

UNITED STATES NUCLEAR REGULATORY COMMISSION

WASHINGTON, D.C. 20555-0001

ENTERGY NUCLEAR INDIAN POINT 3, LLC AND ENTERGY NUCLEAR OPERATIONS, INC.

DOCKET NO. 50-286

INDIAN POINT NUCLEAR GENERATING UNIT NO. 3

RENEWED FACILITY OPERATING LICENSE

Renewed License No. DPR-64

- 1. The Nuclear Regulatory Commission (the Commission) has found that:
 - A. The application for a renewed license filed by Entergy Nuclear Indian Point 3, LLC (ENIP3) (the licensee) and Entergy Nuclear Operations, Inc. (ENO) (operator) for Indian Point Nuclear Generating Unit No. 3 (IP3 at the Indian Point Energy Center (IPEC) complies with the standards and requirements of the Atomic Energy Act of 1954, as amended (the Act), and the Commission's rules and regulations as 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 renewed license 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. ENIP3 and ENO are financially and technically qualified to engage in the activities authorized by this amendment;

 Amdt. 203
 11/27/00
 - E. ENIP3 and ENO have satisfied the applicable provisions of 10 CFR
 Part 140, "Financial Protection Requirements and Indemnity
 Agreements" of the Commission's regulations;

 Amdt. 203
 11/27/00
 - F. The issuance of this renewed license will not be inimical to the common defense and security or to the health and safety of the public;
 - G. The receipt, possession and use of source, byproduct and special nuclear material as authorized by this renewed license will be in accordance with the Commission's regulations in 10 CFR Parts 30, 40 and 70 including 10 CFR Sections 30.33, 40.32, 70.23, and 70.31;

- H. The issuance of this renewed license is in accordance with 10 CFR Part 51 of the Commission's regulations and all applicable requirements have been satisfied; and
- I. Actions have been identified and have been or will be taken with respect to (1) managing the effects of aging during the period of extended operation on the functionality of structures and components that have been identified to require review under 10 CFR 54.21(a)(1); and (2) time-limited aging analyses that have been identified to require review under 10 CFR 54.21(c), such that there is reasonable assurance that the activities authorized by this renewed license will continue to be conducted in accordance with the current licensing basis, as defined in 10 CFR 54.3, for the facility, and that any changes made to the facility's current licensing basis in order to comply with 10 CFR 54.29(a) are in accordance with the Act and the Commission's regulations.
- 2. Accordingly, Renewed Facility Operating License No. DPR-64 is hereby issued to ENIP3 and ENO to read as follows:
 - A. This renewed license applies to the Indian Point Nuclear Generating Unit No. 3, a pressurized water nuclear reactor and associated equipment (the facility), owned by ENIP3 and operated by ENO. The facility is located in Westchester County, New York, on the east bank of the Hudson River in the Village of Buchanan, and is described in the "Final Facility Description and Safety Analysis Report" as supplemented and amended, and the Environmental Report, as amended.

B. Subject to the conditions and requirements incorporated herein, the Commission licenses:

(1) Pursuant to Section 104b of the Act and 10 CFR Part 50, "Licensing of Production and Utilization Facilities," (a) ENIP3 to possess and use, and (b) ENO to possess, use and operate, the facility at the designated location in Westchester County, New York, in accordance with the procedures and limitations set forth in this renewed license;

Amdt. 203 11/27/00

Amdt. 203

11/27/00

(2) ENO pursuant to the Act and 10 CFR Part 70, to receive, possess, and use, at any time, special nuclear material as reactor fuel, in accordance with the limitations for storage and amounts required for reactor operation, as described in the Final Facility Description and Safety Analysis Report, as supplemented and amended;

Amdt. 203 11/27/00

(3) ENO pursuant to the Act and 10 CFR Parts 30, 40, and 70, to receive, possess, and use, at any time, any byproduct source and special nuclear material as sealed neutron sources for reactor startup, sealed sources for reactor instrumentation and radiation monitoring equipment calibration, and as fission detectors in amounts as required;

Amdt. 203 11/27/00 (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 renewed 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 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) <u>Technical Specifications</u>

The Technical Specifications contained in Appendices A and B, as revised through Amendment No. 264, are hereby incorporated in the renewed License. ENO shall operate the facility in accordance with the Technical Specifications.

(3) <u>(DELETED)</u>

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 renewed license is also subject to appropriate conditions by the New York State Department of Environmental Conservation in its letter granting a Section 401 certification under the Federal Water Pollution Control Act Amendments of 1972.

G. ENO shall fully implement and maintain in effect all provisions of the Commission-approved physical security, training and qualification, and safeguards contingency plans including amendments made pursuant to provisions of the Miscellaneous Amendments and Search Requirements revisions to 10 CFR 73.55 (51 FR 27817 and 27822), and to the authority of 10 CFR 50.90 and CFR 50.54(p). The combined set of plans¹ for the Indian Point Energy Center, which contain Safeguards Information protected under 10 CFR 73.21, is entitled: "Physical Security, Training and Qualification, and Safeguards Contingency Plan, Revision 0," and was submitted by letter dated October 14, 2004, as supplemented by letter dated May 18, 2006.

ENO shall fully implement and maintain in effect all provisions of the Commission-approved cyber security plan (CSP), including changes made pursuant to the authority of 10 CFR 50.90 and 10 CFR 50.54(p). The ENO CSP was approved by License Amendment No. 243, as supplemented by changes approved by License Amendment Nos. 254, 260, and 263.

ENO has been granted Commission authorization to use "stand alone preemption authority" under Section 161A of the Atomic Energy Act, 42 U.S.C. 2201a with respect to the weapons described in Section II supplemented with Section III of Attachment 1 to its application submitted by letter dated August 20, 2013, as supplemented by letters dated November 21, 2013, and July 24, 2014, and citing letters dated April 27, 2011, and January 4, 2012. ENO shall fully implement and maintain in effect the provisions of the Commission-approved authorization.

H. ENO shall implement and maintain in effect all provisions of the approved Fire Protection Program as described in the Final Safety Analysis Report for Indian Point Nuclear Generating Unit No. 3 and as approved in NRC fire protection safety evaluations (SEs) dated September 21, 1973, March 6, 1979, May 2, 1980, November 18, 1982, December 30, 1982, February 2, 1984, April 16, 1984, January 7, 1987, September 9, 1988, October 21, 1991, April 20, 1994, January 5, 1995, and supplements thereto, subject to the following provision:

ENO may make changes to the approved Fire Protection Program without prior approval of the Commission only if those changes would not adversely affect the ability to achieve and maintain safe shutdown in the event of a fire.

I. <u>DELETED</u> Amdt. 205 2-27-01

J. <u>DELETED</u> Amdt. 205 2-27-01

K. <u>DELETED</u> Amdt. 49 5-25-84

¹ The Training and Qualification Plan and Safeguards Contingency Plan are Appendices to the Security Plan.

_

L. DELETED Amdt. 205 2-27-01 M. DELETED Amdt. 205 2-27-01 N. DELETED Amdt. 49 5-25-84 O. Evaluation, status and schedule for completion of balance of plant Amdt. 47 modifications as outlined in letter dated February 12, 1983, shall be 5-27-83 forwarded to the NRC by January 1, 1984. P. ENIP3 and ENO shall take no action to cause Entergy Global Amdt. 203 Investments, Inc. or Entergy International Ltd. LLC, or their parent 11/21/00 companies to void, cancel, or modify the \$70 million contingency commitment to provide funding for the facility as represented in the application for approval of the transfer of the license from PASNY to ENIP3 and ENO, without the prior written consent of the Director, Office of Nuclear Reactor Regulation. Q. <u>DELETED</u> R. <u>DELETED</u> S. DELETED T. <u>DELETED</u> U. DELETED V. <u>DELETED</u>

- W. For purposes of ensuring public health and safety, ENIP3, upon the transfer of this license to it, and upon transfer of decommissioning funds from PASNY to ENO, shall provide decommissioning funding assurance for the facility by the prepayment or equivalent method, to be held in a decommissioning trust fund for the facility, of no less than the amount required under NRC regulations at 10 CFR 50.75. Any amount held in any decommissioning trust maintained by ENO for the facility after the transfer of the facility license to ENIP3 may be credited towards the amount required under this paragraph.
- X. ENIP3 shall take all necessary steps to ensure that the decommissioning trust is maintained in accordance with the application for the transfer of this license to ENIP3 and ENO, as modified by the request to transfer decommissioning funds from PASNY, and the requirements of the order approving the transfer and order approving the transfer of decommissioning funds from PASNY to ENO, and consistent with the safety evaluations supporting such orders.
- AA. The following conditions relate to the amendment approving the conversion to Improved Standard Technical Specifications:

Amdt. 205 2/27/01

- 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.
- 2. The following is a schedule for implementing surveillance requirements (SRs):

For SRs that are new in this amendment, the first performance is due at the end of the first surveillance interval that begins on the date of implementation of this amendment.

For SRs that existed prior to this amendment whose intervals of performance are being reduced, the first reduced surveillance interval begins upon completion of the first surveillance performed after the date of implementation of this amendment.

For SRs that existed prior to this amendment that have modified acceptance criteria, the first performance is due at the end of the first surveillance interval that began on the date the surveillance was last performed prior to the date of implementation of this amendment.

For SRs that existed prior to this amendment whose intervals of performance are being extended, the first extended surveillance interval begins upon completion of the last surveillance performed prior to the date of implementation of this amendment.

- AB. With the reactor critical, Entergy shall maintain the reactor coolant system cold leg at a temperature (T_{cold}) greater than or equal to 525 °F. Entergy shall maintain a record of the cumulative time that the plant is operated with the reactor critical while T_{cold} is below 525 °F. Upon determination by Entergy that the cumulative time of plant operation with the reactor critical while T_{cold} is below 525 °F has exceeded one (1) year, Entergy must:
 - (a) within one (1) month, inform the NRC, in writing, and
 - (b) within six (6) months submit the results of an analysis of the impact of the operation with T_{cold} below 525 °F on the pressurized thermal shock reference temperature (RT_{pts}).

AC. Mitigation Strategy License Condition

The licensee shall develop and maintain strategies for addressing large fires and explosions and that include the following key areas:

- (a) Fire fighting response strategy with the following elements:
 - 1. Pre-defined coordinated fire response strategy and guidance
 - 2. Assessment of mutual aid fire fighting assets
 - 3. Designated staging areas for equipment and materials
 - 4. Command and control
 - 5. Training of response personnel
- (b) Operations to mitigate fuel damage considering the following:
 - 1. Protection and use of personnel assets
 - 2. Communications
 - 3. Minimizing fire spread
 - 4. Procedures for implementing integrated fire response strategy
 - 5. Identification of readily-available pre-staged equipment
 - 6. Training on integrated fire response strategy
 - 7. Spent fuel pool mitigation measures
- (c) Actions to minimize release to include consideration of:
 - 1. Water spray scrubbing
 - 2. Dose to onsite responders

AD. Control Room Envelope Habitability

Upon implementation of Amendment No. 239 adopting TSTF-448, Revision 3 (as supplemented), the determination of control room envelope (CRE) unfiltered air inleakage as required by Technical Specification (TS) Surveillance Requirement (SR) 3. 7.11.4, in accordance with TS 5.5.16.c.(ii), the assessment of CRE habitability as required by TS 5.5.16.c.(iii), and the measurement of CRE pressure as required by TS 5.5.16.d, shall be considered met. Following implementation:

- (a) The first performance of SR 3.7.11.4, in accordance with TS 5.5.16.c.(i), shall be within the specified Frequency of 6 years, plus the 18-month allowance of SR 3.0.2, as measured from February 1, 2005, the date of the most recent successful tracer gas test, as stated in the June 28, 2005, letter response to Generic Letter 2003-01.
- (b) The first performance of the periodic assessment of CRE habitability, TS 5.5.16.c.(ii), shall be within the next 9 months since the time period since the most recent successful tracer gas test is greater than 3 years.
- (c) The first performance of the periodic measurement of CRE pressure, TS 5.5.16.d, shall be within 24 months, plus the 182 days allowed by SR 3.0.2, as measured from June 18, 2007, the date of the most recent successful pressure measurement test.
- AE. ENO may transfer IP3 spent fuel to the IP2 spent fuel pit subject to the conditions listed in Appendix C. ENO is further authorized to transfer IP3 spent fuel into NRC approved storage casks for onsite storage by ENO and ENIP3.

AF. License Renewal License Conditions

- (1) The information in the UFSAR supplement, submitted pursuant to 10 CFR 54.21(d) and as revised during the license renewal application review process, and licensee commitments as listed in Appendix A of the "Safety Evaluation Report Related to the License Renewal of Indian Point Nuclear Generating Units 2 and 3," (SER) and supplements to the SER, are collectively the "License Renewal UFSAR Supplement." The UFSAR Supplement is henceforth part of the UFSAR, which will be updated in accordance with 10 CFR 50.71(e). As such, the licensee may make changes to the programs, activities, and commitments described in the UFSAR Supplement, provided the licensee evaluates such changes pursuant to the criteria set forth in 10 CFR 50.59, "Changes, Tests, and Experiments," and otherwise complies with the requirements in that section.
- (2) The License Renewal UFSAR Supplement, as defined in license condition AF(1) above, describes certain programs to be implemented and activities to be completed prior to the period of extended operation (PEO).
 - a. The licensee shall implement those new programs and enhancements to existing programs no later than the date specified in the License Renewal UFSAR Supplement.
 - b. The licensee shall complete those activities no later than the date specified in the License Renewal UFSAR Supplement.
 - c. The licensee shall notify the NRC in writing within 30 days after having accomplished item (2)a above and include the status of those activities that have been or remain to be completed in item (2)b above.

This renewed license is effective as of the date of issuance, and shall expire at midnight 3. April 30, 2025.

FOR THE NUCLEAR REGULATORY COMMISSION

/RA/

Ho K. Nieh, Director Office of Nuclear Reactor Regulation

Attachments:

Appendix A – Technical Specifications Appendix B – Environmental Technical Specification Requirements

Appendix C – Inter-Unit Fuel Transfer Technical Specifications

Date of Issuance: September 17, 2018