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10 CFR 50.46

NL-19-094

December 16, 2019

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

Subject: 2018 Annual 10 CFR 50.46 Emergency Core Cooling System Evaluation Changes Report

> Indian Point Unit Nos. 2 and 3 NRC Docket Nos. 50-247 and 50-286 Renewed Facility Operating License Nos. DPR-26 and DPR-64

Reference: Entergy Nuclear Operations, Inc. (Entergy) letter to U.S. Nuclear Regulatory Commission (NRC), "2017 Annual 10 CFR 50.46 Emergency Core Cooling System Evaluation Changes Report," (Letter No. NL-18-082) (ADAMS Accession No. ML18323A081), dated November 13, 2018

This letter provides the annual Title 10 of the Code of Federal Regulations (10 CFR) 50.46 report for calendar year 2018 for Indian Point Units 2 (IP2) and 3 (IP3). The prior report for calendar year 2017 was provided in the Reference.

There are no new peak cladding temperature (PCT) adjustments required for the IP2 or the IP3 small and large break loss-of-coolant accident (LOCA) analyses of record (AORs) for calendar year 2018. Although not required by regulation, this letter reports the small break LOCA PCT for IP2 as 1028 degrees Fahrenheit (°F) and IP3 as 1543°F, and the large break LOCA PCT for IP2 as 2119°F and IP3 as 2046°F.

Two separate error corrections resulting in an estimated PCT impact of 0°F were reported by Westinghouse Electric Company, LLC (Westinghouse), concerning the IP2 and IP3 large break LOCA and small break LOCA evaluation models as follows:

- 1) UO<sub>2</sub> Fuel Pellet Heat Capacity (IP2 and IP3)
- 2) Vapor Temperature Resetting (IP2 and IP3)

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The error corrections and PCT AOR assessment results are further described in the enclosed Westinghouse letter and attachment.

The limiting PCT results for the IP2 and IP3 small and large break LOCAs continue to meet the criteria of 10 CFR 50.46, paragraph (b)(1) for calendar year 2018.

There are no new commitments being made in this submittal. If you have any questions or require additional information, please contact Ms. Mahvash Mirzai, Manager, Regulatory Assurance, at 914-254-7714.

Sincerely

Anthony J. Vitale

## AJV/mm/aye

- Enclosure: Westinghouse Letter LTR-LIS-19-14, Indian Point Units 2 and 3, 10 CFR 50.46 Annual Notification and Reporting for 2018
- cc: Regional Administrator, NRC Region I NRC Senior Project Manager, NRC NRR DORL New York State (NYS) Public Service Commission President and CEO, NYSERDA

NRC Senior Resident Inspector, Indian Point Energy Center