

SAFETY EVALUATION REPORTAPPENDIX J REVIEWFORT CALHOUN STATION, UNIT 1DOCKET NO. 50-0291.0 INTRODUCTION

On August 7, 1975[1], the NRC requested Omaha Public Power District (OPPD) to review its containment testing program for the Fort Calhoun Station, Unit 1 (Fort Calhoun), and the associated Technical Specifications, for compliance with the requirements of Appendix J to 10 CFR Part 50.

Appendix J to 10 CFR Part 50 was published on February 14, 1973. Since by this date there were already many operating nuclear plants and a number more in advance stages of design or construction, the NRC decided to have these plants reevaluated against the requirements of this new regulation. Therefore, beginning in 1975, requests for review of the extent of compliance with the requirements of Appendix J were made of each licensee. Following the initial responses to these requests, NRC staff positions were developed which would assure that the objectives of the testing requirements of the above cited regulation were satisfied. These staff positions have since been applied to our review of the submittals filed by the licensee for Fort Calhoun. The results of our evaluation are provided below.

2.0 EVALUATION

Our consultant, the Franklin Research Center (FRC), has reviewed the licensee's submittals [2, 3, 5] and prepared the attached evaluation of containment leakage tests for Fort Calhoun. We have reviewed this evaluation and concur in its bases and findings.

### 3.0 CONCLUSION

Based on our review of the enclosed Technical Evaluation Report (TER) regarding the Appendix J review for Fort Calhoun, we conclude that:

- 3.1 The definition of terms provided in proposed Technical Specification 3.5.(1) is in accordance with Appendix J and is acceptable.
- 3.2 The Type A test pretest requirements, test methods, acceptance criteria, and testing frequency of proposed Technical Specification 3.5.(2) are in accordance with Appendix J and are acceptable.
- 3.3 The Type B test methods, test pressure, frequency, and acceptance criteria, other than for containment airlocks, of proposed Technical Specification 3.5.(3) are in accordance with Appendix J and are acceptable.
- 3.4 OPPE's proposal to test containment airlocks at not less than 5 psig within 72 hours of every first of a series of openings and to conservatively extrapolate the results to Pa is in accordance with the requirements of Appendix J and is acceptable.
- 3.5 OPPD's correlation to extrapolate leakage rates at 5 psig to 60 psig is not sufficiently conservative. An alternative method is suggested in Appendix A of the enclosed TER.
- 3.6 The Type C test methods, test pressure, acceptance criteria, testing frequency, and penetrations to be tested of proposed Technical Specification 3.5.(4) are in conformance with Appendix J and are acceptable, except for penetrations M-3 and M-44. The isolation valves in these penetrations should be tested in accordance with Appendix J.

- 3.7 The special requirements relating to modification and replacement of containment isolation components of proposed Technical Specification 3.5.(5) are in conformance with Appendix J and are acceptable.
- 3.8 The requirements for reporting test results of proposed Technical Specification 3.5.(6) are in conformance with Appendix J and are acceptable.

#### 4.0 REFERENCES

1. NRC generic letter, "Implementation of 10 CFR Part 50, Appendix J, at Fort Calhoun," dated August 7, 1975.
2. T. E. Short (OPPD) letter to K. R. Goller (NRC), dated September 10, 1975.
3. LeBoeuf, Lamb, Leiby, and MacRea letter to Mr. B. C. Rusche (NRC), Subject: Proposed Technical Specification Change for Fort Calhoun, dated March 30, 1977.
4. NRC letter, "Request for Additional Information," dated April 4, 1980.
5. W. C. Jones (OPPD) letter to R. A. Clark (NRC), dated May 15, 1980.

Attachment:  
FRC Technical Evaluation Report