POWER AUTHORITY OF THE STATE OF NEW YORK
INDIAN POINT NO. 3 NUCLEAR POWER PLANT
P. O. BOX 215 BUCHANAN, N. Y. 10511
TELEPHONE: 914-739-8200

September 28, 1978
IP-JJK-2986

50-286/78-22

Docket No. 50-286
License No. DPR-64

Mr. Hilbert W. Crocker, Acting Chief
Fuel Facility and Materials Safety Branch
United States Nuclear Regulatory Commission
Region I
631 Park Avenue
King of Prussia, PA 19406

Dear Mr. Crocker:

This letter is provided in response to your letter of September 6, 1978 received at this office on September 11, 1978 concerning inspection 50-286/78-22 of Indian Point 3 conducted by Mr. D. R. Neely of your office on July 17-21 and August 1-4, 1978. The inspector noted two items of noncompliance during this inspection and each of these items is addressed separately in the following paragraphs.

In item A of the notice of violation we are cited for allowing an Eberline RM-14 radiation monitor (frisker) to be used beyond its calibration due date. It was also noted in the inspection details that this was one of two "friskers" that the licensee knew were out of calibration but had not been able to physically locate. The second missing instrument has since been found and it was determined that it had not been in use beyond its calibration due date. To avoid recurrence of this use of out of calibration health physics instrumentation the following actions are being taken.

By October 1, 1978 a physical inventory list for all health physics instrumentation, exclusive of dosimeters, is being established. This list identifies all instrumentation by serial numbers or property record number, instrument type, and the most recent calibration date. Each month health physics personnel will perform a physical inventory of all health physics instrumentation and will remove from service all instrumentation that is due for calibration within the following month. When instrumentation cannot be found during such an inventory an investigation will be conducted to establish its location. In the case of dosimeters, the personnel assigned to zero these devices will by October 1, 1978 be instructed to check the calibration due date on all the dosimeters they handle. If any of these dosimeters are found to be within ten days of their next calibration due date they will be removed from service until they are recalibrated.

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These actions will assure that all health physics instrumentation will be removed from service well in advance of calibration due dates and will preclude the possibility of instrumentation being used beyond required calibration dates.

In Item B we were cited for using forms that were not "equivalent to Form NRC-4" to document previous radiation exposure of transient workers at Indian Point 3 in June and July 1978. As of August 4, 1978, only Form NRC-4's are being used to document previous radiation exposure of workers at Indian Point 3 and no other forms are being accepted as "equivalent to" this form. This policy assures that we will at all times have all the information required by regulations for documentation of previous radiation exposures.

After an individual completes Form NRC-4, his radiation exposure is limited to 750 millirem at Indian Point 3 until documentation of exposure has been received from all previous locations where radiation exposure has been received. This policy assures that an individual will not receive more than 1250 millirem at Indian Point 3 until we have received full documentation of all previous exposures.

The above information constitutes our response to the items of non-compliance in this inspection. One other item addressed in the inspection details in paragraph 2 requires clarification. In a previous inspection (50-286/77-01) an unresolved item (-09) was identified. This item related to a substantial difference between the exposure indicated by film badges and thermoluminescent dosimeters (TLD's) when they were exposed to the high energy gamma fields experienced in the vicinity of primary system piping when the reactor is at power. The Authority has conducted experiments which demonstrated that the exposures indicated by TLD's are more accurate than film badges under these specialized conditions of exposure. The results of these experiments have been presented at a scientific meeting and will be published. We are also presently conducting a comparison of film badge and TLD's for measuring all exposures at Indian Point. We will have completed a preliminary comparison of film badge and TLD measurement of exposures within two months but we do not at this time intend to switch to TLD's for measuring all exposures. We do, however, feel technically justified in using TLD's for measuring gamma exposures inside the vapor containment building when the reactor is at power. Our actions as described above should be sufficient to resolve Item 77-01-09.

Very truly yours,

J. P. Bayne
Resident Manager

JJK/rbb

cc:

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