



UNITED STATES
NUCLEAR REGULATORY COMMISSION
WASHINGTON, D.C. 20555-0001

April 25, 2016

Mr. Adam C. Heflin
President, Chief Executive Officer,
and Chief Nuclear Officer
Wolf Creek Nuclear Operating Corporation
Post Office Box 411
Burlington, KS 66839

SUBJECT: WOLF CREEK GENERATING STATION – REQUEST FOR ADDITIONAL
INFORMATION RE: LICENSE AMENDMENT REQUEST TO ALLOW USE OF
OPTIMIZED ZIRLO™ (CAC NO. MF7285)

Dear Mr. Heflin:

By letter dated January 27, 2016, Wolf Creek Nuclear Operating Corporation (the licensee) submitted to the U.S. Nuclear Regulatory Commission (NRC) a license amendment request to revise the Wolf Creek Generating Station (WCGS) Technical Specifications to allow the use of Optimized ZIRLO™ as an approved fuel rod cladding.

The NRC staff has reviewed the information provided in your application and determined that additional information is required in order to complete its formal review. The enclosed questions were provided to Mr. J. Knust of your staff on April 12, 2016, and discussed in a telecon with Mr. Knust, et al., of your staff on April 25, 2016. Please provide a response to the enclosed questions within 30 days of the date of this letter. If you have any questions, please contact me at 301-415-2296 or via e-mail at fred.lyon@nrc.gov.

Sincerely,

A handwritten signature in black ink, appearing to read "CF Lyon", is positioned below the word "Sincerely,".

Carl F. Lyon, Project Manager
Plant Licensing Branch IV-1
Division of Operating Reactor Licensing
Office of Nuclear Reactor Regulation

Docket No. 50-482

Enclosure
Request for Additional Information

cc w/encl: Distribution via Listserv

REQUEST FOR ADDITIONAL INFORMATION

WOLF CREEK NUCLEAR OPERATING CORPORATION

WOLF CREEK GENERATING STATION

DOCKET NO. 50-482

By letter dated January 27, 2016 (Agencywide Documents Access and Management System (ADAMS) Accession No. ML16033A470), Wolf Creek Nuclear Operating Corporation (WCNOC, the licensee) submitted to the U.S. Nuclear Regulatory Commission (NRC) a license amendment request to revise the Wolf Creek Generating Station (WCGS) Technical Specifications to allow the use of Optimized ZIRLO™ as an approved fuel rod cladding. The NRC staff has reviewed the information provided in the application and determined that the additional information below is required in order to complete its formal review.

Please demonstrate that that same thermal-hydraulic analysis and transient and accident analysis used (non-loss-of-coolant accident (LOCA); non-LOCA) for WCGS as described in References 1, 2, and 3 will not be impacted by the transition to Optimized ZIRLO™. This should include (1) demonstrating that the process is valid for all resident fuel designs licensed for WCGS, (2) demonstrating that the transition has no impact on both non-LOCA and LOCA analyses methodologies at WCGS, and (3) addressing the change to the cladding or structural materials for the fuel assembly skeleton and its impact on the thermal-hydraulic analysis. Additionally, please provide the three references.

References:

1. WCNOC Topical Report TR 90-0025 W01, "Core Thermal Hydraulic Analysis Methodology for the Wolf Creek Generating Station."
2. WCNOC Topical Report NSAG-006, "Transient Analysis Methodology for the Wolf Creek Generating Station."
3. WCNOC Topical Report NSAG-007, "Reload Safety Evaluation Methodology for the Wolf Creek Generating Station."

Enclosure

April 25, 2016

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/RA/

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Plant Licensing Branch IV-1
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