WOLF CREEK
NUCLEAR OPERATING CORPORATION

Terry J. Garrett
Vice President Engineering

October 25, 2009

ET 09-0026

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

Subject: Docket No. 50-482: Notification of Deviation from EPRI Pressurized Water Reactor Secondary Water Chemistry Guidelines

Gentlemen:

The purpose of the letter is to provide notification to the Nuclear Regulatory Commission (NRC) of a plant-specific deviation from the Electric Power Research Institute (EPRI) Pressurized Water Reactor Secondary Water Chemistry Guidelines, Revision 7. This notification is being made in accordance with the guidance in Nuclear Energy Institute (NEI) 03-08, "Guideline for the Management of Materials Issues," Section 8 of Addendum E (Revision 3), "Materials Guidelines Implementation Protocol."

Wolf Creek Nuclear Operating Corporation (WCNOC) is deviating from the Table 5-1 requirement to sample steam generators in wet layup three times per week until chemistry parameters are stable. The Enclosure provides the detailed justification and alternative for this deviation.

This notification is being provided for information only and no response from the NRC is required. This letter contains no commitments. If you have any questions concerning this matter, please contact me at (620) 364-4084, or Mr. Richard D. Flannigan at (620) 364-4117.

Sincerely,

Terry J. Garrett

TJG/rlt

Enclosure

cc: E. E. Collins (NRC), w/e
M. G. Evans (NRC), w/e
V. G. Gaddy (NRC), w/e
B. K. Singal (NRC), w/e
Senior Resident Inspector (NRC), w/a

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Enclosure to ET 09-0026

STEAM GENERATOR MANAGEMENT PROGRAM
Industry Guideline Exception Detail Sheet
(2 pages)

APF 29A-003-01, Rev. 2

STEAM GENERATOR MANAGEMENT PROGRAM
Industry Guideline Exception Detail Sheet

Exception Title Secondary Chemistry Wet Layup Initial Monitoring Frequency

Date Exception Effective 10/01/2001

Time Frame Exception is Effective permanent (Permanent or list outage)

Applicable Industry Guideline Document and Revision EPRI Pressurized Water Reactor Secondary Water Chemistry Guidelines – Revision 7

Current Requirement Description: Section 5.5.1 Cold Shutdown/Wet Layup, Table 5-1 Wet Layup (RCS ≤ 200 ° F) Steam Generator Sample Control Parameter requires monitoring values until stable at a frequency of three times per week after filling or after significant water additions, then weekly once values are stable.

Exception Description: Wolf Creek deviates from the Table 5-1 requirement to sample Steam Generators in wet layup three times per week until chemistry parameters are stable. Wolf Creek performs a 33-hour recirculation, followed by weekly sampling instead of three samples per week until values are stable.

After filling the Steam Generators to wet layup, Wolf Creek performs a 33-hour recirculation, followed by sampling. If our sample results after 33 hours of recirculation indicate a failure to meet wet layup specifications, we take actions at that point to correct the layup mixture. After any chemical additions, the Steam Generator contents are recirculated for another 33 hours prior to sampling. If chemistry control parameters are within the specified limits, then sampling is performed on a weekly basis.

Wolf Creek is meeting the requirement to ensure thorough mixing of the steam generator bulk solution. Use of six-inch centrifugal steam generator wet layup recirculation pump and adequate sample flush times (three times the volume) provide samples that are representative of steam generator contents.

Based on data from past Refueling outages, Wolf Creek is meeting the intent of the EPRI requirement to ensure thorough mixing of the steam generator bulk solution. The following is Steam Generator A data from wet layup in Refuel 10, 12 and 14. Results from Steam Generator A, as listed in the table below, are representative of the remaining steam generators. This data was chosen due to limited maintenance during Refuel 10, 12, and 14, thus allowing the steam generators to be placed in wet layup, recirculated, and sampled routinely. Limited data was available for Refuel 15 and 16 due to extended times for scheduled maintenance (i.e. Refuel 16 MSIV replacement).

Refuel	Plant Mode	Date	Hydrazine Concentration (ppm)	pH
10	5	4-11-1999*	209	10.23
10	6	4-25-1999*	204	10.26
12	6	3-30-2002	246	10.19
12	7	4-6-2002	251	10.15
14	6	4-15-2005	220	10.37
14	7	4-21-2005	249	10.33

*The time between samples in Refuel 10 is longer than the weekly requirement due to outage activities preventing the steam generator to be placed on recirc.

Data values for steam generator sodium, chloride, and sulfate were not included in the table, because measured concentrations were typically ten times lower than the action level limits of 1000 ppb.

It is Wolf Creek's position that we meet the need for mixing and the ability to obtain a representative sample after 33 hours of recirculation, and three samples per week are not necessary.

There is no plan at this time to eliminate the deviation to EPRI Secondary Water Chemistry Guidelines – Revision 7 from Wolf Creek's Secondary Chemistry Control program. The justification will be reviewed with the next revision of the Guidelines to evaluate and/or validate the continued need for the deviation.

Organizations Impacted: Chemistry, Maintenance, Operations, and Integrated Plant Scheduling

Initiated Jennifer A. Wilson **Date** 10/5/2009

Technical Review [signature] **Date** 10-06-09

Reviewed Patrick D. Wagner **Date** 10-6-09

Steam Generator Engineer/ SG Asset Management Team

Off-Site Review Robert A. Miller **Date** 10-06-09

Station Concurrence Gary J. Pendergrass **Date** 10-11-09

Plant Health Committee

M W Sunseri **Date** 10/12/2009

Responsible Executive