



John Twarog
Manager
Regulatory Assurance
504-739-6747

W3F1-2025-0018

10 CFR 50.46

April 15, 2025

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 (CY) Calendar Year 2024

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 2024.

This letter contains no new regulatory commitments.

Should you have any questions or require additional information, please contact John Twarog,
Manager, Regulatory Assurance, at 504-739-6747.

Respectfully,

A handwritten signature in black ink, appearing to read 'John Twarog', written over a horizontal line.

John Twarog

JT/Ilb

Enclosure: Waterford Steam Electric Station Unit 3 10 CFR 50.46 Annual Notification and Reporting for CY 2024

cc: NRC Region IV Regional Administrator
NRC Senior Resident Inspector – Waterford 3
NRC Project Manager – Waterford 3
Louisiana Department of Environmental Quality

Enclosure

W3F1-2025-0018

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

**WATERFORD STEAM ELECTRIC STATION UNIT 3
10 CFR 50.46 ANNUAL NOTIFICATION AND REPORTING FOR 2024**

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 2024. 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 2024.

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 2024.

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 2024

	Analysis of Record (AOR) Peak Clad Temperature (PCT), (°F) Evaluation Model (EM) Used AOR Date	Adjustment as of End-of-Year (EOY) 2024, (°F)	Net PCT at the EOY 2024, (°F)
Small-Break Loss-of-Coolant Accident (SBLOCA)	1925 S2M 6/19/2009	-27	1898
Large-Break Loss-of-Coolant Accident (LBLOCA)	2092 1999 EM 7/16/2009	-6.1	2085.9