



**UNITED STATES
NUCLEAR REGULATORY COMMISSION
REGION I
2100 RENAISSANCE BOULEVARD, SUITE 100
KING OF PRUSSIA, PA 19406-2713**

February 28, 2018

Mr. Timothy S. Rausch
Senior Vice President
and Chief Nuclear Officer
Susquehanna Nuclear, LLC
769 Salem Blvd. - NUCSB3
Berwick, PA 18603-0467

**SUBJECT: ANNUAL ASSESSMENT LETTER FOR SUSQUEHANNA UNITS 1 AND 2
(REPORT 05000387/2017006 AND 05000388/2017006 REPORT 05000387/
2017402 AND 05000388/2017402 REPORT 05000387/2017501 AND
05000388/2017501)**

Dear Mr. Rausch:

The NRC has completed its end-of-cycle performance assessment of Susquehanna 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 Susquehanna Units 1 and 2 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 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 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.

Additionally, the NRC plans to conduct Inspection Procedure 60855.1, "Operation of an Independent Spent Fuel Storage Installation at Operating Plant."

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's Public Document Room or from the Publicly Available Records (PARS) component of NRC's document system (ADAMS). ADAMS is accessible from the NRC's Website at <http://www.nrc.gov/reading-rm/adams.html> (the Public Electronic Reading Room).

T. Rausch

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Please contact me at 610-337-5120 with any questions you may have regarding this letter.

Sincerely,

/RA/

James A. Krafty, Acting Chief
Reactor Projects Branch 4
Division of Reactor Projects

Docket Nos. 50-387 and 50-388
License Nos. NPF-14 and NPF-22

Enclosure:
Inspection/Activity Plan

SUBJECT: ANNUAL ASSESSMENT LETTER FOR SUSQUEHANNA UNITS 1
 AND 2 (REPORT 05000387/2017006 AND 05000388/2017006
 REPORT 05000387/2017402 AND 05000388/2017402
 REPORT 05000387/2017501 AND 05000388/2017501) DATED FEB 28, 2018

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NAME	SBarber	JKrafty			
DATE	2/28/18	2/28/18			

OFFICIAL RECORD COPY

IP 22 Inspection Activity Plan Report

Susquehanna

01/01/2018 - 12/31/2019

Unit	Start	End	Activity	CAC	Title	Staff Count
EQ PROGRAM						3
1, 2	01/22/2018	01/26/2018	IP 71111.21N	000714	Design Bases Assurance Inspection (Programs)	
1, 2	02/05/2018	02/09/2018	IP 71111.21N	000714	Design Bases Assurance Inspection (Programs)	
ACCESS AUTH & CONTROL, SGI CONTROL, FFD						3
1, 2	01/29/2018	02/02/2018	IP 71130.01	000733	Access Authorization	
1, 2	01/29/2018	02/02/2018	IP 71130.02	000734	Access Control	
1, 2	01/29/2018	02/02/2018	IP 71130.06	000738	Protection of Safeguards Information	
1, 2	01/29/2018	02/02/2018	IP 71130.08	000740	Fitness For Duty Program	
1, 2	01/29/2018	02/02/2018	IP 71151	001338	Performance Indicator Verification	
SUSQUEHANNA INITIAL OL EXAM						3
1, 2	02/04/2018	02/09/2018	OV	000956	VALIDATION OF INITIAL LICENSE EXAMINATION (OV)	
1, 2	03/05/2018	03/16/2018	EXAD	000500	LICENSE EXAM ADMINISTRATION (EXAD)	
TRIENNIAL HEAT SINK						1
1, 2	02/26/2018	03/02/2018	IP 71111.07T	000700	Heat Sink Performance -Triennial	
UNIT 1 INSERVICE INSPECTION						1
1	04/09/2018	04/13/2018	IP 71111.08G	000701	Inservice Inspection Activities - BWR	
HP INSPECTION						1
1	04/09/2018	04/13/2018	IP 71124.01	000725	Radiological Hazard Assessment and Exposure Controls	
1	04/09/2018	04/13/2018	IP 71124.02	000726	Occupational ALARA Planning and Controls	
1, 2	04/09/2018	04/13/2018	IP 71124.03	000727	In-Plant Airborne Radioactivity Control and Mitigation	
HP INSPECTION						1
1, 2	06/04/2018	06/08/2018	IP 71124.02	000726	Occupational ALARA Planning and Controls	
1, 2	06/04/2018	06/08/2018	IP 71124.04	000729	Occupational Dose Assessment	
1, 2	06/04/2018	06/08/2018	IP 71124.05	000729	Radiation Monitoring Instrumentation	
PI&R BIENNIAL						4
1, 2	06/11/2018	06/15/2018	IP 71152B	000747	Problem Identification and Resolution	
1, 2	06/25/2018	06/29/2018	IP 71152B	000747	Problem Identification and Resolution	

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

Susquehanna

01/01/2018 - 12/31/2019

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FORCE-ON-FORCE PLANNING & EXERCISE WEEK						7
1, 2	07/16/2018	07/20/2018	IP 71130.03	000735	Contingency Response - Force-On-Force Testing	
1, 2	08/06/2018	08/10/2018	IP 71130.03	000735	Contingency Response - Force-On-Force Testing	
RETS						1
1, 2	08/06/2018	08/10/2018	IP 71124.06	000730	Radioactive Gaseous and Liquid Effluent Treatment	
50.59 PROCESS						3
1, 2	08/20/2018	08/24/2018	IP 71111.17T	000709	Evaluations of Changes, Tests, and Experiments	
RADWASTE						1
1, 2	09/17/2018	09/21/2018	IP 71124.08	000732	Radioactive Solid Waste Processing and Radioactive Material Handling, Storage, and Transportation	
MC&A						1
1, 2	09/24/2018	09/28/2018	IP 71130.11	000742	Material Control and Accounting (MC&A)	
EP EXERCISE INSPECTION						4
1, 2	10/15/2018	10/19/2018	IP 71114.01	000716	Exercise Evaluation	
1, 2	10/15/2018	10/19/2018	IP 71151	001397	Performance Indicator Verification	
CYBER FULL IMP						4
1, 2	10/15/2018	10/19/2018	IP 71130.10P	000741	Cyber Security	
1, 2	10/29/2018	11/02/2018	IP 71130.10P	000741	Cyber Security	
BASELINE HP & PI VERIFICATION						1
1, 2	12/10/2018	12/14/2018	IP 71124.01	000725	Radiological Hazard Assessment and Exposure Controls	
1, 2	12/10/2018	12/14/2018	IP 71124.02	000726	Occupational ALARA Planning and Controls	
1, 2	12/10/2018	12/14/2018	IP 71124.03	000727	In-Plant Airborne Radioactivity Control and Mitigation	
1, 2	12/10/2018	12/14/2018	IP 71124.04	000729	Occupational Dose Assessment	
1, 2	12/10/2018	12/14/2018	IP 71151	000746	Performance Indicator Verification	
ACCESS CONTROL, EQUIP PERF, TRAINING						3
1, 2	02/11/2019	02/15/2019	IP 71130.02	000734	Access Control	
1, 2	02/11/2019	02/15/2019	IP 71130.04	000736	Equipment Performance, Testing, and Maintenance	
1, 2	02/11/2019	02/15/2019	IP 71130.07	000739	Security Training	
1, 2	02/11/2019	02/15/2019	IP 71151	001338	Performance Indicator Verification	

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Susquehanna

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HP						1
1, 2	02/25/2019	03/01/2019	IP 71124.01	000725	Radiological Hazard Assessment and Exposure Controls	
1, 2	02/25/2019	03/01/2019	IP 71124.02	000726	Occupational ALARA Planning and Controls	
INSERVICE INSPECTION - UNIT 2						1
2	04/22/2019	04/26/2019	IP 71111.08G	000701	Inservice Inspection Activities - BWR	
HP						1
2	04/29/2019	05/03/2019	IP 71124.01	000725	Radiological Hazard Assessment and Exposure Controls	
2	04/29/2019	05/03/2019	IP 71124.02	000726	Occupational ALARA Planning and Controls	
1, 2	04/29/2019	05/03/2019	IP 71124.03	000727	In-Plant Airborne Radioactivity Control and Mitigation	
REMP						1
1, 2	05/20/2019	05/24/2019	IP 71124.07	000731	Radiological Environmental Monitoring Program	
SUSQUEHANNA INITIAL OL EXAM						4
1, 2	05/27/2019	05/31/2019	OV	000956	VALIDATION OF INITIAL LICENSE EXAMINATION (OV)	
1, 2	06/24/2019	07/05/2019	EXAD	000500	LICENSE EXAM ADMINISTRATION (EXAD)	
DESIGN BASES ASSURANCE INSP - TEAMS						6
1, 2	09/16/2019	09/20/2019	IP 71111.21M	000713	Design Bases Assurance Inspection (Teams)	
1, 2	09/30/2019	10/04/2019	IP 71111.21M	000713	Design Bases Assurance Inspection (Teams)	
ISFSI OPERATIONAL INSPECTION						2
1, 2	09/23/2019	09/27/2019	IP 60855	001001	Operation Of An ISFSI	
1, 2	09/23/2019	09/27/2019	IP 60855.1	000590	Operation of an Independent Spent Fuel Storage Installation at Operating Plants	
HP						1
1, 2	10/21/2019	10/25/2019	IP 71124.01	000725	Radiological Hazard Assessment and Exposure Controls	
1, 2	10/21/2019	10/25/2019	IP 71124.02	000726	Occupational ALARA Planning and Controls	
1, 2	10/21/2019	10/25/2019	IP 71124.03	000727	In-Plant Airborne Radioactivity Control and Mitigation	
1, 2	10/21/2019	10/25/2019	IP 71124.04	000729	Occupational Dose Assessment	
1, 2	10/21/2019	10/25/2019	IP 71124.05	000729	Radiation Monitoring Instrumentation	
1, 2	10/21/2019	10/25/2019	IP 71151	000746	Performance Indicator Verification	
EP PROGRAM INSPECTION						2
1, 2	10/23/2019	10/27/2019	IP 71114.02	000717	Alert and Notification System Testing	

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IP 22 Inspection Activity Plan Report

Susquehanna

01/01/2018 - 12/31/2019

Unit	Start	End	Activity	CAC	Title	Staff Count
EP PROGRAM INSPECTION						2
1, 2	10/23/2019	10/27/2019	IP 71114.03	000718	Emergency Preparedness Organization Staffing and Augmentation System	
1, 2	10/23/2019	10/27/2019	IP 71114.05	000720	Correction of Emergency Preparedness Weaknesses and Deficiencies	
1, 2	10/23/2019	10/27/2019	IP 71151	001397	Performance Indicator Verification	
SQ REQUAL INSP WITH P/F RESULTS						2
1, 2	10/28/2019	11/01/2019	IP 71111.11A	000703	Licensed Operator Requalification Program and Licensed Operator Performance - Annual	
1, 2	10/28/2019	11/01/2019	IP 71111.11B	000704	Licensed Operator Requalification Program and Licensed Operator Performance - Biennial	