50-286

NOV 13 1973

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H. Smith
J. Stolz

Professor Gerald Palevsky
C. E. Department, Room T152
The City College
Convent Avenue and 138th Street
New York, New York 10031

Dear Mr. Palevsky:

I am enclosing for your use typical examples of draft and final environmental statements (DES and FES) prepared by the AEC Regulatory staff, for the following plants:

DES	FES
Indian Point 3	San Onofre 1
Vogtle	Trojan
Millstone 3	Haddam-Neck
Dresden 2 and 3	Grand Gulf 1 and 2

Sincerely,
Original Signed by:
John F. Stolz

John F. Stolz, Chief
Boiling Water Reactors Branch No. 2
Directorate of Licensing

Enclosures:
As stated

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ADOCK 05000286

Stater

OFFICE	L:BWR-2	L:BWR-2				
SURNAME	JFStolz	HSmith/maw				
DATE	11/13/73	11/13/73				

(Rev. 9-53) AECM 0240 GPO C43-16 81468-1 448-678

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Docket Nos. 50-3
50-247
50-286

Mr. Harry Woodbury
Executive Vice President
Consolidated Edison Company
of New York, Inc.
4 Irving Place
New York, New York 10003

Dear Mr. Woodbury:

Thank you for your letter of September 24, 1973, and the April 1973 annual report entitled "Hudson River Ecological Study in the Area of Indian Point," prepared by the Ecological Services branch of Texas Instruments Incorporated for Consolidated Edison. I have forwarded the report to our Regulatory staff for use in its continuing assessment of the environmental impact of the Indian Point plants on the Hudson River.

It was a pleasure to hear from you and again thank you for your report.

Sincerely,

/s/

Chairman

DIST.
CHM-2
LMMuntzing
JFO'Leary
LVGossick
ECase
GErtter(DR-6239)
MGroff
JCook
DRReading
PDR
Local PDR
AGiambusso, L:RP
DMuller, L:DP
GKnighton, L:DP:1
MJOestmann, L:EP-1

REWRITTEN IN CHM'S OFFICE Flynn/bam 11/8/73

MKarman/STreby, OGC
RP Reading
L Reading
EP-1 Reading
E. Hughes

OFFICE ▶	SEE ATTACHED YELLOW FOR CONCURRENCES					
SURNAME ▶						
DATE ▶						

Form AEC-318 (Rev. 9-53) AECM 0240 U. S. GOVERNMENT PRINTING OFFICE : 1970 O - 405-346

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Docket Nos. 50-3
50-247
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ENVIRO - FILE

Mr. William J. Cahill, Jr.
Vice President
Consolidated Edison Company
of New York, Inc.
4 Irving Place
New York, New York 10003

Dear Mr. Cahill:

In reference to your letter of August 21, 1973, you provided additional information as to the modifications of the radioactive waste treatment system for Indian Point Nuclear Generating Plants, Unit Nos. 1, 2 and 3. These modifications include the steam generator blowdown interties from Unit No. 3 or from Unit No. 2 to the Unit No. 1 Secondary Boiler Blowdown Purification System (SBBPS) as described in the Final Facility Description and Safety Analysis Report (FFDSAR) and in the Environmental Report (ER) and supplements for Indian Point Unit No. 3. These documents also describe installation of charcoal filters in the containment purge duct, the primary auxiliary building and the fuel storage building ventilation systems.

Upon this basis, the staff prepared its evaluation of the radioactive waste treatment system as presented in the Safety Evaluation Report of September 21, 1973, and the Draft Environmental Statement of October 1973. The results indicate that the radioactive waste treatment systems will meet the Commission's "as low as practicable" guidelines and thus will be acceptable. This staff conclusion is based on your statement that (1) the SBBPS at Unit No. 1 will be designed to treat the blowdown simultaneously from Units No. 1, 2 and 3; and (2) the blowdown from Unit No. 3 will be directed to the Unit No. 1 SBBPS when the radioactivity exceeds a predetermined level regardless of the operability of Unit No. 1.

In your August 21, 1973 letter, however, you reported that such equipment will not be available at the time of the initial startup of Unit No. 3 but by Spring 1975. The staff will require as a condition to the

operating license for Indian Point Unit No. 3 that the intertie from Unit No. 3 to the Unit No. 1 SBBPS and the charcoal adsorbers be installed and functional no later than May 1, 1975. Furthermore, prior to that date, it is anticipated that the operation of Unit No. 3 during the first few months, assuming criticality in the Fall of 1974, will result in releases of radioactive materials in effluents that are well below the release values calculated for full power operation.

The Technical Specifications will limit the releases to assure they will be kept "as low as practicable" at all times and will require the capability of continuous monitoring of the blowdown effluent from all principal release points prior to initial startup of Unit No. 3. In terms of the monitoring of the blowdown, the radioactivity level of the secondary coolant will be measured continuously by collecting samples from the bottom of each of the four steam generators in a common header and by gamma counting a common sample in a holdup tank assembly. When the radioactivity is below a predetermined value, the blowdown will be treated in the Unit No. 3 blowdown flash tank (BFT). The gases will be vented directly to the atmosphere through an unmonitored roof vent without further treatment. Furthermore, the tank condensate will not be directly monitored but discharged into the discharge canal without further treatment. The staff considers that the lack of monitoring the releases will not meet the requirements of Regulatory Guide 1.21 and General Design Criterion 64 of Appendix A of 10 CFR Part 50.

When the radioactivity is above the predetermined value, an alarm will be signaled such as to close the sample and blowdown isolation valves and the blowdown tank spray valve. The blowdown to the Unit No. 1 flash tank of the SBBPS will be manually diverted through a valve to Unit No. 1. During operation of Unit No. 1, the gases from Unit No. 1 BFT will be vented to the turbine condenser which in turn will be vented to the atmosphere through the Unit No. 1 stack. The stack is continuously monitored for gross radioactivity, particulates, and radioiodine which is acceptable. In addition, the flash tank condensate will be further treated by being processed through a filter and a demineralizer for reduction in radioactivity before being discharged into the discharge canal. The radioactivity of the liquid effluent is required to be measured prior to discharge.

When Unit No. 1 is not operational, the gases from the Unit No. 1 BFT, however, will be discharged unmonitored to the atmosphere through a roof top vent. In your letter of August 21, 1973, you proposed to monitor periodically the level of iodine-131 by sampling the upstream and downstream blowdown stream from the Unit No. 1 BFT and by determining partition factors. However, Criterion 64 - Monitoring

Radioactivity Releases - requires that:

> "Means shall be provided for monitoring the reactor containment atmosphere, spaces containing components for recirculation of loss-of-coolant accident fluids, effluent discharge paths, and the plant environs for radioactivity that may be released from normal operations, including anticipated operational occurrences, and from postulated accidents".

Upon this basis, the staff will require that all releases through the BFT roof vents be directly monitored. Therefore, your proposed system of measuring the radioactivity content of the upstream and downstream blowdown, taking into account partition factors, is considered to be inadequate to meet Criterion 64.

In addition, in your letter of August 21, 1973, you reported a value of 3×10^{-5} µCi/cc as the set point to divert the blowdown from Unit No. 3 to Unit No. 1. However, on page Q 11.3-2 of Supplement 7 to the FFDSAR, you presented a value of 2.7×10^{-4} µCi/cc for the alarm level of the R-19 scintillation counter for a blowdown rate of 12.5 gpm per steam generator. Would you clarify the discrepancy between these two values.

The staff considers the sampling of iodine in the plant vent to be acceptable as you have proposed. This system will be similar to that already being used at Unit No. 2. The area monitoring system is also acceptable.

In summary, the staff will require that all principal release points be identified and be monitored prior to startup of Indian Point No. 3. Subject to installing the flash tank vent monitoring system, the staff concludes that the radioactive waste treatment system will satisfy the "as low as practicable" guidelines of 10 CFR Parts 20 and 50.

Your comments on the radiological environmental monitoring program will be reviewed upon receipt of the proposed Environmental Technical Specifications which will cover all three units at the site. We expect your proposed document to be available by mid-November.

Sincerely,

Original signed by
George W. Knighton

George W. Knighton
Chief, Environmental Projects
Branch No. 1

cc: Mr. Samuel W. Jensch
Dr. John C. Geyer
Mr. R. B. Briggs
Mr. Max D. Paglin, Esq.
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J. Bruce MacDonald
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Atomic Safety and Licensing Appeal Board
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OFFICE ▶	L:EP-1	L:EP-1	L:ADEP			
SURNAME ▶	MJO					
	MJOestmann/jm	GWKnighton	DRMuller			
	11/2/73	11/ /73	11/ /73			