VIRGINIA ELECTRIC AND POWER COMPANY
RICHMOND, VIRGINIA 23261

July 25, 2000

U.S. Nuclear Regulatory Commission
Attention: Document Control Desk
Washington, D.C. 20555

Serial No. 00-304A
NL&OS/GSS/ETS R0
Docket Nos. 50-338
50-339
License Nos. NPF-4
NPF-7

Gentlemen:

VIRGINIA ELECTRIC AND POWER COMPANY
NORTH ANNA POWER STATION UNITS 1 AND 2
CORRECTED PAGES FOR PROPOSED TECHNICAL SPECIFICATION CHANGES
REACTIVITY CONTROLS – RETURN OF ISOLATED RCS LOOPS TO SERVICE

In a June 22, 2000 letter (Serial No. 00-304), pursuant to 10 CFR 50.90, Virginia Electric and Power Company requested changes to the Technical Specifications (TS) to accommodate a vacuum-assisted fill technique for backfilling isolated loops from the active volume of the Reactor Coolant System. Subsequently, we identified a potential implementation issue with the proposed Technical Specification wording that requires clarification. Coincidentally, we identified an administrative error in the original submittal, affecting the same proposed page, which requires replacement of the page. The corrected Technical Specification pages, including the revised discussion of change page, are provided in the attachment to this letter. Please substitute these pages into the June 22, 2000 submittal to complete your review.

These changes do not alter our significant hazards consideration included in the June 22, 2000 submittal. If you have any further questions or require additional information, please contact us.

Very truly yours,

David A. Christian
Senior Vice President and Chief Nuclear Officer

Attachment

Commitments made in this letter:

1. None

A001

cc: U.S. Nuclear Regulatory Commission
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Mr. M. J. Morgan
NRC Senior Resident Inspector
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COMMONWEALTH OF VIRGINIA)
)
COUNTY OF HENRICO)

The foregoing document was acknowledged before me, in and for the County and Commonwealth aforesaid, today by David A. Christian who is Senior Vice President and Chief Nuclear Officer of Virginia Electric and Power Company. He has affirmed before me that he is duly authorized to execute and file the foregoing document in behalf of that Company, and that the statements in the document are true to the best of his knowledge and belief.

Acknowledged before me this 25th day of July, 2000.

My Commission Expires: 3/31/04.

Maggie McClure
Notary Public

(SEAL)

Attachment 1

Corrected Discussion of Change, Marked-up, and Typed Pages for Reactivity Controls – Return of an Isolated RCS Loop To Service

North Anna Power Station
Units 1 and 2
Virginia Electric and Power Company

Revise existing LCO 3.4.1.6.a and b as follows:

From:

a. The valves may be energized and/or opened to fill the loop from the active volume of the Reactor Coolant System, once the following conditions are met:
   1. The isolated loop shall be drained.
   2. Pressurizer water volume shall be at least 450 cubic feet.
   3. A source range neutron flux monitor shall be operable.

b. During backfilling of the isolated loop.
   1. Pressurizer water volume shall be maintained at or above 450 cubic feet.
   2. The source range neutron flux count rate shall be no more than a factor of 2 above the initial count rate.
   3. The hot and cold leg stop valves shall be fully opened within 2 hours after the backfill of the isolated loop has been completed.

To:

a. Seal injection may be initiated to the reactor coolant pump in the isolated loop provided that:
   1. The isolated loop is drained
   2. The boron concentration of the reactor coolant pump seal injection source is ≥ the boron concentration requirements of Specification 3.9.1 or 3.1.1.2 for the applicable Mode.

b. The **cold leg stop** valves may be energized and/or opened to fill the loop from the active volume of the Reactor Coolant System **provided that**:
   1. The isolated loop **is** drained **or reactor coolant pump seal injection has been initiated in accordance with Specification 3.4.1.6.a above.**
   2. Pressurizer water volume **is** ≥ 450 cubic feet.
   3. A source range neutron flux monitor **is** operable.

c. Backfilling of the isolated loop **may continue provided that:**
   1. Pressurizer water volume **is** maintained at or above 450 cubic feet.
   2. The source range neutron flux count rate **is** no more than a factor of 2 above the initial count rate.
   3. The boron concentration of the reactor coolant pump seal injection source is ≥ the boron concentration requirements of Specification 3.9.1 or 3.1.1.2 for the applicable Mode.

d. When the isolated loop is full, the loop stop valves can be fully opened provided that:
   1. The boron concentration in the loop is ≥ the boron concentration requirements of Specification 3.9.1 or 3.1.1.2 for the applicable Mode.
   2. The hot and cold leg stop valves are fully opened within 2 hours after backfill of the isolated loop has been completed.

REACTOR COOLANT SYSTEM

ISOLATED LOOP STARTUP - DRAINED

When returning an isolated drained loop to service the following conditions shall be met:

LIMITING CONDITION FOR OPERATION

3.4.1.6 Whenever a reactor coolant loop is isolated and drained, A.C. power shall be removed from the loop stop valves and the associated breakers locked open.

b.a. The cold leg stop valves may be energized and/or opened to fill the loop from the active volume of the Reactor Coolant System, ~~once the following conditions are met:~~ provided that:

1. The isolated loop ~~shall be~~ is drained.
2. Pressurizer water volume ~~shall be at least~~ is ≥ 450 cubic feet.
3. A source range neutron flux monitor ~~shall be~~ is operable.

c.b. ~~During~~ backfilling of the isolated loop may continue provided that:

1. Pressurizer water volume shall be maintained at or above 450 cubic feet.
2. The source range neutron flux count rate ~~shall be~~ is no more than a factor of 2 above the initial count rate.

2.b. The hot and cold leg stop valves ~~shall be~~ are fully opened within 2 hours after the backfill of the isolated loop has been completed.

APPLICABILITY: MODES 5 and 6.

ACTION:

a. If the isolated loop is not drained then it must be fully drained before initiating backfilling, or initiating seal injection to the reactor coolant pump in the loop

b. If the pressurizer water volume is not maintained at 450 cubic feet or greater, then the loop stop valves on the loop being backfilled shall be closed, A.C. power shall be removed from the loop stop valves and the breakers locked open.

e.c. If the loop stop valves are not fully open within 2 hours after the loop is filled or Surveillance Requirement 4.4.1.6.5 is not met, then the loop shall be isolated and drained or apply Specification 3.4.1.4 and 3.4.1.5.

d. If the source range count rate increases by a factor of two over the initial count rate, then the hot and cold leg loop stop valves shall be reclosed, power removed from the breakers and the breakers locked open. No attempt shall be made to reopen the loop stop valves until the reason for the count rate increase has been determined.

LCO d. When the isolated loop is full the loop stop valves can be fully opened provided that:

1. The boron concentration in the loop is ≥ the boron concentration requirements of Specification 3.9.1 or 3.1.1.2 for the applicable Mode.

ACTION c. If the boron concentration of the RCP seal injection make up source is not maintained ≥ the boron concentration requirements of Specification 3.9.1 or 3.1.1.2 for the applicable Mode, then the loop stop valve on the loop being backfilled shall be closed and the loop drained or apply Specification 3.4.1.4 or 3.4.1.5.

d. Seal injection may be initiated to the reactor coolant pump in the isolated loop provided that:
1. The isolated loop is drained
2. The boron concentration at the reactor coolant pump seal injection source is ≥ the boron concentration requirements of Specification 3.9.1 or 3.1.1.2 for the applicable Mode.

3. The boron concentration of the reactor coolant pump seal injection source is ≥ the boron concentration requirements of Specification 3.9.1 or 3.1.1.2 for the applicable Mode.

~~10-30-98~~

REACTOR COOLANT SYSTEM

ISOLATED LOOP STARTUP - DRAINED

LIMITING CONDITION FOR OPERATION

When returning an isolated drained loop to service the following conditions shall be met:

3.4.1.6 Whenever a reactor coolant loop is isolated and drained, A.C. power shall be removed from the loop stop valves and the associated breakers locked open.

b.2. The ~~valves~~ cold leg stop may be energized and/or opened to fill the loop from the active volume of the Reactor Coolant System ~~once the following conditions are met:~~ provided that:

1. The isolated loop ~~shall be~~ is drained or reactor coolant pump seal injection has been initiated in accordance with Specification 3.4.1.6.4 above.
2. Pressurizer water volume ~~shall be at least~~ is ≥ 450 cubic feet.
3. A source range neutron flux monitor ~~shall be~~ is operable.

c.b. ~~During~~ backfilling of the isolated loop may continue provided that:

1. Pressurizer water volume shall be maintained at or above 450 cubic feet.
2. The source range neutron flux count rate ~~shall be~~ is no more than a factor of 2 above the initial count rate.

2.c. The hot and cold leg stop valves ~~shall be~~ are fully opened within 2 hours after the backfill of the isolated loop has been completed.

APPLICABILITY: MODES 5 and 6.

ACTION:

a. If the isolated loop is not drained then it must be fully drained before initiating backfilling or initiating seal injection to the reactor coolant pump in the loop.

b. If the pressurizer water volume is not maintained at 450 cubic feet or greater, then the loop stop valves on the loop being backfilled shall be closed. A.C. power shall be removed from the loop stop valves and the breakers locked open.

e.c. If the loop stop valves are not fully open within 2 hours after the loop is filled or surveillance Requirement 4.4.1.6.5 is not met, then the loop shall be isolated and drained or apply Specification 3.4.1.4 and 3.4.1.5.

d. If the source range count rate increases by a factor of two over the initial count rate, then the hot and cold leg loop stop valves shall be reclosed, power removed from the breakers and the breakers locked open. No attempt shall be made to reopen the loop stop valves until the reason for the count rate increase has been determined.

LCO d. When the isolated loop is full the loop stop valves can be fully opened provided that:
1. The boron concentration in the loop is ≥ the boron concentration requirements of Specification 3.9.1 or 3.1.1.2 for the applicable Mode.

ACTION c. If the boron concentration of the RCP seal injection makeup source is not maintained ≥ the boron concentration requirements of Specification 3.9.1 or 3.1.1.2 for the applicable Mode, then the loop stop valve on the loop being backfilled shall be closed and the loop drained or apply Specification 3.4.1.4 or 3.4.1.5

a. Seal injection may be initiated to the reactor coolant pump in the isolated loop provided that:
1. The isolated loop is drained
2. The boron concentration of the reactor coolant pump seal injection source is ≥ the boron concentration requirements of Specification 3.9.1 or 3.1.1.2 for the applicable Mode.

3. The boron concentration of the reactor coolant pump seal injection source is ≥ the boron concentration requirements of Specification 3.9.1 or 3.1.1.2 for the applicable Mode.

REACTOR COOLANT SYSTEM

ISOLATED LOOP STARTUP - DRAINED

LIMITING CONDITION FOR OPERATION

3.4.1.6 Whenever a reactor coolant loop is isolated and drained, A.C. power shall be removed from the loop stop valves and the associated breakers locked open. When returning an isolated drained loop to service the following conditions shall be met:

a. Seal injection may be initiated to the reactor coolant pump in the isolated loop provided that:

   1. The isolated loop is drained.

   2. The boron concentration of the reactor coolant pump seal injection source is ≥ the boron concentration requirements of Specification 3.9.1 or 3.1.1.2 for the applicable Mode.

b. The cold leg stop valves may be energized and/or opened to fill the loop from the active volume of the Reactor Coolant System provided that:

   1. The isolated loop is drained or reactor coolant pump seal injection has been initiated in accordance with Specification 3.4.1.6.a above.

   2. Pressurizer water volume is ≥ 450 cubic feet.

   3. A source range neutron flux monitor is operable.

c. Backfilling of the isolated loop may continue provided that:

   1. Pressurizer water volume shall be maintained at or above 450 cubic feet.

   2. The source range neutron flux count rate is no more than a factor of 2 above the initial count rate.

   3. The boron concentration of the reactor coolant pump seal injection source is ≥ the boron concentration requirements of Specification 3.9.1 or 3.1.1.2 for the applicable Mode.

d. When the isolated loop is full the loop stop valves can be fully opened provided that:

   1. The boron concentration in the loop is ≥ the boron concentration requirements of Specification 3.9.1 or 3.1.1.2 for the applicable Mode.

   2. The hot and cold leg stop valves are fully opened within 2 hours after the backfill of the isolated loop has been completed.

APPLICABILITY: MODES 5 and 6.

ACTION:

a. If the isolated loop is not drained then it must be fully drained before initiating seal injection to the reactor coolant pump in the loop or initiating backfill.

REACTOR COOLANT SYSTEM

ISOLATED LOOP STARTUP - DRAINED

LIMITING CONDITION FOR OPERATION

3.4.1.6 Whenever a reactor coolant loop is isolated and drained, A.C. power shall be removed from the loop stop valves and the associated breakers locked open. When returning an isolated drained loop to service the following conditions shall be met:

a. Seal injection may be initiated to the reactor coolant pump in the isolated loop provided that:

   1. The isolated loop is drained.

   2. The boron concentration of the reactor coolant pump seal injection source is ≥ the boron concentration requirements of Specification 3.9.1 or 3.1.1.2 for the applicable Mode.

b. The cold leg stop valves may be energized and/or opened to fill the loop from the active volume of the Reactor Coolant System provided that:

   1. The isolated loop is drained or reactor coolant pump seal injection has been initiated in accordance with Specification 3.4.1.6.a above.

   2. Pressurizer water volume is ≥ 450 cubic feet.

   3. A source range neutron flux monitor is operable.

c. Backfilling of the isolated loop may continue provided that:

   1. Pressurizer water volume shall be maintained at or above 450 cubic feet.

   2. The source range neutron flux count rate is no more than a factor of 2 above the initial count rate.

   3. The boron concentration of the reactor coolant pump seal injection source is ≥ the boron concentration requirements of Specification 3.9.1 or 3.1.1.2 for the applicable Mode.

d. When the isolated loop is full the loop stop valves can be fully opened provided that:

   1. The boron concentration in the loop is ≥ the boron concentration requirements of Specification 3.9.1 or 3.1.1.2 for the applicable Mode.

   2. The hot and cold leg stop valves are fully opened within 2 hours after the backfill of the isolated loop has been completed.

APPLICABILITY: MODES 5 and 6.

ACTION:

a. If the isolated loop is not drained then it must be fully drained before initiating seal injection to the reactor coolant pump in the loop or initiating backfill.