

Stephen B. Bram
Vice President

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

September 16, 1993

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

Mr. Richard Cooper, Director
Division of Reactor Projects
Region 1
US Nuclear Regulatory Commission
475 Allendale Road
King of Prussia, PA 19406

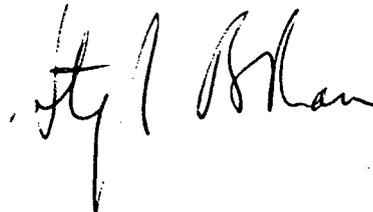
Dear Mr. Cooper:

This is in response to your letter of August 17, 1993 concerning a June 9, 1993 letter sent to NRC by the New York State Department of Public Service. We have carefully reviewed this matter as it relates to interpretation of radiographs by the referenced individual and the NDE vendor involved. The results of our evaluation are summarized in an attachment to this letter.

We find no basis for questioning the acceptability of the radiographic weld evaluations involved or the related actions of the referenced individual or of the NDE vendor. Consequently, we do not find that the New York State PSC letter presents a basis for questioning work performed or it's evaluation at Indian Point 2. We note especially that the pipe welds and radiographs discussed in the letter from the New York PSC are associated with gas and steam piping located in New York City which are not in any way associated with Indian Point 2.

Should you have any further questions or need additional clarification regarding this matter, please contact us.

Very truly yours,



280013

9309290319 930916
PDR ADOCK 05000247
P PDR



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

Mr. Thomas T. Martin
Regional Administrator - Region I
US Nuclear Regulatory Commission
475 Allendale Road
King of Prussia, PA 19406

Mr. Francis J. Williams, Jr., Project Manager
Project Directorate I-1
Division of Reactor Projects I/II
US Nuclear Regulatory Commission
Mail Stop 14B-2
Washington, DC 20555

Senior Resident Inspector
US Nuclear Regulatory Commission
PO Box 38
Buchanan, NY 10511

Attachment

Evaluation of NYS PSC Comments Concerning Radiography Interpretations

Background

During 1992 and early 1993, a qualified NDE vendor radiographed numerous welds in New York City gas and steam piping. The vendor, using qualified reviewers, found the welds acceptable to the API 1104 standard. Subsequently, these radiographs were reviewed by unnamed individuals selected by the New York State PSC. Based upon the results of this review, the PSC questioned the acceptability of the welds.

A Level III (ASME background) qualified individual from Nuclear Power performed a third party review of the radiographs. This review indicated that the welds were acceptable^{1/} for service. Since this third party review disagreed with the New York State PSC reviewers, the PSC questioned the judgement of the Nuclear Power Level III reviewer.

A nationally recognized outside expert was selected with agreement from the PSC to review the radiographs. This individual, who is associated with a Texas gas transmission company, reviewed the radiographs in accordance with the API 1104 standard. The results of this outside review also found most of the welds acceptable; one weld was found to need further evaluation (which is currently in progress), and four areas that were acceptable under API 1104 analysis guidelines, were found to slightly exceed radiographic acceptance guidelines.

^{1/} The Level III reviewer's report concludes that "overall, I find the welds to be of an acceptable quality to API 1104 and the radiographs, for the most part, to be of an acceptable quality also."

Evaluation

The nature of the disagreement over the acceptability of the welds appears to center on the quality of the radiographs, particularly their density as revealed by darkness of color, and the interpretation of penetration, fusion, undercut, and porosity.

While some of the radiographs exceeded the preferable density range of 2.0 to 3.8 (i.e., some were in excess of 4.0) for reading by a low intensity viewer, they were able to be read by providing increased illumination (i.e., a brighter light bulb). We note that the API 1104 standard does not address an upper limit on density of radiographs.

With adequate illumination, the Nuclear Power Level III reviewer identified some "slight depressions along the root to base metal interface" which would be characterized as "slight undercut" by an ASME radiographic evaluation. These depressions were not considered defects or detrimental for the weld's intended service.

The additional review by an outside expert was consistent with and supported the reviews and evaluations performed by both the NDE vendor and the Nuclear Power Level III third party review. Indeed, a close review of the matrix provided by the PSC indicates disagreement among the PSC reviewers, with each of the radiographs in question being found acceptable by at least one of the PSC reviewers.

Conclusion

Evaluation of one weld area is in progress as suggested by the outside expert.

The outside expert's report was jointly reviewed by Con Edison and the PSC at a meeting on June 3, 1993. It is Con Edison's belief that the report has been accepted and the matter is now closed.