

November 24, 2003

Mr. Salvatore Rao
3 Chateaux Circle, Apt. G
Scarsdale, NY 10583

Dear Mr. Rao:

On behalf of the Nuclear Regulatory Commission (NRC), I am responding to your letter of September 16, 2003, to Chairman Diaz urging the NRC to order the immediate shutdown of Indian Point Nuclear Generating Unit Nos. 2 and 3 (IP2 and 3) as requested in a petition filed on September 8, 2003, by the Union of Concerned Scientists and Riverkeeper, Inc. The petitioners requested that the NRC take this action because of a concern with the potential for blockage of the containment sumps at IP2 and 3 during an accident.

After thorough consideration of the issues raised in the petition, the NRC denied the request for the immediate shutdown of IP2 and 3 in a letter dated October 22, 2003. The NRC has been addressing this concern with all licensees of pressurized-water reactors and concluded that continued operation of the plants does not pose an undue risk to public health and safety while the issue is being resolved generically.

On June 9, 2003, the NRC issued a bulletin informing licensees of the results of an NRC-sponsored study that identified the potential susceptibility of recirculation sump screens to debris blockage in the event of an accident. The NRC was evaluating whether piping insulation and other materials dislodged by a steam or water jet emerging from a postulated break in the reactor coolant piping would be transported and accumulate in the sump and subsequently impede the operation of the emergency core cooling pumps. During certain postulated accidents scenarios, water is taken from the sump and recirculated back to the reactor vessel after the supply of water from the large-volume storage tanks is exhausted. An NRC-approved methodology for evaluating each plant's susceptibility to debris clogging is being developed to ensure that each evaluation is based on state-of-the-art, plant-specific information and to provide the NRC with the technical basis for ensuring that any proposed solution adequately addresses the issue. While the evaluations are being done, many plants, including IP2 and 3 have taken steps to minimize the potential risk associated with this issue. It is also important to recognize that the probability of an accident that would require recirculation from the sump is very unlikely.

The petitioners had based their request on a generic NRC-sponsored study that does not provide sufficient basis and level of detail for drawing conclusions about the operation of sumps at individual plants. The purpose of that study was to determine if the issue needed further evaluation and whether plant-specific reviews were warranted. There are also limitations in the study that make it inappropriate to apply the study data to individual plants such as IP2 and 3.

In particular for IP2 and 3, the NRC took exception with the petitioners' statement that failure of the sump during an accident is "almost certain." The study used plant data that is at least 5–7

years old, and the data was not verified for accuracy. Many plants, including IP2 and 3, have made significant changes so that plant characteristics modeled in the study do not reflect current plant configurations. For example, at IP2 and 3, the amount of calcium silicate insulation (a major contributor to sump blockage) was greatly reduced when the steam generators were replaced. Further, the study did not recognize that IP2 and 3 each have two independent and redundant sumps that are located in different parts of the containment. The containment sump is a completely independent backup sump that can be used if the normal recirculation sump loses suction due to debris clogging of its sump screen.

I hope that you find this information useful in understanding the NRC's actions on this generic issue and the implications for IP2 and 3. Although having denied their request for immediate action to shut down the facility, we are continuing to evaluate the petition. We will complete our review and respond to the petitioners in a Director's Decision in accordance with our review process in the near future. A copy of the October 22 NRC letter (Accession No. ML032930295) can be accessed electronically from the Agencywide Documents Access and Management System (ADAMS) Public Electronic Reading Room on the Internet at the NRC Web site, <http://www.nrc.gov/reading-rm/adams.html>. Persons who do not have access to ADAMS or who encounter problems in accessing the documents located in ADAMS, should contact the NRC PDR Reference staff by telephone at 1-800-397-4209 or 301-415-4737, or by e-mail to pdr@nrc.gov.

Sincerely,

/RA/

James W. Clifford, Acting Director
Project Directorate I
Division of Licensing Project Management
Office of Nuclear Reactor Regulation

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ADAMS Accession Numbers: Package: ML033030036

Incoming: ML032760265

Response: ML033030065

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