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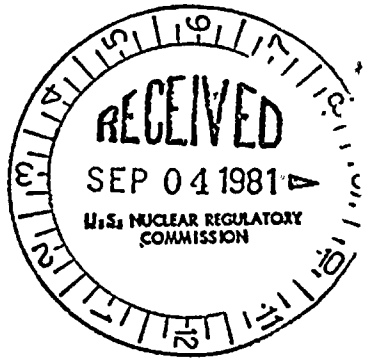

Dr. Robert E. Uhrig, Vice President
Advanced Systems and Technology
Florida Power and Light Company
Post Office Box 529100
Miami, Florida 33152

Dear Dr. Uhrig:

In our letter of November 28, 1978, we identified the generic concerns of purging and venting of containments to all operating reactor licensees and requested your response to these concerns. Our review of your response was interrupted by the TMI accident and its demands on staff resources. Consequently, as you know, an Interim Position on containment purging and venting was transmitted to you on October 23, 1979. You were requested to implement short-term corrective actions to remain in effect pending completion of our longer-term review of your response to our November 28, 1978 letter.

Over the past several months we and our contractors have been reviewing the responses to our November 1978 letter to close out our long-term review of this rather complex issue. The components of this review are as follows:

1. Conformance to Standard Review Plan Section 6.2.4 Revision 1 and Branch Technical Position CSB 6-4 Revision 1.

   These documents were provided as enclosures to our November 1978 letter.

2. Valve Operability

   Although the Interim Position allowed blocking of the valves at partial-open positions, this is indeed an interim position. Earlier we requested a program demonstrating operability of the valves in accordance with our "Guidelines for Demonstrative Operability of Purge and Vent Valves." These Guidelines were sent to you in our letter of September 27, 1979. There is an acceptable alternative which you may wish to consider in lieu of completing the valve qualification program for the large butterfly-type valves. This would be the installation of a fully-qualified mini-purge system with valves 8-inches or smaller to bypass the larger valves. Such a system change might prove more timely and more cost-effective. The system would meet BTP CSB 6-4 item B.1.c.

3. Safety Actuation Signal Override

This involves the review of safety actuation signal circuits to ensure that overriding of one safety actuation signal does not also cause the bypass of any other safety actuation signal.

4. Containment Leakage Due to Seal Deterioration

Position B.4 of the BTP CSB 6-4 requires that provisions be made to test the availability of the isolation function and the leakage rate of the isolation valves in the vent and purge lines, individually, during reactor operations. But CSB 6-4 does not explain when or how these tests are to be performed. Enclosure 1 is an amplification of Position B.4 concerning these tests.

The status of our long-term review of the above items for the Turkey Point facility is as follows:

1. Conformance to Standard Review Plan Section 6.2.4 Revision 1 and Branch Technical Position CSB 6-4 Revision 1.

We have completed our review. For your information a restatement of salient features of the position as interpreted by the staff is provided in Enclosure 2. Enclosure 3 is our Safety Evaluation Report (SER) for this item. This SER is subject to our request that you provide additional assurance, such as debris screens, to ensure that the isolation valves for the purge supply and exhaust systems will close as discussed in the SER. Any such assurance should be designed to seismic Category I criteria.

2. Valve Operability

This item is still under review. Please provide the information requested in Enclosure 4 within 45 days of receipt of this letter.

3. Safety Actuation Signal Override

We have completed our review. Enclosure 5 is our Safety Evaluation Report (SER) for this item. With this SER, the electrical override aspects of our long-term review of this generic task is complete. It is noted that a somewhat parallel review of engineered safety features reset is being carried out in conjunction with I&E Bulletin 80-06. That review will be handled separately outside the framework of the purge and vent review.

4. Containment Leakage Due to Seal Deterioration

We request that you propose a Technical Specification change incorporating the test requirements together with the details of your proposed test program within 45 days of receipt of this letter.

5. Containment Pressure Setpoint

We have complete our review of the containment pressure setpoint. Enclosure 6 is our Safety Evaluation Report (SER) for this item. With this SER, the containment pressure setpoint aspect of our long term review of this generic task is complete.

In closing, you may have noted the similarity of this long-term generic issue with Item II.E.4.2 of NUREG-0737, TMI Action Plan. Except for Positions 6 & 7 of Item II.E.4.2, the review of the remaining outstanding positions of Item II.E.4.2 will be completed by this purge and vent review. Our schedule of the purge and vent review agrees with the schedule for Item II.E.4.2.

Thus, your assistance in completing the outstanding purge and vent items, noted above, is necessary to complete Item II.E.4.2. Although the Technical Specifications necessary to finalize the purge and vent part of Item II.E.4.2.7 are not completely finalized, a recently developed sample Technical Specification for the remaining items is provided for your consideration as Enclosure 7. We request that you review existing Technical Specifications (TS) against the sample provided herein. For any areas in which your existing TS needs expansion, you are requested to provide a TS change request within 60 days of receipt of this letter.

Please contact your NRC Project Manager should you have any questions.

Sincerely,
Original signed by:
S. A. Varga

Steven A. Varga, Chief
Operating Reactors Branch #1
Division of Licensing

Enclosures: As stated

OFFICE	ORB#1:DL	ORB#1:DL	ORB#1:DL				
SURNAME	MGrotenhuis	CReeves	SVarga				
DATE	8/12/81:ds	8/27/81	8/28/81				

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Sincerely,

Steven A. Varga, Chief
Operating Reactors Branch #1
Division of Licensing

Enclosures: As stated

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Enclosure 1

PURGE/VENT VALVE LEAKAGE TESTS

The long term resolution of Generic Issue B-24, "Containment Purging During Normal Plant Operation," includes, in part, the implementation of Item B.4 of Branch Technical Position (BTP) CSB 6-4. Item B.4 specifies that provisions should be made for leakage rate testing of the (purge/vent system) isolation valves, individually, during reactor operation. Although Item B.4 does not address the testing frequency, Appendix J to 10 CFR Part 50 specifies a maximum test interval of 2 years.

As a result of the numerous reports on unsatisfactory performance of the resilient seats for the isolation valves in containment purge and vent lines (addressed in OIE Circular 77-11, dated September 6, 1977), Generic Issue B-20, "Containment Leakage Due to Seal Deterioration," was established to evaluate the matter and establish an appropriate testing frequency for the isolation valves. Excessive leakage past the resilient seats of isolation valves in purge/vent lines is typically caused by severe environmental conditions and/or wear due to frequent use. Consequently, the leakage test frequency for these valves should be keyed to the occurrence of severe environmental conditions and the use of the valves, rather than the current requirements of 10 CFR 50, Appendix J.

It is recommended that the following provision be added to the Technical Specifications for the leak testing of purge/vent line isolation valves:

> "Leakage integrity tests shall be performed on the containment isolation valves with resilient material seals in (a) active purge/vent systems (i.e., those which may be operated during plant operating Modes 1 through 4) at least once every three months and (b) passive purge systems (i.e., those which must be administratively controlled closed during reactor operating Modes 1 through 4) at least once every six months."

By way of clarification, the above proposed surveillance specification is predicated on our expectation that a plant would have a need to go to cold shutdown several times a year. To cover the possibility that this may not occur, a maximum test interval of 6 months is specified. However, it is not our intent to require a plant to shutdown just to conduct the valve leakage integrity tests. If licensees anticipate long duration power operations with infrequent shutdown, then installation of a leak test connection that is accessible from outside containment may be appropriate. This will permit simultaneous testing of the redundant valves. It will not be possible to satisfy explicitly the guidance of Item B.4 of BTP CSB 6-4 (which states that valves should be tested individually), but at least some testing of the valves during reactor operation will be possible.

It is intended that the above proposed surveillance specification be applied to the active purge/vent lines, as well as passive purge lines: i.e., the purge lines that are administratively controlled closed during reactor operating modes 1-4. The reason for including the passive purge lines is that B-20 is concerned wtih the potential adverse effect of seasonal weather conditions on the integrity of the isolation valves. Consequently, passive purge lines must also be included in the surveillance program.

The purpose of the leakage integrity tests of the isolation valves in the containment purge and vent lines is to identify excessive degradation of the resilient seats for these valves. Therefore, they need not be conducted with the precision required for the Type C isolation valve tests in 10 CFR Part 50, Appendix J. These tests would be performed in addition to the quantitative Type C tests required by Appendix J and would not relieve the licensee of the responsibility to conform to the requirements of Appendix J. In view of the wide variety of valve types and seating materials, the acceptance criteria for such tests should be developed on a plant-specific basis.

Enclosure 2

1. Purging/venting should be minimized during reactor operation because the plant is inherently safer with closed purge/vent valves (containment) than with open lines which require valve action to provide containment. (Serious consideration is being given to ultimately requiring that future plants be designed such that purging/venting is not required during operation).
2. Some purging/venting on current plants will be permitted provided that:
   a) purging is needed and justified for safety purposes, and
   b) valves are judged by the staff to be both operable and reliable, and
   c) the estimated amount of radioactivity released during the time required to close the valve(s) following a LOCA either
      i. does not cause the total dose to exceed the 10 CFR Part 100 Guidelines; then a goal should be established which represents a limit on the annual hours of purging expected through each particular valve, or
      ii. causes the total dose to exceed the guideline values; then purging/venting shall be limited to 90 hours/year.
3. Purging/venting should not be permitted when valves are being used that are known to be not operable or reliable under transient or accident conditions.