Docket Nos. 50-3 and 50-247

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

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Dear Mr. Cahill:

In response to your request dated April 15, 1974, the Commission has issued Amendment No. 6 to Provisional Operating License No. DPR-5 for Indian Point Nuclear Generating Unit No. 1 and Amendment No. 9 to Facility Operating License No. DPR-26 for Indian Point Nuclear Generating Unit No. 2. These amendments include Change Nos. 62 and 6 to the Technical Specifications, for Units Nos. 1 and 2, respectively.

These amendments involve modifications in the tables for the radiological environmental monitoring program. We have reviewed items 1 through 3 of your proposed changes to the radiological monitoring program and approve items 1 and 2 with some modifications. Item 3 is partially approved with additional modifications as discussed in the enclosed Environmental Evaluation. The request to delete the map showing the locations where the radiological samples are taken on and off site is denied. The reason is that it is essential, in accordance with Commission's regulations, to keep a historical record on the buildup of any plant-related releases of radionuclides into the environment so as to be able to estimate the dose commitment to the population surrounding the site.

Amendment No. 6 to Provisional Operating License No. DPR-5 for Unit No. 1 also deletes paragraph 4 of the license. Paragraph 4 pertained to the allocation of special nuclear material pursuant to Section 50.60 of the Commission's regulations. This provision is no longer applicable because the regulations were revised to permit private ownership of special nuclear material and we have discontinued this provision in licenses. However, this does not mean that any contractual agreement you may have with the Commission is void, but you will continue to work with the contracting office.

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Form AEC-318 (Rev. 9-53) AECM 0240

Copies of the related Environmental Evaluation and the Federal Register Notice on this action are also enclosed.

Sincerely,

Original signed by

George E. Lear, Chief Operating Reactors Branch No. 3 Directorate of Licensing

2. Amendment No.	9 to DPR-26							
3. Environmental	Evaluation							
4. Federal Regis	ter Notice							
cc w/enclosures:	See next page	ı						
DISTRIBUTION:								
Docket File (2)								
AEC PDR								
Local PDR								
EP-1 Reading								
L Reading								
DRMuller								
GWKnighton								
KKneil								
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PErickson								
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Form AEC-318 (Rev. 9-53) AECM 0240

Enclosures:

1. Amendment No. 6 to DPR-5

U. S. GOVERNMENT PRINTING OFFICE: 1974-526-166

Samuel W. Jensch, Esq., Chairman Atomic Safety and Licensing Board Germantown C-419 U. S. Atomic Energy Commission Washington, D. C. 20545

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Mr. R. B. Briggs, Associate Director Molten-Salt Reactor Program Oak Ridge National Laboratory P. B. Box Y Oak Ridge, Tennessee 37830

Dr. John C. Geyer, Chairman Department of Geography and Environmental Engineering The John Hopkins University Baltimore, Maryland 21218

Myron Karman, Esq. Regulatory Staff Counsel U. S. Atomic Energy Commission Washington, D. C. 20545

Leonard M. Trosten, Esq. LeBoeuf, Lamb, Leiby and MacRae 1757 N Street, N. W. Washington, D. C. 20036

Edward J. Sack, Esq. 4 Irving Place New York, New York 10003

Honorable George E. Segnit Mayor, Village of Buchanan 188 Westchester Avenue Buchanan, New York 10511

New York State Office of Planning Service 488 Broadway Albany, New York 12207

Tri-State Regional Planning Commission 100 Church Street New York, New York 10007

Mr. Neill Thomasson (w/incoming) Rm. 647A, East Tower Waterside Mall Environmental Protection Agency Washington, D. C. 20460 Commissioner of Commerce State Department of Commerce 112 State Street Albany, New York 12207

.....¢

Honorable Louis J. Lefkowitz
Attorney General, State of
New York
World Trade Center
New York, New York 10047

Honorable Paul S. Shemin Assistant Attorney General State of New York 80 Centre Street New York, New York 10013

Bruce L. Martin, Esq. (w/incoming) New York State Atomic Energy Council State Department of Commerce 99 Washington Avenue Albany, New York 12210

Mrs. Kay Winter, Librarian Hendrick Hudson Free Library 31 Albany Post Road Montrose, New York 10548

Mr. Harvey E. Hauptner 110 Bay Street City Island, New York 10464

Angus Macbeth, Esq. Rich M. Hall, Esq. 15 West 44th Street New York, New York 10036

Anthony Z. Roisman, Esq. Berlin, Roisman & Kessler 1712 N Street, N. W. Washington, D. C. 20036

Mr. Paul Arbesman (w/incoming) Environmental Protection Agency 26 Federal Plaza New York, New York 10007 Delete Paragraph 4 of the license. The deletion of this paragraph also deletes Appendix B, dated October 29, 1965, to the license.

3. This license amendment is effective as of the date of its issuance.

FOR THE ATOMIC ENERGY COMMISSION

and R. Golla

Karl R. Goller, Assistant Director for Operating Reactors Directorate of Licensing

Attachment: Change No. 62 to Technical Specifications

Date of Issuance: NOV 1 4 1974

CONSOLIDATED EDISON COMPANY OF NEW YORK, INC.

DOCKET NO. 50-3

INDIAN POINT NUCLEAR GENERATING UNIT NO. 1

AMENDMENT TO PROVISIONAL OPERATING LICENSE

Amendment No. 6 License No. DPR-5

- 1. The Atomic Energy Commission (the Commission) has found that:
 - A. The application for amendment by Consolidated Edison Company of New York, Inc., for Indian Point Nuclear Generating Unit No. 1, dated April 15, 1974, complies with the standards and requirements of the Atomic Energy Act of 1954, as amended, and the Commission's rules and regulations set forth in 10 CFR Chapter I;
 - B. The facility will operate in conformity with the application, the provisions of the Act, and the rules and regulations of the Commission;
 - C. There is reasonable assurance (i) that the activities authorized by this anendment can be conducted without endangering the health and safety of the public, and (ii) that such activities will be conducted in compliance with the Commission's regulations;
 - D. The issuance of this amendment will not be inimical to the common defense and security or to the health and safety of the public; and
 - E. Prior public notice of this amendment is not required since the amendment does not involve a significant hazards consideration.
- 2. Accordingly, the license is amended by a change to the Technical Specifications as indicated in the attachment to this license amendment and Paragraph 3.B. of License No. DPR-5 is hereby amended to read as follows:

"B. Technical Specifications

The radiological Technical Specifications contained in Appendix A dated October 29, 1965, as issued with Amendment No. 2 to License No. DPR-5, and as modified by all changes through Change No. 60, and also the environmental Technical Specifications contained in Appendix B dated August 9, 1973, as issued with Amendment No. 3 to License No. DPR-26, and as modified by Change No. 61 dated May 22, 1974, and Change No. 62, attached to this license amendment, are hereby incorported in the license. The licensee shall operate the OFFICE facility in accordance with the Technical Specifications. ^{SUR™}B111060147 741125 PDR ADOCK 05000003 PDR Form AEC-318 (Rev. 9-53) AECM 0240 C43 16 81468-1 445-678 GPO

ATTACHMENT TO LICENSE AMENDMENT

AMENDMENT NO. 9 TO FACILITY OPERATING LICENSE NO. DPR-26 CHANGE NO. 6 TO TECHNICAL SPECIFICATIONS;

AMENDMENT NO. 6 TO PROVISIONAL OPERATING LICENSE NO. DPR-5 CHANGE NO. 62 TO TECHNICAL SPECIFICATIONS

CONSOLIDATED EDISON COMPANY OF NEW YORK, INC.

INDIAN POINT NUCLEAR GENERATING UNITS NOS. 1 AND 2

DOCKET NOS. 50-3 AND 50-247

Revise Appendix B as follows:

Remove pages 4-55, 4-58, 4-59, 4-60 and insert the attached pages.

NOV 1 4 1974

4.0 ENVIRONMENTAL SURVEILLANCE PROGRAMS

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Table 4.2-1 (sheet 1 of 4)

	Environmental Monito	ring Survey	Liquid Di	Lscharges +			
				<u>1</u> <u>P1</u>	cograms		2
Media of Sample	No. of Samples/ Collection	Col	llection equency	Analysis	C F	ollection requency	Analysis
Hudson River	2		W	GBG	T	W	GBG
Water	2		MC	Т	м	² C	GSA
					11	C	T (
Hudson River	15		SSF	GBG	. M	DGS	GBG
Aquatic					· .		GSA
Vegetation							NA
Hudson River	5		SSF	GBG	M	1	GBG
Bottom Sediment Including Benth	, 05			•			GSA RA
Hudson River					•		1
Crabs/Clams	2		SSF	GBG	N	ſ	CBG
							GSA RA
				· ·	•		141
Hudcon River	2		М	GBG	ر. ر	ſM	GBG(
Fish	~						GSA
				· .			RA
+Samples will be	taken whenever biological	ly availabe.					
Nomenclature for	Sample Frequency		Nomenc	lature for Ar	alysis		
W - Weekly	_		GBG -	Gross Beta-Ga	uuma Appalvoia to	o moscure b	ata l
TW - Twice Week	(Ly		:01 -	emitters and	those radio:	isotopes ex	pected
M - Monthly	<i>w</i>	·		to be present	not otherw	ise detecte	d by
MC - Monthly Co	omposite			gamma spectru	im analyses.	- 1 -	ł
TM - Twice Mont	the Control Curron and Fal	1	GSA -	Gamma Spectro	meter Analy	5.1.8	
MDGS - Monthly du	in spring, summer and far	ч ы такана алы алы алы алы алы алы алы алы алы ал	· TLD -	Thermolumines	scent Dosime	try	
SA - Semiannual		. /. EE				C	Change No. 62
.		: 4-33				r)ate40V 1 4 w

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Table 4.2-1 (Sheet 4 of 4) Environmental Monitoring Survey Gaseous Discharges

Nomenclature for Sample Frequency

M - - Monthly

TM - - Twice Monthly

W - - Weekly

TW - - Twice Weekly

MC - - Monthly Composite

A - - Annually

SSF - Once each in Spring, Summer and Fall

MDGS - Monthly During the Growing Season

MSL - Monthly at Selected Locations

WSL - Weekly at Selected Locations

Nomenclature for Analysis

GEG - Gross Beta-Gamma

GSA - Gamma Spectrometer Analysis

RA - Radiochemical Analysis to measure beta emitters and those radioisotopes expected to be present not otherwise detected by gamma spectrum analysis. Radiochemical analysis will be required to measure radioactive content of iodine-131 in milk and drinking water.

T - Tritium

GGB - Gross Gamma Background (Thermoluminescent Dosimeters)

Change No. 62

Date: NOV 1 4 1974

TABLE 4.2-2

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INDIAN POINT STATION-RADIOLOGICAL ENVIRONMENTAL MONITORING SURVEY

Sample	Sample Frequency/Type		Samplé <u>T</u> Location	ype of analysis
Hudson River Water	Weekly/Cont.		Inlet pipe into plant and at plant discharge canal. Points 9 and 10	Gross Beta-Gam Tritium
• •	Monthly Compos ite			
Nudson River Aquatic Vegetation	Once each in Spring, Summer and Fall/Grab	•	Points 10, 15, 16 and 17. At mouth of discharge canal, Peekskill Bay, Tompkins Cove. off Verplanck and at Lovett site	Gross Bd -Gam
Hudson River Bottom Sediment (including Benthos)	Once each in Spring, Summer and Fall/Grab	• •	Same as item 2	Gross Beta-Car
lludson River Crabs/Clams	Once each in Spring,Summer and Fall/Grab		Same as item 2	Gross Beta-Cat
Hudson River • Fish	Monthly/Catch	•	Where available near site	Gross Beta-Ga (
Fallout (Rain water)	Monthly/Cont.		Point 1; 15 miles south of site - East view	Gronn Beth-Ca Trillium
Drinking Water	Monthly/Grab		Points 7 and 8	Gross Beta-Ca Radiochemistr Tritium
Air Particulate and Radioiodine	Weekly/Cont,		Points 1,2,3,4,5 and 21 and offsite at points in Peekskill, Buchanan, Crugers, and Springdale for one week periods consecutively	Gross Beta-Ca Gamma Spectri Iodine-131 Change No.
	,	9-59		Date: NDV 1.4 m

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		110			
Samp	<u>1e</u>		Sample Frequency/Type	Sample Location	Type of Analysis
9.	Lake Water		Monthly/Grab	Points 11, 12 and 13	Gross Beta-Gamma Trittium
10.	Well Water	•	Nonthly/Grab	Points 6, 14, and Verplanck	Gross Beta-Gamma Tritium
11.	Lake Aquatic Vegetation		Once each Spring, Summer and Fall/Grab	Points 11, 12 and 13	Gross Beta-Gamma and Gamma Spectrum
12.	Land Vegetation	-	Once each Spring, Summer and Fall/Grab	Points 6, 18, 19, 20 and 21	Gross Beta and Gamma Spectrum
13.	Soil		Annually/Grab	Points 6, 18, 19, 20	Gross Beta and Gamma Spectrum
14,	Direct Gamma (TLD		Annually (Spot Readings)	Along principal roads within a 5 mile radius of plant	Cross Gamma Backgroun
15.	Direct Gamma (TLD)		Monthly/Cont.	Selected locations in Buchanan, Verplanck, Montrose, Peekskill, and at a number of points onsite at plant perimete	Gross Gamma Backgroun (
16.	Milk		Monthly (during grazing seasons)/Grab	Selected Locations of cows within 7 miles (farm located within SSW direction)	Radiochemistry and Gamma Spectrum
					Change No. 62
				•	Date: NOV 1 4 1974

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"(2) <u>Technical Specifications</u>

The Technical Specifications contained in Appendices A and B, as revised, are hereby incorporated in the license. The licensee shall operate the facility in accordance with the Technical Specifications, as revised by issued changes thereto through Change No.6."

3. This license amendment is effective as of the date of its issuance.

FOR THE ATOMIC ENERGY COMMISSION

Karl R. Gelin

Karl R. Goller, Assistant Director for Operating Reactors Directorate of Licensing

Attachment: Change No.6 to Technical Specifications

Date of Issuance: NOV 1 4 1974

ATTACHMENT TO LICENSE AMENDMENT

AMENDMENT NO. 9 TO FACILITY OPERATING LICENSE NO. DPR-26 CHANGE NO. 6 TO TECHNICAL SPECIFICATIONS;

AMENDMENT NO. 6 TO PROVISIONAL OPERATING LICENSE NO. DPR-5 CHANGE NO. 62 TO TECHNICAL SPECIFICATIONS

CONSOLIDATED EDISON COMPANY OF NEW YORK, INC.

INDIAN POINT NUCLEAR GENERATING UNITS NOS. 1 AND 2

DOCKET NOS. 50-3 AND 50-247

Revise Appendix B as follows:

Remove pages 4-55, 4-58, 4-59, 4-60 and insert the attached pages.

CONSOLIDATED EDISON COMPANY OF NEW YORK, INC.

DOCKET NO. 50-247

INDIAN POINT NUCLEAR GENERATING UNIT NO. 2

AMENDMENT TO FACILITY OPERATING LICENSE

Amendment No. 9 License No. DPR-26

- 1. The Atomic Energy Commission (the Commission) has found that:
 - A. The application for amendment by Consolidated Edison Company of New York, Inc., for Indian Point Nuclear Generating Unit No. 2, dated April 15, 1974, complies with the standards and requirements of the Atomic Energy Act of 1954, as amended, and the Commission's rules and regulations set forth in 10 CFR Chapter I;
 - B. The facility will operate in conformity with the application, the provisions of the Act, and the rules and regulations of the Commission;
 - C. There is reasonable assurance (i) that the activities authorized by this amendment can be conducted without endangering the health and safety of the public, and (ii) that such activities will be conducted in compliance with the Commission's regulations;
 - D. The issuance of this amendment will not be inimical to the common defense and security or to the health and safety of the public; and
 - E. Prior public notice of this amendment is not required since the amendment does not involve a significant hazards consideration.
- 2. Accordingly, the license is amended by a change to the Technical Specifications as indicated in the attachment to this license amendment and Paragraph 2.C.(2) of License No. DPR-26 is hereby amended to read as follows:



4.0 ENVIRONMENTAL SURVEILLANCE PROGRAMS

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Table 4.2-1 (sheet 1 of 4)

	Environmental Monitori	ng Survey L	iquid Dis	charges +		
			1	Progra	ms	2
Media of Sample	No. of Samples/ Collection	Coll Freq	ection uency	Analysis	Collection Frequency	Analysi
Hudson River Nater	2 2		W MC	GBG T	JW	GEG CSA
					MC	R^ (
Hudson River Aquatic Vegetation	15		SSF	GBG	MDCS	GBG GSA RA
Hudson River Bottom Sediment, Including Benthe	5 5 5		SSF	GBG	М	GEG GSA RA
Hudson River	•					
Crabs/Clams	2		SSF	GBG	М	CBG CSA RA
Hudson River Fish	2		M	GBG	ТМ	(CLG GSA RA
+Samples will be <u>Nomenclature for S</u> W - Weekly TW - Twice Week D - Daily M - Monthly MC - Monthly Con TM - Twice Monthl SSF - Once each S MDGS - Monthly du	taken whenever biologically Sample Frequency ly mposite hly in Spring, Summer and Fall ring the Growing Season	availabe.	$\frac{Nomencla}{GBG - Gr}$ $RA - Ra$ en tc $GSA - Ga$ $T - Tr$ $TLD - Th$	ature for Analys coss Beta-Gamma adiochemical Anal mitters and those be present not mma spectrum an imma Spectrometer citium hermoluminescent	is lysis to measure by e radioisotopes exp otherwise detector alyses, r Analysis Dosimetry	eta bected 1 by
SA ~ Semiannual	,	1. E.E.			C	

Date Minu 14 3

4-55

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Table 4.2-1 (Sheet 4 of 4)Environmental Monitoring SurveyGaseous Discharges

Nomenclature for Sample Frequency

- M - Monthly
- TM - Twice Monthly
- W - Weekly
- TW - Twice Weekly
- MC - Monthly Composite
- A - Annually
- SSF Once each in Spring, Summer and Fall
- MDGS Monthly During the Growing Season
- MSL Monthly at Selected Locations
- WSL Weekly at Selected Locations

Nomenclature for Analysis

- GBG Gross Beta-Gamma
- GSA Gamma Spectrometer Analysis
- RA Radiochemical Analysis to measure beta emitters and those radioisotopes expected to be present not otherwise detected by gamma spectrum analysis. Radiochemical analysis will be required to measure radioactive content of iodine-131 in milk and drinking water.
- T Tritium
- GGB Gross Gamma Background (Thermoluminescent Dosimeters)

Change No.⁶ Date: NOV 1 4 1974

TABLE 4.2-2

1.

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INDIAN POINT STATION-RADIOLOGICAL ENVIRONMENTAL MONITORING SURVEY

Sample ... Sample Type of analysis Frequency/Type Location Sample Gross Beta-Ga Inlet pipe into plant and at Weekly/Cont. Hudson River Water plant discharge canal. Points Tritium 9 and 10 Month1v Composite Gross Beta-Ca Points 10, 15, 16 and 17. At Once each in Hudson River Aquatic mouth of discharge canal, Spring, Summer Vegetation Peekskill Bay, Tompkins and Fall/Grab Cove, off Verplanck and at Lovett site Gross Beta-Ga Same as item 2 Hudson River Bottom Once each in Spring, Summer Sediment (including and Fall/Grab Benthos) Gross Beta-Ga Same as item 2 Once each in Hudson River Spring, Summer Crabs/Clams and Fall/Grab Gross B Where available near site Monthly/Catch Hudson River Fish Grong Beth-Ga Point 1; 15 miles south of Monthly/Cont. Fallout Trfl.fum aite - East view (Rain water) Gross Beta-Ca Points 7 and 8 Monthly/Grab Drinking Water Radiochemistu Tritium Gross Beta-Ga Points 1,2,3,4,5 and Weekly/Cont. Air Particulate Gamma Spectri 21 and offsite at points in and Radioiodine Iodine-131 Peekskill, Buchanan, Crugers, and Springdale for one week Change No. periods consecutively 1-59 DALCINGERY

				TAU	LE 4.2-2 (Cont'd)		
	Samp	<u>1e</u>		•	Sample Frequency/Type	Sample Location	Type of Analysia
•	9.	Lake Water			Nonthly/Grab	Points 11, 12 and 13	Grobs Bèta-Gamma Trittium
	10.	Well Water			Monthly/Grab	Points 6, 14, and Verplanck	Gross Beta-Gamma Tritium
	11.	Lake Aquatic Vegetation			Once each Spring, Summer and Fall/Grab	Points 11, 12' and 13	Gross Beta-Gamma and Gamma Spel um
	12.	Land Vegetation		•	Once each Spring, Summer	Points 6, 18, 19, 20 • and 21	Gross Beta and Gamm Spectrum
	1.3.	Soil			Annually/Grab	Points 6, 18, 19, 20	Gross Beta and Gamm Spectrum
	14.	Direct Gamma (TLD	•		Annually (Spot Readings)	Along principal roads within a 5 mile radius of plant	Gross Camma Backgro
	15.	Direct Gamma (TLD)		•	Monthly/Cont.	Selected locations in Buchanan, Verplanck, Montrose, Peekskill, and at a number of points onsite at plant perimete	Gross Gamma Backgro (r
	16.	Milk		. •	Monthly (during grazing seasons)/Grab	Selected Locations of cows within 7 miles (farm located within SSW direction)	Radiochemistry and Gamma Spectrum
	•				ана стана стана Стана стана стан Стана стана стан		Change No. 6
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ENVIRONMENTAL EVALUATION BY THE DIRECTORATE OF LICENSING SUPPORTING AMENDMENT NO. 6 TO LICENSE NO. DPR-5 CHANGE NO. 62 TO THE TECHNICAL SPECIFICATIONS INDIAN POINT NUCLEAR GENERATING UNIT NO. 1 (DOCKET NO. 50-3) SUPPORTING AMENDMENT NO. 9 TO LICENSE NO. DPR-26 CHANGE NO. 6 TO THE TECHNICAL SPECIFICATIONS INDIAN POINT NUCLEAR GENERATING UNIT NO. 2 (DOCKET NO. 50-247) CONSOLIDATED EDISON COMPANY OF NEW YORK, INC.

Introduction

By letter dated April 15, 1974, Consolidated Edison Company requested Change No. 3 to Appendix B, Environmental Technical Specifications, appended to Provisional Operating License No. DPR-5 for Indian Point Nuclear Generating Unit No. 1 and Facility Operating License No. DPR-26 for Indian Point Nuclear Generating Unit No. 2. The proposed change involves modification of the radiological and environmental monitoring survey program as follows:

- 1. Changing the benthos sampling media in Table 4.2-1 (page 4-55) from a separate item to incorporation under the category of "Hudson River Bottom Sediment (including Benthos)."
- 2. Changing the scope and complexity of the radiochemical analyses in Table 4.2-1.
- 3. Deleting Table 4.2-2 (pages 4-59, 4-60 and 4-61) and Figure 4-5 (page 4-62) from the Environmental Technical Specification Requirements.

Discussion and Evaluation

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1. The first item proposed by the licensee would in effect result in sampling benthos at the same time the bottom sediment from the Hudson River is sampled. Benthos are present in the Hudson at a concentration of 0.1 gm/m^2 and exist as semi-microscopic organisms which must be hand sorted. In order to conduct an analysis of microscopic organisms, it would require a 1 kg sample taken from a $10,000 \text{ m}^2$ of sampling area. This would involve dredging 2.5 acres of river bottom for each sample.

The staff agrees that it would not be practical to sample for microscopic samples involving dredging an extensive area of the river bottom to obtain a large enough sample to carry out an analysis; however, it is expected that the licensee sample and analyze for radioactivity content in macroscopic benthos species such as barnacles, clams, crabs, polychaete worms and amphipods which can be readily obtained from the river bottom and sorted from bottom sediments.

The purpose of measuring the radioactivity content of river bottom sediments is to identify the radioisotopes present and to determine the relationship of the radioisotopic content of species such as fish in the estuarine environment with that found in the river bottom sediments. For example, the cesium-137 content of fish is in part related to the cumulative deposition in sediment.¹ Manganese-54 deposits by sedimentation in fresh salt regions of the estuary but leaches from sediments during seasonal salt water intrusions. Rooted aquatic plants concentrate all of the radioisotopes in the food chain. These include Mn-54, Co-60, Fe-55, and Zr-95-Nb-95, Ce-144, and Ru-103, but are considered to be of no dosimetric consequence to man since they are not consumed by man, and since much lower concentrations are found in higher organisms of the aquatic food chain.

The licensee has been carrying out measurements of radioactivity of samples of water, bottom sediment and biota from the Hudson River since 1958 and particularly after the startup of Indian Point Nuclear Generating Unit No. 1 in 1962, and has found that natural radioactivity levels generally exceed the levels of artificial radioactivity. Thus, to clarify the listings in Table 4.2-1, the staff agrees with the licensee to include microscopic benthos with the river bottom sediment. Samples will be taken spring, summer, and fall and analyzed for gross beta-gamma radioactivity. With the appearance of clams or crabs in the Hudson River, the licensee will be required to carry out a similar sampling and analysis of such macroscopic species.

2. The second item involves a request for a change in the scope and complexity of the radiochemical analysis listed on pages 4-55, and 4-58. At present, a complete chemical separation is performed in the radiochemical analysis with exhaustive sequential analysis for all radioactivity. The licensee considers such an analysis possible but extremely burdensome. The licensee has prepared a revised definition of the requirements for radiochemical analysis which would provide for analysis of only beta emitters expected to be present but not otherwise measured by gamma spectrum analysis and

¹Lentsch, Jack W., Wrenn, McDonald E., Kneip, Theodore J. and Eisenbud, M., "Manmade Radionuclides in the Hudson River Estuary", presented at the Fifth Annual Health Physics Society, Mid-Year Topical Symposium, Idaho Falls, Idaho, November 1970, Amendix Y to Consolidated Edison Company's Environmental Report for Indian Point Nuclear Generating Unit No. 3, June 14, 1971.

which are related to Indian Point operations. A basic objective of the analytical program is to provide the information needed to determine dose estimates resulting from plant-released radioisotopes. The revised definition will enable the licensee to accomplish this objective while bringing the program within reasonable bounds. Therefore, the staff agrees with the licensee in the new definition of radiochemical analysis. The only exception is the analysis of milk and drinking water where radiochemical separations and analytical procedures are necessary to measure the radioactivity content of iodine-131 with sufficient accuracy and precision; thus, these samples will require radiochemical analysis to obtain the required sensitivity of measurement of iodine-131.

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In reference to item 3, the licensee requested that Table 4.2-2 with Figure 4-5 be removed from the Environmental Technical Specifications Requirements. According to the licensee, the table in question with the map commits the licensee to using specific instruments, methods of analysis and sampling locations and allows no flexibility whatsoever. The licensee believes this degree of specificity would tend to obstruct changes which continued feedback from the ongoing sampling program demonstrates are needed. In addition, these tables, which were first proposed in 1972, are out of date in several locations. The licensee further argues that the proposed change would eliminate the need for changes in the Environmental Technical Specifications when instrumentation is modified or sampling locations are altered for purposes of updating the monitoring program.

3.

The staff has reviewed the licensee's request but does not agree that the essence of Table 4.2-2 should be deleted; therefore, to permit the licensee the flexibility of altering and upgrading the specific instrumentation used for the radiological environmental monitoring survey, the staff has revised Table 4.2-2 as shown in Attachment 1. The name of any manufacturer is deleted so this allows the licensee to select new instrumentation to replace old equipment. However, the staff does not agree with the licensee to delete the map showing the locations of where samples are taken. It is essential that samples are taken from the same location so as to keep a continuous history of the buildup of radioactivity in the environment from the plant during its operation and to be able to estimate the buildup of the dose consequence to man. Thus the request from the licensee to delete entirely Table 4.2-2 and Figure 4-5 is denied.

Conclusions

Based on the above discussion and evaluation, we have granted the licensee the request for items 1 and 2 except to include macroscopic benthos species (crabs and clams) as a separate category in Table 4.2-1 and the radiochemical analysis needed to measure iodine-131 in drinking water and milk. The request in item 3 has been modified in Table 4.2-2 but the request to delete Figure 4-5 has been denied. Since no safety related systems are affected by this change, we conclude that your proposed Change No. 3 does not involve significant hazards considerations. We have also concluded that there is reasonable assurance (1) that activities authorized by this amendment can be conducted without endangering the health and safety of the public, and (2) that such activities will be conducted in compliance with the Commission's regulations.

Mary Jane Octmann

Mary Jane Oestmann, Project Manager Environmental Projects Branch #1 Directorate of Licensing

George W. Knighton, Chief Environmental Projects Branch #1 Directorate of Licensing

DATE: October 7, 1974

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Docket Nos. 50-3 and 50-247

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Docketing and Service Section Office of the Secretary

FEDERAL REGISTER NOTICE - INDIAN POINT NUCLEAR GENERATING UNITS NOS. 1 AND 2

Two signed originals of the Federal Register Notice identified as follows are enclosed for transmittal to the Office of the Federal Register for filing and publication.

CONSOLIDATED EDISON COMPANY OF NEW YORK, INC.

INDIAN POINT NUCLEAR GENERATING UNITS NOS. 1 AND 2

NOTICE OF ISSUANCE OF LICENSE AMENDMENTS

Twelve additional conformed copies are enclosed for your use.

Original signed by George W. Knighton George W. Knighton, Chief Environmental Projects Branch No. 1 Directorate of Licensing

Enclosure: As stated

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SURNAME	MSlater:sh	MJOestmann		GWKnighton	
DATE	10/17/74	10/18/74	10/ /74	10/22/74	
Form AEC-31t Rev.	9-53) AECM 0240		PO C43 16 81468-1	445-678	

UNITED STATES ATOMIC ENERGY COMMISSION DOCKET NUMBERS 50-3 AND 50-247 INDIAN POINT NUCLEAR GENERATING UNITS NOS. 1 AND 2

CONSOLIDATED EDISON COMPANY OF NEW YORK, INC.

NOTICE OF ISSUANCE OF LICENSE AMENDMENTS

Notice is hereby given that the U. S. Atomic Energy Commission (the Commission) has issued Amendment No. 6 to Provisional Operating License No. DPR-5 for Indian Point Nuclear Generating Unit No. 1 and Amendment No. 9 to Facility Operating License No. DPR-26 for Indian Point Nuclear Generating Unit No. 2, to Consolidated Edison Company of New York, Inc. Both units are located in Westchester County, State of New York. The amendments are effective as of their date of issuance.

These amendments permit modifications in the tables for the radiological environmental monitoring program.

The application for the amendments complies with the standards and requirements of the Atomic Energy Act of 1954, as amended, (the Act), and the Commission's rules and regulations. The Commission has made appropriate findings as required by the Act and the Commission's rules and regulations in 10 CFR Chapter I, which are set forth in the license amendments. For further details with respect to these actions, see: (1) the application for the amendments dated April 15, 1974; (2) Amendment No. 6 to License No. DPR-5 with its attachment, Change No. 62; (3) Amendment No. 9 to License No. DPR-26 with its attachment, Change No. 6 and (4) the Commission's related Environmental Evaluation.

All of the above items are available for public inspection at the Commission's Public Document Room, 1717 H Street, NW., Washington, D. C. 20545 and at the Hendrick Hudson Free Library, 31 Albany Post Road, Montrose, New York 10548. Copies are also being made available at the New York State Office of Planning Services, 488 Broadway, Albany, New York 12207 and the Tri-State Regional Planning Commission, 100 Church Street, New York, New York 10007.

A copy of items (2) through (4) may be obtained upon request addressed to the United States Atomic Energy Commission, Washington, D. C. 20545, Attention: Deputy Director for Reactor Projects, Directorate of Licensing, Regulation.

Dated at Bethesda, Maryland, this Hay of November 1974.

FOR THE ATOMIC ENERGY COMMISSION

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George W/ Knighton, Chief Environmental Projects Branch No. 1 Directorate of Licensing