



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

November 25, 2008

Mr. J. V. Parrish
Chief Executive Officer
Energy Northwest
P.O. Box 968 (Mail Drop 1023)
Richland, WA 99352-0968

SUBJECT: COLUMBIA GENERATING STATION - REQUEST FOR ADDITIONAL
INFORMATION RELATED TO REQUEST FOR CHANGES TO TECHNICAL
SPECIFICATIONS INVOLVING COLR AND SCRAM TIME TESTING
(TAC NO. MD9247)

Dear Mr. Parrish:

By application dated July 16, 2008, to the U.S. Nuclear Regulatory Commission (NRC), Energy Northwest submitted a license amendment request for Columbia Generating Station. The proposed changes revise Technical Specifications 3.1.4, "Control Rod Scram Times," 3.2.2, "Minimum Critical Power Ratio (MCPR)," and 5.6.3, "Core Operating Limits Report (COLR)." The proposed changes involve incorporating the analytical methodologies associated with operation of Global Nuclear Fuel-Americas (GNF) fuel into the licensing basis to support transition to GNF GE14 fuel.

The NRC staff is reviewing your submittal and has determined that additional information is required to complete its review. The specific information requested is addressed in the enclosure to this letter. Please provide a response by January 2, 2009, to this request for additional information.

The NRC staff considers that timely responses to requests for additional information help ensure sufficient time is available for staff review and contribute toward the NRC's goal of efficient and effective use of staff resources. If circumstances result in the need to revise the requested response date, please contact me at (301) 415-2296.

Sincerely,

A handwritten signature in black ink that reads "CF Lyon".

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

Docket No. 50-397
Enclosure: As stated
cc w/encl: Distribution via ListServ

REQUEST FOR ADDITIONAL INFORMATION
RELATED TO REQUEST FOR LICENSE AMENDMENT
ENERGY NORTHWEST
COLUMBIA GENERATING STATION
DOCKET NUMBER 50-397

By application dated July 16, 2008, to the U.S. Nuclear Regulatory Commission (NRC) (Agencywide Document Access and Management System (ADAMS) Accession No. ML082250680), Energy Northwest submitted a license amendment request for Columbia Generating Station (CGS). The proposed changes revise Technical Specifications (TS) 3.1.4, "Control Rod Scram Times," 3.2.2, "Minimum Critical Power Ratio (MCPR)," and 5.6.3, "Core Operating Limits Report (COLR)." The proposed changes involve incorporating the analytical methodologies associated with operation of Global Nuclear Fuel-Americas (GNF) fuel into the licensing basis to support transition to GNF GE14 fuel.

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1. The application dated July 16, 2008, describes a transition from the current core with a full loading of ATRIUM-10 to a full loading of GE14 fuel for the CGS. Accordingly, the application describes a transition to GNF analytical methodologies (NEDC-33419P and NEDE-24011-P-A). Once the NRC staff approves the inclusion of these methodologies into the TS, the licensee calculates the core operating limits listed in TS 5.6.5a and performs the plant accident analyses without further review by the NRC staff, consistent with Generic Letter 88-16, "Removal of Cycle-Specific Parameter Limits for Technical Specifications." Therefore, the NRC staff requests that the licensee provide additional information to allow the staff to review the impact of the transition on the safety analyses.

Specifically, for the affected analyses performed for the initial transition core:

- a) Please state the approved methodology and/or the computer codes used and the reference (e.g. topical report) documenting the methodology/computer codes;
- b) Please state if the analysis is in compliance with all applicable restrictions in the staff safety evaluation(s) approving the methodology; and
- c) Please provide the quantitative results of the figure(s) of merit (FOM) compared against the acceptance criteria.

For the LOCA analysis, provide a narrative showing that:

- a) the limiting break location, break size, and single failure(s) were identified and used;
- b) the limiting power/flow conditions and axial power shape were used; and

- c) the legacy fuel analysis (MAPLHGR) will continue to be applicable through the transition cycles.

Similar information was provided for the Grand Gulf amendment request for a similar transition (ADAMS Accession No. ML0824703610).

2. The application states that the Westinghouse SVEA-96 fuel may be re-introduced from the discharged fuel in the spent fuel pool, if failed fuel replacement is required. What is the licensing basis that permits the GNF methodologies to model the SVEA-96 fuel?
3. Please provide the mixed core analysis demonstrating the thermal-hydraulic compatibility of ATRIUM-10 and GE14 for CGS.
4. The following statement in the application, "The approach discussed in Reference 7.2 was adopted into the BWR/4 STS and resulted in simplifying the scram time LCO for plants utilizing the GNF methodology," seem to imply that this approach may not be applicable to plants not using the GNF methodology. Please clarify this statement.
5. Please provide the actual scram time table used in the transient analysis.
6. Please provide the CGS scram time performance data from past cycles to justify proposed scram time table. Also, based on historical CGS data, how many control rods would typically be considered slow based on the proposed scram time table?

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/RA/

Carl F. Lyon, Project Manager
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Docket No. 50-397
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