



**UNITED STATES
NUCLEAR REGULATORY COMMISSION**

REGION III
2443 WARRENVILLE ROAD, SUITE 210
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February 9, 2021

Mr. David Rhoades
Senior VP, Exelon Generation Company, LLC
President and CNO, Exelon Nuclear
4300 Winfield Road
Warrenville, IL 60555

SUBJECT: CLINTON POWER STATION – INTEGRATED INSPECTION REPORT
05000461/2020004; 07201046/2020001

Dear Mr. Rhoades:

On December 31, 2020, the U.S. Nuclear Regulatory Commission (NRC) completed an inspection at Clinton Power Station. On January 14, 2021, the NRC inspectors discussed the results of this inspection with Mr. T. Chalmers, Site Vice President, and other members of your staff. The results of this inspection are documented in the enclosed report.

One finding of very low safety significance (Green) is documented in this report. This finding did not involve a violation of NRC requirements.

If you disagree with a cross-cutting aspect assignment or a finding not associated with a regulatory requirement in this report, you should provide a response within 30 days of the date of this inspection report, with the basis for your disagreement, to the U.S. Nuclear Regulatory Commission, ATTN: Document Control Desk, Washington, DC 20555-0001; with copies to the Regional Administrator, Region III; and the NRC Resident Inspector at Clinton Power Station.

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,

/RA/

Kenneth R. Riemer, Chief
Branch 1
Division of Reactor Projects

Docket Nos. 05000461, 07201046

License No. NPF-62

Enclosure:
As stated

cc w/ encl: Distribution via LISTSERV®

Letter to David Rhoades from Kenneth Riemer dated February 9, 2021.

SUBJECT: CLINTON POWER STATION – INTEGRATED INSPECTION REPORT
05000461/2020004; 07201046/2020001

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U.S. NUCLEAR REGULATORY COMMISSION
Inspection Report

Docket Number: 05000461; 07201046

License Number: NPF-62

Report Number: 05000461/2020004; 07201046/2020001

Enterprise Identifier: I-2020-004-0059

Licensee: Exelon Generation Company, LLC

Facility: Clinton Power Station

Location: Clinton, IL

Inspection Dates: October 1, 2020 to December 31, 2020

Inspectors: J. Beavers, Senior Resident Inspector
J. Dalzell, Reactor Inspector
N. Fields, Reactor Operations Engineer
M. Garza, Emergency Preparedness Inspector
G. Hansen, Sr. Emergency Preparedness Inspector
C. Mathews, Illinois Emergency Management Agency
D. Sargis, Resident Inspector

Approved By: Kenneth R. Riemer, Chief
Branch 1
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

Failure to Determine Extent of Cause			
Cornerstone	Significance	Cross-Cutting Aspect	Report Section
Mitigating Systems	Green FIN 05000461/2020004-01 Open/Closed	[H.12] - Avoid Complacency	71152
The inspectors identified a Green finding when the licensee failed to determine the extent of cause for a root cause in accordance with PI-AA-125-1001, "Root Cause Analysis Manual," Revision 6. Specifically, the licensee failed to identify that lack of technical rigor in the station's FLEX modification caused the FLEX output breaker settings to have been left at factory settings without an analysis.			

Additional Tracking Items

None.

PLANT STATUS

Unit 1 operated at or near rated thermal power for the entire 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 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.

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 Disease 2019 (COVID-19), resident inspectors were directed to begin telework and to remotely access licensee information using available technology. During this time, the resident inspectors performed periodic site visits each week; conducted plant status activities as described in IMC 2515, Appendix D, "Plant Status"; observed risk-significant activities; and completed on-site portions of IPs. In addition, resident and regional baseline inspections were evaluated to determine if all or portions of the objectives and requirements stated in the IP could be performed remotely. If the inspections could be performed remotely, they were conducted per the applicable IP. In some cases, portions of an IP were completed remotely and on-site. The inspections documented below met the objectives and requirements for completion of the IP.

REACTOR SAFETY

71111.01 - Adverse Weather Protection

Seasonal Extreme Weather Sample (IP Section 03.01) (1 Sample)

- (1) The inspectors evaluated readiness for seasonal extreme weather conditions prior to the onset of seasonal cold temperatures for the following systems:

lake/river screen house, fire pump house, and FLEX equipment storage buildings

71111.04 - Equipment Alignment

Partial Walkdown Sample (IP Section 03.01) (6 Samples)

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

- (1) reactor core isolation cooling system on October 8, 2020
- (2) Division 3 emergency diesel generator on November 23, 2020
- (3) 'B' control room ventilation train on November 23, 2020
- (4) 'C' residual heat removal train on November 24, 2020
- (5) 'A' feed water train on November 24, 2020

- (6) safety direct current power system on December 2, 2020

71111.05 - Fire Protection

Fire Area Walkdown and Inspection Sample (IP Section 03.01) (6 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) Fire Zone A-1b, auxiliary building general access area, elevation 737' on October 6, 2020
- (2) Fire Zone A-1a, auxiliary building general access area, elevation 707' on October 6, 2020
- (3) Fire Zone D-12, diesel generator building Division 1 diesel generator and day tank room, elevation 712' on November 20, 2020
- (4) Fire Zone D-5(a,b), diesel generator building Division 1 diesel fuel tank room, elevation 737' on November 20, 2020
- (5) Fire Zone M-1, screen house Division 1 shutdown service water pump room and Fire Zone M-2(a,b), elevation 699'; Divisions 2 & 3 shutdown service water pump room, elevation 699' on November 20, 2020
- (6) Fire Zone M-3, screen house 'B' fire pump room and Fire Zone M-4, elevation 699'; screen house 'A' fire pump room, elevation 699' on November 20, 2020

Fire Brigade Drill Performance Sample (IP Section 03.02) (1 Sample)

- (1) The inspectors evaluated the onsite fire brigade training and performance during an unannounced fire drill on November 20, 2020.

71111.07A - Heat Sink Performance

Annual Review (IP Section 03.01) (1 Sample)

The inspectors evaluated readiness and performance of:

- (1) Division 4 inverter room cooler 1VX014AA

71111.11A - Licensed Operator Requalification Program and Licensed Operator Performance

Requalification Examination Results (IP Section 03.03) (1 Sample)

- (1) The inspectors reviewed and evaluated the licensed operator examination failure rates for the requalification annual operating exam administered between October 22 and November 20, 2020.

71111.11Q - Licensed Operator Regualification Program and Licensed Operator Performance

Licensed Operator Performance in the Actual Plant/Main Control Room (IP Section 03.01) (1 Sample)

- (1) The inspectors observed and evaluated licensed operator performance in the control room during power restoration from 90 percent to full power, completion of 24-hour Division 1 emergency diesel generator run, and subsequent fast start of Division 1 emergency diesel generator on November 20, 2020.

Licensed Operator Regualification Training/Examinations (IP Section 03.02) (1 Sample)

- (1) The inspectors observed and evaluated annual dynamic simulator testing on November 18, 2020.

71111.12 - Maintenance Effectiveness

Maintenance Effectiveness (IP Section 03.01) (2 Samples)

The inspectors evaluated the effectiveness of maintenance to ensure the following structures, systems, and components remain capable of performing their intended function:

- (1) condensate polishing system
- (2) nuclear system protection system self-testing

71111.13 - Maintenance Risk Assessments and Emergent Work Control

Risk Assessment and Management Sample (IP Section 03.01) (1 Sample)

The inspectors evaluated the accuracy and completeness of risk assessments for the following planned and emergent work activities to ensure configuration changes and appropriate work controls were addressed:

- (1) planned Yellow risk while switching Division 2 battery to swing battery charger, Work Order 4801239

71111.15 - Operability Determinations and Functionality Assessments

Operability Determination or Functionality Assessment (IP Section 03.01) (3 Samples)

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

- (1) Action Request 4373461, "RCIC [reactor core isolation cooling] Pump Oil Cooler Issue"
- (2) Action Request 4376204, "ERAT [emergency reserve auxiliary transformer] Static Var Compensator Thyristor Monitor"
- (3) Action Request 4375036, "Received Unexpected Annunciator 5006-2L, LPRM [local power range monitor] Upscale Alarm"

71111.18 - Plant Modifications

Temporary Modifications and/or Permanent Modifications (IP Section 03.01 and/or 03.02) (1 Sample)

The inspectors evaluated the following temporary or permanent modifications:

- (1) revision to secondary containment tornado design criteria

71111.19 - Post-Maintenance Testing

Post-Maintenance Test Sample (IP Section 03.01) (6 Samples)

The inspectors evaluated the following post-maintenance test activities to verify system operability and functionality:

- (1) Work Order 1849500, "Stroke of 1SX041A and 1SX041B after Replacement of Instrument Air Regulator"
- (2) Work Order 4776173, "High Pressure Core Spray Pump Run after System Outage Window"
- (3) Work Order 5058517, "Reactor Core Isolation Cooling Comprehensive Test after System Outage Window"
- (4) Work Order 5088240, "1VF07Y Failed to Open During VG [standby gas treatment] 'A' Shutdown and VF [fuel building ventilation] Startup"
- (5) Work Order 5099146, "Signs of Component Failure 0AP25E-4B (0VC24YB Damper Bucket) after Rebuild"
- (6) Work Order 5099742, "'B' Reactor Recirculating Pump Flow Control Valve"

71111.22 - Surveillance Testing

The inspectors evaluated the following surveillance tests:

Surveillance Tests (other) (IP Section 03.01) (4 Samples)

- (1) Work Order 4918018, "Reactor Core Isolation Cooling Remote Shutdown Operability Checks"
- (2) Work Order 4820186, "9080.13 Emergency Diesel Generator 1A 24-Hour Run and Hot Restart"
- (3) Work Order 5093459, "9071.01 Fire Pump 'B' Operability Run"
- (4) Work Order 5048393, "9030.01C06 1B21-N692ABEF Reactor Water Low Level 2 Channel Functional"

71114.02 - Alert and Notification System Testing

Inspection Review (IP Section 02.01-02.04) (1 Sample)

- (1) The inspectors evaluated the following maintenance and testing of the alert and notification system:
 - annual siren inspection and maintenance records for the period from September 2018 to September 2020

- monthly alert notification system (siren) tests for the period from September 2018 to September 2020

71114.03 - Emergency Response Organization Staffing and Augmentation System

Inspection Review (IP Section 02.01-02.02) (1 Sample)

- (1) The inspectors evaluated the readiness of the emergency preparedness organization.

71114.04 - Emergency Action Level and Emergency Plan Changes

Inspection Review (IP Section 02.01-02.03) (1 Sample)

- (1) The inspectors completed an evaluation of submitted emergency action level and emergency plan changes on December 2, 2020. This evaluation does not constitute NRC approval.

71114.05 - Maintenance of Emergency Preparedness

Inspection Review (IP Section 02.01 - 02.11) (1 Sample)

- (1) The inspectors evaluated the maintenance of the emergency preparedness program.

OTHER ACTIVITIES – BASELINE

71151 - Performance Indicator Verification

The inspectors verified licensee performance indicators submittals listed below:

EP01: Drill/Exercise Performance (IP Section 02.12) (1 Sample)

- (1) 01/01/2019 – 06/30/2020

EP02: ERO Drill Participation (IP Section 02.13) (1 Sample)

- (1) 01/01/2019 – 06/30/2020

EP03: Alert & Notification System Reliability (IP Section 02.14) (1 Sample)

- (1) 01/01/2019 – 06/30/2020

71152 - Problem Identification and Resolution

Annual Follow-up of Selected Issues (IP Section 02.03) (2 Samples)

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

- (1) FLEX diesel generator breaker set to factory settings
- (2) unplanned reactivity events during 2020

OTHER ACTIVITIES – TEMPORARY INSTRUCTIONS, INFREQUENT AND ABNORMAL

60855.1 - Operation of an Independent Spent Fuel Storage Installation at Operating Plants

Operation of an Independent Spent Fuel Storage Installation at Operating Plants (1 Sample)

- (1) The inspectors evaluated the licensee's activities related to the long-term operation and monitoring of its independent spent fuel storage installation (ISFSI). The inspectors reviewed relevant documentation and interviewed personnel remotely during the week of November 16, 2020. The inspector performed an onsite walkdown of the ISFSI pad and haul path and evaluated the material condition of the ISFSI pad and HI-STORM FW casks on November 16, 2020. The inspector utilized licensee personnel and radiological instrumentation to verify that radiological conditions on the ISFSI pad were as expected during the walkdown.

The inspectors evaluated the following change reviews:

- changes to the licensee's 10 CFR 72.212 report performed since October 1, 2018
- 10 CFR 72.48 screenings and a 10 CFR 72.48 evaluation performed since October 1, 2018
- procedural changes primarily stemming from lessons learned or operating experience since the licensee's previous loading campaign

INSPECTION RESULTS

Failure to Determine Extent of Cause			
Cornerstone	Significance	Cross-Cutting Aspect	Report Section
Mitigating Systems	Green FIN 05000461/2020004-01 Open/Closed	[H.12] - Avoid Complacency	71152
The inspectors identified a Green finding when the licensee failed to determine the extent of cause for a root cause in accordance with PI-AA-125-1001, "Root Cause Analysis Manual," Revision 6. Specifically, the licensee failed to identify that lack of technical rigor in the station's FLEX modification caused the FLEX output breaker settings to have been left at factory settings without an analysis.			
<u>Description:</u> On June 26, 2020, the licensee wrote Action Request 4352937 documenting that the FLEX diesel generator output breakers did not have an engineering analysis to determine the correct breaker settings. Both FLEX diesel generator output breakers were still set to the factory default settings. Upon discovery of the condition, it was uncertain if the FLEX diesel generators would have been able to supply power without tripping the output breaker. The licensee evaluated the condition and determined that the breaker would not trip if it were supplying power and that there was less margin in the calculation than would normally be acceptable. The licensee adjusted the breaker settings to provide a more acceptable margin.			

The licensee performed a corrective action program evaluation for the condition and identified that the breaker settings were not discussed in Engineering Change 392335, which installed the breakers. The licensee determined that the cause was less than adequate technical rigor by the engineer responsible for the FLEX modification. The inspectors noted that this cause was nearly identical to the cause identified in Root Cause Report 4297570 for the FLEX diesel generator 1FX01KA being wired with its phase rotation out of phase from the plant equipment phase rotation. The phase rotation issue was previously identified as a Green finding identified in NRC integrated inspection report 05000461/2020001 as FIN 05000461/2020001-01 "FLEX Diesel Generator Phase Rotation Incorrect."

The inspectors reviewed Root Cause Report 4297570 to determine the similarities between the FLEX diesel generator phase rotation issue and the output breaker settings issue. The root cause identified was that engineers did not apply technical human performance fundamentals during selection of post-modification testing for the FLEX modification. The licensee conducted an extent-of-cause review for the root cause in accordance with PI-AA-125-1001, "Root Cause Analysis Manual," Revision 6. The extent-of-cause review evaluated all modifications that were completed by the responsible engineers to verify that post-modification testing was correct. The extent-of-cause did not review the modifications to verify overall adequacy or that the appropriate engineering rigor was applied to areas outside of post-modification testing.

Exelon procedure PI-AA-125-1006, "Investigation Techniques Manual," Revision 5, includes considerations for performing an extent-of-cause review. The manual stresses the importance of identifying how a cause could affect programs or processes other than the one that was already identified. When the licensee focused their extent-of-cause review on the adequacy of post-modification testing, they did not consider how the cause could affect other processes or programs that could have been affected by lack of technical rigor in implementing the FLEX modification. Specifically, the review did not identify that Engineering Change 392335 did not provide any analysis of the FLEX breakers; therefore, the breakers did not have any discussion for post-modification testing.

Corrective Actions: The licensee determined correct breaker settings and performed the change to support breaker functionality.

Corrective Action References: Action Request 4352937, "FLEX Diesel Generator Breaker Settings"

Performance Assessment:

Performance Deficiency: The licensee failed to determine the extent of cause for a root cause as required by PI-AA-125-1001. This led to the licensee failing to identify that the FLEX diesel generator output breaker settings were not evaluated and were set to factory default settings instead of site-specific settings.

Screening: The inspectors determined the performance deficiency was more than minor because it was associated with the Design Control attribute of the Mitigating Systems cornerstone and adversely affected the cornerstone objective to ensure the availability, reliability, and capability of systems that respond to initiating events to prevent undesirable consequences. Specifically, there was reasonable doubt as to the functionality of the FLEX generator output breakers until a detailed analysis was performed, and following the analysis, the licensee determined that the settings should be revised. This was similar to example 3.a in Inspection Manual Chapter 0612, Appendix E, "Examples of Minor Issues."

Significance: The inspectors assessed the significance of the finding using Appendix A, "The Significance Determination Process (SDP) for Findings At-Power." The inspectors used Exhibit 2, "Mitigating Systems Screening Questions," Section E "Flexible Coping Strategies (FLEX)," and answered "No" to all questions. Therefore, the finding screens to Green or very low safety significance.

Cross-Cutting Aspect: H.12 - Avoid Complacency: Individuals recognize and plan for the possibility of mistakes, latent issues, and inherent risk, even while expecting successful outcomes. Individuals implement appropriate error reduction tools. Specifically, when the licensee attempted to identify the extent of cause for the FLEX diesel generator phase rotation issue; they only focused on post-modification testing and did not attempt to identify other areas where lack of technical rigor could have impacted the FLEX implementation.

Enforcement:

Inspectors did not identify a violation of regulatory requirements associated with this finding.

Observation: Unplanned Reactivity Events in 2020

71152

The inspectors' observations and assessments of trends related to several unplanned power changes over 2020 indicated an inconsistent range of response in assessment as well as communication with the support organizations and management. The inspectors determined that the lack of an off normal procedure to address unplanned power changes impacted the consistent application of process in both response and communication. All minor issues with each event were individually addressed in the quarter in which they occurred during the quarterly exits. The station did take note of the inspectors' observations regarding the response to these events and is developing an off normal response procedure for unplanned power changes. The procedure is slated for completion by the first half of 2021.

EXIT MEETINGS AND DEBRIEFS

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

- On January 14, 2021, the inspectors presented the integrated inspection results to Mr. T. Chalmers, Site Vice President, and other members of the licensee staff.
- On October 15, 2020, the inspectors presented the emergency preparedness baseline inspection results to Mr. J. Kowalski, Plant Manager, and other members of the licensee staff.
- On November 20, 2020, the inspectors presented the independent spent fuel storage installation (ISFSI) program review inspection results to Mr. T. Chalmers, Site Vice President, and other members of the licensee staff.
- On December 2, 2020, the inspectors presented the IP 71114.04 exit meeting inspection results to Mr. D. Moore, Senior Manager - Emergency Preparedness, and other members of the licensee staff.
- On December 14, 2020, the inspectors presented the annual licensed operator requalification examination inspection results to Mr. R. Tyler, Licensed Operator Lead Instructor, and other members of the licensee staff.

DOCUMENTS REVIEWED

Inspection Procedure	Type	Designation	Description or Title	Revision or Date
60855.1	Corrective Action Documents		Selected Corrective Action Documents Created Since October 2018	
		AR 4236199	60-Day Reporting Period for ISFSI ARERR Not Met	04/04/2019
		AR 4355273	Unexpected Water Flowing Out of the MPC Drain Port	07/07/2020
		AR 4364058	Forced Helium Drying Skid Issue: Braidwood	09/18/2020
	Corrective Action Documents Resulting from Inspection	AR 4385229	Errors in Survey Calculations	11/18/2020
		AR 4385391	Spalling on South West Edge of ISFSI Pad	11/19/2020
	Engineering Changes	ECO 5018-65	Holtec Engineering Change Order	0
		ISFSI 72.212-CR-2018-001, ISFSI 72.212-CR-2018-002, ISFSI 72.212-CR-2018-003, ISFSI 72.212-CR-2018-004, ISFSI 72.212-CR-2019-001	72.212 Evaluation Report Change Requests	0
	Miscellaneous		Clinton Power Station Unit 1 10 CFR 72.212 Evaluation Report for the HI-STORM FW MPC Storage System Docket 72-1046	2
			2018 Annual Radiological Environmental Operating Report Clinton Power Station - Docket Number 50-461	04/25/2019
			2019 Annual Radiological Environmental Operating Report Clinton Power Station - Docket Number 50-461	04/28/2020
		72.48 Screening/Evaluation 1209	Holtec 10 CFR 72.48 Screening/Evaluation for ECO 5018-65	0, 1
		72.48-CL-2018-S-022, 72.48-CL-2018-S-023, 72.48-CL-2018-S-024, 72.48-	10 CFR 72.48 Screenings and Evaluations	October 2018 to October 2020

Inspection Procedure	Type	Designation	Description or Title	Revision or Date
		CL-2018-E-024, 72.48-CL-2018-S-025, 72.48-CL-2018-S-026, 72.48-CL-2019-S-001, 72.48-CL-2020-S-001		
		EP-AA-1003, Addendum 3	Emergency Action Levels for Clinton Station	5
		NO-AA-10	Quality Assurance Topical Report	95
		U-604484	Clinton Power Station, October 1, 2016 to September 30, 2017, Independent Spent Fuel Storage Installation Annual Radioactive Effluent Release Report	04/24/2019
		U-604485	Clinton Power Station, October 1, 2017 to September 30, 2018, Independent Spent Fuel Storage Installation Annual Radioactive Effluent Release Report	04/25/2019
		U-604577	Clinton Power Station, October 01, 2018 to September 30, 2019, Independent Spent Fuel Storage Installation Annual Radioactive Effluent Release Report	11/13/2020
		U-604578	Clinton Power Station, October 01, 2019 to September 30, 2020, Independent Spent Fuel Storage Installation Annual Radioactive Effluent Release Report	11/13/2020
	Procedures	CPS 1019.05	Transient Equipment/Materials	25
		CPS 1860.01C001	Operations Department Cold Weather Preparations Checklist	9b
		CPS 1893.04M913	Independent Spent Fuel Storage Facility Installation (ISFSFI) Prefire Plan	0a
		CPS 9000.01D001	Control Room Surveillance Log - Mode 1, 2, 3 Data Sheet	58d
		CPS 9000.01D002	Control Room Surveillance Log - Mode 4, 5 Data Sheet	39
		CY-AA-170-1001	Environmental Dosimetry - Performance Specifications, Testing, and Data Analysis	1
		ER-AA-450	Structures Monitoring	9
		HPP-2226-200	MPC Loading at Clinton	10
		HPP-2226-400	MPC Transfer at Clinton	8
		HPP-2226-500	HI-STORM Movements	8

Inspection Procedure	Type	Designation	Description or Title	Revision or Date
		HPP-2226-600	MPC Unloading at Clinton	1
		HPP-2226-700	Responding to Abnormal Conditions	4
		OP-AA-108-111-1001	Severe Weather and Natural Disaster Guidelines	22
		OU-AA-3005	Conduct of Outage Services Manual T&RM	19
		OU-AA-630-1000	Spent Fuel Loading Campaign Management	10
		OU-AA-630-101	Dry Cask Storage/ISFSI Inspection Surveillance Program	2
		OU-CL-800-81	DCS Campaign Preparations and Restoration	3
		OU-CL-800-83	Spent Fuel Cask Contingency Actions	2
		RP-AA-305	Holtec HI-TRAC Radiation Survey	5
		RP-AA-306	Holtec HI-STORM Radiation Survey	2
		RP-AA-307	Holtec Independent Spent Fuel Storage Installation (ISFSI) Radiation Survey	2
		RP-AA-401-1006	Controls for Independent Spent Fuel Storage (ISFSI) Associated Activities	2
	Radiation Surveys	2019-046314	Outside Areas - ISFSI Pad Grid Survey (per RP-CL-300-1004 - Sections 5.1-5.3)	06/15/2019
		2019-046316	Outside Areas - ISFSI Pad Protected Area Fence Survey (per RP-CL-300-1004 - Section 5.4)	06/15/2019
		2020-072193	Outside Areas - ISFSI Pad	05/04/2020
		2020-080757	Outside Areas - ISFSI Pad Grid Survey (per RP-CL-300-1004 - Sections 5.1-5.3)	09/26/2020
		2020-080759	Outside Areas - ISFSI Pad Protected Area Fence Survey (per RP-CL-300-1004 - Section 5.4)	09/26/2020
	Self-Assessments	AR 429608-02	Clinton Spent Fuel Loading Readiness Assessment	07/29/2020
		NOSA-CPS-18-10 (AR 4177215)	Independent Spent Fuel Storage Installation Audit Report: Clinton Power Station	11/14/2018
		NOSA-CPS-20-10	Independent Spent Fuel Storage Installation Audit Report	10/02/2020
	Work Orders	WO 4817969-01	ISFSI - DCS Eng Perform Annual Insp of ISFSI per OU-CL-630-100	08/14/2019
		WO 4978935-01	OP 9000.01 Control Room Surv Log for Mode 1/2/3, D001-Weekly	11/17/2019
		WO 5013563-01	OP 9000.01 Control Room Surv Log for Mode 1/2/3,	03/08/2020

Inspection Procedure	Type	Designation	Description or Title	Revision or Date
			D001-Weekly	
		WO 5033760-01	ISFSI - DCS Eng Perform Annual Insp of ISFSI per OU-CL-630-100	08/12/2020
71111.01	Procedures	WC-AA-107	Seasonal Readiness	22
71111.04	Drawings	M05-1004, Sheet 1	P&ID Reactor Feedwater (FW)	AH
	Procedures	CPS 3310.01V001	Reactor Core Isolation Cooling Valve Lineup	13
		CPS 3312.01V001	Residual Heat Removal Valve Lineup	17c
		CPS 3402.01E001	Control Room HVAC Electrical Lineup	10e
		CPS 3506.01C003	Diesel Generator 1C Pre-Start Checklist	6e
71111.05	Fire Plans	CPS 1893.04M100	707 Auxiliary Building General Access Area Prefire Plan	5a
		CPS 1893.04M110	737 Auxiliary Building General Access Area Prefire Plan	6b
	Procedures	CPS 1893.04M511	737 Diesel Generator Building Div 1 Diesel Generator & Day Tank Room	6c
		CPS 1893.04M800	699 Screen House Div 1 SX Pump Room Prefire Plan	5a
		CPS 1893.04M801	699 Screen House Div 2&3 SX Pump Rooms and Tunnel Prefire Plan	6a
		CPS 1893.04M802	699 Screen House 'B' Fire Pump Room Prefire Plan	6a
		CPS 1893.04M803	699 Screen House 'A' Fire Pump Room Prefire Plan	6a
71111.07A	Work Orders	WO 4789401	Inspect, Boroscope, Clean, Eddy Current, and Hydrolase as Required	05/12/2020
71111.11A	Procedures	TQ-AA-150-F25	Clinton 2020 LORT Annual Exam Status Report	12/07/2020
71111.11Q	Miscellaneous	ESG-LOR-10	Clinton Power Station Licensed Operator Training Simulator Exercise Guide	01
71111.13	Work Orders	WO 4801239	OP Cross-Tie Div II DC MCC 1B / Swing Charger 1DC11E	10/26/2020
71111.19	Work Orders	WO 5058517	OP 9054.01C002 RCIC 1E51-C001 High Pressure Operability Check	09/24/2020
		WO 5088240	1VF07Y Failed to Open During VG 'A' Shutdown and VF Startup	10/27/2020
		WO 5099146	0AP25E-4B (0VC24YB Damper Bucket) Rebuild	0
		WO 5099742	Leakcheck RR Subloop B1	0
71111.22	Corrective Action Documents	AR 4371952	ATM B21N692B and F Gross Fail High Didn't Come in As Expected	09/25/2020

Inspection Procedure	Type	Designation	Description or Title	Revision or Date
	Work Orders	WO 4918018	OP 9054.05 RCIC Remote Shutdown Panel Operability Checks	09/24/2020
		WO 5048393	9030.01C06 Channel Functional RCIC Reactor Low Level 2 B21-N692ABEF	09/25/2020
		WO 5093459	9071.01B21 Fire Pump Operability Run	11/23/2020
71114.02	Corrective Action Documents	AR 4257968	EP- Siren Failures (CL06 & CL21)	06/19/2019
		AR 4262593	EP ID: Trend IR; Multiple CPS Siren Failures	07/08/2019
		AR 4336468	EP - Dewitt County Siren Controller Inoperable	04/17/2020
	Miscellaneous		Exelon Nuclear Manager, Midwest Emergency Preparedness Letter to Program Enhancement Manager, Illinois Emergency Management Agency; Submission of Clinton Power Station Public Alert and Notification System (ANS) Design Report, Revision 3	10/01/2018
			Clinton Station Monthly Siren Availability Reports	09/01/2018 - 09/30/2020
			Clinton Primary Notification System (PNS) Maintenance Reports	09/01/2018 - 09/30/2018
			Semi-Annual Clinton Power Siren Reports	09/01/2018 - 09/30/2020
			2019/2020 Emergency Planning for the Clinton Area (Community Information Booklet)	07/19/2019
			2020/2021 Emergency Planning for the Clinton Area (Community Information Booklet)	06/17/2020
			U.S. Department of Homeland Security, FEMA Letter, Subj: Backup Alert and Notification System	12/10/2012
		KLD-TR-987	Clinton Power Station Alert and Notification System (ANS) Design Report	09/19/2018
	Procedures	EP-AA-120-F-02	EP Staff Initial Developmental Checklist	H
		EP-AA-112-200	TSC Activation and Operation	14
		EP-AA-112-300	OSC Activation and Operation	14
		EP-AA-112-400	EOF Activation and Operation	15
71114.03	Corrective Action Documents	AR 4173268	EP ID: 1 Hour Responder Failed to Call During Augmentation Drill	09/14/2018
		AR 4249806	EP ID: 2nd Quarter ERO Augmentation Drill	05/17/2019

Inspection Procedure	Type	Designation	Description or Title	Revision or Date
	Miscellaneous		Quarterly Unannounced Off-Hours Call-In Augmentation Drill Results	09/01/2018 - 09/30/2020
			Emergency Response Organization Duty Roster	09/22/2020
	Procedures	EP-AA-1003, Addendum 1	On-Shift Staffing Technical Basis	2
		EP-AA-112	Emergency Response Organization (ERO)/Emergency Response Facility (ERF) Activation and Operation	22
		EP-AA-112-100-F-06	ERO Notification or Augmentation	X
		TQ-AA-113	ERO Training and Qualification	39
71114.04	Corrective Action Documents	AR 4325295	Perform Impact Review of EAL Revisions from EOP/SAMG, Rev. 4	03/10/2020
		AR 4329864	NOS ID: Revise Standardized Emergency Plan	03/26/2020
		AR 4334253	EPlan: CDAM 50.54(q) Potential Deficiencies	04/09/2020
	Miscellaneous	Eval No. 19-29	Exelon Nuclear Standardized Radiological Emergency Plan	09/04/2020
		Eval No. 19-65	Exelon Nuclear Standardized Radiological Emergency Plan	09/06/2019
		Eval No. 19-79	Various Station Emergency Plan Annexes	11/08/2019
		Eval No. 19-80	On-Shift Staffing Assessments	11/08/2019
71114.05	Corrective Action Documents	AR 4335802	NOS ID: Increase communication with Warner Hospital	04/15/2020
		AR 4335805	Communicate with Maroa FD About Their EP Role	04/15/2020
		AR 4335859	NOS ID: Satellite Testing not Conducted by Required Disciplines	04/15/2020
		AR 4335887	Exercise/Drill Evaluated Reports and Communication Test Forms Contain Documentation Errors	04/15/2020
		AR 4336124	Annual Testing not Performed on 47 of 259 Public Address (PA) Speakers in 2019	04/16/2020
	Miscellaneous		Full Scale PI Drill Series Report	12/19/2018
			Clinton 2020 1st Half Health Physics Drill Report	07/22/2020
			Clinton Medical/Health Physics Drill Evaluation Report	11/15/2019
			Clinton 2019 NRC Graded Exercise Evaluation Report	04/18/2019
			TSC PI Focus Drill Report	03/09/2020
			2019 NRC Pre-Exercise WANO Emergency Management	03/11/2019

Inspection Procedure	Type	Designation	Description or Title	Revision or Date
			Performance Evaluation	
			Clinton 2019 1st Half Health Physics Drill Report	05/31/2019
		EP-AA-124-F-01	Quarterly Emergency Response Data System (ERDS) Test Records	09/01/2018 - 09/30/2020
		EP-MW-124-1001-F-01	Control Room/Simulator Inventory Records	09/01/2018 - 09/30/2020
		EP-MW-124-1001-F-02	CR/Simulator/TSC/OSC Equipment Test–TSC Software and Reference Document Inventory Records	09/01/2018 - 09/30/2020
		EP-MW-124-1001-F-03	Technical Support Center Inventory Records	09/01/2018 - 09/30/2020
		EP-MW-124-1001-F-04	Operations Support Center Inventory Records	09/01/2018 - 09/30/2020
		EP-MW-124-1001-F-05	Field Team Inventory Records	09/01/2018 - 09/30/2020
		EP-MW-124-1001-F-06	Assembly Area Inventory Records	09/01/2018 - 09/30/2020
		EP-MW-124-1001-F-08	Medical Response Kit Inventory Records	09/01/2018 - 09/30/2020
		EP-MW-124-1001-F-14	Monthly NARS Communications Test Records	09/01/2018 - 09/30/2020
		EP-MW-124-1001-F-15	Monthly ENS Communications Test Records	09/01/2018 - 09/30/2019
		EP-MW-124-1001-F-17	Quarterly Director's Hotline Test Records	09/01/2018 - 09/30/2020
		EP-MW-24-1001-F-18	Quarterly Operations Status Line Test Records	09/01/2018 - 09/30/2020
		EP-MW-124-1001-F-19	Quarterly Damage Control Line Test Records	09/01/2018 - 09/30/2020
		EP-MW-124-1001-F-20	Quarterly Technical Support Line Test Records	09/01/2018 - 09/30/2020
		KLD-TR-1002	Clinton Power Station 2018 Population Update Analysis	09/08/2018
		KLD-TR-1181	Clinton Power Station 2020 Population Update Analysis	09/05/2020
	Procedures	EP-AA-1000	Exelon Nuclear Standardized Radiological Emergency Plan	33

Inspection Procedure	Type	Designation	Description or Title	Revision or Date
		EP-AA-1003	Exelon Nuclear Radiological Emergency Plan Annex for Clinton Station	29
		EP-AA-1003, Addendum 2	Evacuation Time Estimates for Clinton Power Station Plume Exposure Pathway Emergency Planning Zone	1
		EP-AA-122	EP-AA-122; Drills and Exercise Program	22
		EP-AA-124	Inventories and Surveillances	11
	Self-Assessments	NOSA-CPS-19-03	Emergency Preparedness Audit Report	03/15/2019
		NOSA-CPS-20-03	Emergency Preparedness Audit Report	04/22/2020
71151	Miscellaneous		NRC Performance Indicator Data; Emergency Preparedness—Drill/Exercise Performance	01/01/2019 - 06/30/2020
			NRC Performance Indicator Data; Emergency Preparedness—ERO Readiness	01/01/2018 - 06/30/2020
			NRC Performance Indicator Data; Emergency Preparedness—Alert and Notification System Reliability	01/01/2018 - 06/30/2020