

June 3, 2016

The Honorable Kirsten Gillibrand
United States Senate
Washington, DC 20510

Dear Senator Gillibrand:

On behalf of the U.S. Nuclear Regulatory Commission (NRC), I am responding to your letter of May 10, 2016, in which you expressed concerns regarding restart of Indian Point Energy Center (Indian Point) Unit 2 and inspection of Indian Point Unit 3 in light of failed baffle-former bolts in Unit 2.

Based on our independent assessment of this issue, the NRC does not have an immediate safety concern at this time that would warrant regulatory action to prevent the restart of Indian Point Unit 2. The licensee has provided its root cause analysis to the NRC for its review. In light of the licensee's corrective actions described below and our understanding of the degradation phenomenon and its potential consequences, completion of our review of root-cause analysis is not a pre-condition to restart of Indian Point Unit 2. Baffle assemblies are constructed with a significant amount of structural margin and integrity of the baffle plates can be maintained even with the failure of a substantial number of bolts. Damage to fuel created by loose baffle-former bolt parts would be detected by routine monitoring of reactor coolant radioactivity.

Entergy Nuclear Operations (Entergy) performed ultrasonic testing on the reactor vessel internal bolts to look for degradation known to be caused by irradiation-induced stress corrosion cracking. Entergy replaced all the bolts that were identified as flawed at Indian Point Unit 2 using bolts with material properties less susceptible to corrosion. No flaws were identified through ultrasonic testing of the remaining bolts. The NRC's independent assessment of this issue has included review of analyses performed by the original equipment vendor and past industry experience with such bolting replacements.

Entergy also has performed an evaluation to determine whether it is safe to continue operation of Indian Point Unit 3. Indian Point Unit 3's baffle bolts were exposed to less radiation than the bolts in Unit 2 because Unit 3 has a different operating history and less operating time than Unit 2. In addition, there are no current indications of loose parts or fuel leaks that would indicate significant problems with the baffle-former bolts in Indian Point Unit 3. The NRC is currently performing an independent review of the licensee's evaluation but to date has not identified an immediate safety concern. Nevertheless, Entergy has since stated that it plans to perform ultrasonic examination of Unit 3 bolts in the spring 2017 refueling outage, rather than the spring 2019 refueling outage, as originally planned.

Given the licensee's corrective action, we do not believe that regulatory action to prevent the restart of Unit 2 is warranted. However, on May 24, 2016, the Commission received an emergency petition from Friends of the Earth, requesting that the Commission prohibit the restart of Indian Point Unit 2 and order the shutdown of Unit 3. The Commission has already acted promptly to ensure that the petition be handled expeditiously by referring it to the Executive Director for Operations for consideration under 10 C.F.R. § 2.206. This provision

requires the appropriate office director to determine whether to initiate a proceeding to modify, suspend, or revoke an operating license.

I share your interest in ensuring that the Indian Point plants operate in a manner that protects public health and safety. Please be assured that by monitoring the licensee's activities, completing our independent assessment of the licensee's analysis, and considering the concerns raised by Friends of the Earth through our 2.206 process, the NRC will continue to closely monitor this situation, remain alert to potential generic implications, and evaluate the need for further regulatory action. If you have any questions, please contact me or Eugene Dacus, Director of the Office of Congressional Affairs, at (301) 415-1776.

Sincerely,

/RA/

Stephen G. Burns