



**UNITED STATES
NUCLEAR REGULATORY COMMISSION**
REGION III
2443 WARRENVILLE RD. SUITE 210
LISLE, IL 60532-4352

March 1, 2017

Mr. Bryan C. Hanson
Senior VP, Exelon Generation Company, LLC
President and CNO, Exelon Nuclear
4300 Winfield Road
Warrenville, IL 60555

SUBJECT: ANNUAL ASSESSMENT LETTER FOR CLINTON POWER STATION,
UNIT 1 (Report 05000461/2016006)

Dear Mr. Hanson:

The NRC has completed its end-of-cycle performance assessment of Clinton Power Station, Unit 1, reviewing performance indicators (PIs), inspection results and enforcement actions from January 1, 2016, through December 31, 2016. This letter informs you of the NRC's assessment of your facility during this period and its plans for future inspections at your facility. The NRC concluded that overall performance at your facility preserved public health and safety.

The NRC determined the performance at Clinton Power Station, Unit 1, during the most recent quarter was within the Licensee Response Column, the highest performance category of the NRC's Reactor Oversight Process (ROP) Action Matrix, because all inspection findings had very low safety significance (i.e., Green) and all PIs were within the expected range (i.e., Green). Therefore, the NRC plans to conduct ROP baseline inspections at your facility.

The NRC determined the performance at Clinton Power Station, Unit 1, during the first quarter of the assessment period was within the Regulatory Response Column of the NRC's ROP Action Matrix due to a white finding related to your failure to properly design the replacement Division 3 shutdown service water pump and ensure the pump internals would not degrade under expected operating conditions as described in our letter to you dated August 11, 2015, (ADAMS Accession Number ML15223B382). Per Inspection Procedure 95001, the NRC completed a supplemental inspection for this issue on February 4, 2016, as documented in our letter to you dated March 17, 2016, (ML16077A312). The White finding was closed as of the end of the first quarter of 2016, in accordance with Inspection Manual Chapter 0305.

As defined in Inspection Manual Chapter 0305, "Operating Reactor Assessment Program," the NRC identified a cross-cutting theme in the area of human performance due to 20 inspection items being identified in the cross-cutting area of human performance over the last 12 months. The NRC will continue to monitor your staff's effort and progress in addressing the theme until the theme criterion is no longer met.

The enclosed inspection plan lists the inspections scheduled through December 31, 2018. The NRC provides the inspection plan to allow for the resolution of any scheduling conflicts and personnel availability issues. Routine inspections performed by resident inspectors are not included in the inspection plan. The inspections listed during the last twelve months of the inspection plan are tentative and may be revised. The NRC will contact you as soon as possible to discuss changes to the inspection plan should circumstances warrant any changes. This inspection plan does not include the plan for security-related inspections, which will be sent via separate, non-publicly available correspondence.

In addition to the baseline inspection, the NRC plans to conduct an infrequently performed inspection related to ISFSI Cask Loading using Inspection Procedure (IP) 60855.1, "Operation of an Independent Spent Fuel Storage Installation at Operating Plants."

In early 2016, the NRC conducted IP 92723, "Follow Up Inspection for Three or More Severity Level IV Traditional Enforcement Violations in the Same Area in a 12-Month Period," at Clinton Power Station to review five traditional enforcement items documented through the third quarter of 2015. From October 1, 2015, to December 31, 2016, the NRC issued an additional eight Severity Level IV traditional enforcement violations associated with impeding the regulatory process. Therefore, the NRC plans to conduct another IP 92723 to follow-up on these additional violations.

In accordance with Title 10 of the *Code of Federal Regulations* (10 CFR) 2.390 of the NRC's "Rules of Practice," a copy of this letter will be available electronically for public inspection in the NRC Public Document Room or from the Publicly Available Records (PARS) component of NRC's document system (ADAMS). ADAMS is accessible from the NRC Web site at <http://www.nrc.gov/reading-rm/adams.html> (the Public Electronic Reading Room).

Please contact Karla Stoedter at 630-829-9731 with any questions you may have regarding this letter or the inspection plan.

Sincerely,

/RA/

Patrick L. Loudon, Director
Division of Reactor Projects

Docket No. 50-461
License No. NPF-62

Enclosure:
Inspection Plan

cc: Distribution via LISTSERV®

B. Hanson

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Letter to Bryan C. Hanson from Patrick L. Louden dated March 1, 2017

SUBJECT: ANNUAL ASSESSMENT LETTER FOR CLINTON POWER STATION,
UNIT 1 (Report 05000461/2016006)

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Clinton
Inspection / Activity Plan
03/01/2017 - 12/31/2018

Unit Number	Planned Dates		Inspection Activity	Title	No. of Staff on Site
	Start	End			
			BI FP - TRIENNIAL FIRE PROTECTION INSPECTION		3
1	03/20/2017	04/21/2017	IP 7111105T	Fire Protection [Triennial]	
			BI RP - RADIATION PROTECTION BASELINE INSPECTION		1
1	02/27/2017	03/03/2017	IP 71124.05	Radiation Monitoring Instrumentation	
			BI RP - RADIATION PROTECTION BASELINE INSPECTION		2
1	05/15/2017	05/19/2017	IP 71124.01	Radiological Hazard Assessment and Exposure Controls	
1	05/15/2017	05/19/2017	IP 71124.02	Occupational ALARA Planning and Controls	
1	05/15/2017	05/19/2017	IP 71124.03	In-Plant Airborne Radioactivity Control and Mitigation	
1	05/15/2017	05/19/2017	IP 71124.04	Occupational Dose Assessment	
			ISI - INSERVICE INSPECTION		1
1	05/15/2017	06/04/2017	IP 7111108G	Inservice Inspection Activities - BWR	
			BI RP - RADIATION PROTECTION BASELINE INSPECTION		1
1	06/19/2017	06/23/2017	IP 71124.08	Radioactive Solid Waste Processing and Radioactive Material Handling, Storage, and Transportation	
			BI RP - RADIATION PROTECTION BASELINE INSPECTION		1
1	07/10/2017	07/14/2017	IP 71124.02	Occupational ALARA Planning and Controls	
			BI HS - TRIENNIAL HEAT SINK INSPECTION		2
1	07/17/2017	07/21/2017	IP 7111107T	Heat Sink Performance	
			BI PI&R - BIENNIAL PI&R IINSPECTION		4
1	09/11/2017	09/29/2017	IP 71152B	Problem Identification and Resolution	
			BI RP - RADIATION PROTECTION BASELINE INSPECTION		1
1	09/18/2017	09/22/2017	IP 71124.06	Radioactive Gaseous and Liquid Effluent Treatment	
1	09/18/2017	09/22/2017	IP 71151	Performance Indicator Verification	
			BI OLRQ - BIENNIAL REQUAL PROGRAM INSPECTION		2
1	10/30/2017	11/02/2017	IP 7111111B	Licensed Operator Requalification Program	
			BI EP - EP EXERCISE INSPECTION / PI VERIFICATION		5
1	10/30/2017	11/03/2017	IP 7111401	Exercise Evaluation	
1	10/30/2017	11/03/2017	IP 7111406	Drill Evaluation	
1	10/30/2017	11/03/2017	IP 7111408	Exercise Evaluation – Scenario Review	
1	10/30/2017	11/03/2017	IP 71151	Performance Indicator Verification	
			BI RP - RADIATION PROTECTION BASELINE INSPECTION		1
1	04/02/2018	04/06/2018	IP 71124.05	Radiation Monitoring Instrumentation	
			BI 50.59 - TRIENNIAL 50.59 INSPECTION		3
1	07/30/2018	08/03/2018	IP 7111117T	Evaluations of Changes, Tests, and Experiments and Permanent Plant Modifications	

This report does not include INPO and OUTAGE activities.
This report shows only on-site and announced inspection procedures.

Clinton
Inspection / Activity Plan
03/01/2017 - 12/31/2018

Unit Number	Planned Dates		Inspection Activity	Title	No. of Staff on Site
	Start	End			
			ISI - INSERVICE INSPECTION UNIT 1		1
1	05/07/2018	05/19/2018	IP 7111108G	Inservice Inspection Activities - BWR	
			BI RP - RADIATION PROTECTION BASELINE INSPECTION		2
1	05/14/2018	05/18/2018	IP 71124.01	Radiological Hazard Assessment and Exposure Controls	
1	05/14/2018	05/18/2018	IP 71124.05	Radiation Monitoring Instrumentation	
			ISFSI - ISFSI CASK LOADING INSPECTION		1
1	06/01/2018	09/01/2018	IP 60855.1	Operation of an Independent Spent Fuel Storage Installation at Operating Plants	
			OL PREP - INITIAL PREP AUG/SEPT 2018		3
1	07/30/2018	08/03/2018	W90371	OL - INITIAL EXAM - 2018 AUG-SEPT - CLINTON	
			OL EXAM - INITIAL EXAM AUG/SEPT 2018		3
1	08/27/2018	09/08/2018	W90371	OL - INITIAL EXAM - 2018 AUG-SEPT - CLINTON	
			BI ENG - DBA PROGRAM		4
1	10/29/2018	11/16/2018	IP 7111121N	Component Design Bases Inspection (Programs)	
			BI RP - RADIATION PROTECTION BASELINE INSPECTION		1
1	11/26/2018	11/30/2018	IP 71124.08	Radioactive Solid Waste Processing and Radioactive Material Handling, Storage, and Transportation	

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