

ATTACHMENT A

APPLICATION FOR AMENDMENT TO  
OPERATING LICENSE

Consolidated Edison Company of New York, Inc.

Power Authority of the State of New York

Indian Point Unit No. 3

Docket No. 50-286

July 8, 1977

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TABLE 4.2-1 (Sheet 1 of 2)

## INDIAN POINT STATION-RADIOLOGICAL ENVIRONMENTAL MONITORING SURVEY

<u>Sample</u>	<u>Sample Location</u>	<u>Method of Collection</u>	<u>Sampling Frequency</u>	<u>Type of Analysis</u>
1. Hudson River Water	Inlet pipe into plant-Point 9 Discharge canal - Point 10.	Continuing flow regulated to fill 2 gallon drums. Representative sample tanken once a week and drums emptied	Monthly Quarterly	Composite for GSA* Composite for T, <sup>90</sup> Sr once per year****
2. Hudson River Aquatic Vegetation	Points 10, 15, 16, 17 and 22.	Grab samples along shoreline.	Once each in Spring and Summer	GSA,
3. Hudson River Bottom Sediment (including Benthos)	Same as item 2.	Same as item 2.	Same as item 2.	Same as item 2.
4. Hudson River Crabs/Clams	Point 25	Catch or grab samples	Once in the Summer or Fall.	GSA, <sup>90</sup> Sr once per year****
5. Hudson River Fish	Point 25	Same as item 4	Monthly	GSA on edible portions, <sup>90</sup> Sr once per year****
6. Fallout (Rain water)	Points 1, 23, and 24	Open pot type collector***	Monthly	GSA, T
7. Drinking water	Points 7, 8 and 26	Grab samples	Monthly	GSA, <sup>131</sup> I, <sup>90</sup> Sr once per year****
8. Air Particulate	Points 1, 2, 3, 4 and 5 for one week periods consecutively	Membrane filter preceding charcoal cartridge - continuous sampling	Weekly Monthly/Quarterly	GBG,** Composite for GSA, and <sup>90</sup> Sr.
9. Radioiodine	Same as item 8.	Charcoal cartridge	Same as item 8.	<sup>131</sup> I

\* GSA = Gamma Spectrum Analysis

\*\* GBG = Gross Beta Gamma. If the weekly analysis indicates results which are three times higher than previous results, then additional weekly analysis shall be carried out to determine the cause of high results and corrective action taken to reduce levels.

\*\*\* Modified to reduce evaporation effects.

\*\*\*\* Analysis for Sr-89 + Sr-90 shall also be performed in those months when the gamma spectrum analysis reveals the presence of Cs-137 in the following quantities: Liquids - 100 pCi/l; Aquatic vegetation, crabs, fish - 1 pCi/gm.

TABLE 4.2-1 (Sheet 2 of 2)

## INDIAN POINT STATION-RADIOLOGICAL ENVIRONMENTAL MONITORING SURVEY

<u>Sample</u>	<u>Sample Location</u>	<u>Method of Collection</u>	<u>Sampling Frequency</u>	<u>Type of Analysis</u>
10. Surface Lake Water	Points 11, 12 and 13.	Grab 1 liter sample offshore.	Monthly Quarterly	GSA, Composite for T, <sup>90</sup> Sr once per year*****
11. Well Water	Points 6 and 18	Grab sample from deep-well pumps.	Quarterly	Composite for GSA and T.
12. Lake Aquatic Vegetation	Points 11, 12 and 13	Same as item 2.	Same as item 2.	GSA,
13. Soil	Points 1, 2, 3, 4, 5, 6, 18 19, 20 and 21	Grab	Once per 3 yrs.	GSA, <sup>90</sup> Sr, <sup>137</sup> Cs
14. Direct Gamma	Along principal roads within a 5 mile radius of plant.	Spotchecks.	Annually	GGB* (Ion Chamber)
15. Direct Gamma	Selected locations in Buchanan, Verplanck, Montrose, Peekskill, and at a number of points onsite at plant perimeter.	Continuous.	Quarterly	GGB (TLD)**
16. Milk	Selected locations of cows as determined from Spec. 4.2.1.2 Points 39, 40 and 42	Grab samples.	Monthly (when in pasture)	GSA, <sup>89</sup> Sr, <sup>90</sup> Sr, <sup>131</sup> I, <sup>134</sup> Cs, <sup>137</sup> Cs.
17. Grass***	Same as item 16.	Same as item 16.	Same as item 16.	Same as item 16.
18. Leafy Green Vegetables**** (Food Products)	Appropriate locations in critical wind sectors	Grab samples at point of source.	At time of harvest.	GSA, <sup>131</sup> I

\* GGB = Gross Gamma Background

\*\* TLD = Thermoluminescent Dosimeters

\*\*\* See Specification 4.2.1.2

\*\*\*\* See Specification 4.2.1.4

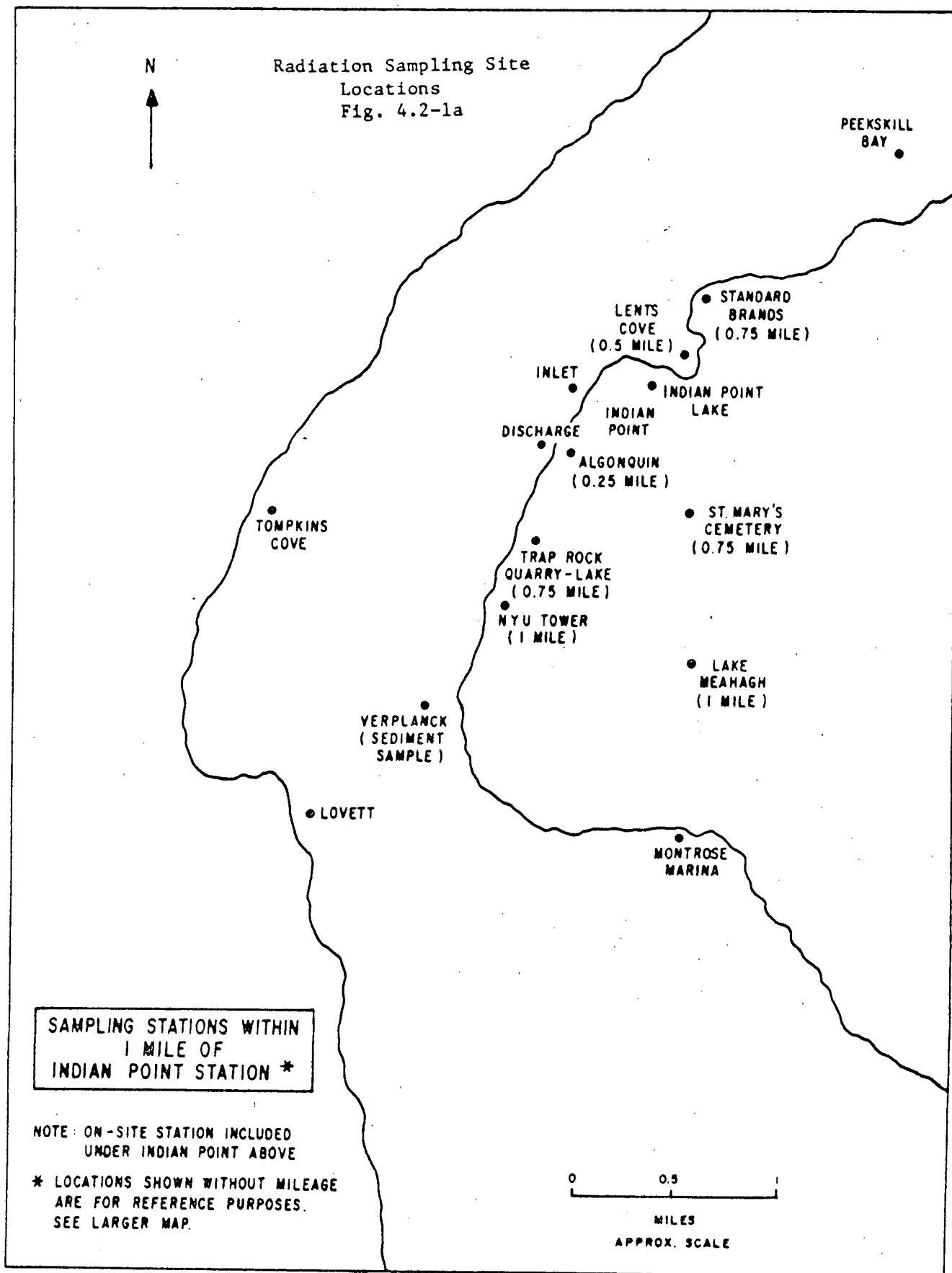
\*\*\*\*\* Analysis for SR-89 + Sr-90 shall also be performed in those months when the gamma spectrum analysis reveals the presence of CS-137 in the following quantities: Liquids - 100 pCi/l; Aquatic vegetation, crabs, fish - 1 pCi/gm.

T = Tritium

TABLE 4.2-2 (Continued)  
(Sheet 2 of 2)

<u>Sample Station Points</u>	<u>Location/Distance</u>	<u>Sample Types</u>
20	Montrose Marina, 1.5 mi - S	Soil
21	George's Island, 2.5 mi - SSE	Soil
22	Lovett, 1.5 mi - WSW	HR Aquatic Vegetation HR Bottom Sediment
23	Roseton,* 20 mi - N	Fallout Air Particulate Radioiodine Food Products
24	Eastview,* 15 mi - SE	Fallout
25	Where available near site	Fish
26	New York City Aqueduct, Onsite (tap water)	Drinking Water
27	Croton Point, 7.5 mi - SSE	Air Particulate Radioiodine Direct Gamma
28	Lent's Cove, 0.5 mi - NE	HR Aquatic Vegetation Bottom Sediment Direct Gamma
29	Grassy Point, 3 mi - S	Air Particulate Radioiodine Direct Gamma
30	Dock, Onsite - W	Direct Gamma
31	Onsite Pole - S	Direct Gamma
32	Factory St. SS, 1 mi - ESE	Direct Gamma
33	Hamilton St. SS, 3 mi - NNE	Direct Gamma
34	SE Corner Onsite - SE	Direct Gamma
35	Beakley & Broadway, Onsite - E	Direct Gamma
36	Old Dump, 0.5 mi - ENE	Direct Gamma
37	NE Corner, Onsite - NE	Direct Gamma
38	Furnace Dock, 3.5 mi - SE	Direct Gamma
39	Strawtown Dairy, 7 mi - SSW	Milk
40	Guard Hill Farm, near Bedford 10 mi - ESE	Milk
41	Appropriate locations in critical wind sections	Food Products (leafy green vegetables)
42	Crowley Milk Co. Newburgh	Milk

\*Control Station



ATTACHMENT B

APPLICATION FOR AMENDMENT TO  
OPERATING LICENSE

ENVIRONMENTAL IMPACT EVALUATION

Consolidated Edison Company of New York, Inc.

Power Authority of the State of New York

Indian Point Unit No. 3

Docket No. 50-286

July 8, 1977

## Environmental Impact Evaluation

The proposed changes to the Environmental Technical Specification Requirements (ETSR) contained in Attachment A to this Application partially alter the program for sampling drinking water in the vicinity of the Indian Point Station.

Appendix B, Section 4.2 (see Table 4.2-1, Table 4.2-2 and Figure 4.2-1a) of the site Environmental Technical Specification Requirements contained in Appendix B to the Indian Point Unit No. 3 license requires that a well water sample be collected at sample station point 26 at Verplanck once per calendar quarter. However, the majority of the people living in Verplanck have now sealed off their wells and obtain their drinking water from the New York City Aqueduct. Therefore, a sample of the aqueduct water would be more representative of drinking water for persons living in the area than that of a well water sample.

A study of ground water hydrology performed by Thomas W. Fluhr, P.E., contained in Section 2.7 of the Unit 3 FSAR, concludes it is impossible for any drainage from the plant to go anywhere except into the Hudson River and "No problem of contamination of water supply exists." In addition, the well water sampling station points located at Camp Smith and onsite monitor ground water and are sampled periodically as required by the ETSR. Samples from these two wells and from the well at Verplanck have never shown any evidence of plant attributed radioactivity. The wells at Camp Smith and onsite will con-

tinue to monitor ground water as they have done in the past.

In view of the above, the Verplanck sample location should be eliminated from the Technical Specifications and replaced with a requirement to sample drinking water from the New York City Aqueduct.

The proposed changes do not in any way alter the environmental impact of Indian Point Station. These proposed changes have been reviewed by Con Edison's Nuclear Facilities Safety Committee and Environmental Protection Committee. Both committees concur that these changes will not cause any change in the types or increase in the amounts of effluents from the station.

Since these changes will not affect the environmental impact of the unit, the requested amendment is not a major federal action significantly affecting the quality of the human environment.



BEFORE THE UNITED STATES  
NUCLEAR REGULATORY COMMISSION

In the Matter of )  
 )  
CONSOLIDATED EDISON COMPANY )  
OF NEW YORK, INC. and ) Docket No. 50-286  
POWER AUTHORITY OF THE )  
STATE OF NEW YORK )  
(Indian Point Station )  
Unit No. 3) )

CERTIFICATE OF SERVICE

I certify that I have, this 13th day of July, 1977,  
served the foregoing document entitled "Application for Amend-  
ments to Operating License" dated July 8, 1977 by mailing  
copies thereof, first class postage prepaid and properly  
addressed to the following persons:

Mr. Samuel J. Chilk  
Secretary of the Commission  
U.S. Nuclear Regulatory  
Commission  
Washington, D.C. 20555  
Attn: Chief, Docketing and  
Service Section

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