

NOTICE OF VIOLATION

Consolidated Edison Company of New York, Inc.
Indian Point Nuclear Generating Station, Unit 2

Docket No. 50-247
License No. DPR-26
EA 84-92

On June 12-15 and July 5-6, 1984, an NRC special safety inspection was conducted to review radiological safety concerns and the circumstances associated with the unplanned occupational radiation exposure on June 19, 1984 of 1050 millirem and 1500 millirem, respectively, to two workers. One of the workers received a total quarterly exposure of 2395 millirem. The 10 CFR 20 limit is 3000 millirem per calendar quarter. The NRC resident inspector became aware of the unplanned exposures while attending a routine outage meeting conducted by the licensee on June 20, 1984. Although the unplanned exposures were not in excess of regulatory limits, a substantial potential for such an exposure did exist.

The workers received the unplanned exposures while waiting in a High Radiation Area inside the crane wall of the 40 foot elevation of the Vapor Containment near the Regenerative Heat Exchanger. Although the workers believed they were standing in a low-background radiation area, radiation surveys performed by the licensee after identification of the unplanned exposures indicated that the workers inadvertently waited in an area with radiation dose rates of between 2000 and 4000 millirem/hr.

The required radiological controls regarding access to the High Radiation Area where the workers waited were not implemented. Specifically, the workers were not adequately instructed by the use of map routes or guides or otherwise directed to the location of the actual low background area where they were to wait. Also, areas having dose rates greater than 1000 millirem/hr were not adequately barricaded to prevent unauthorized entry. Further, the workers were sent to the area of low-background radiation without radiation survey meters, alarming dosimeters, or the equivalent that would have alerted them to the high radiation fields in which they finally waited. The provision of such equipment is required by Technical Specifications given that the area through which the workers were to transit and in which they were to wait were both contained within an area posted as a High Radiation Area.

On August 16-17, 1984, an NRC special safety inspection was conducted to review the circumstances associated with an unplanned exposure on August 7, 1984, of 2000 millirem to another worker with a total quarterly exposure of 2900 millirem. The occurrence was reported to the NRC resident inspector on August 9, 1984, and involved an individual performing work in a steam generator. The worker was standing at the manway of one of the steam generators with his arms and portions of his upper body located inside the steam generator. The radiation dose rate at the steam generator manway was 10-15 R/hour and as high as 30 R/hour inside the steam generator. Although the worker's exposure was being controlled by a Radiation Protection Technician, the technician did not read all the self reading dosimeters located on the worker (upper arms, head and chest) and did not use the highest dosimeter value (the upper arms in his case) to control the worker time in the steam generator and to limit the worker exposure as required by procedures.

In accordance with the NRC Enforcement Policy, 10 CFR Part 2, Appendix C, as revised, 49 CFR 8583 (March 8, 1981). The particular violations are set forth below:

- A. Technical Specification 6.12, "High Radiation Area", specifies that areas greater than 1000 mrem/hour be controlled by conspicuously posting the area as a High Radiation Area, by the issuance of a Radiation Work Permit, by providing individuals (or groups of individuals) with continuously indicating dose rate instrumentation, and by providing locked doors for each area with the key administratively controlled by the Watch Supervisor on duty.

Contrary to the above, on June 19, 1984, two workers were permitted to enter a High Radiation Area in the Unit 2 Vapor Containment where radiation levels were between 2000 and 4000 mrem/hour, without the entry being controlled by the issuance of a Radiation Work Permit, and without being provided with continuously dose rate indicating instrumentation.

- B. 10 CFR 19.12 requires, in part, that individuals working or frequenting any portion of a restricted area be kept informed of radiation in such portions of the restricted area and precautions or procedures to minimize exposures.

Contrary to the above, on June 19, 1984, two workers who entered the crane wall of Unit 2 Vapor Containment (a restricted area) were not informed of the radiation dose rates or precautions and procedures to minimize their exposures. No surveys, maps, diagrams, or other means were used to instruct the workers as to the location of a low background area that they were supposed to wait at, and instead they waited near the Regenerative Heat Exchanger which had radiation levels between 2000 millirem/hr and 4000 millirem/hr.

- C. Technical Specification 6.11, Radiation Protection Program, states that "Procedures for personnel radiation protection shall be prepared consistent with the requirements of 10 CFR Part 20 and shall be approved, maintained and adhered to for all operations involving personnel radiation exposure."

Procedure No. EHS 3.403, Revision 0, "Steam Generator Channel Entry," developed pursuant to the above, requires an SAO-134 be prepared for the entry of personnel into the Steam Generators. The SAO-134 prepared for the Steam Generator entry on August 7, 1984, required that self reading dosimeters be worn on the head, chest and the upper arms, and the highest reading on these dosimeters be used in controlling the worker's whole body exposure.

Contrary to the above, on August 7, 1984, an entry was made into a Steam Generator by a worker, and a Health Physics Technician did not adhere to Procedure No. EHS 3.403 in that he did not utilize the highest reading indicated by the dosimeter located on the upper arm of the worker to control the worker's whole body exposure.

Collectively, these violations have been categorized in the aggregate as a Severity Level III problem (Supplement IV).

Pursuant to the provisions of 10 CFR 2.201, Consolidated Edison Company is hereby required to submit to the Director, Office of Inspection and Enforcement, U.S. Nuclear Regulatory Commission, Washington, D.C. 20555, and a copy to the Regional Administrator, U.S. Nuclear Regulatory Commission, Region I, 631 Park Avenue, King of Prussia, Pennsylvania 19406, within 30 days of the date of this Notice, a written statement or explanation, including for each alleged violation: (1) admission or denial of the alleged violation; (2) the reasons for the violation, if admitted; (3) the corrective steps which have been taken and the results achieved; (4) the corrective steps which will be taken to avoid further violations; (5) the date when full compliance will be achieved. Consideration may be given to extending the response time for good cause shown. Under the authority of Section 182 of the Act, 42 U.S.C. 2232, this response shall be submitted under oath or affirmation.

bcc w/encls:
Region I Docket Room (with concurrences)
DPRP Section Chief
ACRS
SECY
CA
R. DeYoung, IE
J. Taylor, IE
J. Axelrad, IE
E. Flack, IE
T. Murley, RI
J. Lieberman, ELD
V. Stello, DED/RCGR
Enforcement Coordinators,
RI, RII, RIII, RIV, RV
F. Ingram, PA
G. Messenger, OIA
B. Hayes, OI
H. Denton, NRR
J. Crooks, AEOD
E. Jordan, IE
J. Partlow, IE
IE:ES
IE:EA File
EDO Rdg File
DCS

Telephone

RI:IE 200 Holody 9/21/84	RI:DETP Shanbaky 9/ /84	RI:DETP Bellamy 9/ /84	RI:DPRP Starostecki 9/ /84	RI:DETP Martin 9/ /84
RI:RC Gutierrez 9/ /84	RI:DRA Allan 9/ /84	RI:RA Murley 9/ /84	200 IE:ES EFlack 9/27/84	<i>Telephone</i> ELD R. Hoopling JLieberman 9/21/84
ES: 10 JAAxelrad 9/21/84	IE:RD Taylor 9/27/84 9/24 #5	IE: 10 DeYoung 9/27/84		