



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

November 18, 2020

Mr. Brad Berryman
Senior Vice President and Chief Nuclear Officer
Susquehanna Nuclear, LLC
769 Salem Blvd., NUCSB3
Berwick, PA 18603

SUBJECT: SUSQUEHANNA STEAM ELECTRIC STATION, UNITS 1 AND 2 –
EMERGENCY PREPAREDNESS BIENNIAL EXERCISE INSPECTION REPORT
05000387/2020501 AND 05000388/2020501

Dear Mr. Berryman:

On October 23, 2020, the U.S. Nuclear Regulatory Commission (NRC) completed an inspection at Susquehanna Steam Electric Station, Units 1 and 2. On October 29, 2020, the NRC inspectors discussed the results of this inspection with Kevin Cimorelli, Site Vice President and other members of your staff. The results of this inspection are documented in the enclosed report.

No findings or violations of more than minor significance were identified during this inspection.

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,

X /RA/

Signed by: Fred L. Bower
Fred L. Bower, III, Chief
Plant Support Branch
Division of Reactor Safety

Docket Nos. 05000387 and 05000388
License Nos. NPF-14 and NPF-22

Enclosure:
As stated

cc w/ encl: Distribution via LISTSERV®

SUBJECT: SUSQUEHANNA STEAM ELECTRIC STATION, UNITS 1 AND 2 –
 EMERGENCY PREPAREDNESS BIENNIAL EXERCISE INSPECTION REPORT
 05000387/2020501 AND 05000388/2020501 DATED NOVEMBER 18, 2020

DISTRIBUTION:

DLew, RA (R1ORAMAIL Resource)
 RLorson, DRA (R1ORAMAIL Resource)
 DCollins, DRP (R1DRPMAIL Resource)
 BPham, DRP (R1DRPMAIL Resource)
 JYerokun, DRS (R1DRSMAIL Resource)
 PKrohn, DRS (R1DRSMAIL Resource)
 JGreives, DRP
 LCasey, DRP
 ZCoffman, DRP
 CHighley, DRP, SRI
 MRossi, DRP, RI
 DHochmuth, DRP, AA
 RSkokowski, RI OEDO
 RidsNrrPMSusquehanna Resource
 RidsNrrDorlLpl1 Resource
 ROPreports Resource

DOCUMENT NAME: <https://usnrc.sharepoint.com/teams/RI.DRS.PSB.EP/Shared Documents/EP Inspection Reports/SSES/SSES EP IR 2020-501.docx>

ADAMS ACCESSION NUMBER: ML20323A217

<input checked="" type="checkbox"/> SUNSI Review		<input checked="" type="checkbox"/> Non-Sensitive <input type="checkbox"/> Sensitive		<input checked="" type="checkbox"/> Publicly Available <input type="checkbox"/> Non-Publicly Available	
OFFICE	RI/DRS	RI/DRP	RI/DRS		
NAME	JAmbrosini	JGreives	FBower		
DATE	11/16/2020	11/18/2020	11/18/2020		

OFFICIAL RECORD COPY

**U.S. NUCLEAR REGULATORY COMMISSION
Inspection Report**

Docket Numbers: 05000387 and 05000388

License Numbers: NPF-14 and NPF-22

Report Numbers: 05000387/2020501 and 05000388/2020501

Enterprise Identifier: I-2020-501-0007

Licensee: Susquehanna Nuclear, LLC

Facility: Susquehanna Steam Electric Station, Units 1 and 2

Location: Berwick, PA

Inspection Dates: October 19, 2020 to October 23, 2020

Inspectors: J. Ambrosini, Senior Emergency Preparedness Inspector
D. Johnson, Senior Emergency Preparedness Specialist
J. Rady, Emergency Preparedness Inspector
S. Seeley, Health Physicist
D. Silk, Senior Operations Engineer

Approved By: Fred L. Bower, III, Chief
Plant Support Branch
Division of Reactor Safety

Enclosure

SUMMARY

The U.S. Nuclear Regulatory Commission (NRC) continued monitoring the licensee's performance by conducting an emergency preparedness biennial exercise inspection at Susquehanna Steam Electric Station, Units 1 and 2, 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

No findings or violations of more than minor significance were identified.

Additional Tracking Items

None.

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. The inspection was conducted to assess the exercise performed to meet the regulatory requirements in 10 CFR Part 50, Appendix E, paragraph IV.F.2.b (onsite). The regulatory requirements of 10 CFR Part 50, Appendix E, paragraph IV.F.2.c (offsite) are being addressed in separate docketed correspondence (ML20272A020). 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 (COVID-19), inspectors were directed to begin telework. In addition, regional baseline inspections were evaluated to determine if all or portion 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 that were available for performance (ML20294A291).

REACTOR SAFETY

71114.01 - Exercise Evaluation

Inspection Review (IP Section 02.01-02.09) (1 Sample)

- (1) The inspectors evaluated the biennial emergency plan exercise. The exercise scenario simulated a seismic event, core spray flooding, a reactor core isolation cooling (RCIC) steam leak, and an anticipated transient without scram (ATWS) on October 20, 2020.

71114.04 - Emergency Action Level and Emergency Plan Changes

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

- (1) The inspectors evaluated the following submitted Emergency Action Level and Emergency Plan changes.
 - Evaluations 2020-03-05-01, 2020-03-05-02, 2020-03-05-03, and 2020-03-05-04, EP-RM-004, EAL Classification Bases, Revision 17

This evaluation does not constitute NRC approval.

71114.08 - Exercise Evaluation Scenario Review

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

- (1) The inspectors reviewed and evaluated the proposed scenario for biennial emergency plan exercise on September 16, 2020.

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) July 1, 2019 - September 30, 2020

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

- (1) July 1, 2019 - September 30, 2020

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

- (1) July 1, 2019 - September 30, 2020

INSPECTION RESULTS

No findings were identified.

EXIT MEETINGS AND DEBRIEFS

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

- On October 29, 2020, the inspectors presented the emergency preparedness biennial exercise inspection results to Mr. Kevin Cimorelli, Site Vice President and other members of the licensee staff.

DOCUMENTS REVIEWED

Inspection Procedure	Type	Designation	Description or Title	Revision or Date
71114.01	Corrective Action Documents	CR-2020-14498, CR-2020-14391, CR-2020-14572, CR-2020-14487, CR-2020-14536, CR-2020-14533		
	Corrective Action Documents Resulting from Inspection	CR-2020-14343		
	Miscellaneous		Susquehanna Steam Electric Station Request for One-Time Exemption From 10 CFR 50, Appendix E, Biennial Emergency Preparedness Exercise Requirements Due To Covid-19 Pandemic Pla-7893 (ML20272A020)	
			Susquehanna Steam Electric Station, Units 1 and 2 – Temporary Exemption from Biennial Emergency Preparedness Exercise Frequency Requirements OF 10 CFR Part 50, Appendix E, Section IV.F.2.C (EPID L-2020-LLE-0153 [COVID-19]) (ML20294A291)	
			Scenario package - Susquehanna Steam Electric Station Evaluated Exercise	08/10/2020
	Procedures		Susquehanna Steam Electric Station Emergency Plan	Revision 63