UNITED STATES
NUCLEAR REGULATORY COMMISSION
WASHINGTON, D.C. 20555-0001

November 09, 2026

Christopher H. Mudrick
Senior Vice President
Constellation Energy Generation, LLC
President and Chief Nuclear Officer (CNO)
Constellation Nuclear
200 Energy Way, KSA-3N
Kennett Square, PA 19348

SUBJECT: CLINTON POWER STATION - INTEGRATED INSPECTION REPORT 05000461/2026003

Dear Christopher H. Mudrick:

On September 30, 2026, the U.S. Nuclear Regulatory Commission (NRC) completed an inspection at Clinton Power Station. On October 23, 2026, the NRC inspectors discussed the results of this inspection with Christopher Smith, Plant Manager, 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,

Signed by Robert Ruiz on 11/09/26

Robert Ruiz, Chief
Division of Reactor Projects
Reactor Projects Branch A
Region III

Docket No. 05000461
License No. NPF-62

Enclosure:
As stated

cc: w/ encl: distribution via digital
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Letter to Christopher H. Mudrick from Robert Ruiz dated November 09, 2026.

SUBJECT: CLINTON POWER STATION - INTEGRATED INSPECTION REPORT 05000461/2026003

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ADAMS Accession No.: ML26313A404
PKG.: ML26313A405
e-Concurrence Case: 20261109-03287

U.S. NUCLEAR REGULATORY COMMISSION
Inspection Report

Docket Number:	05000461
License Number:	NPF-62
Report Number:	05000461/2026003
Enterprise Identifier:	I-2026-003-0062
Licensee:	Constellation Energy Generation, LLC
Facility:	Clinton Power Station
Location:	Clinton, IL
Inspection Dates:	July 01, 2026, to September 30, 2026
Inspectors:	John Gewargis, Senior Resident Inspector John Murphy, Illinois Emergency Management Agency Vicki Rand, Resident Inspector
Approved By:	Robert Ruiz, Chief Reactor Projects Branch A Division of Reactor Projects

Enclosure

SUMMARY

The U.S. Nuclear Regulatory Commission (NRC) continued monitoring the licensee's performance by conducting an integrated inspection at Clinton Power Station, 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

Type	Issue Number	Title	Report Section	Status
LER	05000461/2026-004-01	LER 2026-004-01 for Clinton Power Station, Unit 1, Division 3 Switchgear Heat Removal System Head Pressure Controller Non-Functional	71111.13	Closed
LER	05000461/2026-004-00	LER 2026-004-00 for Clinton Power Station, Unit 1, Division 3 Switchgear Heat Removal System Head Pressure Controller Non-Functional	71111.13	Closed
LER	05000461/2026-003-00	LER 2026-003-00 for Clinton Power Station, Unit 1, Division 3 Switchgear Heat Removal System Head Pressure Controller Non-Functional	71111.13	Closed
LER	05000461/2026-003-01	LER 2026-003-01 for Clinton Power Station, Unit 1, Division 3 Switchgear Heat Removal System Head Pressure Controller Non-Functional	71111.13	Closed

PLANT STATUS

Unit 1 began the inspection period at rated thermal power (RTP). From September 11, 2026, to September 20, 2026, the licensee lowered unit power to between 65 and 90 percent RTP to maintain discharge flume temperatures within the normal band. From September 26, 2026, to September 27, 2026, the licensee lowered unit power to approximately 79 percent RTP for planned rod pattern adjustment and turbine valve testing. From October 9, 2026, to October 10, 2026, the licensee lowered unit power to 89 percent RTP for feedwater heater repairs. Unit 1 remained at or near RTP for the remainder of the inspection period.

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 performed activities described in IMC 2515, Appendix D, "Plant Status," observed risk significant activities, and completed on-site portions of IPs. The inspectors reviewed selected procedures and records, observed activities, and interviewed personnel to assess licensee performance and compliance with Commission rules and regulations, license conditions, site procedures, and standards.

REACTOR SAFETY

71111.01 - Adverse Weather Protection

Impending Severe Weather Sample (IP Section 03.02) (1 Sample)

(1) The inspectors evaluated the adequacy of the overall preparations to protect risk-significant systems from impending severe thunderstorms, rain and high lake level on August 16, 2026.

71111.04 - Equipment Alignment

Partial Walkdown (IP Section 03.01) (1 Sample 1 Partial)

The inspectors evaluated system configurations during partial walkdowns of the following systems/trains:

(1) (Partial)
control room air conditioning train B opened on August 31, 2026
The inspectors performed a partial walkdown to ensure the system and supporting components and structures were correctly aligned to perform their function. The inspectors performed inspection procedure section 03.01 in this inspection period. This sample is planned to be closed in the Clinton Power Station 4th quarter integrated inspection report, 05000461/2026004.

(2) diesel generator air (DG) starters and dryer systems on September 17, 2026

71111.05 - Fire Protection

Fire Area Walkdown and Inspection (IP Section 03.01) (3 Samples)

The inspectors evaluated the implementation of the fire protection program by conducting a walkdown and performing a review to verify program compliance, equipment functionality, material condition, and operational readiness of the following fire areas:

(1) Division III switchgear room completed on July 30, 2026
(2) main power transformer deluge system completed on September 2, 2026
(3) DGs, diesel ventilation, and diesel storage tanks on September 9, 2026

71111.11A - Licensed Operator Requalification Program and Licensed Operator Performance

Licensed Operator Training/Examination Observations (IP Section 03.01) (1 Sample)

(1) observation of operating basis earthquake simulated event scenario on August 18, 2026

71111.15 - Operability Determinations and Functionality Assessments

Operability Determination or Functionality Assessment (IP Section 03.01) (2 Samples 1 Partial)

The inspectors evaluated the licensee's justifications and actions associated with the following operability determinations and functionality assessments:

(1) seismic snubber and measuring and test equipment completed on August 14, 2026
(2) service water pumps on July 22, 2026
(3) (Partial)
Division III DG coolant hose rupture and leak inspection opened on July 5, 2026
This inspection sample will be closed under the Clinton Power Station Preliminary Significance Report for the Division III DG Coolant Leak Issue, Inspection Report Number 05000461/2026090. The inspectors evaluated the operability and functionality determination associated with the Division III DG Coolant Leak and verified the licensee was taking appropriate action from July 5, 2026, to September 30, 2026. The inspectors performed procedure Section 3.01. Inspection conclusions from this sample will be documented in Inspection Report 05000461/2026090.

Temporary and Permanent Modifications (IP Section 03.02) (2 Samples)

The inspectors evaluated the following temporary or permanent modifications:

(1) Division II DG CO2 system controller upgrade completed on September 30, 2026
(2) reactor water cleanup isolation valves completed on September 30, 2026

71111.24 - Testing and Maintenance of Equipment Important to Risk

The inspectors evaluated the following testing and maintenance activities to verify system operability and/or functionality:

Post-Maintenance and Surveillance Testing (IP Section 03.01) (8 Samples)

(1) Division II DG operability run completed on July 23, 2026
(2) Division III DG operability run after hose replacement completed on August 20, 2026
(3) Division III system outage window WW 2631 completed on August 20, 2026
(4) Division I battery charger repair completed on August 20, 2026
(5) residual heat removal (RHR) pump A surveillance operability run completed on August 25, 2026
(6) RHR pump C operability surveillance completed on August 28, 2026
(7) Division I DG system outage window September 7 through September 16, 2026
(8) control room air conditioning train B chillwater pump surveillance completed on August 28, 2026

Inservice Testing (IST) (IP Section 03.01) (1 Sample)

(1) RHR surveillance operability completed on September 30, 2026

71114.06 - NRC Resident--Evaluation of Emergency Preparedness Program

Emergency Preparedness Plan Activity (IP Section 03.01) (1 Sample)

(1) frazil ice scenario to general emergency completed on August 20, 2026

SAFEGUARDS

71130.15 - Security Operations

Security Operations (IP Section 03.01) (1 Sample)

The inspectors evaluated security operations during observations of the following activity:

(1) personnel searches at the main access facility completed on September 11, 2026

Security Equipment Condition (IP Section 03.02) (2 Samples)

The inspectors evaluated the ability of security equipment to perform its intended function through a walkdown of the following:

(1) security gates completed on September 9, 2026
(2) security doors completed on September 10, 2026

OTHER ACTIVITIES – BASELINE

71152A - Annual Follow-up Problem Identification and Resolution

Annual Follow-up of Selected Issues (IP Section 03.03) (1 Partial)

The inspectors reviewed the licensee's implementation of its corrective action program related to the following issues:

(1) (Partial)
Drywell floor drain system and check valves in-depth review began on September 23, 2026. The inspectors performed an in-depth review of the licensee's drywell floor drain system to include check valve function and system leakage to ensure implemented corrective actions were adequate. The inspectors performed inspection procedure section 03.03 this inspection period. The inspection sample is planned to be completed in the 4th Quarter Clinton Power Station Integrated Inspection Report, 05000461/2026004.

71153 - Follow-Up of Events and Notices of Enforcement Discretion

Event Report (IP Section 03.02) (5 Samples)

The inspectors evaluated the following licensee event reports (LERs):

(1) 05000461/2026-003-00 Clinton Power Station, Unit 1, Division 3 Switchgear Heat Removal System Head Pressure Controller Non-Functional
(ADAMS Accession No. ML26197A256)

The event described in LER 05000461/2026-003-00 was previously inspected under Inspection Sample Section 71111.13, Maintenance Risk Assessment and Emergent Work Control of Integrated Inspection Report 05000461/2026002. This sample was opened for LER review only.

The inspectors determined that the cause of the condition described in the LER was not reasonably within the licensee's ability to foresee and correct, and therefore was not reasonably preventable. No performance deficiency nor violation of NRC requirements was identified. This LER is Closed.

(2) 05000461/2026-003-01 Clinton Power Station, Unit 1, Division 3 Switchgear Heat Removal System Head Pressure Controller Non-Functional
(ADAMS Accession No. ML26245A259)

The event described in LER 05000461/2026-003-01 was previously inspected under Inspection Sample Section 71111.13, Maintenance Risk Assessment and Emergent Work Control of Integrated Inspection Report 05000461/2026002. This sample was opened for LER review only.

The inspectors determined that the cause of the condition described in the LER was not reasonably within the licensee's ability to foresee and correct, and therefore was not reasonably preventable. No performance deficiency nor violation of NRC requirements was identified. The inspectors reviewed the updated LER submittal. The previous LER submittal was reviewed in this Inspection Report. This LER is Closed.

(3) 05000461/2026-004-00 Clinton Power Station, Unit 1, Division 3 Switchgear Heat Removal System Head Pressure Controller Non-Functional
(ADAMS Accession No. ML26197A257)

The event described in LER 05000461/2026-004-00 was previously inspected under Inspection Sample Section 71111.13, Maintenance Risk Assessment and Emergent

Work Control of Integrated Inspection Report 05000461/2026002. This sample was opened for LER review only.

The inspectors determined that the cause of the condition described in the LER was not reasonably within the licensee's ability to foresee and correct, and therefore was not reasonably preventable. No performance deficiency nor violation of NRC requirements was identified. This LER is Closed.

(4) 05000461/2026-004-01 Clinton Power Station, Unit 1, Division 3 Switchgear Heat Removal System Head Pressure Controller Non-Functional (ADAMS Accession No. ML26197A257)

The event described in LER 05000461/2026-004-01 was previously inspected under Inspection Sample Section 71111.13, Maintenance Risk Assessment and Emergent Work Control of Integrated Inspection Report 05000461/2026002. This sample was opened for LER review only.

The inspectors determined that the cause of the condition described in the LER was not reasonably within the licensee's ability to foresee and correct, and therefore was not reasonably preventable. No performance deficiency nor violation of NRC requirements was identified. The inspectors reviewed the updated LER submittal. The previous LER submittal was reviewed in this Inspection Report. This LER is Closed.

INSPECTION RESULTS

No Findings were identified.

EXIT MEETINGS AND DEBRIEFS

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

- On October 23, 2026, the inspectors presented the integrated inspection results to C. Smith, Plant Manager, and other members of the licensee staff.

DOCUMENTS REVIEWED

Inspection Procedure	Type	Designation	Description or Title	Revision or Date
71111.01	Drawings	M01-1102	Property Development Clinton Power Station	K
		M01-1103	Plant Development Clinton Power Station	K
	Procedures	4303.02	Abnormal Lake Level	10/13/2026
		EP-AA-1003 Addendum 3	Emergency Action Levels for Clinton Station	9
		Main Dam EAP	Main Dam EAP	6
71111.04	Corrective Action Documents	04990041	Potential VC B Deficiency	07/20/2026
		05170879	Div 1 DG 1DG16MA/ML 16 Cylinder Air Start Valve Leaking By	09/16/2026
		05170967	Div 1 DG Air Dryer Desiccant Approaching Expended	09/16/2026
	Procedures	3402.01	Control Room HVAC (VC)	033C
		3402.01P001	Control Room HVAC (VC) Shifting Train A to Train B	008D
		3506.01V001	Division 1: Diesel Generator and Support Systems Valve Lineup	13A
71111.05	Corrective Action Documents	04998116	Potential Fire PRA Impact from Deluge Isolation	07/30/2026
	Fire Plans	1893.04M353	781 Control: Division III Switchgear and Battery Room Prefire Plan	6b
		1893.04M500	712 Diesel Generator: Div 3 Diesel Fuel Tank Room Prefire Plan	5b
		1893.04M501	712 Diesel Generator: Div 1 Diesel Fuel Tank Room Prefire Plan	5b
		1893.04M502	712 Diesel Generator: Div 2 Diesel Fuel Tank Room Prefire Plan	6a
		1893.04M510	737 Diesel Generator: Div 3 Diesel Generator & Day Tank Room Prefire Plan	6c
		1893.04M511	737 Diesel Generator: Div 1 Diesel Generator & Day Tank Room Prefire Plan	6c
		1893.04M512	737 Diesel Generator: Div 2 Diesel Generator & Day Tank Room Prefire Plan	7b

		1893.04M520	762 Diesel Generator: Div 3 Diesel Generator Ventilation Room Prefire Plan	5a
		1893.04M521	762 Diesel Generator: Div 1 Diesel Generator Ventilation Room Prefire Plan	5a
		1893.04M522	762 Diesel Generator: Div 2 Diesel Generator Ventilation Room Prefire Plan	5a
	Procedures	BTP APCSB 9.5-1, Appendix E	Plants Under Construction and Operating Plants Overall Requirements of Nuclear Plant Fire Protection Program	Rev 25, March 2026
71111.15	Corrective Action Documents	04902885	1G36F085 Vibrations Led to Broken Pipe Hanger for CY	10/03/2025
		04926181	WW 2602 RT SOW 4.0 Critique	01/08/2026
		04962550	Maintenance 4.0 Critique for RT F/D Work	05/19/2026
		04991549	Potentially Degraded WS Pump 1A	07/21/2026
		00373892	FASA for 2005 SSD&PC CDG19T UPGRD DG EXP TANK FLEX CNNCTION	09/12/2005
		00378846	New Flexible Connections Oversized for 1DG19T Coolant Pipe	09/12/2005
		00378868	1DG19T - Div 3 EDG Coolant Flexible Coupling Replacement	09/26/2005
		04736839	C1R22 Snubber Visual-Only Examination Scope	01/26/2024
		04829204	Extension Needed for OOTR	01/13/2025
		04870672	M&TE OOTR Communication	06/04/2025
		04896159	Snubber 1HP03042S Clamp Misaligned/Bound	09/09/2025
		04896353	Snubber 1MS07048S Failed Visual Examination	09/09/2025
		04896879	Snubber 1MS07012S Failed Visual Examination	09/11/2025
		04897717	Snubber 1DG02001S Found Outside Cold Setting Range	09/14/2025
		04897722	Clinton Specific M&TE Not Available due to Delay with Vendor	09/14/2025
		04897946	C1R22-Functional Failure of Snubber 1MS36001S	09/15/2025

		04898770	Snubber 1NB01006S Setting Indication	09/18/2025
		04915814	OOTR 0011648991 / IR 4906213-32 / Torque Wrench 0002544145	11/19/2025
		04923055	OOTR 003123626 / IR 04906213	12/22/2025
		04981541	DG 1C E-Stopped due to Large Coolant Leak	07/05/2026
		04995777	Unexpected Alarm 5052-1A Auto Trip Division 2 During 9071.14	07/27/2026
	Engineering Changes	0000646102 Rev 1	Install Manual Isolation Valve on 1RT34C	02/05/2026
		629203	Replace the Division 2 DG Fire Panel 1CO0JB Micro 1-EV Controller with AEGIS-XLT	0
	Engineering Evaluations	CPS-13461	Failed Hose, Rubber, 8 Inch Long, For Expansion Water	0
		CPS-14807	Non-Failed Hose, Rubber, 8 Inch Long, for Expansion Water Tank	0
	Miscellaneous	0065-0086-RPT-001	Technical Basis for Clinton Division III EDG Cooling Water Hose Failure Exposure Time Methodology	1
		70000231	Vendor Technical Information Micro 1 EV Relay Coil Resistor	01/10/2001
		MPR 0065-0086-LTR-001	Evaluation of Exposure Time Methodology for the Division III EDG Cooling Water Hose Failure	1
		MPR 0065-0086-LTR-002	Performance Deficiency Assessment - Division III EDG Coolant Hose Failure	1
		Root Cause Report: IR 04981541, Division III DG Coolant Leak	Root Cause: DG 1C E-Stopped due to Large Coolant Leak	0
		VTD-K4312-4100	Kidde AEGIS Conventional Fire Alarm-Suppression Control Unit	0
	Procedures	1512.01	Calibration and Control of Measuring and Test Equipment	19a
		3303.01V001	Reactor Water Cleanup Valve Lineup	20a

		645-E4	645E4 Turbocharged Engine Maintenance Manual	3
		AD-AA-101	Processing of Procedures, T&RMs, and Forms	32
		CC-AA-415	Maintenance Specific Measurement and Test Equipment	5
		CPS 8207.09	Emergency Diesel Engine Twelve (12) Year Maintenance and Inspection	6a
		CPS 8207.09C001	Emergency Diesel Engine Twelve (12) Year Maintenance and Inspection Checklist	5
		ER-AA-200	Preventive Maintenance Program	7
		ER-AA-200-1004	PCM Templates	2
		I024-000089	ESI-EMD Owners Group Recommended Maintenance Program for Nuclear Standby Emergency Diesel Generators	2
		K2801-0076-C	Division III Diesel Generator	131
		M.I. 1742	Electromotive Division, General Motors Corporation Maintenance Instruction, Scheduled Maintenance Program 999 System Generating Plants	E
		MA-AA-716-040	Control of Portable Measurement and Test Equipment Program	18
		MA-MW-792-042	Calibration of Torque Wrenches	1
		OP-AA-108-115	Operability Determinations	29
		PL-AA-001-0001	Administrative Process for the Performance of M&TE Calibration Activities at the Station	4
	Work Orders	00607583	0WS031 Leaking by its Shut Seat	03/18/2005
		00851020	MM 1DG19T - Upgrade DG Exp Tank Flex Connection	09/26/2007
		01375926	MM 1DG01KC Coolant/Oil System Couplings / Oil Cooler Inspection	01/14/2014
		01432828	0WS031 Handwheel Turns but Valve does not Move	05/02/2011

		05309378	0WS031 Clean Valve Stem, Lube, Stroke	05/07/2024
		4981874	Replace the Division II 1CO05JB CO2 Panel Micro 1-EV W/AEGIS EC 629203	04/20/2020
71111.24	Corrective Action Documents	05164211	1VD01YA Didn't Perform When Driven by Ohms	09/09/2026
	Procedures	3506.01C005	Diesel Generator Start Log	1c
		3506.01D002	Diesel Generator 1B Operating Logs	7
		3506.01P002	Division 2 Diesel Generator Operations	4a
		3506.01P005	Placing Division 2 Diesel Generator 1B in Standby	2
		8501.05	CV-2 Relay Inspection and Calibration with Doble Test Equipment	7
		9052.01P002	RHR Pump A Operability / WLP Double Check Valve Test	4
		9053.07C21	RHR B/C Pumps & RHR B/C Water Leg Pump Operability	50
		CPS 9053.07	RHR B/C Pumps and RHR B/C Water Leg Pump Operability	50
		CPS 9080.01	Diesel Generator 1A Operability - Manual and Quick Start Operability	62
		CPS 9080.03	Diesel Generator 1C Operability - Manual and Quick Start Operability	42
	Work Orders	00318465	Contingency to Replace or Repair Division I Battery Charger	08/12/2026
		05832114	9170.02B20 Op VC B Valve Operability	08/26/2026
		05832114-01	9170.02B-002 Control Room HVAC Chilled Water Train B Valve Operability Test	08/26/2026
		05832760-02	9053.07C21 OP RHR Pump Oper Test (C-Pump)	08/26/2026
		05843287	CPS 9080.03 Diesel Generator 1C Operability - Manual and Quick Start Operability	07/07/2026
		05857669	RHR Pump A Operability / WLP Double Check Valve Test	08/10/2026

		05869446	227-DG1KB BC Supply UV Relay Will Not Reset	07/23/2026
		05877936	9080.03A23 OP DG 1C Operability	07/31/2026
		5635734	9080.01 Diesel Generator 1A Operability - Manual and Quick Start Operability	09/16/2026
		5832759	9053.07B21 OP RHR Pump OPER Test (B-Pump)	08/31/2026
		5881966	9080.01 Diesel Generator 1A Operability - Manual and Quick Start Operability	08/13/2026
71130.15	Corrective Action Documents	04950896	Security Sliding Gates Repair Need Corrective WOs	04/08/2026
		05164080	Security Gate 1D Requires Repairs to Both Sides	09/08/2026
		05164081	Security Gate 3D Requires Repairs to Both Sides	09/08/2026
		05164082	Security Gate 4D Requires Repairs to Both Sides	09/08/2026
		05164083	Security Gate 6D Requires Repairs to Both Sides	09/08/2026
		05164084	Security Gate 6W Requires Repairs to Both Sides	09/08/2026
		05164085	Security Gate 2D Requires Repairs to Both Sides	09/08/2026
	Procedures	SY-AA-101-112	Constellation Security Search Processes	39
		SY-AA-101-112-104	Protected Area Search Processes	1
		SY-AA-101-122	Testing Security Equipment	24
71152A	Corrective Action Documents	05183608	Step Change in Drywell Unidentified Leakage	09/26/2026