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January 28, 2000

1CAN010007

U. S. Nuclear Regulatory Commission  
Document Control Desk  
Mail Station OP1-17  
Washington, DC 20555

Subject: Arkansas Nuclear One - Unit 1  
Docket No. 50-313  
License No. DPR-51  
Arkansas Nuclear One - Unit 1 Conversion To Improved Standard Technical Specifications

Gentlemen:

Attached for your review and approval is an amendment request for the conversion of the current Arkansas Nuclear One - Unit 1 (ANO-1) Technical Specifications (CTS) to be consistent with NUREG-1430, "Standard Technical Specifications - Babcock and Wilcox Plants," Revision 1, dated April 1995. The proposed license amendment request to convert the ANO-1 CTS to the ANO-1 Improved Technical Specifications (ITS) is provided in volumes enclosed with this letter. The proposed license amendment request was prepared considering the guidance of NEI 96-06, "Improved Standard Technical Specifications Conversion Guidance," dated August, 1996, and NRC Administrative Letter 96-04, "Efficient Adoption of Improved Standard Technical Specifications," dated October 9, 1996.

A detailed description of the contents and organization of the proposed license amendment request is described below:

Attachment 1, "Synopsis of the Proposed License Amendment Request," describes the organization and content of the enclosed volumes.

Attachment 2, "Existing ANO-1 License Amendment Requests Incorporated into the ITS," provides a listing of all currently docketed license amendment requests that have been incorporated into this ITS license amendment request.

Attachment 3, "Disposition of Generic Changes to NUREG-1430," provides a listing of the pending and approved changes to NUREG-1430 as of

A001

January 10, 2000. A disposition is provided for each generic change identifying the impact on this license amendment request.

Attachment 4, "List of Beyond Scope Changes," provides a listing of those changes incorporated into this license amendment request that are different than both CTS and NUREG-1430.

Attachment 5, "List of Items That Could Require Additional NRC Resources," provides a listing of those changes that Entergy Operations believes fit into the scope of Technical Specification conversion that could require additional NRC resources to process.

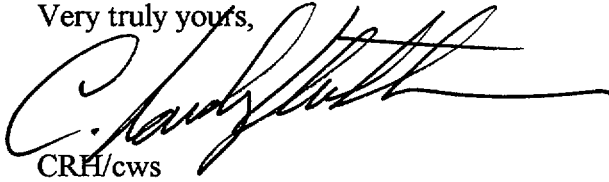
Attachment 6, "CTS Pages Not Included in CTS Markup," provides a listing of the CTS pages that were not used in any of the CTS markups. This includes pages that are intentionally blank, and page numbers that are not used.

Implementation of the ANO-1 ITS will require the performance of a number of new ITS surveillance requirements. Entergy Operations intends to treat these new requirements as being "met" at the time of implementation, with the first performance of these new surveillance requirements scheduled to be completed within the required interval from the date of implementation.

Any revisions to the ANO-1 Safety Analysis Report (SAR) required as a result of this proposed license amendment request will be made in accordance with 10 CFR 50.71(e).

ANO-1 currently plans on implementing the ITS during the third quarter of 2001. The actual implementation date may vary based on NRC approval, the time required for procedure revisions, the development of new programs, training schedules for both licensed and non-licensed operators, and the timing of implementation with respect to scheduled refueling outages. The planned implementation period is in between the 1R16 outage and the 1R17 outage. Additionally, this date follows initial operator exams and operator re-qualification exams, as currently scheduled. Entergy Operations requests a minimum of 3 months after issuance of the final Safety Evaluation to implement this proposed license amendment request at ANO-1.

Very truly yours,

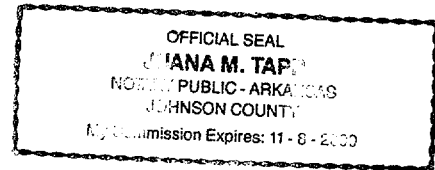


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Attachments

To the best of my knowledge and belief, the statements contained in this submittal are true.

SUBSCRIBED AND SWORN TO before me, a Notary Public in and for Johnson County and the State of Arkansas, this 28 day of January, 2000.

Juana M. Tapp  
Notary Public  
My Commission Expires 11-8-2000



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## **SYNOPSIS OF THE PROPOSED LICENSE AMENDMENT REQUEST**

The submittal for the conversion to Improved Technical Specifications (ITS) consists of 7 volumes and related attachments to the transmittal letter. The 7 volumes consist of the application of NRC Selection Criteria (Split Report) and ITS Section packages. Below is a brief description of the contents of the Split Report and each of the Section packages, as well as a brief explanation of how the material was prepared and the designations utilized.

### **APPLICATION OF NRC SELECTION CRITERIA**

The Selection Criteria provides a discussion of how the 10 CFR 50.36(c)(2)(ii) criteria were evaluated with respect to the Current Technical Specification (CTS) requirements. This evaluation was performed only to determine those CTS requirements that are required to be retained in the proposed ITS. For those CTS requirements that do not meet any of the NRC selection criteria and are not retained in the proposed ITS, an evaluation of the CTS requirement against the criteria is provided in Appendix A.

### **SECTION PACKAGES FOR SECTIONS 1.0 THROUGH 5.0 (18 SECTIONS)**

Each of the Section packages corresponds to a Section of the proposed ITS. ITS Section 3.3, "Instrumentation," has been divided into four sub-Sections based on the instrumentation systems (Reactor Protection System, Engineered Safeguards Systems, Emergency Feedwater Indication and Controls, and Miscellaneous Instrumentation). ITS Section 3.4, "Reactor Coolant Systems," has been divided into two sub-Sections based on the systems (Reactor Coolant System and Reactor Coolant System Auxiliaries). Each Section, and sub-Section contains the required information to review the ITS Section, and is organized as described below:

TAB ITS

Contains the proposed ITS Limiting Conditions for Operation (LCOs).

TAB ITS Bases

Contains the proposed ITS Bases

TAB CTS Markup

Contains annotated copies of the CTS pages which show the disposition of existing requirements into the proposed ITS. The pages are arranged in ITS order. The upper right hand corner of the CTS page is annotated with the ITS Specification number to which the CTS page applies. Items on the CTS page that are addressed in other proposed ITS Sections (or Specifications within the Section) are annotated with the appropriate location.

Where a proposed ITS requirement differs from a CTS requirement, individual details of the CTS revision are annotated with alpha-numeric designators which relate to the appropriate Discussion of Change (DOC). The DOC provides a concise justification for the change. The DOCs are located directly preceding the CTS Markup in each Section or sub-Section. The alpha-numeric designators also relate to the evaluations supporting a finding of No Significant Hazard Consideration (NSHC).

The CTS pages in the Section packages reflect License Amendments issued as of the date of the submittal letter, and License Amendment Requests described in Attachment 2 to the submittal letter.

The DOCs are numbered sequentially within each letter category for each ITS Section or sub-Section. The proposed changes for each CTS requirement are separated into the following categories:

<u>Designator</u>	<u>Category</u>
A	ADMINISTRATIVE - changes to the CTS that result in no additional or reduced restrictions or flexibility. These changes are supported in aggregate by a single NSHC.
M	TECHNICAL CHANGES - MORE RESTRICTIVE - changes to the CTS that result in added restrictions or reduced flexibility. These changes are supported in aggregate by a single NSHC.
L	TECHNICAL CHANGES - LESS RESTRICTIVE - changes to the CTS that result in reduced restrictions or added flexibility. Each corresponding evaluation is supported by a corresponding evaluation supporting a finding of NSHC.
LA	TECHNICAL CHANGES - REMOVAL OF DETAIL - changes to the CTS that eliminate detail and relocate the detail to a licensee controlled document. Typically, this involves details of system design and function, or procedural detail on methods of conducting a surveillance. These changes are supported in aggregate by a single NSHC.

R RELOCATED SPECIFICATIONS - changes to the CTS that encompass the requirements that do not meet the selection criteria of 10 CFR 50.36(c)(2)(ii). These changes are supported in aggregate by a single NSHC.

The CTS Bases pages are replaced in their entirety. A single DOC justifies the replacement.

TAB NSHC

Contains evaluations required by 10 CFR 50.91(a) supporting a finding of No Significant Hazard Consideration (NSHC). Generic evaluations for a finding of NSHC have been written for each category of changes except Category "L." The evaluations supporting a finding of NSHC are ordered as follows: A, M, LA, R, and L. Each evaluation is annotated to correspond to the DOC discussed in the NSHC. The generic NSHC evaluations for Category A, M, and R changes are located in the Split Report section.

TAB NUREG Markup

Contains annotated copies of the applicable NUREG-1430, Revision 1, LCOs which show how the proposed ITS LCO differs from the NUREG LCO. Where a proposed ITS LCO differs from the NUREG LCO, individual details of the change are annotated with numeric designators which relate to the appropriate Discussion of Difference (DOD). The DOD provides a concise justification for the change. The LCO DODs are located directly preceding the associated markup for each Section or sub-Section.

TAB Bases Markup

Contains annotated copies of the applicable NUREG-1430, Revision 1, Bases which show how the proposed ITS Bases differ from the NUREG Bases. Where a proposed ITS Bases requirement differs from the NUREG Bases, individual details of the change are annotated with numeric designators which relate to the appropriate DOD. The DOD provides a justification for the change. The DODs are located directly preceding the associated markup of the NUREG Limiting Conditions for Operation for each Section or sub-Section.

CTS MARKUP IN CTS ORDER

The individual section CTS Markups in the Section packages were prepared in the order of the ITS. This volume provides an entire markup of the CTS in CTS order to demonstrate that all CTS requirements are accounted for. In many instances, the same CTS page is used in several ITS Sections. As a result, in this volume, the same CTS page

will appear with the annotations associated with the ITS Section or sub-Section in which it appears.

### TREATMENT OF INSTRUMENT UNCERTAINTY

During the development of the ANO-1 ITS, parameter values were reviewed to determine whether the CTS value contained allowances for instrument uncertainty. This review incorporated the results of the ANO-1 Plant Parameter Uncertainty Project (PPUP). The PPUP is an ANO design basis initiative based on Entergy Operations' graded approach methodology for determining and documenting uncertainties in the measurement of plant parameters. The purpose of PPUP is to evaluate all parameter values contained in the technical specifications and determine how instrument uncertainty should be characterized. The parameter values associated with the Reactor Protection System, Engineered Safeguards Actuation System, and Emergency Feedwater Initiation and Control System trip setpoints are characterized as "Allowable Values" containing allowances for instrument uncertainties. The actual trip setpoints entered into the bistables for these trip parameters are conservative with respect to the Allowable Values, and are controlled in the implementing procedures. Other parameter values contained in the ITS have been stated without allowances for instrument uncertainty. In other words, these values reflect the value assumed in the safety analyses (where appropriate) with no allowance for instrument uncertainty. Unless otherwise noted, ITS parameter values do not contain an allowance for instrument uncertainty in the measurement of the parameter. These changes are considered to be administrative in nature. Entergy Operations proposes to control any required instrument uncertainties in the implementing procedures.

### ENVIRONMENTAL IMPACT EVALUATION

10 CFR 51.22(c) provides criteria for and identification of licensing and regulatory actions eligible for categorical exclusion from performing an environmental assessment. A proposed amendment to an operating license for a facility requires no environmental assessment if operation of the facility in accordance with the proposed amendment would not: (1) involve a significant hazards consideration, (2) result in a significant change in the types or significant increase in the amounts of any effluents that may be released off-site, or (3) result in a significant increase in individual or cumulative occupational radiation exposure. Entergy Operations, Inc. has reviewed this license amendment and has determined that it meets the eligibility criteria for categorical exclusion set forth in 10 CFR 51.22(c)(9). Pursuant to 10 CFR 51.22(b), no environmental impact statement or environmental assessment need be prepared in connection with the issuance of the proposed license amendment. The basis for this determination is as follows:

1. The proposed license amendment does not involve a significant hazards consideration as described previously in the evaluation.
2. As discussed in the significant hazards evaluation, this change does not result in a significant change or significant increase in the radiological doses for any Design



Basis Accident. The proposed license amendment does not result in a significant change in the types or a significant increase in the amounts of any effluents that may be released off-site.

3. The proposed license amendment does not result in a significant increase to the individual or cumulative occupational radiation exposure because this change has been shown to retain controls necessary to limit exposures.

**EXISTING ANO-1 LICENSE AMENDMENT REQUESTS INCORPORATED INTO THE ITS**

<b>DATE</b>	<b>LETTER</b>	<b>DESCRIPTION</b>	<b>AFFECTED ITS SPEC</b>	<b>CTS PAGE(S)</b>
August 6, 1998	1CAN089801	Revision of the Sodium Hydroxide Tank limits	3.6.7	37 and 39
July 14, 1999	0CAN079901	Deletion of post accident sampling system requirements	N/A	126
August 18, 1999	1CAN089903	Revision to Engineered Safeguards Actuation System low reactor coolant system pressure setpoint	3.3.5	49 and 50
September 17, 1999	0CAN099901	Revision of the curie limits for radioactive gas storage tanks	5.5.12	66w
November 23, 1999	0CAN119906	Revision of charcoal filter testing requirements per GL 99-02	5.5.11	66c, 66d, 66g, 66h, 109, 109a, and 110I
January 27, 2000	0CAN010004	Revision of Condensate Storage Tank volume	3.7.6	40 and 41a

**DISPOSITION OF GENERIC CHANGES TO NUREG-1430**

<b>TSTF NUMBER</b>	<b>NRC STATUS</b>	<b>ITS SECTION</b>	<b>STATUS<sup>(1)</sup></b>	<b>NOTES</b>	<b>DISCUSSION</b>
TSTF-001, R 01	Rejected	3.0	NI	Not incorporated due to rejection	
TSTF-002, R 01	Approved	3.8	INC		3.8 DOD-20
TSTF-003, R 01	Rejected	1.0 3.4A 3.4B 3.7	NI NI NI NI	Not incorporated due to rejection	
TSTF-004, R 01	Rejected	1.0	NI	Not incorporated due to rejection	
TSTF-005, R 01	Approved	2.0	IWC	Incorporated with the exception that NUREG-1430 2.2.5 has been retained as a site preference.	2.0 DOD-03
TSTF-006, R 01	Approved	3.0	INC		3.0 DOD-01
TSTF-007, R 01	Withdrawn	3.0	NI	Not incorporated due to withdrawal	
TSTF-008, R 02	Approved	3.0 3.8	INC INC		3.0 DOD-05 3.8 DOD-08
TSTF-009, R 01	Approved	3.1 3.2 3.3A	INC INC INC		3.1 DOD-01 3.2 DOD-02 3.3a DOD-28
TSTF-016, R 02	Pending	3.8	NI	Not incorporated due to not being approved	
TSTF-017, R 02	Approved	3.6	IWC	ANO revised to maintain consistency with fuel cycle length.	3.6 DOD-08

TSTF NUMBER	NRC STATUS	ITS SECTION	STATUS <sup>(1)</sup>	NOTES	DISCUSSION
TSTF-019, R 01	Approved	1.0 3.3A 3.3D	INC INC INC		1.0 DOD-12 3.3a DOD-29 3.3d DOD-30
TSTF-020, R 00	Approved	3.9	INC		3.9 DOD-21
TSTF-021, R 01	Rejected	3.9	NI	Not incorporated due to rejection	
TSTF-022, R 00	Rejected	3.9	NI	Not incorporated due to rejection	
TSTF-026, R 00	Approved	3.4A	NI	Not incorporated due to retention of current license basis	
TSTF-027, R 03	Approved	3.4A	IWC	Revised to reflect unit specific design	3.4a DOD-06
TSTF-028, R 00	Approved	3.4B	IWC	Required Actions for ITS 3.4.12 (NUREG-1430 LCO 3.4.16) have been revised to reflect the ANO-1 current license basis, in addition to the incorporation of TSTF-028	3.4b DOD-19
TSTF-030, R 03	Approved	3.6	IWC	ANO-1 is not licensed as an SRP plant. Therefore, Reference 6 has not been incorporated	3.6 DOD-06
TSTF-036, R 04	Approved	3.7 3.8	NI NI	Not incorporated due to retention of current license basis Not incorporated due to not including NUREG-1430 LCO 3.8.2, 3.8.5, 3.8.8, & 3.8.10 in the ANO-1 ITS	
TSTF-037, R 02	Approved	3.3D 3.8 5.0	NI NI INC	Not incorporated in NUREG-1430 3.8.1 and 3.3.17 due to retention of current license basis	5.0 DOD-19
TSTF-038, R 00	Approved	3.8	NI	Not incorporated due to not including NUREG-1430 SR 3.8.4.3 in the ANO-1 ITS	

TSTF NUMBER	NRC STATUS	ITS SECTION	STATUS <sup>(1)</sup>	NOTES	DISCUSSION
TSTF-039, R 01	Withdrawn	1.0	NI	Not incorporated due to withdrawal	
TSTF-040, R 00	Approved	1.0	IWC	The reference to seal "injection" has not been incorporated since leakage is associated with escape of fluids from systems or boundaries. This is consistent with the current license basis	1.0 DOD-13 1.0 DOD-14
TSTF-041, R 00	Pending	3.0	NI	Not incorporated due to not being approved	
TSTF-042, R 00	Approved	3.0	INC		3.0 DOD-04
TSTF-043, R 00	Approved	3.0	INC		3.0 DOD-09
TSTF-044, R 00	Rejected	3.6	NI	Not incorporated due to rejection	
TSTF-045, R 02	Approved	3.6	INC		3.6 DOD-04
TSTF-046, R 01	Approved	3.6	INC		3.6 DOD-05
TSTF-051, R 02	Approved	3.3D 3.6 3.7 3.8 3.9	NI NI NI NI NI	Approved too late in ITS development cycle for inclusion	
TSTF-052, R 02	Pending	1.0 3.0 3.6 5.0	NI NI NI NI	Not incorporated due to not being approved	
TSTF-054, R 01	Approved	3.4B	INC		3.4b DOD-26

TSTF NUMBER	NRC STATUS	ITS SECTION	STATUS <sup>(1)</sup>	NOTES	DISCUSSION
TSTF-056, R 00	Approved	3.4B	NI	Not incorporated based on not including NUREG-1430 LCO 3.4.11 in the ANO-1 ITS	
TSTF-057, R 00	Approved	3.4B	INC		3.4b DOD-18
TSTF-060, R 00	Approved	3.4B	INC		3.4b DOD-28
TSTF-061, R 00	Approved	3.4B	INC		3.4b DOD-27
TSTF-063, R 00	Approved	3.4A	NI	Superseded by changes made per TSTF-263 and incorporated	
TSTF-064, R 00	Withdrawn	1.0	NI	Not incorporated due to withdrawal	
TSTF-065, R 01	Approved	2.0 5.0	NI IWC	Revised to reflect current ANO-1 license basis	5.0 DOD-01 5.0 DOD-33
TSTF-068, R 02	Approved	3.9	NI	Not incorporated due to incorporation of current license basis.	
TSTF-070, R 01	Approved	3.7	IWC	Incorporated with editorial changes to reflect ANO-1 naming conventions and to enhance readability of Bases inserts.	3.7 DOD-30
TSTF-071, R 02	Approved	3.0	NI	Not incorporated because site reviewers felt that the level of detail contained in the Bases without the change was appropriate.	
TSTF-086, R 00	Rejected	5.0	NI	Not incorporated due to rejection	
TSTF-088, R 00	Withdrawn	1.0	NI	Not incorporated due to withdrawal	
TSTF-090, R 01	Approved	3.5	IWC	TSTF-090 was revised to retain the SR 3.5.3.1 Note in the Surveillance Requirement as well as echoing it in the LCO to avoid confusion with respect to the applicable SRs.	3.5 DOD-12

TSTF NUMBER	NRC STATUS	ITS SECTION	STATUS <sup>(1)</sup>	NOTES	DISCUSSION
TSTF-091, R 01	Rejected	3.3D	NI	Not incorporated due to rejection	
TSTF-092, R 01	Modify	3.9	IWC	TSTF-092 insert was revised to incorporate current license basis	3.9 DOD-04
TSTF-096, R 01	Approved	3.9	INC		3.9 DOD-05
TSTF-100, R 00	Approved	3.7	NI	Not incorporated due to not including NUREG-1430 LCO 3.7.4 in the ANO-1 ITS	
TSTF-101, R 00	Approved	3.7	INC		3.7 DOD-13
TSTF-102, R 00	Rejected	3.7	NI	Not incorporated due to rejection	
TSTF-104, R 00	Approved	3.0	INC		3.0 DOD-11
TSTF-105, R 01	Rejected	3.4A	NI	Not incorporated due to rejection	
TSTF-106, R 01	Approved	5.0	INC		5.0 DOD-38
TSTF-107, R 04	Approved	3.1	NI	Changes consistent with the current license basis were incorporated in lieu of TSTF-107	
TSTF-110, R 02	Approved	3.1 3.2	INC INC		3.1 DOD-12 3.2 DOD-03 3.2 DOD-08 3.2 DOD-22
TSTF-113, R 04	Rejected	3.4B	NI	Not incorporated due to rejection	
TSTF-115, R 00	Withdrawn	3.8 5.0	NI NI	Not incorporated due to withdrawal	

TSTF NUMBER	NRC STATUS	ITS SECTION	STATUS <sup>(1)</sup>	NOTES	DISCUSSION
TSTF-116, R 02	Approved	3.4B	IWC	In addition to the incorporation of TSTF-116, additional clarification has been added that steady state operation is at or near normal operating pressure as a plant specific clarification based on operating history	3.4b DOD-11 3.4b DOD-17
TSTF-118, R 00	Approved	5.0	INC		5.0 DOD-16 5.0 DOD-35
TSTF-119, R 00	Rejected	5.0	NI	Not incorporated due to rejection	
TSTF-120, R 00	Rejected	5.0	NI	Not incorporated due to rejection	
TSTF-121, R 00	Withdrawn	5.0	NI	Not incorporated due to withdrawal	
TSTF-122, R 00	Approved	3.0	INC		3.0 DOD-07
TSTF-123, R 01	Approved	4.0	INC		4.0 DOD-02
TSTF-124, R 00	Approved	1.0	INC		1.0 DOD-08
TSTF-125, R 01	Approved	1.0 3.2	INC INC		1.0 DOD-07 3.2 DOD-13
TSTF-126, R 00	Approved	2.0	INC		2.0 DOD-02
TSTF-137, R 00	Approved	3.4B	NI	Not incorporated due to the deletion of the LCO 3.0.4 exception note for incorporation of current license basis required actions	
TSTF-138, R 00	Rejected	3.4B	NI	Not incorporated due to rejection	
TSTF-139, R 01	Approved	3.7	NI	Not incorporated due to not including NUREG-1430 LCO 3.7.14 in the ANO-1 ITS	



TSTF NUMBER	NRC STATUS	ITS SECTION	STATUS <sup>(1)</sup>	NOTES	DISCUSSION
TSTF-140, R 00	Approved	3.7	IWC	Reference to Final Policy Statement replaced with reference to 10CFR50.36	3.7 DOD-43
TSTF-141, R 01	Rejected	3.1	NI	Not incorporated due to rejection	
TSTF-142, R 00	Approved	3.1	INC		3.1 DOD-29
TSTF-143, R 00	Approved	3.1	INC		3.1 DOD-03
TSTF-145, R 01	Withdrawn	3.6	NI	Not incorporated due to withdrawal	
TSTF-152, R 00	Approved	5.0	INC		5.0 DOD-26
TSTF-153, R 00	Approved	3.4A 3.9	IWC NI	Revised Note proposed by TSTF-153 to clarify that pumps “may be removed from operation” in ITS Section 3.4. TSTF-153 was not incorporated in ITS Section 3.9 due to retention of current license basis.	3.4a DOD-05
TSTF-154, R 02	Approved	3.1	IWC	Reference to Final Policy Statement replaced with reference to 10CFR50.36	3.1 DOD-13
TSTF-155, R 01	Pending	3.5	NI	Not incorporated due to not being approved	
TSTF-156, R 01	Approved	3.1	INC		3.1 DOD-25
TSTF-157, R 01	Withdrawn	3.7	NI	Not incorporated due to withdrawal	
TSTF-158, R 01	Approved	3.1	INC		3.1 DOD-40
TSTF-159, R 01	Approved	3.1	INC		3.1 DOD-07

TSTF NUMBER	NRC STATUS	ITS SECTION	STATUS <sup>(1)</sup>	NOTES	DISCUSSION
TSTF-160, R 01	Approved	3.1 3.2	INC INC		3.1 DOD-20 3.1 DOD-33 3.2 DOD-01 3.2 DOD-06 3.2 DOD-23
TSTF-163, R 02	Approved	3.8	NI	Not incorporated due to not including NUREG-1430 SRs 3.8.1.7, 3.8.1.12, 3.8.1.15, and 3.8.1.20 in the ANO-1 ITS.	
TSTF-165, R 00	Approved	3.0	INC		3.0 DOD-12
TSTF-166, R 00	Approved	3.0	INC		3.0 DOD-06
TSTF-167, R 00	Rejected	5.0	NI	Not incorporated due to rejection	
TSTF-173, R 00	Approved	3.7	INC		3.7 DOD-44
TSTF-174, R 00	Approved	3.7	INC		3.7 DOD-48
TSTF-196, R 00	Rejected	3.3D 3.6 3.9	NI NI NI	Not incorporated due to rejection	
TSTF-197, R 02	Approved	3.9	NI	Not incorporated due to retention of current license basis	
TSTF-198, R 00	Withdrawn	3.8	NI	Not incorporated due to withdrawal	
TSTF-199, R 00	Withdrawn	3.8	NI	Not incorporated due to withdrawal	
TSTF-200, R 00	Withdrawn	3.8	NI	Not incorporated due to withdrawal	
TSTF-201, R 00	Withdrawn	3.8	NI	Not incorporated due to withdrawal	

TSTF NUMBER	NRC STATUS	ITS SECTION	STATUS <sup>(1)</sup>	NOTES	DISCUSSION
TSTF-202, R 00	Withdrawn	3.8	NI	Not incorporated due to withdrawal	
TSTF-203, R 00	Withdrawn	3.8	NI	Not incorporated due to withdrawal	
TSTF-204, R 01	Modify	3.8	NI	Not incorporated due to not being approved	
TSTF-205, R 03	Approved	1.0 3.3A 3.3B 3.3C 3.4B	INC NI NI NI NI	Details of the successful test of a channel relay being verified by the change of state of a single contact has not been incorporated since the ANO-1 design of the systems that would be affected by this change do not require this allowance. All required contacts are tested under the existing and proposed test scopes	1.0 DOD-20
TSTF-209, R 01	Approved	3.7	INC		3.7 DOD-07
TSTF-210, R 00	Approved	3.7	INC		3.7 DOD-45
TSTF-211, R 00	Approved	3.3A	IWC	Bases changes proposed in TSTF-211 have been editorially revised for clarity	3.3a DOD-31
TSTF-212, R 01	Approved	3.3A	NI	Not Incorporated due to retention of the ANO-1 current license basis for the affected Surveillance Requirements	
TSTF-213, R 00	Rejected	1.0	NI	Not incorporated due to rejection	
TSTF-214, R 00	Approved	3.9	INC		3.9 DOD-13
TSTF-215, R 00	Withdrawn	3.3B	NI	Not incorporated due to withdrawal	
TSTF-216, R 00	Approved	3.1 3.2	INC INC		3.1 DOD-14 3.2 DOD-16

TSTF NUMBER	NRC STATUS	ITS SECTION	STATUS <sup>(1)</sup>	NOTES	DISCUSSION
TSTF-217, R 01	Approved	3.3A 3.3B 3.3C	INC IWC NI	TSTF-217 changes were revised in the ITS for LCO 3.3.5, Condition B, to reflect the current license basis. TSTF-217 was not incorporated in ITS 3.3.11 due to retention of the ANO-1 current license basis.	3.3a DOD-02 3.3a DOD-20 3.3b DOD-02
TSTF-218, R 00	Approved	3.3A	INC		3.3a DOD-04
TSTF-219, R 00	Approved	3.4B	NI	Not incorporated due to the revision of the LTOP Required Actions to provide adequate control for inoperabilities associated with the proposed LCO	
TSTF-220, R 00	Approved	3.1	NI	Not incorporated due retention of current license basis	
TSTF-235, R 01	Approved	3.7	INC		3.7 DOD-02
TSTF-248, R 00	Pending	1.0	NI	Not incorporated due to not being approved	
TSTF-249, R 00	Approved	3.1	INC		3.1 DOD-39
TSTF-250, R 00	Modify	4.0 5.0	NI NI	Not incorporated due to not being approved	
TSTF-251, R 00	Rejected	5.0	NI	Not incorporated due to rejection	
TSTF-252, R 00	Pending	5.0	NI	Not incorporated due to not being approved	
TSTF-253, R 00	Approved	3.8	INC		3.8 DOD-03
TSTF-254, R 00	Pending	3.8	NI	Not incorporated due to not being approved	
TSTF-255, R 01	Approved	3.7	INC		3.7 DOD-49
TSTF-256, R 00	Approved	3.1	INC		3.1 DOD-24

TSTF NUMBER	NRC STATUS	ITS SECTION	STATUS <sup>(1)</sup>	NOTES	DISCUSSION
TSTF-257, R 00	Rejected	3.4B	NI	Not incorporated due to rejection	
TSTF-258, R 04	Approved	5.0	IWC	TSTF-258 has been editorially revised to promote consistency	5.0 DOD-24 5.0 DOD-33 5.0 DOD-42
TSTF-260, R 00	Pending	3.5 3.6 3.7	NI NI NI	Not incorporated due to not being approved	
TSTF-261, R 00	Approved	3.4A	INC		3.4a DOD-16
TSTF-262, R 01	Pending	3.4A	NI	Not incorporated due to not being approved	
TSTF-263, R 03	Approved	3.4A	IWC	TSTF-263 has been revised in its incorporation in ITS 3.4.7 to clarify the Required Actions. This change is considered editorial in nature	3.4a DOD-09 3.4a DOD-12 3.4a DOD-14
TSTF-264, R 00	Approved	3.3A	NI	Not Incorporated due to the incorporation of the ANO-1 current license basis for the affected Surveillance Requirements	
TSTF-265, R 02	Approved	3.4A	INC		3.4a DOD-10
TSTF-266, R 03	Approved	3.3D	NI	Not incorporated due to not being approved	
TSTF-267, R 00	Modify	1.0	NI	Not incorporated due to not being approved	
TSTF-268, R 00	Approved	3.7	INC		3.7 DOD-47
TSTF-269, R 02	Approved	3.6	INC		3.6 DOD-18
TSTF-270, R 01	Withdrawn	1.0	NI	Not incorporated due to withdrawal	

TSTF NUMBER	NRC STATUS	ITS SECTION	STATUS <sup>(1)</sup>	NOTES	DISCUSSION
TSTF-271, R 01	Approved	3.4B	NI	Not incorporated due to the revision of the LTOP Surveillance Requirements to provide for adequate surveillances with respect to the proposed LCO	
TSTF-272, R 01	Approved	3.9	NI	Not incorporated due to no perceived benefit to ANO-1	
TSTF-273, R 02	Approved	3.0 5.0	INC INC		3.0 DOD-13 5.0 DOD-39
TSTF-274, R 00	Rejected	3.8	NI	Not incorporated due to rejection	
TSTF-276, R 02	Pending	3.8	NI	Not incorporated due to not being approved	
TSTF-277, R 00	Rejected	3.5	NI	Not incorporated due to rejection	
TSTF-278, R 00	Approved	3.8	INC		3.8 DOD-53
TSTF-279, R 00	Approved	5.0	INC		5.0 DOD-11
TSTF-280, R 01	Approved	3.4B	NI	Not incorporated due to incorporation of current license basis	
TSTF-281, R 00	Pending	3.7	NI	Not incorporated due to not being approved	
TSTF-282, R 00	Rejected	3.4A	NI	Not incorporated due to rejection	
TSTF-283, R 02	Pending	3.8	NI	Not incorporated due to not being approved	
TSTF-284, R 02	Pending	1.0 3.1 3.4B 3.7	NI NI NI NI	Not incorporated due to not being approved	
TSTF-285, R 01	Approved	3.4B	NI	Not incorporated due to incorporation of current license basis	

TSTF NUMBER	NRC STATUS	ITS SECTION	STATUS <sup>(1)</sup>	NOTES	DISCUSSION
TSTF-286, R 01	Modify	3.3A 3.4A 3.4B 3.7 3.8 3.9	NI NI NI NI NI NI	Not incorporated due to not being approved	
TSTF-287, R 04	Pending	3.7	NI	Not incorporated due to not being approved	
TSTF-289, R 00	Approved	3.7	INC		3.7 DOD-08
TSTF-291, R 00	Approved	3.3a	INC		3.3a DOD-17
TSTF-292, R 00	Approved	3.3A	INC		3.3a DOD-21
TSTF-293, R 00	Approved	3.3A	INC		3.3a DOD-23
TSTF-294, R 00	Modify	3.1	NI	Not incorporated due to not being approved	
TSTF-295, R 00	Approved	3.3D	INC		3.3d DOD-18
TSTF-299, R 00	Pending	5.0	INC		5.0 DOD-40
TSTF-300, R 00	Approved	3.8	NI	Not incorporated due to not including NUREG-1430 LCO 3.8.2 in the ANO-1 ITS.	
TSTF-302, R 00	Rejected	4.0	NI	Not incorporated due to rejection	
TSTF-308, R 00	Pending	5.0	INC		5.0 DOD-41
TSTF-312, R 01	Approved	3.9	NI	Not incorporated due to retention of current license basis	

<b>TSTF NUMBER</b>	<b>NRC STATUS</b>	<b>ITS SECTION</b>	<b>STATUS<sup>(1)</sup></b>	<b>NOTES</b>	<b>DISCUSSION</b>
TSTF-313, R 00	Pending	3.8	NI	Not incorporated due to not being approved	
TSTF-316, R 01	Approved	3.5	INC		3.5 DOD-16
TSTF-325, R 00	Approved	3.5	NI	Not incorporated due to the incorporation of the ANO-1 current license basis for the affected Conditions and Required Actions.	
TSTF-327, R 00	Approved	3.3A	NI	Not Incorporated due to the incorporation of the ANO-1 current license basis for the affected Conditions and Required Actions	
TSTF-330, R 00	Pending	3.7	NI	Not incorporated due to not being approved	
TSTF-333, R 01	Pending	3.8	NI	Not incorporated due to not being approved	
TSTF-340, R 02	Pending	3.7	NI	Not incorporated due to not being approved	
TSTF-342, R 00	Pending	3.3A	IWC	TSTF-342 was revised by the incorporation of ANO-1 current license basis	3.3a DOD-30
TSTF-343, R 00	Pending	3.6 5.0	NI NI	Not incorporated due to not being approved	
TSTF-344, R 00	Pending	3.1	INC	Incorporated based on prior NRC approval of similar changes (TSTF-108)	3.1 DOD-02
TSTF-345, R 00	Pending	3.2	INC	Incorporated because this change is necessary to bridge the current license basis to the NUREG-1430 requirements	3.2 DOD-01
TSTF-346, R 00	Pending	3.8	NI	Not incorporated due to not being approved	
TSTF-348, R 00	Approved	5.0	NI	Not incorporated due to retention of current license basis	
TSTF-349, R 00	Pending	3.9	NI	Not incorporated due to not being approved	



<b>TSTF NUMBER</b>	<b>NRC STATUS</b>	<b>ITS SECTION</b>	<b>STATUS<sup>(1)</sup></b>	<b>NOTES</b>	<b>DISCUSSION</b>
TSTF-352, R 00	Pending	3.4B	NI	Not incorporated due to not being approved	
TSTF-358, R 01	Pending	3.0	NI	Not incorporated due to not being approved	
TSTF-359, R 01	Pending	3.0	NI	Not incorporated due to not being approved	
TSTF-361, R 00	Pending	3.9	NI	Not incorporated due to not being approved	

(1) NI – Not Incorporated

IWC – Incorporated with Changes

INC - Incorporated

### LIST OF BEYOND SCOPE ITEMS

NO.	ITS	CTS	SUMMARY OF CHANGE	CTS DOC	ITS DOD
1	3.2.3 R.A. B.1 Completion Time	3.5.2.6.4	NUREG-1430 3.2.3, "AXIAL POWER IMBALANCE Operating Limits," Required Action B.1 Completion Time has been increased from 2 to 4 hours in the ITS. CTS requires a power reduction if Axial Power Imbalance cannot be restored within 4 hours, however, there is no time limit provided to complete the power reduction.	M8	3.2 DOD-07
2	3.2.4 Completion Times	N/A	A second completion time has been added to NUREG-1430 3.2.4, "QUADRANT POWER TILT (QPT)," Required Action A.1.2.2 requiring a reduction in nuclear overpower based on Reactor Coolant System flow and AXIAL POWER IMBALANCE trip setpoint 10 hours after the last performance of SR 3.2.5.1 when QPT is greater than the steady state limit. Required Action C.1 Completion Time has been revised from 2 hours to 4 hours. Required Action D.1 Completion Time has been revised from 2 hours to 4 hours. An explicit Completion Time is not specified in the CTS.	L1 M1 M6	3.2 DOD-17 3.2 DOD-07 3.2 DOD-07
3	3.4.7	4.27.3	NUREG 3.4.7, "RCS Loops - MODE 5, Loops Filled," LCO b requirement for a specific steam generator level for steam generator OPERABILITY is relocated to the Bases. CTS Surveillance Requirement 4.27.3 specifies a level of $\geq 20$ inches on the startup range. The description of what constitutes an OPERABLE steam generator is described in the associated Bases since there are more options and restrictions than provided in either the NUREG or CTS.	L8	3.4a DOD-18
4	3.4.8	N/A	NUREG-1430 3.4.8 Condition B has been revised by the addition of a Required Action that requires suspension of all activities involving reduction of reactor coolant system volume when two decay heat removal loops are inoperable or one is not in operation. This requirement is not specified in the ANO-1 CTS.	M16	3.4a DOD-25

NO.	ITS	CTS	SUMMARY OF CHANGE	CTS DOC	ITS DOD
5	3.4.11	3.1.2	NUREG-1430 3.4.12, "Emergency Ventilation System," is modified. CTS LTOP requirements provide insufficient guidance on the required actions. The CTS also does not contain surveillances for some of the CTS LCO requirements. The NUREG-1430 3.4.12 Actions and Surveillance Requirements are not totally applicable to the CTS LCO requirements that have been retained.	M3	3.4b DOD-06
6	3.5.2	N/A	NUREG-1430 3.5.2, "ECCS - Operating," has been revised to require a shutdown (in lieu of LCO 3.0.3) for one or more trains inoperable with <100% of the ECCS flow equivalent to a single OPERABLE ECCS train available. CTS does not contain a similar requirement and would require entry into LCO 3.0.3.	A11	3.5 DOD-05
7	3.7.1	3.4.1.2	NUREG-1430 3.7.1, "MSSVs," Figure 3.7.1-1 has been editorially reformatted to be replaced by Table 3.7.1-1 providing limitations for operation with more than one inoperable MSSV per steam generator. CTS does not allow operation with more than 2 inoperable MSSVs.	L1	3.7 DOD-01
8	3.4.13.1	Table 4.1-2 item 6a	NUREG-1430 3.4.13, "RCS Operational Leakage," SR 3.4.13.1 has been modified to require the RCS water inventory balance to be performed "at or near operating pressure." The CTS does not provide this explicit allowance.	L12	3.4b DOD-11
9	6.14	5.5.1	Reference to specific requirements (by Specification number) are deleted from the NUREG 5.5.1.b description of the Offsite Dose Calculation Manual (ODCM). CTS 6.14 also referred to specific requirements. These cross references have been deleted. The ODCM description still refers to the affected reports by name.	A1	5.0 DOD-07

NO.	ITS	CTS	SUMMARY OF CHANGE	CTS DOC	ITS DOD
10	5.2.2.b	Table 6.2-1	NUREG-1430 (incorporating TSTF-258) does not retain Operator staffing. 10 CFR 55.4, related to Operator Licenses, requires a Technical Specification reference to Licensed positions on shift. CTS provides explicit staffing requirements. The ITS contains a reference to 10 CFR 10 CFR 50.54(m)(2)(i).	A5	5.0 DOD-24

**LIST OF ITEMS THAT COULD REQUIRE ADDITIONAL NRC RESOURCES**

<b>NO.</b>	<b>ITS</b>	<b>CTS</b>	<b>SUMMARY OF CHANGE</b>	<b>CTS DOC</b>	<b>ITS DOD</b>
1	3.2.5	N/A	NUREG-1430 3.2.5, "Power Peaking Factors," Required Action A.1 and A.3 have been revised to require a power reduction to restore linear heat rate to within limits. The associated Completion Time has been revised from 24 hours to 2 hours. Required Action C.1 (ITS R. A. B.1) has been revised to require a power reduction to $\leq 20\%$ RTP within 4 hours if linear heat rate (LHR) is not restored to within limits within 2 hours. The CTS do not provide guidance for this condition.	M9	3.2 DOD-07 3.2 DOD-23 3.2 DOD-31
2	3.3.3	N/A	NUREG-1430 3.3.3, "Reactor Protection System - Reactor Trip Module," - If two or more reactor trip modules (RTMs) inoperable. If two or more RTMs are inoperable, this change provides specific Required Actions to open the control rod drive trip breakers or remove power from the control rod drive system. LCO 3.0.3 would not require these same actions and could allow the unit to remain in MODE 3 within the applicability. CTS provides no specific actions for inoperable RTMs.	M14	3.3a DOD-20
3	3.3.11	N/A	NUREG-1430 3.3.11, "Emergency Feedwater Initiation and Control (EFIC) System," - In addition to the NUREG Action to be $< 750$ PSIG, the ITS provides an option for closing all associated valves in the event Function 3a is inoperable and the Required Actions or associated Completion Times are not met. CTS only requires placing the unit in MODE 3.	M4	3.3c DOD-06

NO.	ITS	CTS	SUMMARY OF CHANGE	CTS DOC	ITS DOD
4	3.3.12	N/A	NUREG-1430 LCO 3.3.12, "Emergency Feedwater Initiation and Control (EFIC) Manual Initiation - Applicability has been revised from MODES 1, 2, and 3 to "When associated EFIC Function is required to be OPERABLE." The CTS does not provide explicit requirements for the Applicability of the EFIC manual trip other than requiring OPERABILITY during startup and power operation. This change ensures the manual initiation backup to the automatic function is available in those MODES in which the Function is required.	M4	3.3c DOD-11
5	3.4.1	N/A	NUREG-1430 LCO 3.4.1, "RCS Pressure Temperature and Flow Departure From Nucleate Boiling Limits," has been revised by relocating the reactor coolant system pressure, temperature and flow departure from nucleate boiling limits to the Core Operating Limits Report, by the addition of a Note to SR 3.4.1.1, and by rewording the Note associated with SR 3.4.1.4. The requirements contained in ITS 3.4.1 were not contained in the CTS.	M10	3.4a DOD-01 3.4a DOD-02 3.4a DOD-03
6	3.4.5	N/A	NUREG-1430 LCO 3.4.5, "RCS Loops - MODE 3," LCO b core outlet temperature is revised from "at least 10°F below" to "sufficiently below saturation temperature to assure subcooling capability." CTS does not contain this limitation.	L7 M15	3.4a DOD-17
7	3.4.10	3.1.1.3.B	NUREG-1430 3.4.10, "Pressurizer Safety Valves," has been modified to reflect the CTS requirement for only one safety in MODE 3 and 4. However, CTS does not provide any actions in this MODE and does not recognize LTOP applicability.	M2	3.4b DOD-03

NO.	ITS	CTS	SUMMARY OF CHANGE	CTS DOC	ITS DOD
8	3.5.1.4	Table 4.1-3 Item 3	NUREG-1430 3.5.1, "Core Flood Tanks," SR 3.5.1.4, "Frequency has been extended from six hours to 12 hours after each solution increase. This sampling Frequency does not exist in the ANO-1 CTS which only states after each makeup. The changes reflect the plant specific time needed to recirculate a core flood tank and to reflect the control room indication available to determine the quantity added to a core flood tank.	L3 M3	3.5 DOD-03
9	3.8.5	N/A	NUREG-1430 3.8.7, "Inverters - Operating," SR 3.8.7.1 Frequency has been revised from 7 days to 31 days. This SR is not required by the CTS.	M1	3.8 DOD-46
10	SR 3.9.3.3	3.8.10	NUREG-1430 3.9.3, "Containment Penetrations," has been revised to include the reactor building purge radiation monitor. NUREG-1430 LCO 3.3.15, "Reactor Building Purge Isolation - High Radiation" was not incorporated in the ITS. The CTS contains a reactor building purge radiation monitor SR with a Frequency of "within 7 days prior to moving fuel." This has been revised to once every 18 months in the ITS.	L3	3.9 DOD-03
11	3.9.5.1	N/A	NUREG-1430 3.9.5, "Decay Heat Removal and Coolant Circulation - Low Water Level," SR 3.9.5.2 has been revised to require verification of correct breaker alignment and indicated power available for each required decay heat removal (DHR) pump. The CTS does not contain this SR.	M1	3.9 DOD-17
12	N/A	5.5.13	NUREG-1430 Specification 5.5.13 description of Diesel Fuel Oil Testing Program has been revised the new fuel oil test of "clear and bright appearance with proper color" to "water and sediment within limits." The CTS does not provide requirements for testing new fuel oil. ANO fuel oil is supplied with added dye which precludes the "clear and bright" test.	M9	5.0 DOD 14
13	3.8	N/A	NUREG-1430 LCOs 3.8.2, 3.8.5, 3.8.8, and 3.8.10 are not incorporated in the ITS. The CTS provides no explicit requirements for these components, treating them as support systems.	N/A	3.8 DOD-17

<b>NO.</b>	<b>ITS</b>	<b>CTS</b>	<b>SUMMARY OF CHANGE</b>	<b>CTS DOC</b>	<b>ITS DOD</b>
14	Various	Various	Parameter values incorporated in the ITS have been revised to reflect the associated analytical values. Allowances for instrument uncertainty have been removed and are proposed to be retained under licensee control.	Various	Various



**CTS PAGES NOT INCLUDED IN CTS MARKUP**

Pages shown as "DELETED"

66f,  
66j,  
66m,  
66n,  
66o,  
66p,  
66q,  
98,  
99,  
110p,  
110q,  
110r,  
110s,  
110t,  
110u,  
110v,  
110w, and  
128

Pages not existing in CTS

62 through 65  
66k  
66l  
81 through 91  
119 through 125  
130 through 139