

March 21, 2022

UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION

BEFORE THE COMMISSION

In the Matter of

FLORIDA POWER & LIGHT CO.

(Turkey Point Nuclear Generating Units 3
and 4)

Docket Nos. 50-250-SLR
50-251-SLR

NRC STAFF VIEWS ON THE PRACTICAL EFFECTS OF (1) THE SUBSEQUENT RENEWED
LICENSES CONTINUING IN PLACE AND (2) THE PREVIOUS LICENSES BEING
REINSTATED

INTRODUCTION

Pursuant to the Commission's direction in *Florida Power & Light Co.*, the NRC Staff (Staff) hereby provides its views on the practical effects of (1) the subsequent renewed licenses continuing in place and (2) the previous licenses being reinstated.¹

BACKGROUND

On December 4, 2019, the NRC issued Subsequent Renewed Facility Operating Licenses (SLR licenses) Nos. DPR-31 and DPR-41 for Turkey Point Nuclear Generating Units 3 and 4, respectively.² As issued,³ the SLR licenses expire at midnight July 19, 2052, and

¹ *Florida Power & Light Co.* (Turkey Point Nuclear Generating Units 3 and 4), CLI-22-2, 95 NRC __ (Feb. 24, 2022) (ADAMS Accession No. ML22055A496).

² Florida Power & Light Company; Turkey Point Nuclear Generating Unit Nos. 3 and 4; Subsequent License Renewal and record of decision, 84 Fed. Reg. 67,482 (Dec. 10, 2019).

³ In CLI-22-2, the Commission directed the Staff to modify the expiration dates to midnight July 19, 2032, and midnight April 10, 2033, respectively, to match the end dates of the superseded licenses. *Turkey Point*, CLI-22-2, 95 NRC __, __ (slip op. at 14-15).

midnight April 10, 2053, respectively.⁴ The SLR licenses superseded⁵ Renewed Facility Operating License (LR licenses) Nos. DPR-31 and DPR-41 that would have expired at midnight July 19, 2032, and midnight April 10, 2033.⁶

Since issuance on December 4, 2019, the Turkey Point SLR licenses have been amended⁷ as shown in the table below:

Amendment Nos.	Title and Description	Date	Accession No.
289 (U3)/283 (U4)	Issuance of Amendment Nos. 289 and 283 Regarding Technical Specification Applicability to Equipment Shared Between Units and Exception AO Technical Specification 4.0.4 (EPID L-2019-LLA-0024): Revise certain technical specifications (TS) for shared equipment when one unit is defueled; remove a footnote related to TS 4.0.4.	12/17/2019	ML19266A585

⁴ After issuance, licenses can be amended. The current versions of the licenses are available at static (i.e., unchanging) ADAMS accession numbers. See Turkey Point Unit 3 SLR (ML052790649); Turkey Point Unit 4 SLR (ML052790652). These files are updated in a reasonable period after amendments to the licenses are issued.

⁵ 10 C.F.R. § 54.31(c) (stating "A renewed license will become effective immediately upon its issuance, thereby superseding the operating license ... previously in effect. If a renewed license is subsequently set aside upon further administrative or judicial appeal, the operating license ... previously in effect will be reinstated[.]").

⁶ Copies of the superseded licenses are attached.

⁷ The NRC elected not to re-start the amendment numbers at 1 upon issuance of a renewed license to a power reactor. Cf., NRR, NRC, License Amendment Review Procedures, NRR Office Instruction LIC-101, app. C, "Guide for Processing License Amendments For Non-Power Production and Utilization Facilities, Revision 0," at 30 (July 2020) (ML19248C539):

Reissuance is in the form of a new license, not an amendment to the license (although the license number is retained). Because it is a new license, reissuance of the license replaced all past amendments to the license. However, a decision was made to continue to number amendments to the reissued license in order and not restart numbering at Amendment No. 1.

Amendment Nos.	Title and Description	Date	Accession No.
290 (U3)/284 (U4)	<p>Issuance of Amendment Nos. 265, 268, 164, 290, and 284 Re: Revise Technical Specifications to Adopt TSTF-563 (EPID L-2019-LLA-0055): Revise the Instrumentation Testing Definitions of Channel Calibration, Channel Operational Test, and Trip Actuating Device Operational Test to Permit Determination of the Appropriate Frequency to Perform the Surveillance Requirements Based on the Devices Being Tested in Each Step.</p>	2/10/2020	ML19357A195
291 (U3)	<p>Issuance of Exigent Amendment No. 291 Concerning the Deferral of Steam Generator Inspections (EPID L-2020-LLA-0067): Revises the Unit 3 TS to allow a one-time extension to the requirement to inspect each steam generator every other refueling outage.</p>	4/16/2020	ML20104B527
292 (U3)/285 (U4)	<p>Issuance of Amendment Nos. 292 and 285 Concerning Modification O2F Reactor Trip System Turbine Trip Instrumentation Requirements (EPID L-2019-LLA-0126): Revise the TS reactor trip system turbine trip instrumentation requirements to align with the reactor trip 10 percent pressure permissive interlock. Additionally, the amendments resolve two non-conservative conditions associated with a potential loss of instrument function during TS testing.</p>	4/20/2020	ML20029E948

Amendment Nos.	Title and Description	Date	Accession No.
293 (U3)/286(U4)	Issuance of Amendments Nos. 293 and 286 Regarding Containment Atmospheric Radioactivity Ventilation Isolation and Leakage Detection System (EPID L-2019-LLA-0240) (L-2019-192): Revise certain TS containment atmospheric radioactivity and containment ventilation isolation, instrument setpoints, modifies the TS limiting condition for operation (LCO) with the TS ACTION and COMPLETION TIMES related to the inoperability of reactor coolant system radioactivity monitors, adjusts the frequency of reactor coolant system water inventory balances, changes the TS LCO related to isolation of the containment purge supply and exhaust isolation valves, and approves the relocation of the purge valve leakage rate criteria out of the TS to licensee administrative control within the constraints of 10 CFR 50.59.	10/20/2020	ML20237F385
294 (U3)/287(U4)	Issuance of Amendment Nos. 294 and 287 Regarding Emergency Action Level Scheme Upgrade (EPID L-2019-LLA-0271) (L-2019-203): Revise the Turkey Point Emergency Action Level scheme to one based on the Nuclear Energy Institute (NEI) document NEI 99 01, Revision 6, "Development of Emergency Action Levels for Non-Passive Reactors," dated November 21, 2012.	1/27/2021	ML20198M498

Amendment Nos.	Title and Description	Date	Accession No.
295 (U3)/288(U4)	Issuance of Amendment Nos. 295 and [288] Concerning Extension of Containment Leak Rate Testing Frequency (EPID L-2020-LLA-0016) (L-2020-LIa-003): Modify Section 6.8.4.h, "Containment Leakage Rate Testing Program," of the Turkey Point technical specifications to support the extension of the frequency of the Type A Integrated Leak Rate Test from 10 to 15 years and allow the extension of the containment isolation valves leakage test intervals (i.e., Type C tests) from their current 60-month frequency to 75 months.	2/26/2021 5/26/2021 (Correction Ltr.)	ML21032A020 ML21119A355

The exemptions shown in the table below have been granted for Turkey Point Units 3 and 4 after the issuance of the SLR licenses on December 4, 2019.

Subject	Date	Accession Number
Turkey Point Nuclear Point, Units 3 and 4 - Issuance of Temporary Exemption Concerning Security Training Requirements (EPID L-2020-LLA-0067)	6/15/2020	ML20149K606
Turkey Point Nuclear Plant, Units 3 and 4 - Approval of Exemption from Certain Requirements of 10 CFR [p]art 26, "Fitness for Duty Programs" (EPID L-2020-LLE-0068 [COVID 19])	7/30/2020	ML20204A765
Turkey Point Nuclear Plant Units 3 and 4 – Exemption from Specific Requirements of 10 CFR Part 26, "Fitness for Duty Programs" (EPID L-2021-LLE-0058 [Covid-19])	12/30/2021	ML21364A052

DISCUSSION

To determine the practical effects of the two options, the NRC Staff considered the set of NRC requirements and written commitments for ensuring compliance with and operation within applicable NRC requirements and the plant-specific design basis, i.e., the Current Licensing Basis (CLB), how the CLB changed upon issuance of the SLR licenses, and how the CLB has

changed since that time.⁸ The CLB changed when the SLR licenses superseded the LR licenses, and the CLB changed each time an amendment was issued or an exemption granted. The CLB also changed each time the licensee made a change under the 10 C.F.R. § 50.59 of title 10 of the *Code of Federal Regulations* (10 CFR) process even if those changes did not require pre-approval by the NRC.

In determining the practical effects of retaining the SLR licenses with modified end dates or vacating the SLR licenses and reinstating the initial LR licenses, the NRC Staff refrained from speculating about issues outside of NRC's direct authority and knowledge (e.g., the practical effects on how a licensee is allowed to depreciate equipment).

I. Practical Effects of the SLR Licenses Remaining in Place

A. The Implementation Schedule for New and Enhanced Programs is Maintained

Maintaining the SLR licenses would require the licensee to continue to meet the implementation schedule for new programs and enhancements in the current licensing basis. As reflected in "Subsequent License Renewal License Conditions" section of each SLR license, the subsequent renewed license conditions require licensees to implement new programs and enhancements to existing programs and complete certain other activities by the six-month date

⁸ As used in 10 C.F.R. Part 54, and defined in 10 C.F.R. § 54.3(a), the CLB is:

[T]he set of NRC requirements applicable to a specific plant and a licensee's written commitments for ensuring compliance with and operation within applicable NRC requirements and the plant-specific design basis (including all modifications and additions to such commitments over the life of the license) that are docketed and in effect. The CLB includes the NRC regulations contained in 10 CFR parts 2, 19, 20, 21, 26, 30, 40, 50, 51, 52, 54, 55, 70, 72, 73, 100 and appendices thereto; orders; license conditions; exemptions; and technical specifications. It also includes the plant-specific design-basis information defined in 10 CFR 50.2 as documented in the most recent final safety analysis report (FSAR) as required by 10 CFR 50.71 and the licensee's commitments remaining in effect that were made in docketed licensing correspondence such as licensee responses to NRC bulletins, generic letters, and enforcement actions, as well as licensee commitments documented in NRC safety evaluations or licensee event reports.

prior to the Subsequent Period of Extended Operation (SPEO) or by the end of the last refueling outage before the SPEO, whichever occurs later.⁹

Aging Management Programs (AMPs) credited by the licensee are tabulated in Table 3.0-1 “Turkey Point Aging Management Programs” of the NRC safety evaluation report related to the subsequent license renewal of Turkey Point Units 3 and 4; the table shows if an AMPs is an existing or a new program.¹⁰ The topics addressed by the 14 new AMPs in Table 3.0-1 include: Thermal Aging Embrittlement of Cast Austenitic Stainless Steel; Buried and Underground Piping and Tanks; and Inspection of Water-Control Structures Associated with Nuclear Power Plants.¹¹ These are examples of the new programs and activities that would continue to be required if the SLR licenses are maintained, but the superseded LR licenses did not require these new programs and activities and would not require them even if reinstated.

B. Piping Replacement Schedule at Each Turkey Point Unit Is Maintained

Another practical effect of keeping the SLR licenses in place is that the licensee would continue to be required to replace a portion of the existing containment spray system carbon steel piping with stainless steel piping by December 1, 2024. The SLR license conditions for Turkey Point Units 3 and 4 require the licensee to complete the replacement of a portion of the existing containment spray system carbon steel piping with stainless steel piping by December 1, 2024, so that any remaining carbon steel piping will not normally be internally exposed to borated water during the subsequent period of extended operation.¹² During the SLR license application review process, the licensee explained that the decision to perform the replacement was based upon site-specific operating experience obtained through the

⁹ See License Condition 3.J.2., Turkey Point Unit 3 SLR, at 7; License Condition 3.J.2., Turkey Point Unit 4 SLR, at 7.

¹⁰ Safety Evaluation Report Related to the Subsequent License Renewal of Turkey Point Generating Units 3 and 4, at Table 3.0-1 (July 2019) (ML19191A057).

¹¹ *Id.*

¹² See License Condition 3.J.3., Turkey Point Unit 3 SLR, at 7-8; License Condition 3.J.3., Turkey Point Unit 4 SLR, at 7-8.

implementation of the Containment Spray System Piping Inspection AMPs during the initial license renewal Period of Extended Operation (PEO).¹³ The licensee must also notify the NRC in writing within 60 days following completion of the refueling outage during which the piping replacement is completed.¹⁴ As of March 21, 2022, the licensee has not notified the NRC that the piping has been replaced. A practical effect of keeping the SLR licenses in place is the licensee must replace the piping per the schedule.

C. The Updated Final Safety Analysis Report Continues to Include the Subsequent License Renewal New and Enhanced Programs

Maintaining the SLR licenses while the Staff completes additional National Environmental Policy Act (NEPA) analysis and updates NUREG-1437, Revision 1, "Generic Environmental Impact Statement for License Renewal of Nuclear Plants" (June 2013) (GEIS) would have the practical effect of maintaining the current, Updated Final Safety Analysis Reports (UFSAR), whereas reinstating the superseded LR licenses would render the UFSAR obsolete. The FSAR describes the facility, presents the design bases and the limits on its operation, and presents a safety analysis of the structures, systems, and components and of the facility as a whole.¹⁵ A licensee must periodically update its FSAR to assure that the information included in the report contains the latest information developed.¹⁶ The update must include an identification of changes made under the provisions of 10 C.F.R. § 50.59, but not previously submitted to the Commission.¹⁷

As part of a license renewal application, an applicant must submit a supplement to the FSAR pursuant to 10 C.F.R. § 54.21(d), in which the applicant describes programs to be

¹³ See L-2019-019, Letter from William Maher to NRC Document Control Desk, Turkey Point Units 3 and 4 Subsequent License Renewal Application Safety Review - December 20, 2018, Public Meeting Action Item Responses, Attachment 1, at 2 (Jan. 31, 2019) (ML19035A195).

¹⁴ See License Condition 3.J.3., Turkey Point Unit 3 SLR, at 7-8; License Condition 3.J.3., Turkey Point Unit 4 SLR, at 7-8.

¹⁵ See 10 C.F.R. § 50.34(b).

¹⁶ See 10 C.F.R. § 50.71(e).

¹⁷ See 10 C.F.R. § 50.71(e).

implemented and activities to be completed prior to the period of extended operation or subsequent period of extended operation, as applicable. By operation of the SLR license conditions, the license renewal FSAR supplement is integrated into the UFSAR.¹⁸ If the SLR licenses continue, then the current UFSARs will not have to be changed and information within them is not rendered obsolete.

D. It Is Not Clear if the SLR Licensees are Subject to Requirements That Only Bind Applicants

Keeping the SLR licenses in place while the NEPA review is underway by the Staff introduces some uncertainty about whether regulations normally only applicable to applicants are nonetheless applicable to these SLR licensees. Vacating the SLR licenses and reinstating the initial LR licenses would not vacate the SLR application, which would remain pending. Regulations applicable to applicants for SLRs would arguably apply, creating new requirements for these licensees to update the SLR applications while the Staff's NEPA review is ongoing. For example, 10 C.F.R. § 54.21(b) requires an applicant to inform the NRC of CLB changes that materially affect the contents of the license renewal application, including the FSAR supplement. But 10 C.F.R. § 54.21(b) is inapplicable to a non-applicant licensee. As the Staff's review of the environmental impacts of subsequent license renewal is active, one might argue that the SLR licensee is also an SLR license applicant that must follow 10 C.F.R. § 54.21(b).

E. License Amendments and Changes to the CLB Issued or Made After Issuance of the SLR Licenses Continue

Continuing the SLR licenses does not simply continue the SLR licenses as issued, but rather continues the SLR licenses as amended since issuance. As shown in the table of amendment above, the NRC issued several amendments to the SLR licenses; the amendments did not apply to or affect the superseded LR licenses. The CLB includes "orders; license

¹⁸ See License Condition 3.J.1, Turkey Point Unit 3 SLR, at 7; License Condition 3.J.1, Turkey Point 4 SLR, at 7.

conditions; exemptions; and technical specifications.”¹⁹ Leaving the SLR licenses in place does not alter the CLB and, as a result, does not alter the effectiveness of orders, license conditions, exemptions, and changes to technical specifications included in those licenses or issued between their issuance and the present. Keeping the SLR licenses maintains the existing Environmental Protection Plan (EPP) set forth as Appendix B to the SLR licenses.²⁰ Reinstating the previous LR licenses will also affect Appendix B to the SLR licenses. Also significant, continuing the SLR licenses does not disturb decisions made by the SLR licensee under 10 C.F.R. § 50.59 concerning changes to the facility and the facility described in the UFSAR.²¹ Vacating the SLR licenses would have the practical effect of also vacating each of the amendments, orders, license conditions, exemptions, and changes to technical specifications included in the SLR licenses or approved after their issuance.

II. Practical Effects of Reinstating the LR Licenses

A. The New and Enhanced Programs Would Not Be Required

If the superseded LR licenses were reinstated, then the licensee’s aging management programs would be those the NRC found acceptable when issuing the LR licenses in 2002, as modified by the licensee via § 50.59 or by the NRC via § 50.92, prior to the issuance of the SLR licenses on March 5, 2020. The reinstated LR licenses simply do not require the new and improved programs SLR licenses are currently required to implement. For example, Turkey

¹⁹ 10 C.F.R. § 54.3(a).

²⁰ Turkey Point Unit 3 SLR, app. B at 2; Turkey Point 4 uses the same Appendix B as Turkey Point 3. The EPP says in part:

The licensee shall adhere to the requirements within the Incidental Take Statement of the currently applicable Biological Opinion. Changes to the Biological Opinion, including the Incidental Take Statement, Reasonable and Prudent Measures, and Terms and Conditions contained therein, must be preceded by consultation between the NRC, as the authorizing agency, and the FWS.

²¹ One factor a licensee uses in a § 50.59 evaluation is whether a “change to the technical specifications incorporated in the license is not required[.]” 10 C.F.R. § 50.59(c)(1)(i). During the period of effectiveness of the subsequent license, the license against which the licensee performed § 50.59 evaluations was the subsequent license, as amended. Continuing the superseding SLR licenses as amended does not impugn those previous evaluations.

Point would not be required to implement its new or revised Buried and Underground Piping and Tanks AMP. The licensee can, of course screen the new and improved programs and procedures reflected in the subsequent license renewal application via § 50.59 and, assuming the programs do not require pre-approval via a license amendment, implement those programs. But the practical effect of reinstating the LR licensees would be that the licensee would no longer be required to do so.

B. The Piping Replacement at Turkey Point Would Not Be Required

The superseded LR licenses for Turkey Point Units 3 and 4 do not require the licensee to complete the replacement of a portion of the existing containment spray system carbon steel piping with stainless steel piping by December 1, 2024, so that any remaining carbon steel piping will not normally be internally exposed to borated water during the subsequent period of extended operation. Nor do these superseded licenses require the licensee to notify the NRC that the piping replacement has been completed. Assuming the piping replacement does not require NRC pre-approval under § 50.59, the licensee could, of course, still elect to replace the piping. But the requirement to do so by December of 2024 would no longer exist.

C. The Updated Final Safety Analysis Report Would Be Obsolete

By operation of the SLR license conditions, the subsequent license renewal FSAR supplements were integrated in to the UFSARs.²² Per 10 C.F.R. § 54.21(d), the FSAR supplement is submitted as part of the renewal application, and per 10 C.F.R. § 50.59(c)(3), for purposes of 10 C.F.R. § 50.59 evaluations, the UFSAR is considered to include changes resulting from evaluations performed pursuant to 10 C.F.R. § 50.59 and analyses performed pursuant to 10 C.F.R. § 50.90, since submittal of the last update of the UFSAR pursuant to 10 C.F.R. § 50.71. If the LR licenses were reinstated, then the UFSARs would still have information concerning the changes made to the UFSAR that occurred as a result of, and subsequent to,

²² See License Condition 3.J.1, Turkey Point Unit 3 SLR, at 7; License Condition 3.J.1, Turkey Point 4 SLR, at 7.

the issuance of the SLR license. The practical effect would be that the licensee would have to determine how best to modify the UFSAR to assure that the current UFSAR reflects the new CLB (i.e., the CLB for the reinstated LR licenses). Further, where the licensee's determination under 10 C.F.R. § 50.59 is that preapproval is required, then the licensee would have to submit an appropriate license amendment request.

D. Updates to the Application Would Likely Resume

Pursuant to 10 C.F.R. § 54.21(b), an SLR applicant must periodically update the application. If the LR licenses were reinstated, the SLR application would remain pending and the SLR licensee would no longer be a SLR licensee. Instead, the former SLR licensees would once again be SLR license applicants. Accordingly, the SLR license applicants would need to resume the duties of applicants by, for example, providing the updates required by 10 C.F.R. § 54.21(b).

E. Reinstating the Previous Licenses Eliminates All Requirements and Authorizations Set Forth in Amendments to the SLR Licenses and Impacts the CLB

The LR licenses previously in effect lack the amendments that were issued to the superseding SLR licenses during the time the superseding licenses were effective. The previous LR licenses do not contain the associated license conditions, amended technical specifications, and other approvals made to the superseding SLR licenses. The Environmental Protection Plan in Appendix B to the SLR licenses would no longer be in effect. As shown in the table of amendments above, the licensee requested and received several amendments addressing a variety of matters including amendments to resolve non-conservative conditions (Turkey Point Amendment Nos. 292 (Unit 3)/285 (Unit 4)). The practical effect of reinstating the previous LR licenses is removal of all requirements imposed by, and permissions granted by, the amendments made to the SLR licenses.²³

²³ See 10 C.F.R. § 54.31(c).

Under the reinstated licenses, the CLB, which includes “orders; license conditions; exemptions; and technical specifications, [and] the plant-specific design-basis information ... as documented in the most recent final safety analysis report (FSAR)”²⁴ would not necessarily be the exact same CLB that existed when the reinstated license was superseded. The licensee could have changed the facility or FSAR under 10 C.F.R. § 50.59. As 10 C.F.R. § 50.59(c)(1)(i) considers whether a change to the technical specifications included in the license is required, restoring the previous licenses result in the plant and its UFSAR being incongruent with the restored license.

CONCLUSION

The current licensing basis for Turkey Point Units 3 and 4 would be maintained if the SLR licenses continue, and requirements for new aging management programs, enhancements to existing programs, and requirements for piping replacement that exist in the SLR licenses, would continue to be required. By contrast, the practical effect of reinstating the previous, superseded LR licenses is removal of the requirements to implement new or enhanced programs and eliminating each of the amendments, orders, license conditions, exemptions, and changes to technical specifications included in the SLR licenses or approved after their issuance. Also significant, reinstating the superseded LR licenses has the practical effect of reinstating the SLR license applications, which would remain pending. Current SLR licensees

²⁴ 10 C.F.R. § 54.3(a).

would be required to meet all requirements for applicants, including but not limited to updating the SLR application, while the Staff completes its work under NEPA and updates the GEIS.

/Signed (electronically) by/

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Dated this 21st day of March 2022

Attachments: Turkey Point Nuclear Generating Unit No. 3 Renewed License
Turkey Point Nuclear Generating Unit No. 4 Renewed License

UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION

BEFORE THE COMMISSION

In the Matter of

FLORIDA POWER & LIGHT CO.

(Turkey Point Nuclear Generating Units 3 and
4)

Docket Nos. 50-250-SLR
50-251-SLR

Certificate of Service

Pursuant to 10 C.F.R § 2.305, I hereby certify that copies of the foregoing: (1) "NRC STAFF VIEWS ON THE PRACTICAL EFFECTS OF (1) THE SUBSEQUENT RENEWED LICENSES CONTINUING IN PLACE AND (2) THE PREVIOUS LICENSES BEING REINSTATED," (2) Turkey Point Nuclear Generating Unit No. 3 Renewed License, and (3) Turkey Point Nuclear Generating Unit No. 4 Renewed License, dated March 21, 2022, have been served upon the Electronic Information Exchange (the NRC's E-Filing System), in the captioned proceeding, this 21st day of March 2022.

/Signed (electronically) by/

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Dated this 21st day of March 2022