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March 23, 1998
NG-98-0531

Office of Nuclear Reactor Regulation
U. S. Nuclear Regulatory Commission
Attn: Document Control Desk
Mail Station P1-37
Washington, DC 20555-0001

Subject: Duane Arnold Energy Center
Docket No: 50-331
Op. License No: DPR-49
Comments on the Draft Safety Evaluation for the Duane Arnold Energy
Center Conversion to Improved Technical Specifications (TAC No.
M97197).

Reference: Letter, R. Laufer (NRC) to L. Liu (IES), "Issuance of Draft Safety
Evaluation Regarding Proposed Conversion to Improved Standard
Technical Specifications for the Duane Arnold Energy Center (TAC No.
M97197)," March 4, 1998.

File: A-117, SPF-167

Dear Sir(s):

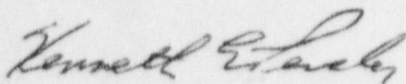
In the reference letter, the Staff requested comments on its draft Safety Evaluation (SE) for the conversion of the existing Duane Arnold Energy Center (DAEC) Technical Specifications (TS) to the Improved TS (ITS) based upon NUREG-1433. The Enclosure to this letter provides our comments in the form of "pen & ink" markups and typed inserts. We have only enclosed those pages from the SE and accompanying Tables that contain comments. Because a number of last minute changes and additions resulting from final negotiations did not get included in the referenced transmittal, we can only attest to the accuracy of the SE as reflected in the enclosed comments. We would offer to review the draft SE again, after those items have been added, if the Staff so desires.

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We are currently finalizing the clean, typed pages of the ITS and BASES for certification, as requested in the referenced letter. We expect to submit them within the next few days. That submittal will also contain the commitment requested by the draft SE regarding the final destination of those items categorized as "Relocated Items" in the original submittal, along with updated "R-DOCs," as previously requested by the Staff.

Should you have any questions regarding this matter, please contact this office.

Sincerely,



Kenneth E. Peveler
Manager, Regulatory Performance

Enclosure: IES Utilities' Comments on the Draft Safety Evaluation for the DAEC
Conversion to Improved Technical Specifications

JFF/RAB/rab

cc: R. Browning
L. Root (w/o attachment)
R. Laufer (NRC-NRR)
A. B. Beach (Region III)
NRC Resident Office
DOCU

IES Utilities' Comments
on the
Draft Safety Evaluation
for the
DAEC Conversion to
Improved Technical Specifications

DRAFT

SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION RELATED TO AMENDMENT NO. [] TO FACILITY OPERATING LICENSE DPR-49

DUANE ARNOLD ENERGY CENTER

IES UTILITIES, INC.

DOCKET NO. 50-331

I. INTRODUCTION

Duane Arnold Energy Center (DAEC) has been operating with Technical Specifications (TS) issued with the original operating license on July 31, 1970, as amended from time to time. By letter dated October 30, 1996, and as supplemented by letters dated February 25, 1997 (NG-97-0395), April 11, 1997 (NG-97-0578), June 10, 1997 (NG-97-1010), September 5, 1997 (NG-97-1598), September 30, 1997 (NG-97-1723), October 16, 1997 (NG-97-1798), November 18, 1997 (NG-97-1991), November 21, 1997 (NG-97-2008), December 8, 1997 (NG-97-2097), December 15, 1997 (NG-97-2149), January 2, 1998 (NG-98-0001), January 5, 1998 (NG-97-2158), January 12, 1998 (NG-98-0052), January 22, 1998 (NG-98-0146), January 22, 1998 (NG-98-0158), January 23, 1998 (NG-98-0127), and February 26, 1998 (NG-98-0342), IES Utilities, Inc., (the licensee) proposed to amend Appendix A of Operating License No. DPR-49 to completely revise the DAEC TS. The proposed amendment was based upon NUREG-1433, "Standard Technical Specifications - General Electric Plants," Revision 1, dated April 1995, and upon guidance in the "NRC Final Policy Statement on Technical Specification Improvements for Nuclear Power Reactors" (Final Policy Statement), published on July 22, 1993 (58 FR 39132). The overall objective of the proposed amendment, consistent with the Final Policy Statement, was to rewrite, reformat, and streamline completely the existing TS for DAEC.

Hereinafter, the proposed TS are referred to as the improved TS (ITS), the existing DAEC TS are referred to as the current TS (CTS), and the TS in NUREG-1433 are referred to as the standard TS (STS). The corresponding TS Bases are ITS Bases, CTS Bases, and STS Bases, respectively.

In addition to basing its ITS on STS and the Final Policy Statement, the licensee retained portions of the CTS as a basis for the ITS. Plant-specific issues, including design features, requirements, and operating practices, were discussed with the licensee during a series of conference calls and meetings that concluded on February 25, 1998. Based on these

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

Part III of this SE explains the NRC staff conclusion that the conversion of the DAEC CTS to those based on STS, as modified by plant-specific changes, is consistent with the DAEC current licensing basis and the requirements and guidance of the Final Policy Statement and 10 CFR 50.36.

III. EVALUATION

The NRC staff's ITS review evaluates changes to CTS that fall into five categories defined by the licensee and includes an evaluation of whether existing regulatory requirements are adequate for controlling future changes to requirements removed from the CTS and placed in licensee-controlled documents. This evaluation also discusses the NRC staff's plans for monitoring the licensee's implementation of these controls at DAEC.

In addition to the initial submittal of October 30, 1996, as supplemented, the NRC staff review identified the need for clarifications and additions to the submittal in order to establish an appropriate regulatory basis for translation of current TS requirements into ITS. Each change proposed in the amendment request is identified as either a discussion of change (DOC) to CTS or a justification for deviation from STS. The NRC staff comments were documented as requests for additional information (RAIs) and forwarded to the licensee for response by letters dated February 24, April 3, August 18, September 5, September 8, October 2, and October 3, 1997. The licensee provided written responses to the NRC staff requests in the supplemental letters listed above. The docketed letters clarified and revised the licensee basis for translating CTS requirements into ITS. The NRC staff finds that the licensee's submittals provide sufficient detail to allow the staff to reach a conclusion regarding the adequacy of the licensee's proposed changes.

The license amendment application was organized such that changes were included in each of the following CTS change categories, as appropriate: administrative changes, technical changes - less restrictive (specific), technical changes - less restrictive (generic), technical changes - more restrictive, and relocated specifications.

- (1) Administrative Changes, (A), i.e., non-technical changes in the presentation of existing requirements;
- (2) Technical Changes - More Restrictive, (M), i.e., new or additional CTS requirements;
- (3) Technical Changes - Less Restrictive (specific), (L), i.e., changes, deletions and relaxations of existing TS requirements;
- (4) Technical Changes - Less Restrictive (generic), (LA), i.e., deletion of existing TS requirements by movement of information and requirements from existing

specifications (that are otherwise being retained) to licensee-controlled documents, including TS Bases; and

- (5) Relocated Specifications, (R1) i.e., relaxations in which whole specifications (the LCO and associated action and SR) are removed from the existing TS (an NRC-controlled document) and placed in licensee-controlled documents.

These general categories of changes to the licensee's current TS requirements and STS differences may be better understood as follows:

A. Administrative Changes

Administrative (non-technical) changes are intended to incorporate human factors principles into the form and structure of the ITS so that plant operations personnel can use them more easily. These changes are editorial in nature or involve the reorganization or reformatting of CTS requirements without affecting technical content or operational restrictions. Every section of the ITS reflects this type of change. In order to ensure consistency, the NRC staff and the licensee have used STS as guidance to reformat and make other administrative changes. Among the changes proposed by the licensee and found acceptable by the NRC staff are:

- (1) providing the appropriate numbers, etc., for STS bracketed information (information that must be supplied on a plant-specific basis and that may change from plant to plant)
- (2) identifying plant-specific wording for system names, etc.
- (3) changing the wording of specification titles in STS to conform to existing plant practices
- (4) splitting up requirements currently grouped under a single current specification to more appropriate locations in two or more specifications of ITS
- (5) combining related requirements currently presented in separate specifications of the CTS into a single specification of ITS.

Table A lists the administrative changes proposed in ITS. Table A is organized by the corresponding ITS section discussion of change, and provides a summary description of the administrative change that was made, and CTS and ITS LCO references. The NRC staff reviewed all of the administrative and editorial changes proposed by the licensee and finds them acceptable, because they are compatible with the Writers Guide and STS, do not result in any substantive change in operating requirements and are consistent with the Commission's regulations.

Category VIII - Relaxation of Fuel Cycle from 18 to 24 Months

Category IX - Relaxation of Requirements Unrelated to STS Conversion (see para. G)

The following discussions address why various technical specifications within each of the nine categories of information or specific requirements are not required to be included in ITS.

Relaxation of Applicability (Category I)

Reactor operating conditions are used in CTS to define when the LCO features are required to be operable. CTS applicabilities can be specific defined terms of reactor conditions: hot shutdown, cold shutdown, reactor critical or power operation condition. Applicabilities can also be more general. Depending on the circumstances, CTS may require that the LCO be maintained within limits in "all modes" or "any operating mode." Generalized applicability conditions are not contained in STS, therefore ITS eliminate CTS requirements such as "all modes" or "any operating mode," replacing them with ITS defined modes or applicable conditions that are consistent with the application of the plant safety analysis assumptions for operability of the required features.

reactor

when irradiated fuel is in the reactor vessel

at all times

In another application of this type of change, CTS requirements may be eliminated during conditions for which the safety function of the specified safety system is met because the feature is performing its intended safety function. Deleting applicability requirements that are indeterminate or which are inconsistent with application of accident analyses assumptions is acceptable because when LCOs cannot be met, the TS are satisfied by exiting the applicability thus taking the plant out of the conditions that require the safety system to be operable. These changes are consistent with STS and changes specified as Category I are acceptable.

ambiguous

Relaxation of Surveillance Frequency (Category III)

CTS and ITS surveillance frequencies specify time interval requirements for performing surveillance requirement testing. Increasing the time interval between surveillance tests in the ITS results in decreased equipment unavailability due to test which also increases equipment availability. In general, the STS contain test frequencies that are consistent with industry practice or industry standards for achieving acceptable levels of equipment reliability. Adopting testing practices specified in the STS is acceptable based on similar design, like-component testing for the system application and the availability of other TS requirements which provide regular checks to ensure limits are met.

Reduced testing can result in a safety enhancement because the unavailability due to test is reduced; in turn, reliability of the affected structure, system or component should remain constant or increase. Reduced testing is acceptable where operating experience, industry practice or the industry standards such as manufacturers' recommendations have shown that these components usually pass the Surveillance when performed at the specified interval, thus the frequency is acceptable from a reliability standpoint. Surveillance frequency changes to incorporate alternate train testing have been shown to be acceptable where other qualitative

or quantitative test requirements are required which are established predictors of system performance, e.g., a 31 day air flow test is an indicator that positive pressure in a controlled space will be maintained because this test would use the same fans as the less frequent ITS 26 month pressurization test and industry experience shows that components usually pass the pressurization test. Additionally, surveillance frequency extension can be based on staff-approved topical reports. The NRC staff has accepted topical report changes where topical report analyses bound the plant-specific design and component reliability assumptions. These changes are consistent with STS and changes specified as Category II are acceptable.

Relaxation of Required Actions Details (Category III)

CTS provides ^{descriptions} ~~lists~~ of acceptable devices that may be used to satisfy LCO requirements. The ITS reflect the STS approach to provide LCO requirements that specify the protective limit that is required to meet safety analysis assumptions for required features. The protective limits replace the ^{descriptions} ~~lists~~ of specific devices previously found to be acceptable to the NRC staff for meeting the LCO. The ITS changes provide the same degree of protection required by the safety analysis and provide flexibility for meeting limits without adversely affecting operations since equivalent features are required to be operable. These changes are consistent with STS and changes specified as Category III are acceptable.

Relaxation of Allowable Values (Category IV)

New Setpoints (SPs) and Allowable values (AVs) were established by using an in-house calculation methodology based on the General Electric (GE) Instrument Setpoint Methodology NEDC-31336, "General Electric Instrumentation Setpoint Methodology." The GE NEDC-31336 methodology was reviewed and approved by the staff in 1995 via a safety evaluation report (SER) (ref: letter from B. Berger (NRC) to R. Pinelli (BWROG) dated November 6, 1995). The 1995 SER also concluded that the GE Setpoint Methodology was a satisfactory method to demonstrate compliance with Regulatory Guide 1.105, Revision 2, "Instrument Setpoint for Safety Related Systems," which endorses ISA-STD-S67.04-1982, "Setpoint for Nuclear Safety Related Instrumentation Used in Nuclear Power Plants."

The proposed AVs and trip SPs have been established from each design or safety analysis limit by accounting for instrument accuracy, calibration and drift uncertainties, as well as process measurement accuracy and primary element accuracy using the DAEC Instrument Setpoint Methodology to ensure that design and safety analysis limits will not be exceeded in the event of transients or accidents. The calculations established AVs and SPs using actual physical data and data acquired through operating practices. Allowance for drift is included in the margin between the AV and the instrument nominal trip SP. The margin between the AV and the analytical or safety limit is established based on instrument accuracy, calibration accuracy, process measurement accuracy, and process element accuracy. The calculation methodology is consistent with NEDC-31336 and is, therefore, changes specified as Category IV acceptable to the staff.

Relaxation of Required Actions to exit Applicability (Category V)

CTS require that in the event specified LCOs are not met, penalty factors to reactor operation, such as resetting setpoints, and power reductions shall be initiated as the method to reestablish the appropriate limits. The ITS are constructed to specify actions for conditions of required features made inoperable. Adopting ITS action requirements for exiting LCO applicabilities is acceptable because the plant remains within analyzed parameters by performance of required actions, or the actions are constructed to minimize risks associated with continued operation while providing time to repair inoperable features. Such actions add margin to safety or verify equipment status such as interlock status for the mode of operation, thereby providing assurance that the plant is configured appropriately or operations that could result in a challenge to safety systems are exited in a time period that is commensurate with the safety importance of the system. Additionally, other changes to TS actions ^{for} include placing the reactor in a Mode where the specification no longer applies, usually resulting in an extension to the time period for taking the plant into shutdown conditions. These actions are commensurate with industry standards for reductions in thermal power in an orderly fashion without compromising safe operation of the plant. These changes are consistent with STS and changes specified as Category V are acceptable.

Relaxation of Surveillance Requirement Acceptance Criteria (Category VI)

CTS require safety systems ^{flexibility} to be tested and verified operable ^{when in} prior to entering applicable conditions. ITS provide the ~~additional requirement~~ to verify operability by actual or test conditions. Adopting the STS allowance for "actual" conditions is acceptable because TS required features cannot distinguish between an "actual" signal or a "test" signal. Category VI also includes changes to CTS requirements that are replaced in the ITS with separate and distinct testing requirements which when combined include operability verification of all TS required components for the features specified in the CTS. Adopting this format preference in the STS is acceptable because TS SRs that remain include testing of all previous features required to be verified operable. These changes are consistent with STS and changes specified as Category VI are acceptable.

Relaxation of Completion Time (Category VII)

Upon discovery of a failure to meet an LCO, STS specify times for completing required actions of the associated TS conditions. Required actions of the associated conditions are used to establish remedial measures that must be taken within specified completion times ^{outage times} ~~followed~~. These times define limits during which operation in a degraded condition is permitted.

Adopting completion times from the STS is acceptable because completion times take into account the operability status of the redundant systems of TS required features, the capacity and capability of remaining features, a reasonable time for repairs or replacement of required features, and the low probability of a DBA occurring during the repair period. These changes

are consistent with the STS, and completion time extensions specified as Category VII are acceptable.

Relaxation of Fuel Cycle from 18 to 24 Months (Category VIII)

The ITS includes changes to the frequency of the current surveillance requirements (SRs) to accommodate the planned change from an 18 to 24-month fuel cycle. In their submittal, the licensee stated that the proposed modifications are based on the 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. In the GL 91-04 letter, it is stated that the NRC staff has reviewed a number of requests to extend 18-month surveillances to the end of a fuel cycle and a few requests for changes in surveillance interval to accommodate a 24-month fuel cycle. The staff has found that the effect on safety is small because safety systems use redundant electrical and mechanical components and because licensees perform other surveillances during plant operation that confirm that these systems and components can perform their safety functions. In applying GL 91-04, the licensee should evaluate the effect on safety of an increase in 18-month surveillance intervals to accommodate a 24-month fuel cycle. This evaluation should support a conclusion that the effect on safety is small. The licensee should confirm that historical plant maintenance and surveillance data support this conclusion. Also, the licensee should confirm that assumptions in the plant licensing basis would not be invalidated on the basis of performing any surveillance at the bounding surveillance interval limit provided to accommodate a 24-month fuel cycle. In consideration of these confirmations, the licensee need not quantify the effect of the change in surveillance intervals on the availability of individual systems or components.

other than for instrument calibrations, which is discussed separately below.

In their submittal, the licensee stated that ~~as left as found~~ ^{performance} data was ~~collected~~ ^{reviewed} for a ten-year period from January 1986 to January 1996 for ~~all~~ ^{performance} surveillance for which a frequency extension is being sought. According to the licensee, the ten-year period was selected to ensure a broad overview of long term performance and also because a similar comprehensive review was performed in 1986 to support changes from 12-month to 18-month surveillance interval. In addition, as a supplement check, the database for 10CFR50.65 (Maintenance Rule) compliance was also reviewed by the licensee to confirm that overall equipment performance was compatible with a revised surveillance frequency of 24 months. Review of past test and surveillance data indicated that the system performance during the surveillance test was found to be within acceptable limits. No train failures were identified ~~by~~ ^{performance of the reference cyclic test during the ten-year period reviewed}. In each case, the system performance was within targets established under the Maintenance Rule. The licensee further stated that based on the results of their evaluation, system redundancy, detectability of the failures by other mid-cycle testing and equipment performance during these mid-cycle tests, it was concluded that the proposed test interval extensions have an insignificant effect on safety.

which indicated that more frequent testing was required.

Based on the above, the staff concludes that in accordance with GL 91-04, the proposed changes have a negligible effect on safety. Historical data supports this conclusion. The proposed changes follows the guidance of GL 91-04, and there are no plant-specific

DAEC

Insert attached write-up for calibration interval extensions

GL 91-04 provides guidance to licensees on the type of analysis and information required to justify a change to the surveillance interval for instrument calibrations. The specific actions contained in GL 91-04 are summarized below. This is a generic discussion to provide insight into the methodology the licensee used to evaluate the affects of an increased surveillance interval on instrument drift.

As discussed in Category IV above, the licensee uses the GE Setpoint Methodology (NEDC-31336-A), which has staff approval. The licensee collected historical as-found and as-left data to validate that assumptions for vendor-specified drift values were conservative. Where these assumptions were not validated, historical drift was utilized directly using the second moment about zero (SMAZ) method described in NEDC-31336-A. The resulting performance record supports the conclusion that as-found calibration data from surveillance and maintenance records have not, except on rare occasions, exceeded acceptable limits for a calibration interval. For extensions of the CTS calibration surveillance intervals, the drift was predicted using the time correction method of NEDC-31336-A up to a maximum interval of 30 months.

Channel Functional Tests are performed during the operating cycle more frequently than the Channel Calibration surveillance. The purpose of the Channel Functional Tests is to detect failures of the instrumentation channels, and thus, is performed on a more frequent basis than Channel Calibrations. Gross instrumentation failures are also detected by alarms or by a comparison with redundant and independent indications (i.e., Channel Checks). Instrumentation purchased for these functions are highly reliable and meet the design criteria of safety related equipment. The instrumentation is designed with redundant and independent channels which provide means to verify proper instrumentation performance during operation, and adequate redundancy to ensure a high confidence of system performance even with the failure of a single component. Based on this evaluation and the drift analysis performed, the licensee concluded that the impact on instrumentation reliability, if any, would be insignificant and that instrument drift is not a significant factor in increasing the surveillance interval.

Hot Standby Condition

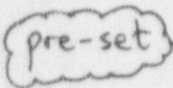
The CTS definition is incorporated into Mode 2. The requirement to maintain pressure below 1055 psig is not required and has been deleted because 1055 psig is the RPS High Pressure nominal trip setpoint and the reactor would trip if pressure were greater than this value. As a result, the existing Hot Standby Condition could not be maintained at a pressure greater than 1055 psig. Similarly, the specification for reactor coolant temperature to be $> 212^{\circ}\text{F}$ has also been deleted from the definition of Mode 2, consistent with the CTS Table 1.0-1 for Startup (Mode 2)/Hot Standby. The proposed ITS Table definition for Mode 2 does not specify a temperature because the temperature will be controlled by the RCS P/T Limits curve (ITS 3.4.9).

- L2 The CTS definition, "Alteration of the Reactor Core (Core Alteration)," was revised so that the term will apply only to those activities that create the potential for a reactivity excursion and, therefore, warrant special precaution or controls in the Technical Specifications. The ITS definition for Core Alterations identifies those activities affecting reactivity within the reactor vessel with the vessel head removed and fuel in the vessel. As a result, the term Core Alterations identifies those activities that create the potential for a reactivity excursion and warrant special controls and precautions. In the ITS definition, in-vessel movement of instruments, cameras, lights, tools, etc. are not classified as Core Alterations since special controls needed to prevent reactivity excursions for these activities are not warranted because they do not have the capability for adversely impacting core reactivity.

ITS 1.1 does not consider control rod movement a Core Alteration provided there are no fuel assemblies in the associated core cell. The removal of the four fuel bundles surrounding a control rod very significantly reduces the reactivity worth of the associated control rod to the point where removal of that rod no longer has the potential to cause a reactivity excursion. Therefore, removal from the core of a control rod is not included as a Core Alteration provided there are no fuel assemblies in the associate core cell. This is recognized in the design of the control rod velocity limiter which precludes removal of a rod prior to the removal of the four adjacent bundles. This change is consistent with the STS.

- ~~L3~~ The CTS definition of Channel Functional Test requires the injection of a simulated signal into the channel in order to perform the test. The ITS definition of Channel Functional Test allows either a simulated or actual signal. Some Channel Functional Tests are performed by insertion of the actual signal into the logic. 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 existing requirements to use a simulated signal does not affect the performance of the channel. Operability is demonstrated in either case since the channel itself cannot discriminate between "actual" or "simulated" signals. (2/4/98 Note - this Less Restrictive change may have to be revised depending on DAEC response to this Open Item.)

Section 2.0 - Less Restrictive

- L1 CTS 1.1.A requires the MCPR greater than or equal to 1.10 for single loop operation when the reactor pressure is greater than 785 psig and core flow greater than 10% of rated core flow. By letter dated December 7, 1984, DAEC submitted a CTS proposed change, RTS 124C. This proposed change submitted to the NRC changed the MCPR limits for both two loop and single loop operation in accordance with NEDO-24272 and UFSAR 15.4.5. The NRC SER dated May 28, 1985, License Amendment 119, stated on page 3, paragraph 3, "The staff found the MCPR increase of 0.01 acceptable, but suggested that the licensee conservatively increase the MCPR by 0.03." Based on the NRC's suggestion, DAEC used the 1.10 MCPR limit for single loop operation. ITS 2.1.1.2 uses the 1.08 MCPR limit for single loop operation, which is consistent with the analysis supporting RTS 124C, NEDO-24272, UFSAR 15.4.5, and the NUREG.
- L2 CTS 1.1.C, "Power Transient" SL was deleted in ITS 2.0. The intent of the SL was to ensure that other SLs are not exceeded. This SL is assumed to be exceeded when a scram is accomplished by means other than the expected scram signal (Primary Source Signal). The RPS scram setpoints are established to ensure margin to the SLs.  Exceeded the scram setpoint, in and of itself, does not necessarily indicate that a SL is exceeded. Sections 2.1 and 2.2.1.A of the CTS contain various trip settings that initiate a reactor scram. These scram setpoints are included in Table 3.3.1.1-1 of the DAEC ITS. The SRs imposed on these scram setpoints in Table 3.3.1.1-1 ensure that the margin to a SL is preserved. The redundancy built into the RPS is maintained by the Action of ITS 3.3.1.1. The intent of the CTS Power Transient SL 1.1.C is maintained by the provisions in ITS 3.3.1.1 for the RPS. This less restrictive change is consistent with the STS.
- L3 The CTS 1.2.2 SL, when operating the RHR System in the Shutdown Cooling Mode, is incorporated into ITS Table 3.3.6.1-1 for Primary Containment Isolation Instrumentation. The RHR Shutdown Cooling System is designed with an interlock in the logic for the system isolation valves, which are normally closed during power operation, to prevent opening of the valves above a ~~present~~  pressure setpoint (Allowable Value) of ≤ 152 psig. This setpoint assures that pressure integrity of the RHR System is maintained. The high pressure interlock is only provided for equipment protection to prevent an intersystem LOCA and, as such, this function is not a SL on plant operation. This less restrictive change is consistent with the STS.

Section 3.0 - Less Restrictive

- L1 ITS LCO 3.0.5 allows equipment which was previously declared inoperable (and appropriate Actions taken) to be returned to service under administrative controls solely to perform testing required to demonstrate its Operability or the Operability of other equipment. This is an exception to ITS LCO 3.0.2. Many TS Actions require an inoperable component to be removed from service, such as, maintaining an isolation valve closed, disarming a control rod, or tripping an inoperable instrument channel. To

allow the performance of Surveillance Requirements to demonstrate the Operability of the equipment being returned to service, or to demonstrate the Operability of other equipment that otherwise could not be performed without returning the equipment to service, an exception to these Required Actions is necessary. ITS LCO 3.0.5 is necessary to establish an allowance that, although informally utilized previously in restoration of inoperable equipment, is not formally recognized in the CTS. Without this allowance, certain components could not be restored to Operable status and a plant shutdown would ensue. Clearly, it is not the intent or desire that the TS preclude the return to service of a suspected Operable component to confirm its Operability. This allowance is deemed to represent a more stable, safe operation than requiring a plant shutdown to complete the restoration and confirmatory testing. This proposed change is consistent with the STS.

- L2 ITS SR 3.0.3 allows the flexibility to defer declaring affected equipment inoperable or an affected variable outside the specified limits when a Surveillance has not been completed within the specified Frequency. A delay period of up to 24 hours applies from the point in time that it is discovered that the Surveillance has not been performed. This delay time allows adequate time to complete Surveillances that have been missed and permits completion of the Surveillance before complying with Required Actions or other remedial measures that might preclude completion of the Surveillance. The basis for this delay period includes consideration of unit conditions, adequate planning, availability of personnel, the time required to perform the Surveillance, the safety significance of the delay in completing the required Surveillances, and the recognition that the most probable result of any particular Surveillance being performed is the verification of conformance with the requirements. Failure to comply with specified Frequencies for SRs is expected to be an infrequent occurrence. Use of the delay period established by ITS SR 3.0.3 is a flexibility which is not intended to be used as an operational convenience to extend Surveillance intervals. If a Surveillance is not completed or is failed within the delay period, then the equipment is inoperable, or the variable is outside the specified limits. Appropriate Actions are entered for the applicable LCO conditions. This proposed change is consistent with the STS.
- L3 In ITS SR 3.0.2, 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," was added to allow the 1.25 times the interval currently specified in the CTS definition of Surveillance Frequency to also apply to periodic Required Actions in the ITS. This provides the consistency in scheduling flexibility for all performances of periodic requirements, whether they are Surveillances or Required Actions. The intent remains to perform the activity, on the average, once during each specified interval.

Section 3.1 - Less Restrictive

ITS 3.1.3

- L7 CTS 3/4.3.A.3 requires that the CRD housing support to be in place whenever the reactor vessel is pressurized above atmospheric pressure with fuel in the reactor vessel.

DAEC

Add L5 to 3.1.3

This requirement is included in the Operability requirements for control rods. The CRD housing support restricts the outward movement of a control rod to less than 3 inches in the extremely remote event of a CRD housing failure. The CRD housing support is not an accident initiator or precursor and, as such, cannot contribute to an increase in the probability of an accident previously evaluated. Removing this requirement from the technical specifications does not result in the removal of the requirement to verify proper installation of the CRD housing support prior to placing the plant in a condition where the CRD housing support is assumed to be Operable in order to assure successful mitigation of a CRD housing failure. Plant procedures ensure through post-maintenance testing and inspections that the proper configuration for the CRD housing supports is maintained. These procedures are currently in place and are used to ensure this system is properly configured prior to being considered Operable for plant operation. These controls will continue to ensure that the CRD housing supports are properly configured prior to the plant entering Modes 1 or 2, as assumed in any analysis. The requirement for CRD housing support operability that is assumed in the transient analysis and documented in the UFSAR, Section 3.9.4.1.4, will be in effect. The operability requirements assumed in the safety analysis are effectively the same as requiring the housing supports to be operable whenever control rods are required to be operable (i.e., in Modes 1 and 2). This is acceptable because even if a control rod is ejected under the shutdown condition, the reactor remains subcritical as a result of meeting the SDM limits required by ITS LCO 3.1.1. This is a less restrictive change, since the safety analysis allows the housing supports to be removed in Mode 3, whereas the CTS would not. Plant procedures provide adequate controls to assure the CRD housing support is in place when required to support control rod operability. This is an acceptable less restrictive change.

Add
L1
to 3.1.4

ITS 3.1.5

- L1 CTS 3.3.A.2.a allows one control rod scram accumulator to be inoperable for 8 hours when reactor pressure is > 950 psig. If the inoperable accumulator is not restored within 8 hours or if more than one accumulator is inoperable, the affected control rods are required to be declared inoperable in accordance with CTS 3.3.A.2.a.(iii) and the Actions of CTS 3.3.A.2.e taken. Inoperable control rods must be inserted and disarmed. ITS 3.1.5 Required Actions A.1, B.1, B.2.1, C.1 and C.2 have been added and CTS 3.3.A.2.a (ITS Required Action B.2.2) has been modified to allow up to 8 hours, depending upon the number of inoperable accumulators and the reactor pressure, before the rod associated with the inoperable accumulator must be declared "slow" or inoperable.

The reactor pressure above which an 8 hour allowance exists for declaring a CR "slow" or inoperable has been changed from 950 psig in the CTS to 900 psig in the ITS. The difference in scram times that would occur (assuming that the accumulator is not able to contribute to scrambling the rod) at 900 psig versus 950 psig is negligible, and ample margin to the maximum scram time assumed in any transient or accident analysis would still exist. In addition, the accumulator only contributes significantly to meeting scram time requirements when reactor pressure is less than approximately 800 psig, so the difference in the expected scram time with an inoperable accumulator compared to the

ITS 3.3.6.1

- L6 CTS Table 3.2-A requirements for isolation of Group 7 isolation valves are deleted from the ITS. The Group 7 isolation signal closes the reactor building closed cooling water (RBCCW) drywell outlet and inlet valves, and the well water drywell cooling water supply and discharge valves. The RBCCW System is a closed loop water-filled system that provides cooling water to drywell equipment sump coolers and recirculation pump seal heat exchangers. RBCCW is equipped with a radiation monitor to detect leaks into the system. The well water system is a closed system in the drywell and provides a once-through cooling function for the drywell coolers. The well water system operates at a higher pressure than the drywell even under accident conditions. These systems are closed systems and as such ~~are not specified as containment isolation valves.~~

the automatic isolation capability is not required to satisfy GDC 57 for containment isolation

ITS 3.3.6.3

- L1 CTS Table 4.2-B contains a daily Channel Check for the Low-Low Set (LLS) function setpoints. This channel check is currently performed by observing local control panel LLS status lights. These lights do not provide an instrument reading. The LLS Function setpoints are not designed at the DAEC to allow performance of a meaningful Channel Check. Thus, this CTS Channel Check is being deleted. The LLS status lights will continue to be routinely checked by operations personnel. This change is acceptable since the LLS status lights will be monitored and the current design for LLS does not allow a meaningful channel check to be performed.

Section 3.4 - Less Restrictive

ITS 3.4.4

- L5 CTS 3.6.C.1.c limits the Total Leakage to less than or equal to 25 gpm at any time. ITS 3.4.4 allows Total Leakage to be averaged over the previous 24 hour period, with the average being less than or equal to 25 gpm. Total Leakage consists of two component leakages, Identified and Unidentified Leakage. From a plant safety perspective, strictly limiting leakage from unknown sources, Unidentified Leakage, is critical hence an instantaneous limit on it is maintained (LCO 3.4.4 c). With that limit in place, this change largely proposes to allow some variation in Identified Leakage during a given 24 hour period. Given that the RCS inventory makeup capability and drywell sump capacity can accommodate leakage rates above 25 gpm, this change which is consistent with the STS is acceptable.

ITS 3.4.5

- L1 The daily channel checks of the Equipment Drain and Floor Drain Sump Integrators specified in CTS Table 4.2-E are being deleted. Given that there is only one integrator for each application, a true channel check (comparison of one independent channel against another) can not be and is not presently done. In place of the daily checks that are done, monthly channel functional tests are being added. The addition of these more rigorous tests at a monthly interval is an acceptable alternative to qualitative daily checks now being performed.

ITS 3.4.6

- L1 CTS 3.6.B.1.b which limits the amount of time that the reactor may be operated with primary coolant specific activity Dose Equivalent I-131 above a certain limit is being eliminated. The ITS (and STS) requirements to sample specific activity every four hours, when the limit is exceeded and return specific activity to within the limit in 48 hours are sufficient to ensure that prolonged operation in excess of the limit will not occur.

Section 3.5 - Less Restrictive

ITS 3.5.1

- ~~L4~~ CTS requirements for actuation testing of CS (4.5.A.1.a), LPCI (4.5.A.3.a), HPCI (4.5.D.1.a) and ADS (4.5.F.1.a) stipulate a simulated automatic actuation test shall be performed. The phrase "actual or," in reference to the automatic initiation signal, has been added to the ITS Surveillance Requirement for verifying that each ECCS subsystem actuates on an automatic initiation signal. This allows satisfactory automatic system initiations to be used to fulfill the Surveillance Requirements. Operability is adequately demonstrated in either case since the ECCS subsystem itself cannot discriminate between "actual" or "simulated" signals. This change is consistent with the STS.
- ~~L5~~ CTS 4.5.D.1.d requires verification that HPCI is capable of delivering at least 3000 gpm "if vessel pressure were as high as 1040 psig." ITS SR 3.5.1.5 requires verification of HPCI flow rate with reactor pressure ≥ 940 psig and ≤ 1025 psig. The intent of the CTS is to test HPCI against a head of 1040 psig regardless of actual reactor vessel pressure. The ITS relaxes this requirement to allow testing against a head corresponding to reactor vessel pressure, which is maintained ≤ 1025 psig by ITS LCO 3.4.10. The HPCI performance test at high pressure is the second part of a two part test, the other being the low pressure test in ITS SR 3.5.1.6, that verifies HPCI pump performance at the upper and lower end of the range of steam supply and pump discharge pressures in which the HPCI pump is expected to perform. Performance of the HPCI test at both ends of the expected operating pressure range confirms that the HPCI pump and turbine are functioning in accordance with design specifications. A small decrease in the pressure to as low as 940 psig at which the performance to design specifications is verified will not affect the validity of the test to determine that the pump and turbine are still operating at the design specifications. At the DAEC, 940 psig will be utilized as the lower bound for HPCI testing, to coincide with the EHC pressure setpoint for normal operating pressure. This change is consistent with the STS.
- ~~L7~~ ITS 3.5.1 Action H establishes Required Actions and Completion Times for the situation when the HPCI System is inoperable and one low pressure ECCS (CS or LPCI) subsystem is inoperable for reasons other than Condition A of one RHR pump inoperable. The proposed Specification is less restrictive than CTS 3.5.D.2 which allows continued operation if HPCI is inoperable only if ADS, RCIC, the LPCI subsystem and both Core Spray subsystems are Operable. The accident analysis presented in NEDC-31310P, Duane Arnold Energy Center SAFER/GESTR-LOCA Loss-of-Coolant Accident Analysis, indicates that the plant is protected by the ADS System and the remaining ECCS

subsystems when the HPCI System and one low pressure ECCS subsystem are inoperable. However, with both the HPCI System and a low pressure ECCS subsystem inoperable, another single failure may place the plant in a condition where adequate core cooling may not be available during an accident. Therefore, a Completion Time of 72 hours has been assigned to either restore the inoperable HPCI System or the low pressure ECCS subsystem. This change is consistent with the STS.

- ~~L11~~ This change deletes the requirements in CTS 3.5.A.4 and 3.5.A.5 to ensure that the DGs and CS subsystem are Operable When one RHR pump or a LPCI subsystem is inoperable. Requiring an Operable DG in the same division as an inoperable LPCI pump, LPCI subsystem or CS pump is overly restrictive because the analysis in NEDC 31310P, Duane Arnold Energy Center SAFER/GESTR-LOCA Loss-of-Coolant Accident Analysis, demonstrates that with the failure of a DG, which results in a loss of one CS and two RHR pumps, sufficient ECCS cooling capability remains to ensure peak cladding temperature remains below regulatory limits. Additionally, Actions to be performed if an inoperable DG exists with an inoperable LPCI pump, LPCI subsystem, or CS pump in the opposite division are proposed to be retained, but moved to proposed Specification 3.8.1, AC Sources - Operating, Required Action B.2. Currently, CTS 3.5.A.2, 3.5.A.4, and 3.5.A.5 specify no Completion Time for this verification, while proposed Specification 3.8.1 allows 4 hours to declare required features supported by the inoperable DG inoperable. This 4 hour Completion Time will allow the operator time to evaluate and repair any discovered inoperabilities, which minimize the risk of subjecting the unit to transients associated with a shutdown. The Completion Time also considers the capacity and capability of the remaining AC sources and the low probability of a DBA occurring during this period. The deletion of the requirement to ensure Operability of the DGs when an RHR pump or LPCI subsystem is inoperable and the allowance of the 4 hour Completion Time constitute a less restrictive change. In addition, the containment spray function is not assumed in the accident analysis. The function has been relocated to licensee controlled documents (see Application of Screening Criteria to the DAEC Technical Specification for CTS 3/4.5.B). Therefore, the requirement that the containment spray subsystem be Operable whenever an RHR pump or LPCI subsystem is inoperable has been deleted from the ITS. This change is consistent with the STS.

- L12 The once per shift visual inspection of the RHR valve panel in CTS 4.5.A.3.e is deleted in the ITS. This inspection does not necessarily relate directly to the RHR subsystem operability. The STS do not specify indication-only equipment to be Operable to support Operability of a system or component. Control of the availability and necessary compensatory activities for indication instruments, monitoring instruments, and alarms are addressed by plant operational procedures and policies. The functions these instruments monitor are all verified during Surveillance Requirements required by ITS 3.5.1 and 3.8.7. Therefore, if any RHR valves were in the improper position or did not have power available, this would be discovered during the required Surveillances. In addition, valve manipulation is controlled by administrative procedures; therefore, it would be unlikely that the RHR valves would be mispositioned. Monitoring of the RHR subsystem lineup and condition, conducted by the Operations staff on a routine basis,

Add L3 to 3.5.2

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would also likely find a valve out of position or without power. Therefore, this inspection is being deleted from the Technical Specifications. This change is consistent with the STS.

ITS 3.5.2

~~L1~~ CTS 3.5.G.3 only allows all ECCS low pressure subsystems to be inoperable in Mode 5 if no work is being performed which has a potential for draining the reactor vessel. ITS 3.5.2 allows all ECCS low pressure subsystems to be inoperable in Mode 5, even during OPDRVs, when the spent fuel storage pool gates are removed and water level is ≥ 21 feet 1 inch over the top of the reactor pressure vessel flange. If the ITS conditions are met, OPDRVs can be performed with no low pressure ECCS subsystems Operable. The large volume of water over the reactor provides sufficient inventory to allow operator action to terminate the inventory loss prior to fuel uncover in case of an inadvertent draindown. This change is consistent with the STS.

~~L2~~ CTS 3.5.G.4 allows, with certain conditions met, Core Alterations to proceed with suppression pool volume below the minimum value. The requirement in CTS 3.5.G.5 to suspend Core Alterations with the suppression chamber volume below the minimum value and the conditions of CTS 3.5.G.4 not met is deleted. Refueling LCOs provide requirements, including required water level, to ensure safe operation during positive reactivity changes. If water level is maintained, then Core Alterations can be performed with no ECCS subsystems Operable. The large volume of water over the reactor provides sufficient inventory to allow operator action to terminate the inventory loss prior to fuel uncover in case of an inadvertent draindown. The ECCS function provides protection for loss of vessel inventory events. However, these events are not initiated by, nor is the response of ECCS hampered by, positive reactivity changes. The ECCS requirements of CTS 3.5.G.4, however, are being maintained. CTS 3.5.G.4(a) is maintained as the Applicability of ITS 3.5.2. CTS 3.5.G.4(b) and (c) are maintained as ITS SR 3.5.2.2.b, while CTS 3.5.G.4(d) is ITS Required Action B.1. This change is consistent with the STS.

~~ITS 3.5.3~~

~~L2~~ CTS 4.5.E.1.d requires verification that RCIC is capable of delivering at least 400 gpm (rated flow) "if vessel pressure were as high as 1040 psig." ITS SR 3.5.3.3 requires verification of a minimum 400 gpm RCIC flow rate with reactor pressure ≥ 940 psig and ≤ 1025 psig. The intent of the CTS is to test RCIC against a head of 1040 psig regardless of actual reactor vessel pressure. The ITS relaxes this requirement to allow testing against a head corresponding to reactor vessel pressure, which is maintained ≤ 1025 psig by ITS LCO 3.4.10. The RCIC performance test at high pressure is the second part of a two part test that verifies RCIC pump performance at the upper and lower end of the range of steam supply and pump discharge pressures in which the RCIC pump is expected to perform. Performance of the RCIC test at both ends of the expected operating pressure range confirms that the RCIC pump and turbine are functioning in accordance with design specifications. A small decrease in the pressure to as low as 940 psig at which the performance to design specifications is verified will

not affect the validity of the test to determine that the pump and turbine are still operating at the design specifications. At the DAEC, 940 psig will be utilized as the lower bound for RCIC testing, to coincide with the EHC pressure setpoint for normal operating pressure. This change is consistent with the STS.

- ~~L3~~ The CTS requirement for actuation testing of RCIC (CTS 4.5.E.1.a) stipulates a simulated automatic actuation test shall be performed. The phrase "actual or," in reference to the automatic initiation signal, has been added to ITS SR 3.5.3.5 for verifying that the RCIC System actuates on an automatic initiation signal. This allows satisfactory automatic system initiations to be used to fulfill the Surveillance Requirement. Operability is adequately demonstrated in either case since the RCIC System itself cannot discriminate between "actual" or "simulated" signals. This change is consistent with the STS.

Section 3.6 - Less Restrictive

ITS 3.6.1.3

- L.6 CTS 3.7.B.4.a allows opening the large primary containment purge and exhaust isolation valves for inerting, de-inerting, testing and pressure control. ITS SR 3.6.1.3.1 Note expands this to also include ALARA or air quality considerations for personnel entry or for Surveillances that require opening the valves. This change is considered acceptable since these purge and exhaust valves are capable of closing in the environment following a LOCA.

ITS 3.6.1.6

- L.3 CTS 3.7.D.4 and 4.7.D.2 provide ACTIONS and Surveillance Requirement for the Reactor Building-to-Suppression Chamber Vacuum Breaker position indication instrumentation. Position indication does not relate directly to the respective system OPERABILITY and the STS does not specify indication-only equipment OPERABLE to support system or component OPERABILITY. ITS 3.6.1.6 does not address Reactor Building-to-Suppression Chamber Vacuum Breaker position indication instrumentation. Control of the availability of position indication instrumentation and necessary compensatory activities if not available, is addressed by plant procedures and policies. Vacuum breaker position is required to satisfy ITS SR 3.6.1.6.1, SR 3.6.1.6.2 and SR 3.6.1.6.3. If position indication is not available and vacuum breaker position is not determined, then the SRs are not satisfied and the appropriate actions are 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 position indication are adequately addressed by the requirements of 3.6.1.6 and associated SRS. This Less Restrictive change is acceptable.

ITS 3.6.1.7

- L.2 CTS 4.7.E.3 requires a visual inspection of the drywell-to-suppression chamber vacuum breakers. This visual inspection does not relate directly to the respective system OPERABILITY and the STS does not specify visual inspections of systems or

necessary to ensure diesel generator Operability. This change reflects the intent of the CTS requirements (i.e., to prove Operability of the DGs).

ITS 3.8.2

- L1 CTS 3.9.D.1.b requires one DG to be Operable during Core Alterations, supplying its associated Operable Standby Gas Treatment (SBGT) system, Control Room Ventilation Standby Filter Unit (SFU) and Control Building Chiller (CBC). ITS 3.8.2 requires only one DG to be Operable during Core Alterations. Both CTS and ITS requires both subsystems of SBGT, SFU and CBC to be Operable during Core Alterations. Consequently, per ITS LCO 3.8.8 (Distribution Systems - Shutdown), one of the required Operable trains of SBGT, SFU and CBC will be associated with this DG and the other train will be powered by the one required off-site power source. If the off-site source and/or its associated distribution system is lost, then both LCOs 3.8.2 and 3.8.8 require the supported feature(s) be declared inoperable (or suspend Core Alterations) Immediately. However, Core Alterations are allowed to continue for a limited time with one subsystem of SBGT (7 days), SFU (7 days) and CBC (30 days) inoperable. But, if the required DG is inoperable, the per LCO 3.8.2 Condition B, Core Alterations must be suspended Immediately. This change implements the intent of the CTS.

ITS 3.8.6

- L3 CTS 4.8.B.1.a and 4.8.B.1.b require that the station batteries have Surveillances but do not provide a specific LCO for this purpose. The CTS 3.8 Bases states, "A cell will be considered out of service if its float voltage is below 2.13 volts and the specific gravity is below 1.190 at 77°F." These limits corresponds to ITS Table 3.8.6-1 Category B Limits. ITS 3.8.6 adds Table 3.8.6-1 and also adds Category C Limits. The Category C Limits are less restrictive than the Category B Limits. Category C defines the limits for each connected cell. These reduced values provide assurance that sufficient capacity exists to perform the intended function and maintain a margin of safety. *When* any battery parameter is outside the Category C limits, the assurance of sufficient capacity described above no longer exists and the battery is declared Inoperable. This change is consistent with the STS. ITS 3.8.6 ensures that Battery Cell Parameters for the Essential Station 125 VDC and 250 VDC batteries are maintained within the limits of ITS Table 3.8.6-1.

connected
cell

Section 3.9 - Less Restrictive

ITS 3.9.1

- L1 CTS 4.9.A.1 governing the surveillance testing of the refueling interlocks: "They shall also be tested following any repair work associated with the interlocks." After restoration of a component that failed a required SR, ITS SR 3.0.1 requires performing the appropriate SRs (in this case ITS SR 3.9.1.1) to demonstrate the Operability of the affected components. Any time the Operability of a system or component has been affected by the repair, maintenance, or replacement, post maintenance testing is required to demonstrate Operability of the system or component. Therefore, explicit

section and includes: the section designation followed by the discussion of change identifier, e.g., 1.1 L.1 (ITS Section 1.1, DOC L.1); a summary description of the change; CTS and ITS LCO references; a reference to the specific change category as discussed above (if applicable); and a characterization of the discussion of change.

For the reasons presented above, these less restrictive requirements are acceptable because they will not affect the safe 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 public health and safety will be protected.

D. Relocated Less Restrictive Requirements

When requirements have been shown to give little or no safety benefit, their removal from the TS may be appropriate. In most cases, relaxations previously granted to individual plants on a plant-specific basis were the result of (1) generic NRC actions, (2) new staff positions that have evolved from technological advancements and operating experience, or (3) resolution of the Owners Groups comments on STS. The NRC staff reviewed generic relaxations contained in STS and found them acceptable because they are consistent with current licensing practices and the Commission's regulations. The DAEC design was also reviewed to determine if the specific design basis and licensing basis are consistent with the technical basis for the model requirements in STS, and thus provide a basis for ITS. A significant number of changes to the CTS involved the removal of specific requirements and detailed information from individual specifications evaluated to be Types 1 through 4 that follow:

Type 1 Details of System Design and System Description including Design Limits

Type 2 Descriptions of Systems Operation

Type 3 Procedural Details for TS Requirements and Related Reporting Problems

Type 4 Performance Requirements for Indication-only Instrumentation and Alarms

The following discussions address why each of the four types of information or specific requirements are not required to be included in ITS .

Details of System Design and System Description including Design Limits (Type 1)

The design of the facility is required to be described in the UFSAR by 10 CFR 50.34. In addition, the quality assurance (QA) requirements of Appendix B to 10 CFR Part 50 require that plant design be documented in controlled procedures and drawings, and maintained in accordance with an NRC-approved QA plan (UFSAR Chapter 17). In 10 CFR 50.59 controls are specified for changing the facility as described in the UFSAR, and in 10 CFR 50.54(a) criteria are specified for changing the QA plan. In ITS, the Bases also contain descriptions of system design. ITS 5.5.10 specifies controls for changing the Bases.

DAEC

which includes the new
Technical Requirements Manual (TAM),
by reference,

Removing details of system design from the CTS is acceptable because this information will be adequately controlled in the UFSAR, controlled design documents and drawings, or the TS Bases, as appropriate. ~~Cycle-specific design limits are moved from the CTS to the Core-Operating Limits Report (COLR) in accordance with Generic Letter 88-16. ITS Administrative Controls are revised to include the programmatic requirements for the COLR.~~

Descriptions of Systems Operation (Type 2)

The plans for the normal and emergency operation of the facility are required to be described in the UFSAR by 10 CFR 50.34. ITS 5.4.1.a requires written procedures to be established, implemented, and maintained for plant operating procedures including procedures recommended in Regulatory Guide 1.33, Revision 2, Appendix A, February 1978. Controls specified in 10 CFR 50.59 apply to changes in procedures as described in the UFSAR. In ITS, the Bases also contain descriptions of system operation. ~~It is acceptable to remove details of system operation from the TS because this type of information will be adequately controlled in the UFSAR, plant operating procedures, and the TS Bases, as appropriate.~~

QAPD, Fire Plan, ODA, SFDP and TRM,

Insert
Items 1, 2,
3, 4 and 5
attached

Procedural Details for Meeting TS Requirements & Related Reporting Problems (Type 3)

Details for performing action and surveillance requirements are more appropriately specified in the plant procedures required by ITS 5.4.1, the UFSAR, and ITS Bases. For example, control of the plant conditions appropriate to perform a surveillance test is an issue for procedures and scheduling and has previously been determined to be unnecessary as a TS restriction. As indicated in Generic Letter 91-04, allowing this procedural control is consistent with the vast majority of other SRs that do not dictate plant conditions for surveillances. Prescriptive procedural information in an action requirement is unlikely to contain all procedural considerations necessary for the plant operators to complete the actions required, and referral to plant procedures is therefore required in any event. Other changes to procedural details include those associated with limits retained in the ITS. ~~For example, the ITS requirement may refer to programmatic requirements such as COLR, included in ITS Section 5.5, which specifies the scope of the limits contained in the COLR and mandates NBC approval of the analytical methodology.~~

Insert
Items
1, 3, 5, 6
and 7
attached

The removal of these kinds of procedural details from the CTS is acceptable because they will be adequately controlled in the UFSAR, plant procedures, Bases and COLR, as appropriate. This approach provides an effective level of regulatory control and provides for a more appropriate change control process. Similarly, removal of reporting requirements from LCOs is appropriate because ITS 5.6, 10 CFR 50.36 and 10 CFR 50.73 adequately cover the reports deemed to be necessary.

IST, QAPD,
ISI, ODA,
and TRM,

Performance Requirements for Indication-Only Instrumentation and Alarms (Type 4)

Indication-only instrumentation, test equipment, and alarms are usually not required to be operable to support TS operability of a system or component unless these items are

Insert 1: The Quality Assurance plan is approved by the NRC and contained in UFSAR Chapter 17. Changes to the QAPD is controlled by 10 CFR 50.54(a).

Insert 2: The Fire Plan is required by License Condition 2.C.(3). Changes to the Fire Plan are controlled by 10 CFR 50.59.

Insert 3: The Offsite Dose Assessment Manual (ODAM) is required by ITS section 5.5.1. Changes to the ODA M are controlled in accordance with ITS section 5.5.1.

Insert 4: The Safety Function Determination Program (SFDP) is required by ITS section 5.5.11. Changes to the SFDP are controlled by 10 CFR 50.59.

Insert 5: The Technical Requirements Manual (TRM) is incorporated by reference into the UFSAR. Changes to the TRM will be controlled by 10 CFR 50.59.

Insert 6: The Inservice Testing (IST) program is required by ITS section 5.5.6. Changes to the IST program will be controlled by 10CFR 50.59.

Insert 7: The Inservice Inspection (ISI) program is approved by the NRC. Changes to the inservice inspection program will be controlled by 10 CFR 50.59.

and Remote Shutdown Panel

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included in TS as Accident Monitoring instrumentation. Thus, with the exception of the Accident Monitoring instrumentation, STS do not include 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. Removal of requirements for indication-only instrumentation and alarms from the CTS is acceptable because they will be adequately controlled in plant procedures.

R Table RL lists CTS specifications and detailed information removed from individual specifications that are relocated to licensee-controlled documents in ITS. Table RL is organized by ITS section and includes: the section designation followed by the discussion of change identifier, e.g., 2.0 LA1 (ITS Section 2.0, DOC LA1); CTS reference; a summary description of the change; the name of the document that retains the CTS requirements; the method for controlling future changes to relocated requirements; a characterization of the change; and a reference to the specific change type, as discussed above, for not including the information or specific requirements in ITS.

The NRC staff has concluded that these types of detailed information and specific requirements are not necessary to ensure the effectiveness of ITS to adequately protect the health and safety of the public. Accordingly, these requirements may be moved to one of the following licensee-controlled documents for which changes are adequately governed by a regulatory or TS requirement: (1) TS Bases controlled by ITS 5.5.14 "Technical Specifications Bases Control Program;" (2) UFSAR (includes the Technical Requirements Manual (TRM) by reference) controlled by 10 CFR 50.59; (3) the Offsite Dose Calculation Manual (ODCM) controlled by 10 CFR 50.59; and (4) the QA plans as approved by the NRC and contained in UFSAR Chapter 17 and controlled by 10 CFR Part 50, Appendix B. For each of these changes, Table RL also lists the licensee-controlled documents and the TS or regulatory requirements governing changes to those documents. A

50.54(a)(3)

Assessment
Insert Items 2, 4, 6 and 7
attached

To the extent that requirements and information have been relocated to licensee-controlled documents, such information and requirements 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, where such information and requirements are contained in LCOs and associated requirements in the CTS, the NRC staff has concluded that they do not fall within any of the four criteria in the Final Policy Statement (discussed in Part II of this safety evaluation). Accordingly, existing detailed information and specific requirements, such as generally described above, may be deleted from the CTS.

E. Relocated Specifications

The Final Policy Statement states that LCOs and associated requirements that do not satisfy or fall within any of the four specified criteria may be relocated from existing TS (an NRC-controlled document) to appropriate licensee-controlled documents. These requirements include the LCOs, Action Statements (ACTIONS), and associated SRs. In its application, the

Quality Assurance
Program Description
(QAPD)

licensee proposed relocating such specifications to the Updated Final Safety Analysis Report (UFSAR) (includes the Technical Requirements Manual (TRM) by reference), and the ODCM, as appropriate. The staff has reviewed the licensee's submittals, and finds that relocation of these requirements to the FSAR (and TRM) and ODCM is acceptable, in that changes to these documents will be adequately controlled by 10 CFR 50.59. These provisions will continue to be implemented by appropriate plant procedures: i.e., operating procedures, maintenance procedures, surveillance and testing procedures, and work control procedures.

QAPD

and 10 CFR 50.54
(a)(3), as appropriate

The licensee, in electing to implement the specifications of STS, also proposed, in accordance with the criteria in the Final Policy Statement, to entirely remove certain TS from the CTS and place them in licensee-controlled documents noted in Table R. Table R lists all specifications and specific CTS details that are relocated, based on the Final Policy Statement, to licensee-controlled documents in ITS. Table R provides: a CTS reference; a summary description of the requirement; the name of the document that retains the CTS requirements; the method for controlling future changes to relocated requirements; and a characterization of the discussion of change. The NRC staff evaluation of each relocated specification and specific CTS detail presented in Table R is provided below.

CTS 3/4.12.B LINEAR HEAT GENERATION RATE

CTS 3.12.B Linear Heat Generation Rate (LHGR) is addressed in ITS 3.2.1, Average Planar Linear Heat Generation Rate (APLHGR). ITS 3.2.1 addresses the APLHGR requirements which encompass the LHGR requirements, thereby eliminating the need for a LHGR Specification. This change is consistent with a letter from A.C. Thadani (NRC) to J.S. Charnley (GE), "Acceptance for Referencing of Amendment 19 to General Electric Licensing Topical Report NEDE-24011-P-A (GESTAR-II), General Electric Standard Application for Reactor Fuel," dated April 7, 1987.

GESTAR-II requires that the LHGR be monitored by the plant computer. In keeping with the GESTAR-II requirements, CTS 3.12.B LHGR requirements are moved to the TRM. Changes to the moved requirements are evaluated in accordance with 10 CFR 50.59. This change is consistent with the STS.

CTS 3/4.2.C CONTROL ROD BLOCK INSTRUMENTATION

CTS Tables 3.2-C and 4.2-C include the LCOs and SRs for Control Rod Block Functions associated with the APRMs, IRMs, SRMs, Scram Discharge Volume (SDV), and Recirculation Flow. Only the power-biased local power RBM Functions, the RWM and the Reactor Mode Switch-Shutdown Position rod blocks are retained in ITS 3.3.2.1. The APRM, IRM, SRM, SDV, and Recirculation Flow rod blocks are intended to prevent control rod withdrawal when plant conditions make such withdrawal imprudent. However, there are no safety analyses that depend upon these rod blocks to prevent, mitigate or establish initial conditions for design basis accidents or transients. The evaluation summarized in NEDO-31466, Technical Specification Screening Criteria Application and Risk Assessment, determined that the loss of these rod blocks is a non-significant risk contributor to core damage frequency and offsite releases. The results of this evaluation are applicable to the DAEC. Therefore, this instrumentation did not satisfy the Screening Criteria for inclusion in the Technical

Specifications and is moved to the TRM. Any changes to these requirements are to be evaluated in accordance with 10 CFR 50.59. This change is consistent with the STS.

CTS 3/4.2.F&H POST ACCIDENT MONITORING (PAM) INSTRUMENTATION

CTS 3/4.2.F contains requirements for plant Surveillance Instrumentation whose ranges are designed for normal plant operating conditions and not for post accident monitoring. CTS 3/4.2.H for Accident Monitoring Instrumentation contains some instrumentation that is not Regulatory Guide 1.97 Category 1. The DAEC does not have any Regulatory Guide 1.97 Type A variables. The NRC position on application of the deterministic screening criteria to PAM instrumentation is documented in a letter dated May 7, 1988 from T.E. Murley (NRC) to R.F. Janecek (BWROG). The position is that the PAM Table in the CTS should contain, on a plant specific basis, all Regulatory Guide 1.97 Type A variables and all Category 1 instruments. Instruments meeting this criteria remain in the ITS. The instruments not meeting this criteria, and their associated CTS requirements (including Actions, Surveillances and footnotes), are moved to licensee controlled documents where changes are evaluated in accordance with 10 CFR 50.59. For PAM instrumentation that does not satisfy the deterministic screening criteria, their loss is not risk significant since the variable they monitor did not qualify as a Type A or Category 1 variable (one that is important to safety or needed by the operator to perform necessary manual actions). Therefore, consistent with the STS, these criteria are applied to the specific PAM instrumentation and the following instruments and their associated requirements are moved to the TRM:

<u>Surveillance Instrumentation</u>	<u>Type/Range</u>
1. Reactor Water Level	Recorder, Indicator 158 - 218 Inches
2. Reactor Pressure	Recorder, Indicator 0 - 1200 psig
3. Drywell Pressure	Recorder -10 - +90 psig
4. Drywell Temperature	Recorder 0 -350°F
5. Torus Water Temperature	Recorder 20 - 220°F
6. Torus Water Level	Recorder -10 - +10 Inches H ₂ O
7. Source Range Monitoring	10 ¹ - 10 ⁶ cps
8. IRM/APBM	0 - 125%

9. Control Rod Position

Accident Monitoring Instrumentation

1. Safety/Relief Valve Position Indicator (Primary Detector)
2. Safety/Relief Valve Position Indicator (Backup - Thermocouple)
3. Safety Valve Position Indicator (Primary Detector)
4. Safety Valve Position Indicator (Backup - Thermocouple)
5. Reactor Coolant, Containment Atmosphere, and Torus Water Post-Accident Sampling
6. Extended Range Effluent Radiation Monitors:
 - a. Reactor Building Exhaust Stack
 - b. Turbine Building Exhaust Stack
 - c. Offgas Stack
7. Containment Water Level Monitor

8. Post-Accident Sampling System

CTS 3/4.2.G ALTERNATE ROD INSERTION INSTRUMENTATION FUNCTIONS

CTS 3/4.2.G establishes requirements for Alternate Rod Insertion (ARI) Functions. The ATWS-ARI function, serving only as a backup to the Reactor Protection System Scram function, does not satisfy the NRC Policy Statement on Technical Specification Screening Criteria for inclusion in the ITS. As such, ARI function requirements are moved to the TRM where changes are evaluated in accordance with 10 CFR 50.59. In addition, the ARI function is required by and must meet the requirements of 10 CFR 50.62 and is maintained in accordance with Appendix B to 10 CFR 50 per NRC Generic Letter 85-06, "Quality Assurance Guidance for ATWS Equipment that is not Safety-Related." This change is consistent with the STS.

CTS 3/4.5.I ENGINEERED SAFEGUARDS COMPARTMENTS COOLING & VENTILATION

are 3.5.I, Engineered Safeguards Compartments Cooling and Ventilation, as it relates to the HPCI and RCIC. The TRM
room coolers ~~is~~ being relocated to the TRM. In addition, CTS 4.5.I, the Surveillance
Requirements for all the ECCS room coolers is being relocated to plant procedures. Relocating
requirements for the room coolers does not preclude them from being required to be Operable.
and RCIC have HPCI has redundant room coolers and if one room cooler is inoperable, the HPCI System is still
(or RCIC) Operable. Thus, only one room cooler is required to be Operable for HPCI to be Operable; and
if that room cooler becomes inoperable, the definition of Operability would require that the
HPCI System be declared inoperable immediately. Similarly, if a RHR and CS corner room
cooler is inoperable; for example, by failing one of the relocated surveillances, the associated
pumps would be declared inoperable, as appropriate, by the definition of Operability and the
required actions taken. This is consistent with the CTS requirements. Changes to the
relocated requirements in the TRM will be evaluated in accordance with the DAEC 10 CFR
50.59 program.

3/4.2.I OFFGAS HYDROGEN MONITORING INSTRUMENTATION

CTS 3/4.2.I identifies the monitoring requirements for explosive gas downstream of the Off-Gas System recombiners. ITS 5.5.8, Explosive Gas and Storage Tank Radioactivity Monitoring Program, requires maintaining explosive gas concentration limits in a surveillance program, including specific details regarding the explosive gas concentration limits, instrumentation, and associated surveillance program. These details are moved outside the

ITS to the TRM. Placing these details in the TRM, and the addition of the Explosive Gas and Storage Tank Radioactivity Monitoring Program to the ITS provides assurance the associated limits are maintained. Changes to the moved requirements in the TRM are controlled according to 10 CFR 50.59. This change is consistent with the STS.

3/4.2.D RADIATION MONITORING INSTRUMENTATION

The radioactive gas processing system, including 3/4.2.D.1 Offgas Post-Treatment Radiation Monitors and 3/4.2.D.2 Offgas Pre-Treatment Radiation Monitors, is not a safety system and is not connected to the primary coolant piping. The offgas post-treatment and pre-treatment monitors are used to show conformance with the discharge limits of 10 CFR 20. There is a new Specification (LCO 3.7.6, Main Condenser Offgas) that ensures 10 CFR 100 limits are not exceeded. Information provided by these instruments on the radiation levels would have limited or no use in identifying/assessing core damage and they are not installed to detect excessive reactor coolant leakage. Since the screening criteria of 10 CFR 50.36 are not satisfied, and as discussed in NEDO-31466, the loss of these monitors was found to be a non-significant risk contributor to core damage frequency and offsite releases, the Offgas Post-Treatment and Pre-Treatment Radiation Monitors specifications may be relocated to the Offsite Dose Assessment Manual (ODAM) outside the Technical Specifications and controlled through the requirements established in ITS 5.5.1 on the ODA.

3/4.5.B CONTAINMENT SPRAY COOLING CAPABILITY

The drywell spray mode of RHR is utilized to condense the steam that is discharged into the drywell during a LOCA. Emergency operating procedures direct manual initiation of the containment mode of RHR, i.e., both drywell spray and suppression pool spray. However, in the analysis of the bounding event for the containment analysis and the suppression pool pressurization due to bypass leakage, the drywell spray mode of RHR was not utilized for mitigation of the event. Suppression pool spray may be utilized for mitigation of the event, however, its use is not relied upon for successful mitigation. The DAEC containment has been examined to determine what leakage between the drywell and wetwell can be tolerated. The basis for determining the maximum tolerable leakage is the containment maximum internal pressure of 56 psig. The results of this examination indicate that the maximum allowable leakage area is approximately 0.2 ft². With the maximum allowable bypass leakage present, small primary system breaks are more limiting than large primary system breaks, since for larger primary system breaks, the primary system will be depressurized before the containment reaches 56 psig. For small primary system breaks, some operator action is required to terminate the event prior to the time that primary containment pressure reaches 56 psig, since the primary system will not be depressurized before the containment pressure reaches 56 psig. When calculating the maximum allowable bypass leakage, operator action was assumed as follows: When suppression chamber pressure reaches 35 psig, the operator first realizes that a containment bypass leakage path exists (the maximum suppression chamber pressure that can exist without some containment bypass leakage present is approximately 25 psig). Following this, there is a 10 minute time delay before any action is taken to terminate the containment pressure rise. The corrective action initiated 10 minutes after the containment pressure reaches 35 psig is assumed to take 5 minutes to be effective. At that time, the containment pressure would reach 56 psig if the allowable bypass leakage

had occurred. For the analysis, the specific nature of the corrective action taken after 10 minutes was not defined, although the operator would have several options available. If the source of leakage is unknown, the primary system can be depressurized via either the main condenser or the relief valves. Thus, the event can be successfully mitigated if the primary system can be manually depressurized in less than 5 minutes using either the main condenser or the relief valves. The time required to depressurize the RPV using the Automatic Depressurization System (with a small primary system leak present) is on the order of 220 seconds. Therefore, the use of suppression pool sprays was not assumed in the analysis of the maximum containment bypass leakage, and is not relied upon to mitigate the event. Since the screening criteria of 10 CFR 50.36 are not satisfied, the Containment Spray Mode of RHR (both Drywell Spray and Suppression Pool Spray) Specification may be relocated to the TRM.

3/4.6.B.2 CHEMISTRY

Poor reactor coolant water chemistry may contribute to the long term degradation of system materials and thus is not of immediate importance to the plant operator. Reactor coolant water chemistry is monitored for a variety of reasons. One reason is to reduce the possibility of failures in the reactor coolant system pressure boundary caused by corrosion. Severe chemistry transients have resulted in failure of thin walled LPRM instrument dry tubes in a relatively short period of time. However, these LPRM dry tube failures result in loss of the LPRM function and are readily detectable. In summary, the chemistry monitoring activity serves a long term preventative rather than mitigative purpose. Since the screening criteria of 10 CFR 50.36 are not satisfied, the Chemistry LCO and Surveillances may be relocated to the TRM.

3/4.6.G STRUCTURAL INTEGRITY

The inservice testing requirements on pumps and valves required by 4.6.G.1 have been moved to Specification 5.5.6 and are not part of this discussion.

The inspection programs for ASME Code Class 1, 2, and 3 components ensure that the structural integrity of these components will be maintained throughout the components life. Other Technical Specifications require important systems to be operable (for example, ECCS 3/4.5.A) and in a ready state for mitigative action. This Technical Specification is more directed toward prevention of component degradation and continued long term maintenance of acceptable structural conditions. Hence it is not necessary to retain this Specification to ensure immediate operability of safety systems. Further, this Technical Specification prescribes inspection requirements which are performed during plant shutdown. It is, therefore, not directly important for responding to design basis accidents (DBAs). Since the screening criteria of 10 CFR 50.36 are not satisfied, the Structural Integrity Specification may be relocated to the TRM.

3/4.6.H SHOCK SUPPRESSORS (SNUBBERS)

Hydraulic and mechanical snubbers are included in the plant design to ensure that the structural integrity of the reactor coolant system and other safety-related systems are maintained during and following a seismic or other dynamic loading event. The snubbers are considered a part of the piping system. They serve as an aid to preventing piping failure, but

do not mitigate piping failure. Also, the failure of a snubber on a particular pipe cannot, by itself, cause the pipe to fail. Consequently, the snubbers do not meet any of the criteria since they are not utilized as a part of the primary success path in detecting or mitigating the consequences of a DBA or transient event. Additionally, the surveillance and maintenance requirements of the snubbers can adequately be controlled outside of the plant Technical Specifications and are moved to the TRM and QAPD.

Record keeping requirements are relocated to the

3/4.7.M.1 ISOLATION OF MECHANICAL VACUUM PUMP

The main condenser mechanical vacuum pump is used during startup and for purging the condenser after plant shutdown. This pump discharges first to a holdup pipe and then through the plant stack. The purpose for isolating the mechanical vacuum pump line is to limit the release of activity from the main condenser. During an accident, fission products could be transported from the reactor through the main steam lines to the condenser. However, the fission product radioactivity would be sensed by the main steam line radiation monitors which initiate isolation of the mechanical vacuum pump and terminate the release. Since the screening criteria of 10 CFR 50.36 are not satisfied, the mechanical vacuum pump isolation requirements may be relocated to the TRM and ODAM where they can be adequately through 10 CFR 50.59 and TS 5.5.1 on the ODAM.

3/4.11 RIVER LEVEL SPECIFICATION

The requirement to shutdown the plant if the Cedar River reaches 757.0 feet ensures that safety related equipment will not be adversely impacted by a flooding event prior to the unit being shutdown. However, this is an external event only and is not assumed in any design basis accident (DBA) or transient. Since the screening criteria of 10 CFR 50.36 are not satisfied, the River Level Specification may be relocated to the TRM where requirements can be adequately maintained through 10 CFR 50.59.

CONCLUSION

The relocated CTS discussed above are not required to be in the TS under 10 CFR 50.36 and do not meet any of the four criteria in the Final Policy Statement. They are not needed to obviate the possibility that an abnormal situation or event will give rise to an immediate threat to the public health and safety. In addition, the NRC staff finds that sufficient regulatory controls exist under the regulations cited above to maintain the effect of the provisions in these specifications. The NRC staff has concluded that appropriate controls have been established for all of the current specifications, information, and requirements that are being moved to licensee-controlled documents. This is the subject of a license condition established herewith. Until incorporated in the UFSAR and procedures, changes to these specifications, information, and requirements will be controlled in accordance with the applicable current procedures that control these documents. Following implementation, the NRC will audit the removed provisions to ensure that an appropriate level of control has been achieved. The NRC staff has concluded that, in accordance with the Final Policy Statement, sufficient regulatory controls exist under the regulations, particularly 10 CFR 50.59. Accordingly, these specifications, information, and requirements, as described in detail in this Safety Evaluation, may be relocated from CTS and placed in the UFSAR or other licensee-

March —, 1998.

controlled documents as specified in the licensee's letters dated ~~September 10, 1997, and October 13, 1997.~~

F. Control of Specifications, Requirements, and Information Removed from the CTS

The facility and procedures described in the UFSAR and TRM, incorporated into the UFSAR by reference, can only be revised in accordance with the provisions of 10 CFR 50.59, which ensures records are maintained and establishes appropriate control over requirements removed from CTS and over future changes to the requirements. Other licensee-controlled documents contain provisions for making changes consistent with other applicable regulatory requirements: for example, the Offsite Dose Calculation Manual (ODCM) can be changed in accordance with 10 CFR 50.59, ~~the emergency plan implementing procedures (EPIP) can be changed in accordance with 10 CFR 50.54(a); and the administrative instructions that implement the Quality Assurance Manual (QAM) can be changed in accordance with 10 CFR 50.54(a) and 10 CFR Part 50, Appendix B. Temporary procedure changes are also controlled by 10 CFR 50.54(a).~~ The documentation of these changes will be maintained by the licensee in accordance with the record retention requirements specified in the licensee's QA plan for DAEC and such applicable regulations as 10 CFR 50.59.

DAEC
Fire
Plan
and

A Assessment

March —, 1998

and other specified
licensee-controlled
documents

The licensee committed in a letter dated ~~September 10, 1997.~~ to confirm that CTS requirements designated for placement in the UFSAR ~~or the TRM~~ are appropriately reflected in these documents, or that they will be included in the next required update of these documents. This is the subject of a license condition established herewith. ~~The licensee has also committed to maintain an auditable record of, and an implementation schedule for, the procedure changes associated with the development of ITS.~~ The licensee will maintain the documentation of these changes, in accordance with the record retention requirements in the QA plan ~~and the TRM.~~ Attachment II in the letter, as corrected by the licensee's October 13, 1997, letter, includes a list of the changes involving specific requirements that have been removed from the CTS. For each of these changes, Attachment II also lists the licensee-controlled documents and the TS or regulatory requirements governing changes to those documents.

procedure

that
implement
the ITS

G. EVALUATION OF OTHER TS CHANGES INCLUDED IN THE APPLICATION FOR CONVERSION TO IMPROVED TECHNICAL SPECIFICATIONS

ITS 3.5: EVALUATION OF NEW ECCS CONDITIONS NOT INCLUDED IN THE STS AND CHANGES TO ECCS FLOW RATE REQUIREMENTS IN THE CTS

The NRC staff has concluded that, because the licensee used NRC approved codes and methods, the changes to the ITS to take credit for the lower flow rates found adequate in the SAFER/GESTR calculations for ECCS systems as well as the combinations of ECCS equipment found adequate to meet 10 CFR 50, Appendix K, requirements are acceptable. Detailed discussions of the individual changes falling in this category are provided below.

L₂ ITS 3.5.1 Action C establishes Required Actions and Completion Times for the situation when one Core Spray subsystem and one or two RHR (LPCI) pump(s) are inoperable. ITS 3.5.1 is less restrictive than CTS 3.5.A.4, which allows one RHR pump to be inoperable for 30 days, and CTS 3.5.A.5, which allows two RHR pumps (i.e., the LPCI subsystem) to be inoperable for up to 7 days, provided the remaining RHR (LPCI) active components, both Core Spray subsystems, the Containment Spray subsystem, and the DGs are verified to be Operable. The CTS does not allow one Core Spray subsystem and one or two RHR pump(s) to be inoperable at the same time. The LOCA analysis presented in NEDC-31310P, (Duane Arnold Energy Center SAFER/GESTR-LOCA Loss-of-Coolant Accident Analysis), indicates that an adequate level of protection is provided by the remaining Operable ECCS subsystems in this condition. The accident analysis also demonstrates that, in this condition, the peak clad temperature remains below the regulatory limit. However, another single failure may place the plant in a condition where adequate core cooling may not be available during a design basis LOCA. Therefore, a Completion Time of 72 hours has been established to either restore the inoperable Core Spray subsystem or the inoperable RHR pump(s).

L₃ ITS 3.5.1 Action D establishes Required Actions and Completion Times for the situation when two Core Spray subsystems are inoperable. ITS 3.5.1 is less restrictive than CTS 3.5.A.2, which allows only one Core Spray subsystem to be inoperable. CTS 3.5.A.6 would require the plant to be in Hot Shutdown within 12 hours and Cold Shutdown within the following 24 hours if both Core Spray subsystems were inoperable. With two CS subsystems inoperable, the LOCA analysis presented in NEDC-31310P, (Duane Arnold Energy Center SAFER/GESTR-LOCA Loss-of-Coolant Accident Analysis), indicates that the remaining Operable low pressure ECCS subsystem consisting of LPCI with four RHR pumps Operable (only 3 pumps required), provides adequate protection. However, another single failure may place the plant in a condition where adequate core cooling may not be available during a design basis LOCA. Therefore, a Completion Time of 72 hours has been established to restore one Core Spray subsystem to Operable status.

L₆ ITS 3.5.1 Action G establishes Required Actions and Completion Times for the situation when HPCI and one RHR pump are inoperable. ITS 3.5.1 is less restrictive than CTS 3.5.D.2, which allows continued operation if HPCI is inoperable only if both Core Sprays, LPCI, ADS and RCIC are verified to be Operable. While the LPCI subsystem is technically Operable with only 3 of 4 RHR pumps Operable, the CTS is currently conservatively interpreted to require all 4 RHR pumps to be Operable for the requirements of CTS 3.5.D.2 to be met, as a single RHR pump has more makeup capability than the HPCI System. Thus for mitigating small and intermediate break LOCAs, one LPCI pump, in combination with ADS, is more than adequate core cooling. The condition of HPCI and one RHR pump inoperable is bounded by the analysis in NEDC-31310P, Duane Arnold Energy Center, SAFER/GESTR-LOCA Loss-of-Coolant Accident Analysis. Since the remaining Operable low pressure ECCS subsystems are more than capable of performing their intended function, and RCIC and ADS are Operable, the proposed Action G maintains LOCA analysis assumptions for ECCS Operability. ITS Action G allows 7 days to restore the HPCI System or the RHR pump to Operable status. The 7 day Completion Time is considered reasonable

in that the LOCA analysis demonstrates that in this condition, the peak clad temperature remains below the regulatory limit. The 7 day Completion Time also provides the benefit of potentially avoiding an unnecessary plant shutdown while the safety functions are still capable of being performed.

ITS 3.5.1

L₈ ITS 3.5.1 Action I establishes Required Actions and Completion Times for the situation when HPCI and one ADS valve are inoperable. The proposed Specification is less restrictive than CTS 3.5.D.2, which allows continued operation if HPCI is inoperable only if both Core Sprays, LPCI, ADS and RCIC are verified to be Operable. While ADS is capable of performing its design function with only 3 of 4 valves Operable, per NEDC-31310P, Duane Arnold Energy Center, SAFER/GESTR-LOCA Loss-of-Coolant Accident Analysis, the CTS requires all 4 ADS valves to be Operable for the requirements of CTS 3.5.D.2 to be met. ITS 3.5.1 is less restrictive than CTS 3.5.F.2, which allows continued operation when one ADS valve is inoperable only if HPCI is verified to be Operable. Since all low pressure ECCS subsystems remain capable of performing their design function and ADS is still capable of performing its design function, ITS 3.5.1 Action I maintains LOCA assumptions to ensure an adequate level of protection is maintained. The proposed condition allows 72 hours to restore the HPCI System or the ADS valve to Operable status, since another single failure (i.e., loss of another ADS valve), may place the plant in a condition where adequate core cooling may not be available during a small or intermediate break LOCA.

L₉ CTS 4.5.A.1.d requires each Core Spray subsystem flow to be at least 3020 gpm; CTS 4.5.A.3.d requires 3 LPCI pumps to deliver 14,400 gpm; and CTS 4.5.D.1.d and CTS 4.5.D.1.e requires HPCI to deliver at least 3000 gpm. Changes in ITS 3.5.1 will reduce these CTS pump flow requirements by approximately 10%. ITS SR 3.5.1.4 will require a flow rate of 2718 gpm for each Core Spray subsystem and 4320 gpm for each LPCI pump (12,960 gpm for 3 pumps). ITS SR 3.5.1.5 and SR 3.5.1.6 will require a flow rate of 2700 gpm for HPCI. These changes to the ECCS minimum flow rate requirements are based on the analysis contained in NEDC-31310P, Duane Arnold Energy Center SAFER/GESTR-LOCA, Loss-of-Coolant Accident Analysis, via DAEC License Amendment #142, dated May 7, 1987. These revised pump flow rates are consistent with or are conservative with respect to the input parameters in the LOCA analysis and, therefore, are acceptable for use in the ITS.

3.6.1.3 Primary Containment Isolation Valves

STS 3.6.1.3 Condition D refers to "Secondary containment bypass leakage rate not within limit," with an associated requirement to restore the leakage rate to within the limit within 4 hours. The licensee has proposed to change this to "One or more penetration flow paths with one or more MSIVs not within leakage limit," and to change the completion time to 8 hours.

The wording change is acceptable because MSIV leakage is a part of secondary containment bypass leakage and the CTS does not contain requirements on any other secondary containment bypass leak paths. The completion time change from 4 to 8 hours is requested.

Condition

-50-

STS 3.6.1.3_A states that, for the condition of one or more penetration flow paths with one PCIV (primary containment isolation valve) inoperable, except for purge valve leakage not within limit, to take certain actions to isolate the affected flow path within 4 hours, except for a main steam line, for which the time is 8 hours. The allowance of 8 hours for MSIV inoperability applies to any kind of valve inoperability, including a valve stuck wide open. Clearly, this bounds whatever leakage rate the valve could experience. Therefore, because the staff has accepted the MSIVs as a special case in STS 3.6.1.3_A, allowing 8 hours of inoperability, and because ITS 3.6.1.3_D as proposed applies only to the leakage of MSIVs, rather than also including other valves, then it is logical to allow the completion time of ITS 3.6.1.3_D to also be 8 hours.

Condition

Based on the above, the staff finds a completion time of 8 hours for proposed ITS 3.6.1.3_D to be acceptable.

3.6.2.3 RHR Suppression Pool Cooling

The licensee has proposed, in ITS 3.6.2.3, to allow two subsystems of RHR suppression pool cooling to be inoperable (loss of function) for up to 8 hours before proceeding to shut down, whereas the STS require an immediate shutdown on loss of this function, without the 8 hour allowance. The licensee argues that both the STS and the ITS allow both RHR service water subsystems to be inoperable (loss of function) for 8 hours, and, with no RHR service water to cool the RHR suppression pool cooling subsystems, the RHR suppression pool cooling function would also be lost.

It would appear that consistency between these two TS is desirable, as loss of function for either system results in loss of the suppression pool cooling function. ~~However, it is not obvious that allowing 8 hours for both TS is appropriate, rather than requiring an immediate shutdown for both TS.~~

It is the staff's judgement that the difference, in terms of safety, between the two approaches (i.e., immediate shutdown vs. allowing 8 hours) is not significant. Therefore, to allow two subsystems of RHR suppression pool cooling to be inoperable (loss of function) for up to 8 hours is acceptable.

IV. STATE CONSULTATION

In accordance with the Commission's regulations, the Iowa State official was notified of the proposed issuance of the amendment. The State official for the State of Iowa had no comments.

March 17, 1998
(63 FR 13078)

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 September 25, 1997 (62 FR 50409T).

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 DAEC TS provide clearer, more readily understandable requirements to ensure safe operation of the plant. The NRC 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-1433 with appropriate modifications for plant-specific considerations. The NRC staff further concludes that the improved DAEC TS satisfy Section 182a of the Atomic Energy Act, 10 CFR 50.36 and other applicable standards. On this basis, the NRC staff concludes that the proposed improved DAEC TS are acceptable.

The NRC staff has also reviewed the plant-specific changes to CTS as described in this evaluation. On the basis of the evaluations described herein for each of the changes, the NRC 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.

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DAEC

TABLE A - ADMINISTRATIVE CHANGES MATRIX (page 2 of 78)

Discussion of Change	Summary of Change	ITS Section	CTS Section
1.0 A7	The presentation of the CTS definition for Shutdown Margin (SDM) was revised in the ITS. The CTS requires the analytically determined strongest rod to be used; whereas, the ITS allows the use of either the analytically determined strongest rod or the strongest rod determined by test. The definition was modified to be consistent with the actual ITS LCO for SDM. Discussion of the technical aspects of this change are addressed in ITS Section 3.1.1, Shutdown Margin.	1.1	1.0
1.0 A8	The definitions of Primary Containment Integrity and Secondary Containment Integrity were deleted. All the requirements are specifically addressed in the respective LCOs and Bases along with other LCOs in the Containment Systems Section.	None	1.0
1.0 A9	CTS definitions not used in the ITS were deleted.	None	1.0
1.0 A10	The definitions of Critical Power Ratio and Transition Boiling were incorporated into the definition of Minimum Critical Power Ratio (MCPR) to enhance clarity.	1.1	1.0
1.0 A11	The CTS definitions of Instrument Calibration or Channel Calibration, Channel Functional Test and Logic System Functional Test (LSFT) were revised to provide additional details with respect to test methods and the scope of testing. The CTS definition for RPS Response Time was clarified to state that the test can be performed in segments, provided the total response time is measured, consistent with current interpretation and practice. These changes are consistent with the STS.	1.0	1.0
1.0 A12	The CTS definitions for Channel, Trip System and Logic were deleted because they are <u>commonly understood and not prone to unique or inappropriate interpretations</u> . This change is administrative with no impact of its own.	None	1.0

not required for proper interpretation of the ITS.

TABLE A - ADMINISTRATIVE CHANGES MATRIX (page 6 of 78)

Discussion of Change	Summary of Change	ITS Section	CTS Section
ITS CHAPTER 2.0 - SAFETY LIMITS (SLs)			
2.0 A1	Editorial, text, and format changes of an administrative nature are made to conform to the conventions used in the ITS.	2.0	1.1 1.2 2.1 2.2 6.7
2.0 A2	The presentation of the CTS low pressure/low flow MCPWR Safety Limit was changed in the ITS. The CTS Applicabilities of the reactor water level and reactor steam dome pressure Safety Limits, related to irradiated fuel in the reactor vessel, were changed in presentation in the ITS. In addition, the CTS wording "... not be less than 12 inches above the top of the normal active fuel zone" is being replaced in the ITS with "... be greater than 15 inches above the top of active irradiated fuel" consistent with current plant design, interpretation, and practice.	2.1.1.1 2.1 2.1.1.3	1.1.B 1.1.D 1.2.1 1.1.D
2.0 A3	The CTS statement that exceeding the MCPWR Safety Limits "shall constitute violation of the fuel cladding integrity safety limit," was deleted since exceeding the MCPWR Safety Limits is understood to constitute exceeding the Safety Limit in the ITS.	2.1.1.2	1.1.A
2.0 A4	The CTS requirement for the MCPWR Safety Limit to be met when reactor pressure is > 785 psig and core flow > 10% of rated has been slightly reduced in the ITS (by adding the "equal to" sign). This change is considered to be administrative because the CTS Bases discussion agrees with the ITS and with the GEXL correlation assumptions described in NEDO-10958 (GETAB). <i>modified to be consistent with</i>	2.1.1.2	1.1.A

TABLE A - ADMINISTRATIVE CHANGES MATRIX (page 16 of 78)

Discussion of Change	Summary of Change	ITS Section	CTS Section
3.3.1.1 A8	The CTS Surveillance Requirements for the SDV Water Level High Float Switches and SDV Resistance Temperature Detectors (RTDs) are clarified in the ITS by indicating that the requirement to calibrate the trip units apply to the SDV RTDs since only this SDV Function includes trip units.	SR 3.3.1.1.1.10	Table 4.1.1-1 Note (j)
3.3.1.1 A9	The Allowable Value for the Turbine Control Valve Fast Closure, Trip Oil Pressure RPS Function was changed in presentation from the CTS to the ITS. The ITS Allowable Value for this Function, and the current pressure switch settings, correspond to the CTS response time.	Table 3.3.1.1-1 Function 9	2.1.D Table 3.1.1-1 Function 9 Table 4.1.1-1 Note (k)
3.3.1.1 A10	The CTS Frequency for the Channel Functional Test of the RPS IRM Functions and the APRM Function of Neutron Flux-Upscale, Startup, "within 24 hours prior to Startup, if not performed within the previous 7 days," is redundant to the requirements of ITS SR 3.0.4 which requires the Surveillance to be current prior to entry into the applicable Modes (i.e., Startup) and the normal periodic ITS Surveillance which is required to be performed at a Frequency of 7 days.	SR 3.3.1.1.4-1 Not Used	Table 4.1.1-1 Note (c)
3.3.1.1 A11	The CTS practice and interpretation of the requirement to determine that IRM and SRM channels overlap during each startup after entering the Startup Mode is clarified in the ITS to define when during the startup this verification is required.	SR 3.3.1.1.6	Table 4.1.1-1 Footnote (b)
3.3.1.1 A12	The requirements for the APRM Scram Clamp were changed in presentation from the CTS to the ITS.	Table 3.3.1.1-1 Function 2.c	2.1.A.1 Table 3.1.1-1 Table 4.1.1-1

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Discussion of Change	Summary of Change	ITS Section	CTS Section
3.3.1.1 A13	The CTS Frequency for calibration of LPRMs was changed from at least once per 1000 effective full power hours (EFPH) to every 1000 MWD/T average core exposure in the ITS. Since the Frequencies are comparable, this change is considered to be administrative.	SR 3.3.1.1.8	Table 4.1-1 Footnote (f)
3.3.1.1 A14	The CTS Note (for the IRMs and APRMs), that states the Channel Functional Test will consist of injecting a simulated electrical signal into the measurement channels, is deleted since this information is included in the ITS definition of Channel Functional Test.	1.1	Table 4.1-1 Note (1)
ITS 3.3.1.2: SRM INSTRUMENTATION			
3.3.1.2 A1	Editorial, text, and format changes of an administrative nature are made to conform to the conventions of the ISTS.	3.3.1.2	3.3.C 4.3.C 3.9.B 4.9.D
3.3.1.2 A2	The cross references to other Specifications were deleted. The change is a presentation preference and does not alter the current requirements.	None	3.9.B.1
ITS 3.3.2.1: CONTROL ROD BLOCK INSTRUMENTATION			
3.3.2.1 A1	Editorial, text, and format changes of an administrative nature are made to conform to the conventions of the ISTS.	3.3.2.1	1.0 3.2.C 4.2.C Table 3.2-C Table 4.2-C 3.3.C 4.3.C 4.3.D

Add new A15 to 3.3.1.1

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Discussion of Change	Summary of Change	ITS Section	CTS Section
ITS 3.3.3.2: REMOTE SHUTDOWN SYSTEM			
3.3.3.2 A1	Editorial, text, and format changes of an administrative nature are made to conform to the conventions of the ITS.	3.3.3.2	3.10.B 4.10.B
ITS 3.3.4.1: END OF CYCLE RECIRCULATION PUMP TRIP (EOC-RPT) INSTRUMENTATION			
3.3.4.1 A1	Editorial, text, and format changes of an administrative nature are made to conform to the conventions of the ITS.	3.3.4.1	Table 4.1-1 3.2.G 4.2.G Table 3.2-G Table 4.2-G
3.3.4.1 A2	Current practice and interpretation is maintained with a Note for separate Condition entry applied to the ITS ACTIONS.	3.3.4.1 ACTIONS Note	3.2.G
3.3.4.1 A3	The requirements for EOC-RPT Instrumentation were changed in presentation from the CTS to the ITS.	3.3.4.1, APPLICABILITY, ACTIONS, and SURVEILLANCE REQUIREMENTS	3.2.G 4.2.G Table 3.2-G Table 4.2-G
3.3.4.1 A4	The presentation of the CTS allowance that if an instrument(s) for EOC-RPT is (are) inoperable, it may be considered to be Operable if placed in a tripped condition, is maintained because the ITS permits continued operation in this condition.	3.3.4.1 Required Action A.2	Table 3.2-G Footnote (c)
3.3.4.1 A5	The CTS requirement for a Channel Functional Test of the RPT breakers is included in the ITS Logic System Functional Test for EOC-RPT.	SR 3.3.4.1.3 SR 3.3.4.2.4	Table 4.2-G

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Discussion of Change	Summary of Change	ITS Section	CTS Section
3.3.4.1 A8	The revised presentation of ITS 3.3.4.1 Required Actions C.1 and C.2 does not explicitly detail options to restore compliance with the LCO. The CTS requirement, in the event one EOC-RPT system is inoperable for more than 72 consecutive hours or if both EOC-RPT systems are inoperable, that the MCPR penalty be applied within 4 hours, is effectively an action to restore compliance with the LCO. The option to apply the MCPR penalty and restore compliance with the LCO is always an option, and is implied in all ITS ACTIONS. CTS Table 3.2-G Action 81 for (EOC) RPT instrumentation requires if one system is inoperable for more than 72 consecutive hours or if both (EOC) RPT systems are inoperable, apply the MCPR penalty within 4 hours. This CTS limit of 4 hours to apply the MCPR penalty includes the 2 hours to restore MCPR in CTS 3.12.C.3. With ITS 3.3.4.1 Action A not satisfied, ITS 3.3.4.1 Condition C is entered. The ITS option to apply the MCPR penalty within the 4 hour Completion Time of ITS 3.3.4.1 Condition C is available to satisfy the LCO requirement and exit the Actions. Thus, the CTS and ITS Actions are equivalent.	3.3.4.1 Required Actions C.1 and C.2 3.3.4.1 Required Actions B.1 and B.2 3.2.2 Required Action A.1	Table 3.2-G Action 81 Table 3.2-G Action 81
3.3.4.1 A9	The requirement that if the MCPR limit is not restored, to reduce Thermal Power to < 25% RTP, or to such a power level that the limits are again being met was changed in presentation in the ITS by requiring a power reduction to < 30% RATED THERMAL POWER. The ITS implement the intent of the CTS with respect to restoring MCPR to within limits because footnote (e) specifies that EOC-RPT logic is to be operated at $\geq 30\%$ RTP.	3.3.4.1 Required Action C.2	3.12.C.3 Table 3.2-G Footnote (e)

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Discussion of Change	Summary of Change	ITS Section	CTS Section
ITS 3.3.4.2: ANTICIPATED TRANSIENT WITHOUT SCRAM RECIRCULATION PUMP TRIP (ATWS-RPT) INSTRUMENTATION			
3.3.4.2 A1	Editorial, text, and format changes of an administrative nature are made to conform to the conventions of the ISTS.	3.3.4.2	3.2.G 4.2.G Table 3.2-G Table 4.2-G
3.3.4.2 A2	Current practice and interpretation is maintained with a Note for separate Condition entry applied to the ITS ACTIONS.	3.3.4.2 ACTIONS Note	3.2.G
3.3.4.2 A3	The requirements for ATWS-RPT Instrumentation were changed in presentation from the CTS to the ITS.	3.3.4.2 APPLICABILITY, ACTIONS, and SURVEILLANCE REQUIREMENTS	3.2.G 4.2.G Table 3.2-G Table 4.2-G
3.3.4.2 A4	The presentation of the CTS allowance that if an instrument(s) for ATWS-RPT is (are) inoperable, it may be considered to be Operable if placed in a tripped condition because the ITS permits continued operation in this condition.	3.3.4.2 Required Actions A.1 and B.1	Table 3.2-G Footnote (c)
3.3.4.2 A5	The CTS requirement for a Channel Functional Test of the RPT breakers is included in the ITS Logic System Functional Test for ATWS-RPT.	SR 3.3.4.2.4 SR 3.3.4.1.3	Table 4.2-G

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Discussion of Change	Summary of Change	ITS Section	CTS Section
ITS 3.3.5.1: EMERGENCY CORE COOLING SYSTEM (ECCS) INSTRUMENTATION			
3.3.5.1 A1	Editorial, text, and format changes of an administrative nature are made to conform to the conventions of the ISTS. In addition, the ECCS Instrumentation trip settings were combined with the current ECCS Instrumentation Technical Specification into one Specification.	3.3.5.1	2.1 3.2.B 4.2.B Table 3.2-B Table 4.2-B
3.3.5.1 A2	Current practice and interpretation is maintained with a Note for separate Condition entry applied to the ITS ACTIONS.	3.3.5.1 ACTIONS Note 1	3.2.B
3.3.5.1 A3	The CTS action for inoperable HPCI Functions of Condensate Storage Tank Level-Low or Suppression Pool Water Level-High were changed in presentation to require the HPCI pump to be aligned to the suppression pool instead of placing inoperable channel(s) in trip. Since this proposed Action results in the same condition as if the channel were tripped (i.e., tripping one channel results in the suction being aligned to the suppression pool), the change is administrative.	3.3.5.1 Required Action D.2.2 Not Used.	Table 3.2-B Action 35
3.3.5.1 A4	The allowance for the two channels of the HPCI Condensate Storage Tank Level - Low Function to be inoperable for performance of Surveillance Requirements was retained, but changed in presentation from the CTS to the ITS.	Note 2 to SURVEILLANCE REQUIREMENTS	Table 3.2-B Footnote (a)
3.3.5.1 A5	The Applicabilities for ADS and HPCI were changed in presentation from the CTS to the ITS.	Table 3.3.5.1-1 Footnotes (c) and (d)	Table 3.2-B Footnotes #, ##

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Discussion of Change	Summary of Change	ITS Section	CTS Section
3.3.5.1 A6	The ADS Functions of the CTS are divided into two groups of Functions; ADS Trip Logic A and ADS Trip Logic B in the ITS. In addition, the number of required channels per Function was revised to reflect the dividing of the ADS Function (i.e., one half of the number of channels in the CTS are listed as Trip Logic A and the other half as Trip Logic B).	Table 3.3.5.1-1 Functions 4.a through 4.e and 5.a through 5.e	Table 3.2-B
3.3.5.1 A7	The minimum Operable channels per Trip Function for the 4.16 kV Emergency Bus Sequential Loading Relay have been clarified to reflect the requirements separately for CS and LPCI systems.	Table 3.3.5.1-1 Functions 1.f and 2.k	Table 3.2-B
3.3.5.1 A8	The actions associated with an inoperable 4.16 kV Emergency Bus Sequential Loading Relay channel were changed to require the channel to be restored to Operable status within 1 hour instead of tripping the channel in 1 hour. For this Function, placing a channel in the tripped condition causes the supported feature (i.e., low pressure ECCS pump(s)) to be inoperable immediately. Because the ITS require the supported feature to immediately be declared inoperable if restoration of the channel is not completed within 1 hour, the CTS and ITS Actions are equivalent.	3.3.5.1- Required Actions F.1 and 1.1-	Table 3.2-B Action 36

Not Used.

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Discussion of Change	Summary of Change	ITS Section	CTS Section
ITS 3.3.5.2: REACTOR CORE ISOLATION COOLING (RCIC) SYSTEM INSTRUMENTATION			
3.3.5.2 A1	Editorial, text, and format changes of an administrative nature are made to conform to the conventions of the ISTS. In addition, the RCIC Instrumentation trip settings were combined with the current RCIC Instrumentation Technical Specification into one Specification.	3.3.5.2	2.1 3.2.B 4.2.B Table 3.2-B Table 4.2-B
3.3.5.2 A2	Current practice and interpretation is maintained with a Note for separate Condition entry applied to the ITS ACTIONS.	3.3.5.2 ACTIONS Note 1	3.2.B
3.3.5.2 A3	The CTS action for the inoperable RCIC Function of Condensate Storage Tank Level-Low was changed in presentation to require the RCIC pump to be aligned to the suppression pool instead of placing inoperable channel(s) in trip. Since this proposed Action results in the same condition as if the channel were tripped (i.e., tripping one channel results in the suction being aligned to the suppression pool), the change is considered to be administrative.	3.3.5.2 Required Action D.2.2	Table 3.2-B Action 35
3.3.5.2 A4	The allowance for the two channels of the RCIC Condensate Storage Tank Level - Low Function to be inoperable for performance of Surveillance Requirements was changed in presentation from the CTS to the ITS.	Note 2 to SURVEILLANCE REQUIREMENTS	Table 3.2-B Footnote (a)

Not Used.

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Discussion of Change	Summary of Change	ITS Section	CTS Section
ITS 3.3.6.1: PRIMARY CONTAINMENT ISOLATION INSTRUMENTATION			
3.3.6.1 A1	Editorial, text, and format changes of an administrative nature are made to conform to the conventions of the ISTS.	3.3.6.1	2.1 2.2 3.2.A 4.2.A Table 3.2-A Table 4.2-A 3.2.B 4.2.B Table 3.2-B Table 4.2-B 3.2.D 4.2.D Table 3.2-D Table 4.2-D
3.3.6.1 A2	Current practice and interpretation is maintained with a Note for separate Condition entry applied to the ITS ACTIONS.	3.3.6.1 ACTIONS Note 1	3.2.A 3.2.B
3.3.6.1 A3	The CTS allowance, to not require placing inoperable channel(s) in trip, where this would cause a Primary Containment Isolation, was retained but changed in presentation in the ITS. If placing the inoperable channel(s) in trip would cause the isolation, ITS 3.3.6.1 Required Action A.1 would not be completed within the required Completion Time and ITS 3.3.6.1 Condition C would then be entered. ITS 3.3.6.1 Required Action A.1, which requires placing the channel in trip would only be completed where placing channel(s) in trip would not cause an isolation. The same response is required in the CTS and the ITS.	3.3.6.1 ACTIONS	3.2.A.1.a.1 3.2.A.1.a.2 3.2.A.1.b Footnote *

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Discussion of Change	Summary of Change	ITS Section	CTS Section
3.3.6.1 A7	The Offgas Vent Stack - High Radiation Isolation Function is only required to isolate the primary containment vent and purge valves as described in CTS Table 3.2-A Action 27. Therefore, even though listed as a secondary containment isolation function, this function will only appear in ITS 3.3.6.1, Primary Containment Isolation Instrumentation. Since the CTS requirements for the Function are being maintained in the ITS, the change is administrative. The Refuel Floor Exhaust Duct and Reactor Building Exhaust Shaft - High Radiation Functions provide isolations for both Primary and Secondary Containment. Therefore, even though listed as a secondary containment isolation functions, these functions will appear in both ITS 3.3.6.1, Primary Containment Isolation Instrumentation, and in ITS 3.3.6.2, Secondary Containment Isolation Instrumentation.	Table 3.3.6.1-1 Function 2.c Table 3.3.6.1-1 Functions 2.e and 2.d Table 3.3.6.2-1 Functions 4 and 3	Table 3.2-A Table 4.2-A Table 3.2-A Table 4.2-A Table 3.2-A Table 4.2-A
3.3.6.1 A8	The Applicability of the Main Steam Line Radiation-High Function was changed in presentation from the CTS to the ITS.	Table 3.3.6.1-1 Function 1.f	Table 3.2-D Table 4.2-D
3.3.6.1 A9	The CTS Footnotes (for the Main Steam Line Radiation-High Function), that state the Channel Functional Test will consist of injecting a simulated electrical signal into the measurement channels, are deleted since this information is included in the ITS definition of Channel Functional Test.	1.1 1.1	Table 4.2-A Footnote (c) Table 4.2-D Footnote (a)

Add new A10 to 3.3.6.1

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Discussion of Change	Summary of Change	ITS Section	CTS Section
	ITS 3.3.8.2: RPS ELECTRIC POWER MONITORING		
3.3.8.2 A1	Editorial, text, and format changes of an administrative nature are made to conform to the conventions of the ISTS.	3.3.8.2	3.1.B 4.1.B
3.3.8.2 A2	The Applicability of the RPS electric power monitoring requirements was changed in presentation from the CTS to the ITS.	3.3.8.2 APPLICABILITY	3.1.B

to be consistent with the RPS Applicability.

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Discussion of Change	Summary of Change	ITS Section	CTS Section
3.5.1 A8	The Frequencies for performance of the Surveillance Requirements to test Core Spray, RHR (LPCI) and HPCI pump flowrates were changed from once/3 months in the CTS to "in accordance with the IST program" in the ITS which is equivalent to ^{currently} once/3 months.	SR 3.5.1.4 SR 3.5.1.5 SR 3.5.1.6	4.5.A.1.d 4.5.A.3.d 4.5.D.1.d
3.5.1 A9	The explicit CTS lower limit of 140 psig, for HPCI flow testing, is deleted since HPCI system performance limitations dictate the minimum reactor pressure that will allow the required HPCI flow rate Surveillance acceptance criteria of 2700 gpm to be attained.		4.5.D.1.e
3.5.1 A10	The Actions for Core Spray, one RHR (LPCI) pump, LPCI subsystem, DGs, containment spray, HPCI and ADS valve inoperability, as applicable, were changed in presentation from the CTS to the ITS.	3.5.1 ACTIONS	3.5.A.2 3.5.A.4 3.5.A.5 3.5.D.2 3.5.F.2
3.5.1 A11	The CTS requirement for LPCI subsystem actuation is modified by a Note that allows the Surveillance Requirement to be performed in any series of sequential, overlapping or total system steps, consistent with current interpretation and practice.	SR 3.5.1.7 Note 2	4.5.A.3.a
ITS 3.5.2: ECCS - SHUTDOWN			
3.5.2 A1	Editorial, text, and format changes of an administrative nature are made to conform to the conventions used in the ISTS.	3.5.2	3.5.G 3.5.H 4.5.H 3.5.I 4.5.I
3.5.2 A2	The cross reference in the CTS Applicability to Required Actions and Completion Times was deleted since the referenced requirements are already required to be met by ITS LCO 3.0.1 and LCO 3.0.2.	None	3.5.G.3.b

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Discussion of Change	Summary of Change	ITS Section	CTS Section
ITS 3.5.3: REACTOR CORE ISOLATION COOLING (RCIC) SYSTEM			
3.5.3 A1	Editorial, text, and format changes of an administrative nature are made to conform to the conventions used in the ISTS.	3.5.3	3.5.E 4.5.E 3.5.H 4.5.H 3.5.I 4.5.I
3.5.3 A2	The Frequency for the RCIC pump flow test was changed from once/3 months in the CTS to "in accordance with the IST program" in the ITS which is equivalent to <i>currently</i> once/3 months.	SR 3.5.3.3	4.5.E.1.d
3.5.3 A3	The CTS Surveillance for the simulated automatic initiation of the RCIC System is modified by a Note that excludes vessel injection during the Surveillance, consistent with current interpretation and practice.	SR 3.5.3.5	4.5.E.1.a
3.5.3 A4	The explicit CTS lower limit of 140 psig for RCIC flow testing is deleted since RCIC system performance limitations dictate the minimum reactor pressure that will allow the required RCIC flow rate Surveillance acceptance criteria of 400 gpm to be attained.	SR 3.5.3.4	4.5.E.1.e
3.5.3 A5	The Applicability for RCIC System was changed in presentation from the CTS to the ITS. The cross reference within the CTS Applicability to Required Actions and Completion Times was deleted since the referenced requirements are already required to be met by ITS LCO 3.0.1 and LCO 3.0.2.	3.5.3 Applicability None	3.5.E.1 3.5.E.1

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Discussion of Change	Summary of Change	ITS Section	CTS Section
3.6.1.5 M2-	The CTS, requirements for the Low-Low Set (LLS) valves, for LCO, APPLICABILITY and ACTIONS was changed in presentation from the CTS to the ITS.	3.6.1.5-	3.6.D 4.2.B.2.g 4.6.D.3

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Discussion of Change	Summary of Change	ITS Section	CTS Section
ITS 3.6.1.6: REACTOR BUILDING-TO-SUPPRESSION CHAMBER VACUUM BREAKERS			
3.6.1.6 A1	Editorial, text, and format changes of an administrative nature are made to conform to the conventions used in the ISTS.	3.6.1.6	3.7.D 4.7.D
3.6.1.6 A2	The Actions for two vacuum breaker assemblies with one or more valves inoperable for opening were changed in presentation from the CTS to the ITS.	3.6.1.6 Required Action D.1	3.7.D
3.6.1.6 A3	A Note, for separate Condition entry, is added to the ITS ACTIONS. This Note provides direction consistent with the intent of ITS 3.6.1.6 ACTIONS. Therefore, the addition of the Note is considered administrative.	3.6.1.6 ACTIONS Note	3.7.D
3.6.1.6 A4	The CTS is clarified in the ITS to state that a vacuum breaker is allowed to be open during performance of Surveillances and when performing its intended function.	SR 3.6.1.6.1 Notes 1 and 2	4.7.D.1
3.6.1.6 A5	The requirement to verify the other valve in the vacuum breaker assembly closed within 2 hours when one valve is known to be open is being deleted <i>as it is implicitly included in the ITS Actions, per SR 3.0.1</i>	None	3.7.D.3
ITS 3.6.1.7: SUPPRESSION CHAMBER-TO-DRYWELL VACUUM BREAKERS			
3.6.1.7 A1	Editorial, text, and format changes of an administrative nature are made to conform to the conventions used in the ISTS.	3.6.1.7	3.7.E 4.7.E
3.6.1.7 A2	The CTS is clarified in the ITS to state that a vacuum breaker is allowed to be open during performance of Surveillances.	SR 3.6.1.7.1 Note	3.7.E.1 and 3.7.E.3 * NOTE 4.7.E.1

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Discussion of Change	Summary of Change	ITS Section	CTS Section
ITS 3.6.2.1: SUPPRESSION POOL AVERAGE TEMPERATURE			
3.6.2.1 A1	Editorial, text, and format changes of an administrative nature are made to conform to the conventions used in the ISTS.	3.6.2.1	3.7.G 4.7.G
3.6.2.1 A2	The shutdown Actions associated with suppression pool temperature > 95°F during normal power operation (i.e., > 1% RTP) were revised in presentation from the CTS to the ITS to reflect placing the unit in a condition outside the APPLICABILITY.	3.6.2.1 Required Action B.1	3.7.G.2.b 3.7.G.2.c
3.6.2.1 A3	The requirements associated the suppression pool water temperature exceeding 110°F were changed in presentation from the CTS to the ITS.	3.6.2.1.c	3.7.G.2.d
ITS 3.6.2.2: SUPPRESSION POOL WATER LEVEL			
3.6.2.2 A1	Editorial, text, and format changes of an administrative nature are made to conform to the conventions used in the ISTS.	3.6.2.2	3.7.G 4.7.G
3.6.2.2 A2	The suppression pool water volume limits were changed in presentation to the corresponding levels in feet.	3.6.2.2	3.7.G.1.a
ITS 3.6.2.3: RHR SUPPRESSION POOL COOLING			
None			
ITS 3.6.2.4: RHR SUPPRESSION POOL SPRAY			
TBD	Add new A1, A2 and A3 to 3.6.2.4		
ITS 3.6.3.1: CONTAINMENT ATMOSPHERIC DILUTION SYSTEM			
3.6.3.1 A1	Editorial, text, and format changes of an administrative nature are made to conform to the conventions used in the ISTS.	3.6.3.1	3.7.H 4.7.H

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Discussion of Change	Summary of Change	ITS Section	CTS Section
3.6.3.1 A2	The APPLICABILITY of the CAD System was changed in presentation from the CTS to the ITS.	3.6.3.1 APPLICABILITY	3.7.H.1
<i>and</i>	The applicability of the CAD System nitrogen volume requirements were changed to be consistent with the overall CAD System Applicability requirements, ITS SR 3.0.1, <u>and current interpretation.</u>	SR 3.6.3.1.1	3.7.H.2
3.6.3.1 A3	The shutdown ACTIONS associated with the CAD System were revised in presentation from the CTS to the ITS to reflect placing the unit in a condition outside the APPLICABILITY.	3.6.3.1 Required Action B.1	3.7.H.1 3.7.H.2
ITS 3.6.3.2: PRIMARY CONTAINMENT OXYGEN CONCENTRATION			
3.6.3.2 A1	Editorial, text, and format changes of an administrative nature are made to conform to the conventions used in the ISTS.	3.6.3.2	3.7.I 4.7.I
3.6.3.2 A2	The CTS Frequency, "within 24 hours after placing the reactor mode switch in RUN," for verifying oxygen concentration is deleted since it is redundant to the normal periodic Frequency of ITS SR 3.6.3.2.1, the APPLICABILITY of ITS LCO 3.6.3.2, and ITS SR 3.0.4.	SR 3.6.3.2.1 3.6.3.2 APPLICABILITY SR 3.0.4	4.7.I.1
ITS 3.6.4.1: SECONDARY CONTAINMENT			
3.6.4.1 A1	Editorial, text, and format changes of an administrative nature are made to conform to the conventions used in the ISTS.	3.6.4.1	1.0 3.7.J 4.7.J
3.6.4.1 A2	The Applicability for Secondary Containment Integrity was changed in presentation from the CTS to the ITS.	3.6.4.1 APPLICABILITY	3.7.J.1

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Discussion of Change	Summary of Change	ITS Section	CTS Section
ITS 3.7.2: RWS SYSTEM AND ULTIMATE HEAT SINK			
3.7.2 A1	Editorial, text, and format changes of an administrative nature are made to conform to the conventions used in the ISTS.	3.7.2	3.5.J 4.5.J 4.8.E
3.7.2 A2	The CTS requirement, to verify the other river water supply loop and associated diesel generator are OPERABLE when one RWS loop is inoperable, is deleted since the ITS Notes and ACTIONS provide adequate direction for two inoperable RWS subsystems as well as for the associated diesel generator and cross train checks are performed, as necessary, per the Safety Function Determination Program in ITS 5.5.11.	3.7.2 ACTIONS 5.5.11	3.5.J.2
3.7.2 A3	The SR Frequency for verifying river water temperature is within the limit was revised to be consistent with current operating practice and design limit. The point of inoperability is not altered <i>by this change.</i>	SR 3.7.2.2	4.8.E.1.c
3.7.2 A4	The SR Frequency for verifying river water level is within the limit was revised to be consistent with current operating practice and design limit. The point of inoperability is not altered <i>by this change.</i>	SR 3.7.2.1	4.5.J.1.c
3.7.2 A5	The Actions associated with both RWS subsystems being inoperable were revised in presentation from the CTS to the ITS.	3.7.2 Condition B	3.5.J
3.7.2 A6	Cross references to other Required Actions and Completion Time are deleted since the referenced requirements are already required to be met by ITS LCO 3.0.1 and LCO 3.0.2.	None	3.5.J.1

TABLE A - ADMINISTRATIVE CHANGES MATRIX (page 63 of 78)

Discussion of Change	Summary of Change	ITS Section	CTS Section
ITS 3.9.2: REFUEL POSITION ONE-ROD-OUT INTERLOCK			
3.9.2 A1	Editorial, text, and format changes of an administrative nature are made to conform to the conventions used in the ISTS.	3.9.2	3.9.A 4.9.A
ITS 3.9.3: CONTROL ROD POSITION			
3.9.3 A1	Editorial, text, and format changes of an administrative nature are made to conform to the conventions used in the ISTS.	3.9.3	3.9.A
3.9.3 A2	The Applicability of the refueling equipment interlock requirements was changed in presentation from the CTS to the ITS, consistent with current interpretation. In addition, the cross references to other Specifications are deleted since the referenced requirements are already required to be met by ITS LCO 3.0.1, LCO 3.0.2, LCO 3.0.7, and the Special Operations LCOs.	3.9.3 APPLICABILITY None	3/4.9 3.9.A.2
ITS 3.9.4: CONTROL ROD POSITION INDICATION			
None	None	3.9.4	None
ITS 3.9.5: CONTROL ROD OPERABILITY - REFUELING			
None	Editorial, text, and format changes of an administrative nature are made to conform to the conventions used in the ISTS.	3.9.5	4.9
ITS 3.9.6: REACTOR PRESSURE VESSEL (RPV) WATER LEVEL			
None	None	3.9.6	None
ITS 3.9.7: RESIDUAL HEAT REMOVAL (RHR) - HIGH WATER LEVEL			
None	None	3.9.7	None

TABLE A - ADMINISTRATIVE CHANGES MATRIX (page 72 of 78)

Discussion of Change	Summary of Change	ITS Section	CTS Section
ITS CHAPTER 4.0 - DESIGN FEATURES			
4.0 A1	Editorial, text, and format changes are made of an administrative nature to conform to the conventions used in the ISTS.	4.0	5.0
4.0 A2	The CTS were revised to provide additional information to more fully describe the control rod assemblies and the K_{eff} requirements of the spent fuel and new fuel storage racks.	4.3.1.1 4.3.1.2.b 4.3.1.2.c	5.5.1.1 5.5.1.2
4.0 A3	The CTS Bases for Section 5.5 was deleted because it was redundant to the information contained in the three references in CTS Bases 5.5. The limits specified in the CTS Bases are contained in the ITS.	None	5.5 Bases
4.0 A4	The CTS description of the site has been clarified in ITS. ^(IN TYPE) In addition, the CTS contains a reference to the site plan shown on UFSAR Figures 1.2-1 and 1.2-2, that is included in the ITS.	4.1	5.1

reference

also

TABLE R - RELOCATED SPECIFICATIONS MATRIX (page 1 of 3)

Discussion of Change	CTS	Description	General Location	Change Controls	Characterization
3.2.3 RI	3/4.12.B	Linear Heat Generation Rate LCO and Surveillances.	Technical Requirements Manual (TRM)	10 CFR 50.59	Does not meet 10 CFR 50.36 criteria
3.3.2.1 RI	3/4.2.C	Control Rod Block Instrumentation Functions LCOs and Surveillances: Average Power Range Monitors (APRMs), Intermediate Range Monitors (IRMs), Source Range Monitors (SRMs), Scram Discharge Volume, and Recirculation Flow.	TRM	10 CFR 50.59	Does not meet 10 CFR 50.36 criteria
3.3.3.1 RI	3/4.2.F 3/4.2.H	Accident Monitoring Instrumentation LCOs and Surveillances: Reactor Water Level (Narrow Range), Drywell Pressure (non-accident), Drywell Temperature, Torus Water Level (Narrow Range), Torus Water Temperature, Extended Range Effluent Radiation Monitors (Reactor Building Exhaust Stack, Turbine Building Exhaust Stack, and Offgas Stack), Safety/Relief Valve and Safety Valve Position Indicators, SRMs, IRMs/APRMs, Reactor Pressure (non-accident range), Control Rod Position, and Post Accident Sampling System.	TRM	10 CFR 50.59	Does not meet 10 CFR 50.36 criteria
3.3.4.2 RI	3/4.2.G	Alternate Rod Insertion Instrumentation Functions LCO and Surveillances.	TRM	10 CFR 50.59	Does not meet 10 CFR 50.36 criteria

3/4.2.F is "Surveillance Instrumentation, not Accident monitoring."

TABLE R - RELOCATED SPECIFICATIONS MATRIX (page 2 of 3)

Discussion of Change	CTS	Description	General Location	Change Controls	Characterization
3.5.1 R2 3.5.2 R2 3.5.3 R4	3/4.5.1	Engineered Safeguards Compartments Cooling and Ventilation, for ECCS and RCIC, LCO and Surveillances.	TRM	10 CFR 50.59	Does not meet 10 CFR 50.36 criteria
5.0 R18	3.4.2.1	Explosive Gas Monitoring Instrumentation	TRM	10 CFR 50.59	Does not meet 10 CFR 50.36 criteria
5.0 R18	3/4.2.1	Offgas Hydrogen Monitoring Instrumentation LCO and Surveillances.	TRM	10 CFR 50.59	Does not meet 10 CFR 50.36 criteria
3/4.2.D R1	3/4.2.D	Offgas Post-Treatment Radiation Monitors and Offgas Pre-Treatment Radiation Monitors LCO and Surveillances.	Offsite Dose Assessment Manual (ODAM)	ODAM (ITS 5.5.1)	Does not meet 10 CFR 50.36 criteria
3/4.5.B R1	3/4.5.B	Containment Spray Cooling Capability LCO and Surveillances.	TRM	10 CFR 50.59	Does not meet 10 CFR 50.36 criteria
3/4.6.B.2 R1	3/4.6.B.2	Coolant Chemistry LCO and Surveillances.	TRM	10 CFR 50.59	Does not meet 10 CFR 50.36 criteria
3/4.6.G R1	3/4.6.G	Structural Integrity LCO and Surveillances.	TRM	10 CFR 50.59	Does not meet 10 CFR 50.36 criteria

Some CTS (per) Combine

TABLE RL - RELOCATED DETAILS MATRIX (page 5 of 32)

Discussion of Change	CTS Section	Description	General Location	Change Controls	Characterization	Change Type
3.3.1.1 R7	Table 3.1-1 Note (e)	Design details of RPS Instrumentation (i.e., Main Steam Isolation Valve (MSIV) Closure Trip will be automatically bypassed when the reactor mode switch is not in the Run position).	Bases	Bases Control Program (ITS 5.5.10)	Relocation of system design description details	1
3.3.1.1 R8	4.1.A.2	Details of the Staggered Test Basis Frequency for response time testing of the Reactor Vessel Water Level - Low and Reactor Vessel Steam Dome Pressure - High RPS Functions.	Bases Not Used	Bases Control Program (ITS 5.5.10)	Relocation of testing details	3
3.3.1.1 R9	Table 3.1-1 Table 4.1-1	Description of the Turbine First Stage Pressure Permissive.	Bases	Bases Control Program (ITS 5.5.10)	Relocation of system design description details	1
3.3.1.1 R10	Table 4.1-1 Note (g)	Details of the method for performing the calibration for the MSIV Closure and Turbine Stop Valve Closure RPS Instrumentation Functions.	Bases	Bases Control Program (ITS 5.5.10)	Relocation of testing details	3

Types of Changes

- Type 1 - Details of System Design and System Description Including Design Limits
- Type 2 - Descriptions of Systems or Plant Operation
- Type 3 - Procedural Details for Meeting TS Requirements & Related Reporting Requirements
- Type 4 - Performance Requirements for Indication-only Instrumentation and Alarms

TABLE RL - RELOCATED DETAILS MATRIX (page 6 of 32)

Discussion of Change	CTS Section	Description	General Location	Change Controls	Characterization	Change Type
3.3.1.1 R11	Table 3.1-1 Note (i)	Design details of RPS Instrumentation (i.e., the Turbine Stop Valve Closure and Turbine Control Valve Fast Closure RPS Functions also actuate the End of Cycle Recirculation Pump Trip (EOC-RPT) system).	Bases	Bases Control Program (ITS 5.5.10)	Relocation of system design description details	1
3.3.1.1 R12	2.1 2.2 Table 3.1-1	Trip settings for the associated instrumentation.	UFSAR	10 CFR 50.59	Relocation of operational details not required for Operability	2
3.3.1.2 R1	3.9.B.1	Requirement that SRMs be inserted to the normal operating level during Core Alterations.	UFSAR	10 CFR 50.59	Relocation of system description and operation details	2
3.3.1.2 R2	3.9.B.3	Requirement that prior to spiral reloading, two to four fuel assemblies which have previously accumulated exposure in the reactor be loaded next to each of the four SRMs to obtain the required 3 cps.	Bases	Bases Control Program (ITS 5.5.10)	Relocation of description of plant operation details	2

Add new R 13
to 3.3.1.1

Types of Changes

- Type 1 - Details of System Design and System Description Including Design Limits
- Type 2 - Descriptions of Systems or Plant Operation
- Type 3 - Procedural Details for Meeting TS Requirements & Related Reporting Requirements
- Type 4 - Performance Requirements for Indication-only Instrumentation and Alarms

TABLE RL - RELOCATED DETAILS MATRIX (page 11 of 32)

Discussion of Change	CTS Section	Description	General Location	Change Controls	Characterization	Change Type
3.3.6.1 R2	2.1 2.2 Table 3.2-A Table 3.2-B Table 3.2-D	Trip settings for the associated instrumentation.	UFSAR	10 CFR 50.59	Relocation of operational details not required for Operability	2
3.3.6.1 R3 <i>Add (g) and (h)</i>	Table 3.2-A Notes (b), (c), and (e)	Details related to system design (i.e., the valve groups isolated by a trip function signal and that the applicable signals start the Standby Gas Treatment System).	Bases	Bases Control Program (ITS 5.5.10)	Relocation of system description details	1
3.3.6.1 R4	Table 3.2-A Note (o)	The number of temperature sensors per main steam line required for Operability of the Main Steam Line Tunnel Temperature-High isolation Function.	Bases	Bases Control Program (ITS 5.5.10)	Relocation of system design description details	1
3.3.6.1 R5	Table 4.2-A Note ##	Details related to system design (i.e., the Reactor Vessel Water Level-Low Low Trip Function is common to Emergency Core Cooling System (ECCS) Instrumentation).	UFSAR	10 CFR 50.59	Relocation of system description details	1

Types of Changes

- Type 1 - Details of System Design and System Description Including Design Limits
- Type 2 - Descriptions of Systems or Plant Operation
- Type 3 - Procedural Details for Meeting TS Requirements & Related Reporting Requirements
- Type 4 - Performance Requirements for Indication-only Instrumentation and Alarms

TABLE RL - RELOCATED DETAILS MATRIX (page 24 of 32)

Discussion of Change	CTS Section	Description	General Location	Change Controls	Characterization	Change Type
3.7.1 R1	4.5.C.1.a 4.5.C.1.b	Residual Heat Removal Service Water System pump and valve Operability tests.	IST Program	10 CFR 50.59	Relocation of details concerning testing methodology	3
3.7.2 R1	4.5.J.1.b 4.5.J.1.c 4.5.J.1.d	River Water Supply System pump and valve testing, post-maintenance testing, and pump flow rate demonstration.	IST Program	10 CFR 50.59	Relocation of details concerning testing methodology	3
3.7.3 R1	4.8.E.1.b 4.8.E.1.c Figure 4.8.E-1	Emergency Service Water System pump and valve testing and post-maintenance testing.	IST Program	10 CFR 50.59	Relocation of details concerning testing methodology	3
3.7.4 R1	4.10.A.2.d 4.10.A.3	Details of the methods for performing the Standby Filter Unit (SFU) operating and actuation tests.	Bases	Bases Control Program (ITS 5.5.10)	Relocation of testing details	3
3.7.4 R2	4.10.A.3	Details of SFU System design (i.e., maintain a positive pressure in the control room under calm wind conditions (<5 mph) relative to the outside atmosphere).	Bases	Bases Control Program (ITS 5.5.10)	Relocation of system design description details	1
3.7.8 R1	3.9.C.1.a.1	Details of the method for performing the actions to place equipment in a safe condition.	Bases	Bases Control Program (ITS 5.5.10)	Relocation of details regarding the method used to comply with the required actions	3

Types of Changes

- Type 1 - Details of System Design and System Description Including Design Limits
- Type 2 - Descriptions of Systems or Plant Operation
- Type 3 - Procedural Details for Meeting TS Requirements & Related Reporting Requirements
- Type 4 - Performance Requirements for Indication-only Instrumentation and Alarms

TABLE RL - RELOCATED DETAILS MATRIX (page 25 of 32)

Discussion of Change	CTS Section	Description	General Location	Change Controls	Characterization	Change Type
3.8.1 R1	4.8.A.2.a.2 4.8.A.2.b	Requirement for Surveillance results to be "recorded."	QAPD	10 CFR 50.54(a)	Relocation of testing details	3
3.8.1 R2	4.8.A.2.c	Requirement to inspect diesel generators in accordance with manufacturer's recommendations.	UFSAR	10 CFR 50.59	Relocation of details concerning testing methodology	3
3.8.1 R7		Not used				
3.8.3 R1	4.8.A.2.e	Requirement for the available diesel fuel to be recorded monthly and after each use of the diesel generators.	QAPD	10 CFR 50.54(a)	Relocation of details concerning testing methodology	3
3.8.3 R2	4.8.A.2.a.1.c	Requirement to check the air compressor for proper operation and ability to recharge the air receivers during the monthly diesel generator test runs.	UFSAR	10 CFR 50.59	Relocation of details concerning testing methodology	3
3.8.4 R1	3.8.B.2.a 4.8.B.2.a	Requirement to monitor the battery room atmosphere for hydrogen concentration when the battery room ventilation is not available and provide portable ventilation equipment if normal ventilation is unavailable.	TRM	10 CFR 50.59	Relocation of requirements relating to systems not required for Operability or to maintain required limits	2

Legend of Changes

- Type 1 - Details of System Design and System Description Including Design Limits
- Type 2 - Descriptions of Systems or Plant Operation
- Type 3 - Procedural Details for Meeting TS Requirements & Related Reporting Requirements
- Type 4 - Performance Requirements for Indication-only Instrumentation and Alarms

TABLE M - MATRIX OF MORE RESTRICTIVE CHANGES
SECTION 1.0 "Use and Application"

Discussion of Change	Summary of Change	ITS Section	CTS Section
	1.0 "Use and Application"		
1.0 M1	The ITS Definitions for Channel Calibration and Channel Functional Test deletes the "Instrument part" and adopts the STS terminology for these definitions. This more restrictive change ensures the entire channel is included (not just the instrument) when referring to the Instrument Calibration or Instrument Functional Test.	1.1	1.0.22
1.0 M2	More prescriptive requirements with regard to the use of Completion Times were added. For the case where two subsystems become inoperable concurrently and no separate condition entry is allowed, if one subsystem were restored (within the Completion Time for two subsystems inoperable), the shorter of 24 hours or the remainder of the subsystems Completion Time (for one subsystem inoperable) is allowed to restore the other subsystem to Operable status. The CTS allows the remainder of the inoperable subsystem's Completion Time.	1.3	1.0
1.1 M3	The new definition of Operability, as spelled out in the Bases for LCO 3.0.2, added the concept that equipment removed from service for TS - required surveillances is considered to be inoperable for the purposes of satisfying the LCO and that the appropriate Conditions will be entered and Required Actions taken, unless specifically exempted. The exemptions are specified and justified in individual LCOs.	1.1	1.0.5

TABLE M - MATRIX OF MORE RESTRICTIVE CHANGES
SECTION 3.3, "INSTRUMENTATION"

Discussion of Change	Summary of Change	ITS Section	CTS Section
3.3.3.1 M2	The actions for PAM instrumentation, with two channels of a function inoperable, that require placing the plant in at least Hot Standby (i.e., Mode 2) within 12 hours if Completion Times are not met were changed to require the plant to be in Mode 3 within 12 hours.	LCO 3.3.3.1 Action G	Table 3.2-H Actions 93, 94, and 95

Add new M3
to 3.3.3.1

**TABLE M - MATRIX OF MORE RESTRICTIVE CHANGES
SECTION 3.3, "INSTRUMENTATION"**

Discussion of Change	Summary of Change	ITS Section	CTS Section
3.3.4.2 M4	A Note was added to the Surveillance Requirements for ATWS-RPT which allows a channel to be inoperable for performance of required Surveillances and entry into associated Conditions and Required Actions to be delayed up to 6 hours provided the associated Function maintains ATWS-RPT trip capability. This ITS allowance is considered more restrictive since the DAEC philosophy is not to enter LCOs when performing required TS Surveillances. The CTS could be interpreted to allow more than the six hours in the ITS.	Note to SRs 3.3.4.2	Table 4.2.G

Not Used.

**TABLE M - MATRIX OF MORE RESTRICTIVE CHANGES
SECTION 3.3, "INSTRUMENTATION"**

Discussion of Change	Summary of Change	ITS Section	CTS Section
3.3.6.1 M2	A Channel Check was added for the functions of RWCU Area Temperature - High, Area Near TIP Room Ambient Temperature-High, and RWCU Area Ventilation Differential Temperature - High.	Table 3.3.6.1-1 Functions 5.b, 5.c, and 5.f SR 3.3.6.1.2	Table 4.2-A
3.3.6.1 M3	The actions for Secondary Containment Isolation Functions of Refuel Floor Exhaust Duct and Reactor Building Exhaust Shaft - High Radiation that require isolation of the Secondary Containment with the Standby Gas Treatment System operating within one hour, did not address the primary containment isolation valves closed by these functions. Actions were added to address these primary containment functions and require the plant to be in Mode 3 in 12 hours and in Mode 4 in 36 hours.	LCO 3.3.6.1 Action C 	Table 3.2-A Action 26
3.3.6.1 M4	A quarterly Channel Functional Test for the RCIC Leak Detection Time Delay was added.	Table 3.3.6.1-1 Function 4.f	Table 4.2-A
3.3.6.1 M5	Footnote (d) was added to ITS Table 3.3.6.1-1 for Function 5.b for RWCU Area Temperature - High and Function 5.c for RWCU Area Ventilation Differential Temperature - High to require each of the RWCU areas (i.e., the heat exchanger area and the pump area) to have either an Operable Function 5.b or 5.c channel which may be in the same or different trip systems . 	Table 3.3.6.1-1 Footnote (d)	Table 3.2-A

TABLE M - MATRIX OF MORE RESTRICTIVE CHANGES
SECTION 3.3, "INSTRUMENTATION"

Discussion of Change	Summary of Change	ITS Section	CTS Section
3.3.6.1 M6	The requirement for one channel per trip system of each isolation function to be Operable was changed to require a channel to be Operable in each of the two RWCU areas. The requirement that the associated system be declared Inoperable if actions are not met for inoperable Containment Cooling System Isolation channels of Containment Pressure - High, would result in Containment Sprays being declared inoperable. However, the Containment Sprays were relocated from the CTS to plant controlled documents. Since the Containment Sprays and Suppression Pool Cooling Function piping share the same containment penetration, actions were added to protect the primary containment from inadvertent spraying and to ensure the availability of Suppression Pool Cooling when required. These actions require with one or more Containment Pressure - High channels inoperable, that containment sprays be inhibited within 24 hours versus the CTS action to only place the channel in trip. Actions were added to address the condition where Containment Pressure - High channels are not restored or placed in trip within the allowed Completion Times. Actions are entered if a channel is not placed in trip since this results in the Suppression Pool Cooling function being inoperable (Suppression Pool Cooling declared inoperable 1 hour from discovery of loss of initiation capability). Similarly, if the inoperable channels are in trip such that containment spray can occur when less than a nominal 2.0 psig in the containment, (i.e., the containment sprays are not inhibited) then primary containment is declared inoperable immediately.	Table 3.3.6.1-1 LCO 3.3.6.1 Required Actions 1.1 and 1.2 which includes both Drywell and Suppression Pool Spray Functions and Spray	Table 3.2-A Table 3.2-B Action 30
3.3.6.1 M7	The refueling interval for the Channel Calibration for the Function of RCIC Turbine Exhaust Diaphragm Pressure-High was changed to a 184 day interval.	SR 3.3.6.1.6	Table 4.2-A

TABLE M- MATRIX OF MORE RESTRICTIVE CHANGES
SECTION 3.5, "EMERGENCY CORE COOLING SYSTEMS (ECCS)"

Discussion of Change	Description	ITS Section	CTS Section	Category
3.5.3.1-CY-2	This change documents the DAEC review of extending the fuel cycle from 18 to 24 months, versus the NRC requirements specified in Generic Letter 91-04. The review included instrument drift, Appendix J extension, and the effect of historical maintenance and surveillance data on the extension.	SR 3.5.3.4	4.5.E.1.e	VIII

This is an L-DOC. Should not be in M-DOC Table.

**TABLE M- MATRIX OF MORE RESTRICTIVE CHANGES
SECTION 3.5, "EMERGENCY CORE COOLING SYSTEMS (ECCS)"**

Discussion of Change	Summary of Change	ITS Section	CTS Section
3.5.2 M4	CTS 3.5.H.1 requires LPCI and Core Spray discharge piping to be filled to the last block valve whenever the associated Systems/subsystem are required to be Operable. This requirement has been incorporated into the general LCO requirement as part of Operability of the ECCS subsystems in the ITS and is verified by a new SR (ITS SR 3.5.2.3). CTS 4.5.H.1 requires the pressure switches on the LPCI and Core Spray discharge piping be functionally tested quarterly and calibrated once per operating cycle. These pressure switches, by monitoring the line pressure and in turn that the Keep-fill pump is operating, are used to assure the piping is full of water. The CTS has no specific action if these switches become inoperable (and not in alarm) and thus, the Keep-fill pump is not capable of assuring the piping is full of water. While current operating practice would be to enter the LCO Actions, the CTS does not specifically direct this action. However, because the ITS has a direct, specific requirement to verify that the piping is full of water on a 31 day frequency, it does direct this action to be taken (via SR 3.0.1) and thus, is considered to be more restrictive than the CTS.	SR 3.5.2.3	3.5.H.1

Note: Delete. Not consistent with 3.5.1 M6

**TABLE M - MATRIX OF MORE RESTRICTIVE CHANGES
SECTION 3.6, "CONTAINMENT SYSTEMS,"**

Discussion of Change	Summary of Change	ITS Section	CTS Section
	ITS 3.6.1.5: LOW-LOW SET (LLS) VALVES		
3.6.1.5 M1	The requirement that each Low-Low Set valve to be verified to open when manually actuated with reactor pressure ≥ 100 psig and turbine bypass flow to the main condenser, was made more restrictive by placing a time limit for performance of the test of 12 hours after reactor steam pressure and flow are adequate to perform the test.	SR 3.6.1.5.1	4.6.D.3
	ITS 3.6.1.6: REACTOR BUILDING-TO-SUPPRESSION CHAMBER VACUUM BREAKERS		
3.6.1.6 M1	The action to verify within 2 hours, that the other valve in the assembly is closed when a vacuum breaker assembly valve is open, was decreased to 1 hour.	ITS 3.6.1.6 Required Action B.1	3.7.D.3

Add M2 for
3.6.1.5. See
DAEC matrix

**TABLE M - MATRIX OF MORE RESTRICTIVE CHANGES
SECTION 3.6, "CONTAINMENT SYSTEMS,"**

Discussion of Change	Summary of Change	ITS Section	CTS Section
ITS 3.6.2.2: SUPPRESSION POOL WATER LEVEL			
3.6.2.2 M1	The CTS governing suppression pool level, that is applicable at any time the nuclear system is pressurized above atmospheric, was changed to require operability in MODES 1, 2, and 3. As a result, the proposed requirements for suppression pool level are applicable when the reactor is critical or control rods are being withdrawn when the reactor coolant temperature is < 212°F (i.e., depressurized) in addition to being applicable whenever the nuclear system is pressurized (greater than 212°F).	ITS 3.6.2.2 APPLICABILITY	3.7.G
ITS 3.6.2.3: RHR SUPPRESSION POOL COOLING			
3.6.2.3 M1	A new Specification, including appropriate actions and surveillance requirements for RHR Suppression Pool Cooling were added.	LCO 3.6.2.3	None
ITS 3.6.2.4: RHR SUPPRESSION POOL SPRAY			
3.6.2.4 M1	FBD Add new M1. See M3 for 3.7.1 as a guide.		
ITS 3.6.3.1: CONTAINMENT ATMOSPHERIC DILUTION SYSTEM			
3.6.3.1 M1	Not Used.	None	None
3.6.3.1 M2	A new Surveillance Requirement, performed every 31 days, was added to verify each CAD System manual, power operated and automatic valve in the required flow path(s) that is not locked, sealed, or otherwise secured in position is in the correct position or can be aligned to the correct position.	SR 3.6.3.1.2	3.7.H
ITS 3.6.3.2: PRIMARY CONTAINMENT OXYGEN CONCENTRATION			
	No MDOCs		

**TABLE M - MATRIX OF MORE RESTRICTIVE CHANGES
SECTION 3.7, "PLANT SYSTEMS,"**

Discussion of Change	Summary of Change	ITS Section	CTS Section
	ITS 3.7.5: CONTROL BUILDING CHILLER (CBC) SYSTEM		
3.7.5 M1	The action with both CBC subsystems inoperable during Power Operation or Reactor Start-up, that requires the plant to be in Hot Shutdown within 12 hours and Cold Shutdown within the following 24 hours, was changed to require an immediate entry into LCO 3.0.3. Entry into LCO 3.0.3 is more restrictive since the unit is required to be in Mode 2 within 7 hours.	LCO 3.7.5 Required Action D.1	3.3.3.2 3.3.4.2
3.7.5 M2	The CTS does not provide any specific Completion Time after the initial 30 day time limit expires for one inoperable CBC subsystem. The change added a Completion Time of "Immediately" for the associated Required Actions.	LCO 3.7.6 Action C	3.10.C.2.b.1

TABLE M - MATRIX OF MORE RESTRICTIVE CHANGE SECTION
3.8, "ELECTRICAL PLANT SYSTEMS,"

Discussion of Change	Summary of Change	ITS Section	CTS Section
	ITS 3.8.1: AC SOURCES - OPERATING		
3.8.1 M1	Actions were added with one offsite source or one DG inoperable, to require performance of ITS SR 3.8.1.1, which is a breaker alignment verification for Operable required offsite circuits. This SR is required to be performed within one hour of determining one offsite source is inoperable and once per 24 hours thereafter and within one hour of determining one DG is inoperable and once per 12 hours thereafter.	LCO 3.8.1 Required Actions A.1 and B.1 SR 3.8.1.1	3.8.A.2.a 3.8.A.4.a
3.8.1 M2	An Action 1 was added that directs immediate entry into LCO 3.0.3 if three or more required AC sources are inoperable (i.e., potential loss of function of the AC sources). The CTS does not contain a specification equivalent to ITS LCO 3.0.3 and would use normal shutdown times provided in the CTS. ITS LCO 3.0.3 is more restrictive than a normal plant shutdown to Hot Shutdown in 12 hours and to Cold Shutdown within the following 24 hours since it also requires reaching Mode 2 within 7 hours.	LCO 3.8.1 Required Action F.1	3.8.A
3.8.1 M3	Additional limitations were imposed in ITS SRs on the monthly DG testing that requires the DG fast-start time be verified (normally performed only at 6-month intervals) if the monthly start procedure does not utilize the option for gradual acceleration and that precludes performing the DG load run SR on more than one DG at a time.	SR 3.8.1.2 Note 3 SR 3.8.1.3 Note 3	4.8.a.2.a.1.a 4.8.a.2.a.1.b
3.8.1 M4	For the 6 month DG fast start and the LOOP/LOCA test of DGs, a start time of ≤ 10 seconds was added, which is conservative with respect to accident analysis assumptions.	SR 3.8.1.7 SR 3.8.1.13	4.8.A.2.a.2 4.8.A.2.b
3.8.1 M5	Not used.		

**TABLE M - MATRIX OF MORE RESTRICTIVE CHANGE SECTION
3.8, "ELECTRICAL PLANT SYSTEMS,"**

Discussion of Change	Summary of Change	ITS Section	CTS Section
3.8.2 M3	The CTS requires operability of one DG in Cold Shutdown or Refueling when performing OPDRVs and one offsite power source and one DG during Core Alterations. The CTS Definition of Operable, in conjunction with CTS Definition 1.0.3 does require that the normal and emergency power sources be Operable to support features that are required to be Operable. However, the CTS allows these features to be inoperable at certain times during Modes 4 and 5, which allows the power sources to be inoperable. The more restrictive change requires one offsite circuit and one DG to be Operable at all times in Modes 4 and 5, and during movement of irradiated fuel assemblies in the secondary containment.	LCO 3.8.2 Applicability	3.5.G.3 3.9.D
3.8.2 M4	A Surveillance Requirement was added to specify which Surveillances (from LCO 3.8.1) are required to determine Operability of AC Sources during shutdown. The new SR exempts the performance of SR 3.8.1.8 to verify automatic and manual transfer of power from the Startup Transformer to the Standby Transformer in Modes 4 and 5, or when moving irradiated fuel in the secondary containment. This exemption is allowed because in Mode 4 or 5, or when moving irradiated fuel in the secondary containment, only one offsite power supply is required to be Operable by the provisions of ITS 3.8.2. SR 3.8.2.1 is modified by a Note which allows SR 3.8.1.3, SR 3.8.1.9, SR 3.8.1.10, SR 3.8.1.12, SR 3.8.1.13, SR 3.8.1.14 and 3.8.1.15 to not be performed, as long as they are met for the Operable DG. <u>3</u>	SR 3.8.2.1	3.9.D.1

**TABLE M - MATRIX OF MORE RESTRICTIVE CHANGE SECTION
3.8, "ELECTRICAL PLANT SYSTEMS,"**

Discussion of Change	Summary of Change	ITS Section	CTS Section
ITS 3.8.6: BATTERY CELL PARAMETERS			
3.8.6 M1	New specification requirements were added in ITS 3.8.6 for battery cell parameters. A Note was added to the Actions stating Separate Condition entry is allowed for each battery. An LCO and Applicability were added to require battery cell parameters for the batteries to be within limits when associated DC electrical power subsystems are required to be Operable. Action A was added to address the condition where one or more batteries have one or more battery cell parameter not within Category A or B limits as specified in Table 3.8.6-1. Action B was added to provide a Required Action and associated Completion Time if Condition A is not met <u>OR</u> if one or more batteries have average electrolyte temperature of the representative cells not within limits <u>OR</u> if two cells in one or more batteries have two or more battery cell parameters not within Category C limits. Table 3.8.6-1 was added which contains Category A, Category B and Category C acceptance criteria for float voltage, electrolyte level, and specific gravity.	I.CO 3.8.6 Applicability SR 3.8.6.2 SR 3.8.6.3 Table 3.8.6-1 <i>type</i>	None
3.8.6 M2	Surveillance Requirements were added for a 7 day verification that electrolyte level of the pilot cell is within Category A limits of Table 3.8.6-1, and to require a 92 day verification that electrolyte level of each connected cell is within Category B limits of Table 3.8.6-1.	Table 3.8.6-1 SR 3.8.6.1 SR 3.8.6.2	4.8.B.1.a
3.8.6 M3	Surveillance Requirements were added to verify the battery cell parameters meet Category B limits once within 24 hours after a 125 VDC battery discharge to less than 110 V and once within 24 hours after a battery overcharge to greater than 150 V. For the 250 VDC battery, the change requires this verification once within 24 hours after a battery discharge to less than 220 V or an overcharge to greater than 300V.	SR 3.8.6.2	4.8.B.1.b

**TABLE M - MATRIX OF MORE RESTRICTIVE CHANGES
SECTION 3.9, "REACTIVITY CONTROL SYSTEMS"**

Discussion of Change	Summary of Change	ITS Section	CTS Section
ITS 3.9.1: REFUELING EQUIPMENT INTERLOCKS			
	No M DOCs	LCO 3.9.1- Applicability	3.8.1-
ITS 3.9.2: REFUEL POSITION ONE-ROD-OUT INTERLOCK			
3.9.2 M1	An Action was added that requires the suspension of control rod withdrawal and action to be initiated to fully insert all insertable control rods in core cells containing one or more fuel assemblies, when the refuel position one-rod-out interlock is inoperable.	LCO 3.9.2 Action A	3.9.A
3.9.2 M2	A surveillance requirement was added that requires verification every 12 hours that the mode switch remains locked in the "Refuel" position while in Mode 5 with the reactor mode switch in the refuel position and any control rod withdrawn.	SR 3.9.2.1	3.9.A.1
ITS 3.9.3: CONTROL ROD POSITION			
3.9.3 M1	A surveillance requirement was added that requires a verification every 12 hours while loading fuel, that all control rods are fully inserted.	SR 3.9.3.1	3.9.A.2
ITS 3.9.4: CONTROL ROD POSITION INDICATION			
3.9.4 M1	ITS 3.9.4, Control Rod Position Indication, and the associated Conditions, Required Actions, Completion Times, Notes, and Surveillance Requirements were added.	LCO 3.9.4	None
ITS 3.9.5: CONTROL ROD OPERABILITY - REFUELING			
3.9.5 M1	ITS 3.9.5, Control Rod Operability - Refueling, and the associated Conditions, Required Actions, Completion Times, Notes, and Surveillance Requirements were added.	LCO 3.9.5	None

TABLE L - MATRIX OF LESS RESTRICTIVE CHANGES
SECTION 2.0 "Safety Limits (SL)"

Discussion of Change	Description	ITS Section	CTS Section	Category
2.0 "SAFETY LIMITS (SL)"				
2.0 L1 <i>typo</i>	The MCPR limits for single loop operation were changed from 1.10 to 1.08, when the reactor pressure is ≥ 785 psig and core flow $\geq 10\%$ of rated core flow. This less restrictive change is consistent with the analysis support RTS 124C, NEDO-24272, UFSAS 1.5.4.5, and the STS.	2.1.1.2	1.1.A	None ✓
2.0 L2	The "Power Transient" SL was deleted. These scram setpoints are maintained in ITS Table 3.3.1.1-1.	3.3.1.1 Table 3.3.1.1-1	1.1.C	None ✓
2.0 L3	The SL (high pressure interlock setpoint), when operating the RHR System in the Shutdown Cooling Mode, was incorporated into ITS 3.3.6.1 (Table 3.3.6.1-1 for Primary Containment Isolation Instrumentation). The change from maintaining the setpoint as a SL to maintaining it as a LCO is less restrictive.	Table 3.3.6.1-1 Function 6.a	1.2.2	None ✓

Categories	
I.	Relaxation of Applicability
II.	Relaxation of Surveillance Frequency
III.	Relaxation of Action Requirements details
IV.	Relaxation of Setpoints to Allowable Values
V.	Relaxation of Required Actions to exit Applicability
VI.	Relaxation of Surveillance Requirement acceptance criteria
VII.	Relaxation of Completion Time
VIII.	Relaxation of Fuel Cycle from 18 to 24 months
IX.	Relaxation unrelated to STS Conversion

TABLE L - MATRIX OF LESS RESTRICTIVE CHANGES
SECTION 3.1, "REACTIVITY CONTROL SYSTEMS,"

Discussion of Change	Description	ITS Section	CTS Section	Category
ITS 3.1.3: CONTROL ROD OPERABILITY				
3.1.3 L1	The frequency of the SR to exercise partially withdrawn control rods was relaxed from 7 days to 31 days.	SR 3.1.3.3	4.3.A.2.f(i)	II
3.1.3 L2	Not used.			
3.1.3 L3	The requirement to exercise all operable control rods if one or more control rods are stuck was changed from once each 24 hours to only once within 24 hours for each withdrawn operable control rod.	LCO 3.1.3 Required Action A.3	4.3.A.2.f(ii)	II
3.1.3 L4	The requirement to shutdown the plant with a single stuck control rod that may be stuck as a result of a collet housing failure was changed to allow continued operation with one stuck rod (for any reason).	LCO 3.1.3 Condition A	3.3.A.2.f(iv) 3.3.A.2.f(v)	VII
3.1.3 L5	Not Used. <i>See DAEC Matrix for write-up</i>	SR 3.1.3.5	4.3.A.2.d	None
3.1.3 L6	The implicit CTS applicability for control rod operability of Modes 1, 2, and 3 was relaxed to require operability only in Modes 1 and 2. Also, Required Actions were modified to required exiting the new Modes of Applicability within 12 hours.	LCO 3.1.3 Applicability LCO 3.1.3 Required Actions B.1 and E.1	3.3.A.2.b 3.3.A.2.c 3.3.A.2.d 3.3.A.2.e(v) 3.3.A.2.f(v)	I V

Categories	
I.	Relaxation of Applicability
II.	Relaxation of Surveillance Frequency
III.	Relaxation of Action Requirements details
IV.	Relaxation of Setpoints to Allowable Values
V.	Relaxation of Required Actions to exit Applicability
VI.	Relaxation of Surveillance Requirement acceptance criteria
VII.	Relaxation of Completion Time
VIII.	Relaxation of Fuel Cycle from 18 to 24 months
IX.	Relaxation unrelated to STS Conversion

TABLE L - MATRIX OF LESS RESTRICTIVE CHANGES
SECTION 3.3, "INSTRUMENTATION"

Discussion of Change	Description	ITS Section	CTS Section	Category
3.3.1.1 L9	Per the response to the Staff's RAI (Ref. NG-97-1597) and the meeting with the Staff dated September 9, 1997, this change has been withdrawn. Not used	None	None	None
3.3.1.1 L AV	This change revised the Technical Specification setpoints for proposed Section 3.3 instrumentation to reflect Allowable Values consistent with the philosophy of the NUREG. While this change could be classified administrative, it has been characterized as a less restrictive change for overall conservatism. Add new L10 to 3.3.1.1	Table 3.3.1.1-1	Table 3.1-1	IV

- Categories
- I. Relaxation of Applicability.
 - II. Relaxation of Surveillance Frequency
 - III. Relaxation of Action Requirements details
 - IV. Relaxation of Setpoints to Allowable Values
 - V. Relaxation of Required Actions to exit Applicability
 - VI. Relaxation of Surveillance Requirement acceptance criteria
 - VII. Relaxation of Completion Time
 - VIII. Relaxation of Fuel Cycle from 18 to 24 months
 - IX. Relaxation unrelated to STS Conversion

TABLE L - MATRIX OF LESS RESTRICTIVE CHANGES
SECTION 3.3, "INSTRUMENTATION"

Discussion of Change	Description	ITS Section	CTS Section	Category
ITS 3.3.1.2: "SRM INSTRUMENTATION"				
3.3.1.2 L1	The number of SRM channels required to be Operable was reduced from 2 to 1 during spiral offload or reload when the fueled region includes only that SRM detector.	Table 3.3.1.2-1 Footnote (b)	3.9.B.1	None ✓
3.3.1.2 L2	The requirement that control rods shall not be withdrawn in Startup (includes all of Mode 2 operation) unless the required number of SRMs are Operable, was relaxed to only require SRM Operability in Mode 2 when IRMs are on Range 2 or below.	Table 3.3.1.2-1 Footnote (a)	3.3.C.2	I
3.3.1.2 L3	With SRM Operability requirements in Mode 2 not satisfied, the only action was to not allow control rods to be withdrawn. The relaxation in the Action requirements allows 4 hours to restore the 3 required SRM channels to Operable status as long as at least one SRM is always Operable.	LCO 3.3.1.2 Actions A and B	3.3.C.2	VII

Categories	
I.	Relaxation of Applicability.
II.	Relaxation of Surveillance Frequency
III.	Relaxation of Action Requirements details
IV.	Relaxation of Setpoints to Allowable Values
V.	Relaxation of Required Actions to exit Applicability
VI.	Relaxation of Surveillance Requirement acceptance criteria
VII.	Relaxation of Completion Time
VIII.	Relaxation of Fuel Cycle from 18 to 24 months
IX.	Relaxation unrelated to STS Conversion

TABLE L - MATRIX OF LESS RESTRICTIVE CHANGES
SECTION 3.3, "INSTRUMENTATION"

Discussion of Change	Description	ITS Section	CTS Section	Category
3.3.3.1 L3	The actions for the Post Accident Monitoring Functions of Drywell Pressure and Torus Water Level were relaxed. The actions that allow 30 days of continued operation with backup instrumentation operable and 7 days if backup instrumentation is not operable were changed to allow 30 days for restoration of the inoperable channel <u>and if required channels are inoperable.</u> If the one of the two inoperable channels are not restored within 30 days, the new Actions do not require a plant shutdown as in the CTS, but require a Special Report to be written in accordance with ITS 5.6.6.	LCO 3.3.3.1 Actions A and B	Table 3.2-H Actions 93 and 94	III
3.3.3.1 L4	The actions for the Post Accident Monitoring Functions of Drywell Pressure and Torus Water Level were relaxed. With both channels of either the Drywell Pressure or Torus Water Level inoperable, the actions allowed 48 hours to restore at least one channel before requiring a plant shutdown. The new action extends the restoration time to 7 days.	LCO 3.3.3.1 Action C	Table 3.2-H Actions 93 and 94	VII
3.3.3.1 L5	Per the response to the Staff's RAI (Ref. NG/97-1597) and the meeting with the Staff dated September 9, 1997, this change has been withdrawn.	None	None	None

Categories

- I. Relaxation of Applicability
- II. Relaxation of Surveillance Frequency
- III. Relaxation of Action Requirements details
- IV. Relaxation of Setpoints to Allowable Values

- V.
- VI.
- VII.
- VIII.
- IX.

- Relaxation of Required Actions to exit Applicability
- Relaxation of Surveillance Requirement acceptance criteria
- Relaxation of Completion Time
- Relaxation of Fuel Cycle from 18 to 24 months
- Relaxation unrelated to STS Conversion

Not Used

Add new L6 to 3.3.3.1

TABLE L - MATRIX OF LESS RESTRICTIVE CHANGES
SECTION 3.3, "INSTRUMENTATION"

Discussion of Change	Description	ITS Section	CTS Section	Category
3.3.5.1 L3 cont'd	to declare HPCI inoperable and is only applicable for the HPCI initiation Functions of Reactor Vessel Water Level-Low and Drywell Pressure-High. The one hour timeframe allowed to declare associated systems inoperable is less restrictive than the CTS requirement of immediately.			
3.3.5.1 L4	Per the response to the Staff's RAJ (Ref. NG-97-1597) and the meeting with the Staff dated September 9, 1997, this change has been withdrawn.	None <i>Not Used</i>	None	None
3.3.5.1 L AV	This change revised the Technical Specification setpoints for proposed Section 3.3 instrumentation to reflect Allowable Values consistent with the philosophy of the NUREG. While this change could be classified administrative, it has been characterized as a less restrictive change for overall conservatism.	Table 3.3.5.1-1	Table 3.2-B Table 3.2-H	IV

Add new L5 to 3.3.5.1

- | | | |
|---|-------|--|
| Categories | V. | Relaxation of Required Actions to exit Applicability |
| I. Relaxation of Applicability. | VI. | Relaxation of Surveillance Requirement acceptance criteria |
| II. Relaxation of Surveillance Frequency | VII. | Relaxation of Completion Time |
| III. Relaxation of Action Requirements details | VIII. | Relaxation of Fuel Cycle from 18 to 24 months |
| IV. Relaxation of Setpoints to Allowable Values | IX. | Relaxation unrelated to STS Conversion |

TABLE L - MATRIX OF LESS RESTRICTIVE CHANGES
SECTION 3.3, "INSTRUMENTATION"

Discussion of Change	Description	ITS Section	CTS Section	Category
3.3.5.2 L2	Per the response to the Staff's RAI (Ref. NG-97-1597) and the meeting with the Staff dated September 9, 1997, this change has been withdrawn.	None <i>Not Used.</i>	None	None
3.3.5.2 L3	CTS Table 3.2-B Action 30 with more than one channel inoperable, that required declaring RCIC inoperable immediately was relaxed to allow 1 hour from discovery of loss of RCIC initiation capability, to declare the RCIC System inoperable. Required Action B.1 is only applicable for the RCIC initiation Function of Reactor Vessel Water Level-Low Low	LCO 3.3.5.2 Required Action B.1	Table 3.2-B Action 30	VII
3.3.5.2 L AV	This change revised the Technical Specification setpoints for proposed Section 3.3 instrumentation to reflect Allowable Values consistent with the philosophy of the NUREG. While this change could be classified administrative, it has been characterized as a less restrictive change for overall conservatism.	Table 3.3.5.2-1	Table 3.2-B	IV

Categories

- I. Relaxation of Applicability
- II. Relaxation of Surveillance Frequency
- III. Relaxation of Action Requirements details
- IV. Relaxation of Setpoints to Allowable Values

- V. Relaxation of Required Actions to exit Applicability
- VI. Relaxation of Surveillance Requirement acceptance criteria
- VII. Relaxation of Completion Time
- VIII. Relaxation of Fuel Cycle from 18 to 24 months
- IX. Relaxation unrelated to STS Conversion

TABLE L - MATRIX OF LESS RESTRICTIVE CHANGES
SECTION 3.3, "INSTRUMENTATION"

Discussion of Change	Description	ITS Section	CTS Section	Category
3.3.6.1 L2	The Actions for Isolation Actuation Instrumentation channels allowed 6 hours to restore inoperable channels when placing the inoperable channel(s) in trip would cause the isolation. The CTS also contained restoration times for inoperable channels where placing the channel(s) in trip would not cause an isolation, of 12 hours for trip functions common to RPS and 24 hours for trip functions not common to RPS. The relaxation allows the 12 and 24 hour Completion Times for all inoperable channels (as long as primary containment isolation capability is maintained) before requiring entry into applicable conditions.	LCO 3.3.6.1 Action A	3.2.A.1.a.1 3.2.A.1.a.2	VII
3.3.6.1 L3	The actions for the Reactor Water Level-Low isolation signal for the RHR Shutdown Cooling System that required the affected system isolation valves be closed within one hour and the affected system to be declared inoperable were changed to require immediate action to restore channels to Operable status or to initiate Action to isolate the RHR-SDC System.	LCO 3.3.6.1 Action A	Table 3.2-A Action 23	III

Categories

- I. Relaxation of Applicability.
- II. Relaxation of Surveillance Frequency
- III. Relaxation of Action Requirements details
- IV. Relaxation of Setpoints to Allowable Values

- V. Relaxation of Required Actions to exit Applicability
- VI. Relaxation of Surveillance Requirement acceptance criteria
- VII. Relaxation of Completion Time
- VIII. Relaxation of Fuel Cycle from 18 to 24 months
- IX. Relaxation unrelated to STS Conversion

TABLE L - MATRIX OF LESS RESTRICTIVE CHANGES
SECTION 3.3, "INSTRUMENTATION"

Discussion of Change	Description	ITS Section	CTS Section	Category
3.3.6.1 L6	The Reactor Vessel Water Level - Low Low Low, Group 7 Isolation Function was deleted. The Group 7 Isolation signal functions to close the Reactor Building Closed Cooling Water (RBCCW) Drywell Outlet and Inlet Valves, and the We'll Water Drywell Cooling Water Supply and Discharge Valves. These Systems are considered closed systems (GDC 57).	None	Table 3.2-A	None ✓
3.3.6.1 L7	Actions for the RWCUI isolation function of Standby Liquid Control (SLC) System Initiation (require the affected system isolation valves to be closed within one hour and the affected system to be declared inoperable) were relaxed to require the SLC System to be declared inoperable within one hour of the RWCUI System to be isolated in one hour.	LCO 3.3.6.1 Action W <i>I</i>	Table 3.2-A Action 23	III
3.3.6.1 L8	The Manual Initiation Functions for RCIC and HPCI were deleted.	LCO 3.3.6.1 Action G <i>None</i>	Table 3.2-A	<i>VII</i> None

Actions for the Manual Initiation isolation function for HPCI and RCIC to isolate the affected penetration flow path(s) with inoperable channel(s) were relaxed from 9 hours to 24 hours.

- Categories
- I. Relaxation of Applicability
 - II. Relaxation of Surveillance Frequency
 - III. Relaxation of Action Requirements details
 - IV. Relaxation of Setpoints to Allowable Values
 - V. Relaxation of Required Actions to exit Applicability
 - VI. Relaxation of Surveillance Requirement acceptance criteria
 - VII. Relaxation of Completion Time
 - VIII. Relaxation of Fuel Cycle from 18 to 24 months
 - IX. Relaxation unrelated to STS Conversion

TABLE L - MATRIX OF LESS RESTRICTIVE CHANGES
SECTION 3.3, "INSTRUMENTATION"

Discussion of Change	Description	ITS Section	CTS Section	Category
3.3.6.1 L9	The isolation Function of Offgas Vent Stack - High Radiation is required operable during venting or purging of primary containment at any time when primary containment integrity is required. However, Surveillance Requirements (SRs) for this Function were required to be performed in Modes 1, 2, 3 and when handling irradiated fuel in the secondary containment and during Core Alterations and Operations with a Potential for Draining the Reactor Vessel (OPDRVs). The SRs were incorrectly required to be performed for Modes and conditions outside the Modes of Applicability. The relaxation requires the SRs to be performed only during venting or purging of primary containment when primary containment integrity is required.	Table 3.3.6.1-1	Tables 3.2-A and 4.2-A	I
3.3.6.1 L10	The CTS and ITS 6 hour Allowed Outage Time (AOT) for testing for the isolation Function of RWCU Differential Flow - High was not adequate and was extended to 12 hours.	Note: 3.3.6.1-1 SRs	Table 3.2-A Note (a)	None

typo

Not used.

- Categories
- i. Relaxation of Applicability.
 - ii. Relaxation of Surveillance Frequency
 - iii. Relaxation of Action Requirements details
 - iv. Relaxation of Setpoints to Allowable Values
 - v. Relaxation of Required Actions to exit Applicability
 - vi. Relaxation of Surveillance Requirement acceptance criteria
 - vii. Relaxation of Completion Time
 - viii. Relaxation of Fuel Cycle from 18 to 24 months
 - ix. Relaxation unrelated to STS Conversion

TABLE L - MATRIX OF LESS RESTRICTIVE CHANGES
SECTION 3.3, "INSTRUMENTATION"

Discussion of Change	Description	ITS Section	CTS Section	Category
3.3.6.1 L13	With more than one channel of the Containment Pressure - High Function inoperable, the action to declare the associated system inoperable immediately was relaxed to allow 1 hour to restore isolation capability. If not met, then either the associated Suppression Pool Cooling subsystem(s) or Primary Containment are declared inoperable.	LCO 3.3.6.1 Required Action B.1 and Action C.1 <i>H</i> and <i>Spray</i>	Table 3.2-B Action 30	VII
3.3.6.1 L14	The action for the Main Steam Line Pressure - Low Isolation Function that required the plant to be in at least Startup within 6 hours was relaxed to allow 8 hours to be in Mode 2.	LCO 3.3.6.1 Required Action E.1	Table 3.2-A Action 22	VII
3.3.6.1 L15	<i>Per the response to the Staff's RAI (Ref. NG-97-1597) and the meeting with the Staff dated September 9, 1997, this change has been withdrawn.</i>	None <i>Not Used</i>	None	None
3.3.6.1 L AV	This change revised the Technical Specification setpoints for proposed Section 3.3 instrumentation to reflect Allowable Values consistent with the philosophy of the NUREG. While this change could be classified administrative, it has been characterized as a less restrictive change for overall conservatism.	Table 3.3.6.1-1	Table 3.2-A Table 3.2-B	IV

Categories

- I. Relaxation of Applicability
- II. Relaxation of Surveillance Frequency
- III. Relaxation of Action Requirements details
- IV. Relaxation of Setpoints to Allowable Values

- V. Relaxation of Required Actions to exit Applicability
- VI. Relaxation of Surveillance Requirement acceptance criteria
- VII. Relaxation of Completion Time
- VIII. Relaxation of Fuel Cycle from 18 to 24 months
- IX. Relaxation unrelated to STS Conversion

TABLE L - MATRIX OF LESS RESTRICTIVE CHANGES
SECTION 3.3, "INSTRUMENTATION"

Discussion of Change	Description	ITS Section	CTS Section	Category
3.3.6.2 L4	In addition to the applicability of Modes 1, 2, and 3 for the Isolation Signal of Drywell Pressure - High, the SRs were also required to be performed when handling irradiated fuel in the secondary containment and during Core Alterations and OPDRVs. The relaxation requires the SRs to be performed only in Modes 1, 2, and 3.	Table 3.3.6.1-1	Tables 3.2-A and 4.2-A	I
3.3.6.2 L5	Per the response to the Staff's RAI (Ref. NG-97-1597) and the meeting with the Staff dated September 9, 1997, this change has been withdrawn.	None	None	None
3.3.6.2 L AV	This change revised the Technical Specification setpoints for proposed Section 3.3 instrumentation to reflect Allowable Values consistent with the philosophy of the NUREG. While this change could be classified administrative, it has been characterized as a less restrictive change for overall conservatism.	Table 3.3.6.2-1	Table 3.2-A	IV

Add new L6 to 3.3.6.2

- Categories
- I. Relaxation of Applicability
 - II. Relaxation of Surveillance Frequency
 - III. Relaxation of Action Requirements details
 - IV. Relaxation of Setpoints to Allowable Values
 - V. Relaxation of Required Actions to exit Applicability
 - VI. Relaxation of Surveillance Requirement acceptance criteria
 - VII. Relaxation of Completion Time
 - VIII. Relaxation of Fuel Cycle from 18 to 24 months
 - IX. Relaxation unrelated to STS Conversion

**TABLE L - MATRIX OF LESS RESTRICTIVE CHANGES
SECTION 3.5, "EMERGENCY CORE COOLING SYSTEMS (ECCS)"**

Discussion of Change	Description	ITS Section	CTS Section	Category
3.5.1 L3	Required Actions and Completion Times were added in the ITS for the situation when two Core Spray subsystems are inoperable a that allow 72 hours to restore one Core Spray subsystem to Operable status. The CTS, with two subsystems inoperable, allows only 12 hours to be in Hot Shutdown and another 24 hours to be in Cold Shutdown. The CTS allows one or two RHR pumps to be inoperable only if the remaining LPCI Core Spray and Containment Spray subsystems are inoperable. This change is not related to the conversion to the STS and is discussed in Section G of this safety evaluation.	LCO 3.5.1 Action D	3.5.A.2 3.5.A.6	IX
3.5.1 L4	The existing requirements for actuation testing of CS, LPCI, HPCI and ADS, that stipulate using a simulated automatic actuation test, were changed to allow an actual or a simulated automatic initiation signal.	SR 3.5.1.7	4.5.A.1.a 4.5.A.3.a 4.5.D.1.a 4.5.F.1.a	VI
3.5.1 L5	The requirement to verify that HPCI is capable of delivering at least 3000 gpm "if vessel pressure were as high as 1040 psig," was relaxed to allow verification of HPCI flow rate with reactor pressure $\geq$ 940 psig and $\leq$ 1025 psig.	SR 3.5.1.5	4.5.D.1.d	VI

Categories	
I.	Relaxation of Applicability
II.	Relaxation of Surveillance Frequency
III.	Relaxation of Action Requirements details
IV.	Relaxation of Setpoints to Allowable Values
V.	Relaxation of Required Actions to exit Applicability
VI.	Relaxation of Surveillance Requirement acceptance criteria
VII.	Relaxation of Completion Time
VIII.	Relaxation of Fuel Cycle from 18 to 24 months
IX.	Relaxation unrelated to STS Conversion

**TABLE L - MATRIX OF LESS RESTRICTIVE CHANGES
SECTION 3.5, "EMERGENCY CORE COOLING SYSTEMS (ECCS)"**

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Discussion of Change	Description	ITS Section	CTS Section	Category
ITS 3.5.3: RCIC SYSTEM				
3.5.3 L1	Based upon discussions with the Staff on September 9, 1997 regarding the response to the Staff's Request for Additional Information (RAI) of February 24, 1997 (Ref. NG-97-1597, September 5, 1997), the proposed change to add Note 2 to ITS SR 3.5.3.5 has been withdrawn.	None	None	None
3.5.3 L2	The requirement to verify that RCIC is capable of delivering at least 400 gpm (rated flow) "if vessel pressure were as high as 1040 psig," was changed to require verification of a minimum 400 gpm RCIC flow rate with reactor pressure $\geq$ 940 psig and $\leq$ 1025 psig.	SR 3.5.3.3	4.5.E.1.d	VI
3.5.3 L3	The requirement for actuation testing of RCIC that stipulates using a simulated automatic actuation signal was changed to allow using either a simulated or actual automatic initiation signal.	SR 3.5.3.5	4.5.E.1.a	VI
3.5.3 L IC-2	The Frequency of performing ECCS testing was extended to facilitate a change to the DAEC operating cycle from 18 months to 24 months. The change extended the Surveillance Frequency from annual to 24 months for the simulated automatic actuation test for RCIC.	SR 3.5.3.5	4.5.E.1.a	II

Add 3.5.3. LCY-2
See DAEC matrix.

- | | | |
|---|-----------|--|
| Categories | V. | Relaxation of Required Actions to exit Applicability |
| I. Relaxation of Applicability | VI. | Relaxation of Surveillance Requirement acceptance criteria |
| II. Relaxation of Surveillance Frequency | VII. | Relaxation of Completion Time |
| III. Relaxation of Action Requirements details | VIII. | Relaxation of Fuel Cycle from 18 to 24 months |
| IV. Relaxation of Setpoints to Allowable Values | IX. | Relaxation unrelated to STS Conversion |

TABLE L - MATRIX OF LESS RESTRICTIVE CHANGES
SECTION 3.6, "CONTAINMENT SYSTEMS,"

Discussion of Change	Description	ITS Section	CTS Section	Category
	ITS 3.6.1.6: REACTOR BUILDING-TO-SUPPRESSION CHAMBER VACUUM BREAKERS			
3.6.1.6 L1	With more than one valve in a vacuum breaker assembly inoperable, the CTS assumes either containment integrity is lost or the ability to relieve negative pressure in the containment is lost. The relaxation in the ITS recognizes that there are two valves in series in each of two vacuum breaker assemblies.	ITS 3.6.1.6 Condition C	3.7.D.2 3.7.D.3	VII
3.6.1.6 L1 contid	If one vacuum breaker assembly valve will not open, the vacuum breaker assembly is inoperable to perform its relief function, thus there are no further consequences if the second vacuum breaker assembly valve in the same assembly is inoperable. If two vacuum breaker valves in one vacuum breaker assembly are inoperable but closed, containment integrity and venting capability are still maintained and 72 hours is provided to restore the redundant vacuum breaker assembly.			

Categories	
I.	Relaxation of Applicability
II.	Relaxation of Surveillance Frequency
III.	Relaxation of Action Requirements details
IV.	Relaxation of Setpoints to Allowable Values
V.	Relaxation of Required Actions to exit Applicability
VI.	Relaxation of Surveillance Requirement acceptance criteria
VII.	Relaxation of Completion Time
VIII.	Relaxation of Fuel Cycle from 18 to 24 months
IX.	Relaxation unrelated to STS Conversion

TABLE L - MATRIX OF LESS RESTRICTIVE CHANGES
SECTION 3.6, "CONTAINMENT SYSTEMS,"

Discussion of Change	Description	ITS Section	CTS Section	Category
ITS 3.6.2.2: SUPPRESSION POOL WATER LEVEL				
3.6.2.2 L1	The 1 hour allowance to restore suppression pool level to within limits was changed to allow 2 hours to restore level.	ITS 3.6.2.2 ACTION A	3.7.G.1.b	VII
ITS 3.6.2.3: RHR SUPPRESSION POOL COOLING				
	No L DOCs			
ITS 3.6.2.4: RHR SUPPRESSION POOL SPRAY				
	TTBD No L DOCs			
ITS 3.6.3.1: CONTAINMENT ATMOSPHERIC DILUTION SYSTEM				
3.6.3.1 L1	The requirement to verify the volume in the N ₂ bank weekly was relaxed to 31 days, similar to other surveillances for tank contents (e.g., diesel fuel oil).	SR 3.6.3.1.1	4.7.H.2	II

Categories	
I.	Relaxation of Applicability
II.	Relaxation of Surveillance Frequency
III.	Relaxation of Action Requirements details
IV.	Relaxation of Setpoints to Allowable Values
V.	Relaxation of Required Actions to exit Applicability
VI.	Relaxation of Surveillance Requirement acceptance criteria
VII.	Relaxation of Completion Time
VIII.	Relaxation of Fuel Cycle from 18 to 24 months
IX.	Relaxation unrelated to STS Conversion

**TABLE L - MATRIX OF LESS RESTRICTIVE CHANGES
SECTION 3.6 "CONTAINMENT SYSTEMS,"**

Discussion of Change	Description	ITS Section	CTS Section	Category
ITS 3.6.4.3: SBTGT SYSTEM				
3.6.4.3 L1	The action with one train of standby gas treatment inoperable and not restored within 7 days, that requires the unit to be placed in Cold Shutdown and the suspension of irradiated fuel movement, was relaxed to also allow placing the OPERABLE SBTGT subsystem in operation as an alternative to suspending movement of irradiated fuel assemblies.	ITS 3.6.4.3 Required Action C.1	3.7.L.3	III
3.6.4.3 L2	ITS SR 3.6.4.3.2 was relaxed by Note 1, which delays entry into the Conditions and Required Actions for one hour, when a SBTGT System is made inoperable (as a result of testing on the other subsystem).	SR 3.6.4.3.2 <i>typo</i>	3.7.L.2.d	None ✓
3.6.4.3 L CY-2	This change documents the DAEC review of extending the fuel cycle from 18 to 24 months, versus the NRC requirements specified in Generic Letter 91-04. The review included instrument drift, Appendix J extension, and the effect of historical maintenance and surveillance data on the extension.	SR 3.6.4.3.3	4.7.L.1.d	VIII
3.6.4.3 L IC-2	The Frequency of performing a manual operability check of the SBTGT bypass system for filter cooling, was extended to facilitate a change to the DAEC operating cycle from 18 months to 24 months. The extended the Surveillance Frequency from annually to 24 months	SR 3.6.4.3.4	4.7.L.1.e	II

- Categories**
- I. Relaxation of Applicability
 - II. Relaxation of Surveillance Frequency
 - III. Relaxation of Action Requirements details
 - IV. Relaxation of Setpoints to Allowable Values
 - V. Relaxation of Required Actions to exit Applicability
 - VI. Relaxation of Surveillance Requirement acceptance criteria
 - VII. Relaxation of Completion Time
 - VIII. Relaxation of Fuel Cycle from 18 to 24 months
 - IX. Relaxation unrelated to STS Conversion

TABLE L - MATRIX OF LESS RESTRICTIVE CHANGES
SECTION 3.7, "PLANT SYSTEMS,"

Discussion of Change	Description	ITS Section	CTS Section	Category
ITS 3.7.3: EMERGENCY SERVICE WATER (FSW)				
3.7.3 L1	The requirement for automatic actuation testing of ESW that stipulates a simulated automatic actuation test be performed, was relaxed to allow either a simulated or actual automatic initiation signal. This allows satisfactory automatic system initiations to fulfill the SR s.	SR 3.7.3.2	4.8.E.1.a	VI
3.7.3 L2	The conditional surveillance requirement to perform FSW pump testing weekly when the river water temperature exceeds 80° F is deleted. Instead the UHS is declared inoperable whenever river water temperature exceeds 95° F and appropriate Required Actions and Completion Times for this condition (which is to be in Mode 3 in 12 hours and Mode 4 in 36 hours) are added.	None	4.8.E.1.c	None

Categories	
I.	Relaxation of Applicability
II.	Relaxation of Surveillance Frequency
III.	Relaxation of Action Requirements details
IV.	Relaxation of Setpoints to Allowable Values
V.	Relaxation of Required Actions to exit Applicability
VI.	Relaxation of Surveillance Requirement acceptance criteria
VII.	Relaxation of Completion Time
VIII.	Relaxation of Fuel Cycle from 18 to 24 months
IX.	Relaxation unrelated to STS Conversion

TABLE L - MATRIX OF LESS RESTRICTIVE CHANGES
SECTION 3.8, "ELECTRICAL POWER SYSTEMS,"

Discussion of Change	Description	ITS Section	CTS Section	Category
3.8.1 L8	A Note was added to the 31 day DG test run SR, which allows a 2 hour delay to perform the SR before requiring entry into associated Conditions and Required Actions. The Note only applies when the SR is being performed pursuant to the Required Actions of B.3 and B.4 (one DG inoperable). The addition of this Note reflects the DAEC current operating practice of not entering Required Actions for Conditions caused by performing Surveillance Requirements.	SR 3.8.1.2 Note 3	4.8.A.2	None ✓
3.8.1 L9	This change deleted the requirements to maintain and verify the Operability of both emergency diesel generators when one or both off-site sources are inoperable.	None	3.8.A.2.a 3.8.A.2.c	None ✓
3.8.1 L10	This change deleted requirements for manually starting and loading the DGs for Surveillances.	None	4.8.A.2.a.1.a 4.8.A.2.a.1.b 4.8.A.2.a.2	None ✓
3.8.1 L11	This change allow the DGs to be tested within a specified range of voltage and frequency instead of at the exact value of rated voltage and frequency.	SR 3.8.1.2 SR 3.8.1.7	4.8.A.2.a.1.a 4.8.A.2.a.2	VI

Categories	
I.	Relaxation of Applicability.
II.	Relaxation of Surveillance Frequency
III.	Relaxation of Action Requirements details
IV.	Relaxation of Setpoints to Allowable Values
V.	Relaxation of Required Actions to exit Applicability
VI.	Relaxation of Surveillance Requirement acceptance criteria
VII.	Relaxation of Completion Time
VIII.	Relaxation of Fuel Cycle from 18 to 24 months
IX.	Relaxation unrelated to STS Conversion