BOSTON EDISON COMPANY
EXECUTIVE OFFICES
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STEPHEN J. SWEENEY
PRESIDENT
AND
CHIEF EXECUTIVE OFFICER

April 5, 1985
BECo. Ltr. #85-068

Dr. Thomas E. Murley
Regional Administrator
U.S. Nuclear Regulatory Commission
Region I
631 Park Avenue
King of Prussia, PA. 19406

License No. DPR-35
Docket No. 50-293

Re: Notice of Violation (NRC Inspection Nos. 50-293/84-44 and 85-02)

Dear Dr. Murley:

This letter is in response to the above Notice of Violation concerning a radiological incident which occurred at Pilgrim Station on December 17, 1984. The Notice of Violation was communicated to Boston Edison Company with your letter dated March 6, 1985.

Boston Edison's detailed response to the Notice of Violation is contained in the Attachment to this letter. As President and Chief Executive Officer I want to assure you that Boston Edison acknowledges the seriousness of the incident giving rise to the Notice of Violation and is firmly committed to maintaining a strong radiological safety program. At the same time, as amplified in the Attachment, we believe that the circumstances surrounding the violation make the categorization of the violation as Severity Level III inappropriate, and we therefore respectfully request that you consider assigning these violations to a lower Severity Level. We stress that the primary cause of the major incident involving the individual entering the "C" monitor tank without proper authorization was the willful disregard of instructions by that individual.

In addition, Boston Edison wishes to take exception to the statement contained in your letter that lack of adequate health physics management oversight was the primary cause of the incident. As you are aware, we have committed both human and financial resources to developing and implementing an extensive multi-departmental Radiological Improvement Program (RIP) to address previously identified programmatic deficiencies on a long-term basis prior to the end of 1985. Until full implementation of the RIP can be achieved, an

Interim Program (IP) has been initiated to strengthen radiological controls in the interim period. The decision to make such extensive commitments was made prior to the "C" monitor tank incident. We believe that our long term commitments as evidenced in the RIP as well as the corrective and preventive measures discussed in the Attachment which were enacted immediately following the "C" monitor tank incident reflect the seriousness of Boston Edison's commitment to radiation safety.

Should you have any questions or concerns regarding this response, please do not hesitate to call upon either myself or Mr. Harrington, our Senior Vice President - Nuclear.

Very truly yours,

Stephen J. Sweeney

Commonwealth of Massachusetts
County of Suffolk

Then personally appeared before me Stephen J. Sweeney who, being duly sworn, did state that he is President and Chief Executive Officer of the Boston Edison Company, the applicant herein, and that he is duly authorized to execute and file the submittal contained herein in the name and on behalf of the Boston Edison Company, and that the statements in said submittal are true to the best of his knowledge and belief.

William S. Stowe
Notary Public

My Commission expires: June 22, 1990

WILLIAM S. STOWE, NOTARY PUBLIC
COMMISSION EXPIRES JUNE 22, 1990

Response to Notice of Violation
(NRC Inspection Nos. 50-293/84-44 and 85-02)

Notice of Violation "A"

Technical Specification 6.11 requires that radiation protection procedures be adhered to for all operations involving personnel radiation exposure. Procedure 6.1-022, "Radiation Work Permits (RWP)," states in Section V.A. that it is the responsibility of the first line supervisor and the individuals working for the supervisor under the control of an RWP to follow all instructions on the RWP.

Procedure 6.1-022, also states in Section C.7 that all RWPs for work in high radiation areas must specify constant or periodic surveillance and that the surveillance frequency must be specified on the RWP. This surveillance is to be performed by a technician with a survey meter.

Procedure 6.1-022, states in Section C.10 that an RWP revision sheet be completed if for any reason it becomes necessary to change RWP requirements or instructions.

Contrary to the above:

1. On December 17, 1984, certain instructions specified in RWP No. 84-3057, dated November 19, 1984, were not followed, as evidenced below:

   a. RWP No. 84-3057, prohibited entry into the 'C' Monitor Tank without HP supervisory approval.

      However, at about 2:00 p.m., an individual who performed work under RWP 84-3057 entered the 'C' Monitor Tank without HP supervisory approval.

   b. RWP No. 84-3057 specified the performance of high radiation area surveillance at a frequency of every half-hour.

      However, between 10:00 a.m. and 3:20 p.m., no high radiation area surveillance by a technician with a survey meter was performed.

   c. RWP No. 84-3057 also required that a breathing zone air (BZA) sampler be provided to each person during sludge-lancing operation.

      However, between 2:30 p.m. and 3:20 p.m., an individual performed sludge-lancing of the 'C' monitor tank under the coverage of RWP No. 84-3057, and no BZA was provided to the individual, nor were other air samplers present in the area.

2. On or about December 14, 1984, a change was made to RWP No. 84-3057 deleting the need to perform periodic surveys every one-half hour in the area of the monitor tanks, and a revision sheet showing the change was not completed. The RWP was used for several days to provide radiological controls for sludge-lancing of the 'C' monitor tank, and the surveys specified in the RWP were not made.

Response to Violation "A"

Boston Edison believes that Violation "A" should be considered in two separate parts: Item 1.a which directly involved the unauthorized entry of the individual into the "C" monitor tank and Items 1.b, 1.c and 2 which involved failures to follow proper procedures with respect to Radiation Work Permits. With respect to Item 1.a the seriousness of the incident is acknowledged, but it is not clear what Boston Edison could have done to prevent the incident. We do not believe therefore that Item 1.a should be considered a violation, or in any event, we do not believe it should be categorized as a violation of Severity Level III categorization. With respect to the remaining Items we admit that these were indeed violations, however we do not believe that they were by themselves of Severity Level III category. In each of Item 1.b, 1.c and 2 the specific change to the RWP would have been acceptable, if properly made. Thus, although it is clear that proper procedures should have been followed and the RWP should have been revised in writing rather than orally, we do not believe that there was ever a "substantial potential for an exposure or release in excess of 10 CFR 20" from the improper oral amendments to the RWP in question. Consequently, we respectfully request a lower categorization of Severity Level for the subject incident. Following is specific information on the causes of each item and the correction actions which have been taken or are planned:

It has been established that in the case of Item 1.a, the contractor employee who entered the tank was fully aware that he was not allowed to do so by procedure. However, he took deliberate actions, such as removing his headset and teledosimetry, so that the health physics technicians and the foreman who were monitoring him from outside the area would not know he was entering the tank.

In response to Items 1.b and 2, health physics technicians discontinued the periodic surveillances required by the RWP based upon verbal instructions from a contractor Radiological Group supervisor. The supervisor perceived use of the teledosimetry system as the equivalent of performing the surveillances. Due to administrative oversight, the contractor supervisor neither informed Boston Edison Radiological Group supervision of this change, nor did he revise the RWP appropriately.

Concerning Item 1.c, a breathing zone air sampler was not provided to the individuals performing sludge-lancing because the health physics technician on duty concluded that an air sampler was not necessary based upon the type of work being performed and on the results of an air sample collected that morning during the performance of similar work. This decision was also discussed with and verbally approved by the contractor Radiological Group supervisor. Due to administrative oversight, the RWP was not appropriately revised.

After being informed of the incident on December 17, 1984, Boston Edison management immediately suspended monitor tank desludging work and initiated an investigation into the circumstances surrounding the

incident. Subsequently, the individual who willfully violated the RWP and the procedure by entering the tank had his employment terminated at Pilgrim Station. Additionally, two television cameras were installed in the monitor tank area allowing constant visual surveillance of the operation by the radiation protection technicians stationed outside the area.

Boston Edison and contractor technicians were reinstructed verbally and in writing of the importance of following procedures and the consequences of failing to do so. Also, the contractor Radiological Group supervisor and four contractor technicians involved in the incident were given written reprimands. Other individuals working on the desludging operation were also reinstructed on the procedures to be followed during this project. Finally, the remainder of the monitor tank desludging was performed under the purview of Boston Edison (rather than contractor) Radiological Group supervisors and technicians.

Full compliance with respect to these violations was achieved prior to the resumption of work on the "C" monitor tank on 1/8/85.

Boston Edison has lessened the discretionary authority allowed contractor health physics personnel by revising the Station procedure governing Radiation Work Permits so that only Boston Edison supervisory personnel are permitted to revise the requirements of a Radiation Work Permit. Additionally, the Vice President-Nuclear Operations reinforced, via memorandum to Station personnel, the policy that failure to follow procedures would not be tolerated by Boston Edison. Finally, it should be noted that on January 17, 1985, an Internal Review Program of work in progress was initiated with the use of an independent auditor.

In addition to the preceding corrective actions we would also point out that Boston Edison has undertaken an extensive Radiological Improvement Program (RIP) to address programmatic deficiencies on a long-term basis. Included within RIP is a complete analysis, and overhaul where necessary, of Radiation Work Permits and the controlling procedure. Upon completion of the RIP at the end of 1985 Boston Edison would expect to have implemented a comprehensive approach to assuring that all RWP-controlled work is conducted in a safe manner.

Notice of Violation "B"

Technical Specification 6.8 requires that procedures be established, implemented, and maintained that meet or exceed the requirements of Appendix "A" of USNRC Regulatory Guide 1.33, November 1972. This Regulatory Guide recommends in Appendix A, Section 6.5, that procedures for restrictions and activities in High Radiation Areas and for surveys and monitoring be established.

Contrary to the above, on December 17, 1984, a remote reading teledosimetry system was used for purposes of surveying, monitoring, and restricting activities during sludge-lancing of the 'C' monitor tank, and no procedures detailing use of this device for this purpose had been established.

Response to Violation "B"

The RWP controlling the job required high radiation area surveillances at half-hour intervals. As noted in our response to Violation "A" above, the surveillances were discontinued when a contractor Radiological Group supervisor informed the health physics technician covering the job that using the teledosimetry system was equivalent. The contractor supervisor failed to inform Boston Edison supervision of his actions and also failed to appropriately revise the RWP to address use of the teledosimetry for this purpose. Note that a Station procedure governing teledosimetry usage existed at the time of the incident. Boston Edison admits that the job-specific RWP should have referenced this procedure if the teledosimetry was to be used in this manner. However, we stress that this violation does not represent a failure to establish procedures as required by the Technical Specification and Regulatory Guide 1.33 which you cited. As with Violation "A", although it is admitted that there was a violation of proper RWP procedure, it is submitted that Violation "B" should not have been characterized as Severity Level III because there was not a "substantial potential for an exposure or release in excess of 10 CFR 20". As with Violation "A" we therefore respectfully request a lower categorization of Severity Level for the subject incident.

As noted in our response to Violation "A", upon being informed of the monitor tank incident, Boston Edison suspended the desludging operations to investigate the situation. Learning that the teledosimetry system was being used in lieu of performing the required surveillances, Boston Edison issued supervision instructions to cease this practice. Additionally, as noted earlier, the contractor supervisor received a written reprimand and Station personnel were informed by memorandum from the Vice President-Nuclear Operations that failure to follow procedures would not be tolerated.

Full compliance was achieved prior to recommencement of the work on 1/8/85 when the use of the teledosimetry system in lieu of performing the required surveillances was discontinued.

As noted earlier in this response, the Station procedure governing RWP's has been revised to restrict - to Boston Edison supervisory personnel alone - the authority to revise RWP requirements. Also, as discussed above, an Internal Review Program has been initiated, providing Boston Edison Radiological Group management with an additional means of assuring adherence to procedures. In addition, and as further corrective action, we would again point to the Radiological Improvement Program (RIP) which Boston Edison is in the process of implementing and which we believe will constitute an effective long-range approach to problems in the radiological safety area.