

# WOLF CREEK

NUCLEAR OPERATING CORPORATION

Richard D. Flannigan  
Manager Regulatory Affairs

February 9, 2010

RA 10-0013

U. S. Nuclear Regulatory Commission  
ATTN: Document Control Desk  
Washington, DC 20555

Subject: Docket No. 50-482: Inservice Inspection Program Third Interval,  
Second Period, Refueling Outage 17 Owner's Activity Report

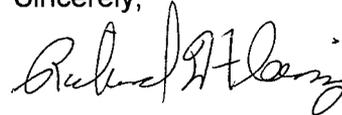
Gentlemen:

Enclosed is Wolf Creek Nuclear Operating Corporation's (WCNOC's) Owner's Activity Report (Form OAR-1, Report Number WCRE-16, I3-P2-RF17) for inservice inspections performed prior to and during Wolf Creek Generating Station's (WCGS) seventeenth refueling outage (RF17) that concluded on November 21, 2009. RF17 was the first outage of the second period of the third interval of the WCNOC Inservice Inspection Program. The enclosed report is submitted pursuant to the requirements of paragraph IWA-6240 of the 1998 Edition through 2000 Addenda of Section XI of the American Society of Mechanical Engineers (ASME) Boiler and Pressure Vessel Code and ASME Code Case N-532-4.

There are no commitments contained within this letter.

If you have any questions concerning this matter, please contact me at (620) 364-4117 or Ms. Diane Hooper at (620) 364-4041.

Sincerely,



Richard D. Flannigan

RDF/rtt

Enclosure

cc: E. E. Collins (NRC), w/e  
G. B. Miller (NRC), w/e  
B. K. Singal (NRC), w/e  
Senior Resident Inspector (NRC), w/e

A047  
NRK

**FORM OAR-1 OWNER'S ACTIVITY REPORT**

Report Number WCRE-16, I3-P2-RF17

Plant Wolf Creek Generating Station, 1550 Oxen Lane Northeast, Burlington, Kansas 66839

Unit No. 1 Commercial service date 9-3-1985 Refueling outage no. RF-17  
(if applicable)

Current inspection interval 3rd  
(1st, 2nd, 3rd, 4th, other)

Current inspection period 2st  
(1st, 2nd, 3rd)

Edition and Addenda of Section XI applicable to the inspection plans 1998 Edition through 2000 Addenda

Date and revision of inspection plans WCRE-16 Rev. 5, dated 10-5-2009

Edition and Addenda of Section XI applicable to repair/replacement activities, if different than the inspection plans same

Code Cases used: See Attachment 1  
(if applicable)

**CERTIFICATE OF CONFORMANCE**

I certify that (a) the statements made in this report are correct; (b) the examinations and tests meet the inspection Plan as required by the ASME Code, Section XI; and (c) the repair/replacement activities and evaluations supporting the completion of RF-17 conform to the requirements of Section XI.  
(refueling outage number)

Signed *Dana F. Tomp* ENGINEER Date 2/1/2010  
Owner or Owner's Designee, Title

**CERTIFICATE OF INSERVICE INSPECTION**

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State or Province of Kansas and employed by The Hartford Steam Boiler Inspection and Insurance Co. of Connecticut of Hartford, CT have inspected the items described in this Owner's Activity Report, and state that, to the best of my knowledge and belief, the Owner has performed all activities represented by this report in accordance with the requirements of Section XI.

By signing this certificate neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the repair/replacement activities and evaluation described in this report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.

*[Signature]* Commissions NB 13573 A.N.I. KS 657  
Inspector's Signature National Board, State, Province, and Endorsements

Date 1 FEB 2010

**TABLE 1  
ITEMS WITH FLAWS OR RELEVANT CONDITIONS THAT REQUIRED  
EVALUATION FOR CONTINUED SERVICE**

| Examination Category and Item Number | Item Description                                      | Evaluation Description  |
|--------------------------------------|---|---|
| D-B, D2.10                           | Essential Service Water (ESW) piping line EF138HBC-30 | A through wall leak was identified in an area with reduced thickness in this 30" pipe. Two other areas were also identified as having thickness below minimum wall. The character of the flaws in these areas was indicative of internal pitting. An evaluation was performed in accordance with Code Case N-513-2. The evaluation determined that structural integrity was intact and that the piping could remain in operation in the current condition until the next refueling outage. Reference SWOs 09-318203-002 and 09-318203-009. Repairs were performed on this piping per R/R plan 2009-051 listed in Table 2. |
| D-B, D2.10                           | ESW piping line EF150HBC-18                           | A through wall leak was identified in an area with reduced thickness in this 18" pipe. Another area was also identified as having thickness below minimum wall. Both flaws were characterized as being pit-like. An evaluation was performed in accordance with Code Case N-513-2. The evaluation determined that structural integrity was intact and that the piping could remain in operation in the current condition until the next refueling outage. Reference SWO 09-318982-001. Repairs were performed on this piping per R/R plan 2009-054 listed in Table 2.   |
| D-B, D2.10                           | ESW piping line EF049HBC-8                            | A through wall leak was identified in an area with reduced thickness in this 8" pipe. Another area was also identified  |

|  |  |   |
|--|--|---|
|  |  | <p>as having thickness below minimum wall. Both flaws were indicative of internal pitting. An evaluation was performed in accordance with Code Case N-513-2. The evaluation determined that structural integrity was intact and that the piping could remain in operation in the current condition until the next refueling outage. Reference SWO 09-319429-001. Repairs were performed on this piping per R/R plans 2009-061 and 2009-062 listed in Table 2.</p> |
|--|--|---|

**TABLE 2**  
**ABSTRACT OF REPAIR/REPLACEMENT ACTIVITIES REQUIRED FOR CONTINUED SERVICE**

| Code Class | Item Description                                 | Description of Work  | Date Completed | Repair/Replacement Plan Number |
|------------|--|--|----------------|--------------------------------|
| 3          | ESW piping line EF138HBC-30"                     | Installed three pressure boundary modification (encapsulations), one over a leaking area and the other two over areas with below minimum wall thickness.               | 10/01/2009     | 2009-051                       |
| 2          | Crosby Relief Valve in CVCS System               | Reworked BG8119, which failed set pressure test due to excessive seat leakage, by replacing nozzle and disc insert.  | 12/14/2009     | 2009-053                       |
| 3          | ESW piping line EF150HBC-18"                     | Cut out and replaced 18" pipe section containing the through wall leak and area of below minimum wall thickness with like material.                                    | 12/28/2009     | 2009-054                       |
| 3          | ESW piping line EF049HBC-8"                      | Repaired leak on ESW line by installing a pressure boundary modification (encapsulation) over the leaking area.  | 10/01/2009     | 2009-061                       |
| 3          | ESW piping line EF049HBC-8"                      | Repaired ESW line by installing a pressure boundary modification (encapsulation) over the area that was below minimum pipe wall thickness.                             | 12/21/2009     | 2009-062                       |
| 1          | Reactor Vessel Penetration # 17 Canopy Seal Weld | Installed a canopy seal clamp assembly on active Penetration #17 to stop leakage through seal welded joint.  | 12/29/2009     | 2009-084                       |
| 2          | Pressurizer Auxiliary Spray Line BG-026-BCB-2"   | Replaced a section of 2" stainless steel piping due to defects indicative of OD initiated SCC.   | 12/14/2009     | 2009-088                       |
| 2          | Pressurizer Auxiliary Spray Line BG-026-BCB-2"   | Replaced a section of 2" stainless steel piping due to defects indicative of OD initiated SCC.   | 12/14/2009     | 2009-094                       |
| 3          | Containment Cooler SGN01C Cooling Coil           | Due to through wall leakage, removed two cooling coils from service due to leakage by cutting off the nozzles and installed blind flanges on the manifold connections. | 12/15/2009     | 2009-107                       |

**ATTACHMENT 1**

**Code Cases used:**

|         |         |         |
|---------|---------|---------|
| N-460   | N-513-2 | N-532-4 |
| N-533-1 | N-552   | N-566-2 |
| N-616   | N-623   | N-624   |
| N-639   | N-652   | N-658   |
| N-685   | N-695   | N-700   |