

instrumentation and radiation monitoring equipment calibration, and as fission detectors in amounts as required;

- |     |   |                       |
|-----|---|-----------------------|
| (4) | ENO pursuant to the Act and 10 CFR Parts 30, 40 and 70, to receive, possess, and use in amounts as required any byproduct, source or special nuclear material without restriction to chemical or physical form, for sample analysis or instrument calibration or associated with radioactive apparatus or components; | Amdt. 42<br>10-17-78  |
| (5) | ENO pursuant to the Act and 10 CFR Parts 30 and 70, to possess, but not separate, such byproduct and special nuclear materials as may be produced by the operation of the facility.   | Amdt. 220<br>09-06-01 |

C. This amended license shall be deemed to contain and is subject to the conditions specified in the following Commission regulations in 10 CFR Chapter I: Part 20, Section 30.34 of Part 30, Section 40.41 of Part 40, Sections 50.54 and 50.59 of Part 50, and Section 70.32 of Part 70; is subject to all applicable provisions of the Act and to the rules, regulations, and orders of the Commission now or hereafter in effect; and is subject to the additional conditions specified or incorporated below:

(1) Maximum Power Level

ENO is authorized to operate the facility at steady state reactor core power levels not in excess of 3216 megawatts thermal.	Amdt. 241 10-27-04
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(2) Technical Specifications

The Technical Specifications contained in Appendices A and B, as revised through Amendment No. 252, are hereby incorporated in the license. ENO shall operate the facility in accordance with the Technical Specifications.

(3) The following conditions relate to the amendment approving the conversion to Improved Standard Technical Specifications:

1. This amendment authorizes the relocation of certain Technical Specification requirements and detailed information to licensee-controlled documents as described in Table R, "Relocated Technical Specifications from the CTS," and Table LA, "Removed Details and Less Restrictive Administrative Changes to the CTS" attached to the NRC staff's Safety Evaluation enclosed with this amendment. The relocation of requirements and detailed information shall be completed on or before the implementation of this amendment.

3. On the closing date of the transfer of the license, Con Edison shall transfer to ENIP2 all of the accumulated decommissioning trust funds for IP2 and such additional funds to be deposited in the decommissioning trust for IP2 such that the total amount transferred for Indian Point Nuclear Generating Unit No. 1 (IP1) and IP2 is no less than \$430,000,000. Furthermore, ENIP2 shall either (a) establish a provisional trust for decommissioning funding assurance for IP1 and IP2 in an amount no less than \$25,000,000 (to be updated as required under applicable NRC regulations, unless otherwise approved by the NRC) or (b) obtain a surety bond for an amount no less than \$25,000,000 (to be updated as required under applicable NRC regulations, unless otherwise approved by the NRC). The total decommissioning funding assurance provided for IP2 by the combination of the decommissioning trust and the provisional trust or surety bond at the time of transfer of the licenses shall be at a level no less than the amounts calculated pursuant to, and required under, 10 CFR 50.75. The decommissioning trust, provisional trust, and surety bond shall be subject to or be consistent with the following requirements, as applicable:

Facility Operating License No. DPR-26  
Appendix A – Technical Specifications

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## 1.4 Frequency

## EXAMPLES (continued)

EXAMPLE 1.4-1SURVEILLANCE REQUIREMENTS

SURVEILLANCE	FREQUENCY
Perform CHANNEL CHECK.	12 hours

Example 1.4-1 contains the type of SR most often encountered in the Technical Specifications (TS). The Frequency specifies an interval (12 hours) during which the associated Surveillance must be performed at least one time. Performance of the Surveillance initiates the subsequent interval. Although the Frequency is stated as 12 hours, an extension of the time interval to 1.25 times the stated Frequency is allowed by SR 3.0.2 for operational flexibility. The measurement of this interval continues at all times, even when the SR is not required to be met per SR 3.0.1 (such as when the equipment is inoperable, a variable is outside specified limits, or the unit is outside the Applicability of the LCO). If the interval specified by SR 3.0.2 is exceeded while the unit is in a MODE or other specified condition in the Applicability of the LCO, and the performance of the Surveillance is not otherwise modified (refer to Example 1.4-3), then SR 3.0.3 becomes applicable.

If the interval as specified by SR 3.0.2 is exceeded while the unit is not in a MODE or other specified condition in the Applicability of the LCO for which performance of the SR is required, then SR 3.0.4 becomes applicable. The Surveillance must be performed within the Frequency requirements of SR 3.0.2, as modified by SR 3.0.3, prior to entry into the MODE or other specified condition or the LCO is considered not met (in accordance with SR 3.0.1) and LCO 3.0.4 becomes applicable.

Table 3.3.1-1 (page 5 of 6)  
Reactor Protection System Instrumentation

Note 1: Overtemperature  $\Delta T$

The Overtemperature  $\Delta T$  Function Allowable Value shall not exceed the following:

The channel's maximum trip setpoint shall not exceed its computed trip setpoint by more than 4.9%  $\Delta T$  span.

$$\Delta T \leq \Delta T_0 \left\{ K_1 - K_2 \frac{(1 + \tau_1 s)}{(1 + \tau_2 s)} [T - T'] + K_3 (P - P') - f_1(\Delta I) \right\}$$

Where:  $\Delta T$  is measured RCS  $\Delta T$ , °F (measured by hot leg and cold leg RTDs).  
 $\Delta T_0$  is the loop specific indicated  $\Delta T$  at RTP, °F.  
 $s$  is the Laplace transform operator,  $\text{sec}^{-1}$ .  
 $T$  is the measured RCS average temperature, °F.  
 $T'$  is the loop specific indicated  $T_{\text{avg}}$  at RTP,  $\leq [^{\circ}\text{F}]$ .

$P$  is the measured pressurizer pressure, psig  
 $P'$  is the nominal RCS operating pressure,  $\geq [^{\circ}]$  psig

$K_1 \leq [^{\circ}]$                        $K_2 \geq [^{\circ}]/^{\circ}\text{F}$                        $K_3 \geq [^{\circ}]/\text{psig}$   
 $\tau_1 \geq [^{\circ}] \text{ sec}$                        $\tau_2 \leq [^{\circ}] \text{ sec}$

$f_1(\Delta I) =$                        $[^{\circ}] \{ [^{\circ}] - (q_t - q_b) \}$                       when  $q_t - q_b \leq [^{\circ}]\% \text{ RTP}$   
    0% of RTP                      when  $[^{\circ}]\% \text{ RTP} < q_t - q_b \leq [^{\circ}]\% \text{ RTP}$   
     $[^{\circ}] \{ (q_t - q_b) - [^{\circ}] \}$                       when  $q_t - q_b > [^{\circ}]\% \text{ RTP}$

Where  $q_t$  and  $q_b$  are percent RTP in the upper and lower halves of the core, respectively, and  $q_t + q_b$  is the total THERMAL POWER in percent RTP.

\*These values denoted with  $[^{\circ}]$  are specified in the COLR.

Table 3.3.1-1 (page 6 of 6)  
Reactor Protection System Instrumentation

Note 2: Overpower  $\Delta T$

The Overpower  $\Delta T$  Function Allowable Value shall not exceed the following:

The channel's maximum trip setpoint shall not exceed its computed trip setpoint by more than 2.4%  $\Delta T$  span.

$$\Delta T \leq \Delta T_0 \left\{ K_4 - K_5 \frac{\tau_3 s}{(1 + \tau_3 s)} T - K_6 (T - T'') - f_2(\Delta I) \right\}$$

Where:  $\Delta T$  is measured RCS  $\Delta T$ , °F.  
 $\Delta T_0$  is the loop specific indicated  $\Delta T$  at RTP, °F.  
 $s$  is the Laplace transform operator,  $\text{sec}^{-1}$ .  
 $T$  is the measured RCS average temperature, °F.  
 $T''$  is the loop specific indicated  $T_{\text{avg}}$  at RTP,  $\leq [^{\circ}\text{F}]$ .

$$\begin{array}{lll} K_4 \leq [^{\circ}\text{F}] & K_5 \geq [^{\circ}\text{F}] \text{ for increasing } T_{\text{avg}} & K_6 \geq [^{\circ}\text{F}] \text{ when } T > T'' \\ & [^{\circ}\text{F}] \text{ for decreasing } T_{\text{avg}} & [^{\circ}\text{F}] \text{ when } T \leq T'' \\ \tau_3 \geq [^{\circ}\text{F}] \text{ sec} & & \\ f_2(\Delta I) = [^{\circ}\text{F}] & & \end{array}$$

\*These values denoted with [°F] are specified in the COLR.

Table 3.3.7-1 (page 1 of 1)  
CRVS Actuation Instrumentation

FUNCTION	REQUIRED CHANNELS	SURVEILLANCE REQUIREMENTS	ALLOWABLE VALUES
1. Manual Initiation	1 train	SR 3.3.7.4	NA
2. Control Building Air Intake Radiation (R-38-1)	1	SR 3.3.7.1 SR 3.3.7.2 SR 3.3.7.3 SR 3.3.7.5	$\leq 0.75$ mr/hr
3. Control Room Air Intake Radiation (R-38-2)	1	SR 3.3.7.1 SR 3.3.7.2 SR 3.3.7.3 SR 3.3.7.5	$\leq 0.75$ mr/hr
4. Safety Injection	Refer to LCO 3.3.2, "ESFAS Instrumentation," Function 1, for all initiation functions and requirements.		

5.0 ADMINISTRATIVE CONTROLS

5.3 Unit Staff Qualifications

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5.3.1 Each member of the unit staff shall meet or exceed the minimum qualifications of ANSI/ANS 3.1-1978 for comparable positions, except for the following:

- a. The radiation protection manager shall meet or exceed the qualifications of Regulatory Guide 1.8, September 1975; and
- b. The operations manager shall meet or exceed the minimum qualifications of ANSI/ANS 3.1-1978 except for the SRO license requirement which shall be in accordance with Technical Specification 5.2.2.e.

5.3.2 For the purpose of 10 CFR 55.4, a licensed Senior Reactor Operator (SRO) and a licensed reactor operator (RO) are those individuals who, in addition to meeting the requirements of TS 5.3.1, perform the functions described in 10 CFR 50.54(m).

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5.5 Programs and Manuals

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5.5.13 Safety Function Determination Program (SFDP) (continued)

The SFDP identifies where a loss of safety function exists. If a loss of safety function is determined to exist by this program, the appropriate Conditions and Required Actions of the LCO in which the loss of safety function exists are required to be entered. When a loss of safety function is caused by the inoperability of a single Technical Specification support system, the appropriate Conditions and Required Actions to enter are those of the support system.

5.5.14 Containment Leakage Rate Testing Program

- a. A program shall establish the leakage rate testing of the containment as required by 10 CFR 50.54(o) and 10 CFR 50, Appendix J, Option B, as modified by approved exemptions. This program shall be in accordance with the guidelines contained in Regulatory Guide 1.163, "Performance-Based Containment Leak-Test Program," dated September, 1995.
- b. The calculated peak containment internal pressure for the design basis loss of coolant accident,  $P_a$ , is assumed to be the containment design pressure of 47 psig.
- c. The maximum allowable containment leakage rate,  $L_a$ , at  $P_a$ , and 271°F shall be 0.1% of containment steam air weight per day.
- d. Leakage rate acceptance criteria:
  1. Containment leakage rate acceptance criterion is  $1.0 L_a$ . During the first unit startup following testing in accordance with this program, the leakage rate acceptance criteria are  $< 0.60 L_a$  for the Type B and C tests and  $\leq 0.75 L_a$  for Type A tests.
  2. Air lock testing acceptance criteria shall be established to ensure that limits for Type B and C testing in Technical Specification 5.5.14.d.1 are met.

- (4) ENO pursuant to the Act and 10 CFR Parts 30, 40 and 70, to receive, possess, and use in amounts as required any byproduct, source or special nuclear material without restriction to chemical or physical form, for sample analysis or instrument calibration or associated with radioactive apparatus or components; Amdt. 203 11/27/00
- (5) ENO pursuant to the Act and 10 CFR Parts 30 and 70, to possess, but not separate, such byproduct and special nuclear materials as may be produced by the operation of the facility. Amdt. 203 11/27/00
- C. This amended license shall be deemed to contain and is subject to the conditions specified in the following Commission regulations in 10 CFR Chapter I: Part 20, Section 30.34 of Part 30, Section 40.41 of Part 40, Sections 50.54 and 50.59 of Part 50, and Section 70.32 of Part 70; and is subject to all applicable provisions of the Act and to the rules, regulations, and orders of the Commission now or hereafter in effect; and is subject to the additional conditions specified or incorporated below:
- (1) Maximum Power Level
- ENO is authorized to operate the facility at steady state reactor core power levels not in excess of 3216 megawatts thermal (100% of rated power).
- (2) Technical Specifications
- The Technical Specifications contained in Appendices A and B, as revised through Amendment No. 234, are hereby incorporated in the License. ENO shall operate the facility in accordance with the Technical Specifications.
- (3) (DELETED) Amdt. 205 2-27-01
- (4) (DELETED) Amdt. 205 2-27-01
- D. (DELETED) Amdt.46 2-16-83
- E. (DELETED) Amdt.37 5-14-81
- F. This amended license is also subject to appropriate conditions by the New York State Department of Environmental Conservation in its letter of May 2, 1975, to Consolidated Edison Company of New York, Inc., granting a Section 401 certification under the Federal Water Pollution Control Act Amendments of 1972.

## 1.4 Frequency

EXAMPLES  
(continued)EXAMPLE 1.4-1SURVEILLANCE REQUIREMENTS

SURVEILLANCE	FREQUENCY
Perform CHANNEL CHECK.	12 hours

Example 1.4-1 contains the type of SR most often encountered in the Technical Specifications (TS). The Frequency specifies an interval (12 hours) during which the associated Surveillance must be performed at least one time. Performance of the Surveillance initiates the subsequent interval. Although the Frequency is stated as 12 hours, an extension of the time interval to 1.25 times the stated Frequency is allowed by SR 3.0.2 for operational flexibility.

The measurement of this interval continues at all times, even when the SR is not required to be met per SR 3.0.1 (such as when the equipment is inoperable, a variable is outside specified limits, or the unit is outside the Applicability of the LCO). If the interval specified by SR 3.0.2 is exceeded while the unit is in a MODE or other specified condition in the Applicability of the LCO, and the performance of the Surveillance is not otherwise modified (refer to Example 1.4-3), then SR 3.0.3 becomes applicable.

If the interval as specified by SR 3.0.2 is exceeded while the unit is not in a MODE or other specified condition in the Applicability of the LCO for which performance of the SR is required, then SR 3.0.4 becomes applicable. The Surveillance must be performed within the Frequency requirements of SR 3.0.2, as modified by SR 3.0.3, prior to entry into the MODE or other specified condition or the LCO is considered not met (in accordance with SR 3.0.1) and LCO 3.0.4 becomes applicable.

(continued)

Table 3.3.1-1 (page 7 of 8)  
Reactor Protection System Instrumentation

Note 1: Overtemperature  $\Delta T$

The Overtemperature  $\Delta T$  Function Allowable Value shall not exceed the following Trip Setpoint by more than 2.8% of  $\Delta T$  span:

$$\Delta T \leq \Delta T_0 \left\{ K_1 - K_2 \frac{(1 + \tau_1 s)}{(1 + \tau_2 s)} [T - T'] + K_3 (P - P') - f_1(\Delta I) \right\}$$

Where:  $\Delta T$  is measured RCS  $\Delta T$ , °F.

$\Delta T_0$  is the indicated  $\Delta T$  at RTP, °F.

$s$  is the Laplace transform operator, sec<sup>-1</sup>.

$T$  is the measured RCS average temperature, °F.

$T'$  is the nominal  $T_{avg}$  at RTP,  $\leq [ * ]$  °F.

$P$  is the measured pressurizer pressure, psig

$P'$  is the nominal RCS operating pressure,  $\geq [ * ]$  psig

$K_1 \leq [ * ]$

$K_2 \geq [ * ] / ^\circ\text{F}$

$K_3 \geq [ * ] / \text{psig}$

$\tau_1 \geq [ * ] \text{ sec}$

$\tau_2 \leq [ * ] \text{ sec}$

$$f_1(\Delta I) = \begin{cases} [ * ] \{ [ * ] - (q_t - q_b) \} & \text{when } q_t - q_b \leq [ * ] \% \text{ RTP} \\ 0 \% \text{ of RTP} & \text{when } [ * ] \% \text{ RTP} < q_t - q_b \leq [ * ] \% \text{ RTP} \\ [ * ] \{ (q_t - q_b) - [ * ] \} & \text{when } q_t - q_b > [ * ] \% \text{ RTP} \end{cases}$$

Where  $q_t$  and  $q_b$  are percent RTP in the upper and lower halves of the core, respectively, and  $q_t + q_b$  is the total THERMAL POWER in percent RTP.

The values denoted with  $[ * ]$  are specified in the COLR.

Table 3.3.1-1 (page 8 of 8)  
Reactor Protection System Instrumentation

Note 2: Overpower  $\Delta T$

The Overpower  $\Delta T$  Function Allowable Value shall not exceed the following Trip Setpoint by more than 1.8% of  $\Delta T$  span:

$$\Delta T \leq \Delta T_0 \left\{ K_4 - K_5 \frac{\tau_3 S}{(1 + \tau_3 S)} T - K_6 (T - T''') - f_2(\Delta I) \right\}$$

Where:  $\Delta T$  is measured RCS  $\Delta T$ , °F.

$\Delta T_0$  is the indicated  $\Delta T$  at RTP, °F.

$s$  is the Laplace transform operator,  $\text{sec}^{-1}$ .

T is the measured RCS average temperature, °F.

$T''$  is the nominal  $T_{avg}$  at RTP,  $\leq [ * ]^{\circ}F$ .

$$K_4 \leq [ * ] \quad K_5 \geq [ * ] / ^\circ F \text{ for increasing } T_{avg} \quad K_6 \geq [ * ] / ^\circ F \text{ when } T > T^*$$
$$[ * ] / ^\circ F \text{ for decreasing } T_{avg} \quad [ * ] / ^\circ F \text{ when } T \leq T^*$$

$$\tau_3 \geq [\cdot \star] \text{ sec}$$

$$f_2(\Delta I) = [ * ]$$

\*The values denoted with [ \* ] are specified in the COLR.

### 3.7 PLANT SYSTEMS

#### 3.7.11 Control Room Ventilation System (CRVS)

LCO 3.7.11 Two CRVS trains shall be OPERABLE.

APPLICABILITY: MODES 1, 2, 3, 4.

#### ACTIONS

CONDITION	REQUIRED ACTION	COMPLETION TIME
A. One CRVS train inoperable.	A.1 Restore CRVS train to OPERABLE status.	7 days
B. Two CRVS trains inoperable.	B.1 Restore one CRVS train to OPERABLE status.	72 hours
C. Required Action and associated Completion Time of Condition A or B not met.	C.1 Be in MODE 3.	6 hours
	<u>AND</u> C.2 Be in MODE 5.	36 hours

SURVEILLANCE REQUIREMENTS

SURVEILLANCE		FREQUENCY
SR 3.8.7.1	Verify correct inverter voltage, frequency, and alignment to required 120V AC vital instrument buses.	7 days
SR 3.8.7.2	Verify manual transfer of the AC power source for VIB 34 from inverter 34 to each required CVT.	24 months

5.0 ADMINISTRATIVE CONTROLS

5.3 Unit Staff Qualifications

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- 5.3.1 Each member of the unit staff shall meet or exceed the minimum qualifications of ANSI/ANS 3.1-1978 for comparable positions, except for the following:
- a. The radiation protection manager shall meet or exceed the qualifications of Regulatory Guide 1.8, September 1975; and
  - b. The operations manager shall meet or exceed the minimum qualifications of ANSI/ANS 3.1-1978 except for the SRO license requirement which shall be in accordance with Technical Specification 5.2.2.e.
- 5.3.2 For the purpose of 10 CFR 55.4, a licensed Senior Reactor Operator (SRO) and a licensed Reactor Operator (RO) are those individuals who, in addition to meeting the requirements of TS 5.3.1, perform the functions described in 10 CFR 50.54(m).
-



## 5.0 ADMINISTRATIVE CONTROLS

### 5.4 Procedures

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- 5.4.1 Written procedures shall be established, implemented, and maintained covering the following activities:
- a. The applicable procedures recommended in Regulatory Guide 1.33, Revision 2, Appendix A, February 1978;
  - b. The emergency operating procedures required to implement the requirements of NUREG-0737 and to NUREG-0737, Supplement 1, as stated in Generic Letter 82-33;
  - c. Quality assurance for effluent and environmental monitoring;
  - d. Fire Protection Program implementation; and
  - e. All programs specified in Specification 5.5.
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## 5.5 Programs and Manuals

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### 5.5.10 Ventilation Filter Testing Program (VFTP) (continued)

- c. Demonstrate for each system that a laboratory test of a sample of the charcoal adsorber shows the methyl iodide removal efficiency specified below when tested in accordance with ASTM D3803-1989, subject to clarification below, at a temperature of 86°F and a relative humidity of 95%.

Ventilation System	Methyl iodide removal efficiency (%):	ASTM D3803-1989 Clarification
Control Room Ventilation System	$\geq 95.5$	78 ft/min face velocity
Containment Fan Cooler Units	$\geq 85$	59 ft/min face velocity

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(continued)

## 5.5 Programs and Manuals

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### 5.5.15 Containment Leakage Rate Testing Program

A program shall be established to implement the leakage rate testing of the containment as required by 10 CFR 50.54(o) and 10 CFR 50, Appendix J, Option B, as modified by approved exemptions. This program shall be in accordance with the guidelines contained in Regulatory Guide 1.163, "Performance-Based Containment Leak Test Program, dated September 1995" as modified by the following exception:

ANS 56.8-1994, Section 3.3.1: WCCPPS isolation valves are not Type C tested.

The maximum allowable primary containment leakage rate,  $L_a$ , at a minimum test pressure equal to  $P_a$ , shall be 0.1% of primary containment air weight per day.  $P_a$  is the peak calculated containment internal pressure related to the design basis accident.

Leakage acceptance criteria are:

- a. Containment leakage rate acceptance criterion is  $\leq 1.0 L_a$ . During the first unit startup following testing in accordance with this program, the leakage rate acceptance criteria are  $\leq 0.60 L_a$  for the Type B and C tests and  $\leq 0.75 L_a$  for Type A tests;
- b. Air lock testing acceptance criteria are:
  - 1) Overall air lock leakage rate is  $\leq 0.05 L_a$  when tested at  $\geq P_a$ ,
  - 2) For each door, leakage rate is  $\leq 0.01 L_a$  when pressurized to  $\geq P_a$ ,
- c. Isolation Valve Seal Water System leakage rate acceptance criterion is  $\leq 14,700$  cc/hr at  $\geq 1.1 P_a$ .
- d. Acceptance criterion for leakage into containment from isolation valves sealed with the service water system is  $\leq 0.36$  gpm per fan.

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(continued)