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September 5, 1989

Re: Indian Point Unit No. 2  
Docket No. 50-247

Document Control Desk  
US Nuclear Regulatory Commission  
Mail Station P1-137  
Washington, DC 20555

SUBJECT: Response to NRC Inspection Report 50-247/89-15

This is in response to your letter dated August 3, 1989 concerning routine inspection No. 50-247/89-09 conducted by Mr. Lawrence W. Rossbach and Mr. Peter W. Kelley from May 23, 1989 to July 10, 1989. Our detailed response to the violations set forth in your August 3, 1989 letter are contained in attachment A. After a careful review of the facts and circumstances surrounding these matters we find that we are unable to fully concur with the basis and rationale for two of the three violations. Furthermore, we respectfully suggest that a common root cause similarity between the current alleged violation concerning safety evaluations and the violation discussed in Inspection Report 89-09 is tenuous at best, the only common element between the two events being that both involve jumpers.

The earlier (Inspection Report 89-09) violation stemmed from a Temporary Operating Instruction, TOI, that involved an unidentified jumper. As a result the TOI did not receive a formal safety evaluation (10 CFR 50.59) per Station Administrative Order (SAO)-460. Instead, the plant proceeded on the basis of a review by the Station Nuclear Safety Committee. Upon identification of the jumper, a formal safety evaluation was prepared after implementation of the TOI, not prior thereto, which was a violation of plant procedure. There was no mention in the earlier Inspection Report that the quality of the safety report was ever in question.

In the current instance, the quality of the safety evaluation was admittedly not of the level we expect to achieve, and accordingly required revision to bring it to acceptable standards. However the current event involved no TOI or reliance upon a SNSC review as a substitute for a formal safety evaluation. SAO-460, from a procedural viewpoint, was followed without deviation.

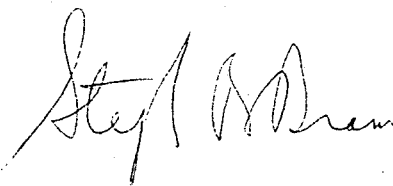
Thus we continue to believe that the event discussed in Inspection Report 89-09 was an isolated event which had as a root cause an unrecognized jumper contained in a TOI. The quality of the safety evaluation was never questioned nor compliance with SAO-460 in doubt once the jumper was identified. The current event, on the other hand, relates to the technical sufficiency and quality of a safety evaluation for a jumper. To improve performance in this latter regard we will be revising

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SAO-460, on a trial basis, in the near future so that all SIL 4 safety evaluations for jumpers will require a review by the Operations Manager as to whether a pre-implementation SNSC review is warranted. The SIL 4 and 5 categories encompass those changes with the most significant safety implications. We believe this measure will enhance the quality of safety evaluations as they pertain to jumpers.

Should you or your staff have any questions regarding this matter, please contact Mr. Jude G. Del Percio, Manager, Regulatory Affairs and Safety Assessment.

Very truly yours,



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## Attachment A

### Violation

During an NRC inspection conducted from May 23 to July 10, 1989, and in accordance with the "General Statement of Policy and Procedure for NRC Enforcement Action," 10 CFR Part 2, Appendix C, 53 Fed. Reg. 40019 (October 13, 1988 Enforcement Policy), the following violations were identified:

Technical Specification 6.8.1 requires that written procedures shall be established and implemented per Section 5.1 of ANSI N 18.7-1972. Section 5.1 requires that procedures shall be followed. 1) Procedure IPC-S-057 requires that the component cooling water surge tank chemical addition port flange be kept securely tightened. 2) Safety evaluation 89-172TM requires that the upper component cooling water surge tank level column temporary isolation valve be isolated when not in use. 3) Station Administrative Order 460 requires that written safety evaluations include specific and sufficient information to be an independent document.

### Contrary to the above:

1. On June 21, 1989, the component cooling water surge tank chemical addition port flange was found loose.
2. On July 5, 1989, the upper component cooling water surge tank level column temporary isolation valve was open when not in use and no procedure had been established to control its position.
3. Written safety evaluations 89-113 dated June 27, 1989, and 89-172, dated June 30, 1989, did not include specific and sufficient information to be an independent document concerning the loss of the component cooling water surge tank level indicator and alarms.

### Response:

1. Procedures governing tightening of the blind flange on the chemical addition port to the Component Cooling System were in effect prior to the event. The Chemistry staff had received prior instruction concerning the importance of securing the blind flange due to a prior similar event. At the time of the recent event the procedural requirement had been reinforced to the responsible Chemistry Technician by his supervisor by means of a note re-iterating the requirement. Despite these measures the technician did not properly secure the blind flange; a chemical spill at the time diverted his attention.

The technician was administratively disciplined and advised that future similar events would involve more serious disciplinary action, including suspension or termination of employment. This message was conveyed to all of the Chemistry staff.

Previously, the training received by the Chemistry staff was informally conducted by Chemistry management. Henceforth, the importance of the Component Cooling System boundary as an extension of Containment will now also be permanently included in the curriculum of formal instruction received by the Chemistry staff from the Training Department.

We believe that the above measures will be effective in preventing future similar occurrences.

2. It is acknowledged that the tygon tubing connected to the Component Cooling Water surge tank was not isolated at the upper connection. However, contrary to the statements contained in the Inspection Report, written instructions were in effect, constituting procedural control, which required the tygon tubing to be isolated when not in use. The operating staff failed to comply with this requirement.

The issued safety evaluation stipulated as a specific condition that the tygon tubing was to be isolated when not in use. This special condition was reflected in the Night Order Book as follows:

"While the CCW expansion tank level transmitters are OOS, level will be measured by the installed tygon jumper. The tygon will only be valved in when taking level readings and then it should be isolated. The CCR Log will reflect measured level."

In discussions with plant operating staff it appears the term isolation was incorrectly interpreted to mean closure of the lower isolation valve only, a plausible if erroneous interpretation of isolation requirements. In the future, additional care will be exercised to assure direction is in sufficiently explicit terms so that the task is achieved without the need for interpretation.

3. After reviewing the facts related to the safety evaluations for the jumper to replace the transmitter for monitoring the level within the Component Cooling Water Surge Tank, we are unable to concur fully with the statements contained within the inspection report.

In this instance, Indian Point Unit 2 procedures were followed without deviation. Prior to installation of the jumper a safety evaluation, 89-113, was prepared by the Shift Technical Advisor on duty as required. Per procedure the safety evaluation was subsequently reviewed by the Safety Assessment section. Due to inconsistencies and the brevity of the safety evaluation it was decided to revise the safety evaluation in its entirety. This was brought to the attention of the Station Nuclear Safety Committee chairman on June 29, 1989, at which time it was determined that the Committee had essentially reached the same conclusion in reviewing the jumper. The revised safety evaluation, 89-172, was reviewed by SNSC and issued on June 30, 1989 as revision 0. All of these steps were taken in strict adherence with existing plant procedures.

We concur that the initial safety evaluation issued with the jumper was of poor quality and apparently the result of work done in haste on the backshift. We do not concur that plant procedures were not followed.

The revised safety evaluation reviewed by SNSC on June 30, 1989 was a complete document, which had been prepared independent of the SNSC review. Although discussed at SNSC, the upper level alarm aspect of the jumper was not included within the safety evaluation as no safety credit is taken in the FSAR and the jumper retained monitoring capability, albeit intermittently rather than continuously. As explained within chapter 4 of the FSAR, radiological releases are well within 10 CFR 20 limits independent of this alarm. The alarm is an operator aid and not relied upon for accident mitigation. This is in contrast to the low level alarm for which credit is taken in the FSAR. This latter change in function was discussed extensively in the safety evaluation. The safety evaluation was subsequently revised to include a discussion of the upper alarm due to discussions with the NRC inspectors, however this did not diminish the sufficiency of the revised Safety Evaluation which adequately addressed the criteria of 10 CFR 50.59.

The inspection report refers to an incorrect SIL level. The SIL level assigned to the initial safety evaluation implied a physical change and no change in function. The initial determination of a SIL level 4 was based on the physical substitution of tygon tubing for a transmitter with no functional change of the Component Cooling Surge Tank. A level 5 was probably more appropriate as the change in instrumentation caused a functional change from continuous to intermittent level monitoring. On this basis, a SIL 5 may have been more appropriate. Potential failure of the modification does not determine a SIL level, as stated in the Inspection Report.

In summary, we believe the initial safety evaluation was not of the level of quality we expect of such documents. However, we are unable to concur that the revised revision was deficient insofar as the upper level alarm is not relied upon for accident mitigation. Furthermore, there is no requirement that the safety evaluation reflect the discussions of the Station Nuclear Safety Committee. It must address the criteria of 10 CFR 50.59 which was done. In all instances SAO-460, the applicable procedure, was followed.