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March 26, 2004
L-04-049

U. S. Nuclear Regulatory Commission
Attention: Document Control Desk
Washington, DC 20555-0001

Subject: Beaver Valley Power Station, Unit No. 1 and No. 2
BV-1 Docket No. 50-334, License No. DPR-66
BV-2 Docket No. 50-412, License No. NPF-73
Inservice Inspection Programs, Proposed Revisions 1J and 2H Addenda

Attached for NRC review and approval are Addenda to proposed Revisions 1J and 2H to the Beaver Valley Power Station Unit 1 (BVPS-1) and Unit 2 (BVPS-2) Inservice Testing (IST) Programs. Proposed Revisions 1J and 2H were originally submitted on March 12, 2004 (letter L-04-033) and included a Pump Relief Request (No. 7) for alternate testing of the Residual Heat Removal (RHR) Pumps. These proposed revisions are being re-submitted for NRC review and approval in accordance with 10 CFR 50.55a(f)(5)(iii).

The RHR Pumps at BVPS-1 and BVPS-2 are currently considered to be in a system out of service during normal operations, and are therefore tested during cold shutdowns per ASME Section XI before they are declared operable per Technical Specifications. This is currently documented in the BVPS-1 and BVPS-2 IST Programs in Pump Cold Shutdown Justification No. 1.

This relief request proposes testing the pumps at cold shutdown. Thus the pumps will be allowed to be credited as operable per Technical Specifications as long as they remain within their current surveillance testing interval. The NRC granted a similar request for relief for North Anna Power Station, Units 1 and 2 on January 28, 2002. (ADAMS Accession No. ML 020280439)

Considering the RHR Pumps as operable during the shutdown for refueling can result in several improvements at BVPS-1 and BVPS-2. These include:

- The third Reactor Coolant Pump (RCP) could be removed from service earlier in the shutdown sequence thus allowing hydrogen peroxide to be added to the Reactor Coolant System (RCS) much sooner, which would lower peak activity and shorten cleanup time.

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- Shutting down the RCPs earlier in the shutdown sequence would also reduce RCS heat input and allow the plant to cool down to a safer cold shutdown condition in a more expedited manner.

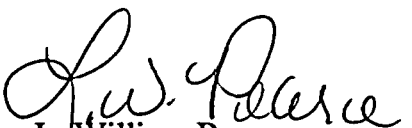
- The second and third RCS loops could also be isolated earlier in the shutdown sequence, thus minimizing the overall area in the plant affected by the RCS cleanup. This would minimize dose rates and improve ALARA concerns.

The improvements could be realized immediately and would be beneficial for the upcoming refueling outages at BVPS-1 (1R16) and BVPS-2 (2R11). NRC review and approval of these proposed revisions is therefore requested prior to the 1R16 outage, which is currently scheduled to begin in mid-October 2004.

These proposed revisions are intended to be in effect for the duration of the current IST ten-year intervals for BVPS-1 and BVPS-2.

There are no new regulatory commitments contained in this letter. If you have any questions concerning this matter, please contact Mr. Larry R. Freeland, Manager, Regulatory Affairs/Performance Improvement at 724-682-5284.

Sincerely,



L. William Pearce

Attachment

c: Mr. T. G. Colburn, NRR Senior Project Manager
Mr. P. C. Cataldo, NRC Sr. Resident Inspector
Mr. H. J. Miller, NRC Region I Administrator

Beaver Valley Power Station

Unit 1

INSERVICE TESTING (IST) PROGRAM FOR PUMP AND VALVES

Proposed Revision 1J (Addendum 1)

Preparer *Original Signed By: David T. Jones*	Date: *3/23/04*
IQR (RAD #04-00486-00) *Original Signed By: Joann H. West*	Date: *3/23/04*
Owner Approval *Original Signed By: R. A. Lieb*	Date: *3/23/04*
Approval Authority *Original Signed By: R. T. Green*	Date: *3/23/04*

This "Proposed Revision" was made against Revision 11 of the present Unit 1 IST Program.

(PROPOSED REVISION 1J)

PUMP RELIEF REQUEST 7

Pump Asset No(s): 1RH-P-1A
1RH-P-1B

Code Class: 2

System: 10 – Residual Heat Removal

Function: The Residual Heat Removal (RHR) Pumps provide long term removal of decay heat from the reactor core and sensible heat from the reactor coolant system (RCS) in order to achieve and maintain the plant in a cold shutdown condition.

Test Requirement: Per OM-6, Paragraph 5.1, "Frequency of Inservice Tests," an inservice test shall be run on each pump, nominally every 3 months.

Basis for Relief: In accordance with 10CFR50.55a(f)(5)(iii), relief is requested on the basis that compliance with the Code test frequency requirement above is impractical.

The Residual Heat Removal (RHR) Pumps are in a standby condition during power operation, and are not required to be in service until the Reactor Coolant System (RCS) temperature is ≤350F and RCS pressure is ≤430 psig. Therefore, they are not exposed to operational wear except when the RCS is at low temperature and pressure and the RHR System is operating.

The RHR Pumps have a design pressure of 600 psig. They take suction from the RCS, pass flow through the RHR Heat Exchangers, and then discharge back to the RCS. The RHR System is considered to be a low pressure system that could be damaged if exposed to the normal operating RCS pressure of approximately 2235 psig. In order to prevent this, the RHR Inlet and Return Isolation Valves are interlocked with an output signal from the RCS pressure transmitters which prevent the valves from being opened when the RCS pressure exceeds 430 psig. In addition, these valves are also maintained shut with their breakers de-energized and administratively controlled (caution tagged). Therefore, testing of the RHR Pumps during normal operation is not practicable.

In addition, the RHR Pumps are located inside Containment, and if tested at power, test personnel would have to make a Containment entry in order to properly monitor pump operation. However, the BVPS-1 Containment is presently maintained subatmospheric as required by Technical Specifications. This subatmospheric condition as well as high radiological dose rates at the pumps presents a hazardous working environment for station personnel and is considered inaccessible for quarterly surveillance testing.

Based on the above, compliance with the ASME XI Code test frequency requirement (quarterly) is impractical. Therefore, testing is only possible during a surveillance interval frequency of cold shutdown and refueling.

Alternate Test: These pumps will be tested during cold shutdowns and refueling outages, not more often than once every 92 days, per 1OST-10.1 (Residual Heat Removal Pumps Performance Test). For a cold shutdown or refueling outage that extends longer than 3 months, the pumps will be tested every 3 months in accordance with OM-6, Paragraph 5.1.

References: OM-6, Paragraph 5.1.
1OM-10.

Beaver Valley Power Station

Unit 2

INSERVICE TESTING (IST) PROGRAM FOR PUMP AND VALVES

Proposed Revision 2H (Addendum 1)

Original Signed By: Preparer *David T. Jones*	Date: *3/23/04*
Original Signed By: IQR (RAD #04-00486-00) *Joann H. West*	Date: *3/23/04*
Original Signed By: Owner Approval *R. A. Lieb*	Date: *3/23/04*
Original Signed By: Approval Authority *R. T. Green*	Date: *3/23/04*

This "Proposed Revision" was made against Revision 9 of the present Unit 2 IST Program.

(PROPOSED REVISION 2H)

PUMP RELIEF REQUEST 7

Pump Asset No(s): 2RHS*P21A
2RHS*P21B

Code Class: 2

System: 10 – Residual Heat Removal

Function: The Residual Heat Removal (RHR) Pumps provide long term removal of decay heat from the reactor core and sensible heat from the reactor coolant system (RCS) in order to achieve and maintain the plant in a cold shutdown condition.

Test Requirement: Per OM-6, Paragraph 5.1, "Frequency of Inservice Tests," an inservice test shall be run on each pump, nominally every 3 months.

Basis for Relief: In accordance with 10CFR50.55a(f)(5)(iii), relief is requested on the basis that compliance with the Code test frequency requirement above is impractical.

The Residual Heat Removal (RHR) Pumps are in a standby condition during power operation, and are not required to be in service until the Reactor Coolant System (RCS) temperature is ≤350F and RCS pressure is ≤360 psig. Therefore, they are not exposed to operational wear except when the RCS is at low temperature and pressure and the RHR System is operating.

The RHR Pumps have a design pressure of 600 psig. They take suction from the RCS, pass flow through the RHR Heat Exchangers, and then discharge back to the RCS. The RHR System is considered to be a low pressure system that could be damaged if exposed to the normal operating RCS pressure of approximately 2235 psig. In order to prevent this, the RHR Inlet and Return Isolation Valves are interlocked with an output signal from the RCS pressure transmitters which prevent the valves from being opened when the RCS pressure exceeds 360 psig. In addition, the Inlet Isolation Valves closest to the RHR Pumps and Return Isolation Vales are also maintained shut with their breakers de-energized and administratively controlled (caution tagged). Therefore, testing of the RHR Pumps during normal operation is not practicable.

In addition, the RHR Pumps are located inside Containment, and if tested at power, test personnel would have to make a Containment entry in order to properly monitor pump operation. However, the BVPS-2 Containment is presently maintained subatmospheric as required by Technical Specifications. This subatmospheric condition as well as high radiological dose rates at the pumps presents a hazardous working environment for station personnel and is considered inaccessible for quarterly surveillance testing.

Based on the above, compliance with the ASME XI Code test frequency requirement (quarterly) is impractical. Therefore, testing is only possible during a surveillance interval frequency of cold shutdown and refueling.

Alternate Test: These pumps will be tested during cold shutdowns and refueling outages, not more often than once every 92 days, per 2OST-10.1 and 2OST-10.2 (Residual Heat Removal Pump Performance Tests). For a cold shutdown or refueling outage that extends longer than 3 months, the pumps will be tested every 3 months in accordance with OM-6, Paragraph 5.1.

References: OM-6, Paragraph 5.1.
2OM-10.