



Franklin Research Center
A Division of The Franklin Institute

November 12, 1979

United States Nuclear Regulatory Commission
Washington, D.C. 20555

Attention: Mr. Gary Zech
Project Monitor

Reference: FRC Project C5257
NRC Contract NRC-03-79-118
NRC TAC No. 08638
FRC Task Nos. 50/51
Title: Surry Units 1 & 2, Containment Leak Rate Testing
(Appendix J)

Dear Mr. Zech:

A status of the subject review package is provided in enclosure (1). It is forwarded to provide both the NRC and VEPCO with an opportunity to concur with or comment on the status as determined by the FRC.

Enclosure (2) provides a listing of additional information required by the FRC to complete the review.

For your information, the milestone dates for review of this package are as follows:

Receipt of Additional Information: 1/15/80
Start Final Review: 2/4/80
Submit Draft Report to NRC: 3/31/80

Very truly yours,

S. P. Carfagno
Project Manager

Enc.

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STATUS OF IMPLEMENTATION 10 CFR 50, APPENDIX J
SURRY 1 & 2

1.0 GENERIC ISSUE BACKGROUND

Appendix J to 10 CFR 50 was published on February 14, 1973. Since several plants were either operating or in advanced stages of construction at the time, it was frequently not possible to implement the requirements of Appendix J in these plants without exceptions.

During mid-1975, the USNRC requested all licensees concerned to review their status of compliance with Appendix J and to identify planned actions (design modifications, amendment to technical specifications, requests for exemption pursuant to 10 CFR 50.12, etc.) where not in full compliance. Subsequently, the NRC developed positions regarding the extent to which leak testing practices generally satisfy the intent of the regulation. These positions have been utilized to resolve certain exemption or technical specification change requests for specific plants. The generic issue, however, has remained open primarily owing to proposed changes to both Appendix J and the associated consensus standards related to containment leak rate testing.

The NRC presently intends to resolve all outstanding questions in this area prior to October, 1980. The proposed regulatory or standards changes have developed sufficiently to preclude the precipitation by such action of further generic issues. Accordingly, a concerted effort has been scheduled to provide a final review of all outstanding requests. This effort may require licensees to submit additional information necessary to resolve the specific issues for their plants.

2.0 SPECIFIC BACKGROUND

According to the file of correspondence relating to implementation of Appendix J requirements for Surry, Units No. 1 and No. 2, the history of the issue is as follows:

Virginia Electric and Power Company (VEPCO) replied to the NRC's generic letter (dated 8/4/75) on October 20, 1975. In that reply, VEPCO listed seven differences between the then existing technical specifications and the approved version of Appendix J. VEPCO further stated that it would modify its program to accommodate the technical differences with exception of the requirement to test the containment personnel air lock after each opening. Subsequently, VEPCO submitted Proposed Technical Specification Change No. 69 on September 22, 1978 which specified that Containment Leakage Testing would be performed in accordance with Appendix J except for the personnel hatch which would be tested at least quarterly instead of after each entry.

On January 9, 1979, in response to an NRC letter dated November 29, 1978, VEPCO stated that it would conform to the NRC Staff's interpretation of the "after each opening" requirement of Appendix J for containment air locks. VEPCO further stated that air lock seals would be tested within 72 hours of each use to verify proper sealing and that the entire air lock would be tested at peak calculated accident pressure at intervals of no more than six months.

Finally, on September 24, 1979, VEPCO amended its Proposed Technical Specification Change No. 69 to replace the reference volume method of leakage rate testing with the absolute method of leakage rate testing of ANSI N45.4-1972.

3.0 OUTSTANDING ISSUES

The outstanding requests, questions or issues as enumerated in the correspondence listed above relating to implementation of Appendix J criteria for SURRY Units 1 and 2 which require review, comment or approval are:

<u>ITEM</u>	<u>DESCRIPTION OF ISSUE</u>
1	Acceptance of T.S. Change No. 69 with amendment of 9/24/79 (contingent upon further amendment to include VEPCO's commitment of 1/9/79).

4.0 INFORMATION REQUIRED

In order to conduct a final review in this matter, additional information, documentation or drawings is needed as listed in enclosure (2). Additionally, should the licensee have a substantial disagreement with either the background or listing of outstanding issues described above, or have other information pertinent to a final review and disposition of this matter, this should be made known at this time.

It is desired that all information indicated herein be provided within approximately thirty days.

Enclosure (2)

Additional Information Required

<u>Item</u>	<u>Description</u>
1	Further description of the method to be used to verify proper seating of air lock seals with 72 hours of opening, including system diagram, test pressures and system discription.
2	Manufacturer's drawings or other drawings of the personnel air lock showing sealing devices and door operating/locking mechanisms, as well as the manufacturer's recommended test pressure.
3	A description of how L_t will be determined (para 4.(a)(iii) of App. J.) in view of the fact the method of performing the Type A test was changed from the reference volume method to the absolute pressure method.
4	A further description of the "make up air method" to be used to verify the Type A test discussed in VEPCO's 9/24/79 letter.