



Gary B. Fader  
Vice President Technical Services

**MAY 16 2002**

ET 02-0021

U. S. Nuclear Regulatory Commission  
ATTN: Document Control Desk  
11555 Rockville Pike  
Rockville, MD 20852

Reference: Letter ET 02-0018, dated April 3, 2002, from Richard A. Muench, WCNOC, to USNRC

Subject: Docket No. 50-482: 60-Day Response for NRC Bulletin 2002-01, "Reactor Pressure Vessel Head Degradation and Reactor Coolant Pressure Boundary Integrity"

Gentlemen:

This letter provides the Wolf Creek Nuclear Operating Corporation (WCNOC) response to the 60-day requirement of U.S. Nuclear Regulatory Commission (NRC) Bulletin 2002-01, "Reactor Pressure Vessel Head Degradation and Reactor Coolant Pressure Boundary Integrity" dated March 18, 2002. Item 3.A of the bulletin requires information relative to reasonable assurance of compliance with applicable regulatory requirements related to the boric acid corrosion program for the remainder of the reactor coolant pressure boundary be submitted within 60 days.

Also included in this letter is information satisfying a commitment made in the WCNOC response to NRC Bulletin 2002-01 (Reference) relative to future inspections of the reactor pressure vessel head and penetration nozzles.

No commitments are identified in this submittal. If you should have any questions regarding this submittal, please contact me at (620) 364-4034, or Mr. Tony Harris at (620) 364-4038.

Very truly yours,

A handwritten signature in black ink, appearing to read "G. B. Fader", written in a cursive style.

Gary B. Fader

GBF/rlr

Attachment

A095

cc: J. N. Donohew (NRC), w/a  
D. N. Graves (NRC), w/a  
E. W. Merschoff (NRC), w/a  
Document Control Desk. w/a  
Senior Resident Inspector (NRC), w/a

STATE OF KANSAS    )  
                                  ) SS  
COUNTY OF COFFEY )

Gary B. Fader, of lawful age, being first duly sworn upon oath says that he is Vice President Technical Services of Wolf Creek Nuclear Operating Corporation; that he has read the foregoing document and knows the contents thereof; that he has executed the same for and on behalf of said Corporation with full power and authority to do so; and that the facts therein stated are true and correct to the best of his knowledge, information and belief.

By *Gary B. Fader*  
Gary B. Fader  
Vice President Technical Services

SUBSCRIBED and sworn to before me this 16<sup>th</sup> day of May, 2002.

*Cindy Novinger*  
Notary Public



Expiration Date July 8, 2002

**60-Day Response to NRC Bulletin 2002-01  
Reactor Pressure Vessel Head Degradation and  
Reactor Coolant Pressure Boundary Integrity**

Below is the Wolf Creek Nuclear Operating Corporation (WCNOC) response to the 60-day requirement of U.S. Nuclear Regulatory Commission (NRC) Bulletin 2002-01, "Reactor Pressure Vessel Head Degradation and Reactor Coolant Pressure Boundary Integrity," dated March 18, 2002. The bulletin's "Required Information" is shown in bold. Also included after the response to item 3.A. below is information satisfying a commitment made in the WCNOC response to NRC Bulletin 2002-01 (Reference 1) relative to evaluating enhancements to current inspection programs and practices for future inspections of the reactor pressure vessel head and penetration nozzles.

**Required Information**

- 3. Within 60 days of the date of this bulletin, all PWR addressees are required to submit to the NRC the following information related to the remainder of the reactor coolant pressure boundary:**
  - A. the basis for concluding that your boric acid inspection program is providing reasonable assurance of compliance with the applicable regulatory requirements discussed in Generic Letter 88-05 and this bulletin. If a documented basis does not exist, provide your plans, if any, for a review of your programs.**

**Response**

WCNOC has reasonable assurance that regulatory requirements pertaining to reactor coolant pressure boundary integrity are being met and will continue to be met in the future. Compliance with the applicable regulatory requirements discussed in Generic Letter 88-05 and NRC Bulletin 2002-01 is described in the WCNOC response to NRC Bulletin 2002-01 (Reference 1). WCNOC's policy is to minimize boric acid corrosion by applying integrated programs that provide for: 1) early detection of boric acid leaks; 2) inspection of areas surrounding identified boric acid leakage; 3) removal of boric acid from components; 4) evaluation of areas where leakage has occurred; and 5) action to mitigate the leak, perform repairs, and avoid future damage. The following information on WCNOC's boric acid corrosion inspection (BACINS) program provides the basis that reasonable assurance exists for current and future conformance with regulatory requirements.

The BACINS program applies to systems that contain boric acid. This includes systems from which leakage could potentially affect the reactor coolant pressure boundary. Boric acid leakage may be identified during BACINS program inspections, ASME Section XI system leakage inspections, and during scheduled containment entries which include area housekeeping inspections. Other activities that could identify boric acid leakage include the reactor coolant system (RCS) leakage surveillance test (to quantify identified and unidentified RCS leakage per Technical Specifications), monitoring containment radiation levels, and monitoring containment sumps levels.

Both the BACINS program procedure and the ASME Section XI system leakage test procedure have similar inspection requirements relative to identifying boric acid leaks. Each procedure has specific lists of components and areas to inspect. Both procedures also require the inspection personnel to be Level II certified, as a minimum, for the visual examination (VT-2) method. The BACINS program procedure is performed at the beginning of each refueling outage as RCS temperature and pressure are decreasing, and may be performed during other outages, at the discretion of station management. This inspection is typically completed early in an outage to preserve evidence of boric acid leakage prior to maintenance activities. The ASME Section XI system leakage test is performed near the end of a refueling outage, or any other outage that affects the reactor coolant pressure boundary. In accordance with ASME Section XI requirements, this test is performed at normal operating pressure.

If evidence of boric acid leakage is identified by any of the activities described above, or at any time during general work activities, procedural controls require initiation of documentation in accordance with WCNOG work control and corrective action programs. Administrative controls for identified boric acid leakage require locating the source of the leak, identifying other impacted components, cleaning boric acid from components, and determining if boric acid corrosion has occurred. Engineering evaluations are required for any components to be returned to service with identified active leakage, and any components identified with corrosion caused by boric acid leakage.

The BACINS program engineer reviews relevant industry operating experience for possible incorporation into applicable plant programs. Boric acid corrosion operating experience is also an integral part of both initial training and periodic continuing training for the certified examiners described above.

Based on the above, WCNOG has reasonable assurance that regulatory requirements discussed in Generic Letter 88-05 and NRC Bulletin 2002-01 pertaining to reactor coolant pressure boundary integrity are being met and will continue to be met in the future.

#### **Schedule and Plans for Future Inspections of the Reactor Vessel Head and Penetration Nozzles:**

As described the WCNOG response to NRC Bulletin 2002-01 (Reference 1), a remote visual inspection of the reactor vessel head has been completed. Determination of inspection frequency and detailed inspection requirements for future inspections are pending the final results of ongoing industry initiatives.

#### **Reference**

1. Letter ET 02-0018 from Rick Muench, WCNOG, to USNRC, "Response to NRC Bulletin 2002-01, Reactor Pressure Vessel Head Degradation and Reactor Coolant Pressure Boundary Integrity," dated April 3, 2002.