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GO2-16-067

10 CFR 50.46(a)(3)(ii)

U.S. Nuclear Regulatory Commission
ATTN: Document Control Desk
Washington, D.C. 20555-0001

Subject: **COLUMBIA GENERATING STATION, DOCKET NO. 50-397
REPORT OF CHANGES OR ERRORS IN ECCS LOSS OF COOLANT
ACCIDENT (LOCA) ANALYSIS MODELS PURSUANT TO 10 CFR 50.46**

Dear Sir or Madam:

This report is provided in accordance with 10 CFR 50.46(a)(3)(ii), which requires, in part, annual reporting of changes to, or errors in, evaluation models used for calculating emergency core cooling system (ECCS) performance, and an estimate of their effect on the limiting ECCS analysis.

The Columbia Generating Station (Columbia) core consists of a mixture of Global Nuclear Fuel GE14 fuel and Global Nuclear Fuel GNF2 fuel. The attached report provides the details related to changes affecting the analysis of record. There were no changes to the GE14 fuel; however, a new analysis of record for GNF2 fuel was introduced during this reporting period.

Since the last 10 CFR 50.46 report dated April 28, 2015, there were no changes or errors reported to Columbia by the fuel vendor Global Nuclear Fuel.

The licensing basis Peak Clad Temperature for all fuel types in the core remains within the acceptance criteria set forth in 10 CFR 50.46 (i.e., ≤ 2200 °F). This letter meets the annual reporting requirements.

There are no commitments being made to the NRC herein. If you have any questions, or require additional information, please contact Ms. D. M. Wolfgramm at (509) 377-4792.

Executed on 20th of April, 2016
Respectfully,

A. L. Javorik
Vice President, Engineering

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Attachment: LOCA Margin Summary Sheet – Annual Report for 2015

cc: NRC Region IV Administrator
NRC NRR Project Manager
NRC Senior Resident Inspector/988C
CD Sonoda – BPA/1399
WA Horin – Winston & Strawn

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Attachment

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**Loss of Coolant Accident Margin Summary Sheet – Annual Report for 2015
(Per NFM-4-1 Table 7-b)**

Plant Name: Columbia Generating Station				
Utility Name: Energy Northwest				
Evaluation Model: (Description or Name) GE14: SAFER/GESTR-LOCA Models, GNF2: SAFER/PRIME-LOCA Models				
			Net PCT Effect	Absolute PCT Effect
A.	GE14 Fuel – Prior 10 CFR 50.46 Changes or Error Corrections – This Year			
	2015 – GE14 Fuel – No changes	$\Delta PCT =$	0 °F	0 °F
	GE14 Fuel – Absolute Sum of 10 CFR 50.46 Changes	$\Delta PCT =$		0 °F
B.	GNF2 Fuel – Prior 10 CFR 50.46 Changes or Error Corrections – This Year			
	2015 – GNF2 Fuel – No changes	$\Delta PCT =$	0 °F	0 °F
	GNF2 Fuel – Absolute Sum of 10 CFR 50.46 Changes	$\Delta PCT =$		0 °F

The sum of the Peak Cladding Temperature (PCT) from the most recent analysis using an acceptable evaluation model and the estimates of PCT impact for changes and errors identified since this analysis is less than 2200 °F. PCT prior to this report was 1730 °F for GE14 fuel. With this report a new analysis of record for GNF2 fuel is reported; all errors and changes reported since the previous analysis of record have been incorporated. Current PCT, including all changes and errors, is 1730 °F for GE14 fuel and 1700 °F for GNF2 fuel.

References:

1. NE-02-03-08 Revision 3, “10 CFR 50.46 Cumulative PCT – Changes in ECCS LOCA Models”
2. AR 341520, “10 CFR 50.46 (ECCS) Annual reporting requirements (187662)”
3. NFM-4-1 Revision 2, “Tracking Changes in ECCS LOCA Analysis”, Table 7-b