



May 21, 2015

L-2015-158
10 CFR 50.90

U.S. Nuclear Regulatory Commission
Document Control Desk
Washington, D.C. 20555-0001

Re: St. Lucie Units 1 and 2
Dockets Nos. 50-335 and 50-389
Response to Requests for Additional Information (RAIs) Regarding License
Amendment Request to Adopt TSTF-426, "Revise or Add Actions to Preclude Entry
into LCO 3.0.3 - RITSTF Initiatives 6b & 6c" (MF4631 and MF4632)

References:

1. FPL letter L-2014-160 dated August 7, 2014: St. Lucie Plant - Application to Revise Technical Specifications to Adopt TSTF-426, "Revise or Add Actions to Preclude Entry into LCO 3.0.3 - RITSTF Initiatives 6b & 6c," Using the Consolidated Line Item Improvement Process [ML14225A630]
2. FPL letter L-2015-034 dated February 20, 2015: Response to Requests for Additional Information (RAIs) Regarding License Amendment Request to Adopt TSTF-426, "Revise or Add Actions to Preclude Entry into LCO 3.0.3 - RITSTF Initiatives 6b & 6c" (MF4631 and MF4632) [ML15065A235]
3. NRC letter dated May 1, 2015: Request for Additional Information - Unit 1 - Docket Number 50-335 and Unit 2 - Docket Number 50-389, Adoption of TSTF-426, Revision 5, "Revise or Add Actions to Preclude Entry into LCO 3.0.3 - RITSTF Initiatives 6b & 6c"

Per Reference 1 above, Florida Power & Light Company (FPL) requested an amendment to the Renewed Facility Operating Licenses for St. Lucie Unit 1 and Unit 2. The license amendment request (LAR) would modify the St. Lucie Unit 1 and Unit 2 Technical Specifications to provide a short Allowed Outage Time to restore an inoperable system for conditions under which the existing technical specifications (TS) require a plant shutdown, consistent with TSTF-426, Revision 5, "Revise or Add Actions to Preclude Entry into LCO 3.0.3 - RITSTF Initiatives 6b & 6c." This LAR was supplemented by letter dated February 20, 2015 (Reference 2).

By letter dated May 1, 2015 (Reference 3), NRC staff requested additional information regarding the LAR. The enclosure explains the editorial corrections that address the requests for additional information (RAIs). TS markups and revised TS pages for Unit 1 and Unit 2 are provided in Attachments 1 and 2 and Attachments 3 and 4, respectively. A review of the corresponding TS Bases revealed a need for editorial corrections to the existing text in the Unit 1 and Unit 2 TS Bases as well. These changes are presented in Attachments 5 and 6 for information only.

These editorial corrections to the TS markups do not alter the conclusion in Reference 1 that the proposed changes do not involve a significant hazards consideration.

ADDI
NRC

This letter makes no new commitments and does not modify any existing commitments.

Should you have any questions regarding this submittal, please contact Mr. Eric Katzman, Licensing Manager, at (772) 467-7734.

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

Executed on May 21st, 2015.

Respectfully submitted,



Christopher R. Costanzo
Site Vice President
St. Lucie Nuclear Plant

Enclosure: St. Lucie Units 1 and 2 TSTF-426 LAR RAI Response

- Attachments:
1. Unit 1 Technical Specifications Markup
 2. Unit 1 Revised Technical Specifications Page
 3. Unit 2 Technical Specifications Markup
 4. Unit 2 Revised Technical Specifications Page
 5. Unit 1 Technical Specifications Bases Markup (for information only)
 6. Unit 2 Technical Specifications Bases Markup (for information only)

cc: USNRC Regional Administrator, Region II
USNRC Senior Resident Inspector, St. Lucie Units 1 and 2
USNRC Project Manager, St. Lucie Units 1 and 2
Ms. Cindy Becker, Florida Department of Health

Enclosure
St. Lucie Units 1 and 2 TSTF-426 LAR RAI Response

Response to Requests for Additional Information (RAIs) Regarding License Amendment
Request to Adopt TSTF-426, "Revise or Add Actions to Preclude Entry Into LCO 3.0.3 -
RITSTF Initiatives 6b & 6c" (MF4631 and MF4632)

RAI 1
RAI 2

During review of the proposed changes to Limiting Condition for Operation (LCO) 3.6.2.1 for Unit 2 the staff has determined that additional information is required. The following requests for additional information (RAI) have been developed by the staff:

RAI 1

The proposed Action d. of LCO 3.6.2.1, Depressurization and Cooling Systems – Containment Spray and Cooling Systems for Unit 2 differs from the current TS and differs between Units 1 and 2 in a way that is not explained in the application. Proposed Action d. would apply for two containment spray trains out of service. The new unit 2 Action d. proposes "... be in MODE 3 within the next 6 hours and in MODE 4 within the following 12 hours." Current Action e. would apply in for two CS trains out of service which requires immediate entry into LCO 3.0.3. LCO 3.0.3 requires the unit to be in HOT STANDBY (MODE 3) within 6 hours and at least HOT SHUTDOWN (MODE 4) within the following 6 hours. The corresponding time to achieve MODE 4 in the equivalent change for unit 1 is 6 hours. Please explain the difference or submit additional justification for the extension of the time to achieve MODE 4 to 12 hours.

RESPONSE

The proposed change for Unit 2 LCO 3.6.2.1 Action d contains a typographical error. The time to achieve Mode 4 should be 6 hours instead of 12 hours. The correction to Unit 2 LCO 3.6.2.1 is shown in Attachments 3 and 4. In addition, corrections to the Unit 1 and Unit 2 LCO 3.6.2.1 Bases are provided in Attachments 5 and 6, respectively.

RAI 2

Unit 1's proposed insert 5 for LCO 3.7.7 proposes new ACTIONS e and f; however, there was already an ACTION e in amendment 205. The submittal does not disposition this pre-existing ACTION. Please submit revised sheet(s) showing the new ACTIONS e and f that include a renumbered ACTION g (formerly e).

RESPONSE

The change to existing Unit 1 LCO 3.7.7 Action e was inadvertently omitted from the submittal. The correction for Unit 1 LCO 3.7.7 Action e to Action g is provided in Attachments 1 and 2.

Attachment 1
Unit 1 Technical Specifications Markup

ACTION: (continued)

MODES 1, 2, 3 and 4: (continued)

- ge. With the filter train inoperable due to an inoperable Control Room Envelope boundary:
1. Immediately initiate actions to implement mitigating actions, and
 2. Within 24 hours, verify mitigating actions to ensure Control Room Envelope occupant exposures to radiological, chemical, and smoke hazards will not exceed limits, and
 3. Restore Control Room Envelope boundary to OPERABLE status within 90 days.

With the above requirements not met, be in at least HOT STANDBY within the next 6 hours and in COLD SHUTDOWN within the following 30 hours.

Attachment 2
Unit 1 Revised Technical Specifications Page

ACTION: (continued)

MODES 1, 2, 3 and 4: (continued)

- g. With the filter train inoperable due to an inoperable Control Room Envelope boundary:
 - 1. Immediately initiate actions to implement mitigating actions, and
 - 2. Within 24 hours, verify mitigating actions to ensure Control Room Envelope occupant exposures to radiological, chemical, and smoke hazards will not exceed limits, and
 - 3. Restore Control Room Envelope boundary to OPERABLE status within 90 days.

With the above requirements not met, be in at least HOT STANDBY within the next 6 hours and in COLD SHUTDOWN within the following 30 hours.

Attachment 3
Unit 2 Technical Specifications Markup

3/4.6.2 DEPRESSURIZATION AND COOLING SYSTEMS

CONTAINMENT SPRAY AND COOLING SYSTEMS

LIMITING CONDITION FOR OPERATION

3.6.2.1 Two containment spray trains and two containment cooling trains shall be OPERABLE.

APPLICABILITY: Containment Spray System: MODES 1, 2, and MODE 3 with Pressurizer Pressure \geq 1750 psia.

Containment Cooling System: MODES 1, 2, and 3.

ACTION:

1. Modes 1, 2, and 3 with Pressurizer Pressure \geq 1750 psia:

 - a. With one containment spray train inoperable, restore the inoperable spray train to OPERABLE status within 72 hours and within 10 days from initial discovery of failure to meet the LCO; otherwise be in MODE 3 within the next 6 hours and in MODE 4 within the following 54 hours.
 - b. With one containment cooling train inoperable, restore the inoperable cooling train to OPERABLE status within 7 days and within 10 days from initial discovery of failure to meet the LCO; otherwise be in MODE 3 within the next 6 hours and in MODE 4 within the following 6 hours.
 - c. With one containment spray train and one containment cooling train inoperable, concurrently implement ACTIONS a. and b. The completion intervals for ACTION a. and ACTION b. shall be tracked separately for each train starting from the time each train was discovered inoperable.
 - ed. With two containment cooling trains inoperable, restore one cooling train to OPERABLE status within 72 hours; otherwise be in MODE 3 within the next 6 hours and in MODE 4 within the following 6 hours.
 - fe. With ~~two containment spray trains inoperable~~ or any combination of three or more trains inoperable, enter LCO 3.0.3/ immediately.

2. Mode 3 with Pressurizer Pressure $<$ 1750 psia:

 - a. With one containment cooling train inoperable, restore the inoperable cooling train to OPERABLE status within 72 hours; otherwise be in MODE 4 within the next 6 hours.
 - b. With two containment cooling trains inoperable, enter LCO 3.0.3 immediately

INSERT 3 

Insert 3

NOTE

Not applicable when second containment spray train intentionally made inoperable.

- d. With two containment spray trains inoperable, within 1 hour verify TS 3.7.7, "CREACS," is met and restore at least one containment spray train to OPERABLE status within 24 hours; otherwise, be in MODE 3 within the next 6 hours and in MODE 4 within the following 6 hours.

Attachment 4
Unit 2 Revised Technical Specifications Page

3/4.6.2 DEPRESSURIZATION AND COOLING SYSTEMS

CONTAINMENT SPRAY AND COOLING SYSTEMS

LIMITING CONDITION FOR OPERATION

3.6.2.1 Two containment spray trains and two containment cooling trains shall be OPERABLE.

APPLICABILITY: Containment Spray System: MODES 1, 2, and MODE 3 with Pressurizer Pressure \geq 1750 psia.
Containment Cooling System: MODES 1, 2, and 3.

ACTION:

1. Modes 1, 2, and 3 with Pressurizer Pressure \geq 1750 psia:
 - a. With one containment spray train inoperable, restore the inoperable spray train to OPERABLE status within 72 hours and within 10 days from initial discovery of failure to meet the LCO; otherwise be in MODE 3 within the next 6 hours and in MODE 4 within the following 54 hours.
 - b. With one containment cooling train inoperable, restore the inoperable cooling train to OPERABLE status within 7 days and within 10 days from initial discovery of failure to meet the LCO; otherwise be in MODE 3 within the next 6 hours and in MODE 4 within the following 6 hours.
 - c. With one containment spray train and one containment cooling train inoperable, concurrently implement ACTIONS a. and b. The completion intervals for ACTION a. and ACTION b. shall be tracked separately for each train starting from the time each train was discovered inoperable.

NOTE

Not applicable when second containment spray train intentionally made inoperable.

- d. With two containment spray trains inoperable, within 1 hour verify TS 3.7.7, "CREACS," is met and restore at least one containment spray train to OPERABLE status within 24 hours; otherwise, be in MODE 3 within the next 6 hours and in MODE 4 within the following 6 hours.
 - e. With two containment cooling trains inoperable, restore one cooling train to OPERABLE status within 72 hours; otherwise be in MODE 3 within the next 6 hours and in MODE 4 within the following 6 hours.
 - f. With two containment spray trains inoperable or any combination of three or more trains inoperable, enter LCO 3.0.3. immediately.
2. Mode 3 with Pressurizer Pressure $<$ 1750 psia:
 - a. With one containment cooling train inoperable, restore the inoperable cooling train to OPERABLE status within 72 hours; otherwise be in MODE 4 within the next 6 hours.
 - b. With two containment cooling trains inoperable, enter LCO 3.0.3 immediately.

Attachment 5
Unit 1 Technical Specifications Bases Markup

SECTION NO.: 3/4.6	TITLE: TECHNICAL SPECIFICATIONS BASES ATTACHMENT 8 OF ADM-25.04 CONTAINMENT SYSTEMS ST. LUCIE UNIT 1	PAGE: 5 of 10
REVISION NO.: 9		

3/4.6 CONTAINMENT SYSTEMS (continued)

BASES (continued)

3/4.6.2 DEPRESSURIZATION AND COOLING SYSTEMS

3/4.6.2.1 CONTAINMENT SPRAY AND COOLING SYSTEMS

The OPERABILITY of the containment spray and cooling systems ensures that depressurization and cooling capability will be available to limit post-accident pressure and temperature in the containment to acceptable values. During a Design Basis Accident (DBA), at least one containment cooling train and one containment spray train are capable of maintaining the peak pressure and temperature within design limits. One containment spray train has the capability, in conjunction with the Spray Additive System, to remove iodine from the containment atmosphere and maintain concentrations below those assumed in the safety analyses. To ensure that these conditions can be met considering single-failure criteria, two spray trains and two cooling trains must be OPERABLE.

The 72-hour action interval specified in ACTION 1.a and ACTION 1.ed, and the 7-day action interval specified in ACTION 1.b take into account the redundant heat removal capability and the iodine removal capability of the remaining operable systems, and the low probability of a DBA occurring during this period. The 10-day constraint for ACTIONS 1.a and 1.b is based on coincident entry into two ACTION conditions (specified in ACTION 1.c) coupled with the low probability of an accident occurring during this time. If the system(s) cannot be restored to OPERABLE status within the specified completion time, alternate actions are designed to bring the unit to a mode for which the LCO does not apply. The extended interval (54 hours) specified in ACTION 1.a to be in MODE 4 includes 48 hours of additional time for restoration of the inoperable CS train, and

INSERT 3B

~~takes into consideration the reduced driving force for a release of radioactive material from the RCS when in MODE 3.~~ With ~~two containment spray trains or~~ any combination of three or more containment spray and containment cooling trains inoperable in MODES 1, 2, or Mode 3 with Pressurizer Pressure \geq 1750 psia, the unit is in a condition outside the accident analyses and LCO 3.0.3 must be entered immediately. In MODE 3 with Pressurizer Pressure $<$ 1750 psia, containment spray is not required.

The specifications and bases for LCO 3.6.2.1 are consistent with NUREG-1432, Revision 0 (9/28/92), Specification 3.6.6A (Containment Spray and Cooling Systems; Credit taken for iodine removal by the Containment Spray System), and the plant safety analyses.

Insert 3B

With two required containment spray trains inoperable, at least one of the required containment spray trains must be restored to OPERABLE status within 24 hours. Both trains of containment cooling must be OPERABLE or Action e is also entered. The Action is modified by a Note stating it is not applicable if the second containment spray train is intentionally declared inoperable. The Action does not apply to voluntary removal of redundant systems or components from service. The Action is only applicable if one train is inoperable for any reason and the second train is discovered to be inoperable, or if both trains are discovered to be inoperable at the same time. In addition, LCO 3.7.7, "Control Room Emergency Ventilation System," must be verified to be met within 1 hour. The components in this degraded condition are capable of providing greater than 100% of the heat removal needs after an accident. The Allowed Outage Time is based on Reference 1 which demonstrated that the 24-hour Allowed Outage Time is acceptable based on the redundant heat removal capabilities afforded by the Containment Cooling System, the iodine removal capability of the Control Room Emergency Ventilation System, the infrequent use of the Action, and the small incremental effect on plant risk.

Attachment 6
Unit 2 Technical Specifications Bases Markup

SECTION NO.: 3/4.6	TITLE: TECHNICAL SPECIFICATIONS BASES ATTACHMENT 8 OF ADM-25.04 CONTAINMENT SYSTEMS ST. LUCIE UNIT 2	PAGE: 6 of 11
REVISION NO.: 44		

3/4.6 CONTAINMENT SYSTEMS (continued)

BASES (continued)

3/4.6.2 DEPRESSURIZATION AND COOLING SYSTEMS

3/4.6.2.1 CONTAINMENT SPRAY AND COOLING SYSTEMS

The OPERABILITY of the containment spray and cooling systems ensures that depressurization and cooling capability will be available to limit post-accident pressure and temperature in the containment to acceptable values. During a Design Basis Accident (DBA), at least one containment cooling train and one containment spray train are capable of maintaining the peak pressure and temperature within design limits. One containment spray train has the capability, in conjunction with the Iodine Removal System, to remove iodine from the containment atmosphere and maintain concentrations below those assumed in the safety analyses. To ensure that these conditions can be met considering single-failure criteria, two spray trains and two cooling trains must be OPERABLE.

The 72-hour action interval specified in ACTION 1.a and ACTION 1.ed, and the 7-day action interval specified in ACTION 1.b take into account the redundant heat removal capability and the iodine removal capability of the remaining operable systems, and the low probability of a DBA occurring during this period. The 10-day constraint for ACTIONS 1.a and 1.b is based on coincident entry into two ACTION conditions (specified in ACTION 1.c) coupled with the low probability of an accident occurring during this time. If the system(s) cannot be restored to OPERABLE status within the specified completion time, alternate actions are designed to bring the unit to a mode for which the LCO does not apply. The extended interval (54 hours) specified in ACTION 1.a to be in MODE 4 includes 48 hours of additional time for restoration of the inoperable CS train, and takes into consideration the reduced driving force for a release of radioactive material from the RCS when in MODE 3. ~~With two containment spray trains or any combination of three or more containment spray and containment cooling trains inoperable in MODES 1, 2, or Mode 3 with Pressurizer Pressure \geq 1750 psia, the unit is in a condition outside the accident analyses and LCO 3.0.3 must be entered immediately. In MODE 3 with Pressurizer Pressure $<$ 1750 psia, containment spray is not required.~~

INSERT 4B

The specifications and bases for LCO 3.6.2.1 are consistent with NUREG-1432, Revision 0 (9/28/92), Specification 3.6.6A (Containment Spray and Cooling Systems; Credit taken from iodine removal by the Containment Spray System), and the plant safety analyses.

Insert 4B

With two required containment spray trains inoperable, at least one of the required containment spray trains must be restored to OPERABLE status within 24 hours. Both trains of containment cooling must be OPERABLE or Action e is also entered. The Action is modified by a Note stating it is not applicable if the second containment spray train is intentionally declared inoperable. The Action does not apply to voluntary removal of redundant systems or components from service. The Action is only applicable if one train is inoperable for any reason and the second train is discovered to be inoperable, or if both trains are discovered to be inoperable at the same time. In addition, LCO 3.7.7, "CREACS," must be verified to be met within 1 hour. The components in this degraded condition are capable of providing greater than 100% of the heat removal needs after an accident. The Allowed Outage Time is based on Reference 1 which demonstrated that the 24-hour Allowed Outage Time is acceptable based on the redundant heat removal capabilities afforded by the Containment Cooling System, the iodine removal capability of the Control Room Emergency Air Cleanup System, the infrequent use of the Action, and the small incremental effect on plant risk.