Energy Harbor Nuclear Corp.
Beaver Valley Power Station
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John J. Grabnar
Site Vice President, Beaver Valley Nuclear

330-436-1356

July 7, 2021
L-21-141

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

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

Subject:
Beaver Valley Power Station, Unit Nos. 1 and 2
Docket No. 50-334, License No. DPR-66
Docket No. 50-412, License No. NPF-73
2020 Annual 10 CFR 50.46 Report of Changes to or Errors in Emergency Core Cooling System Evaluation Models

In accordance with 10 CFR 50.46(a)(3)(ii), Energy Harbor Nuclear Corp. hereby submits the 2020 annual report of changes to or errors in emergency core cooling system (ECCS) evaluation model, or in the application of such model, for the Beaver Valley Power Station, Unit Nos. 1 (BVPS-1) and 2 (BVPS-2). The attached report covers the period of January 1, 2020, to December 31, 2020.

There are no regulatory commitments contained in this letter. If there are any questions or if additional information is required, please contact Mr. Phil H. Lashley, Manager - Fleet Licensing, at 330-696-7208.

Sincerely,

Grabnar, John 19072
Grabnar, John 19072
Site Vice President, Beaver Valley
I am approving this document
Jul 7 2021 6:58 AM
DocuSign

John J. Grabnar

Attachment:
2020 Annual 10 CFR 50.46 Report of Changes to or Errors in Emergency Core Cooling System Evaluation Models

cc: NRC Region I Administrator
NRC Resident Inspector
NRR Project Manager
Director BRP/DEP
Site BRP/DEP Representative

Attachment
L-21-141

2020 Annual 10 CFR 50.46 Report of Changes to or Errors in
Emergency Core Cooling System Evaluation Models

Title 10 of the *Code of Federal Regulations*, Part 50, Section 50.46(a)(3) states that each holder of an operating license shall report to the Nuclear Regulatory Commission (NRC), at least annually, each change to or error in an acceptable emergency core cooling system (ECCS) evaluation model (EM), or in the application of such a model, that affects the calculation of peak cladding temperature (PCT). The nature of the change or error and its estimated effect on the limiting ECCS analysis is to be included in the report.

During the 2020 calendar year, there were no changes or errors in the evaluation model for the current reporting period currently being used to support the design basis at BVPS-1 and BVPS-2.

Therefore, a net PCT change of 0°F (analyzed) from the end of 2019 to the end of 2020 is reported for the Small Break LOCA and Large Break LOCA analyses.

The estimated effects on the peak cladding temperatures for this reporting period are summarized in Table 1.

Table 1
10 CFR 50.46 Summary for 2020

Beaver Valley Power Station, Unit 1		Large Break LOCA	Small Break LOCA
		PCT or PCT Change	PCT or PCT Change
Licensing Basis PCT at BEGINNING of 2020		1840°F	1895°F
2020 Activity			
EM Changes	None	0°F	0°F
EM Errors	None	0°F	0°F
Licensing Basis PCT at END of 2020		1840°F	1895°F

Beaver Valley Power Station, Unit 2		Large Break LOCA	Small Break LOCA
		PCT or PCT Change	PCT or PCT Change
Licensing Basis PCT at BEGINNING of 2020		1839°F	1917°F
2020 Activity			
EM Changes	None	0°F	0°F
EM Errors	None	0°F	0°F
Licensing Basis PCT at END of 2020		1839°F	1917°F