

December 22, 1995 NG-95-2985

Mr. William T. Russell, Director 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

Request for Technical Specification Change (RTS-269): Revision to Technical Specification Section 3.7, "Plant Containment Systems"

Reference:

Letter from C. Grimes (NRC) to D. Modeen (NEI) dated November 2,

1995; NRC guidance for preparation of amendment requests for implementation of Option B of Appendix J to 10 CFR Part 50

File:

A-117, T-23

Dear Mr. Russell:

In accordance with the Code of Federal Regulations, Title 10, Sections 50.59 and 50.90, IES Utilities Inc. hereby requests revision to the Technical Specifications (TS) for the Duane Arnold Energy Center (DAEC).

In 60 FR 49495 dated September 26, 1995, the NRC published an amendment to Appendix J to 10 CFR Part 50. This amendment became effective on October 26, 1995 and revised Appendix J to allow licensees the choice of complying with either the new performance based requirements (Option B) or the previously existing prescriptive requirements (Option A). Regulatory Guide 1.163, "Performance-Based Containment Leak-Test Program," was issued to provide guidance on the implementation of Option B.

The amended rule specifies that, in order to adopt Option B, a licensee must submit to the NRC an implementation plan and a request for revision to TS. The NRC provided guidance on the preparation of such requests in the referenced letter. We have used this guidance to prepare a proposed revision to our TS to allow the use of performance based testing at the DAEC; this revision request is included in the attachment.

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IES Utilities Inc.
200 First Street S.E.
P.O. Box 351

John F. Franz, Jr. Vice President, Nuclear

Cedar Rapids, IA 52406-0351 Telephone 319 398 8162 Fax 319 398 8192 Mr. William T. Russell NG-95-2985 December 22, 1995 Page 2

The NRC's guidance was based on the Improved Standard Technical Specifications (ITS), NUREG-1433. The DAEC presently has custom TS and has committed to the NRC to submit a complete TS conversion to ITS in 1996. In this submittal, therefore, we have incorporated those sections of the ITS which directly pertain to the implementation of Option B, making the proposed wording as close to the ITS as practical within the limitations of our current TS format.

Due to DAEC-specific design characteristics, certain sections of the ITS were modified. For example, the ITS surveillance requirement (SR 3.6.1.3.12) for secondary containment bypass leakage does not apply to the DAEC. The current license does not include this requirement. This type of leakage is part of the overall containment leakage and no special limits apply. Therefore ITS SR 3.6.1.3.12 has not been included in this submittal.

The ITS SR 3.6.1.3.14 requires that the combined leakage rate through hydrostatically tested lines that penetrate the primary containment be verified to be within limits given in the Primary Containment Leakage Rate Testing Program. This SR has not been incorporated into this submittal. At the DAEC, the leakage from tests conducted with water is added to the air leakage totals to demonstrate that total leakage is within acceptable limits. The Technical Evaluation Report (TER) for the DAEC's Containment Leakage Rate Testing, dated March 17, 1982, states that this is acceptable. The TER states that performing tests with water and adding the results to the air leakage totals to determine compliance with leakage limits is conservative with regard to the requirements of Appendix J.

The DAEC primary containment air lock door design includes a single gasketed seal, so the entire air lock must be pressurized to test the door seal. As a result, the air lock leakage SR (ITS SR 3.6.1.2.1) has been revised to reflect this plant specific design.

The DAEC plans to implement Option B during Refueling Outage (RFO) 14, scheduled to begin in October, 1996. The DAEC plan includes implementation in accordance with Regulatory Guide 1.163, "Performance-Based Containment Leak-Test Program." We therefore request approval of this amendment by July 31, 1996, with a 90 day implementation period.

This application has been reviewed by the DAEC Operations Committee and the Safety Committee. A copy of this submittal, along with the evaluation of No Significant Hazards Consideration, is being forwarded to our appointed state official pursuant to 10 CFR Section 50.91.

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Should you have any questions regarding this matter, please contact this office. This letter is true and accurate to the best of my knowledge and belief.

IES UTILITIES INC.

By Ally Aria
John F. Franz
Vice President, Nuclear

State of Iowa
(County) of Linn

Signed and sworn to before me on this 22rd day of Alleember, 1995,

by John J. Franz

Notary Public in and for the State of Iowa

September 28, 1998

Commission Expires

- Attachments: 1) Evaluation of Change Pursuant to 10 CFR Section 50.92
 - Proposed Change RTS-269 to the Duane Arnold Energy Center Technical Specifications
 - 3) Safety Assessment
 - 4) Environmental Consideration

JFF/CJR/cjr

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cc:

- C. Rushworth
- L. Liu (w/o)
- B. Fisher (w/o)
- G. Kelly (NRC-NRR)
- H. Miller (Region III)
- S. Brown (State of Iowa)
- NRC Resident Office

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EVALUATION OF CHANGE PURSUANT TO 10 CFR SECTION 50.92

Background:

In 60 FR 49495 dated September 26, 1995, the NRC published an amendment to Appendix J to 10 CFR Part 50. This amendment became affective on October 26, 1995 and revised Appendix J to allow licensees the choice of complying with either new performance based requirements (Option B) or the previously existing prescriptive requirements (Option A). The amended rule specifies that, in order to adopt Option B, a licensee must submit to the NRC an implementation plan and a request for revision to TS.

IES Utilities Inc., Docket No. 50-331, Duane Arnold Energy Center, Linn County, Iowa Date of Amendment Request: December 22, 1995

Description of Amendment Request:

This request revises the Duane Arnold Energy Center (DAEC) Technical Specifications (TS) Sections 3.7.A and 4.7.A, "Primary Containment," by deleting information also contained in 10 CFR Part 50, Appendix J, Option A and incorporating references to the Primary Containment Leakage Rate Testing Program. These changes will allow the use of the performance based option of containment leak testing.

The request also adds Operability and Surveillance Requirements (SRs) for the drywell air lock. Minor administrative changes are also made.

These changes are consistent with comparable specifications in the Improved Standard Technical Specifications (ITS), NUREG-1433.

Basis for proposed No Significant Hazards Consideration:

The Commission has provided standards (10 CFR Section 50.92(c)) for determining whether a significant hazards consideration exists. A proposed amendment to an operating license for a facility involves no significant hazards consideration if operation of the facility in accordance with the proposed amendment would not (1) involve a significant increase in the probability or consequences of an accident previously evaluated; (2) create the possibility of a new or different kind of accident from any accident previously evaluated; or (3) involve a significant reduction in a margin of safety.

After reviewing this proposed amendment, we have concluded:

 The proposed revision does not involve a significant increase in the probability or consequences of an accident previously evaluated.

Information contained in 10 CFR 50, Appendix J was deleted and references to the Primary Containment Leakage Rate Testing Program were added. These are administrative changes to allow the use of performance-based containment leakage testing methods. The containment testing program will conform with the requirements of Option B of 10 CFR Part 50, Appendix J and approved exemptions. The performance of the leakage tests themselves is not an input or consideration in any accident previously evaluated, thus the proposed change will not increase the probability of any such accident occurring. The same operability requirements remain for the primary containment, therefore the consequences of an accident are not significantly increased.

Drywell air lock operability and surveillance requirements were added. Actions for one air lock door inoperable have been added consistent with the ITS. In addition, notes have been added to allow entry and exit to perform repairs of the air lock components and to explain that the previous overall leak test is not invalidated by an inoperable door. This change represents an additional restriction on plant operation, since the previous condition of one air lock door inoperable did not require any actions to be taken. A requirement to verify proper operation of the interlock mechanism was also added. This will ensure that one door is always closed which maintains primary containment integrity.

The addition of these new drywell air lock requirements provides more stringent provisions than previously existed in the CTS. The more stringent requirements will not result in operation that will increase the probability of initiating an analyzed event. If anything, the new requirements may decrease the probability or consequences of an analyzed event by incorporating the more restrictive changes discussed above. These changes will not alter assumptions relative to mitigation of an accident or transient event. The more restrictive requirements will not alter the operation of process variables, structures, systems, or components as described in the safety analyses.

This TS revision includes the relocation of certain requirements from the CTS to licensee controlled documents. CTS 4.7.A.1.e contains a requirement to replace the T-ring inflatable seals for the 18 inch purge valves every four years. This provision is not in the ITS as it is a maintenance issue and not a surveillance for operability. CTS 4.7.A.1.e also contains a requirement to verify (during Type C testing) that the mechanical modification which limits the maximum opening angle for the 18 inch

purge valves is intact. The ITS only requires this surveillance if the mechanical modification is not permanent. At DAEC, the 18 inch purge valves are permanently blocked to restrict opening to 30°. These CTS provisions will be relocated to plant procedures. Any changes to these relocated requirements will require an evaluation in accordance with 10 CFR 50.59. CTS 4.7.A.1.a and 4.7.A.1.d contain some procedural details that are not contained in Appendix J. These details will also be relocated to plant procedures, consistent with the ITS. Since any changes to these licensee controlled documents will be evaluated in accordance with 10 CFR 50.59, no significant increase in the probability or consequences of an accident previously evaluated will be allowed.

The proposed revision does not involve any change to the configuration or method of operation of any plant equipment that is used to mitigate the consequences of an accident, nor does it affect any assumptions or conditions in the accident analysis. The proposed revision does not degrade any existing plant programs, nor modify any functions of safety related systems or accident mitigation functions previously credited at the DAEC. The proposed changes do not impact initiators of analyzed events. They also do not impact the assumed mitigation of accidents or transient events. These TS changes will not alter assumptions made in the safety analysis and licensing basis.

Therefore, the proposed revision does not involve a significant increase in the probability or consequences of an accident previously evaluated.

The proposed revision does not create the possibility of a new or different kind of accident from any accident previously evaluated.

Deleting information from the TS which is contained in 10 CFR 50, Appendix J and adding references to the Primary Containment Leakage Rate Testing Program are purely administrative changes to allow the use of performance-based containment leakage testing methods. The containment testing program will conform with the requirements of Option B of 10 CFR Part 50, Appendix J and approved exemptions. The use of Option B will maintain the containment safety functions as a barrier to the release of radioactivity to the environment.

The proposed revision does not make any physical or operational changes to existing plant systems or components, nor does it alter any plant parameters, revise any safety limit setpoint, or provide any new release pathways. The proposed revision does not change any transient responses assumed in the Design Bases of the plant.

The proposed changes which relocate requirements to licensee controlled documents will not alter the plant configuration (no new or different type of equipment will be installed) or change the methods governing normal plant operation. These changes will not alter assumptions made in the safety analysis or licensing basis.

The proposed changes which add more restrictive requirements to the CTS will not alter the plant configuration (no new or different type of equipment will be installed) or change the methods governing normal plant operation. These changes do impose different requirements. However, they are consistent with assumptions made in the safety analyses.

Therefore, the revision does not create the possibility of a new or different kind of accident from any accident previously evaluated.

3) The proposed revision will not significantly reduce any margin of safety.

Deleting information from the TS which is contained in 10 CFR 50, Appendix J and adding references to the Primary Containment Leakage Rate Testing Program do not involve a significant reduction in the margin of safety. These changes are administrative in nature and either eliminate a redundant requirement or clarify the applicability and acceptability of an alternative, NRC approved, leak rate testing provision within the TS. The containment testing program will conform to the requirements of Option B of 10 CFR Part 50, Appendix J and approved exemptions. The use of Option B will maintain the containment safety functions as a barrier to the release of radioactivity to the environment.

The proposed revision does not require any modifications to existing plant systems or equipment, safety limit settings, or parameters utilized in the licensing bases for the safety analysis. The proposed revision does not change any safety analysis or any accident mitigation actions for which DAEC has previously taken credit. The proposed changes do not involve any technical changes; they have no impact on any safety analysis assumptions. The addition of new requirements either increases or does not affect the margin of safety.

The proposed changes that relocate requirements from the CTS to licensee controlled documents will not reduce a margin of safety since they have no impact on any safety analysis assumptions. In addition, the requirements to be relocated from the CTS to the licensee controlled document are unchanged. Since any future changes to this licensee controlled document will be evaluated in accordance with the requirements of 10 CFR 50.59, no significant reduction in a margin of safety will be allowed.

The proposed changes are consistent with NUREG-1433, which was approved by the NRC Staff. The changes are also consistent with NRC guidance provided for the implementation of Option B. The change controls for proposed relocated details and requirements are acceptable. Therefore, revising the TS to reflect the NRC accepted level of detail and requirements ensures that there is no reduction in a margin of safety.

Therefore, the proposed revision will not significantly reduce any margin of safety.

Based upon the above, we have determined that the proposed amendment will not involve a significant hazards consideration.

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