

January 10, 2017

Victor McCree, Executive Director for Operations
United States Nuclear Regulatory Commission
Washington, DC 20555-0001

SUBJECT: Scope Reductions for 10 CFR 2.206 Petition on Baffle Bolt Degradation at Indian Point

Dear Mr. McCree:

On behalf of the Union of Concerned Scientists (UCS), I submitted a petition pursuant to §2.206 in Title 10 of the Code of Federal Regulations (hereafter 10 CFR) to the Nuclear Regulatory Commission (NRC) on June 30, 2016, (ADAMS Accession No. ML16187A186) seeking three enforcement actions be taken regarding baffle-former bolt degradation at the Indian Point Energy Center. UCS requested that the NRC take the following enforcement actions:

1. NRC issue an Order requiring the Indian Point licensee to inspect the baffle bolts and to install the downflow to upflow modification on Unit 2 during its next refueling outage.
2. NRC issue a Demand For Information requiring the Indian Point licensee to submit an operability determination to the agency regarding continued operation of Unit 3 until its baffle bolts can be inspected per MRP-227-A.
3. NRC issue a Demand For Information requiring the Indian Point licensee to submit an evaluation of the performance, role and operating experience of the metal impact monitoring system in detecting and responding to indications of loose parts (such as head broken off baffle bolts) within the reactor coolant system.

Recent developments have obviated the need for the first two enforcement actions requested. An agreement was signed on Sunday, January 8, 2017, and announced the following day. Schedule 1 to that agreement requires the baffle bolts on Indian Point Units 2 and 3 during upcoming refueling outages. While the agreement is silent on the downflow to upflow modification, the inspections should protect against degradation during the shortened period of reactor operation specified in the agreement. Hence, the need for the first requested enforcement action has diminished. UCS therefore requests that this requested enforcement action be removed from the scope of our petition.

Within the past two weeks, the NRC has released documents about baffle bolt degradation at Indian Point in response to a Freedom of Information Act request. Among the released documents was the Decision Documentation for Reactive Inspection prepared by the NRC staff per Manual Chapter 0309 (ADAMS Accession No. ML16363A252) regarding whether to supplement its baseline inspection effort at Indian Point because of the degraded baffle bolts discovered during the spring 2016 refueling outage of Unit 2. While this NRC assessment is not an operability determination for Indian Point Unit 3, it covers much of the same ground. Hence, the need for the second requested enforcement action has diminished. UCS therefore requests that this requested enforcement action be removed from the scope of our petition.

We have not yet seen information that diminishes the need for the third requested enforcement action. To the contrary, documents recently released reinforce that need. For example, the Conditional Risk Assessment conducted on April 1, 2016, by the NRC staff of the degraded baffle bolts on Indian Point Unit 2 (but only recently made publicly available, ADAMS Accession No. ML16363A252) stated:

The reactor vessels or internals are not modeled in PRAs. Accordingly, the condition of the degraded baffle-former bolts cannot be quantitatively evaluated. However, it is reasonable to conclude qualitatively that without an obvious failure or displacement of vessel internals due to this degraded condition, there is minimal to no increased likelihood of an event leading to core damage or increased probability of failure of a system relied upon to mitigate an accident or anticipated initiating event.

Neither this evaluation nor other documents we have reviewed addresses the potential for loose parts resulting from baffle bolt degradation compromising the safety function of other components. This potential is not speculative. For example, after the steam dryer within the reactor vessel on Quad Cities Unit 1 literally shook itself apart, the owner provided the NRC with its lost parts analysis and associated operability evaluation (ADAMS Accession No. ML03381214). A piece of the broken dryer had not been found and recovered, prompting the need to evaluate whether steam or water could transport it someplace where it could compromise safety. Hence, loose parts pose a potential safety risk.

And an email dated April 13, 2016, from the NRC's Senior Resident Inspector at Indian Point to NRC staffers (ADAMS Accession No. ML16363A252) reported: "*After a few false starts due to FME [foreign material exclusion] screen installation issues, the long-awaited baffle bolt repair process has begun at IP2 [Indian Point Unit 2].*" Hence, the potential for and consequence from small parts becoming lost within the reactor vessel was significant enough to delay baffle bolt repair efforts until proper foreign material exclusion controls were implemented.

Loose parts within the reactor vessel are not incredible.

Loose parts within the reactor vessel can have adverse safety implications.

To offset this credible nuclear safety hazard, the Updated Final Safety Analysis Report for Indian Point describes how the metal impact monitoring system was installed to detect loose parts within the reactor vessel. The third requested enforcement action seeks information on how well the metal impact monitoring system has been performing—information we have not yet seen provided directly or indirectly. Hence, a need for this information remains. Therefore, UCS reaffirms our request that the NRC take this enforcement action.

Sincerely,



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