



March 5, 2024
L-2024-035
10 CFR 50.90
10 CFR 50.91(a)(5)

U. S. Nuclear Regulatory Commission
Attn: Document Control Desk
Washington DC 20555-0001

RE: Seabrook Station
Docket No. 50-443
Renewed Facility Operating License No. NPF-86

Supplement to Seabrook Emergency License Amendment Request - One Time Extension to Technical Specifications (TS) 3/4.8.1 Action a.3 Allowed Outage Time for an Inoperable Offsite Source

References:

1. NextEra Energy Seabrook, LLC, letter L-2024-032, Emergency License Amendment Request – One Time Extension to Technical Specifications (TS) 3/4.8.1 Action a.3 Allowed Outage Time for an Inoperable Offsite Source, March 4, 2024 (ADAMS Accession No. ML24064A247)
2. NextEra Energy Seabrook, LLC, letter L-2024-033, Request for Enforcement Discretion - Technical Specification (TS) 3/4.8.1.1 "AC. Sources" Required Action Completion Time to Replace "ED-X-3-B", March 4, 2024 (ADAMS Accession No. ML24064A077)

In Reference 1, NextEra Energy Seabrook, LLC (NextEra) requested pursuant to 10 CFR 50.90 and 10 CFR 50.91(a)(5), an emergency amendment to Renewed Facility Operating License NPF-86 for Seabrook Nuclear Plant Unit 1 (Seabrook). The proposed change would modify on a one-time basis, the Allowed Outage Times (AOTs) associated with Seabrook Technical Specifications (TS) 3/4.8.1, "A.C. Sources - Operating" for an inoperable offsite power source. The proposed change is necessary to support the timely replacement of the 3B Reserve Auxiliary Transformer and restoration to operability. In Reference 2, NextEra requested approval for enforcement discretion from TS 3/4.8.1.1 in accordance with NRC Enforcement Manual, Appendix F, "Notices of Enforcement Discretion." On March 3, 2024, the NRC granted verbal approval of NextEra's enforcement discretion request.

On March 5, 2024, during a clarification call with the Nuclear Regulatory Commission (NRC) staff regarding the Reference 1 application, supplemental information was proposed which would clarify the application. The enclosure to this letter provides NextEra's supplement to the emergency license amendment request.

The information included in this supplement provides additional information that clarifies the application, does not expand the scope of the application, and does not change the no significant hazards consideration determination as submitted in the original application (Reference 1).

Should you have any questions regarding this submission, please contact Mr. Kenneth Mack, Licensing Manager at (561) 904-3635.

I declare under penalty of perjury that the foregoing is true and correct.

Executed on the 5th day of March 2024.

Sincerely,

A handwritten signature in black ink, appearing to read "Steve Catron".

Steve Catron
Licensing and Regulatory Compliance Director - Nuclear Fleet

Enclosure

cc: USNRC Region I Administrator
USNRC Project Manager
USNRC Senior Resident Inspector

Director Homeland Security and Emergency Management
New Hampshire Department of Safety
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Supplement to Seabrook Emergency License Amendment Request - One Time Extension to
Technical Specifications (TS) 3/4.8.1 Action a.3 Allowed Outage Time
for an Inoperable Offsite Source

In Reference 1 (below), NextEra Energy Seabrook, LLC (NextEra) requested pursuant to 10 CFR 50.90 and 10 CFR 50.91(a)(5), an emergency amendment to Renewed Facility Operating License NPF-86 for Seabrook Nuclear Plant Unit 1 (Seabrook). The proposed change would modify on a one-time basis, the Allowed Outage Times (AOTs) associated with Seabrook Technical Specifications (TS) 3/4.8.1, "A.C. Sources - Operating", for an inoperable offsite power source.

On March 5, 2024, during a clarification call with the Nuclear Regulatory Commission (NRC) staff, supplemental information was proposed which serves to clarify the emergency license amendment request application. The information below is provided to supplement the Reference 1 application.

Notice of Enforcement Discretion approval

In Reference 2, NextEra requested approval for enforcement discretion from TS 3/4.8.1.1 in accordance with NRC Enforcement Manual, Appendix F, "Notices of Enforcement Discretion." On March 3, 2024, the NRC granted verbal approval of NextEra's enforcement discretion request.

Revised TS Action footnotes

NextEra is modifying the TS markup pages provided in Reference 1 by modifying the footnotes applicable to TS 3/4.8.1, Actions a.3, c.3, and e.3, to clarify that the requested AOT extensions will expire on March 31st. The revised footnotes are as provided below and included in the revised TS markup pages provided in the attachment to this supplement.

- Action a.3 footnote (revised)

** A one-time Allowable Outage Time (AOT) extension for an inoperable offsite circuit allows 30 days to restore the inoperable 3B Reserve Auxiliary Transformer to OPERABLE status. Compensatory measures within NextEra Energy Seabrook, LLC letter L-2024-032 dated March 4, 2024, shall be implemented and shall remain in effect during the extended AOT period. The one-time AOT extension shall expire upon completion of the maintenance to restore the 3B Reserve Auxiliary Transformer to OPERABLE status or by 0542 on March 31, 2024, whichever occurs earliest.*

- Action c.3 footnote (revised)

*** A one-time Allowable Outage Time (AOT) extension for an inoperable offsite circuit and diesel generator allows 30 days to restore the inoperable 3B Reserve Auxiliary Transformer to OPERABLE status. Compensatory measures within NextEra Energy Seabrook, LLC letter L-2024-032 dated March 4, 2024, shall be implemented and shall remain in effect during the extended AOT period. The one-time AOT extension shall expire upon completion of the maintenance to restore the 3B Reserve Auxiliary Transformer to OPERABLE status or by 0542 on March 31, 2024, whichever occurs earliest.*

- Action e.3 footnote (revised)

** A one-time Allowable Outage Time (AOT) extension for two inoperable offsite circuits allows 30 days to restore one inoperable 3B Reserve Auxiliary Transformer to OPERABLE status. Compensatory measures within NextEra Energy Seabrook, LLC letter L-2024-032 dated March 4, 2024, shall be implemented and shall remain in effect during the extended AOT period. The one-time AOT extension shall expire upon completion of the maintenance to restore the 3B Reserve Auxiliary Transformer to OPERABLE status or by 0542 on March 31, 2024, whichever occurs earliest.*

Supplemental Emergency Power Source (SEPS)

Branch Technical Position (BTP) 8-8, "Onsite (Emergency Diesel Generators) and Offsite Power Sources Allowed Outage Time Extensions," states that the Electrical Engineering Branch (EEB) staff evaluates AOT extension requests for onsite or offsite power sources to allow on-line maintenance on EDGs that would normally be performed during refueling outages or maintenance of offsite power source(s) such as a transformer or bus. The Seabrook Emergency LAR is concerned with extending the AOT for an offsite circuit due to failure of the 3B Reserve Auxiliary Transformer.

To clarify, the BTP 8-8 guidance specific to Alternate AC (AAC) sources or supplemental power sources are not applicable to the Reference 1 application beyond demonstrating defense-in-depth to power the emergency AC buses. SEPS is a permanently installed AC source which is verified to be available per Technical Requirement (TR) 31 of the Seabrook Technical Requirements Manual (TRM), which requires an operational readiness status check. The operational readiness status check consists of: (1) verifying the SEPS is operationally ready for automatic start and energization of the selected emergency bus; (2) verifying 24-hour onsite fuel supply; and (3) verifying alignment to the selected 4160 volt emergency bus and associated 480 volt bus.

Each of the two SEPS Generators has a capacity of 2700 kW per unit, for a combined total of 5400 kW. Therefore, the SEPS Generators have sufficient capacity to power the connected loads. The total fuel consumption required by SEPS to reach 200 degrees Fahrenheit is 8675.8 gallons. Each SEPS generator has a fuel tank containing 6085 gallons for a total of 12170 gallons available storage. Procedural requirements include a minimum of 4775 gallons of fuel per engine, for a total on hand supply of 9550 gallons. Therefore, sufficient fuel is available to achieve 200 degrees Fahrenheit, even at the minimum allowable fuel level.

Based on the above information, SEPS has the capacity (including the required fuel oil) to bring the unit to cold shutdown in the event of a LOOP concurrent with a failure of EDG A, while EDG B is unavailable.

The SEPS does not automatically connect to either emergency bus during a LOOP. Were an EDG not available during a LOOP event, control room operators would respond using plant procedures to re-energize the emergency bus utilizing SEPS by closing the SEPS feeder breaker from the Main Control Board (MCB) to repower the affected emergency bus. The Emergency Power Sequencer would sequence loads onto the emergency bus. In this scenario, the approximate time to repower the affected emergency buses by SEPS would be 5 - 15 minutes. This task is not an assigned Time Critical Task or a Time Sensitive Task, and timing runs have not been performed for the purpose of establishing an expected response time.

Repair Schedule

As of March 5, 2024, below is the repair schedule for the 3B Reserve Auxiliary Transformer. As can be seen, completion is planned by March 21, 2024 at 1400 hours. Additional time is requested not to exceed March 31, 2024, to support unanticipated challenges including weather, material availability and unforeseen challenges during the repair.

Milestones	BASELINE FINISH
(MECH) Remove FP Deluge Piping	3/2 1800
(MECH) Drain Transformer Oil	3/3 0700
(ELEC) Establish Conditions for Opening Manway	3/3 1100
(ELEC) Internal Visual Inspections	3/3 1300
(ELEC) Degas A&C SF6 bus duct	3/4/0400

(ELEC) Remove manways and disconnect HV links	3/4 2200
(MECH) Rig and Remove "C" 345kV Transition Duct	3/4 2000
(MECH) Rig and Remove "B" 345kV Transition Duct	3/4 2200
(MECH) Rig and Remove "A" 345kV Transition Duct Work	3/5 0000
(ELEC) Install 345kv end plates	3/5 1400
(ELEC) Disconnect non-Segregated Duct Bus	3/4 1100
(MECH) Rig and Remove A/B/C High-Hats	3/5 1800
(PROJ) Remove OLD Transformer	3/9 0000
(PROJ) Install NEW Transformer	3/10 1200
(ELEC) Reinstall Auxiliaries	3/11 1200
(ELEC) Pull Vacuum on Ductwork	3/15 1400
(ELEC) Fill Ductwork with SF6	3/16 0200
(ELEC) HiPot Testing	3/16 0800
(ELEC) Degas SF6	3/16 2000
(ELEC) Purge with Nitrogen	3/16 2200
(ELEC) Pull Vacuum on Ductwork	3/19 0200
(ELEC) Fill Ductwork with SF6	3/19 1400
(ELEC) Post-Install Testing	3/21 1400

References:

1. NextEra Energy Seabrook, LLC, letter L-2024-032, Emergency License Amendment Request – One Time Extension to Technical Specifications (TS) 3/4.8.1 Action a.3 Allowed Outage Time for an Inoperable Offsite Source, March 4, 2024 (ADAMS Accession No. ML24064A247)
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REVISED TECHNICAL SPECIFICATION PAGES (MARKUP)

(7 pages follow)

3/4.8 ELECTRICAL POWER SYSTEMS

3/4.8.1 A.C. SOURCES

OPERATING

LIMITING CONDITION FOR OPERATION

3.8.1.1 As a minimum, the following A.C. electrical power sources shall be OPERABLE:

- a. Two physically independent circuits between the offsite transmission network and the onsite Class 1E Distribution System, and
- b. Two separate and independent diesel generators, each with:
 - 1) A separate day fuel tank containing a minimum fuel volume fraction of 3/8 (600 gallons),
 - 2) A separate Fuel Storage System containing a minimum volume of 62,000 gallons of fuel,
 - 3) A separate fuel transfer pump,
 - 4) Lubricating oil storage containing a minimum total volume of 275 gallons of lubricating oil, and
 - 5) Capability to transfer lubricating oil from storage to the diesel generator unit.

APPLICABILITY: MODES 1, 2, 3, and 4.

ACTION:

-----NOTE-----
LCO 3.0.4.b is not applicable to the diesel generators.

- a. With an offsite circuit of the above required A.C. electrical power sources inoperable:
 - 1. Perform Surveillance Requirement 4.8.1.1.1.a for the OPERABLE offsite circuit within 1 hour and at least once per 8 hours thereafter;
 - 2. Within 24 hours from discovery of no offsite power to one train concurrent with inoperability of redundant required feature(s), declare required feature(s) with no offsite power available inoperable when its redundant required feature(s) is inoperable; and
 - 3. Restore at least two offsite circuits to OPERABLE status within 72 hours or be in at least HOT STANDBY within the next 6 hours and in COLD SHUTDOWN within the following 30 hours.

Add new footnote denoted by asterisk (*)

Add asterisk

* A one-time Allowable Outage Time (AOT) extension for an inoperable offsite circuit allows 30 days to restore the inoperable 3B Reserve Auxiliary Transformer to OPERABLE status. Compensatory measures within NextEra Energy Seabrook, LLC letter L-2024-032 dated March 4, 2024, shall be implemented and shall remain in effect during the extended AOT period. The one-time AOT extension shall expire upon completion of the maintenance to restore the 3B Reserve Auxiliary Transformer to OPERABLE status or by 0542 on March 31, 2024, whichever occurs earliest.

ELECTRICAL POWER SYSTEMS

A.C. SOURCES

OPERATING

LIMITING CONDITION FOR OPERATION

3.8.1.1 (Continued)

ACTION:

- b. With a diesel generator inoperable:
- 1) Demonstrate the OPERABILITY of the remaining A.C. sources by performing Specification 4.8.1.1.1a within 1 hour and at least once per 8 hours thereafter. Perform ACTION d. Demonstrate the OPERABILITY of the remaining diesel generator by performing Specification 4.8.1.1.2a.5) within 24 hours.*
 - 2) Restore at least two diesel generators to OPERABLE status within 72 hours or be in at least HOT STANDBY within the next 6 hours and in COLD SHUTDOWN within the following 30 hours, unless the following condition exists:
 - (a) The requirement for restoration of the diesel generator to OPERABLE status within 72 hours may be extended to 14** days if the Supplemental Emergency Power System (SEPS) is available, as specified in the Bases, and
 - (b) If at any time the SEPS availability cannot be met, either restore the SEPS to available status within 72 hours (not to exceed 14 days from the time the diesel generator originally became inoperable), or be in at least HOT STANDBY within the next 6 hours and in COLD SHUTDOWN within the following 30 hours.

Remove double-asterisk (**)

* The OPERABILITY of the remaining diesel generator need not be verified if it has been successfully operated within the last 24 hours, or if currently operating, or if the diesel generator became inoperable due to:

1. Preplanned preventive maintenance or testing,
2. An inoperable support system with no potential common mode failure for the remaining diesel generator, or
3. An independently testable component with no potential common mode failure for the remaining diesel generator.

Remove

**A one-time allowed outage time (AOT) extension for an inoperable diesel generator allows 30 days to restore the associated diesel generator to OPERABLE status. Compensatory measures within NEE Letters SBK-L-20068 dated July 13, 2020, and SBK-L-20117 dated September 23, 2020, will remain in effect during the extended AOT period. The one-time AOT extension shall expire upon completion of the maintenance or 90 days after the issuance of the amendment, whichever comes first. In addition, SEPS availability will be checked prior to entering the 30-day extended AOT, and subsequently once per shift during the 30-day extended AOT. If SEPS becomes unavailable any time during the extended AOT, restore SEPS to available within 24 hours or be in at least HOT STANDBY within the next 6 hours and in COLD SHUTDOWN within the following 30 hours. This 24-hour period will be allowed only once within any given extended EDG AOT.

ELECTRICAL POWER SYSTEMS

A.C. SOURCES

OPERATING

LIMITING CONDITION FOR OPERATION

3.8.1.1 (Continued)

ACTION:

-----NOTE-----

Enter applicable ACTIONS of LCO 3.8.3.1, "Onsite Power Distribution – Operating," when ACTION c is entered with no AC power to any train.

c. With one offsite circuit and one diesel generator of the above required A.C. electrical power sources inoperable:

1) Demonstrate the OPERABILITY of the remaining A.C. source by performing Specification 4.8.1.1.1a. within 1 hour and at least once per 8 hours thereafter. Perform ACTION d. Demonstrate the OPERABILITY of the remaining diesel generator by performing Specification 4.8.1.1.2a.5) within 8 hours.*

2) Restore at least one of the inoperable sources to OPERABLE status within 12 hours or be in at least HOT STANDBY within the next 6 hours and in COLD SHUTDOWN within the following 30 hours.

Add double asterisk (**)

3) Restore at least two offsite circuits and two diesel generators to OPERABLE status within 72 hours from the time of initial loss or be in at least HOT STANDBY within the next 6 hours and in COLD SHUTDOWN within the following 30 hours, unless the following condition exists:

(a) The requirement for restoration of the diesel generators to OPERABLE status within 72 hours may be extended to 14 days if the Supplemental emergency Power System (SEPS) is available, as specified in the Bases, and

(b) If at any time the SEPS availability cannot be met, either restore the SEPS to available status within 72 hours (not to exceed 14 days from the time the diesel generator originally became inoperable), or be in at least HOT STANDBY within the next 6 hours and in COLD SHUTDOWN within the following 30 hours.

Add new footnote denoted by double asterisk (**)

* The OPERABILITY of the remaining diesel generator need not be verified if it has been successfully operated within the last 24 hours, or if currently operating, or if the diesel generator became inoperable due to:

1. Planned preventive maintenance or testing,
2. An inoperable support system with no potential common mode failure for the remaining diesel generator, or
3. An independently testable component with no potential common mode failure for the remaining diesel generator.

**** A one-time Allowable Outage Time (AOT) extension for an inoperable offsite circuit and diesel generator allows 30 days to restore the inoperable 3B Reserve Auxiliary Transformer to OPERABLE status. Compensatory measures within NextEra Energy Seabrook, LLC letter L-2024-032 dated March 4, 2024, shall be implemented and shall remain in effect during the extended AOT period. The one-time AOT extension shall expire upon completion of the maintenance to restore the 3B Reserve Auxiliary Transformer to OPERABLE status or by 0542 on March 31, 2024, whichever occurs earliest.**

ELECTRICAL POWER SYSTEMS
A.C. SOURCES
OPERATING
LIMITING CONDITION FOR OPERATION

3.8.1.1 (Continued)

ACTION:

- d. With one diesel generator inoperable in addition to ACTION b. or c. above, verify that:
1. All required systems, subsystems, trains, components, and devices that depend on the remaining OPERABLE diesel generator as a source of emergency power are also OPERABLE, and
 2. When in MODE 1, 2, or 3, the steam-driven emergency feedwater pump is OPERABLE.

If these conditions are not satisfied within 4 hours be in at least HOT STANDBY within the next 6 hours and in COLD SHUTDOWN within the following 30 hours.

- e. With two of the above required offsite A.C. circuits inoperable Add astrisk
1. Within 12 hours from discovery of two offsite circuits inoperable concurrent with inoperability of redundant required feature(s), declare required feature(s) inoperable when its redundant required feature(s) is inoperable;
 2. Restore at least one of the inoperable offsite sources to OPERABLE status within 24 hours or be in at least HOT STANDBY within the next 6 hours.
 3. With only one offsite source restored, restore at least two offsite circuits to OPERABLE status within 72 hours from time of initial loss or be in at least HOT STANDBY within the next 6 hours and in COLD SHUTDOWN within the following 30 hours.

- f. With two of the above required diesel generators inoperable:
- 1) Demonstrate the OPERABILITY of two offsite A.C. circuits by performing Specification 4.8.1.1.1a. within 1 hour and at least once per 8 hours thereafter.
 - 2) Restore at least one diesel generator to OPERABLE status within 2 hours or be in at least HOT STANDBY within the next 6 hours and in COLD SHUTDOWN within the following 30 hours,
 - 3) Restore at least two diesel generators to OPERABLE status within 72 hours from the time of initial loss or be in at least HOT STANDBY within the next 6 hours and in COLD SHUTDOWN within the following 30 hours, unless the following condition exists:

(a) The requirement for restoration of the diesel generators to OPERABLE status within 72 hours may be extended to 14 days if the Supplemental Emergency Power System (SEPS) is available, as specified in the Bases, and

(b) If at any time the SEPS availability cannot be met, either restore the SEPS to available status within 72 hours (not to exceed 14 days from the time the diesel generator originally became inoperable), or be in at least HOT STANDBY within the next 6 hours and in COLD SHUTDOWN within the following 30 hours.

Add new footnote denoted by asterisk (*)

* A one-time Allowable Outage Time (AOT) extension for two inoperable offsite circuits allows 30 days to restore one inoperable 3B Reserve Auxiliary Transformer to OPERABLE status. Compensatory measures within NextEra Energy Seabrook, LLC letter L-2024-032 dated March 4, 2024, shall be implemented and shall remain in effect during the extended AOT period. The one-time AOT extension shall expire upon completion of the maintenance to restore the 3B Reserve Auxiliary Transformer to OPERABLE status or by 0542 on March 31, 2024, whichever occurs earliest.