



April 1, 2014

Russell A. Smith  
Site Vice President and Chief Nuclear Operating Officer

WO 14-0037

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

- References: 1) Letter WM 12-0023 dated August 2, 2012, from M. W. Sunseri, WCNOC, to USNRC
- 2) Letter WO 12-0071 dated December 13, 2012, from R. A. Smith, WCNOC, to USNRC

Subject: Docket No. 50-482: Closure of Essential Service Water System Corrosion Monitoring Commitment

Gentlemen:

Wolf Creek Nuclear Operating Corporation's (WCNOC) response to Notice of Violation EA-12-135 in Reference 1 contained a commitment to add corrosion coupon test locations to the supply and return lines for both Essential Service Water (ESW) trains at the above-ground to below-ground interface in the 1974-foot elevation of the Control Building by December 15, 2012. Reference 2 extended the completion date for that commitment to April 2, 2014.

The flowing-water corrosion monitoring skid or the TRASAR corrosion and biofouling monitoring skid for the Service Water (SW) System effectively monitors corrosion in the above-ground ESW piping because service water is diverted through the above-ground ESW piping under normal operating conditions. However, directly monitoring corrosion in the below-ground ESW piping with the TRASAR corrosion and biofouling monitoring skid is not feasible under normal operating conditions because the ESW System buried piping normally contains stagnant water. The TRASAR corrosion and biofouling monitoring skid requires flowing water to accurately monitor the under-deposit corrosion found in the ESW System.

Under-deposit corrosion in the ESW System is monitored through ultrasonic inspection by determining the wall thickness of ESW System piping. The capability to inspect the below-ground ESW piping using remotely operated Pipeline Inspection Gauges (PIGs) has been incorporated. The inspection program for ESW System piping has been implemented through procedure AP 23L-001, "Lake Water Systems Corrosion and Fouling Mitigation Program."

Inspection requirements, monitoring requirements, specifications for corrosion rates and methods for determining acceptance criteria have been added to procedure AI 23L-005, "Lake Water Piping Integrity," to support prevention of leaks from above-ground and below-ground ESW piping. In addition to monitoring ESW System corrosion by evaluating the wall thickness of ESW System piping, chemical treatments control microbiologically-induced corrosion, biological fouling and accumulation of deposits in the ESW System.

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Therefore, WCNOG has determined that the intent of the commitment to add corrosion coupon test locations to the supply and return lines for both ESW trains at the above-ground to below-ground interface in the 1974-foot elevation of the Control Building has been met through monitoring, inspection and treatment of the ESW System piping as a result of the ESW System piping replacement. If you have any questions concerning this matter, please contact me at (620) 364-4156, or Mr. Michael J. Westman at (620) 364-4009.

Sincerely,

A handwritten signature in dark ink, appearing to read 'RAS', followed by a long horizontal line extending to the right.

Russell A. Smith

RAS/rlt

cc: M. L. Dapas (NRC)  
C. F. Lyon (NRC)  
N. F. O'Keefe (NRC)  
Senior Resident Inspector (NRC)