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U. S. Nuclear Regulatory Commission
Attention: Document Control Desk
Washington, D. C. 20555

Serial No.: NA3-19-003
NRA/SS R0
Docket No.: 52-017
License No.: NPF-103

VIRGINIA ELECTRIC AND POWER COMPANY
NORTH ANNA UNIT 3
REPORT OF 10 CFR 50.46 EMERGENCY CORE COOLING SYSTEM
(ECCS) MODEL CHANGES

General Electric Hitachi Nuclear Energy (GEH) reported no changes to the ECCS model for the Certified Economic Simplified Boiling Water Reactor (ESBWR) Design in letter M180188 from Jerald G. Head (GEH) to U. S. Nuclear Regulatory Commission, "ESBWR Design Certification Annual 10 CFR 50.46 Report for 2018," dated October 1, 2018. The ECCS evaluation model change conclusion provided by GEH is applicable to the North Anna Unit 3 (NA3) Combined Operating License. Therefore, in accordance with 10 CFR 50.46 (a)(3)(ii), this report is being submitted on the NA3 docket.

Attachment 1 provides the Report of Changes in the GEH ECCS Evaluation Model.

If you have any questions regarding this submittal, please contact Mr. Shayan Sinha at (804) 273-4687.

Very truly yours,

A handwritten signature in black ink, appearing to read "Mark D. Sartain", followed by a horizontal line.

Mark D. Sartain

Vice President – Nuclear Engineering and Fleet Support

Attachment: Report of Changes in GEH ECCS Evaluation Model

cc: (electronic distribution, except where noted)

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Attachment

**2018 ANNUAL REPORT OF EMERGENCY CORE COOLING SYSTEM (ECCS)
MODEL CHANGES PURSUANT TO THE REQUIREMENTS OF 10 CFR 50.46**

REPORT OF CHANGES IN GEH ECCS EVALUATION MODEL

**VIRGINIA ELECTRIC AND POWER COMPANY
NORTH ANNA UNIT 3**

Report of Changes in GEH ECCS Evaluation Model

Plant Name	North Anna Unit 3 (Docket 52-017)			
Utility Name	Virginia Electric and Power Company			
Reporting Year: 2018				
Evaluation Model: TRACG				
Vendor: GE Hitachi				
		LBPCT	Net PCT Effect	Absolute PCT Effect
	Analysis of Record Licensing Basis PCT (LBPCT), with prior updates	600°F		
I.	Prior 10 CFR 50.46 Changes or Error Corrections			
	2017-02: Fuel Rod Plenum Temperature Update	$\Delta PCT =$	+ 0°F	+ 0°F
II.	10 CFR 50.46 Changes or Error Corrections for 2018			
	None	$\Delta PCT =$	+ 0°F	+ 0°F
	Sum of 10 CFR 50.46 Changes	$\Delta PCT =$	+ 0°F	+ 0°F
	Projected LBPCT based on these changes	600°F		