

Terry J. Garrett  
Vice President, Engineering

ET 06-0038

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

Subject: Docket No. 50-482: Application for Renewed Operating License

Gentlemen:

Pursuant to Code of Federal Regulations, Title 10, Parts 50, 51 and 54, Wolf Creek Nuclear Operating Corporation (WCNOC) hereby requests the renewal of Facility Operating License Number NPF-42 for the Wolf Creek Generating Station (WCGS), Unit No. 1.

The current Operating License for WCGS expires at midnight, March 11, 2025. WCNOC requests that the WCGS Operating License be extended for 20 years beyond the current expiration date to midnight, March 11, 2045.

The enclosed License Renewal Application contains the information required by 10 CFR Part 54 for filing an application and the application meets the timeliness requirements of 10 CFR 54.17(c) and 10 CFR 2.109(b).

As required by 10 CFR 54.21(b), current licensing basis changes which have a material effect on the content of this application, will be identified at least annually while the application is under NRC review and at least three months prior to the scheduled completion of the NRC review.

Attachment II provides a summary of commitments made in this application. Implementation of new programs may require additional action items not included in this list. WCGS is committed to including new program elements in the corrective action program.

The Enclosure provides the CD-ROM submittal of the WCGS License Renewal Application in accordance with 10 CFR 2 Subpart A, 10 CFR 50.4, and 10 CFR 50.30.

If you have any questions concerning this matter, please contact me at (620) 364-4084, or Mr. Kevin Moles at (620) 364-4126.

Very truly yours,

A handwritten signature in black ink, appearing to read 'Terry J. Garrett', written in a cursive style.

Terry J. Garrett

TJG/rit


Attachment: I – Oath  
II – List of Regulatory Commitments

Enclosure: License Renewal Application

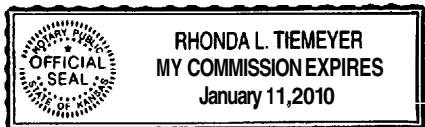
cc: J. N. Donohew (NRC), w/a, w/e  
G.E. Werner (NRC), w/a, w/e  
B. S. Mallett (NRC), w/a, w/e  
Senior Resident Inspector (NRC), w/a, w/e


STATE OF KANSAS    )  
                                  ) SS  
COUNTY OF COFFEY )

Terry J. Garrett, of lawful age, being first duly sworn upon oath says that he is Vice President Engineering 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   
Terry J. Garrett  
Vice President Engineering

SUBSCRIBED and sworn to before me this 27 day of Sept., 2006.



  
Notary Public

Expiration Date January 11, 2010

### LIST OF REGULATORY COMMITMENTS

The following table identifies a summary of those actions committed to by Wolf Creek Nuclear Operating Corporation (WCNOC) in this License Renewal Application (LRA). All commitments have a due date of March 11, 2025. Any other statements in this submittal are provided for information purposes and are not considered to be commitments. Please direct questions regarding these commitments to Mr. Kevin Moles at (620) 364-4126.

<b>COMMITMENT SUBJECT</b>	<b>LRA, Appendix A, Section</b>	<b>COMMITMENT DESCRIPTION</b>
Boric Acid Corrosion Program (RCMS 2006-198)	A1.4	Prior to the period of extended operation, procedures will be enhanced to state that susceptible components adjacent to potential leakage sources will include electrical components and connectors.
Nickel-Alloy Penetration Nozzles Welded To The Upper Reactor Vessel Closure Heads of Pressurized Water Reactors (RCMS 2006-199)	A1.5	Prior to the period of extended operation, procedures will be enhanced to indicate that detection of leakage or evidence of cracking in the vessel head penetration nozzles or associated welds will cause an immediate reclassification to the "High" susceptibility ranking, commencing from the same outage in which the leakage or cracking is detected.
Closed-Cycle Cooling Water System (RCMS 2006-200)	A1.10	Prior to the period of extended operation, a new periodic preventive maintenance activity will be developed to specify performing inspections of the internal surfaces of valve bodies and accessible piping while the valves are disassembled for operational readiness inspections to detect loss of material and fouling.
Inspection of Overhead Heavy Load and Light Load (Related to Refueling) Handling Systems (RCMS 2006-201)	A1.11	Prior to the period of extended operation, procedures will be enhanced to: (1) identify industry standards or Wolf Creek Generating Station (WCGS) specifications that are applicable to the component, and (2) specifically inspect for loss of material due to corrosion or rail wear.

<b>COMMITMENT SUBJECT</b>	<b>LRA, Appendix A, Section</b>	<b>COMMITMENT DESCRIPTION</b>
Fire Protection (RCMS 2006-202)	A1.12	Prior to the period of extended operation: (1) fire damper inspection and drop test procedures will be enhanced to inspect damper housing for signs of corrosion, (2) fire barrier and fire door inspection procedures will be enhanced to specify fire barriers and doors described in USAR Appendix 9.5A, "WCGS Fire Protection Comparison to APCSB 9.5-1 Appendix A", and WCGS Fire Hazards Analysis, and (3) training for technicians performing the fire door and fire damper visual inspection will be enhanced to include fire protection inspection requirements and training documentation.
Fuel Oil Chemistry (RCMS 2006-203)	A1.14	Prior to the period of extended operation: (1) the emergency fuel oil day tanks will be added to the ten year drain, clean, and internal inspection program, and (2) procedures will be enhanced to provide for supplemental ultrasonic thickness measurements if there are indications of reduced cross sectional thickness found during the visual inspection of the emergency fuel oil storage tanks.
One-Time Inspection (RCMS 2006-204)	A1.16	The One-Time Inspection program conducts one-time inspections of plant system piping and components to verify the effectiveness of the Water Chemistry program (A1.2), Fuel Oil Chemistry program (A1.14), and Lubricating Oil Analysis program (A1.23). This new program will be implemented and completed within the ten-year period prior to the period of extended operation.
Selective Leaching of Materials (RCMS 2006-205)	A1.17	The Selective Leaching of Materials program is a new program that will be implemented prior to the period of extended operation.

<b>COMMITMENT SUBJECT</b>	<b>LRA, Appendix A, Section</b>	<b>COMMITMENT DESCRIPTION</b>
Buried Piping and Tanks Inspection (RCMS 2006-206)	A1.18	The Buried Piping and Tanks Inspection program is a new program that will be implemented prior to the period of extended operation. Within the ten-year period prior to entering the period of extended operation, an opportunistic or planned inspection will be performed. Upon entering the period of extended operation a planned inspection within ten years will be required unless an opportunistic inspection has occurred within this ten-year period.
One-Time Inspection of ASME Code Class 1 Small-Bore Piping (RCMS 2006-207)	A1.19	The fourth interval of the ISI program at WCGS will provide the results for the one time inspection of ASME Code Class 1 small-bore piping.
Inspection of Internal Surfaces in Miscellaneous Piping and Ducting Components (RCMS 2006-208)	A1.22	The Inspection of Internal Surfaces in Miscellaneous Piping and Ducting Components program is a new program that will be implemented prior to the period of extended operation. For those systems or components where inspections of opportunity are insufficient, an inspection will be conducted prior to the period of extended operation to provide reasonable assurance that the intended functions are maintained.
Electrical Cables and Connections Not Subject to 10 CFR 50.49 Environmental Qualification Requirements (RCMS 2006-209)	A1.24	The Electrical Cables and Connections Not Subject to 10 CFR 50.49 Environmental Qualification Requirements program is a new program that will be implemented prior to the period of extended operation.
Electrical Cables Not Subject to 10 CFR 50.49 Environmental Qualification Requirements Used in Instrumentation Circuits (RCMS 2006-210)	A1.25	A review of the calibration surveillance test results will be completed before the period of extended operation and every 10 years thereafter.

<b>COMMITMENT SUBJECT</b>	<b>LRA, Appendix A, Section</b>	<b>COMMITMENT DESCRIPTION</b>
Inaccessible Medium Voltage Cables Not Subject to 10 CFR 50.49 Environmental Qualification Requirements (RCMS 2006-211)	A1.26	The Inaccessible Medium Voltage Cables Not Subject to 10 CFR 50.49 Environmental Qualification Requirements program is a new program that will be implemented prior to the period of extended operation.
ASME Section XI, Subsection IWL (RCMS 2006-212)	A1.28	Prior to the period of extended operation, procedures will be enhanced to include two new provisions regarding inspection of repair/replacement activities. The 2003 edition of ASME Section XI, Subsection IWL, Article IWL-2000, includes two provisions that are not required by the 1998 edition. IWL-2410(d) specifies additional inspections for concrete surface areas affected by a repair/replacement activity, and IWL-2521.2 specifies additional inspections for tendons affected by a repair/replacement activity. In accordance with 10 CFR 50.55a, WCGS will revise their CISI program prior to the next inspection interval to incorporate the ASME Code edition and addenda incorporated into 10 CFR 50.55a at that time.
Masonry Wall Program (RCMS 2006-213)	A1.31	Prior to the period of extended operation, procedures will be enhanced to identify un-reinforced masonry in the Radwaste Building within the scope of license renewal that requires aging management.
Structures Monitoring Program (RCMS 2006-214)	A1.32	Prior to the period of extended operation, procedures will be enhanced to add inspection parameters for treated wood.

<b>COMMITMENT SUBJECT</b>	<b>LRA, Appendix A, Section</b>	<b>COMMITMENT DESCRIPTION</b>
RG 1.127, Inspection of Water-Control Structures Associated with Nuclear Power Plants (RCMS 2006-215)	A1.33	Prior to the period of extended operation, procedures will be enhanced: (1) so that the main dam service spillway and the auxiliary spillway will be inspected in accordance with the same specification, (2) to clarify the scope of inspections for the spillways, (3) to add the 5 year inspection frequency for the main dam service spillway, and (4) to add cavitation to the list of concrete aging effects for surfaces other than spillways.
Reactor Coolant System Supplement (RCMS 2006-216)	A1.35	WCNOG will: A. Reactor Coolant System Nickel Alloy Pressure Boundary Components Implement applicable (1) NRC Orders, Bulletins and Generic Letters associated with nickel alloys and (2) staff-accepted industry guidelines, and B. Reactor Vessel Internals (1) Participate in the industry programs for investigating and managing aging effects on reactor internals; (2) evaluate and implement the results of the industry programs as applicable to the reactor internals; and (3) upon completion of these programs, but not less than 24 months before entering the period of extended operation, WCNOG will submit an inspection plan for reactor internals to the NRC for review and approval.
Electrical Cable Connections Not Subject To 10 CFR 50.49 Environmental Qualification Requirements (RCMS 2006-217)	A1.36	Prior to the period of extended operation, the infrared thermography testing procedure will be enhanced to require an engineering evaluation when test acceptance criteria are not met. This engineering evaluation will include identifying the extent of condition, the potential root cause for not meeting the test acceptance, and the likelihood of recurrence.



COMMITMENT SUBJECT	LRA, Appendix A, Section	COMMITMENT DESCRIPTION
Metal Fatigue of Reactor Coolant Pressure Boundary (RCMS 2006-218)	A2.1	<p>Prior to the period of extended operation, the Metal Fatigue of Reactor Coolant Pressure Boundary program will be enhanced to include: (1) Action levels to ensure that if the fatigue usage factor calculated by the code analysis is reached at any monitored location, appropriate evaluations and actions will be invoked to maintain the analytical basis of the leak-before-break (LBB) analysis and of the high-energy line break (HELB) locations, or to revise them as required, (2) Action levels to ensure that appropriate evaluations and actions will be invoked to maintain the bases of safety determinations that depend upon fatigue analyses, if the fatigue usage factor at any monitored location approaches 1.0, or if the fatigue usage factor at any monitored NUREG/CR6260 location approaches 1.0 when multiplied by the environmental effect factor <math>F_{EN}</math>, (3) Corrective actions, on approach to these action levels, that will determine whether the scope of the monitoring program must be enlarged to include additional affected reactor coolant pressure boundary locations in order to ensure that additional locations do not approach the code limit without an appropriate action, and to ensure that the bases of the LBB and HELB analyses are maintained, (4) 10 CFR 50 Appendix B procedural and record requirements. Prior to the period of extended operation, changes in available monitoring technology or in the analyses themselves may permit different action limits and action statements, or may re-define the program features and actions required to address the fatigue time-limited aging analyses (TLAAs).</p>

<b>COMMITMENT SUBJECT</b>	<b>LRA, Appendix A, Section</b>	<b>COMMITMENT DESCRIPTION</b>
Environmental Qualification of Electrical Components (RCMS 2006-219)	A2.2	Prior to the period of extended operation, program documents will be enhanced to describe methods that may be used for qualified life evaluations for the period of extended operation.
Concrete Containment Tendon Prestress (RCMS 2006-220)	A2.3	Prior to the period of extended operation, procedures will be revised to: (1) extend the list of surveillance tendons to include random samples for the year 40, 45, 50, and 55 year surveillances, (2) explicitly require a regression analysis for each tendon group after every surveillance, (3) invoke and describe regression analysis methods used to construct the lift-off trend lines, (4) extend surveillance program predicted force lines for the vertical and hoop tendon groups to 60 years, and (5) conform procedure descriptions of acceptance criteria action levels to the ASME Code, Subsection IWL 3221 descriptions.
ASME III Subsection NG Fatigue Analysis of Reactor Pressure Vessel Internals (RCMS 2006-221)	A3.2.2	WCNOC will obtain a design report amendment to either quantify the increase in high-cycle fatigue effects, or to confirm that the increase will be negligible. WCNOC will complete this action before the end of the current licensed operating period.
Assumed Thermal Cycle Count for Allowable Secondary Stress Range Reduction Factor in B31.1 and ASME III Class 2 and 3 Piping (RCMS 2006-222)	A3.2.4	WCNOC will complete the reanalysis of the reactor coolant sample lines and any additional corrective actions or modifications indicated by them, before the end of the current licensed operating period.
USAR Supplement (RCMS 2006-223)	A0	Following issuance of the renewed operating license in accordance with 10 CFR 50.71(e), WCNOC will incorporate the USAR supplement into the WCGS USAR as required by 54.21(d).
Pressure-Temperature (P-T) Limits (RCMS 2006-224)	A3.1.3	WCNOC will revise the Pressure and Temperature Limits Report for a 60-year licensed operating life.

<b>COMMITMENT SUBJECT</b>	<b>LRA, Appendix A, Section</b>	<b>COMMITMENT DESCRIPTION</b>
Implementation of New Programs (RCMS 2006-225)	N/A	Implementation of new programs may require additional action items not included in this list. WCGS is committed to including new program elements in the corrective action program.

**Subject**

Enclosed is the CD-ROM submittal of the Wolf Creek License Renewal Application.

**Contact**

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<b>E-Mail Address</b>	<a href="mailto:kemoles@wcnoc.com">kemoles@wcnoc.com</a>
<b>Phone Number</b>	620-364-4126

**Document Components:**

The CD-ROM labeled "Wolf Creek License Renewal Application" contains the following files:

License Renewal Application Transmittal Letter; WCNOG\_Xmttl.pdf (publicly available)  
License Renewal Application; WCNOG\_LRA.pdf (publicly available)  
Environmental Report; WCNOG\_AppE.pdf (publicly available)  
License Renewal boundary drawings; WCNOG\_Dwg.pdf (publicly available)