

December 7, 2006

The Honorable Sue W. Kelly  
United States House of Representatives  
Washington, D.C. 20515

Dear Congresswoman Kelly:

I am writing in response to your letter dated August 30, 2006. In that letter and during our subsequent discussion on September 7, you conveyed your concerns with respect to the Indian Point Energy Center and you requested that the Nuclear Regulatory Commission (NRC) authorize an Independent Safety Assessment (ISA) to be conducted at Indian Point, consistent with pending legislation (HR 4891 and S.2488) introduced by members of the New York and Connecticut Congressional delegations earlier this year.

As previously explained, the NRC is an independent regulatory agency established by Congress, and our inspection and assessment processes are independent, thorough, and objective. The NRC's Reactor Oversight Process (ROP) contains a baseline inspection program that is conducted at every nuclear power plant. The ROP inspections are performed in seven fundamental areas (cornerstones) to evaluate plant safety performance and ensure adequate protection of public health and safety. The baseline inspection program addresses the areas mentioned in the proposed legislation. Specifically, the inspections performed by NRC resident inspectors and regional specialists regularly evaluate plant design, modifications, maintenance, operations, and emergency preparedness. The ROP inspection focuses on components important to plant safety, and this process allows for increased NRC oversight when a licensee's performance begins to degrade.

The NRC recently undertook a substantial effort to strengthen its engineering inspection procedures to increase the scrutiny of operator actions and risk-significant components with lower safety margin. This additional and specific attention improves the effectiveness of the engineering design team inspections. To develop the new engineering inspection procedure, the staff analyzed data from NRC engineering design team inspections and licensee self-assessment efforts to assess how effective they were in identifying engineering design issues. The information gained from the analysis led to the development of a prototype inspection procedure. This prototype inspection procedure differed from the former Safety System Design and Performance Capability inspection procedure in that the inspection samples are not limited to one or two systems, but instead focus on risk-significant, low-margin components and operator actions; the inspection samples are not limited to components important after a reactor event occurs, but may also include components that could contribute to or initiate a plant event; and significant effort is spent assessing relevant industry operating experience associated with the samples selected for inspection. The prototype inspection procedure was piloted at four sites, and analysis of the inspection results indicated that the new inspection approach was a significant improvement over the previous approach.

The new component-based inspection ensures that the selected components are capable of performing their intended safety functions by verifying that the design bases have been properly implemented and maintained. This inspection involves four weeks of on-site effort and about 700 hours of inspection by a multi-disciplined team of engineers. Each inspection team is assigned two contractors with extensive design experience, and their contract contains certain restrictions to address conflict of interest issues. In conducting the inspection, the team performs a detailed design review of numerous key components selected after careful analysis. The review includes evaluating the adequacy of the engineering calculations and analyses, the installed configuration, operating procedures, and testing and maintenance activities. A similar process is used to select and inspect risk significant operator actions, such as opening or closing key valves or starting or stopping key pumps. Copies of the new engineering team design inspection procedure can be obtained at our website at <http://www.nrc.gov/reading-rm/doc-collections/insp-manual/inspection-procedure/index.html> by selecting IP 71111.21, "Component Design Bases Inspection."

In addition to the component design bases inspection, the NRC dedicates a significant amount of ROP baseline inspection to the evaluation of other plant activities, such as evaluation of changes and tests, fire protection, permanent and temporary plant modifications, maintenance effectiveness, performance of heat transfer (i.e., cooling) equipment, operability evaluations, surveillance testing, post-maintenance testing, and, piping and pressure vessel boundary inspection. Therefore, NRC resident inspectors and regional specialists routinely evaluate work performed by the licensee to determine whether such activities support safe plant operation. As such, the systems identified for review in the legislation you proposed are covered by our baseline inspection program.

The NRC is currently planning component design bases inspections, which are scheduled to be conducted at Indian Point Unit 2 in January and at Unit 3 in October 2007. While selection of NRC staff and contractors for these inspections is ongoing, the NRC will ensure that these inspections are conducted by an independent, multi-disciplinary inspection team with extensive engineering experience. To increase design experience and add independence to the inspection team, the NRC is currently considering adding a third contractor to the Indian Point Unit 2 inspection team. The selection process for the contractors contains restrictions to prevent conflict of interest issues. During the first week of the inspection, the team will choose components for inspection that meet the selection criteria. This inspection sample will include those components from the systems listed in the proposed legislation that meet the selection criteria for risk and margin.

Consistent with NRC's goal of openness, all NRC inspections at Indian Point Energy Center are open to observation by representatives from New York State in accordance with NRC's policy on cooperation with states. The NRC has encouraged the State to provide a representative to observe the component design bases inspections at Indian Point Energy Center to provide an independent view of the thoroughness and objectivity of these inspection activities.

The Commission is committed to independent, thorough, and objective inspections at all NRC-regulated facilities, including Indian Point. The Commission continues to believe that the current increased level of oversight at Indian Point is appropriate, and the scope and depth of NRC inspections and assessments, particularly the new engineering team inspection, will address your concerns.

If you have additional questions, the NRC staff would be pleased to meet with you or your staff to discuss the NRC's inspection and oversight process.

Sincerely,

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Dale E. Klein