



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

March 2, 2018

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 BRAIDWOOD STATION, UNITS 1 AND 2
(REPORT 05000456/2017006 AND 05000457/2017006)**

Dear Mr. Hanson:

The NRC has completed its end-of-cycle performance assessment of Braidwood Station, Units 1 and 2, reviewing performance indicators (PIs), inspection results, and enforcement actions from January 1, 2017 through December 31, 2017. 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 Braidwood Station, Units 1 and 2 during the most recent quarter was within the Licensee Response Column 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 enclosed inspection plan lists the inspections scheduled through December 31, 2019. This updated inspection plan now includes planned security inspections which were formerly transmitted under separate correspondence. 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 12 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 letter and its enclosure 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 10 CFR 2.390, "Public Inspections, Exemptions, Requests for Withholding."

Please contact Eric Duncan at 630-829-9620 with any questions you have regarding this letter.

Sincerely,

/RA/

Eric R. Duncan, Chief
Branch 3
Division of Reactor Projects

Docket Nos. 50-456 and 50-457
License Nos. NPF-72 and NPF-77

Enclosure:
Inspection Plan

cc: Distribution via LISTSERV®

Letter to Bryan C. Hanson from Eric Duncan dated March 2, 2018

SUBJECT: ANNUAL ASSESSMENT LETTER FOR BRAIDWOOD STATION, UNITS 1 AND 2
(REPORT 05000456/2017006 AND 05000457/2017006)

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OFFICIAL RECORD COPY

IP 22 Inspection Activity Plan Report

Braidwood

03/01/2018 - 12/31/2019

Unit	Start	End	Activity	CAC	Title	Staff Count
EP EXERCISE/PI VERIFICATION						4
1, 2	03/05/2018	03/09/2018	IP 71114.01	000716	Exercise Evaluation	
1, 2	03/05/2018	03/09/2018	IP 71151	001397	Performance Indicator Verification	
DBA PROGRAMS INSPECTION						3
1, 2	03/12/2018	03/30/2018	IP 71111.21N	000714	Design Bases Assurance Inspection (Programs)	
INSERVICE INSPECTION UNIT 1						1
1	04/09/2018	04/27/2018	IP 71111.08P	000702	Inservice Inspection Activities - PWR	
RADIATION PROTECTION BASELINE INSPECTION						2
1, 2	04/16/2018	04/20/2018	IP 71124.01	000725	Radiological Hazard Assessment and Exposure Controls	
1, 2	04/16/2018	04/20/2018	IP 71124.02	000726	Occupational ALARA Planning and Controls	
1, 2	04/16/2018	04/20/2018	IP 71124.03	000727	In-Plant Airborne Radioactivity Control and Mitigation	
1, 2	04/16/2018	04/20/2018	IP 71124.04	000728	Occupational Dose Assessment	
1, 2	04/16/2018	04/20/2018	IP 71151	000746	Performance Indicator Verification	
INITIAL LICENSE EXAM MAY 2018						4
1, 2	04/29/2018	05/04/2018	OV	000956	VALIDATION OF INITIAL LICENSE EXAMINATION (OV)	
1, 2	05/29/2018	06/08/2018	EXAD	000500	LICENSE EXAM ADMINISTRATION (EXAD)	
FIRE PROTECTION AND BAG TRIP						3
1, 2	05/07/2018	06/08/2018	IP 71111.05T	000696	Fire Protection (Triennial)	
BIENNIAL PI&R INSPECTION						4
1, 2	07/16/2018	08/03/2018	IP 71152B	000747	Problem Identification and Resolution	
SECURITY BASELINE INSPECTION						2
1, 2	08/06/2018	08/10/2018	IP 71130.04	000736	Equipment Performance, Testing, and Maintenance	
1, 2	08/06/2018	08/10/2018	IP 71130.14	000743	Review of Power Reactor Target Sets	
RADIATION PROTECTION BASELINE INSPECTION						2
1, 2	08/13/2018	08/17/2018	IP 71124.06	000730	Radioactive Gaseous and Liquid Effluent Treatment	
1, 2	08/13/2018	08/17/2018	IP 71124.07	000731	Radiological Environmental Monitoring Program	
1, 2	08/13/2018	08/17/2018	IP 71151	000746	Performance Indicator Verification	

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

IP 22 Inspection Activity Plan Report

Braidwood

03/01/2018 - 12/31/2019

Unit	Start	End	Activity	CAC	Title	Staff Count
INSERVICE INSPECTION UNIT 2						1
2	10/08/2018	10/28/2018	IP 71111.08P	000702	Inservice Inspection Activities - PWR	
RADIATION PROTECTION BASELINE INSPECTION						1
1, 2	10/15/2018	10/19/2018	IP 71124.05	000729	Radiation Monitoring Instrumentation	
DBA TEAM						6
1, 2	01/14/2019	02/01/2019	IP 71111.21M	000713	Design Bases Assurance Inspection (Teams)	
SECURITY BASELINE INSPECTION						1
1, 2	02/04/2019	02/08/2019	IP 71130.02	000734	Access Control	
1, 2	02/04/2019	02/08/2019	IP 71130.06	000738	Protection of Safeguards Information	
CYBER SECURITY INSPECTION						5
1	02/11/2019	03/01/2019	IP 71130.10P	000741	Cyber Security	
EP BASELINE INSPECTION / PI VERIFICATION						1
1, 2	02/25/2019	03/01/2019	IP 71114.02	000717	Alert and Notification System Testing	
1, 2	02/25/2019	03/01/2019	IP 71114.03	000718	Emergency Response Organization Staffing and Augmentation System	
1, 2	02/25/2019	03/01/2019	IP 71114.05	000720	Correction of Emergency Preparedness Weaknesses and Deficiencies	
1, 2	02/25/2019	03/01/2019	IP 71151	001397	Performance Indicator Verification	
RP Baseline						1
1, 2	02/25/2019	03/01/2019	IP 71124.02	000726	Occupational ALARA Planning and Controls	
SECURITY BASELINE INSPECTION						1
1, 2	04/08/2019	04/12/2019	IP 71130.07	000739	Security Training	
1, 2	04/08/2019	04/12/2019	IP 71151	001338	Performance Indicator Verification	
ISFSI Cask Loading Inspection						2
1, 2	04/15/2019	04/19/2019	IP 60855.1	000590	Operation of an Independent Spent Fuel Storage Installation at Operating Plants	
2019 BWD Exam						3
1, 2	05/05/2019	05/10/2019	OV	000956	VALIDATION OF INITIAL LICENSE EXAMINATION (OV)	
1, 2	06/02/2019	06/07/2019	EXAD	000500	LICENSE EXAM ADMINISTRATION (EXAD)	

IP 22 Inspection Activity Plan Report

Braidwood

03/01/2018 - 12/31/2019

Unit	Start	End	Activity	CAC	Title	Staff Count
FORCE-ON-FORCE PLANNING AND EXERCISES						8
1, 2	07/29/2019	08/02/2019	IP 71130.03	000735	Contingency Response - Force-On-Force Testing	
1, 2	08/19/2019	08/23/2019	IP 71130.03	000735	Contingency Response - Force-On-Force Testing	
BIENNIAL REQUAL PROGRAM INSPECTION						2
1, 2	08/19/2019	08/23/2019	IP 71111.11B	000704	Licensed Operator Requalification Program and Licensed Operator Performance - Biennial	
RADIATION PROTECTION BASELINE INSPECTION						1
1, 2	09/09/2019	09/13/2019	IP 71124.08	000732	Radioactive Solid Waste Processing and Radioactive Material Handling, Storage, and Transportation	
1, 2	09/09/2019	09/13/2019	IP 71151	000746	Performance Indicator Verification	
INSERVICE INSPECTION UNIT 1						1
1	10/07/2019	10/25/2019	IP 71111.08P	000702	Inservice Inspection Activities - PWR	
RADIATION PROTECTION BASELINE INSPECTION						1
1, 2	10/07/2019	10/11/2019	IP 71124.01	000725	Radiological Hazard Assessment and Exposure Controls	
1, 2	10/07/2019	10/11/2019	IP 71124.02	000726	Occupational ALARA Planning and Controls	