



**UNITED STATES
NUCLEAR REGULATORY COMMISSION**
WASHINGTON, D.C. 20555-0001

IES UTILITIES INC.

CENTRAL IOWA POWER COOPERATIVE

CORN BELT POWER COOPERATIVE

DOCKET NO. 50-331

DUANE ARNOLD ENERGY CENTER

AMENDMENT TO FACILITY OPERATING LICENSE

Amendment No. 230
License No. DPR-49

1. The U.S. Nuclear Regulatory Commission (the Commission) has found that:
 - A. The application for amendment by IES Utilities Inc., et al., dated April 12, 1999, as supplemented October 5 and October 8, 1999, complies with the standards and requirements of the Atomic Energy Act of 1954, as amended (the Act), and the Commission's rules and regulations set forth in 10 CFR Chapter I;
 - B. The facility will operate in conformity with the application, the provisions of the Act, and the rules and regulations of the Commission;
 - C. There is reasonable assurance (i) that the activities authorized by this amendment can be conducted without endangering the health and safety of the public, and (ii) that such activities will be conducted in compliance with the Commission's regulations;
 - D. The issuance of this amendment will not be inimical to the common defense and security or to the health and safety of the public; and
 - E. The issuance of this amendment is in accordance with 10 CFR Part 51 of the Commission's regulations and all applicable requirements have been satisfied.
2. Accordingly, the license is amended by changes to the Technical Specifications as indicated in the attachment to this license amendment and paragraph 2.C.(2) of Facility Operating License No. DPR-49 is hereby amended to read as follows:

(2) Technical Specifications

The Technical Specifications contained in Appendix A, as revised through Amendment No. 230, are hereby incorporated in the license. The licensee shall operate the facility in accordance with the Technical Specifications.

3. The license amendment is effective as of the date of issuance and shall be implemented within 30 days of the date of issuance.

FOR THE NUCLEAR REGULATORY COMMISSION



Claudia M. Craig, Chief, Section 1
Project Directorate III
Division of Licensing Project Management
Office of Nuclear Reactor Regulation

Attachment: Changes to the Technical
Specifications

Date of Issuance: December 29, 1999

ATTACHMENT TO LICENSE AMENDMENT NO. 230

FACILITY OPERATING LICENSE NO. DPR-49

DOCKET NO. 50-331

Replace the following pages of the Appendix A Technical Specifications with the attached revised pages. The revised areas are identified by amendment number and contain marginal lines indicating the areas of change.

Remove

3.6 -14
B 3.6 -28
B 3.6- 29

Insert

3.6 -14
B 3.6 -28
B 3.6 -29

SURVEILLANCE REQUIREMENTS (continued)

SURVEILLANCE	FREQUENCY
<p>SR 3.6.1.3.5 Verify the isolation time of each MSIV is > 3 seconds and < 5 seconds.</p>	<p>In accordance with the Inservice Testing Program</p>
<p>SR 3.6.1.3.6 -----NOTE----- For the MSIVs, this SR may be met by any series of sequential, overlapping, or total system steps, such that proper operation is verified. ----- Verify each automatic PCIV actuates to the isolation position on an actual or simulated isolation signal.</p>	<p>24 months</p>
<p>SR 3.6.1.3.7 Verify a representative sample of reactor instrumentation line EFCVs actuate on a simulated instrument line break to restrict flow.</p>	<p>24 months</p>
<p>SR 3.6.1.3.8 Remove and test the explosive squib from each shear isolation valve of the TIP System.</p>	<p>In accordance with the Inservice Testing Program</p>

(continued)

BASES

SURVEILLANCE
REQUIREMENTS
(continued)

SR 3.6.1.3.6 (continued)

the 24 month Frequency. Therefore, the Frequency was concluded to be acceptable from a reliability standpoint.

SR 3.6.1.3.7

This SR requires a demonstration that a representative sample of reactor instrumentation line Excess Flow Check Valves (EFCVs) are OPERABLE by verifying that the valves cause a marked decrease in flow rate on a simulated instrument line break. This SR provides assurance that the instrumentation line EFCVs will perform so that predicted radiological consequences will not be exceeded during the postulated instrument line break event evaluated in Reference 5. The representative sample consists of an approximately equal number of EFCVs, such that each EFCV is tested at least once every 10 years (nominal). The nominal 10 year interval is based on other performance-based testing programs, such as Inservice Testing (snubbers) and Option B to 10 CFR 50, Appendix J. EFCV test failures will be evaluated to determine if additional testing in that test interval is warranted to ensure overall reliability is maintained. Operating experience has demonstrated that these components are highly reliable and that failures to isolate are very infrequent. Therefore, testing of a representative sample was concluded to be applicable from a reliability standpoint (Reference 10).

SR 3.6.1.3.8

The TIP shear isolation valves are actuated by explosive charges. An in place functional test is not possible with this design. The explosive squib is removed and tested to provide assurance that the valves will actuate when required. The replacement charge for the explosive squib shall be from the same manufactured batch as the one fired or from another batch that has been certified by having one of the batch successfully fired. Other administrative controls, such as those that limit the shelf life of the explosive charges, must also be followed. The Frequency of this SR is in accordance with the requirements of the Inservice Testing Program.

(continued)

BASES (continued)

SURVEILLANCE
REQUIREMENTS

SR 3.6.1.3.9

The analysis in Reference 8 is based on leakage that is less than the specified leakage rate. Leakage through each MSIV must be ≤ 100 scfh when tested at ≥ 24 psig. The combined maximum pathway leakage rate for all four main steam lines must be ≤ 200 scfh when tested at ≥ 24 psig. If the leakage rate through an individual MSIV exceeds 100 scfh, the leakage rate shall be restored to ≤ 11.5 scfh. This ensures that MSIV leakage is properly accounted for in determining the overall primary containment leakage rate. The frequency is required by the Primary Containment Leakage Rate Testing Program.

REFERENCES

1. UFSAR, Chapter 15.6.
 2. UFSAR, Table 7.3-1.
 3. 10 CFR 50, Appendix J, Option B.
 4. UFSAR, Section 7.3.1.1.1.7.
 5. UFSAR, Section 1.8.11.
 6. J. Franz (IELP) to T. Murley (NRC), "Revised Response to NRC Position on Operability of Safety-Related Dual Function Valves," NG-93-5124, December 7, 1993.
 7. G. Kelly (NRC) to L. Liu (IES). "NRC Position on Operability of Safety-Related Dual Function Valves at the Duane Arnold Energy Center (TAC No. 88398), " January 3, 1995.
 8. UFSAR Section 6.7.4.3
 9. UFSAR Section 3.1.2.5
 10. GE BWROG B21-00658-01, "Excess Flow Check Valve Testing Relaxation," dated November 1998.
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