

PROPOSED CHANGE RTS-270 TO THE DUANE ARNOLD ENERGY CENTER
TECHNICAL SPECIFICATIONS

The holders of license DPR-49 for the Duane Arnold Energy Center propose to amend Appendix A (Technical Specifications) to said license by deleting certain pages and replacing them with the attached new pages. The affected pages and a description of changes are given below.

AFFECTED PAGES

3.6-11*#

3.6-28*

SUMMARY OF CHANGES

PAGE

DESCRIPTION OF CHANGES

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| 3.6-11 | The reference in SR 4.6.G.1 to written relief being granted by the NRC, which requires prior NRC approval, is being deleted. SR 4.6.G.3 is being added to make clear that surveillance frequency maximum time intervals are applicable to ISI and IST activities.. |
| 3.6-28 | A statement is added to the Bases to state that the ASME Code requirements do not supersede the TS. |

*The proposed markup is based on a pending amendment which incorporates RTS-197A and RTS-261.

#This page is also affected by RTS-249.

LIMITING CONDITIONS FOR OPERATIONF. Jet Pump Flow Mismatch

1. With core power greater than or equal to 80% RATED POWER with both recirculation pumps at steady state operation, the speed of the faster pump may not exceed 122% of the speed of the slower pump.
2. With core power less than 80% RATED POWER with both recirculation pumps at steady state operation, the speed of the faster pump may not exceed 135% of the speed of the slower pump.
3. With the recirculation pump speeds different by more than the specified limits:
 - a. restore the recirculation pump speeds to within the specified limit within 2 hours, or
 - b. one recirculation pump shall be tripped. See Specification 3.3.F.4 for SLO requirements.

G. Structural Integrity

1. At all times, the structural integrity of the ASME Section XI Code Class 1, 2, and 3 components shall be maintained in accordance with Surveillance Requirement 4.6.G.1.
2. With the structural integrity of any ASME Section XI Code Class 1 or Class 2 component(s) not conforming to the above requirements, restore the structural integrity of the affected component(s) to within its limit or isolate the affected component(s) prior to increasing the Reactor Coolant System temperature above 212°F.
3. With the structural integrity of any ASME Section XI Code Class 3 component(s) not conforming to the above requirements, restore the structural integrity of the affected component(s) to within its limit or isolate the affected component(s) from service.

SURVEILLANCE REQUIREMENTSF. Jet Pump Flow Mismatch

1. Recirculation pump speed mismatch shall be verified at least once per day.
2. See Surveillance Requirement 4.3.F.4 for SLO requirements.

G. Structural Integrity

1. Inservice inspection of ASME Section XI Code Class 1, Class 2, and Class 3 components and inservice testing of ASME Section XI Code Class 1, Class 2, and Class 3 pumps and valves shall be performed in accordance with Section XI of the ASME Boiler and Pressure Vessel Code and applicable Addenda as required by 10CFR50, Section 50.55a(g), except where specific written relief has been granted by the NRC pursuant to 10CFR50, Section 50.55a(g)(6)(i).
2. The augmented inspection program for piping identified in NRC Generic Letter 88-01 shall be performed in accordance with the staff positions on schedule, methods, personnel, and sample expansion included in this Generic Letter.

3. The provisions of Definition 26 [SURVEILLANCE FREQUENCY] are applicable to the frequencies for performing inservice inspection and inservice testing activities.

3.6.G & 4.6.G BASES:

Structural Integrity

A pre-service inspection of Nuclear Class I Components was conducted to assure freedom from defects greater than code allowance; in addition, this served as a reference base for future inspections. Prior to operation, the Reactor Coolant System as described in Article IS-120 of Section XI of the ASME Boiler and Pressure Vessel Code was inspected to provide assurance that the system was free of gross defects. In addition, the facility was designed such that gross defects should not occur throughout plant life. The pre-service inspection program was based on the 1970 Section XI of the ASME Code for in-service inspection. This inspection plan was designed to reveal problem areas (should they occur) before a leak in the coolant system could develop. The program was established to provide reasonable assurance that no LOCA would occur at the DAEC as a result of leakage or breach of pressure-containing components and piping of the Reactor Coolant System, portions of the ECCS, and portions of the reactor coolant associated auxiliary systems.

A pre-service inspection was not performed on Nuclear Class II Components because it was not required at that stage of DAEC construction when it would have been used. For these components, shop and in-plant examination records of components and welds will be used as a basis for comparison with in-service inspection data.

Visual examinations for leaks will be made periodically on ASME Section XI Class 1, 2 and 3 systems. The inspection program specified encompasses the major areas of the vessel and piping systems within the ASME Section XI boundaries.

The type of examinations planned for each component depends on location, accessibility, and type of potential defect. Direct visual examination is proposed wherever possible since it is fast and reliable. Surface examinations are planned where practical, and where added sensitivity is required. Ultrasonic examination or radiography shall be used where defects can occur in concealed surfaces. Section 5.2.4 of the Updated FSAR provides details of the inservice inspection program.

Starting with the Cycle 9/10 Refueling Outage, an augmented inspection program was implemented to address concerns relating to Intergranular Stress Corrosion Cracking (IGSCC) in reactor coolant piping made of austenitic stainless steel. The augmented inspection program conforms to the NRC staff's positions set forth in Generic Letter 88-01 and NUREG-0313, Revision 2 for inspection schedule, inspection methods and personnel, and inspection sample expansion. The first 10-year interval for inservice testing of pumps and valves in accordance with the ASME Code, Section XI commenced on February 1, 1975 and ended on January 31, 1985. The second 10-year inservice testing interval commenced on February 1, 1985 and is scheduled to end on January 31, 1995. The second 10-year testing program addresses the requirements of the ASME Code, Section XI, 1980 Edition with Addenda through Winter 1981, subject to the limitations and modifications of 10 CFR 50.55a. Section 3.9.6 of the Updated FSAR describes the inservice testing program.

Nothing in the ASME Boiler and Pressure Vessel Code shall be construed to supersede the requirements of any TS.

SAFETY ASSESSMENT

Introduction

By letter dated July 29, 1994, IES Utilities Inc. submitted a request for revision of the Technical Specifications, Appendix A to Operating License No. DPR-49, for the Duane Arnold Energy Center (DAEC). The proposed change would delete the requirement to obtain prior NRC approval of relief requests and would provide the licensee the authority to implement relief requests pending NRC approval, provided that certain internal review processes are completed. Additionally, provisions are added to make clear that the surveillance frequency maximum time intervals are applicable to inservice inspection and inservice testing activities and that the ASME Code requirements do not supersede the TS requirements.

Assessment

Draft NUREG-1482, "Guidelines for Inservice Testing at Nuclear Power Plants," recommended that licensees revise their Technical Specifications (TS) to incorporate the revised Standard Technical Specifications (STS) wording for inservice testing (IST) programs. Upon determining that an ASME Code requirement is impractical because of prohibitive dose rates or limitations in the design, construction, or system configuration, the licensee can implement a Code relief without prior NRC approval, provided that the relief request had been reviewed and approved by the plant staff in accordance with IST program administrative procedures, reviewed by the plant safety committee (DAEC Operations Committee), and processed under 10 CFR 50.59.

The change is consistent with the recommendations provided in draft NUREG-1482 and with the STS (NUREG-1433). Minor differences exist between these documents and the DAEC TS due to the DAEC custom TS format. The STS reflects the position that the licensee must establish and implement the ISI and IST programs in accordance with 10 CFR 50.55a, but does not require that relief requests be granted by the NRC before they can be implemented. Rather, 10 CFR 50.55a(f)(5)(iv) and 10 CFR 50.55a(g)(5)(iv) allow a licensee up to a full year after the beginning of the updated interval to inform the NRC of any new ASME Code requirements which cannot be met and to request relief. The regulations require the licensee to submit relief requests within 12 months of the interval start date, or during the interval if the licensee finds specific need for relief.

This change will enable a licensee to avoid situations where compliance with the TS cannot be achieved for the period between the time of preparation and submittal of a relief request and NRC granting of the relief. The NRC will still grant final approval and this, in conjunction with the required internal review and approval process of the licensee, will ensure that only the appropriate relief from the ASME Code is granted.

Based on the above evaluation, we conclude that the proposed Technical Specification change is acceptable.

ENVIRONMENTAL CONSIDERATION

10 CFR 51.22(c)(9) identifies certain licensing and regulatory actions eligible for categorical exclusion from the requirement for 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 offsite; and (3) result in an increase in individual or cumulative occupational radiation exposure. IES Utilities Inc. has reviewed this request and determined that the proposed amendment meets the 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 needs to be prepared in connection with the amendment. The basis for this determination follows:

Basis

The change meets the criteria for categorical exclusion set forth in 10 CFR 51.22(c)(9) for the following reasons:

1. As demonstrated in Attachment 1, the proposed amendment does not involve a significant hazards consideration.
2. The proposed change to the ISI/IST programs will have no effect on the types or amounts of effluents released offsite. The requirements of the ASME Code will still be complied with except where written relief is required. The licensee may implement the relief request pending NRC approval, but final NRC approval must still be granted.
3. The proposed change to the ISI/IST programs will have no effect on individual or cumulative occupational radiation exposures.