JAN 27 1988

Docket Nos. 50-247

Consolidated Edison Company of New York, Inc.

ATTN: Mr. Stephen Bram

Vice President, Nuclear Power Indian Point Station Broadway and Bleakley Avenue Buchanan, New York 10511

Gentlemen:

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Subject: Inspection No. 50-247/87-20

This refers to your letter dated October 20, 1987, in response to our letter dated September 2, 1987 that transmitted NRC Inspection Report 50-247/87-20 containing a notice of violation regarding service water system piping repairs not sanctioned by the applicable codes. We are firm in our position that the weld overlay and clamp repair methods are not sanctioned by USAS B 31.1 or Section XI of the ASME Code and the subject violation will not be rescinded.

We agree with your statement that code interpretations are best resolved by the ASME Code Committee and suggest that your use of these repair methods be submitted for review and approval. The NRC recognizes most reasonable code cases and interpretations. We feel the repair methods using weld overlays and clamps have not been addressed by either ASME Section XI or USAS B31.1.

However, we are concerned with your position regarding exigent temporary repairs to safety related and important to safety systems. The NRC requires that repairs to degraded systems meet previously approved codes and standards as defined in the licensing bases. Any deviation from these reviewed and accepted positions must be submitted for our review. Changes under 10 CFR 50.54 (x) are appropriate only in the situation where an emergency exists with a clear threat to the health and safety of the public. Repairs to maintain unit production are not covered by 10 CFR 50.54 (x).

Your cooperation with us is appreciated.

Sincerely,

Original Signed By

William V. Johnston, Acting Director Division of Reactor Safety

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Consolidated Edison Company of New York, Inc.

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cc:

Jude G. Del Percio, Manager, Regulatory Affairs P. Kokolakis, Director, Nuclear Licensing Brent L. Brandenburg, Assistant General Counsel Walter Stein, Secretary - NFSC Public Document Room (PDR) Local Public Document Room (LPDR) Nuclear Safety Information Center (NSIC) NRC Resident Inspector State of New York

bcc:

Region I Docket Room (with concurrences) Management Assistant, DRMA (w/o encl) DRP Section Chief Robert J. Bores, DRSS C. Y. Cheng, NRR







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Consolidated Edison Company of New York, Inc. Indias From Station Broadway & Bleakley Avenue Buchanan, NY 10511 Telephone (914) 737-8116

October 20, 1987

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

Document Control Desk U.S. Nuclear Regulatory Commission Washington, DC 20555

Subject: Inspection Report No. 50-247/87-20 Service Water System

This letter refers to inspection 50-247/87-20 conducted by Mr. H.J. Kaplan of your office on July 20-24, 1987 at Indian Point Nuclear Generating Station Unit 2.

Your September 2, 1987 letter stated that it appears that certain of our activities with regard to the repair of the Service Water System (SWS) were not conducted in compliance with NRC requirements, as set forth in the Notice of Violation enclosed therewith as Appendix A. As you may know, pursuant to our agreement with representatives of NRR and NRC Region I, a letter summarizing our ongoing investigation of the SWS and our position on ASME code ("Code") compliance for temporary repairs was forwarded to NRC on August 14, 1987. Both NRR and Region I received copies of this letter. To date, we have had no response from NRC, NRR or Region I to the August 14 letter. Accordingly, and pursuant to the provisions of 10 CFR 2.201, our response to the Notice of Violation is presented in Attachment A to this letter, which reiterates our position set forth in our August 14 correspondence.

For the reasons set forth in Attachment A we believe that the repair methods employed by Con Edison are in fact consistent with the Code. Consequently, we believe that the Notice of Violation is incorrect in its initial premise of Code noncompliance. We, therefore, respectfully request that the NRC review the circumstances set forth in Attachment A and if it is able to confirm our interpretation of code compliance, that the Notice of Violation be rescinded. I have asked that cognizant members of my staff who were present at the exit interview for the subject inspection give whatever assistance may be desired by the NRC in a review of the relevant circumstances.

Programmatically, we foresee unnecessary complexity and delay were NKC's interpretation of Code compliance and the applicability of 10 CFR 50.55a alternatives to be finally adopted. Mandating prior NRC approval on interpretive Code issues can be deleterious and of no apparent value when repairs are determined to be technically adequate. A case in fact is the temporary repair performed on the piping related to a charging pump. Due to the nature of the IP2 design the charging pump is not safety related.

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However, we believe that all parties recognize the significance of a charging pump to maintenance of the reactor coolant pump seals and reactor coolant inventory. In this instance we believe protracted discussions with the NRC would only have resulted in a time delay in effecting urgent repairs and would not have materially altered the method of repair.

As explained in table A of the Indian Point Unit No. 2 Quality Assurance Program Description, controls exist which require the establishment and documentation of the technical bases for any work performed which deviates from normal procedural requirements. Such action is authorized only in extenuating circumstances for emergency and temporary repairs where an immediate response rather than a lengthly dialogue with NRC is deemed prudent. These controls are adequate to assure that the repair is technically sound for the time period specified and hence a further NRC review would be duplicative and unproductive.

For emergency repairs, i.e., cases where the public health and safety would be affected, we are of the view that licensee initiative in departing from Code compliance or applicable 10 CFR 50.55a requirements is protected by 10 CFR 50.54(x). Thus our concern is focused primarily on repairs classified as "temporary" which could potentially involve significant loss of unit capacity. We are particularly concerned with those limited situations which may be subject to differing interpretations of Code requirements and which could lead to implementation of 10 CFR 50.55a alternatives. We believe that the ASME Code Committee is the only proper authority to repairs precludes receipt of Code Committee interpretations on a timely basis.

We believe the NRC should give credence to and concur with our interpretation of code compliance with respect to the repair methods imposed previously and discussed in detail in Attachment A. Con Edison would be pleased to enter into a dialogue with the NRC concerning the issues presented herein. However, in recognition that ultimately this issue may only be reconciled by the time consuming process of Code Committee review, we believe it prudent to seek a relief request. Only in this manner can we avoid the regulatory consequences of a differing NRC interpretation of Code Compliance after the fact.

Should you wish to pursue the issues of the specific violation as well as the basis for the relief request, please contact Jude Del Percio of my starf. By separate letter we are pursuing the relief request with NRR as suggested in the Notice of Violation.

Very truly yours,

Murray Selman



Mr. William Russell Regional Administrator - Region I U.S. Nuclear Regulatory Commission 631 Park Avenue King of Prussia, PA 19406

Senior Resident Inspector U.S. Nuclear Regulatory Commission P.O. Box 38 Buchanan, NY 10511

October 20, 1987

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

ATTACHMENT A

Response to Notice of Violation

Violation

Ι.

The licensee is required to perform all inspections and repairs in accordance with the requirements in 10 CFR 50.55a(g) "Inservice Inspection Requirements." This section indicates that the inspection and repair program shall meet Section XI of the ASME Code or the original construction code as applicable.

Contrary to the above, during the 1984 outage, the licensee employed two repair methods for leaking joints which are not sanctioned by Code. The first method was weld overlay in which weld metal was deposited over the reinforcement to contain the leaks without removing the defect or reducing them to an acceptable level prior to welding as required by IWD-4200 of Section XI. The second method utilized clamps to contain the leaks. Although Paragraph 104.7 of ANSI B31.1 permits the use of "Other pressure containing components" it does not provide for the use of clamps to contain leaks.

Response

Inspection of the Service Water System piping external to Containment was initiated in 1984. The piping inside of the Diesel Generator Building was examined and three 4" pipe welds showed evidence of weepage. These welds and adjacent welds were subjected to radiographic examination. The radiographs indicated the three welds exhibited corrosion at several locations and wall thinning, with a single through the weld small leak in each. Additionally, one other weld contained a linear indication - possibly as a result of original weld fabrication - as well as the general corrosion and wall thinning. There was no leakage observable in this joint.

This section of service water pipe is 4 inches schedule 40 with nominal wall thickness of 0.237 inches.

Since the contributing cause of the weepage was corrosion as opposed to cracking, repairs to the leaking welds were effected by adding

additional layers of weld material to the weld area. The weld material was deposited completely along the entire weld in a bead approximately 1" wide by 1/8" minimum thickness. The minimum wall required per U.S.A.S. B.31.1 in this case is 0.087 inches for pressure and seismic stresses; therefore the weld buildup by itself exceeds minimum wall requirements. A standard SMAW weld procedure and E 7018 filler metal was used.

The same welding process was used for the weld which exhibited corrosion and a linear indication. In this latter case, removal and rewelding of the linear indication could have affected the cement lining. Since the weld and base metal are ductile, the weld deposit technique was judged the most acceptable repair procedure. This weld was radiographed in 1986 and no evidence of indication propagation was detected which we believe validates the technical decision reached as to the method of repair.

All four repairs were performed as "temporary" repairs which requires their replacement in the 1987 refueling outage. Since these repairs were accomplished primarily to compensate for wall thinning due to corrosion and not to repair weld defects, and since the repair process was developed to comply with the minimum wall requirement of U.S.A.S. B31.1, the work performed complies with the original design objectives of U.S.A.S. B.31.1.

In 1985, repairs were made to two buried 3" service water pipes in the Transformer Yard area. Both pipes serve the Instrument Air System. After weepage was observed below ground, the area was excavated. Two leaks were identified, one at an elbow weld and the other at a weld joint in a horizontal pipe. Repairs were effected in one case by use of a fitting specifically designed for the application and in the other case by use of a standard compression clamp type fitting commonly used in similar applications.

In the case of the repair to the elbow leak the specially designed fitting is a split, bolted elbow that fits completely over and encompasses the elbow. This fitting serves as an extended pressure boundary. The split fitting is designed and fabricated in accordance with ASME Code Section VIII Division I Rules and allowable material stresses. This fitting meets the requirements of U.S.A.S. B.31.1 because the design is based on similarly shaped proportioned and sized components which have been proven satisfactory by successful performance under comparable service conditions. The fitting manufacturer has provided certification to the effect. The use of such a fitting is covered in U.S.A.S. B 31.1, paragraph 104.7.

The line is continuously supported by compacted subgrade underlain by bedrock and the mass of the added fitting is only 40 lbs. Calculations involving anticipated seismic bedrock displacement, the added mass, pressure and deadweight indicate that resulting stresses are well within U.S.A.S. B 31.1 allowable. In summary, the use of such a fitting is consistent with U.S.A.S. B.31.1, the resulting conservatively calculated stresses are within U.S.A.S. B 31.1 allowable stresses, and therefore the repair is consistent with applicable Code requirements.

The straight piping run was repaired utilizing a full circle clamp manufactured by Rockwell. This type of clamp has been used successfully within the industry. It is our opinion that this repair restored the system design integrity in a manner consistent with the requirements of U.S.A.S. B 31.1.

The repairs discussed above were done in accordance with temporary repair procedures whereby the repair service life is administratively limited. Accordingly, all of the above repairs are to be converted into permanent repairs during the 1987 Refueling Outage which began on October 5, 1987.

Based on the foregoing and contrary to the contentions of the Notice of Violation, we respectfully submit that the repair methods referenced in the Violation were in fact consistent with USAS 31.1, 1967 edition, and therefore are in accord with ASME Section XI. Accordingly, it is our position that full compliance with 10 CFR 50.55(a) was achieved. In addition to the information set forth herein, our bases for these conclusions were set forth in a previous letter to the NRC dated August 14, 1987 which is incorporated here by reference.

The cover letter sets forth our rationale for disposition of code interpretation, i.e. via the ASME Code Committee. In practical terms, the only means of avoiding possible future similar instances is via a relief request. This is particularly true since the Violation, as its base argument, contends that unless USAS B 31.1. specified repair methods are utilized, the repair is not in conformance with the Code. We contend that the use of Code identified and accepted configurations such as clamps (pressure containing component) or flanges is an acceptable Code repair. Otherwise it is impossible to establish a USAS 31.1 in-service repair which is certainly the intent of ASME Section XI. We therefore request that NRC review the circumstances of the alleged violation, and upon confirming the facts as set forth herein, withdraw the allegations upon the basis that the assertions of Code noncompliance are not born out by the underlying facts and circumstances.