

10 CFR 50.46

W3F1-2022-0017

April 7, 2022

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

Subject: Annual Report on Westinghouse Electric Company LLC Combustion
Engineering Emergency Core Cooling System Performance Evaluation
Models for Calendar Year 2021

Waterford Steam Electric Station, Unit 3
NRC 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 2021.

There are no new commitments contained in this submittal.

Should you have any questions concerning this issue, please contact John D. Lewis, Manager,
Regulatory Assurance, at 504-739-6028.

Respectfully,



John Lewis
JDL/Ilb

Enclosure: Waterford Steam Electric Station Unit 3 10 CFR 50.46 Annual Notification and
Reporting for 2021

cc: NRC Region IV Operator Licensing Assistant (w/ Enclosure)
NRC Senior Resident Inspector – Waterford Steam Electric Station, Unit 3 (w/ Enclosure)
NRR Project Manager (w/ Enclosure)

Enclosure to

W3F1-2022-0017

10 CFR 50.46 Annual Notification and Reporting for 2021

(1 page)

**Waterford Steam Electric Station Unit 3
10 CFR 50.46 Annual Notification and Reporting for 2021**

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 2021. 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 2021.

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 2021.

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 2021

	Analysis of Record (AOR) Peak Cladding Temperature (PCT), °F Evaluation Model (EM) Used AOR Date	Adjustment as of End-of-Year (EOY) 2021, (°F)	Net PCT at the EOY 2021, (°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