



**UNITED STATES  
NUCLEAR REGULATORY COMMISSION**

REGION I  
2100 RENAISSANCE BOULEVARD, SUITE 100  
KING OF PRUSSIA, PENNSYLVANIA 19406-2713

July 27, 2020

Mr. Anthony J. Vitale  
Site Vice President  
Entergy Nuclear Operations, Inc.  
450 Broadway, Generation Support Building  
P.O. Box 249  
Buchanan, NY 10511-0249

SUBJECT: INDIAN POINT ENERGY CENTER, UNIT 3 – DESIGN BASIS ASSURANCE  
INSPECTION (PROGRAMS) INSPECTION REPORT 05000286/2020012

Dear Mr. Vitale:

On June 25, 2020, the U.S. Nuclear Regulatory Commission (NRC) completed an inspection at Indian Point Energy Center, Unit 3 and discussed the results of this inspection with Mr. John Ferrick and other members of your staff. The results of this inspection are documented in the enclosed report.

No findings or violations of more than minor significance were identified during this inspection.

This letter, its enclosure, and your response (if any) will be made available for public inspection and copying at <http://www.nrc.gov/reading-rm/adams.html> and at the NRC Public Document Room in accordance with Title 10 of the *Code of Federal Regulations* 2.390, "Public Inspections, Exemptions, Requests for Withholding."

Sincerely,

X /RA/

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Signed by: Melvin K. Gray

Mel Gray, Chief  
Engineering Branch 1  
Division of Reactor Safety

Docket No. 05000286  
License No. DPR-64

Enclosure:  
As stated

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INSPECTION (PROGRAMS) INSPECTION REPORT 05000286/2020012  
DATED JULY 27, 2020

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**U.S. NUCLEAR REGULATORY COMMISSION**  
**Inspection Report**

Docket Number: 05000286

License Number: DPR-64

Report Number: 05000286/2020012

Enterprise Identifier: I-2020-012-0009

Licensee: Entergy Nuclear Operations, Inc.

Facility: Indian Point Energy Center, Unit 3

Location: 450 Broadway, Generation Support Building  
Buchanan, NY 10511-0249

Inspection Dates: June 8, 2020 to June 25, 2020

Inspectors: C. Bickett, Senior Reactor Inspector  
A. Patel, Senior Reactor Inspector  
J. Schoppy, Senior Reactor Inspector

Approved By: Mel Gray, Chief  
Engineering Branch 1  
Division of Reactor Safety

Enclosure

## **SUMMARY**

The U.S. Nuclear Regulatory Commission (NRC) continued monitoring the licensee's performance by conducting a design basis assurance inspection (programs) inspection at Indian Point Energy Center, Unit 3, in accordance with the Reactor Oversight Process. The Reactor Oversight Process is the NRC's program for overseeing the safe operation of commercial nuclear power reactors. Refer to <https://www.nrc.gov/reactors/operating/oversight.html> for more information.

### **List of Findings and Violations**

No findings or violations of more than minor significance were identified.

### **Additional Tracking Items**

None.

## INSPECTION SCOPES

Inspections were conducted using the appropriate portions of the inspection procedures (IPs) in effect at the beginning of the inspection unless otherwise noted. Currently approved IPs with their attached revision histories are located on the public website at <http://www.nrc.gov/reading-rm/doc-collections/insp-manual/inspection-procedure/index.html>. Samples were declared complete when the IP requirements most appropriate to the inspection activity were met consistent with Inspection Manual Chapter (IMC) 2515, "Light-Water Reactor Inspection Program - Operations Phase." The inspectors reviewed selected procedures and records, observed activities (assisted by the NRC senior resident inspector), and interviewed personnel to assess licensee performance and compliance with Commission rules and regulations, license conditions, site procedures, and standards. Starting on March 20, 2020, in response to the National Emergency declared by the President of the United States on the public health risks of the coronavirus (COVID-19), regional inspectors were directed to begin telework. The inspection documented below was determined that the objectives and requirements stated in the IP could be completed remotely.

## REACTOR SAFETY

### 71111.21N.02 - Design-Basis Capability of Power-Operated Valves Under 10 CFR 50.55a Requirements

#### POV Review (IP Section 03) (8 Samples)

The inspectors:

- a. Determined whether the sampled power-operated valves (POVs) are being tested and maintained in accordance with NRC regulations along with the licensee's commitments and/or licensing bases.
- b. Determined whether the sampled POVs are capable of performing their design-basis functions.
- c. Determined whether testing of the sampled POVs is adequate to demonstrate the capability of the POVs to perform their safety functions under design-basis conditions.
- d. Evaluate maintenance activities including a walkdown by the NRC senior resident inspector of the sampled POVs (if accessible).

- (1) MOV-536, Power Operated Relief Valve Blocking Valve
- (2) MOV-731, Residual Heat Removal Supply from the Reactor Coolant System
- (3) MOV-822A, #31 Residual Heat Removal Heat Exchanger Component Cooling Water Outlet Isolation Valve
- (4) MOV-885A, Containment Sump Residual Heat Removal Suction Isolation Valve
- (5) MOV-1802A, Recirculating Pump Discharge Isolation Valve
- (6) PCV-455C, Power Operated Relief Valve
- (7) PCV-1139, #32 Auxiliary Feed Pump Steam Control
- (8) FCV-1176, Emergency Diesel Generators Service Water System Flow Control

## INSPECTION RESULTS

No findings were identified.

## **EXIT MEETINGS AND DEBRIEFS**

The inspectors verified no proprietary information was retained or documented in this report.

- On June 25, 2020, the inspectors presented the design basis assurance inspection (programs) inspection results to Mr. John Ferrick and other members of the licensee staff.

## DOCUMENTS REVIEWED

Inspection Procedure	Type	Designation	Description or Title	Revision or Date
71111.21N.02	Calculations	00186-C-019	AOV Component Level Calculation for Rising Stem Valve MS-PCV-1139 at Indian Point 3 Nuclear Power Plant	Revision 0
		00186-C-020	AOV Component Level Calculation for Rising Stem Valves RC-PCV-455C and 456	Revision 0
		3-MCC-001-ELC	Westinghouse 480 Volt MCC Maintenance Inspection	Revision 48
		93162-C-05	Valve Thrust Assessment 14" Copes Vulcan Gate Valve: AC-MOV-730 & 731	Revision 2
		93162-C-27	Valve Thrust Assessment 10" Anchor Darling Gate Valve: SI-MOV-1802A & B	Revision 4
		IP-CALC-20-00016	Update of MOV Thrust and Torque Calculations AC-MOV-745B, AC-MOV-822A, SI-MOV-856B, SI-MOV-889A, and SI-HCV-638	Revision 0
		IP3-CALC-ED-01074	Evaluation of Thermal Overload Heater Sizing for MOV Motors	Revision 1
		IP3-CALC-RCS-00978	Thrust and Torque Limits for RC-MOV-536	Revision 6
		IP3-CALC-SWS-03684	AOV Component Level Calculation for Diesel Generator Cooler Flow Control Valves FCV-1176 and 1176A	Revision 0
		IP3-CALC-SWS-03685	AOV System Level Calculation for Diesel Generator Cooler Flow Control Valves FCV-1176 and -1176A	Revision 0
		IP3-RPT-MULT-01279	Evaluation of Coefficient of Friction for GL 89-10 MOVs	Revision 5
		S1-01004	Thrust and Torque Calculation SI-MOV-1802A (IPEC-3) AC Motor Operated GL96-05 Gate Valve	Revision 6
	Corrective Action Documents Resulting from Inspection	HQN-2020-01190		
		HQN-2020-01209		
		IP3-2020-01256		
		IP3-2020-01276		
		IP3-2020-01282		
		IP3-2020-01299		
		IP3-2020-01323		
		IP3-2020-01342		

Inspection Procedure	Type	Designation	Description or Title	Revision or Date
		IP3-2020-01394		
	Miscellaneous	IP3-LO-2019-00120	Power Operated Valve Focused Self-Assessment Report	01/21/2020
		TSP-011	Environmental Qualification (EQ) Program Harsh Areas and Service Conditions	Revision 11
	Procedures	EN-DC-140	Air Operated Valve Program	Revision 8
		EN-DC-304	MOV Thrust / Torque Setpoint Calculations	Revision 3
		EN-DC-331	MOV Program	Revision 6
		ENN-EE-S-002-IP	Sizing of Thermal Overload Relays	Revision 0