

May 5, 1978

Docket No. 500247

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

Gentlemen:

The Commission has issued the enclosed Amendment No. 39 to Facility Operating License No. DPR-26 for the Indian Point Nuclear Generating Unit No. 2. This amendment consists of changes to the Technical Specifications in response to your application transmitted by letter dated March 30, 1977, as supplemented January 6, 1978 and April 28, 1978.

This amendment revises the Technical Specifications to change requirements for shock suppressors (snubbers). The other changes you requested in your January 6, 1978 letter will be handled by separate licensing actions.

Copies of the Safety Evaluation and the Notice of Issuance are also enclosed.

Sincerely,

A. Schwencer, Chief  
Operating Reactors Branch #1  
Division of Operating Reactors

Enclosures:

1. Amendment No. 39 to License No. DPR-26
2. Safety Evaluation
3. Notice

cc w/enclosures: See next page

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Docket No. 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

Gentlemen:

The Commission has issued the enclosed Amendment No. to Facility Operating License No. DPR-26 for the Indian Point Nuclear Generating Unit No. 2. This amendment consists of changes to the Technical Specifications in response to your application transmitted by letter dated March 30, 1977, as supplemented January 6, 1978. <sup>and April 28, 1978.</sup> As discussed with your staff, modifications have been made to your proposed changes to meet regulatory requirements.

This amendment revises the Technical Specifications to change requirements for shock suppressors (snubbers). The other changes you requested in your January 6, 1978, letter will be handled by separate licensing actions.

Copies of the Safety Evaluation and the Notice of Issuance are also enclosed.

Sincerely,

Robert W. Reid, Chief  
Operating Reactors Branch #4  
Division of Operating Reactors

Enclosures:

1. Amendment No. to License No. DPR-26
2. Safety Evaluation
3. Notice

cc w/enclosures: See next page

*EW*  
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UNITED STATES  
NUCLEAR REGULATORY COMMISSION  
WASHINGTON, D. C. 20555

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. 39  
License No. DPR-26

1. The Nuclear Regulatory Commission (the Commission) has found that:
  - A. The application for amendment by Consolidated Edison Company of New York, Inc. (the licensee) sworn to March 23, 1977, as amended by applications sworn to December 16, 1977 and April 28, 1978, complies with the standards and requirements of the Atomic Energy Act of 1954, as amended (the Act), 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. The issuance of this amendment is in accordance with 10 CFR Part 51 of the Commission's regulations and all applicable requirements have been satisfied.

2. Accordingly, the license is amended by changes to the Technical Specifications as indicated in the attachment to this license amendment, and paragraph 2.C.(2) of Facility Operating License No. DPR-26 is hereby amended to read as follows:

(2) Technical Specifications

The Technical Specifications contained in Appendices A and B, as revised through Amendment No. 39, are hereby incorporated in the license. The licensee shall operate the facility in accordance with the Technical Specifications.

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

FOR THE NUCLEAR REGULATORY COMMISSION



A. Schwencer, Chief  
Operating Reactors Branch #1  
Division of Operating Reactors

Attachment:  
Changes to the Technical  
Specifications

Date of Issuance: May 5, 1978

ATTACHMENT TO LICENSE AMENDMENT NO. 39

FACILITY OPERATING LICENSE NO. DPR-26

DOCKET NO. 50-247

Revise Appendix A as follows:

Remove Table 3.12-1  
(pages 1 - 19)

Insert Table 3.12-1  
(pages 1 - 18 )

Remove Pages

Insert Pages

4.12-2 - 4.12-4

4.12-2 - 4.12-4

Changes on the revised pages are shown by marginal lines.

TABLE 3.12 - 1 (SHEET 1 OF 18)

Safety Related Shock Suppressors (Snubbers)

Line No.	Snubber No.	Location (Approx.)	Category
1	MSR-2V	VC EL 101'-0"	3
1	SR-M4	AFB EL 62'-10"	4
1	SR-M5A	AFB EL 62'-10"	4
1	SR-M5B	AFB EL 62'-10"	4
2	SR-M2	AFB EL 75'-6"	4
2	SR-M3A	AFB EL 75'-6"	4
2	SR-M3B	AFB EL 75'-6"	4
2	SR-M1	AFB EL 75'-6"	4
2	SR-M50	AFB EL 75'-6"	4
2	SR-M51	AFB EL 75'-6"	4
3	MSR-1V	VC EL 101'-0"	3
3	SR-M6	AFB EL 75'-6"	4
3	SR-M7	AFB EL 75'-6"	4
3	SR-M8A (two)	AFB EL 75'-6"	4
3	SR-M8B	AFB EL 75'-6"	4
3	SR-M53	AFB EL 75'-6"	4
4	SR-M9	AFB EL 62'-10"	4
4	SR-M10A	AFB EL 62'-10"	4
4	SR-M10B	AFB EL 62'-10"	4
4	SR-M55	AFB EL 62'-10"	4
4	SR-M56	AFB EL 62'-10"	4
5	SR-B-3	AFB EL 39'-6"	4
5	SR-B-4	AFB EL 39'-6"	4
5	SR-B-9	AFB EL 35'-0"	4
6	BF-SR-9	VC EL 59'-6"	3
6	SR-B1	AFB EL 41'-0"	4

TABLE 3.12 - 1 (SHEET 2 OF 18)

Safety Related Shock Suppressors (Snubbers)

Line No.	Snubber No.	Location (Approx.)	Category
6	SR-B2	AFB EL 40'-0"	4
7	SR-B7	AFB EL 40'-7"	4
7	SR-B8	AFB EL 41'-0"	4
8	SR-B5	AFB EL 39'-6"	4
8	SR-B6	AFB EL 39'-6"	4
8	SR-B10	AFB EL 35'-0"	4
9	9-SR-1	VC EL 59'-6"	3
9	SR-55	PAB EL 27'-0"	4
9	SR-56	PAB EL 45'-0"	4
9	SR-57	PAB EL 47'-0"	4
9	SR-58	PAB EL 52'-6"	4
9	SR-59	PAB EL 52'-6"	4
9	SR-801	VC EL 56'-0"	3
9	SR-802	VC EL 54'-7"	3
9	SR-803	VC EL 54'-7"	3
9	SR-803A	VC EL 54'-7"	3
9	SR-804	VC EL 54'-3"	3
9	SR-805	VC EL 54'-7"	3
10	SR-60	PAB EL 52'-6"	4
10	SR-61	PAB EL 52'-6"	4
10	SR-62	PAB EL 47'-0"	4
10	SR-63	PAB EL 45'-0"	4
10	SR-65	PAB EL 27'-0"	4
10	SR-807	VC EL 59'-6"	3
10	SR-807A	VC EL 59'-6"	3
10	10-SR-807B	VC EL 59'-6"	3



TABLE 3.12 - 1 (SHEET 3 OF 18)

Safety Related Shock Suppressors (Snubbers)

Line No.	Snubber No.	Location (Approx.)	Category
10	SR-807C	VC EL 59'-6"	3
10	SR-808	VC EL 59'-6"	3
10	SR-809	VC EL 59'-6"	3
10	SR-809A	VC EL 59'-6"	3
10	SR-810	VC EL 59'-6"	3
10	SR-811	VC EL 58'-2"	3
13	13-SR-1	VC EL 58'-0"	3
13	SR-935	VC EL 69'-0"	3
13	SR-936	VC EL 76'-9"	3
13	SR-937	VC EL 84'-0"	3
13	SR-937A	VC EL 84'-0"	3
13	SR-938	VC EL 84'-9"	3
13	SR-939	VC EL 76'-2"	3
13	SR-1027A	VC EL 80'-6"	3
13	SR-1028	VC EL 75'-0"	3
13	SR-1028A	VC EL 76'-8"	3
13	SR-1029A	VC EL 76'-0"	3
13	SR-1030	VC EL 68'-0"	3
13	SR-1030A	VC EL 68'-0"	3
13	SR-1031	VC EL 76'-0"	3
13	SR-1032	VC EL 76'-8"	3
13	SR-1037	VC EL 83'-7"	3
13	SR-1037A	VC EL 83'-7"	3
13	SR-1051	VC EL 84'-3"	3
13	SR-1052	VC EL 76'-9"	3
13	SR-1053	VC EL 68'-0"	3

TABLE 3.12 - 1 (SHEET 4 OF 18)

Safety Related Shock Suppressors (Snubbers)

<u>Line No.</u>	<u>Snubber No.</u>	<u>Location (Approx.)</u>	<u>Category</u>
13	SR-1059	VC EL 84'-0"	3
13	SR-1060	VC EL 76'-0"	3
13	SR-1079	VC EL 68'-0"	3
13	SR-1080	VC EL 75'-0"	3
13	SR-1081	VC EL 68'-0"	3
13	SR-1099	VC EL 82'-0"	3
13	SR-1100	VC EL 76'-0"	3
13	SR-1101	VC EL 68'-0"	3
13	SR-1102	VC EL 68'-0"	3
13	SR-1103	VC EL 76'-0"	3
13	SR-1104	VC EL 82'-0"	3
13	SR-1105	VC EL 65'-10"	3
13	13-SR-1105A	VC EL 66'-6"	3
13	SR-1106	VC EL 65'-10"	3
13	SR-1124	VC EL 76'-6"	3
14	14-SR-1	VC EL 83'-0"	3
14	14-SR-2	VC EL 57'-0"	3
14	SR-925	VC EL 84'-9"	3
14	SR-927	VC EL 81'-6"	3
14	SR-927A	VC EL 81'-6"	3
14	SR-928	VC EL 75'-9"	3
14	SR-928A	VC EL 76'-4"	3
14	SR-929	VC EL 75'-3"	3
14	SR-931	VC EL 76'-10"	3
14	SR-969	VC EL 76'-0"	3
14	SR-970	VC EL 75'-0"	3

TABLE 3.12 - 1 (SHEET 5 OF 18)

Safety Related Shock Suppressors (Snubbers)

<u>Line No.</u>	<u>Snubber No.</u>	<u>Location (Approx.)</u>	<u>Category</u>
14	SR-971	VC EL 74'-2"	3
14	SR-1035	VC EL 73'-0"	3
14	SR-1036A	VC EL 76'-0"	3
14	SR-1039A	VC EL 84'-0"	3
14	SR-1040A	VC EL 84'-0"	3
14	SR-1041	VC EL 77'-0"	3
14	SR-1042	VC EL 75'-9"	3
14	SR-1045A	VC EL 76'-6"	3
14	SR-1048	VC EL 76'-6"	3
14	SR-1049	VC EL 75'-8"	3
14	SR-1050	VC EL 84'-3"	3
14	SR-1056	VC EL 75'-0"	3
14	SR-1057	VC EL 84'-3"	3
14	SR-1083	VC EL 78'-5"	3
14	SR-1084	VC EL 78'-0"	3
14	SR-1093	VC EL 76'-8"	3
14	SR-1094	VC EL 69'-0"	3
14	SR-1095	VC EL 76'-8"	3
14	SR-1096	VC EL 69'-0"	3
14	SR-1097	VC EL 73'-9"	3
14	SR-1098	VC EL 73'-9"	3
14A	SR-954	VC EL 66'-6"	3
14A	SR-955	VC EL 71'-0"	3
14A	SR-955A	VC EL 71'-0"	3
14A	SR-956	VC EL 75'-1"	3

TABLE 3.12 - 1 (SHEET 6 OF 18)

Safety Related Shock Suppressors (Snubbers)

<u>Line No.</u>	<u>Snubber No.</u>	<u>Location (Approx.)</u>	<u>Category</u>
14A	SR-1001	VC EL 68'-8"	3
14A	SR-1002	VC EL 69'-0"	3
14A	SR-1002A	VC EL 69'-0"	3
14A	SR-1003	VC EL 76'-8"	3
14A	SR-1003A	VC EL 76'-0"	3
14A	SR-1075	VC EL 70'-6"	3
14A	SR-1076	VC EL 66'-3"	3
14A	SR-1078	VC EL 70'-3"	3
14A	SR-1120	VC EL 68'-8"	3
14A	SR-1122	VC EL 69'-0"	3
14A	SR-1123	VC EL 68'-8"	3
14A	SR-1077	VC EL 70'-6"	3
15	SR-1B	PAB EL 76'-0"	4
15	SR-7	PAB EL 76'-0"	4
15	SR-8	PAB EL 76'-0"	4
15	SR-8A	PAB EL 74'-0"	4
15	SR-8B	PAB EL 74'-8"	4
15	SR-8C (two)	PAB EL 72'-0"	4
15	SR-11A	PAB EL 64'-9"	4
15	SR-13B	PAB EL 61'-9"	4
16	SR-83B	PAB EL 68'-9"	4
16	SR-83C	PAB EL 68'-9"	4
16	56-SR-1	VC EL 61'-3"	3
17	17-SR-1	VC EL 58'-0"	3
17	17-SR-2	VC EL 58'-0"	3
17	17-SR-3	VC EL 58'-0"	3

Safety Related Shock Suppressors (Snubbers)

Line No.	Snubber No.	Location (Approx.)	Category
17	17-SR-4	VC EL 58'-0"	3
17	SR-941	VC EL 75'-7"	3
17	SR-941A	VC EL 75'-7"	3
17	SR-1010	VC EL 76'-6"	3
17	SR-1015	VC EL 79'-0"	3
17	SR-1063	VC EL 76'-9"	3
17	SR-1065	VC EL 76'-9"	3
17	SR-1069	VC EL 76'-0"	3
17	SR-1112	VC EL 68'-0"	3
17	SR-1113	VC EL 69'-0"	3
17	SR-1116	VC EL 65'-0"	3
17	SR-1117	VC EL 65'-0"	3
17	SR-1118	VC EL 69'-0"	3
19	SR-896	VC EL 57'-6"	3
27	SR-898	VC EL 58'-3"	3
38	38-SR-11	VC EL 59'-3"	3
38	38-SR-20	VC EL 55'-0"	3
38	38-SR-21	VC EL 60'-0"	3
38	38-SR-22	VC EL 60'-0"	3
38	38-SR-23	VC EL 60'-0"	3
38	38-SR-24	VC EL 60'-0"	3
41	SR-948A	VC EL 77'-0"	3
41	SR-949	VC EL 76'-9"	3
41	SR-952	VC EL 76'-0"	3
41	SR-952A	VC EL 76'-0"	3
41	SR-953	VC EL 68'-0"	3
41	SR-953A	VC EL 65'-0"	3

TABLE 3.12 - 1 (SHEET 8 OF 18)

Safety Related Shock Suppressors (Snubbers)

Line No.	Snubber No.	Location (Approx.)	Category
42	SR-1107	VC EL 68'-0"	3
42	SR-1108	VC EL 69'-0"	3
42	SR-1109	VC EL 65'-0"	3
42	SR-1111	VC EL 69'-0"	3
43	SR-1020	VC EL 80'-0"	3
43	SR-1020A	VC EL 81'-0"	3
43	SR-1021	VC EL 75'-0"	3
43	SR-1022	VC EL 75'-0"	3
43	SR-1024A	VC EL 74'-5"	3
43	SR-1025A	VC EL 69'-11"	3
43	SR-1026	VC EL 68'-9"	3
44	SR-1072	VC EL 68'-3"	3
44	SR-1073	VC EL 68'-7"	3
45	45-SR-9	VC EL 65'-7"	3
45	45-SR-30	Penetration Area EL 64'-0"	4
46	46-SR-2	VC EL 69'-0"	3
46	46-SR-3	VC EL 69'-0"	3
46	46-SR-30	Penetration Area EL 64'-0"	4
47	47-SR-30	Penetration Area EL 64'-0"	4
48	48-SR-30	Penetration Area EL 64'-0"	4
51	SR-20	PAB EL 76'-0"	4
51	SR-21	PAB EL 76'-0"	4
51	SR-21A	PAB EL 75'-0"	4
51	SR-21B	PAB EL 74'-9"	4
51	SR-21C (two)	PAB EL 72'-0"	4
51	SR-24A	PAB EL 64'-9"	4

TABLE 3.12 - 1 (SHEET 9 OF 18)

Safety Related Shock Suppressors (Snubbers)

Line No.	Snubber No.	Location (Approx.)	Category
51	SR-26B	Penetration Area EL 61'-0"	4
52	52-SR-1	VC EL 55'-0"	3
53	53-SR-1	VC EL 55'-0"	3
53	53-SR-2	VC EL 56'-9"	3
56	56-SR-6	VC EL 55'-6"	3
56	56-SR-12	VC EL 63'-3"	3
56	56-SR-26	VC EL 50'-9"	3
56	SR-83E	PAB EL 66'-0"	4
57	SR-64	PAB EL 32'-0"	4
60	SR-73A	PAB EL 71'-0"	4
60	SR-76A	PAB EL 64'-8"	4
60	SR-77A	PAB EL 47'-8"	4
60	SR-83A	PAB EL 67'-3"	4
60	SR-83D	PAB EL 67'-3"	4
60	SR-703 (two)	VC EL 55'-0"	3
60	SR-746A	VC EL 64'-6½"	3
60	SR-746B	VC EL 64'-6½"	3
60	SR-746C	VC EL 57'-0"	3
61	SR-881	VC EL 64'-2½"	3
61	SR-887	VC EL 68'-3"	3
61	SR-888	VC EL 68'-3"	3
61	SR-890	VC EL 78'-0"	3
62	SR-922A	VC EL 68'-0"	3
62	SR-922B	VC EL 68'-0"	3
62	SR-924	VC EL 70'-0"	3
62	SR-924A	VC EL 70'-0"	3

TABLE 3.12 - 1 (SHEET 10 OF 18)

Safety Related Shock Suppressors (Snubbers)

Line No.	Snubber No.	Location (Approx.)	Category
64	**64-SR-15	VC EL 58'-0"	3
64	**64-SR-20	VC EL 47'-9"	3
70	70-SR-3	VC EL 85'-9½"	3
70	70-SR-4	VC EL 66'-10"	3
70	70-SR-5	VC EL 68'-6"	3
70	70-SR-6	VC EL 103'-0"	3
70	70-SR-10	VC EL 123'-9"	3
70	70-SR-11	VC EL 123'-9"	3
70	70-SR-12	VC EL 123'-9"	3
70	70-SR-13	VC EL 123'-9"	3
70	70-SR-14	VC EL 127'-3"	3
70	RCS-5	VC EL 102'-3 3/4"	3
70	RCS-6	VC EL 103'-0"	3
70	70-RCS-5A	VC EL 103'-0"	3
71	71-SR-1	VC EL 80'-0"	3
71	SR-963	VC EL 76'-0"	3
71	SR-964	VC EL 68'-0"	3
71	SR-964A	VC EL 68'-6"	3
71	SR-967A	VC EL 63'-10"	3
72	72-SR-1	VC EL 80'-0"	3
72	SR-1125	VC EL 80'-0"	3
72	SR-1126	VC EL 70'-0"	3
72	SR-1127	VC EL 70'-0"	3
72	SR-1128	VC EL 72'-0"	3
72	SR-1129	VC EL 63'-0"	3
72	SR-1131	VC EL 64'-0"	3



Safety Related Shock Suppressors (Snubbers)

Line No.	Snubber No.	Location (Approx.)	Category
73	SR-1016	VC EL 76'-3"	3
73	SR-1016A	VC EL 76'-7"	3
73	SR-1017	VC EL 69'-1"	3
73	SR-1017A	VC EL 69'-0"	3
73	SR-1017B	VC EL 69'-0"	3
73	SR-1018A	VC EL 69'-0"	3
73	73-SR-1	VC EL 80'-0"	3
74	74-SR-1	VC EL 80'-4"	3
74	SR-1085	VC EL 67'-8"	3
74	SR-1086	VC EL 68'-9"	3
74	SR-1087	VC EL 68'-11"	3
74	SR-1087A	VC EL 70'-4"	3
74	SR-1088	VC EL 80'-4"	3
74	SR-1089	VC EL 68'-9"	3
74	SR-1090	VC EL 67'-8"	3
74	SR-1092	VC EL 71'-0"	3
76	76-H-15	VC EL 65'-0"	3
78	78-SR-1	VC EL 70'-6"	3
79	SR-901	VC EL 51'-0"	3
79	SR-902	VC EL 56'-6"	3
79	SR-903	VC EL 56'-6"	3
79	SR-904	VC EL 56'-6"	3
79	SR-905	VC EL 56'-6"	3
79	SR-906	VC EL 56'-6"	3
79	SR-907	VC EL 56'-6"	3
79	SR-908	VC EL 56'-6"	3
79	SR-909	VC EL 56'-6"	3

TABLE 3.12 - 1 (SHEET 12 OF 18)

Safety Related Shock Suppressors (Snubbers)

Line No.	Snubber No.	Location (Approx.)	Category
79	SR-910	VC EL 56'-6"	3
79	SR-911	VC EL 46'-3"	3
79	SR-911A	VC EL 55'-0"	3
80	SR-915B	VC EL 58'-0"	3
80	SR-916	VC EL 58'-0"	3
80	SR-920A	VC EL 58'-8"	3
80	SR-920B	VC EL 58'-0"	3
93	SR-752	VC EL 73'-9"	3
93	SR-752A	VC EL 73'-9"	3
93	SR-753	VC EL 85'-3"	3
94	SR-759	VC EL 85'-3"	3
96	SR-913	VC EL 58'-0"	3
155	SR-50A	PAB EL 25'-0"	4
163	SR-250	PAB EL 68'-6"	4
163	SR-250A	PAB EL 68'-6"	4
163	163-SR-5	Penetration Area EL 48'-0"	4
250	250-SR-1	PAB EL 110'-0"	4
293	SR-761	VC EL 49'-2"	3
293	SR-762	VC EL 62'-0"	3
293	SR-762A	VC EL 62'-0"	3
293	SR-763	VC EL 53'-0"	3
293	SR-763A	VC EL 50'-0"	3
293	SR-764	VC EL 68'-6"	3
317	317-SR-1	VC EL 65'-0"	3
317	SR-766	VC EL 57'-0"	3
317	SR-766A	VC EL 53'-6"	3

TABLE 3.12 - 1 (SHEET 13 OF 18)

Safety Related Shock Suppressors (Snubbers)

<u>Line No.</u>	<u>Snubber No.</u>	<u>Location (Approx.)</u>	<u>Category</u>
318	318-SR-1	VC EL 53'-6"	3
318	318-SR-2	VC EL 57'-0"	3
318	318-SR-3	VC EL 66'-8"	3
318	318-SR-5	VC EL 88'-2"	3
342	342-SR-6	VC EL 103'-0"	3
343	343-SR-5	VC EL 103'-0"	3
344	344-SR-4	VC EL 103'-0"	3
350	PWR-156	VC EL 63'-6"	3
351	PWR-127	VC EL 60'-0"	3
351	PWR-128	VC EL 55'-0"	3
351	PWR-129	VC EL 55'-0"	3
351	SR-742	VC EL 56'-2 7/8"	3
351	351-SR-1	VC EL 55'-0"	3
352	PWR-152	VC EL 66'-6"	3
352	SR-713	VC EL 51'-0"	3
352	352-SR-2	VC EL 63'-0"	3
353	PWR-147A	VC EL 60'-0"	3
353	PWR-148	VC EL 48'-9"	3
353	SR-736	VC EL 47'-3 1/4"	3
353	SR-737	VC EL 48'-9"	3
353	SR-737A	VC EL 58'-6"	3
355	SR-748	VC EL 56'-0"	3
356	356-SR-1	VC EL 55'-3"	3
356	SR-708	VC EL 55'-3"	3
356	SR-714	VC EL 61'-6"	3
356	SR-715	VC EL 61'-6"	3

TABLE 3.12 - 1 (SHEET 14 OF 18)

Safety Related Shock Suppressors (Snubbers)

Line No.	Snubber No.	Location (Approx.)	Category
356	SR-716	VC EL 61'-6"	3
356	SR-717	VC EL 61'-6"	3
356	SR-718	VC EL 61'-6"	3
356	SR-718A	VC EL 55'-3"	3
356	SR-720	VC EL 55'-3"	3
356	SR-747	VC EL 53'-10"	3
358	SR-738B	VC EL 55'-1 3/4"	3
358	SR-738A	VC EL 55'-4 1/8"	3
361	SR-732A	VC EL 65'-0"	3
361	SR-749	VC EL 53'-6"	3
361	SR-749A	VC EL 57'-0"	3
361	SR-749B	VC EL 55'-0"	3
361	SR-749C	VC EL 53'-6"	3
361	SR-755	VC EL 56'-9"	3
361	SR-756	VC EL 71'-6"	3
361	361-SR-10	VC EL 61'-6"	3
413	SR-376A	DGB EL 91'-6"	4
413	SR-395A	DGB EL 77'-6"	4
414	SR-377A	DGB EL 93'-7"	4
414	SR-396A	DGB EL 88'-0"	4
518	SR-71A	PAB EL 70'-0"	4
577	577-SR-1	VC EL 65'-1 1/2"	3
577	577-SR-4	VC EL 59'-6"	3
577	577-SR-5	VC EL 59'-6"	3
577	577-SR-13	VC EL 54'-11"	3
577	577-SR-15	VC EL 56'-6"	3
577	577-SR-17	VC EL 62'-0"	3

TABLE 3.12 - 1 (SHEET 15 OF 18)

Safety Related Shock Suppressors (Snubbers)

<u>Line No.</u>	<u>Snubber No.</u>	<u>Location (Approx.)</u>	<u>Category</u>
V-2	SR-V20A	AFB EL 55'-2"	4
V-2	SR-V20B	AFB EL 55'-2"	4
V-3	SR-M29	AFB EL 65'-10"	4
V-3	SR-M30	AFB EL 64'-0"	4
V-3	SR-M31	AFB EL 64'-0"	4
V-3	SR-M32	AFB EL 76'-10"	4
V-3	SR-M33	AFB EL 83'-6"	4
V-4	SR-M25	AFB EL 78'-6"	4
V-4	SR-M26	AFB EL 74'-0"	4
V-4	SR-M27	AFB EL 76'-0"	4
V-4	SR-M52	AFB EL 76'-0"	4
V-4	SR-M28	AFB EL 85'-6"	4
V-5	SR-M34	AFB EL 76'-3"	4
V-5	SR-M35	AFB EL 73'-6"	4
V-5	SR-M36	AFB EL 73'-6"	4
V-5	SR-M37	AFB EL 76'-3"	4
V-5	SR-M38	AFB EL 85'-0"	4
V-5	SR-M54	AFB EL 76'-3"	4
V-6	SR-M39	AFB EL 64'-2"	4
V-6	SR-M40	AFB EL 64'-2"	4
V-6	SR-M41	AFB EL 64'-0 1/2"	4
V-6	SR-M42	AFB EL 83'-0"	4
V-6	SR-M43	AFB EL 83'-0"	4
PCA-2	SR-418	AFB EL 65'-3"	4
PCA-3	SR-432	AFB EL 60'-3"	4
MS-3	SR-M20A	AFB EL 27'-5"	4

TABLE 3.12 - 1 (SHEET 16 OF 18)

Safety Related Shock Suppressors (Snubbers)

<u>Line No.</u>	<u>Snubber No.</u>	<u>Location (Approx.)</u>	<u>Category</u>
MS-3	SR-M21A	AFB EL 20'-6"	4
MS-3	SR-M20B	AFB EL 27'-5"	4
MS-3	SR-M21B	AFB EL 20'-6"	4
MS-3	SR-M22A	AFB EL 26'-7"	4
MS-3	SR-M22B	AFB EL 26'-7"	4
MS-3	SR-M23B	AFB EL 27'-6"	4
MS-3	SR-M24	AFB EL 27'-6"	4
MS-3	SR-499	AFB EL 68'-0"	4
MS-3	SR-500	AFB EL 68'-0"	4
MS-3	SR-501	AFB EL 68'-0"	4
MS-3	SR-501A	AFB EL 65'-1"	4
MS-3	SR-501B	AFB EL 65'-1"	4
MS-3	SR-502	AFB EL 66'-0"	4
MS-3	SR-503	AFB EL 66'-8"	4
MS-3	SR-503A	AFB EL 65'-11"	4
MS-3	SR-503B	AFB EL 65'-1"	4
MS-3	SR-504	AFB EL 58'-10"	4
MS-3	SR-505	AFB EL 55'-10"	4
MS-3	SR-506	AFB EL 51'-7"	4
MS-3	SR-507	AFB EL 38'-6"	4
MS-3	SR-507A	AFB EL 48'-5 1/8"	4
MS-3	SR-507B	AFB EL 48'-7 5/8"	4
MS-3	SR-507C	AFB EL 35'-5 7/8"	4
BFD	SR-A8	AFB EL 49'-10"	4
BFD	SR-A9	AFB EL 51'-4"	4
BFD	SR-A10	AFB EL 52'-10"	4

TABLE 3.12 - 1 (SHEET 17 OF 18)

Safety Related Shock Suppressors (Snubbers)

<u>Line No.</u>	<u>Snubber No.</u>	<u>Location (Approx.)</u>	<u>Category</u>
BFD	SR-A11	AFB EL 28'-6"	4
BFD	SR-A13	AFB EL 25'-9"	4
BFD	SR-A24	AFB EL 54'-4"	4
BFD	SR-464A	AFB EL 54'-4"	4
BFD	SR-465A	AFB EL 52'-4"	4
BFD	SR-466A	AFB EL 51'-0"	4
BFD	SR-471A	AFB EL 20'-0"	4
BFD	SR-472A	AFB EL 27'-0"	4
BFD	SR-473A	AFB EL 20'-0"	4
BFD	SR-474A	AFB EL 20'-0"	4
BFD	SR-475A	AFB EL 20'-0"	4
BFD	SR-484A	AFB EL 19'-0"	4
BFD	SR-486A	AFB EL 19'-0"	4
BFD	SR-490A	AFB EL 19'-0"	4
BFD	SR-492A	AFB EL 19'-0"	4
BFD	SR-494A	AFB EL 26'-6"	4
BFD	SR-496A	AFB EL 26'-6"	4

## Steam Gen.

#21	SG21-1 thru SG21-4	VC-E1.94'	2,3
#21	SG21-5 and SG21-6	VC-E1.46'	2,3
#22	SG22-1 thru SG22-4	VC-E1.94'	2,3
#22	SG22-5 and SG22-6	VC-E1.46'	2,3
#23	SG23-1 thru SG23-4	VC-E1.94'	2,3
#23	SG23-5 and SG23-6	VC-E1.46'	2,3
#24	SG24-1 thru SG24-4	VC-E1.94'	2,3
#24	SG24-5 and SG24-6	VC-E1.46'	2,3

TABLE 3.12 - 1 (SHEET 18 OF 18)

Safety Related Shock Suppressors (Snubbers)

NOTES:

- (1) Location: AFB - Aux. Boiler Feed Pump Bldg. and Pipe  
Bridge Area  
PAB - Primary Auxiliary Building  
VC - Containment Building  
DGB - Diesel Generator Building  
SG - Steam Generator

(2) Categories:

1. Snubber in high radiation area during shutdown.\*
2. Snubber especially difficult to remove. (Because of size and/or location).
3. Snubber inaccessible during normal operation.\*  
(Because of high radiation and/or temperature environment).
4. Snubber accessible during normal operation.\*

\* Modifications to this Table due to changes in high radiation areas may be made without prior license amendment provided that a revision to this Table is included with the next license amendment request.

\*\* Deletion of this snubber has been approved in accordance with a redesign of the support system of this line. When the complete new support system is installed, these snubbers will be removed from the plant and will be considered deleted from this list.



groups may be inspected independently according to the above schedule.

2. All hydraulic snubbers whose seal materials have not been demonstrated to be compatible with the operating environment shall be visually inspected for operability every 31 days.
3. The initial inspection shall be performed within 6 months from the date of issuance of these specifications. For the purpose of entering the schedule in Specification 4.12.1, it shall be assumed that the facility had been on a 6-month inspection interval.
4. Once each refueling cycle, a representative sample of 10 hydraulic snubbers or approximately 10% of the hydraulic snubbers, whichever is less, shall be functionally tested for operability including verification of proper piston movement, lock-up rate and bleed. For each hydraulic snubber found inoperable, an additional 10% of the remaining hydraulic snubbers or ten hydraulic snubbers, whichever is less, shall be so tested. This procedure shall be repeated until no more failures are found or all hydraulic snubbers subject to the functional testing requirements have been tested. Hydraulic snubbers designated in Table 3.12-1 as Category 1 or Category 2 may be exempted from functional testing provided these snubbers were demonstrated operable during functional testing either at the completion of their fabrication or at a subsequent date. Hydraulic snubbers of rated capacity greater than 50,000 lb shall be exempt from the functional testing requirements.

### Basis

All safety related hydraulic snubbers are visually inspected for overall integrity and operability. The inspection will include verification of proper orientation, adequate hydraulic fluid level and proper attachment of snubber to piping and structures. The inspection frequency is based upon maintaining a constant level of snubber protection. Thus the required inspection interval varies inversely with the observed snubber failures. The number of inoperable snubbers found during a required inspection determines the time interval for the next required inspection. Inspections performed before that interval has elapsed may be used as a new reference point to determine the next inspection. However, the results of such early inspections performed before the original required time interval has elapsed (nominal time less 25%) may not be used to lengthen the required inspection interval. Any inspection whose results require a shorter inspection interval will override the previous schedule. Experience at operating facilities has shown that the required surveillance program should assure an acceptable level of snubber performance provided that the seal materials are compatible with the operating environment.

Snubbers containing seal material which has not been demonstrated by operating experience, lab tests or analysis to be compatible with the operating environment should be inspected more frequently (every month) until material compatibility is confirmed or an appropriate changeout is completed.

Examination of defective snubbers at reactor facilities and material tests performed at several laboratories (Reference 1) has

shown that millable gum polyurethane deteriorates rapidly under the temperature and moisture conditions present in many snubber locations. Although molded polyurethane exhibits greater resistance to these conditions, it also may be unsuitable for application in the higher temperature environments. Data are not currently available to precisely define an upper temperature limit for the molded polyurethane. Lab tests and in-plant experience indicate that seal materials are available, primarily ethylene propylene compounds, which should give satisfactory performance under the most severe conditions expected in reactor installations. To further increase the assurance of snubber reliability functional tests will be performed once each refueling cycle. These tests will include stroking of the snubbers to verify proper piston movement, lock-up rate and bleed. Ten percent or ten snubbers, whichever is less, represents an adequate sample for such tests. Observed failures on these samples will require testing of additional units. To minimize personnel exposures, those snubbers designated in Table 3.12-1 as Category 1 (in high radiation areas) or Category 2 (especially difficult to remove) may be exempted from these functional testing requirements provided the operability of these snubbers was demonstrated during functional testing either at the completion of their fabrication or at a subsequent date. Snubbers of rated capacity greater than 50,000 lb are exempt from the functional testing requirements because of the impracticability of testing such large units.

#### Reference

1. Report: H.R. Erickson, Bergen Paterson to K.R. Goller,  
NRC, October 7, 1974  
Subject: Hydraulic Shock Sway Arrestors



UNITED STATES  
NUCLEAR REGULATORY COMMISSION  
WASHINGTON, D. C. 20555

SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION  
SUPPORTING AMENDMENT NO. 39 TO FACILITY OPERATING LICENSE NO. DPR-26  
CONSOLIDATED EDISON COMPANY OF NEW YORK, INC.  
INDIAN POINT NUCLEAR GENERATING UNIT NO. 2  
DOCKET NO. 50-247

Introduction

By application transmitted by letter dated March 30, 1977, as revised by applications transmitted by letters dated January 6, 1978, and April 28, 1978, Consolidated Edison Company of New York, Inc. (Con Ed) proposed changes to the Technical Specifications for Indian Point Unit No. 2. The proposed changes to the Technical Specifications consist of revising Table 3.12-1 to permit deletion of certain hydraulic shock suppressors (snubbers) listed in that table as part of a redesign of the support systems of the lines on which the snubbers are installed.

Evaluation

Hydraulic snubbers have a potential for leakage. This potential makes them inherently less reliable than passive restraints. The purpose of the support system redesign is to improve the reliability of the piping system by reducing the number of hydraulic snubbers necessary to satisfy the design criteria.

In the original design of the subject Indian Point Unit No. 2 pipe lines, hydraulic snubbers were used more extensively than would be necessary with current piping analysis methods. The redesign of the support systems of the subject lines is based on a comparison of these lines with comparable lines in Indian Point Unit No. 3. The geometry and operating conditions of the lines are similar for both Units, but the selection and location of supports and restraints was improved in Unit No. 3 by means of more detailed analyses. To utilize the improved Unit No. 3 design in Unit No. 2, the support systems have been redesigned so that piping and supports are represented by the same analytical conditions found in the Unit No. 3 analyses.

The piping support systems for Unit 3 were dynamically analyzed by the time-history method for each postulated pipe break. In addition the Unit 3 piping support systems were analyzed with respect to seismic loads for the Operating Basis Earthquake and the Safe Shutdown Earthquake of 0.10 g and 0.15 g respectively. The modified earthquake time histories used for the design of support systems were adjusted in amplitude and frequency to envelope the response spectra for the site. We have reviewed the analysis for piping support systems for Unit 3 and determined that there are adequate support systems to protect the piping against postulated breaks and seismic events. We also have determined that the proposed changes to the Indian Point Unit No. 2 piping support systems are acceptable because of the similarity of the two Units and their piping systems. On some of the piping involved the snubbers will be replaced with passive restraints. On other lines the snubbers will be deleted where analysis of similar lines at Indian Point 3 has shown that no piping restraints are necessary.

We have determined that the reliability of the piping system will be increased by this modification of support systems because the number of hydraulic snubbers, which require frequent inspection to assure operability, will be reduced. This modification will, therefore, reduce the potential of a piping failure due to a malfunction of the support system.

#### Environmental Consideration

We have determined that this amendment does not authorize a change in effluent types or total amounts nor an increase in power level and will not result in any significant environmental impact. Having made this determination, we have further concluded that the amendment involves an action which is insignificant from the standpoint of environmental impact and pursuant to 10 CFR §51.5(d)(4) that an environmental impact statement, or negative declaration and environmental impact appraisal need not be prepared in connection with the issuance of this amendment.

#### Conclusion

We have concluded, based on the considerations discussed above, that: (1) because the amendment does not involve a significant increase in the probability or consequences of accidents previously considered and does not involve a significant decrease in a safety margin, the amendment does not involve a significant hazards consideration,

(2) there is reasonable assurance that the health and safety of the public will not be endangered by operation in the proposed manner, and (3) such activities will be conducted in compliance with the Commission's regulations and the issuance of this amendment will not be inimical to the common defense and security or to the health and safety of the public.

Dated: May 5, 1978

UNITED STATES NUCLEAR REGULATORY COMMISSIONDOCKET NO. 50-247CONSOLIDATED EDISON COMPANY OF NEW YORK, INC.NOTICE OF ISSUANCE OF AMENDMENT TO FACILITY  
OPERATING LICENSE

The U. S. Nuclear Regulatory Commission (the Commission) has issued Amendment No. 39 to Facility Operating License No. DPR-26, issued to Consolidated Edison Company of New York, Inc. (the licensee), which revised Technical Specifications for operation of the Indian Point Nuclear Generating Unit No. 2 (the facility), located in Buchanan, Westchester County, New York. The amendment is effective as of its date of issuance.

The amendment revises the Technical Specifications to allow the deletion of certain snubbers and the replacement of some shock suppressors (snubbers) with other (fixed) support systems and to appropriately change the testing requirements.

The application for the amendment 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 amendment. Prior public notice of this amendment was not required since the amendment does not involve a significant hazards consideration.

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The Commission has determined that the issuance of this amendment will not result in any significant environmental impact and that pursuant to 10 CFR §51.5(d)(4) an environmental impact statement, or negative declaration and environmental impact appraisal need not be prepared in connection with issuance of this amendment.

For further details with respect to this action, see (1) the application for amendment transmitted by letter dated March 30, 1977, as supplemented January 6, 1978 and April 28, 1978, (2) Amendment No. 39 to License No. DPR-26, and (3) the Commission's related Safety Evaluation. All of these items are available for public inspection at the Commission's Public Document Room, 1717 H Street, N.W., Washington, D.C. and at the White Plains Public Library, 100 Martine Avenue, White Plains, New York. A copy of items (2) and (3) may be obtained upon request addressed to the U. S. Nuclear Regulatory Commission, Washington, D.C. 20555, Attention: Director, Division of Operating Reactors.

Dated at Bethesda, Maryland, this 5th day of May 1978.

FOR THE NUCLEAR REGULATORY COMMISSION



A. Schwencer, Chief  
Operating Reactors Branch #1  
Division of Operating Reactors