

UNITED STATES NUCLEAR REGULATORY COMMISSION

REGION I 2100 RENAISSANCE BLVD. KING OF PRUSSIA, PA 19406-2713

March 1, 2017

Mr. Timothy S. Rausch 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 NOS. 05000387/2016006 AND 05000388/2016006

Dear Mr. Rausch:

The U.S. Nuclear Regulatory Commission (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, 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 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, 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. Additionally, the NRC plans to conduct temporary instruction (TI) 192, Inspection of the Licensee's Interim Compensatory Measures Associated with the Open Phase Condition Design Vulnerabilities in Electric Power Systems. 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.

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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's Website at http://www.nrc.gov/reading-rm/adams.html (the Public Electronic Reading Room).

Please contact me at 610-337-5262 with any questions you have regarding this letter.

Sincerely,

/RA/

Daniel L. Schroeder, 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

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REPORT NOS. 05000387/2016006 AND 05000388/2016006 DATED

MARCH 1, 2017

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|--------------|------------|-----------------------------|--|------------------|--|
| OFFICE | RI/DRP | RI/DRP | | | |
| NAME | SBarber/SB | DSchroeder/DS | | | |
| DATE | 2/24/17 | 2/24/17 | | | |

OFFICIAL RECORD COPY

Susquehanna Inspection / Activity Plan 01/01/2017 - 12/31/2018

| Unit Number | Planne Start | ed Dates End | Inspection Activ | ty Title | No. of Staff on Site |
|----------------|-----------------|-----------------|------------------|--|----------------------|
| | | | 7111108G - U2 | INSERVICE INSPECTION | 1 |
| 2 | 03/13/2017 | 03/17/2017 | IP 7111108G | Inservice Inspection Activities - BWR | |
| | | | 71124 - HI | PINSPECTION | 1 |
| 2 | 03/20/2017 | 03/24/2017 | IP 71124.01 | Radiological Hazard Assessment and Exposure Controls | |
| 2 | 03/20/2017 | 03/24/2017 | IP 71124.02 | Occupational ALARA Planning and Controls | |
| 1, 2 | 03/20/2017 | 03/24/2017 | IP 71124.03 | In-Plant Airborne Radioactivity Control and Mitigation | |
| | | | 71124.07 - RI | MP | 1 |
| 1, 2 | 06/26/2017 | 06/30/2017 | IP 71124.07 | Radiological Environmental Monitoring Program | |
| | | | 7111105T - TF | RIENNIAL FIRE PROTECTION | 5 |
| 1, 2 | 08/14/2017 | 08/18/2017 | IP 7111105T | Fire Protection [Triennial] | |
| 1, 2 | 08/28/2017 | 09/01/2017 | IP 7111105T | Fire Protection [Triennial] | |
| | | | 7111111B - S0 | REQUAL INSP WITH P/F RESULTS | 2 |
| 1, 2 | 10/30/2017 | 11/03/2017 | IP 7111111A | Licensed Operator Requalification Program - Annual Review | |
| 1, 2 | 10/30/2017 | 11/03/2017 | IP 7111111B | Licensed Operator Requalification Program | |
| | | | 11/6EXAM - SI | ISQUEHANNA INITIAL OL EXAM | 4 |
| 1 | 02/05/2018 | 02/09/2018 | U01950 | FY18-SUSQUEHANNA INITIAL OPERATOR LICENSING EXAM | |
| 1 | 03/05/2018 | 03/16/2018 | U01950 | FY18-SUSQUEHANNA INITIAL OPERATOR LICENSING EXAM | |
| | | | 71124 - HI | PINSPECTION | 1 |
| 1, 2 | 10/02/2017 | 10/06/2017 | IP 71124.01 | Radiological Hazard Assessment and Exposure Controls | |
| 1, 2 | 10/02/2017 | 10/06/2017 | IP 71124.02 | Occupational ALARA Planning and Controls | |
| | | | EP - EF | PROGRAM INSPECTION | 1 |
| 1, 2 | 10/30/2017 | 11/03/2017 | IP 7111402 | Alert and Notification System Testing | |
| 1, 2 | 10/30/2017 | 11/03/2017 | IP 7111403 | Emergency Preparedness Organization Staffing and Augmentation System | |
| 1, 2 | 10/30/2017 | 11/03/2017 | IP 7111405 | Correction of Emergency Preparedness Weaknesses and Deficiencies | |
| 1, 2 | 10/30/2017 | 11/03/2017 | IP 71151 | Performance Indicator Verification | |
| | | | 71124 - HI | PINSPECTION | 1 |
| 1, 2 | 12/11/2017 | 12/15/2017 | IP 71124.02 | Occupational ALARA Planning and Controls | |
| 1, 2 | 12/11/2017 | 12/15/2017 | IP 71124.04 | Occupational Dose Assessment | |
| 1, 2 | 12/11/2017 | 12/15/2017 | IP 71151-OR01 | Occupational Exposure Control Effectiveness | |
| 1, 2 | 12/11/2017 | 12/15/2017 | IP 71151-PR01 | RETS/ODCM Radiological Effluent Occurrences | |
| | | | 7111121N - E0 | Q PROGRAM | 2 |
| 1, 2 | 01/22/2018 | 01/26/2018 | IP 7111121N | Component Design Bases Inspection (Programs) | |
| 1, 2 | 02/05/2018 | 02/09/2018 | IP 7111121N | Component Design Bases Inspection (Programs) | |

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

Susquehanna Inspection / Activity Plan 01/01/2017 - 12/31/2018

| Unit | it Planned Dates | | | | No. of Staff | |
|--------|------------------|------------|--------------|-----------|---|---------|
| Number | Start | End | Inspection A | Activity | Title | on Site |
| | | | HEAT | - TRIEN | NIAL HEAT SINK | 1 |
| 1, 2 | 02/26/2018 | 03/02/2018 | IP 7111107T | | Heat Sink Performance | |
| | | | 71124 | - HP INS | SPECTION | 1 |
| 1 | 04/09/2018 | 04/13/2018 | IP 71124.01 | | Radiological Hazard Assessment and Exposure Controls | |
| 1 | 04/09/2018 | 04/13/2018 | IP 71124.02 | | Occupational ALARA Planning and Controls | |
| 1, 2 | 04/09/2018 | 04/13/2018 | IP 71124.03 | | In-Plant Airborne Radioactivity Control and Mitigation | |
| | | | U1 ISI | - UNIT 1 | INSERVICE INSPECTION | 2 |
| 1 | 04/09/2018 | 04/13/2018 | IP 7111108G | 6 | Inservice Inspection Activities - BWR | |
| | | | 71152B | - PI&R E | BIENNIAL | 1 |
| 1, 2 | 06/11/2018 | 06/15/2018 | IP 71152B | | Problem Identification and Resolution | |
| 1, 2 | 06/25/2018 | 06/29/2018 | IP 71152B | | Problem Identification and Resolution | |
| | | | 71124 | - HP INS | SPECTION | 1 |
| 1, 2 | 06/04/2018 | 06/08/2018 | IP 71124.02 | | Occupational ALARA Planning and Controls | |
| 1, 2 | 06/04/2018 | 06/08/2018 | IP 71124.04 | | Occupational Dose Assessment | |
| 1, 2 | 06/04/2018 | 06/08/2018 | IP 71124.05 | | Radiation Monitoring Instrumentation | |
| | | | 71124.06 | - RETS | | 1 |
| 1, 2 | 08/06/2018 | 08/10/2018 | IP 71124.06 | | Radioactive Gaseous and Liquid Effluent Treatment | |
| | | | 50.59 | - EVALS | S OF CHANGES, TESTS, & EXPERIMENTS | 3 |
| 1, 2 | 08/20/2018 | 08/24/2018 | IP 7111117T | -5059scrn | screenings and/or applicability determinations | |
| | | | EP | - EP EX | ERCISE INSPECTION | 4 |
| 1, 2 | 10/15/2018 | 10/19/2018 | IP 7111401 | | Exercise Evaluation | |
| 1, 2 | 10/15/2018 | 10/19/2018 | IP 71151 | | Performance Indicator Verification | |
| | | | 71124.08 | - RADW | ASTE | 1 |
| 1, 2 | 10/15/2018 | 10/19/2018 | IP 71124.08 | | Radioactive Solid Waste Processing and Radioactive Material Handling, Storage, and Transportation | |
| | | | 71124 | - BASEL | LINE HP & PI VERIFICATION | 1 |
| 1, 2 | 12/10/2018 | 12/14/2018 | IP 71124.01 | | Radiological Hazard Assessment and Exposure Controls | |
| 1, 2 | 12/10/2018 | 12/14/2018 | IP 71124.02 | | Occupational ALARA Planning and Controls | |
| 1, 2 | 12/10/2018 | 12/14/2018 | IP 71124.03 | | In-Plant Airborne Radioactivity Control and Mitigation | |
| 1, 2 | 12/10/2018 | 12/14/2018 | IP 71124.04 | | Occupational Dose Assessment | |
| 1, 2 | 12/10/2018 | 12/14/2018 | IP 71151-OF | R01 | Occupational Exposure Control Effectiveness | |
| 1, 2 | 12/10/2018 | 12/14/2018 | IP 71151-PR | R01 | RETS/ODCM Radiological Effluent Occurrences | |