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Waterford 3

10 CFR 50.46

W3F1-2021-0019

March 30, 2021

U.S. Nuclear Regulatory Commission
Attn: Document Control Desk
Washington, DC 20555-0001

Subject: Annual Report on Westinghouse Electric Company LLC Combustion
Engineering Emergency Core Cooling System Performance Evaluation
Models for Calendar Year 2020
Waterford Steam Electric Station Unit 3
Docket No. 50-382
Renewed Facility Operating License No. NPF-38

This letter provides the Waterford Steam Electric Station Unit 3 (Waterford 3) 10 CFR 50.46(a)(3)(ii) reporting information pertaining to the Westinghouse Electric Company Emergency Core Cooling System (ECCS) performance Evaluation Models (EMs) for calendar year 2020.

There were no changes, error corrections, or enhancements to the 1999 Evaluation Model (EM) which is used in the Large Break Loss-of-Coolant Accident (LBLOCA) Emergency Core Cooling Systems (ECCS) performance analysis. In addition, there were no changes, error corrections, or enhancements to the Supplement 2 Evaluation Model (S2M) which is the EM used in the Small Break Loss-of-Coolant Accident (SBLOCA) ECCS performance analysis.

This letter contains no new commitments.

Please contact Paul Wood, Regulatory Assurance Manager, at 504-464-3786 should you have any questions regarding this submittal.

Respectfully,

Paul Wood Digitally signed by Paul Wood
Date: 2021.03.30 15:22:07 -05'00'

PW/llb

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Attachment: Waterford Steam Electric Station Unit 3 10 CFR 50.46 Annual Notification and Reporting for 2020

cc:
NRC Region IV Regional Administrator
NRC Senior Resident Inspector – Waterford 3
NRC Project Manager – Waterford 3

Attachment to

W3F1-2021-0019

Waterford Steam Electric Station Unit 3

10 CFR 50.46 Annual Notification and Reporting for 2020

**Waterford Steam Electric Station Unit 3
10 CFR 50.46 Annual Notification and Reporting for 2020**

There were no changes, error corrections, or enhancements to the 1999 Evaluation Model (EM), which is the EM used in Waterford 3 Large Break Loss-of-Coolant Accident (LBLOCA) Emergency Core Cooling System (ECCS) performance analysis in calendar year 2020. In addition, there were no changes, error corrections or enhancements to the Supplement 2 Evaluation Model (S2M), which is the EM used in Waterford 3 Small Break Loss-of-Coolant Accident (SBLOCA) ECCS performance analysis in calendar year 2020.

The limiting PCT results for the large and small break LOCAs continue to meet the criteria of 10 CFR 50.46, paragraph (b) for calendar year 2020.

A summary of the information related to peak clad temperatures (PCT) and adjustment to peak clad temperatures is provided in the following table:

Summary of Information for Waterford 3 10 CFR 50.46 Annual Report for 2020

	Analysis of Record (AOR) Peak Cladding Temperature (PCT), °F Evaluation Model (EM) Used AOR Date	Adjustment as of End-of-Year (EOY) 2020, (°F)	Net PCT at the EOY 2020, (°F)
Small-Break Loss-of-Coolant Accident (SBLOCA)	1925 S2M 6/19/2009	-27	1898
Large-Break Loss-of-Coolant Accident (LBLOCA)	2092 1999EM 7/16/2009	-8.4	2083.6