



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

**NUCLEAR REGULATORY COMMISSION**

**Docket No. 50-389**

**Florida Power & Light Company**

**St. Lucie Plant, Unit No. 2**

**Exemption**

**I. Background.**

Florida Power & Light Company (FPL, the licensee) is the holder of Renewed Facility Operating License No. NPF-16, which authorizes operation of the St. Lucie Plant, Unit 2 (St. Lucie 2), a pressurized water reactor. St. Lucie Plant, Unit 1, is collocated with St. Lucie 2 in Jensen Beach, Florida; however, this exemption is applicable only to St. Lucie 2. The license provides, among other things, that the facility is subject to all rules, regulations, and orders of the U.S. Nuclear Regulatory Commission (NRC, or the Commission) now or hereafter in effect. The current renewed facility operating license for St. Lucie 2 expires on April 6, 2043.

**II. Request/Action.**

Part 54 of title 10 of the *Code of Federal Regulations* (10 CFR) "Requirements for Renewal of Operating Licenses for Nuclear Power Plants," contains the requirements for the renewal of operating licenses for nuclear power plants. Section 54.17(c) of 10 CFR states that an application for a renewed license may not be submitted to the

Commission earlier than 20 years before the expiration of the operating license currently in effect.

The licensee has informed the NRC that it plans to submit the St. Lucie Plant, Unit Nos. 1 and 2 subsequent license renewal application (SLRA) earlier than 20 years before expiration of the renewed facility operating license for St. Lucie 2. Based on the requirement in 10 CFR 54.17(c), a subsequent license renewal (SLR) application for St. Lucie 2 cannot be filed prior to April 6, 2023 without an exemption. As a result, by letter dated March 17, 2021 (Agencywide Documents Access and Management System (ADAMS) Accession No. ML21076A315), pursuant to 10 CFR 54.15 and 10 CFR 50.12, FPL requested a one-time exemption from the 10 CFR 54.17(c) schedular requirement.

### **III. Discussion.**

Under 10 CFR 54.15, exemptions from the requirements of part 54 are governed by regulations at 10 CFR 50.12. Pursuant to 10 CFR 50.12, the Commission may, upon application by any interested person or upon its own initiative, grant exemptions from the requirements of the regulations of this part, which are authorized by law, will not present an undue risk to the public health and safety, and are consistent with the common defense and security. However, an exemption will not be granted unless special circumstances are present as defined in 10 CFR 50.12(a)(2). In its application, FPL states that special circumstances, as described in 10 CFR 50.12(a)(2)(ii) apply to its request, which states that special circumstances are present when “Application of the regulation in the particular circumstances would not serve the underlying purpose of the rule or is not necessary to achieve the underlying purpose of the rule.”

#### **A. The Exemption is Authorized by Law**

The Commission's basis for establishing the 20-year limit contained in 10 CFR 54.17(c) is discussed in the 1991 Statements of Consideration for

10 CFR Part 54 (56 FR 64963). The limit was established to ensure that substantial operating experience was accumulated by a licensee before a renewal application is submitted such that any plant-specific concerns regarding aging would be disclosed. In amending the rule in 1995, the Commission indicated that it would consider plant-specific exemption requests by applicants who believe that sufficient information is available to justify applying for license renewal earlier than 20 years from expiration of the current license. The NRC staff has determined that granting the licensee's proposed exemption will not result in a violation of the Atomic Energy Act of 1954, as amended, or the Commission's regulations. Therefore, the exemption is authorized by law.

**B. The Exemption Presents No Undue Risk to Public Health and Safety**

FPL is seeking an exemption from the requirements of 10 CFR 54.17(c) for schedular relief, which would only relieve FPL of the schedular requirement to wait until April 6, 2023 to submit an SLRA for St. Lucie Unit 2. The action does not change the manner in which the plant operates and would maintain public health and safety, because no additional changes are made as a result of the action. FPL must still conduct all environmental reviews required by 10 CFR part 51 and all safety reviews and evaluations required by 10 CFR part 54 when preparing the SLRA for St. Lucie Units 1 and 2.

Pending final action on the SLR application, the NRC will continue to conduct all regulatory activities associated with licensing, inspection, and oversight, and will take whatever action may be necessary to ensure adequate protection of the public health and safety. This exemption does not affect NRC's authority, applicable to all licenses, to modify, suspend, or revoke a license for cause, such as the identification of a serious safety concern. Therefore, the NRC finds that the action does not cause undue risk to public health and safety.

**C. The Exemption is Consistent with the Common Defense and Security**

As discussed previously, the proposed exemption would only allow a schedular exemption. This exemption does not change any site security features, procedures, staffing, or other security-related matters. Therefore, the NRC finds that the action is consistent with common defense and security.

**D. Special Circumstances**

The regulation at 10 CFR 50.12(a)(2) lists special circumstances for which an exemption may be granted. Pursuant to the regulation, it is necessary for one of these special circumstances to be present in order for the NRC to consider granting an exemption request. As noted above, FPL stated that the special circumstance that applies to this exemption request is found in 10 CFR 50.12(a)(2)(ii), which states, “Application of the regulation in the particular circumstances would not serve the underlying purpose of the rule or is not necessary to achieve the underlying purpose of the rule.”

In initially promulgating 10 CFR 54.17(c) in 1991, the Commission stated that the purpose of the 20-year time limit was “to ensure that substantial operating experience is accumulated by a licensee before it submits a renewal application,” such that any plant-specific concerns regarding aging would be disclosed (56 FR 64963). At that time, the Commission found that 20 years of operating experience provided a sufficient basis for license renewal applications. However, in issuing the amended Part 54 in 1995, the Commission indicated it would consider an exemption to this requirement if sufficient information was available on a plant-specific basis to justify submission of an application to renew a license before completion of 20 years of operation (60 FR 22488). FPL’s exemption request is consistent with the Commission’s intent to consider plant-specific requests and is permitted by 10 CFR 54.15.

The licensee stated that St. Lucie 2 is the sister unit to St. Lucie 1. The two units currently have a combined operating history of over 80 reactor-years, with Unit 1 having over 45 years and Unit 2 having over 37 years of operating experience. St. Lucie 1 operating experience is directly applicable to St. Lucie 2 since the two units are similar in design, operation, maintenance, use of operating experience, and environment.

According to the licensee, the materials of construction for St. Lucie 2 structures, systems, and components are typically identical or similar to those used for the corresponding St. Lucie 1 structures, systems, and components. The licensee specified that, because of the similarities between St. Lucie 1 and 2, personnel of the various plant organizations (e.g., Maintenance and Engineering) are typically assigned work activities on both units. Licensed operators at St. Lucie receive training on both units.

St. Lucie Unit 2 is physically located adjacent to Unit 1. As such, the external environments would be similar for both units. Internal environments for both units are also similar due to the similarity in plant design and operation.

The licensee stated that an administrative procedure is used by its entire nuclear fleet for the review and dissemination of operating experience obtained from both external and internal sources. This procedure requires screening of information for potential St. Lucie applicability; the information is received from such sources as the NRC (e.g., NRC Information Notices), industry resources, vendor reports/notices, and in-house operating experience. If an item is potentially applicable to St. Lucie, then the information item is addressed in the plant's Corrective Action Program.

Given the similarities between units, the NRC staff finds that the operating experience at Unit 1 is applicable to Unit 2 for purposes of the license renewal review. At the time of the exemption request, Unit 1 had achieved over 45 years of operating experience, which is applicable to Unit 2, and that Unit 2, itself, has over 37 years of

operating experience. The NRC staff has determined that sufficient combined operating experience exists to satisfy the intent of 10 CFR 54.17(c), and the application of the regulation in this case is not necessary to achieve the underlying purpose of the rule. Therefore, the NRC staff finds that FPL's request meets the special circumstance requirement in 10 CFR 50.12(a)(2)(ii).

#### **E. Environmental Considerations**

The NRC's approval of an exemption to scheduling requirements belongs to a category of actions that the NRC, by rule or regulation, has declared to be a categorical exclusion to environmental analysis, after first finding that the category of actions does not individually or cumulatively have a significant effect on the human environment. Specifically, the exemption is categorically excluded from further analysis under 10 CFR 51.22(c)(25)(vi)(G).

Under 10 CFR 51.22(c)(25), the granting of exemption from the requirements of any regulation of chapter 10 is a categorical exclusion provided that (i) there is no significant hazards consideration; (ii) there is no significant change in the types or significant increase in the amounts of any effluents that may be released offsite; (iii) there is no significant increase in individual or cumulative public or occupational radiation exposure; (iv) there is no significant construction impact; (v) there is no significant increase in the potential for or consequences from radiological accidents; and (vi) the requirements from which an exemption if sought involve certain categories of requirements, including scheduling requirements. The basis for NRC's determination is provided in the following evaluation of the requirements in 10 CFR 51.22(c)(25)(i)-(vi).

##### Requirements in 10 CFR 51.22(c)(25)(i)

To qualify for a categorical exclusion under 10 CFR 51.22(c)(25)(i), the exemption must involve a no significant hazards consideration. The criteria for making

a no significant hazards consideration determination are found in 10 CFR 50.92(c). The NRC staff has determined that granting the exemption request involves no significant hazards consideration because allowing a one-time exemption from the 10 CFR 54.17(c) schedular requirement does not (1) involve a significant increase in the probability or consequences of an accident previously evaluated; or (2) create the possibility of a new or different kind of accident from any accident previously evaluated; or (3) involve a significant reduction in a margin of safety. Therefore, the requirements of 10 CFR 51.22(c)(25)(i) are met.

Requirements in 10 CFR 51.22(c)(25)(ii) and (iii)

The exemption constitutes a change to a schedular requirement which is administrative in nature, and does not involve any change in the types or significant increase in the amounts of any effluents that may be released offsite and does not contribute to any significant increase in individual or cumulative occupational or public radiation exposure. Therefore, the requirements of 10 CFR 51.22(c)(25)(ii) and (iii) are met.

Requirements in 10 CFR 51.22(c)(25)(iv)

The exempted regulation is not associated with construction, and the exemption does not propose any changes to the facility or the site, does not alter the site, and does not change the operation of the site. Therefore, the requirements of 10 CFR 51.22(c)(25)(iv) are met because there is no significant construction impact.

Requirements in 10 CFR 51.22(c)(25)(v)

The exemption constitutes a change to a schedular requirement which is administrative in nature and does not impact the probability or consequences of accidents. Thus, there is no significant increase in the potential for, or consequences from, a radiological accident. Therefore, the requirements of 10 CFR 51.22(c)(25)(v) are met.

Requirements in 10 CFR 51.22(c)(25)(vi)

To qualify for a categorical exclusion under 10 CFR 51.22(c)(25)(vi)(G), the exemption must involve scheduling requirements. The requested exemption involves an exemption from scheduling requirements because it would allow FPL to submit an SLRA for St. Lucie Unit 2 earlier than 20 years before the expiration of its current license. Therefore, the requirements of 10 CFR 51.22(c)(25)(vi) are met.

Based on the above, the NRC staff concludes that the proposed exemption meets the eligibility criteria for a categorical exclusion set forth in 10 CFR 51.22(c)(25). Therefore, pursuant to 10 CFR 51.22(b), no environmental impact statement or environmental assessment need be prepared in connection with the approval of this exemption request.

**IV. Conclusions.**

The NRC has determined that, pursuant to 10 CFR 54.15 and 10 CFR 50.12, the exemption is authorized by law, will not present an undue risk to the public health and safety, and is consistent with the common defense and security. Also, special circumstances, as defined in 10 CFR 50.12(a)(2), are present. Therefore, the NRC hereby grants the licensee a one-time exemption for St Lucie 2, from the requirements of 10 CFR 54.17(c), to allow the submittal of a subsequent license renewal application earlier than 20 years before the expiration of the St. Lucie 2 license that is currently in effect.

This exemption is effective upon issuance.

Dated at Rockville, Maryland, this 20<sup>th</sup> day of July, 2021

For the Nuclear Regulatory Commission.

**Bo M. Pham**

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