 1989. Regulations and WNP-2 commitments to the NRC provide the necessary programmatic requirements for ISI and their inclusion in the TS is unnecessary. Changes to the ISI Program will be controlled by the provisions of 10 CFR 50.55a. ~~[Changes are not controlled by 50.59, but by 50.55a]~~

Part of LA.4 in submittal

LA.5 CTS 4.0.5.b specifies details of the Inservice Testing (IST) program. Details of the Inservice Testing Program (IST) in the CTS are being moved to the licensee's IST Program. The CTS requirements are duplicative of requirements in 10 CFR 50.55a, which requires the implementation of ASME, Section XI and applicable addenda, for inservice testing of ASME Code Class 1, 2, and 3 pumps and valves. Compliance with 10 CFR 50.55a is required by the WNP-2 Operating License. Therefore, it is not necessary to retain the CTS provisions which are being moved in the ITS. Changes to the IST program will be controlled by the provisions of 10 CFR 50.59.

In addition, the reference to ASME Code Class 1, 2, and 3 "components" has been changed to "pumps and valves" for clarity. Pumps and valves are the only components related to the Inservice Testing Program. This change is in accordance with a generic change to the STS under consideration by the NRC staff and is acceptable.

LA.6 CTS 4.6.5.3 specifies SRs for the Standby Gas Treatment System. CTS 4.7.2 specifies SRs for Control Room Emergency Filtration System. Specifically, CTS 4.6.5.3.b.2, 4.6.5.3.c, 4.7.2.c.2, and 4.7.2.~~3~~d require verifying within 31 days after removal that a laboratory analysis of a representative carbon sample meets regulatory criteria. Details of the methods for implementing this specification are being moved to the procedures that implement the VFTP. The requirements of Specification 5.5.7 are adequate to ensure the required ventilation filter testing is performed. SR 3.6.4.3.2 of Specification 3.6.4.3, "Standby Gas Treatment (SGT) System," which requires ventilation filter testing of the SGT System to be performed in accordance with the VFTP, and SR 3.7.~~4~~.3.2 of Specification 3.7.3, "Control Room Emergency Filtration (CREF) System," which requires ventilation filter testing of the CREF System to be performed in accordance with the VFTP, and the requirements of Specification 5.5.7 provide adequate regulatory controls over the testing requirements being moved. As a result, the requirements being moved are not required to be included in the TS to ensure required ventilation filter testing is adequately performed. Changes to the moved requirements in procedures will be controlled by the provisions of 10 CFR 50.59. This change corresponds to change type 3 as defined in the general discussion of less restrictive requirements at the beginning of Part III of this safety evaluation.

LA.7 CTS 3/4.11.1.4 and 3/4.11.2.6 specify requirements for liquid holdup

tanks and explosive gas mixture~~s~~, respectively. The details for implementing the requirements (Applicability, Actions, SR details) contained in CTS 3/4.11.1.4 and CTS 3/4.11.2.6 are being moved to procedures. The requirements of ITS 5.5.8 are adequate to ensure the quantity of radioactivity in outside liquid storage tanks is maintained within limits and explosive gas mixture~~s~~ in the main condenser offgas treatment system are maintained within limits. ITS 5.5.8 provides regulatory control over the limitations and surveillances being moved. As a result, inclusion of these requirements in the TS in unnecessary to ensure the quantity of radioactivity in outside liquid storage tanks is maintained within limits and explosive gas mixtures in the main condenser offgas treatment system are maintained within limits. Changes to the relocated requirements in procedures will be controlled by the provisions of 10 CFR 50.59.

LA.8 CTS 4.8.1.1.2.~~b~~ c and d specifi~~es~~ ASTM testing standards and acceptance criteria for diesel fuel oil. The references to ASTM Standards (which specify certain diesel fuel oil testing) and acceptance criteria for diesel fuel oil testing are being moved to the Bases of ITS 3.8.3, "Diesel Fuel Oil, Lube Oil, and Starting Air," describing SR 3.8.3.3. The requirements of ITS 5.5.9 and SR 3.8.3.3 are adequate to ensure the required diesel fuel oil testing is performed. SR 3.8.3.3 requires diesel fuel oil testing to be performed in accordance with the Diesel Fuel Oil Testing Program and the requirements of ITS 5.5.9 provide regulatory controls over the CTS testing requirements being moved. As a result, inclusion of these requirements in TS is not necessary to ensure required diesel fuel oil testing is performed. Changes to the Bases will be controlled by the provisions of the Bases Control Program described in Chapter 5.0 of the ITS.

LD.1 The 18-month Frequencies of the surveillances in CTS 4.6.5.3, 4.7.2, and 6.8.4.a.2 retained in ITS 5.5.7 are changed to 24 months. These changes are acceptable for the reasons given in the section entitled "Surveillance Interval Extension from 18 to 24 Months" in the general discussion of less restrictive requirements at the beginning of Part III of this safety evaluation.

L.1 CTS 4.6.5.3 and 4.7.2 specify the standby gas treatment (SGT) and control room emergency filtration (CREF) systems surveillance requirements, respectively. ITS 5.5.7 specifies requirements for the Ventilation Filter Testing Program. The CTS requirements for in-place HEPA filter testing of the SGT and CREF systems reference Regulatory Position C.5.a and C.5.c of Regulatory Guide 1.52, Revision 2, March 1978. ITS 5.5.7.a references Regulatory Guide 1.52, Revision 2, Section C.5.c and ANSI N510-1989, Section 10. The change allows the newest ASME N510 standard to be used (i.e., the 1989 version). The 1989 version allows the DOP test to use a suitable alternative to DOP. The suitable alternative chemical will still ensure the HEPA filters show a penetration and system bypass < 0.05%, and is equivalent to DOP. Therefore, this change is considered acceptable in ensuring HEPA filter OPERABILITY. This change conforms to the STS and is acceptable.

.c & .d

L.2 CTS 4.8.1.1.2.~~b~~ specif~~ies~~y ASTM testing standards and acceptance criteria for diesel fuel oil. ITS 5.5.9 provides requirements for the Diesel Fuel Oil Testing Program and the diesel fuel oil sampling requirements have been modified by requiring the tests to be conducted using the latest approved versions of the applicable ASTM Standards. These newer Standards provide a better indication of the present fuel oil conditions. In addition, since ASTM D975-94 provides methods for sulphur analysis (currently required ASTM D975-81 does not specify sulphur testing Standards), which include ASTM D1552 and ASTM D2622, these two specific ASTM Standards are not required to be specifically called out and have been deleted. This change conforms to the STS and is acceptable.

5.6 Reporting Requirements

LA.1 CTS 6.9.1 provides requirements for preparation and submission of a startup report. The details associated with CTS 6.9.1.1, 6.9.1.2, and 6.9.1.3 are being moved to the FSAR. The Startup Report is a summary of plant startup and power escalation testing following receipt of the Operating License, increase in licensed power level, installation of nuclear fuel with a different design or manufacturer than the current fuel, and modifications that may have significantly altered the nuclear, thermal, or hydraulic performance of the unit. The report provides the NRC a mechanism to review the appropriateness of licensee activities after-the-fact, but provides no regulatory authority once the report is submitted (i.e., no requirement for NRC approval). The Quality Assurance requirements of 10 CFR 50, Appendix B, and the Startup Test Program provisions contained in the FSAR provide assurance the activities in CTS 6.9.1 will be adequately performed and that appropriate corrective actions, if required, are taken. Given that the report was required to be provided to the Commission no sooner than 90 days following completion of the respective milestone, report completion and submittal was clearly not necessary to ensure operation of the facility in a safe manner for the interval between completion of the startup testing and submittal of the report. Additionally, given there is no requirement for the Commission to approve the report, the Startup Report is not necessary to ensure operation of the facility in a safe manner. Based on these considerations, the Startup Report is being moved from TS to the FSAR. Changes to the FSAR are controlled by the provisions of 10 CFR 50.59. This change conforms to the STS and is acceptable.

L.1 CTS 6.9.1.4 requires annual reports before March 1 of each year. CTS 6.9.1.10 requires submitting the Annual Radiological Environmental Operating Report before May 1 of each year. ITS 5.6.1 requires the Occupational Radiation Exposure Report by April 30 of each year. ITS 5.6.2 requires the Annual Radiological Environmental Operating Report by May 15 of each year. This change relaxes the requirement for submitting these reports. Given that the report is still required and covers the previous calendar year, report completion and submittal by a certain date is not needed to ensure safe operation for the interval for any period. Additionally, there is no requirement that the NRC approve the

report. Therefore, this change has no impact on safe plant operation. This change conforms to the STS and is acceptable.

5.7 High Radiation Area

L.1 CTS 6.12 provides high radiation area access control alternatives pursuant to 10 CFR 20.203(c)(2) (revised 10 CFR 20.1601(c)). ITS 5.7 is significantly revised as a result of the changes to 10 CFR Part 20, the guidance provided in Regulatory Guide 8.38 (Control of Access to High and Very High Radiation Areas in Nuclear Power Plants), and current industry technology in controlling access to high radiation areas. The changes include a capping dose rate to differentiate a high radiation area from a very high radiation area, additional requirements for groups entering high radiation areas, and clarification of the need for communication and control of workers in high radiation areas. This change provides acceptable alternate methods for controlling access to high radiation areas. As a result, this change will not decrease the ability to provide control of exposures from external sources in restricted areas. These changes are in conformance with the staff's current proposed changes to the STS for high radiation areas, except as identified in Section 5.0.d of this safety evaluation, and are acceptable.

CTS 6.4 Training

LA.1 CTS 6.4.1 contains requirements on training and replacement training for the unit staff. The details contained in CTS 6.4.1 are being moved to the FSAR. These training provisions are adequately addressed by other ITS Chapter 5.0 provisions and by regulations. ITS 5.3, "Unit Staff Qualifications," provides requirements to ensure adequate, competent staff in accordance with ANSI/ANS N18.1-1977 and Regulatory Guide 1.8, Revision 1-R, 1977. ITS 5.2 details unit staff requirements. ITS 5.2.2.a, 5.2.2.b, and 10 CFR 50.54 state minimum shift crew requirements. Training and requalification of licensed positions is contained in 10 CFR 50.55. Therefore, inclusion of the CTS training requirements in the TS is not necessary to ensure that training programs continue to be properly maintained in accordance with WNP-2 commitments and regulations. Changes to the FSAR are controlled by the provisions of 10 CFR 50.59. This change conforms to the STS and is acceptable.

CTS 6.5 Review and Audit

LA.1 CTS 6.5 describes the review and audit activities performed by the Plant Operations Committee (POC) and Corporate Nuclear Safety Review Board (CNSRB). The details of CTS 6.5 are being moved to the WNP-2 Quality Assurance Program description in the FSAR. The review and audit activities performed by the POC and CNSRB are required by ANSI N18.7-1976. Additional audit requirements are contained in 10 CFR 50.54(p); 10 CFR 50.54(t); 10 CFR 50, Appendix B, Criterion XVIII; 10 CFR 73, and ANSI N45.2-1971. Thus, inclusion of the provisions of CTS 6.5 in TS is not necessary to ensure safe operation of the facility, given the existence of these redundant requirements. Changes to the Quality

Assurance Program description in the FSAR will be controlled by the provisions of 10 CFR 50.54(a). This change conforms to the STS and is acceptable.

CTS 6.6 Reportable Event Action

LA.1 CTS 6.6.1.a contains Reportable Event notification requirements. These requirements are being moved to plant procedures. The requirements of CTS 6.6.1.a for Reportable Event Action are contained in 10 CFR 50.73. Since 10 CFR 50.73 requires these notifications and reports following the event and since there is no requirement for the Commission to approve the notifications or reports, their inclusion in TS is not necessary to ensure safe facility operation.

LA.2 CTS 6.6.1.b contains requirements for Reportable Events reviews by the POC and submitting review to the CNSRB and the Assistant Managing Director Operations. These requirements are being moved to the Quality Assurance Program description in the FSAR. Given that these reviews and submittal of results are required following the event without a specified completion time, the inclusion of these requirements in TS is not necessary to ensure operation of the facility in a safe manner. Changes to the Quality Assurance Program description in the FSAR will be controlled by the provisions of 10 CFR 50.54(a).

CTS 6.7 - LA.1 (copy LA.2 from 2.0, page 2)

CTS 6.10 Records Retention

LA.1 CTS 6.10 contains the requirement for retaining records related to activities affecting quality. The details contained in CTS 6.10 are being relocated to the Quality Assurance Program description in the FSAR. The requirement for retention of records related to activities affecting quality is contained in 10 CFR 50, Appendix B, Criterion XVII and other sections of 10 CFR 50 that are applicable to WNP-2 such as 10 CFR 50.71 and 10 CFR 73. These record retention requirements ensure a record of certain activities important to plant safety, but the records themselves do not ensure safe operation of the facility since review of these records is a post-compliance review. Movement of these CTS provisions to the Quality Assurance Program description in the FSAR will provide adequate controls over record retention requirements for WNP-2. The Quality Assurance Program description in the FSAR will be revised to contain adequate detail with respect to these requirements to ensure recordkeeping is implemented in an appropriate manner. Changes to the Quality Assurance Program description in the FSAR are controlled by the provisions of 10 CFR 50.54(a).

CTS 6.11 Radiation Protection Program

LA.1 CTS 6.11 provides requirements for procedures for personnel radiation protection consistent with 10 CFR Part 20. These requirements are being moved to the FSAR. These required procedures relate to nuclear plant personnel radiation protection and have no impact on nuclear safety or the public health and safety. 10 CFR 20.1101(b) contains requirements mandating procedures to implement 10 CFR Part 20. 10 CFR 20.1101(c)

[illegible]

requires periodic review of these procedures. Since the regulations contain the CTS requirements and the Operating License requires compliance with 10 CFR Part 20, there is no need to repeat the requirements in the ITS. Changes to the FSAR are controlled by the provisions of 10 CFR 50.59.

CTS 6.13 Process Control Program (PCP)

LA.1 CTS 6.13 and 1.33 contain the PROCESS CONTROL PROGRAM (PCP) requirements and definition, respectively. These requirements and definition are being moved to the FSAR. The PCP implements the requirements of 10 CFR 20, 10 CFR 61, and 10 CFR 71. The WNP-2 Operating License requires compliance with these regulations. As such, moving the PCP description from the TS does not affect safe facility operation.

The above less restrictive requirements have been reviewed by the staff and have been found to be acceptable because they do not present a significant safety question in the operation of the plant. The TS requirements that remain are consistent with current licensing practices, operating experience and plant accident and transient analyses, and provide reasonable assurance that the public health and safety will be protected.

c. More Restrictive Requirements

The licensee, in electing to implement the specifications of STS Chapter 5.0, proposed one more restrictive condition than is required by CTS Chapter 6.0. This condition is described in the following:

5.1 Responsibility

M.1 ITS 5.1.1 includes new responsibilities for the Plant General Manager not included in the CTS. This change adds responsibilities of the Plant Manager, to approve, prior to implementation, each proposed test, experiment, and modification to systems or equipment that affect nuclear safety. These responsibilities are in addition to those in the CTS, and thus, represent a more restrictive change. This change provides additional assurance that the Plant Manager is aware of all aspects of plant activities that affect nuclear safety and is, therefore, acceptable.

5.2 Organization

There are no more restrictive changes to the CTS associated with ITS 5.2.

5.3 Unit Staff Qualifications

There are no more restrictive changes to the CTS associated with ITS 5.3.

5.4 Procedures

M.1 ITS 5.4.1.e requires written procedures for all programs specified in ITS 5.5. ITS 5.5 contains ~~eleven~~ 12 programs that require implementing and

maintaining procedures. No comparable requirement exists in the CTS. This is an additional administrative control which will ensure procedures are established, implemented, and maintained for all programs specified in ITS 5.5.

5.5 Programs and Manuals

M.1 ITS 5.5.10 and 5.5.11 are new programs added to the ITS. These programs are:

5.5.10 Technical Specification (TS) Bases Control Program
5.5.11 Safety Function Determination Program (SFDP)

The ITS adds the Safety Function Determination Program to support implementing the support system OPERABILITY characteristics of the ITS. The ITS adds the TS Bases Control Program to specifically delineate the appropriate methods and reviews necessary for a change to the ITS Bases. These additions are enhancements to the CTS, and are acceptable.

5.6 Reporting Requirements

M.1 CTS 6.9.1.5.b requires reporting all challenges to the main steam safety/ ~~and~~ relief valves annually. ITS 5.6.4 requires these reports monthly, by the 15th of the following month. The report on a monthly basis is more restrictive reporting requirement.

M.2 CTS 6.9.1.10 specifies reporting requirements for the Annual Radiological Environmental Operating Report. ITS 5.6.2 adds details to these requirements. These details ensure that all reports provide similar content and format for comparison with other plants and with prior reports. Since this information is not in the CTS, its addition is a more restrictive change. This change conforms to the STS and is acceptable.

~~[M.3 Withdrawn.]~~

5.7 High Radiation Area

There are no more restrictive changes to the CTS associated with ITS 5.7.

The staff has reviewed these more restrictive requirements and concludes that they result in enhancements to the CTS. Therefore, these more restrictive requirements are acceptable.

d. Significant Differences from the STS (1434)

The licensee, in electing to adopt the specifications of STS Chapter 5.0, proposed the following differences between the ITS and the STS.

JFD 4. STS 5.2.2.c provides an exception to the requirements for the minimum shift crew composition specified in "10 CFR 50.54(m)(2)(i) and 5.2.2.a and 5.2.2.g." Since 5.5.2.a is a Specification, not a CFR requirement,

the word "Specification" has been added to avoid confusion. Also, the reference to Specification 5.2.2.g has been deleted since it only describes the STA qualifications, not that an STA is part of the shift crew composition or when the STA is required.

JFO 6. STS 5.2.2.e provides requirements on overtime limits. These requirements have been revised to delete the reference to the length of the work day ("[8 or 12] hour day") in ITS 5.2.2.e. However, the nominal 40 hour work week requirement will still be maintained. This wording is being deleted in order to provide more flexibility in shift scheduling to allow shifts up to 12 hours. The proposed change does not change the intent of the guidance of Generic Letter 82-16,"NUREG-0737 Technical Specifications," dated September 20, 1982, with regards to the number of hours worked per week, and will continue to ensure that routine use of heavy overtime will not be used.

" 7. STS 5.2.2.g specifies qualifications for the STA and states that the STA provides advisory technical support to the Shift Supervisor. In reality, the STA provides support to all members of the shift crew, including the Shift Manager (i.e., the NUREG Shift Supervisor position). In addition, the STA position could be filled by the Shift Manager (provided the Shift Manager meets the appropriate requirements). To preclude confusion that could arise when the STA position is filled by the Shift Manager (e.g., can the STA provide advice to himself/herself as the Shift Manager), the statement as to who the STA provides advice to has been deleted.

" 9. STS 5.4.1.c provides the requirement for establishing, implementing, and maintaining procedures for quality assurance for effluent and environmental monitoring. ITS 5.4.1.c clarifies this requirement to apply to a quality assurance program for radioactive effluent and radiological environmental monitoring, to ensure this program is not confused with the environmental monitoring program.

" 11. STS 5.5.2.b specifies integrated leak test requirements under the program for primary coolant sources outside containment. The Surveillance Frequency for these testing requirements has been extended from a refueling cycle interval in the STS to 24 months in ITS 5.5.2.b to be consistent with the proposed "refueling cycle interval" Surveillance Frequency in the WNP-2 ITS LCO Sections. The normal "refueling cycle intervals" (i.e., 18 months) have been extended to 24 months in the WNP-2 ITS, thus this requirement, which is essentially a Surveillance Requirement, has also been extended. In addition, since normal Surveillance Requirements in the LCO Sections allow a 25% extension of the Frequency per proposed SR 3.0.2 (current LCO 4.0.2), this allowance has also been added for this Surveillance Requirement (since SR 3.0.2 only applies to the LCO Sections (i.e., LCO Sections 3.1 through 3.10).

" 12. STS 5.5.3 specifies program requirements for post accident sampling and states that the program provides controls that ensure the capability to obtain and analyze radioactive gas samples under accident conditions.

The term "radioactive gases" has been changed to "radioactive iodines" in ITS 5.5.3, consistent with the WNP-2 current licensing basis.

JFD

13. ~~[OPEN ITEM - Revisions to ITS 5.6.1, 5.6.3, and additional revisions to 5.7 are needed to conform to the staff's position on TS related to the Part 20 change.]~~ STS 5.5.4, ~~5.6.1~~, and 5.6.3 contain requirements affected by the most recent revision to 10 CFR Part 20. Changes have been made in the equivalent ITS specifications to comply with the new 10 CFR Part 20 requirements.

" 14. STS 5.5.4 specifies requirements for the Radioactive Effluent Controls Program. The ITS adds Specifications 5.5.4.k to include limitations on venting and purging of the primary containment through the Standby Gas Treatment System to maintain releases as low as reasonably achievable. This requirement has been added since WNP-2 has a Mark II containment and it is consistent with current licensing basis.

" 16. STS 5.5.7 specifies requirements for the Inservice Testing (IST) Program. The program description has been modified in ITS 5.5.6 to state that the IST Program provides controls for ASME Code Class 1, 2, and 3 "pumps and valves," in place of the STS wording of "components including applicable supports." 10 CFR 50.55a(f) provides the regulatory requirements for an IST Program. It specifies that ASME Code Class 1, 2, and 3 pumps and valves are the only components covered by an IST Program. 10 CFR 50.55a(g) provides regulatory requirements for an Inservice Inspection (ISI) Program. It specifies that ASME Code Class 1, 2, and 3 components (including supports) are covered by the ISI Program, and that pumps and valves are covered by the IST Program in 10 CFR 50.55a(f). Therefore, the "applicable support" requirements has been deleted and the components the IST Program applies to (i.e., pumps and valves) have been added for clarity. In addition, the statement "The program shall include the following:" has been deleted since not all the statements that follow are really part of the program requirements.

" 17. The words of the Ventilation Filter Testing Program (VFTP) in STS 5.5.8 (ITS 5.5.7) and the Diesel Fuel Oil Testing Program in STS 5.5.10 (ITS 5.5.9) have been modified to be consistent with the purpose statements of the other programs in this Chapter. The current words require a program to be established. These current words imply that a program does not exist and this statement is directing the utility to establish the program. However, when ITS is implemented, a program will already have been established. The purpose statement needs to say that the applicable program establishes certain requirements (e.g., testing of ESF filter ventilation systems). The other ITS programs (e.g., IST Program, Specification 5.5.6) provide the proper words, assuming that the program is already established. Therefore, these changes are bringing the VFTP and the Diesel Fuel Oil Testing Program in line with the words of the other programs.

" 18. STS 5.5.8 & ITS 5.5.7 provide requirements for the Ventilation Filter

Testing Program. In the ITS, the WNP-2 current licensing basis Surveillance Frequencies have been provided in place of a reference to the frequencies specified in a particular Regulatory Guide, as outlined in the STS.

JFD 19. The temperature requirement specified in STS 5.5.8.c for demonstrating methyl iodide penetration of a sample of the charcoal adsorber has been deleted in ITS 5.5.7.c to be consistent with current licensing basis. In addition, since the temperature requirement has been deleted, the relative humidity requirement has been editorially changed to be consistent with the words used in ITS 5.5.7.a, 5.5.7.b, and 5.5.7.d.

" 20. ~~[OPEN ITEM — Confirming applicability of references with technical staff.]~~ STS 5.5.8.d and ITS 5.5.7.d requires demonstration that the pressure drop across the HEPA filters and charcoal adsorbers is less than the specified pressure drop when tested at the specified system flow rate. The methods referenced in the STS for performing the test, Regulatory Guide 1.52 and ASME N510-1989, do not provide the methods for performing this test. As a result, these test method references have been deleted. In addition, WNP-2 does not currently require prefilter pressure drop tests, thus, the prefilter requirement has also been deleted consistent with the current licensing basis.

" 21. STS 5.5.9 and ITS 5.5.8 provide the requirements for the Explosive Gas and Storage Tank Radioactivity Monitoring Program. Certain provisions in the STS program description for waste gas systems that are applicable to PWRs only and not to WNP-2 have been deleted. In addition, quantities of radioactivity contained in all outdoor liquid radwaste tanks meeting the conditions of ITS 5.5.8 are determined in accordance with the specified surveillance program in ITS 5.5.8.b. Therefore, the sentence is the STS specifying a method to determine liquid radwaste quantities is not necessary and has been deleted.

" 22. STS 5.5.9.a specifies that the Explosive Gas and Storage Tank Radioactivity Monitoring Program shall include the limits for concentrations of hydrogen and oxygen in the Waste Gas Holdup System (Main Condenser Offgas Treatment System at WNP-2). The requirement to limit oxygen in the Main Condenser Offgas Treatment System has been deleted in ITS 5.5.8.a consistent with current licensing basis.

" 24. ~~[OPEN ITEM — Need letter explaining what differences between Standards and procedures are.]~~ STS 5.5.10 specifies requirements for the Diesel Fuel Oil Testing Program. The existing wording that the Diesel Fuel Oil Testing Program be "in accordance with applicable ASTM Standards" has been revised to "in accordance with procedures based on applicable ASTM Standards" in ITS 5.5.9. This change provides the capability for justified variances between the ASTM Standards and the implementing procedures.

Fix in Rev C

In addition, the words "in accordance with ASTM D-2276 Method A-2 or A-3" in Specification 5.5.9.c have been deleted since they are redundant to the words in Specification 5.5.9. ~~[This reference needs to be~~

Discussed as open item

~~retained because all other requirements are keyed to ASTM 2D fuel (ASTM D-975), but the referenced test in ASTM D-2276 is for aviation fuel but is being applied to diesel fuel.]~~

JFD

25. ~~[OPEN ITEM – Translation of CLB into ITS is not clear.]~~ STS 5.5.10.a specifies requirements for the acceptability of new fuel oil for use prior to addition to storage tanks. These requirements have been modified in ITS 5.5.9.a to be consistent with the WNP-2 current licensing basis. In addition, al allowance that the provisions of SR 3.0.2 and SR 3.0.3 are applicable has been added to the Diesel Fuel Oil Testing Program, consistent with the WNP-2 current licensing basis.

27. STS 5.6.7 specifies a requirement for an EDG Failure Report. This requirement has been deleted in the ITS in accordance with the guidance of Generic Letter 94-01, "Removal of Accelerated Testing and Special Reporting Requirements for Emergency Diesel Generators," dated May 31, 1994. WNP-2 will implement a maintenance program for monitoring and maintaining diesel generator performance in accordance with the provisions of the maintenance rule and consistent with the guidance of Regulatory Guide 1.160. The commitment will be implemented within 90 days of issuance of the ITS license amendment.

30. STS 5.7, "High Radiation Area," has been significantly changed in ITS 5.7 to be consistent with the most recent revisions to 10 CFR Part 20. These changes are generally consistent with the draft NRC Generic Letter on Technical Specifications Improvements Related to Administrative Controls and Reporting Requirements. ~~[OPEN ITEM – Need explanation of when provision to use a guard vs. a locked door or gate will be used.]~~ Minor editorial changes to the guidance provided in the draft NRC Generic Letter were made for consistency with plant-specific terminology or for clarity.

SEE OPEN ITEM DISCUSSION

~~27~~ JFD 31 ITS 5.5.12, "Primary Containment Leakage Rate Testing Program," has been added to the STS Programs consistent with the WNP-2 current licensing basis. WNP-2 adopted 10 CFR Part 50, Appendix J, Option B in Amendment Number 144 dated May 8, 1996 ~~(See related discussion in Section 3.6 of this safety evaluation).~~ (NO DISCUSSION IN 3.6)

The preceding differences from STS Chapter 5.0 are consistent with the WNP-2 design and existing requirements and commitments or proposed changes found to be acceptable as discussed elsewhere in this evaluation. Therefore, these differences are acceptable.

e. Relocted Specifications

None

IV STATE CONSULTATION

In accordance with the Commission's regulations, the Washington State official was notified of the proposed issuance of the amendment. [The State official had no comments.] [The state official provided comments ... .] [This action will be performed when the staff issues the final TS.]

V ENVIRONMENTAL CONSIDERATION

Pursuant to 10 CFR 51.21, 51.32, and 51.35, an environmental assessment and finding of no significant impact was published in the Federal Register on June 26, 1996 (61 FR 33144).

Accordingly, based upon the environmental assessment, the Commission has determined that issuance of this amendment will not have a significant effect on the quality of the human environment.

VI CONCLUSION

The improved WNP-2 TS provide clearer, more readily understandable requirements to ensure safe operation of the plant. The staff concludes that they satisfy the guidance in the Commission's policy statement with regard to the content of technical specifications, and conform to the model provided in NUREG-1434 with appropriate modifications for plant-specific considerations. The staff further concludes that the improved WNP-2 TS satisfy Section 182a of the Atomic Energy Act, 10 CFR 50.36 and other applicable standards. On this basis, the staff concludes that the proposed improved WNP-2 TS are acceptable.

The staff has also reviewed the plant-specific changes to the CTS as described in this evaluation. On the basis of the evaluations described herein for each of the changes, the staff concludes that these changes are acceptable.

The Commission has concluded, based on the considerations discussed above, that: (1) there is reasonable assurance that the health and safety of the public will not be endangered by operation in the proposed manner; (2) such activities will be conducted in compliance with the Commission's regulations; and, (3) the issuance of the amendments will not be inimical to the common defense and security or to the health and safety of the public.

Attachment: Table (To Be Provided)

Principal Contributors: