

**Supplemental Environmental Impact
Statement
Scoping Process**

Summary Report

**St. Lucie Plant
Units 1 and 2
Jensen Beach, FL**

April 2022



**U.S. Nuclear Regulatory Commission
Rockville, Maryland**

Introduction

By letter dated August 3, 2021, (Agencywide Documents Access and Management System (ADAMS) Accession Package No. ML21215A314), Florida Power & Light Company (FPL) submitted an application for subsequent license renewal of Renewed Facility Operating License Nos. DPR-67 and NPF-16 for St. Lucie Plant, Units 1 and 2 (St. Lucie) to the U.S. Nuclear Regulatory Commission (NRC) pursuant to Section 103 of the Atomic Energy Act of 1954, as amended, and Part 54 of Title 10 of the *Code of Federal Regulations* (10 CFR), "Requirements for renewal of operating licenses for nuclear power plants."

St. Lucie is located in Jansen Beach, FL, approximately 10 miles southeast of Ft. Pierce, FL. In its application, FPL requests subsequent license renewal for a period of 20 years beyond the dates when the current renewed facility operating licenses expire. Specifically, the new expiration dates would be: March 1, 2056, for St. Lucie, Unit 1; and April 6, 2063, for St. Lucie, Unit 2.

The purpose of this report¹ is to provide a concise summary of the determination, after incorporating stakeholder inputs, of the scope of the NRC staff's environmental review of this application. This report will briefly summarize the issues identified by the scoping process associated with the NRC staff's review of FPL's subsequent license renewal application.

This report is structured in four sections:

- A. The St. Lucie Public Scoping Period
- B. List of Commenters
- C. Summary of Comments Provided
- D. Significant Issues Identified
- E. Determinations and Conclusions

A. The St. Lucie Public Scoping Period

Background

The FPL application and all other public documents relevant to the St. Lucie subsequent license renewal are available in the NRC's Web-based ADAMS, which is accessible at <http://www.nrc.gov/reading-rm/adams.html>. Persons who encounter problems in accessing documents in ADAMS should contact the NRC's Public Document Room (PDR) reference staff by telephone at 1-800-397-4209 or 301-415-4737, or by e-mail at pdr.resource@nrc.gov.

For additional information, the NRC staff has made available a Web site with specific information about the St. Lucie subsequent license renewal application at <https://www.nrc.gov/reactors/operating/licensing/renewal/applications/st-lucie-subsequent.html>. This Web site includes application information, the licensing review schedule, opportunities for public involvement, project manager information, and other relevant information. In addition,

¹ The NRC's requirements for conducting the scoping process and for preparing a scoping summary report are found at 10 CFR 51.29, "Scoping-environmental impact statement and supplement to environmental impact statement."

important documents, including public comments, are available at the Federal rulemaking Web site, <https://www.regulations.gov/>, under Docket ID NRC-2021-0197.

As part of its application, Duke Energy submitted an environmental report (ER) to the NRC, available at ADAMS Package Accession No. ML21215A314. Duke Energy prepared the ER in accordance with 10 CFR Part 51, “Environmental protection regulations for domestic licensing and related regulatory functions,” which contains NRC’s requirements for implementing the National Environmental Policy Act of 1969, as amended (NEPA).²

Historically, renewal of a power reactor operating license required preparation of a supplemental environmental impact statement (SEIS), which is a supplement to the NRC’s NUREG-1437, “Generic Environmental Impact Statement for License Renewal of Nuclear Plants” (GEIS). The GEIS is available in two main volumes at ADAMS Accession Nos. ML13106A241 and ML13106A242 (ADAMS Package Accession No. ML13107A023).

However, in CLI-22-02, the Commission determined that 10 CFR 51.53(c)(3) only applies to an initial license renewal applicant’s preparation of an ER and that the GEIS did not address subsequent license renewal (SLR). The NRC staff could therefore not rely on the GEIS in their SLR application reviews.³ The Commission also issued Staff Requirements Memorandum – SECY-21-0066 ([ML22053A308](#)) (SRM) and directed the NRC staff to develop a plan for a rulemaking that aligns with the Commission’s determination in CLI-22-02. NRC staff is currently working on a response to this SRM. The scoping process for St. Lucie began prior to CLI-22-02 and the SRM. As stated above, this report is a summary of the determinations resulting from that process. Additional efforts may be necessary to complete the environmental review related to FPL’s St. Lucie SLR application once the NRC staff has responded to the SRM and received further direction from the Commission.

Scoping Process and Objectives

The first step in developing a Supplemental Environmental Impact Statement (SEIS) is to conduct a public scoping process. On October 22, 2021, the NRC published a *Federal Register* notice describing the scoping process for the St. Lucie subsequent license renewal application environmental review (86 FR 58701). This notice informed stakeholders of the NRC staff’s intent to prepare a plant-specific supplement to the GEIS and provided the public with an opportunity to participate in the environmental scoping process. The notice invited members of the public to submit written comments by November 22, 2021. In addition to written comments, oral comments were recorded at two public meetings held on November 3, 2021, via Webinar. All comments, both written and oral, were considered in the agency’s scoping process.

The scoping process provided an opportunity for members of the public to propose environmental issues to be addressed in the SEIS and to highlight public concerns and issues. In accordance with 10 CFR 51.29(b), this scoping summary report provides a concise summary of the determinations and conclusions reached as a result of the scoping process. As noted in

² The NRC’s requirements for an ER supporting a license renewal application are found at 10 CFR 51.53(c)(3).

³ See *FPL*. (Turkey Point Nuclear Generating Units 3 and 4), CLI-22-2, 95 NRC ___ (Feb. 24, 2022) (slip op.).

the October 22, 2021, *Federal Register* notice, the NRC's stated objectives of the scoping process were to:

- Define the proposed action, which is to be the subject of the supplement to the GEIS.
- Gather data on the scope of the supplement to the GEIS and identify the significant issues to be analyzed in depth.
- Identify and eliminate from detailed study those issues that are peripheral or are not significant or were covered by prior environmental review.
- Identify any environmental assessments and other environmental impact statements (EISs) that are being or will be prepared that are related to, but are not part of, the scope of the supplement to the GEIS.
- Identify other environmental review and consultation requirements related to the proposed action.
- Indicate the relationship between the timing of the preparation of the environmental analyses and the Commission's tentative planning and decisionmaking schedule.
- Identify any cooperating agencies and, as appropriate, allocate assignments for preparation and schedules for completing the supplement to the GEIS to the NRC and any cooperating agencies.
- Describe how the supplement to the GEIS will be prepared, including any contractor assistance to be used.

The NRC staff's determinations and conclusions regarding the above objectives are provided in Section D below.

B. List of Commenters

The NRC received comment submissions from six individuals. Table B-1 provides a list of commenters who provided comment submissions (i.e., non-form letter submissions) identified by name, affiliation (if stated), the correspondence identification (ID) number, the comment source, and the ADAMS Accession Number of the source. The staff reviewed the scoping meeting transcript and all written material received to identify individual comments. Each comment was marked with a correspondence ID, a unique identifier consisting of the comment source and a comment number (specified in Table B-1). For example, Comment 3-1 would refer to the first comment from the third comment source. This unique identifier allows each comment to be traced back to the source where the comment was identified. Comments were consolidated and categorized according to a resource area or topic. Table B-2 identifies the distribution of comments received by resource area or topic.

Table B-1. Individuals Providing Comments During the Scoping Comment Period

Commentor	Affiliation (if stated)	Correspondence ID	Comment Source	ADAMS Accession Number
Bennett, Elise	Center for Biological Diversity	1	Email	ML21327A088
Bennett, Elise	Center for Biological Diversity	1	reg.gov	ML21327A394
Carlton, Ken	Mississippi Band of Choctaw Indians	2	Email	ML21340A037
Franks, David	The Seminole Nation of Oklahoma Historic Preservation Office	3	Email	ML21340A039

Table B-2. Distribution of Comments by Resource Area or Topic

Resource Area/Topic	Number of Comments Received
Climate Change	12
Cumulative Impacts	1
Historic and Cultural Resources	2
Terrestrial Ecology and Special Status Species	1
Outside Scope-Safety Concerns	1

C. Summary of Comments Provided

During the scoping period (86 FR 58701), the NRC received comments that provided input for the SEIS. A summary of those comments is provided in this section. Comments were separated to in scope or out of scope, and comments with similar themes were further categorized to capture the resources concerned. Each comment submittal was uniquely identified and when a submittal addressed multiple issues, the submittal was further divided into separate comments with tracking identifiers.

C.1 Comments on the Resource Areas

C.1.1 Climate Change

Comment Summary: The commenter requested that the SEIS consider climate change impacts and provided supporting documents. In particular, the commenter included climate change information from a number of resources and requested that the SEIS include a discussion on impacts from rising temperatures, sea level rise, and increased storm surge and flooding. The commenter also provided information on other concerns related to climate change such as ocean acidification, low to no-oxygen zones in oceans, and disruption of species distributions. The commenter urged the NRC to incorporate sea-level rise planning in the SEIS to ensure protection of water resources, federally listed species, and habitats. The commenter requested that the NRC include an analysis of cumulative impacts from climate change, including sea level rise and storm surge, in the SEIS. The commenter requested that the NRC consider cumulative impacts of climate change and sea level rise on federally listed species, in particular sea turtles. In addition, the commenter requested that the NRC consider

alternatives with nature-based solutions such as living shorelines to protect federally listed species.

Comments: (1-1) (1-2) (1-3) (1-4) (1-5) (1-6) (1-7) (1-8) (1-9) (1-10) (1-11) (1-13) (1-14) (1-15)

C.1.2 Historic and Cultural Resources

Comment Summary: Two comments were received regarding National Historic Preservation Act (NHPA) Section 106 consultation for St. Lucie Unit Nos. 1 and 2 license renewal. The Mississippi Band of Choctaw Indians indicated that they do not have an interest in the area around St. Lucie Unit Nos. 1 and 2 and therefore do not want to be consulted further. The Seminole Nation of Oklahoma Historic Preservation Office indicated that they would like to be informed of the environmental effects for St. Lucie Unit Nos. 1 and 2 license renewal.

Comments: (2-1) (3-1)

C.2 Non-Technical and Comments Outside the Scope of the Environmental Report

C.2.1 Outside Scope-Safety Concerns

Comment Summary: A commenter expressed concerns about the impacts of sea-level rise, storm surge, and hurricanes on the vulnerability of St. Lucie Unit Nos. 1 and 2. The commenter stated that sea-level rise would cause an increased presence of contaminated canal water to reach the Atlantic Ocean, Herman Bay, Indian River, and Big Mud Creek.

Comments: (1-12)

D. Significant Issues Identified

After the NRC staff delineated and grouped comments according to resource area/topic, the NRC staff determined the significant issues identified during the scoping period which bear on the proposed action or its impacts, in accordance with 10 CFR 51.29. A summary of the significant issues, including each commenter's unique identifier, are provided below.

Climate Change

- Elise Bennett of the Center for Biological Diversity provided numerous comments requesting the SEIS include a discussion on impacts from rising temperatures, sea level rise, and increased storm surge and flooding. (Comments 1-1 through 1-11 and 1-13 through 1-15)

Historic and Cultural Resources:

- The Seminole Nation of Oklahoma Historic Preservation Office indicated that they would like to be informed of the environmental effects for St. Lucie Unit Nos. 1 and 2 license renewal. (Comment 2-1)

E. Determinations and Conclusions

Issues to be Analyzed in the SEIS

The significant issues identified in Section D will be considered in the development of the SEIS. The NRC staff will consider the effects of climate change and associated impacts in Chapter 3

of the draft SEIS. Resource impacts related to climate change will be assessed as a part of the cumulative impacts analysis of the draft SEIS. The NRC is conducting NHPA Section 106 consultation through NEPA in accordance with 36 CFR 800.8(c). The regulations in 36 CFR Part 800 require the NRC to consult with any Indian Tribe that attaches religious and cultural significance to historic properties that may be affected by a proposed action/undertaking. The NRC has initiated consultation with six Federally recognized American Indian Tribes. The NRC will describe its ongoing Section 106 consultation for the St. Lucie subsequent license renewal in Chapter 3 of the SEIS.

In addition, the NRC staff received comments that were either general in nature or otherwise beyond the scope of the subsequent license renewal environmental review. These included comments from organizations and individuals in support of the St. Lucie subsequent license renewal. However, the NRC staff will describe in Chapter 3 of the SEIS the following topics generally mentioned in these comments: impacts to greenhouse gases and the effects of climate change, and the socioeconomic impacts as result of renewing the St. Lucie licenses. Comments related to the license renewal process also expressed concerns regarding public participation for the St. Lucie public scoping meeting and date inconsistencies in notifications regarding the public meeting. However, the NRC will not consider or evaluate any issues in the SEIS which do not pertain to the staff's environmental evaluation or are beyond the scope of the subsequent license renewal review.

Define the Proposed Action

The NRC's proposed action in this instance is to determine whether to renew the St. Lucie operating licenses for an additional 20 years.

Identification of Related Environmental Assessments and Other Environmental Impact Statements

The NRC staff did not identify any environmental assessments under preparation or soon to be prepared, which relate to, but are not within the scope of, the SEIS. Previously completed EISs will be used in the preparation of the St. Lucie subsequent license renewal SEIS, as appropriate, including the GEIS and the SEIS for the initial license renewal of St. Lucie (ADAMS Accession No. ML031360705).

Other Environmental Review and Consultation Requirements

Concurrent with its NEPA review, the NRC staff is consulting with the U.S. Fish and Wildlife Service under Section 7 of the Endangered Species Act of 1973 to evaluate the potential impacts of the operation of St. Lucie for an additional 20 years on endangered and threatened species and their critical habitat. Consistent with 36 CFR 800.8(c), the staff is also consulting with affected Indian Tribes and the Florida State Historic Preservation Office to fulfill its Section 106 obligations under the NHPA.

Timing of Agency Action and How the SEIS Will Be Prepared

Upon completion of the scoping process and site audits, completion of its review of St. Lucie's ER and related documents, and completion of its independent evaluations, the NRC staff will compile its findings in a draft SEIS. The staff will make the draft SEIS available for public comment. Based on the information gathered during this public comment period, the staff will amend the draft SEIS findings, as necessary, and will then publish the final SEIS. In

accordance with 10 CFR 51.102 and 10 CFR 51.103 requirements, the NRC will prepare and provide a Record of Decision. Concurrent with, but separate from this environmental review, the staff will document its safety review in a safety evaluation report (SER). The findings in the SEIS and the SER will be considerations in the NRC's decision to issue or deny the subsequent license renewal.

The NRC staff is currently scheduled to reach a decision on the subsequent license renewal by July 2023. The draft and final SEIS will be prepared by the NRC staff with contractor support for document editing and for managing the processing of public comments.

Identification of Cooperating Agencies

No other Federal agencies are participating in the environmental review as a cooperating agency.

Future Opportunities for Public Participation

The NRC staff originally planned to issue a draft SEIS for public comment in October 2022; however, given the Commission's decision in CLI-22-02 and SRM, this timeline will likely be delayed. Once the draft SEIS is issued, the draft SEIS comment period will offer an opportunity for participants, such as the applicant; interested Federal, State, and local government agencies; Tribal governments; local organizations; and members of the public to provide further input to the agency's environmental review process. The draft SEIS comments will be considered in the preparation of the final SEIS. Together, the final SEIS and the SER will identify the information considered and the evaluations that the staff performed, and they will provide the basis for the NRC's decision on FPL's application for subsequent renewal of the St. Lucie operating licenses.