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October 15, 1998
 NG-98-1764

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 (TSCR-006):
 "Revise TS 3.6.1.3 Condition E and Add a Technical Specification for the
 Control Building/Standby Gas Treatment (CB/SBGT) Instrument Air
 System"

File: A-117

Dear Sir(s):

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).

During the development of the DAEC's Improved TS (ITS), the decision was made to treat the CB/SBGT Instrument Air System as a support system outside of TS and handle any inoperabilities under the supported systems LCOs using the definition of OPERABILITY. This was consistent with the then-existing TS and the STS (NUREG-1433). Therefore a "stand-alone" LCO for the CB/SBGT Instrument Air System would have been considered to be a "beyond scope" item in the conversion process. Subsequently, during the implementation of the ITS, we have determined that this approach imposes a hardship on plant operations that we did not fully appreciate at the time the original decision was made. Therefore, we propose to add a complete technical specification (LCO, Applicability, ACTIONS, and Surveillance Requirements) for the CB/SBGT Instrument Air System and utilize the allowances provided under LCO 3.0.6 to minimize the existing plant hardship, in particular, performance of necessary maintenance on the CB/SBGT Instrument Air System under the supported systems LCO Completion Times.

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In addition, the proposed amendment revises TS 3.6.1.3 Condition E (purge valve not within leakage limits) to add a time limit for plant operation if a penetration flow path is isolated by a single purge valve with resilient seal.

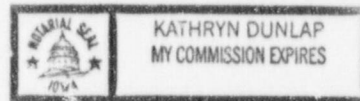
In addition, additions and revisions to the TS BASES have been made pursuant to the BASES Control Program of TS 5.5.10 and 10 CFR 50.36(a) and are included to assist the Staff in its review of the proposed TS changes. These changes are included for information only and are not considered part of this application for license amendment.

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.

This letter is true and accurate to the best of my knowledge and belief.

IES UTILITIES INC.

By David Wilson for
John F. Franz
Vice President, Nuclear



State of Iowa
(County) of Linn

Signed and sworn to before me on this 15 day of October, 1998,

by David Wilson

Kathryn Dunlap
Notary Public in and for the State of Iowa

7-24-'99
Commission Expires

- Attachments: 1) EVALUATION OF CHANGE PURSUANT TO 10 CFR
SECTION 50.92
2) PROPOSED CHANGE TSCR-006 TO THE DUANE ARNOLD
ENERGY CENTER TECHNICAL SPECIFICATIONS
3) SAFETY ASSESSMENT
4) ENVIRONMENTAL CONSIDERATION

cc: A. Roderick
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R. Laufer (NRC-NRR)
J. Caldwell (Region III)
P. Baig (State of Iowa)
NRC Resident Office
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EVALUATION OF CHANGE PURSUANT TO 10 CFR SECTION 50.92Background:

This Technical Specification (TS) amendment request adds a new, complete technical specification (LCO, Applicability, ACTIONS, and Surveillance Requirements) for the Control Building/Standby Gas Treatment (CB/SBGT) Instrument Air System. The CB/SBGT Instrument Air System provides compressed air to support the proper operation of the SBGT System, the Standby Filter Unit System, the Control Building Chiller System, and various Primary Containment Isolation Valves (PCIVs), notably the purge valves. During the DAEC implementation of the conversion to the Improved Technical Specifications, we determined that the supported system LCOs are too short to allow for necessary on-line maintenance of the CB/SBGT Instrument Air System when treating the CB/SBGT Instrument Air System as a support system outside TS under the definition of OPERABILITY. On-line maintenance supports high reliability of this important support system. By adopting an LCO for the CB/SBGT Instrument Air System and using the allowance of LCO 3.0.6, the necessary maintenance can be performed on-line without challenging the supported system Completion Times that result in plant shutdown actions. In addition, the use of LCO 3.0.6 and the Safety Function Determination Program will ensure a loss-of-function doesn't exist. The CB/SBGT Instrument Air System has been determined to satisfy Criterion 3 of 10 CFR 50.36(c)(2)(ii). The proposed Required Actions, Completion Times and Surveillance Frequencies were derived using traditional deterministic methods and qualitatively determined to be acceptable based upon similarity with other TS support systems (e.g., Diesel Generator, Emergency Service Water).

Additionally, during the development of the CB/SBGT Instrument Air System specifications, it was identified that a revision to TS 3.6.1.3 Condition E would be prudent due to the need for compressed air to ensure leak tightness of the 18 inch primary containment purge valves with resilient seals. Therefore, this Technical Specification amendment request also revises TS 3.6.1.3 Condition E (purge valve not within leakage limits) by adding a time limit for plant operation if a penetration flow path is isolated by a single purge valve with resilient seal. Unlimited plant operation is normally allowed only if the plant configuration after implementation of the Required Action is single failure tolerant. Reliance on a single valve and resilient seal in a penetration is not single failure tolerant, due to the need to maintain the pneumatic supply to the resilient seal. The Completion Time was deterministically derived based upon similarity with other Completion Times for inoperable PCIVs.

In addition, additions and revisions to the TS BASES have been made pursuant to the BASES Control Program of TS 5.5.10 and 10 CFR 50.36(a) and are included to assist the Staff in its review of the proposed TS changes. These changes are included for information only and are not considered part of this application for license amendment.

IES Utilities Inc., Docket No. 50-331,
Duane Arnold Energy Center, Linn County, Iowa
Date of Amendment Request: October 15, 1998

Description of Amendment Request:

The proposed amendment:

1. Deletes existing Required Action E.3 for TS 3.6.1.3.
2. Adds new Required Action E.2 for TS 3.6.1.3 which limits plant operation if a purge valve with resilient seal is used to satisfy Required Action E.1 (and existing Required Action E.2 becomes Required Action E.3).
3. Adds TS 3.7.9 LCO and Applicability for the CB/SBGT Instrument Air System.
4. Adds Required Actions and associated Completion Times for one or both CB/SBGT Instrument Air subsystems inoperable.
5. Adds Surveillance Requirements for demonstrating CB/SBGT Instrument Air subsystem OPERABILITY.

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:

- 1) The proposed amendment will not involve a significant increase in the probability or consequences of an accident previously evaluated.

The amendment is adding new requirements for the CB/SBGT Instrument Air System that are commensurate with the safety functions it supports and consistent with other support systems in the Technical Specifications. These requirements provide appropriate actions and time limits for plant operation with one or both CB/SBGT Instrument Air subsystems inoperable. The probability of an event while in this

condition is low, and the consequences are bounded by the failure of the supported systems. The CB/SBGT Instrument Air System is not assumed to be an initiator of any analyzed event.

The amendment is also adding a time limit for plant operation if a purge valve with resilient seal is used to satisfy TS 3.6.1.3 Required Action E.1 (isolate the affected penetration flow path). While primary containment integrity is provided by the purge valve, it is prudent to limit operation in this condition due to the potential for increased leakage from a single active failure.

These additions will provide assurance that the affected systems will be OPERABLE when required and as assumed in the design basis.

This change will not physically alter the plant (no new or different type of equipment will be installed). This change will not alter the operation of process variables, structures, systems, or components as described in the safety analysis. This change will not alter assumptions relative to the mitigation of an accident or transient event. This change will not increase the probability of initiating, or the consequences of an analyzed event.

- 2) The proposed amendment will not create the possibility of a new or different kind of accident from any accident previously evaluated.

The amendment adds new requirements for the CB/SBGT Instrument Air System and adds a time limit for plant operation if a purge valve with resilient seal is used to satisfy TS 3.6.1.3 Required Action E.1.

This change will not physically alter the plant (no new or different type of equipment will be installed). This change will not alter the operation of process variables, structures, systems, or components as described in the safety analysis. Thus, a new or different kind of accident will not be created.

- 3) The proposed amendment will not involve a significant reduction in a margin of safety.

The amendment is adding new requirements for the CB/SBGT Instrument Air System to provide appropriate actions and time limits for plant operation with one or both CB/SBGT Instrument Air subsystems inoperable.

The amendment is also adding a time limit for plant operation if a purge valve with resilient seal is used to satisfy TS 3.6.1.3 Required Action E.1 (isolate the affected penetration flow path). While primary containment integrity is provided by the purge valve, it is prudent to limit operation in this condition due to the potential for

increased leakage from a single active failure in the remaining OPERABLE components.

This change will not physically alter the plant (no new or different type of equipment will be installed). This change will not alter the operation of process variables, structures, systems, or components as described in the safety analysis. This change will not alter assumptions relative to the primary success path for mitigation of an accident or transient event.

These additions will provide assurance that the accident mitigation functions will perform as assumed in the safety analysis. Thus, the margin of safety will not be reduced.

Based upon the above, the proposed amendment is judged to involve no significant hazards considerations.

Local Public Document Room Location: Cedar Rapids Public Library, 500 First Street SE, Cedar Rapids, Iowa 52401

Attorney for Licensee: Jack Newman, Al Gutterman; Morgan, Lewis & Bockius, 1800 M Street NW, Washington, D.C. 20036-5869

PROPOSED CHANGE TSCR-006 TO THE DUANE ARNOLD ENERGY CENTER
TECHNICAL SPECIFICATIONS

The holders of license DPR-49 for the Duane Arnold Energy Center propose to amend the Technical Specifications by deleting the referenced pages and replacing them with the enclosed new pages.

SUMMARY OF CHANGES:

<u>Page</u>	<u>Description of Changes</u>
iii	Adds TS 3.7.9 to the Table of Contents
3.6-11	Revises the Required Actions for TS 3.6.1.3 Condition E by adding a time limit (72 hours) for plant operation if a penetration flow path is isolated by a single purge valve with resilient seal, and deleting the existing Required Action E.3.
3.7-19 and 3.7-20	Adds TS 3.7.9 for the Control Building/Standby Gas Treatment Instrument Air System.

SAFETY ASSESSMENT1. Introduction:

By letter dated October 15, 1998, IES Utilities Inc. submitted a request for revision of the Technical Specifications (TS) for the Duane Arnold Energy Center (DAEC). The proposed amendment would revise TS 3.6.1.3 Condition E and add a technical specification (LCO and Surveillance Requirements) for the Control Building/Standby Gas Treatment (CB/SBGT) Instrument Air System.

2. Evaluation:

The amendment will revise TS 3.6.1.3 Condition E (purge valve not within leakage limits) to add a time limit for plant operation if a penetration flow path is isolated by a single purge valve with resilient seal. Unlimited plant operation is normally allowed only if the plant configuration after implementation of the Required Action is single failure tolerant. Reliance on a single valve and resilient seal in a penetration is not single failure tolerant, due to the need to maintain the pneumatic supply to the resilient seal. The Completion Time was deterministically derived based upon similarity with other Completion Times for inoperable Primary Containment Isolation Valves (PCIVs).

The amendment will also add a technical specification for the CB/SBGT Instrument Air System. The CB/SBGT Instrument Air compressors are powered by the Diesel Generators (DGs) and cooled by the Emergency Service Water (ESW) System during loss of offsite power (LOOP) loss of coolant accident (LOCA) conditions. The proposed Required Actions, Completion Times and Surveillance Frequencies were derived using traditional deterministic methods and qualitatively determined to be acceptable based upon similarity with other TS support systems (e.g., DG, ESW). In addition, the use of LCO 3.0.6 and the Safety Function Determination Program will ensure a loss-of-function doesn't exist.

Therefore, we conclude that the proposed revision to the DAEC TS is acceptable.

ENVIRONMENTAL CONSIDERATION

10 CFR Section 51.22(c)(9) identifies certain licensing and regulatory actions which are eligible for categorical exclusion from the requirement to perform 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 a significant increase in individual or cumulative occupational radiation exposure. IES Utilities Inc. has reviewed this request and determined that the proposed amendment meets the eligibility criteria for categorical exclusion set forth in 10 CFR Section 51.22(c)(9). Pursuant to 10 CFR Section 51.22(b), no environmental impact statement or environmental assessment needs to be prepared in connection with the issuance of the amendment. The basis for this determination follows:

Basis

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

1. As demonstrated in Attachment 1 to this letter, the proposed amendment does not involve a significant hazards consideration.
2. The proposed change revises TS 3.6.1.3 Condition E (purge valve not within leakage limits) to add a time limit for plant operation if a penetration flow path is isolated by a single purge valve with resilient seal and adds a technical specification (LCO and Surveillance Requirements) for the Control Building/Standby Gas Treatment (CB/SBGT) Instrument Air System. There will be no significant change in the types or significant increase in the amounts of any effluents that may be released offsite.
3. The proposed change will not appreciably change the way the plant or its systems are operated. The change will merely revise TS 3.6.1.3 Condition E (purge valve not within leakage limits) to add a time limit for plant operation if a penetration flow path is isolated by a single purge valve with resilient seal and adds a technical specification for the CB/SBGT Instrument Air System. There will be no significant increase in either individual or cumulative occupational radiation exposure.