UNITED STATES
NUCLEAR REGULATORY COMMISSION
WASHINGTON, D.C. 20555-0001

November 17, 2026

Mark Jones
Site Vice President
Susquehanna Nuclear, LLC
769 Salem Boulevard
NUCSB3
Berwick, PA 18603-0467

SUBJECT: SUSQUEHANNA STEAM ELECTRIC STATION, UNITS 1 AND 2 - ISSUANCE OF AMENDMENT NOS. 294 AND 278 RE: ADOPTION OF TSTF-585, "REVISE LCO 3.0.3 TO REQUIRE MANAGING RISK" AND TSTF-597, "ELIMINATE LCO 3.0.3 MODE 2 REQUIREMENTS" (EPID L-2026-LLA-0151)

Dear Mr. Jones:

The U.S. Nuclear Regulatory Commission (NRC or the Commission) has issued the enclosed Amendment No. 294 to Renewed Facility Operating License No. NPF-14 and Amendment No. 278 to Renewed Facility Operating License No. NPF-22 for the Susquehanna Steam Electric Station (Susquehanna), Units 1 and 2, respectively. These amendments consist of changes to the technical specifications (TSs) in response to Susquehanna Nuclear, LLC's application dated July 28, 2026, as supplemented by letter dated September 15, 2026.

The amendments adopt Technical Specification Task Force (TSTF) Travelers TSTF-585, "Revise LCO [Limiting Condition for Operation] 3.0.3 to Require Managing Risk," and TSTF-597, "Eliminate LCO 3.0.3 Mode 2 Requirements."

A copy of the Safety Evaluation is also enclosed. A Notice of Issuance will be included in the Commission's biweekly *Federal Register* notice.

Sincerely,

/RA/

Robert Kuntz, Senior Project Manager
Operating Reactor Licensing Branch 3
Division of Licensing Projects1
Office of Nuclear Reactor Regulation

Docket Nos. 50-387 and 50-388

Enclosures:
1. Amendment No. 294 to NPF-14
2. Amendment No. 278 to NPF-22
3. Safety Evaluation

cc: Listserv

UNITED STATES
NUCLEAR REGULATORY COMMISSION
WASHINGTON, D.C. 20555-0001

SUSQUEHANNA NUCLEAR, LLC

DOCKET NO. 50-387

SUSQUEHANNA STEAM ELECTRIC STATION, UNIT 1

AMENDMENT TO RENEWED FACILITY OPERATING LICENSE

Amendment No. 294
Renewed License No. NPF-14

1. The U.S. Nuclear Regulatory Commission (the Commission or the NRC) has found that:

   A. The application for the amendment filed by Susquehanna Nuclear, LLC, dated July 28, 2026, as supplemented by letter dated September 15, 2026, complies with the standards and requirements of the Atomic Energy Act of 1954, as amended (the Act), and the Commission's regulations set forth in 10 CFR Chapter I;

   B. The facility will operate in conformity with the application, the provisions of the Act, and the regulations of the Commission;

   C. There is reasonable assurance: (i) that the activities authorized by this amendment can be conducted without endangering the health and safety of the public, and (ii) that such activities will be conducted in compliance with the Commission's regulations;

   D. The issuance of this amendment will not be inimical to the common defense and security or to the health and safety of the public; and

   E. The issuance of this amendment is in accordance with 10 CFR Part 51 of the Commission's regulations, and all applicable requirements have been satisfied.

2. Accordingly, the license is amended by changes to the Renewed Facility Operating License and Technical Specifications as indicated in the attachment to this license amendment, and paragraph 2.C.(2) of Renewed Facility Operating License No. NPF-14 is hereby amended to read as follows:

2.C.(2) Technical Specifications and Environmental Protection Plan

The Technical Specifications contained in Appendix A, as revised through Amendment No. 294, and the Environmental Protection Plan contained in Appendix B are hereby incorporated in the license. Susquehanna Nuclear, LLC shall operate the facility in accordance with the Technical Specifications and the Environmental Protection Plan.

3. This license amendment is effective as of its date of issuance and shall be implemented within 90 days.

FOR THE NUCLEAR REGULATORY COMMISSION

ILKA BERRIOS

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Date: 2026.11.17 13:04:44 -05'00'

Ilka Berrios, Chief
Operating Reactor Licensing Branch 3
Division of Licensing Projects1
Office of Nuclear Reactor Regulation

Attachment:
Changes to the Renewed Facility Operating License and Technical Specifications

Date of Issuance: November 17, 2026

ATTACHMENT TO LICENSE AMENDMENT NO. 294

SUSQUEHANNA STEAM ELECTRIC STATION, UNIT 1

RENEWED FACILITY OPERATING LICENSE NO. NPF-14

DOCKET NO. 50-387

Replace the following page of Renewed Facility Operating License No. NPF-14 with the attached revised page. The revised page is identified by amendment number and contains a marginal line indicating the area of change.

REMOVE	INSERT
Page 3	Page 3

Replace the following pages of the Appendix A Technical Specifications with the attached revised pages. The revised pages are identified by amendment number and contain marginal lines indicating the areas of change.

REMOVE	INSERT
3.0-1	3.0-1
3.0-2	3.0-2
3.0-3	3.0-3
3.7-7	3.7-7
3.8-38	3.8-38

(3) Susquehanna Nuclear, LLC, pursuant to the Act and 10 CFR Parts 30, 40, and 70, to receive, posses, and use at any time any byproduct, source and special nuclear material as sealed neutron sources for reactor startup, sealed neutron sources for reactor instrumentation and radiation monitoring equipment calibration, and as fission detectors in amounts as required;

(4) Susquehanna Nuclear, LLC, pursuant to the Act and 10 CFR Parts 30, 40, and 70 to receive, posses, and use in amounts as required any byproduct, source or special nuclear material without restriction to chemical or physical form, for sample analysis or instrument calibration or associated with radioactive apparatus or components; and

(5) Susquehanna Nuclear, LLC, pursuant to the Act and 10 CFR Parts 30, 40, and 70 to possess, but not separate, such byproduct and special nuclear materials as may be produced by the operation of the facility.

C. This license shall be deemed to contain and is subject to the conditions specified in the Commission's regulations set forth in 10 CFR Chapter I and is subject to all applicable provisions of the Act and to the rules, regulations and orders of the Commission nor or hereafter in effect; and is subject to the additional conditions specified or incorporated below:

(1) Maximum Power Level

Susquehanna Nuclear, LLC is authorized to operate the facility at reactor core power levels not in excess of 3952 megawatts thermal in accordance with the conditions specified herein. The preoperational tests, startup tests and other items identified in License Conditions 2.C.(36), 2.C.(37), 2.C.(38), and 2.C.(39) to this license shall be completed as specified.

(2) Technical Specifications and Environmental Protection Plan

The Technical Specifications contained in Appendix A, as revised through Amendment No. 294, and the Environmental Protection Plan contained in Appendix B are hereby incorporated in the license. Susquehanna Nuclear, LLC shall operate the facility in accordance with the Technical Specifications and the Environmental Protection Plan.

For Surveillance Requirements (SRs) that are new in Amendment 178 to Facility Operating License No. NPF-14, the first performance is due at the end of the first surveillance interval that begins at implementation of Amendment 178. For SRs that existed prior to Amendment 178, including SRs with modified acceptance criteria and SRs whose frequency of performance is being extended, the first performance is due at the end of the first surveillance interval that begins on the date the Surveillance was last performed prior to implementation of Amendment 178.

3.0 LIMITING CONDITION FOR OPERATION (LCO) APPLICABILITY

LCO 3.0.1

LCOs shall be met during the MODES or other specified conditions in the Applicability, except as provided in LCO 3.0.2, LCO 3.0.7 and LCO 3.0.8.

LCO 3.0.2

Upon discovery of a failure to meet an LCO, the Required Actions of the associated Conditions shall be met, except as provided in LCO 3.0.5 and LCO 3.0.6.

If the LCO is met or is no longer applicable prior to expiration of the specified Completion Time(s), completion of the Required Action(s) is not required, unless otherwise stated.

LCO 3.0.3

When an LCO is not met and the associated ACTIONS are not met, an associated ACTION is not provided, or if directed by the associated ACTIONS, the unit shall be placed in a MODE or other specified condition in which the LCO is not applicable.

Within 6 hours perform a risk assessment addressing inoperable systems and components and implement appropriate risk management actions. If the risk assessment determines that continuing operation is acceptable, the appropriate risk management actions are implemented, and entry into LCO 3.0.3 was unplanned, then action shall be initiated within 24 hours to place the unit, as applicable, in:

a. MODE 3 within 36 hours, and

b. MODE 4 within 60 hours.

If the risk assessment determines that continuing operation is not acceptable, the risk assessment was not completed, the appropriate risk management actions were not implemented, or entry into LCO 3.0.3 was planned, then action shall be initiated to place the unit, as applicable, in:

a. MODE 3 within 18 hours, and

b. MODE 4 within 42 hours.

All times are determined from entry into LCO 3.0.3.

Exceptions to this Specification are stated in the individual Specifications.

3.0 LCO APPLICABILITY

LCO 3.0.3 (continued)

If corrective measures are completed that permit operation in accordance with the LCO or ACTIONS, then completion of the actions required by LCO 3.0.3 is not required.

LCO 3.0.3 is only applicable in MODES 1, 2, and 3.

LCO 3.0.4

When an LCO is not met, entry into a MODE or other specified condition in the Applicability shall only be made:

a. When the associated ACTIONS to be entered permit continued operation in the MODE or other specified condition in the Applicability for an unlimited period of time;

b. After performance of a risk assessment addressing inoperable systems and components, consideration of the results, determination of the acceptability of entering the MODE or other specified condition in the Applicability, and establishment of risk management actions, if appropriate (exceptions to this Specification are stated in the individual Specifications); or

c. When an allowance is stated in the individual value, parameter, or other Specification.

This Specification shall not prevent changes in MODES or other specified conditions in the Applicability that are required to comply with ACTIONS or that are part of a shutdown of the unit.

LCO 3.0.5

Equipment removed from service or declared inoperable to comply with ACTIONS may be returned to service under administrative control solely to perform testing required to demonstrate its OPERABILITY or the OPERABILITY of other equipment. This is an exception to LCO 3.0.2 for the system returned to service under administrative control to perform the testing required to demonstrate OPERABILITY.

LCO 3.0.6

When a supported system LCO is not met solely due to a support system LCO not being met, the Conditions and Required Actions associated with this supported system are not required to be entered. Only the support system LCO ACTIONS are required to be entered. This is an exception to LCO 3.0.2 for the supported system. In this event, an evaluation shall be performed in accordance with Specification 5.5.11, "Safety Function Determination Program (SFDP)." If a loss of safety function is determined

3.0 LCO APPLICABILITY

LCO 3.0.6 (continued)

to exist by this program, the appropriate Conditions and Required Actions of the LCO in which the loss of safety function exists are required to be entered. When a support system's Required Action directs a supported system to be declared inoperable or directs entry into Conditions and Required Actions for a supported system, the applicable Conditions and Required Actions shall be entered in accordance with LCO 3.0.2.

LCO 3.0.7

Special Operations LCOs in Section 3.10 allow specified Technical Specifications (TS) requirements to be changed to permit performance of special tests and operations. Unless otherwise specified, all other TS requirements remain unchanged. Compliance with Special Operations LCOs is optional. When a Special Operations LCO is desired to be met but is not met, the ACTIONS of the Special Operations LCO shall be met. When a Special Operations LCO is not desired to be met, entry into a MODE or other specified condition in the Applicability shall only be made in accordance with the other applicable Specifications.

LCO 3.0.8

When one or more required snubbers are unable to perform their associated support function(s), any affected supported LCO(s) are not required to be declared not met solely for this reason if risk is assessed and managed, and:

a. The snubbers not able to perform their associated support function(s) are associated with only one train or subsystem of a multiple train or subsystem supported system or are associated with a single train or subsystem supported system and are able to perform their associated support function within 72 hours; or

b. The snubbers not able to perform their associated support function(s) are associated with more than one train or subsystem of a multiple train or subsystem supported system and are able to perform their associated support function within 12 hours.

At the end of the specified period, the required snubbers must be able to perform their associated support function(s), or the affected supported system LCO(s) shall be declared not met.

ACTIONS (continued)

CONDITION	REQUIRED ACTION		COMPLETION TIME
C. Required Action and associated Completion Time of Condition A or B not met in MODE 1, 2, or 3.	C.1	Be in MODE 3.	12 hours
	AND		
	C.2	Be in MODE 4.	36 hours
D. Required Action and associated Completion Time of Condition A not met during movement of irradiated fuel assemblies in the secondary containment or during CORE ALTERATIONS.	----------NOTE---------- LCO 3.0.3 is not applicable. ----------		
	D.1	Place OPERABLE CREOAS subsystem in pressurization/ filtration mode.	Immediately
	OR		
	D.2.1	Suspend movement of irradiated fuel assemblies in the secondary containment.	Immediately
		AND	
	D.2.2	Suspend CORE ALTERATIONS.	Immediately
E. Two CREOAS subsystems inoperable in MODE 1, 2, or 3 for reasons other than Condition B.	E.1	Be in MODE 3.	12 hours
	AND		
	E.2	Be in MODE 4.	36 hours

ACTIONS (continued)

CONDITION	REQUIRED ACTION		COMPLETION TIME
B. ----------NOTE---------- Not applicable to DG E DC electrical power subsystem. --- One or more Unit 1 DC electrical power distribution subsystems inoperable.	B.1	Restore Unit 1 DC electrical power distribution subsystem(s) to OPERABLE status.	2 hours OR ----------NOTE---------- Not applicable if there is a loss of function. --- In accordance with the Risk Informed Completion Time Program
C. Required Action and Associated Completion Time of Condition A or Condition B not met.	C.1 AND C.2	Be in MODE 3. Be in MODE 4.	12 hours 36 hours
D. Diesel Generator E DC electrical power subsystem inoperable while not aligned to the Class 1E distribution system.	D.1	Verify that all ESW valves associated with Diesel Generator E are closed.	2 hours
E. Diesel Generator E DC electrical power subsystem inoperable, while aligned to the Class 1E distribution system.	E.1	Declare Diesel Generator E inoperable.	2 hours
F. Two or more Unit 1 electrical power distribution subsystems inoperable that result in a loss of safety function.	F.1 AND F.2	Be in MODE 3. Be in MODE 4.	12 hours 36 hours

UNITED STATES
NUCLEAR REGULATORY COMMISSION
WASHINGTON, D.C. 20555-0001

SUSQUEHANNA NUCLEAR, LLC

DOCKET NO. 50-388

SUSQUEHANNA STEAM ELECTRIC STATION, UNIT 2

AMENDMENT TO RENEWED FACILITY OPERATING LICENSE

Amendment No. 278
Renewed License No. NPF-22

1. The U.S. Nuclear Regulatory Commission (the Commission or the NRC) has found that:

   A. The application for the amendment filed by Susquehanna Nuclear, LLC, dated July 28, 2026, as supplemented by letter dated September 15, 2026, complies with the standards and requirements of the Atomic Energy Act of 1954, as amended (the Act), and the Commission's regulations set forth in 10 CFR Chapter I;

   B. The facility will operate in conformity with the application, the provisions of the Act, and the regulations of the Commission;

   C. There is reasonable assurance: (i) that the activities authorized by this amendment can be conducted without endangering the health and safety of the public, and (ii) that such activities will be conducted in compliance with the Commission's regulations;

   D. The issuance of this amendment will not be inimical to the common defense and security or to the health and safety of the public; and

   E. The issuance of this amendment is in accordance with 10 CFR Part 51 of the Commission's regulations, and all applicable requirements have been satisfied.

2. Accordingly, the license is amended by changes to the Renewed Facility Operating License and Technical Specifications as indicated in the attachment to this license amendment, and paragraph 2.C.(2) of Renewed Facility Operating License No. NPF-22 is hereby amended to read as follows:

2.C.(2) Technical Specifications and Environmental Protection Plan

The Technical Specifications contained in Appendix A, as revised through Amendment No. 278, and the Environmental Protection Plan contained in Appendix B are hereby incorporated in the license. Susquehanna Nuclear, LLC shall operate the facility in accordance with the Technical Specifications and the Environmental Protection Plan.

3. This license amendment is effective as of its date of issuance and shall be implemented within 90 days.

FOR THE NUCLEAR REGULATORY COMMISSION

ILKA BERRIOS

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Ilka Berrios, Chief
Operating Reactor Licensing Branch 3
Division of Licensing Projects1
Office of Nuclear Reactor Regulation

Attachment:
Changes to the Renewed Facility Operating License and Technical Specifications

Date of Issuance: November 17, 2026

ATTACHMENT TO LICENSE AMENDMENT NO. 278

SUSQUEHANNA STEAM ELECTRIC STATION, UNIT 2

RENEWED FACILITY OPERATING LICENSE NO. NPF-22

DOCKET NO. 50-388

Replace the following page of Renewed Facility Operating License No. NPF-22 with the attached revised page. The revised page is identified by amendment number and contains a marginal line indicating the area of change.

REMOVE	INSERT
Page 3	Page 3

Replace the following page of the Appendix A Technical Specifications with the attached revised page. The revised page is identified by amendment number and contains marginal lines indicating the areas of change.

REMOVE	INSERT
3.0-1	3.0-1
3.0-2	3.0-2
3.0-3	3.0-3
3.7-7	3.7-7
3.8-47	3.8-47

(3) Susquehanna Nuclear, LLC, pursuant to the Act and 10 CFR Parts 30, 40, and 70, to receive, posses, and use at any time any byproduct, source and special nuclear material as sealed neutron sources for reactor startup, sealed neutron sources for reactor instrumentation and radiation monitoring equipment calibration, and as fission detectors in amounts as required;

(4) Susquehanna Nuclear, LLC, pursuant to the Act and 10 CFR Parts 30, 40, and 70 to receive, posses, and use in amounts as required any byproduct, source or special nuclear material without restriction to chemical or physical form, for sample analysis or instrument calibration or associated with radioactive apparatus or components; and

(5) Susquehanna Nuclear, LLC, pursuant to the Act and 10 CFR Parts 30, 40, and 70 to possess, but not separate, such byproduct and special nuclear materials as may be produced by the operation of the facility.

C. This license shall be deemed to contain and is subject to the conditions specified in the Commission's regulations set forth in 10 CFR Chapter I and is subject to all applicable provisions of the Act and to the rules, regulations and orders of the Commission nor or hereafter in effect; and is subject to the additional conditions specified or incorporated below:

(1) Maximum Power Level

Susquehanna Nuclear, LLC is authorized to operate the facility at reactor core power levels not in excess of 3952 megawatts thermal in accordance with the conditions specified herein. The preoperational tests, startup tests and other items identified in License Conditions 2.C.(20), 2.C.(21), 2.C.(22), and 2.C.(23) to this license shall be completed as specified.

(2) Technical Specifications and Environmental Protection Plan

The Technical Specifications contained in Appendix A, as revised through Amendment No. 278, and the Environmental Protection Plan contained in Appendix B are hereby incorporated in the license. Susquehanna Nuclear, LLC shall operate the facility in accordance with the Technical Specifications and the Environmental Protection Plan.

For Surveillance Requirements (SRs) that are new in Amendment 151 to Facility Operating License No. NPF-22, the first performance is due at the end of the first surveillance interval that begins at implementation of Amendment 151. For SRs that existed prior to Amendment 151, including SRs with modified acceptance criteria and SRs whose frequency of performance is being extended, the first performance is due at the end of the first surveillance interval that begins on the date the Surveillance was last performed prior to implementation of Amendment 151.

3.0 LIMITING CONDITIONS FOR OPERATION (LCO) APPLICABILITY

LCO 3.0.1

LCOs shall be met during the MODES or other specified conditions in the Applicability, except as provided in LCO 3.0.2, LCO 3.0.7 and LCO 3.0.8.

LCO 3.0.2

Upon discovery of a failure to meet an LCO, the Required Actions of the associated Conditions shall be met, except as provided in LCO 3.0.5 and LCO 3.0.6.

If the LCO is met or is no longer applicable prior to expiration of the specified Completion Time(s), completion of the Required Action(s) is not required, unless otherwise stated.

LCO 3.0.3

When an LCO is not met and the associated ACTIONS are not met, an associated ACTION is not provided, or if directed by the associated ACTIONS, the unit shall be placed in a MODE or other specified condition in which the LCO is not applicable.

Within 6 hours perform a risk assessment addressing inoperable systems and components and implement appropriate risk management actions. If the risk assessment determines that continuing operation is acceptable, the appropriate risk management actions are implemented, and entry into LCO 3.0.3 was unplanned, then action shall be initiated within 24 hours to place the unit, as applicable, in:

a. MODE 3 within 36 hours, and

b. MODE 4 within 60 hours.

If the risk assessment determines that continuing operation is not acceptable, the risk assessment was not completed, the appropriate risk management actions were not implemented, or entry into LCO 3.0.3 was planned, then action shall be initiated to place the unit, as applicable, in:

a. MODE 3 within 18 hours, and

b. MODE 4 within 42 hours.

All times are determined from entry into LCO 3.0.3.

Exceptions to this Specification are stated in the individual Specifications.

3.0 LCO APPLICABILITY

LCO 3.0.3 (continued)

If corrective measures are completed that permit operation in accordance with the LCO or ACTIONS, then completion of the actions required by LCO 3.0.3 is not required.

LCO 3.0.3 is only applicable in MODES 1, 2, and 3.

LCO 3.0.4

When an LCO is not met, entry into a MODE or other specified condition in the Applicability shall only be made:

a. When the associated ACTIONS to be entered permit continued operation in the MODE or other specified condition in the Applicability for an unlimited period of time;

b. After performance of a risk assessment addressing inoperable systems and components, consideration of the results, determination of the acceptability of entering the MODE or other specified condition in the Applicability, and establishment of risk management actions, if appropriate (exceptions to this Specification are stated in the individual Specifications); or

c. When an allowance is stated in the individual value, parameter, or other Specification.

This Specification shall not prevent changes in MODES or other specified conditions in the Applicability that are required to comply with ACTIONS or that are part of a shutdown of the unit.

LCO 3.0.5

Equipment removed from service or declared inoperable to comply with ACTIONS may be returned to service under administrative control solely to perform testing required to demonstrate its OPERABILITY or the OPERABILITY of other equipment. This is an exception to LCO 3.0.2 for the system returned to service under administrative control to perform the testing required to demonstrate OPERABILITY.

LCO 3.0.6

When a supported system LCO is not met solely due to a support system LCO not being met, the Conditions and Required Actions associated with this supported system are not required to be entered. Only the support system LCO ACTIONS are required to be entered. This is an exception to LCO 3.0.2 for the supported system. In this event, an evaluation shall be performed in accordance with Specification 5.5.11, "Safety Function Determination Program (SFDP)." If a loss of safety function is determined

3.0 LCO APPLICABILITY

LCO 3.0.6 (continued)

to exist by this program, the appropriate Conditions and Required Actions of the LCO in which the loss of safety function exists are required to be entered. When a support system's Required Action directs a supported system to be declared inoperable or directs entry into Conditions and Required Actions for a supported system, the applicable Conditions and Required Actions shall be entered in accordance with LCO 3.0.2.

LCO 3.0.7

Special Operations LCOs in Section 3.10 allow specified Technical Specifications (TS) requirements to be changed to permit performance of special tests and operations. Unless otherwise specified, all other TS requirements remain unchanged. Compliance with Special Operations LCOs is optional. When a Special Operations LCO is desired to be met but is not met, the ACTIONS of the Special Operations LCO shall be met. When a Special Operations LCO is not desired to be met, entry into a MODE or other specified condition in the Applicability shall only be made in accordance with the other applicable Specifications.

LCO 3.0.8

When one or more required snubbers are unable to perform their associated support function(s), any affected supported LCO(s) are not required to be declared not met solely for this reason if risk is assessed and managed, and:

a. The snubbers not able to perform their associated support function(s) are associated with only one train or subsystem of a multiple train or subsystem supported system or are associated with a single train or subsystem supported system and are able to perform their associated support function within 72 hours; or

b. The snubbers not able to perform their associated support function(s) are associated with more than one train or subsystem of a multiple train or subsystem supported system and are able to perform their associated support function within 12 hours.

At the end of the specified period, the required snubbers must be able to perform their associated support function(s), or the affected supported system LCO(s) shall be declared not met.

ACTIONS (continued)

CONDITION	REQUIRED ACTION		COMPLETION TIME
C. Required Action and associated Completion Time of Condition A or B not met in MODE 1, 2, or 3.	C.1	Be in MODE 3.	12 hours
	AND		
	C.2	Be in MODE 4.	36 hours
D. Required Action and associated Completion Time of Condition A not met during movement of irradiated fuel assemblies in the secondary containment or during CORE ALTERATIONS.	----------NOTE---------- LCO 3.0.3 is not applicable. ----------		
	D.1	Place OPERABLE CREOAS subsystem in pressurization/filtration mode.	Immediately
	OR		
	D.2.1	Suspend movement of irradiated fuel assemblies in the secondary containment.	Immediately
		AND	
	D.2.2	Suspend CORE ALTERATIONS.	Immediately
E. Two CREOAS subsystems inoperable in MODE 1, 2, or 3 for reasons other than Condition B.	E.1	Be in MODE 3.	12 hours
	AND		
	E.2	Be in MODE 4.	36 hours

ACTIONS (continued)

CONDITION	REQUIRED ACTION		COMPLETION TIME
F. Diesel Generator E DC electrical power subsystem inoperable, while not aligned to the Class 1E distribution system.	F.1	Verify that all ESW valves associated with Diesel Generator E are closed.	2 hours
G. Diesel Generator E DC electrical power subsystem inoperable, while aligned to the Class 1E distribution system.	G.1	Declare Diesel Generator E inoperable.	2 hours
H. Two or more electrical power distribution subsystems inoperable that result in a loss of safety function.	H.1 AND H.2	Be in MODE 3. Be in MODE 4.	12 hours 36 hours
I. ----------NOTE---------- Not applicable to DG E DC Bus 0D597. ---------- One or more Unit 1 DC electrical power distribution subsystem(s) inoperable.	I.1 AND I.2	Transfer associated Unit 1 and common loads to corresponding Unit 2 DC electrical power distribution subsystem. Restore Unit 1 and common loads to corresponding Unit 1 DC electrical power distribution subsystem.	2 hours 72 hours after Unit 1 DC electrical power subsystem is restored to OPERABLE status
J. Required Actions and associated Completion Times of Condition I not met.	J.1	Declare associated common loads inoperable.	Immediately

UNITED STATES
NUCLEAR REGULATORY COMMISSION
WASHINGTON, D.C. 20555-0001

SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION

RELATED TO AMENDMENT NO. 294

TO RENEWED FACILITY OPERATING LICENSE NO. NPF-14

AND AMENDMENT NO. 278

TO RENEWED FACILITY OPERATING LICENSE NO. NPF-22

SUSQUEHANNA NUCLEAR, LLC

SUSQUEHANNA STEAM ELECTRIC STATION, UNITS 1 AND 2

DOCKET NOS. 50-387 AND 50-388

1.0 INTRODUCTION

Susquehanna Nuclear, LLC (the licensee) requested changes to the technical specifications (TSs) for Susquehanna Steam Electric Station (Susquehanna), Units 1 and 2, by license amendment request (LAR, application) dated July 28, 2026 (Agencywide Documents Access and Management System (ADAMS) Accession No. ML26209A374) as supplemented by letter dated September 15, 2026 (ML26258A248). In its application, the licensee requested that the U.S. Nuclear Regulatory Commission (NRC, the Commission) process the proposed amendment under the Consolidated Line Item Improvement Process (CLIIP). The proposed changes would revise the TS based on Technical Specifications Task Force (TSTF) Traveler TSTF-585, Revision 5, “Revise LCO [Limiting Condition for Operation] 3.0.3 to Require Managing Risk,” (TSTF-585) (ML25260A487) and the associated NRC staff safety evaluation (SE) of Traveler TSTF-585 (ML26005A205).

The proposed changes would revise the shutdown requirements in LCO 3.0.3 by requiring the assessment and management of plant risk whenever LCO 3.0.3 is entered. The licensee proposed that the risk assessment and implementation of any appropriate risk management actions must be completed within six hours. The proposed change also revises or adds TS Required Actions to require a plant shutdown instead of entry into LCO 3.0.3.

The LAR also requested the Susquehanna, Units 1 and 2, TSs be modified to adopt TSTF-597, Revision 0, “Eliminate LCO 3.0.3 Mode 2 Requirement” (TSTF-597) (ML24075A080), correction letter (ML24260A221), and the associated NRC staff final SE of Traveler TSTF-597 (ML24358A228).

The proposed change to adopt TSTF-597 would revise the shutdown requirements in TS LCO 3.0.3 by removing the requirement to place the unit in MODE 2 prior to entering MODE 3.

The current TS LCO 3.0.3 requires action to be initiated within one hour to place the unit, as applicable, in Mode 2 within 7 hours, Mode 3 within 13 hours, and Mode 4 within 37 hours when:

1) an LCO is not met and the associated actions are not met,
2) an associated action is not provided, or
3) if directed to enter LCO 3.0.3 by the associated actions.

LCO 3.0.3 is applicable in Modes 1, 2, and 3.

The supplement dated September 15, 2026, provided additional information that clarified the application, did not expand the scope of the application as originally noticed, and did not change the NRC staff's original proposed no significant hazards consideration determination as published in the *Federal Register* on August 18, 2026 (91 FR 53427). There has been no public comment on such finding.

1.1 Proposed TS Changes to Adopt TSTF-597

In accordance with the NRC staff approved TSTF-597, the licensee proposed changes that would revise LCO 3.0.3. Specifically, the licensee proposed to delete the requirement to be in Mode 2 within 7 hours and renumber the subsequent requirements.

1.2 Proposed TS Changes to Adopt TSTF-585

In accordance with the NRC staff-approved TSTF-585, the licensee proposed changes that restructure LCO 3.0.3. The one-hour shutdown preparation time is proposed to be replaced with a requirement to assess the risk and implement appropriate risk management actions (RMAs) within six hours. In addition, if risk is assessed and managed, and is subsequently determined to be acceptable, operation may continue for a total of 24 hours after unplanned entry into LCO 3.0.3 (i.e., an additional 18 hours beyond the initial six hours for the risk assessment and implementation of RMAs). If the plant is still in LCO 3.0.3 at the end of the 24-hour period, the initiation of a shutdown is required. In addition, a shutdown is required to be initiated at the end of the six-hour period "[i]f the risk assessment determines that continuing operation is not acceptable, the risk assessment was not completed, the appropriate risk management actions were not implemented, or entry into LCO 3.0.3 was planned."

The licensee also proposes to change the following sentence in LCO 3.0.3:

> Where corrective measures are completed that permit operation in accordance with the LCO or ACTIONS, completion of the actions required by LCO 3.0.3 is not required.

to read:

> If corrective measures are completed that permit operation in accordance with the LCO or ACTIONS, then completion of the actions required by LCO 3.0.3 is not required.

Each of the specified Mode change Completion Times (CTs) in the current LCO 3.0.3 (b and c, which are renumbered as a and b) are adjusted in the proposed LCO 3.0.3 to reflect the replacement of the existing one-hour shutdown preparation time with the proposed increased

time for initiating a shutdown of either 6 or 24 hours, as appropriate. The change in CTs does not change the amount of time allowed for the process of shutting down the plant. It reflects a change when the shutdown is required to begin based on the time of entry into LCO 3.0.3.

Table 1 shows the current LCO 3.0.3 compared to the proposed changes to LCO 3.0.3. Text deletions are shown in strikeout font, and additions are shown in bold italicized font.

Table 1
Comparison of Existing LCO 3.0.3 to the Proposed LCO 3.0.3

Current LCO 3.0.3	Proposed LCO 3.0.3
When an LCO is not met and the associated ACTIONS are not met, an associated ACTION is not provided, or if directed by the associated ACTIONS, the unit shall be placed in a MODE or other specified condition in which the LCO is not applicable. Action shall be initiated within 1 hour to place the unit, as applicable, in: a. MODE 2 within 7 hours; b. MODE 3 within 13 hours; and c. MODE 4 within 37 hours. Exceptions to this Specification are stated in the individual Specifications. Where corrective measures are completed that permit operation in accordance with the LCO or ACTIONS, completion of the actions required by LCO 3.0.3 is not required. …	When an LCO is not met and the associated ACTIONS are not met, an associated ACTION is not provided, or if directed by the associated ACTIONS, the unit shall be placed in a MODE or other specified condition in which the LCO is not applicable. ***Within 6 hours perform a risk assessment addressing inoperable systems and components and implement appropriate risk management actions. If the risk assessment determines that continuing operation is acceptable, the appropriate risk management actions are implemented, and entry into LCO 3.0.3 was unplanned, then action*** ~~Action~~ shall be initiated within ***24 hours*** ~~1 hour~~ to place the unit, as applicable, in: ~~a. MODE 2 within 7 hours;~~ ***a***~~b~~. MODE 3 within ***36*** ~~13~~ hours~~,~~; and **b**~~c~~. MODE 4 within ***60*** ~~37~~ hours. ***If the risk assessment determines that continuing operation is not acceptable, the risk assessment was not completed, the appropriate risk management actions were not implemented, or entry into LCO 3.0.3 was planned, then action shall be initiated to place the unit, as applicable, in:*** ***a. MODE 3 within 18 hours, and*** **b.** ***MODE 4 within 42 hours.*** ***All times are determined from entry into LCO 3.0.3.*** Exceptions to this Specification are stated in the individual Specifications. ***If*** ~~Where~~ corrective measures are completed that permit operation in accordance with the LCO or ACTIONS, ***then*** completion of the actions required by LCO 3.0.3 is not required. …

Implicit entries into LCO 3.0.3 can occur when an LCO is not met, and there is no associated Action provided for that condition. There are also several places in the TS where entries into LCO 3.0.3 are explicitly required by the TS Actions. In some cases, the application of the revised LCO 3.0.3 would not be appropriate. Accordingly, the licensee in its LAR, proposes the

following changes to replace these entries into LCO 3.0.3 with explicit requirements to immediately shutdown:

- TS 3.8.7, “Distribution Systems – Operating,” would be modified as followed:
  - For Unit 1: the proposed modification would require a shutdown when two or more Unit 1 electrical power distribution subsystems are inoperable that result in a loss of function
  - For Unit 2: the proposed modification would require a shutdown when two or more electrical power distribution subsystems are inoperable that result in a loss of function.

1.2.1 Additional Proposed TS Changes that were not in TSTF-585

In addition to the changes proposed consistent with the traveler discussed in section 1.2, the licensee proposed the variations below.

1.2.1.1 *Editorial Variations*

The licensee noted that Susquehanna, Units 1 and 2, TSs have different numbering and nomenclature than standard technical specifications (STSs).

1.2.1.2 *Other Variations*

In its supplement dated September 15, 2026, the licensee proposed changes to address plant-specific variations by replacing explicit entries into LCO 3.0.3 with requirements to shut down the plant for the following in both the Susquehanna, Unit 1 and 2, TSs:

- TS 3.7.3, “Control Room Emergency Outside Air Supply (CREOAS) System,” would be modified to require shutdown when two CREOAS subsystems are inoperable in MODE 1, 2, or 3 for reasons other than when one or more CREOAS subsystems are inoperable due to inoperable control room envelope boundary.

2.0 REGULATORY EVALUATION

2.1 Applicable Regulatory Requirements and Guidance

The regulation under Title 10 of the *Code of Federal Regulations* (10 CFR) 50.36(b) requires that:

> Each license authorizing operation of a … utilization facility … will include technical specifications. The technical specifications will be derived from the analyses and evaluation included in the safety analysis report, and amendments thereto, submitted pursuant to [10 CFR] 50.34 [“Contents of applications; technical information”]. The Commission may include such additional technical specifications as the Commission finds appropriate.

The categories of items required to be in the TS are listed in 10 CFR 50.36(c). The regulation at 10 CFR 50.36(c)(2) requires that the TS include LCO. Per 10 CFR 50.36(c)(2)(i), LCO “are the lowest functional capability or performance levels of equipment required for safe operation of the facility.” The regulation also requires that when an LCO of a nuclear reactor is not met, the

licensee shall shut down the reactor or follow any remedial action permitted by the TS until the condition can be met.

LCO 3.0.3 implements 10 CFR 50.36(c)(2)(i) in that it requires a plant to shut down when an LCO is not met and: 1) there are no remedial actions provided in the TS, or 2) the remedial actions provided in the TS are not completed in the time allowed by the TS.

Paragraph (a)(4) of 10 CFR 50.65, "Requirements for monitoring the effectiveness of maintenance at nuclear power plants," (the Maintenance Rule) requires, in part, that:

> [b]efore performing maintenance activities (including but not limited to surveillance, post-maintenance testing, and corrective and preventive maintenance), the licensee shall assess and manage the increase in risk that may result from the proposed maintenance activities. The scope of the assessment may be limited to structures, systems, and components that a risk-informed evaluation process has shown to be significant to public health and safety.

NUMARC 93-01, "Industry Guideline for Monitoring the Effectiveness of Maintenance at Nuclear Power Plants," (ML18120A069) Section 11.0, "Assessment of Risk Resulting from Maintenance Activities," provides a methodology that is an acceptable approach to manage and assess risk associated with maintenance activities. This methodology has been endorsed by the NRC in Regulatory Guide (RG) 1.160, Revision 4, "Monitoring the Effectiveness of Maintenance at Nuclear Power Plants" (ML18220B281). TSTF-585 revised STS LCO 3.0.3 to require the assessment and management of risk using this NRC-endorsed methodology.

The NRC staff's guidance for the review of TS is in NUREG-0800, "Standard Review Plan for the Review of Safety Analysis Reports for Nuclear Power Plants: LWR [Light-Water Reactor] Edition" (SRP), Chapter 16, Section 16.0, "Technical Specifications," March 2010 (ML100351425). The NRC staff's review includes consideration of whether the proposed changes are consistent with the NUREG-1433, "Standard Technical Specifications, General Electric Plants, BWR/4," Volume 1, "Specifications," and Volume 2, "Bases," Revision 5, September 2021 (ML21272A357 and ML21272A358, respectively).

3.0 TECHNICAL EVALUATION

3.1 Proposed TS Changes to Adopt TSTF-585

The requirements and guidance the NRC staff used to determine the acceptability of the licensee's proposed changes are listed in section 2.1 of this SE. The NRC staff compared the licensee's proposed TS changes, summarized in section 1.2 of this SE, against the changes approved in TSTF-585. In accordance with SRP Chapter 16.0, the NRC staff determined that the STS changes approved in TSTF-585 are applicable to Susquehanna, Units 1 and 2, TSs because Susquehanna, Units 1 and 2, are General Electric boiling water reactor type 4 (BWR/4) designs and the NRC staff approved the TSTF-585 changes for that plant design. The NRC staff confirmed that there are no plant-specific design features that would affect the applicability of the proposed TSTF-585 changes to Susquehanna, Units 1 and 2.

TSTF-585 proposed a restructured STS LCO 3.0.3 by replacing the one-hour shutdown preparation time with a requirement to assess the risk and implement appropriate RMAs within six hours. Additionally, TSTF-585 revised or added some TS Required Actions to require a plant

shutdown instead of entry into STS LCO 3.0.3, based on whether the TS directs entry into STS LCO 3.0.3 or could result from an implicit entry into STS LCO 3.0.3. These changes were made in cases where immediate shutdown was more appropriate than the delayed shutdown allowed by the revised STS LCO 3.0.3. The NRC staff finds that the licensee's proposed changes to Susquehanna, Units 1 and 2, TSs in section 1.2 of this SE are consistent with those found acceptable in TSTF-585.

The licensee also confirmed that they will use NUMARC 93-01, "Industry Guideline for Monitoring the Effectiveness of Maintenance at Nuclear Power Plants," Section 11.0, "Assessment of Risk Resulting from Maintenance Activities," as their methodology to assess and manage risk when entering LCO 3.0.3. This methodology was endorsed by the NRC in RG 1.160, Revision 4, "Monitoring the Effectiveness of Maintenance at Nuclear Power Plants," and was found acceptable by the staff in the SE of TSTF-585 for assessing and managing risk when entering LCO 3.0.3.

In the NRC SE of TSTF-585, the NRC staff concluded that the proposed changes were acceptable because the proposed STS LCO 3.0.3 provides appropriate remedial actions in lieu of requiring an immediate shutdown. The proposed STS LCO 3.0.3 ensures that appropriate remedial actions are provided for the requested CT, of up to 24 hours, and the appropriate time for remedial actions are provided based on the risk assessment result. If the required systems are not restored to operable status within the specified CT, a shutdown is required. Therefore, the NRC staff found that the proposed changes to STS LCO 3.0.3 were acceptable because they continued to meet the requirements of 10 CFR 50.36(c)(2)(i) as discussed in section 3.0 of the NRC staff's SE of TSTF-585.

For these same reasons, the NRC staff concludes that the corresponding proposed changes to the Susquehanna, Units 1 and 2, TSs in section 1.2 of this SE continue to meet the requirements of 10 CFR 50.36(c)(2)(i).

3.2 Proposed TS Changes to Adopt TSTF-597

The regulatory framework the NRC staff used to determine the acceptability of the licensee's proposed changes consisted of the requirements and guidance listed in section 2.1 of this SE. The NRC staff compared the licensee's proposed TS changes summarized in section 1.1 of this SE against the changes approved in TSTF-597. In accordance with SRP Chapter 16.0, the NRC staff determined that the STS changes approved in TSTF-597 are applicable to Susquehanna, Units 1 and 2, TSs because Susquehanna, Units 1 and 2, are BWR/4 designs and the NRC staff approved the TSTF-597 changes for BWR designs. The NRC staff confirmed that there are no plant-specific design features that would affect the applicability of the proposed TSTF-597 changes to Susquehanna, Units 1 and 2.

TSTF-597 revised STS LCO 3.0.3 to remove the Mode 2 requirement. The NRC staff finds that the licensee's proposed changes to Susquehanna, Units 1 and 2, TSs summarized in section 1.1 of this SE are consistent with those found acceptable in TSTF-597.

In the NRC SE of TSTF-597, the NRC staff evaluated the BWR modes of operation, typical startup and shutdown operating procedures, and any potential impacts to safety that the removal of the Mode 2 requirement in STS LCO 3.0.3 would have. Additionally, the NRC staff evaluated other LCO to verify the proposed change would not cause conflicts, including LCO only applicable in Mode 1. As a result, the NRC staff concluded that the proposed changes to STS LCO 3.0.3 were acceptable because the requirement to enter Mode 2 in STS LCO 3.0.3

does not align with typical BWR shutdown procedures, and places unnecessary time pressure on licensees without a commensurate gain in safety. Therefore, the NRC staff found that the proposed changes to STS LCO 3.0.3 were acceptable because they would continue to meet 10 CFR 50.36(c)(2)(i) since the STS LCO 3.0.3 requirements would align with all other LCO on the times to reach Mode 3 and Mode 4 and in not requiring entry into Mode 2 while shutting down. For these same reasons, the NRC staff concludes that the corresponding proposed changes to the Susquehanna, Units 1 and 2, TSs summarized in section 1.1 of this SE are acceptable and continue to meet the requirements of 10 CFR 50.36(c)(2)(i).

3.3 Additional Proposed Changes

In addition to the changes proposed consistent with TSTF-585 discussed in section 1.2, the licensee proposed the variations below.

3.3.1 Editorial Variations

The LAR noted that the Susquehanna, Units 1 and 2, TSs have different numbering and nomenclature than STS. The NRC staff finds that the different TS numbering and nomenclature changes proposed in the LAR are acceptable because they do not substantively alter TS requirements.

3.3.2 Other Variations

Section 1.2.1.2 of this SE shows the technical changes proposed in the LAR that were not included in TSTF-585. The NRC staff reviewed each of the proposed variations and determined that each would add an immediate shutdown requirement in lieu of entry into LCO 3.0.3. These proposed variations are more conservative than entry into the proposed LCO 3.0.3 and are essentially equivalent to their current requirements (without the one hour to prepare for shutdown). Therefore, they are acceptable.

3.4 TS Change Consistency

The NRC staff reviewed the proposed TS changes for technical clarity and consistency with the existing requirements for customary terminology and formatting. The NRC staff finds that the proposed changes are consistent with chapter 16.0 of the SRP and are therefore acceptable.

4.0 STATE CONSULTATION

In accordance with the Commission’s regulations, on October 20, 2026, the NRC staff notified the Commonwealth of Pennsylvania official of the proposed issuance of the amendment. The Commonwealth official had no comments.

5.0 ENVIRONMENTAL CONSIDERATION

These amendments relate to authorizations under, or changes to requirements in 10 CFR Part 50 with respect to installation or use of a facility component. The NRC staff has determined that any ground disturbance is limited to previously disturbed areas. Additionally, the NRC staff has determined that the action involves no significant change in the types or significant increase in the amounts of any effluents that may be released offsite, no significant increase in individual or cumulative public or occupational radiation exposure, and no significant increase in the potential for or consequences from radiological accidents. Finally, the NRC staff

has determined that a categorical exclusion applies and that special circumstances under 10 CFR 51.22, “Categorical exclusions,” are not present that would preclude reliance on the categorical exclusion. Accordingly, this action meets the eligibility criteria for categorical exclusion set forth in 10 CFR 51.22(d)(8). Pursuant to 10 CFR 51.22, no environmental impact statement or environmental assessment need be prepared in connection with the action.

6.0 CONCLUSION

The Commission has concluded, based on the considerations discussed above, that: (1) there is reasonable assurance that the health and safety of the public will not be endangered by operation in the proposed manner, (2) there is reasonable assurance that such activities will be conducted in compliance with the Commission’s regulations, and (3) the issuance of the amendment will not be inimical to the common defense and security or to the health and safety of the public.

Date: November 17, 2026

SUBJECT: SUSQUEHANNA STEAM ELECTRIC STATION, UNITS 1 AND 2 - ISSUANCE OF AMENDMENT NOS. 294 AND 278 RE: ADOPTION OF TSTF-585, "REVISE LCO 3.0.3 TO REQUIRE MANAGING RISK" AND TSTF-597, "ELIMINATE LCO 3.0.3 MODE 2 REQUIREMENTS" (EPID L-2026-LLA-0151) DATED NOVEMBER 17, 2026

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