



October 30, 2000

L-2000-226
10 CFR 50.12
10 CFR 54.15

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

Re: St. Lucie Unit 2
Docket No. 50-389
Request for Exemption from the Scheduling Requirements of 10 CFR 54.17(c)

Pursuant to 10 CFR 54.15 and 10 CFR 50.12, Florida Power & Light Company (FPL) requests an exemption from the requirement contained in 10 CFR 54.17(c) that an application for a renewed operating license not be submitted to the U. S. Nuclear Regulatory Commission (NRC) earlier than 20 years before the expiration of the operating license currently in effect. This exemption request seeks schedular relief only. FPL does not seek an exemption from any of the substantive requirements of 10 CFR Part 54 in connection with the preparation of the St. Lucie Units 1 and 2 license renewal application. FPL will fully satisfy all of the pertinent requirements of 10 CFR Part 54 when preparing and submitting the St. Lucie Units 1 and 2 license renewal application.

FPL requests this exemption in order to process and submit the St. Lucie Unit 2 license renewal application concurrent with the St. Lucie Unit 1 license renewal application. Otherwise, pursuant to 10 CFR 54.17(c), a license renewal application for St. Lucie Unit 2 cannot be filed prior to April 6, 2003. At the time of this exemption request, St. Lucie Unit 1 has over 24 years and St. Lucie Unit 2 has over 17 years of operating experience.

Attachment 1 of this request demonstrates, pursuant to 10 CFR 50.12, that special circumstances exist to warrant the approval of this request; namely, that the application of 10 CFR 54.17(c) to St. Lucie Unit 2 is not necessary to achieve the underlying purpose of the rule. Attachment 2 provides FPL's analysis confirming that there are no environmental impacts that would result from the proposed exemption.

This exemption request has been reviewed by the St. Lucie Facility Review Group and the FPL Company Nuclear Review Board.

AD01

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FPL requests that this exemption, if approved, be issued by March 30, 2001 to support the current application submittal schedule. Please contact E. A. Thompson at 305-246-6921 should there be any questions regarding this request.

Very truly yours,



Rajiv S. Kundalkar
Vice President
St. Lucie Plant

RSK/EAT/MRH

Attachments

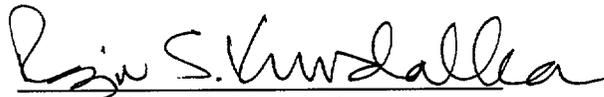
cc: Regional Administrator, USNRC, Region II
Senior Resident Inspector, USNRC, St. Lucie Plant
Chief, USNRC License Renewal and Standardization Branch
Senior Project Manager, USNRC License Renewal and Standardization Branch

STATE OF FLORIDA)
)
COUNTY OF ST. LUCIE) ss.

Rajiv S. Kundalkar being first duly sworn, deposes and says:

That he is Vice President, St. Lucie Plant, for the Nuclear Division of Florida Power & Light Company, the Licensee herein;

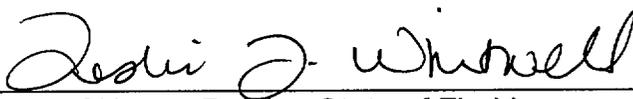
That he has executed the foregoing document; that the statements made in this document are true and correct to the best of his knowledge, information and belief, and that he is authorized to execute the document on behalf of said Licensee.


Rajiv S. Kundalkar

STATE OF FLORIDA
COUNTY OF ST. LUCIE

Sworn to and subscribed before me

this 30 day of October, 2000
by Rajiv S. Kundalkar, who is personally known to me.


Name of Notary Public - State of Florida



Leslie J. Whitwell
MY COMMISSION # CC646183 EXPIRES
May 12, 2001
BONDED THRU TROY FAIN INSURANCE, INC.

(Print, type or stamp Commissioned Name of Notary Public)

**FLORIDA POWER & LIGHT COMPANY
ST. LUCIE UNIT 2
REQUEST FOR EXEMPTION FROM 10 CFR 54.17(c)**

I. Executive Summary

10 CFR Part 54 sets forth the requirements for the renewal of operating licenses for nuclear power plants. 10 CFR 54.17(c) requires that an application for a renewed license "not be submitted to the Commission earlier than 20 years before the expiration of the operating license currently in effect." Based on this limitation, St. Lucie Unit 2 would not be able to submit an application for license renewal prior to April 6, 2003. The underlying purpose of this regulation is to ensure that an applicant for license renewal has accumulated sufficient operating experience such that an adequate assessment of age-related degradation of plant structures, systems, and components may be made. 10 CFR 54.15 authorizes exemptions to 10 CFR Part 54 in accordance with 10 CFR 50.12.

Florida Power & Light Company (FPL) hereby requests an exemption from the requirement of 10 CFR 54.17(c) pursuant to 10 CFR 54.15 and 10 CFR 50.12. FPL requires this exemption in order to process and submit the St. Lucie Unit 2 license renewal application concurrent with the St. Lucie Unit 1 license renewal application. Otherwise, pursuant to 10 CFR 54.17(c), a license renewal application for St. Lucie Unit 2 cannot be filed prior to April 6, 2003. At the time of this exemption request, St. Lucie Unit 1 has over 24 years and St. Lucie Unit 2 has over 17 years of operating experience. The following sections of this request demonstrate, pursuant to 10 CFR 50.12, that special circumstances exist to warrant the approval of this request; namely, that the application of 10 CFR 54.17(c) to St. Lucie Unit 2 is not necessary to achieve the underlying purpose of the rule. Additionally, both FPL and the NRC will benefit from the efficiencies gained with the preparation and review of a single dual-unit application as opposed to preparation and review of separate St. Lucie Unit 1 and Unit 2 applications submitted at different times.

This exemption request seeks schedular relief only. FPL does not seek an exemption from any of the substantive requirements of 10 CFR Part 54 in connection with the preparation of the St. Lucie Units 1 and 2 license renewal application. FPL will fully satisfy all of the pertinent requirements of 10 CFR Part 54 when preparing and submitting the St. Lucie Units 1 and 2 license renewal application. Public health and safety will not be adversely affected by the granting of this exemption.

II. Background

The Unit 1 operating license, Facility Operating License No. DPR-67, expiration date is March 1, 2016. The Unit 2 operating license, Facility Operating License No. NPF-16, has an expiration date of April 6, 2023. Both the Unit 1 and Unit 2 operating licenses represent a licensed operating term of 40 years for their respective units.

St. Lucie Units 1 and 2 are both 2700-megawatt (thermal) pressurized water reactors designed by Combustion Engineering, Incorporated. FPL is and has been the sole owner and operator of St. Lucie Unit 1. FPL is the majority owner of St. Lucie Unit 2 and has been the sole operating agent for Unit 2 since its initial operation.

FPL desires an exemption from the requirements of 10 CFR 54.17(c) so that the license renewal application for St. Lucie Unit 2 may be developed and submitted concurrent with the license renewal application for St. Lucie Unit 1. This exemption will allow FPL to use personnel for the St. Lucie license renewal effort who have just recently completed the Turkey Point license renewal application and are thus experienced in the methods, procedures, and analyses required by the license renewal process. Additionally, because the two St. Lucie units are similar in design, operation, maintenance, and environments, many of the aging analyses to be performed for the structures, systems, and components of Unit 1 will be directly applicable to the structures, systems, and components of Unit 2. As a result, FPL estimates that concurrently processing the St. Lucie Units 1 and 2 license renewal applications will save approximately \$2 million over the cost of preparing and submitting separate applications at different times. The NRC also stands to benefit from the efficiencies gained by reviewing concurrent applications for these two similar plants.

III. Basis for Exemption Request Pursuant to 10 CFR 50.12

10 CFR Part 54 governs the issuance of renewed operating licenses for nuclear power plants. The filing of license renewal applications is addressed in 10 CFR 54.17. 10 CFR 54.17(c) states: "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." Since FPL desires to file a license renewal application for St. Lucie Unit 2 prior to April 6, 2003 (the date after which the 20-year requirement would be satisfied), an exemption from the requirements of 10 CFR 54.17(c) is necessary. 10 CFR 54.15 of the license renewal rule states: "Exemptions from the requirements of this part may be granted by the Commission in accordance with 10 CFR 50.12."

10 CFR 50.12(a) states, in pertinent part:

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-

- (1) Authorized by law, will not present an undue risk to the public health and safety, and are consistent with the common defense and security.
- (2) The Commission will not consider granting an exemption unless special circumstances are present. Special circumstances are present whenever...
 - (ii) 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...

The following analysis demonstrates that the requirements of 10 CFR 50.12(a)(1) are satisfied and that the special circumstances of 10 CFR 50.12(a)(2)(ii) are applicable.

10 CFR 50.12(a)(1)

This paragraph of the regulation requires an exemption request to satisfy three requirements: (1) the request must be authorized by law, (2) the request must not present an undue risk to public health and safety, and (3) the request must be consistent with the common defense and security. These three requirements are discussed below.

Authorized by Law - The schedular requirement of 10 CFR 54.17(c) was adopted solely at the discretion of the NRC in the exercise of its rulemaking authority under Section 161 of the Atomic Energy Act, 42 U.S.C., paragraph 2201. No statute required the NRC to adopt this provision. No other regulation of either the NRC or another agency required the NRC to adopt this provision. The NRC has authority under 10 CFR 50.12 to grant exemptions from the requirements of NRC regulations. Therefore, no statutory or regulatory provision precludes the Commission from granting the requested

exemption upon a proper showing. Specifically, 10 CFR Part 54 states that the NRC may grant exemptions from the requirements of 10 CFR Part 54 in accordance with 10 CFR 50.12. Accordingly, this requested exemption is "authorized by law," as required by 10 CFR 50.12(a)(1).

Further, when the current license renewal rule was promulgated in 10 CFR Part 54, the NRC indicated that it would consider an exemption from 10 CFR 54.17(c) if sufficient information is available on a plant specific basis to justify submission of an application to renew a license before completion of 20 years of operation.¹ The NRC has granted a similar exemption for the Catawba and McGuire Nuclear Stations.²

No Undue Risk to Public Health and Safety – The granting of this exemption poses no risk to public health and safety. This exemption is for schedular relief only. Granting an exemption from the requirements of 10 CFR 54.17(c) only relieves FPL of the requirement to wait until at least April 6, 2003 before submitting an application for renewal of the St. Lucie Unit 2 operating license. The substantive requirements of the license renewal process, as provided for in 10 CFR Part 54, still apply to any license renewal application to be submitted for St. Lucie Unit 2. The intent of 10 CFR 54.17(c) is to ensure that sufficient plant operating experience is accrued prior to any application for license renewal. The 10 CFR 50.12(a)(2)(ii) discussion below provides the details and basis for why sufficient operating experience is available to support a license renewal application for St. Lucie Unit 2.

Common Defense and Security – The granting of this exemption request is consistent with the common defense and security. As noted above, this exemption request is for schedular relief only; all NRC requirements pertaining to the renewal of the Unit 2 operating license will be fully satisfied in the St. Lucie Units 1 and 2 license renewal application. Further, there are no security or safeguards issues raised by the proposed exemption.

10 CFR 50.12(a)(2)(ii)

10 CFR 50.12(a)(2) lists six "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. The special circumstance that is applicable to this exemption request for St. Lucie Unit 2 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.

¹ 60 Federal Register at 22488, May 8, 1995.

² 64 Federal Register at 54924, October 8, 1999.

The 20-year requirement of 10 CFR 54.17(c) was a part of the original Part 54 rule as published in 1991. When this rule was first issued the NRC stated that its purpose was "to ensure that substantial operating experience is accumulated by a licensee before it submits a renewal application."³ This purpose was reiterated in the Safety Evaluation accompanying the 10 CFR 54.17(c) exemption granted to Duke Energy Corporation, wherein the NRC stated:

The Commission's basis for establishing the 20-year limit contained in Section 54.17(c) is discussed in the 1991 Statements of Consideration for 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.⁴

When developing the Part 54 rule change issued in 1995, the NRC considered revising the 20-year requirement and solicited public comments on the subject. Two commentors, the Nuclear Energy Institute and the U.S. Department of Energy, concluded that some plants might have sufficient operating history and plant experience to provide reasonable assurance that aging concerns can be identified with less than 20-years of operation.⁵ In response to the public comments, the NRC noted that it would not revise the 20-year requirement, but the Commission recognized that some license renewal applicants might have sufficient basis for an exemption:

The Commission is willing to consider, however, plant-specific exemption requests by those applicants who believe they may have sufficient information available to justify applying for a renewal license prior to 20 years from the expiration date of the current license.⁶

Although the 20-year requirement of 10 CFR 54.17(c) is specifically applicable to the plant applying for a renewed operating license, the operating experience available to a license renewal applicant is not limited solely to the operating experience accumulated by that plant. In the Supplementary Information accompanying the 1991 publication of the rule, the NRC clearly endorsed the use of operating experience available from industry sources when it made the following comment with respect to the 20-year rule:

³ 56 Federal Register at 64963, December 13, 1991.

⁴ Safety Evaluation by the Office of Nuclear Reactor Regulation Exemption from 10 CFR 54.17(c) Regarding Schedule to Apply for a Renewed Operating License - Catawba Nuclear Station, Units 1 and 2 Docket Nos. 50-413 and 50-414 and McGuire Nuclear Station, Unit 2 Docket No. 50-370, October 1, 1999.

⁵ Although the 20-year requirement of 10 CFR 54.17(c) is written with respect to years remaining until expiration of a plant's operating license, the focus of this provision is on actual years of operation under the current operating license. Since an operating license is typically issued for a 40-year period (the maximum period allowed by 10 CFR 50.51), the rule effectively requires applicants to have accumulated at least 20-years of operating experience prior to the submittal of a license renewal application.

⁶ 60 Federal Register at 22488, May 8, 1995.

...both renewal applicants and the NRC will have the benefit of operational experience from the nuclear industry and are not limited to information developed solely by the utility seeking a renewed license.⁷

Based on this background, it must be demonstrated that for St. Lucie Unit 2 sufficient operational experience is available for use in the license renewal process. As indicated above, this operational experience is not limited to that accumulated by St. Lucie Unit 2; it may also include operational experience gained from St. Lucie Unit 1 and from the nuclear industry as well. The discussion that follows outlines how sufficient operating experience and history is available to support a 10 CFR 54.17(c) exemption for St. Lucie Unit 2.

St. Lucie Unit 2 is the sister unit to St. Lucie Unit 1. The two units currently have a combined operating history of over 42 reactor-years, with Unit 1 having over 24 years and Unit 2 having over 17 years of operating experience. St. Lucie Unit 1 operating experience is directly applicable to St. Lucie Unit 2 since the two units are similar in design, operation, maintenance and use of operating experience, and environments.

Plant Design

Both the St. Lucie Unit 1 and St. Lucie Unit 2 nuclear steam supply systems (NSSS) were designed by Combustion Engineering, Incorporated (CE) as 2,560 megawatt (thermal) pressurized water reactor plants. Both units were subsequently uprated and licensed for operation at 2700 megawatts. The Architect/Engineer (A/E) for both units was Ebasco Services, Incorporated. The materials of construction for St. Lucie Unit 2 structures, systems, and components are typically identical or similar to those used on the corresponding St. Lucie Unit 1 structures, systems, and components.

The St. Lucie Unit 2 UFSAR, Section 1.3, provides a comparison of St. Lucie Unit 2 with other units, including St. Lucie Unit 1. This UFSAR section states "St. Lucie Unit 1 was selected because it is an operating plant which is essentially the same design as St. Lucie Unit 2." This similarity with St. Lucie Unit 1 is further evidenced in St. Lucie Unit 2 UFSAR Table 1.3-1, which compares several key plant operating parameters and system designs of St. Lucie Unit 2 with those of St. Lucie Unit 1. The NRC Safety Evaluation Report⁸ for St. Lucie Unit 2, in Section 1.3, also recognizes the similarity and states: "Many features of the design of St. Lucie Unit 2 are similar to those the staff has evaluated and approved previously...for example, St. Lucie Unit 1..."

⁷ 56 Federal Register at 64963, December 13, 1991.

⁸ NUREG-0843, Safety Evaluation Report Related to the Operation of St. Lucie Plant, Unit No. 2, U.S. Nuclear Regulatory Commission, Office of Nuclear Reactor Regulation, October 1981.

Plant Operations

Licensed operators at St. Lucie receive training on both units. Although some of the training is considered unit specific, several aspects of the training are not. For example, license candidates can meet certain training requirements by performing watchstanding or plant manipulations on either unit.

Because of the units' similarities, the NRC issues Reactor Operator (RO) and Senior Reactor Operator (SRO) licenses that are common to St. Lucie Units 1 and 2. If the two units were significantly different, the NRC would grant individual unit licenses in lieu of the dual-unit licenses currently issued.

Plant Maintenance and Use of Operating Experience

Because of the similarities between St. Lucie Units 1 and 2, personnel of the various plant organizations (e.g., Maintenance and Engineering) are typically assigned work activities on both units. These plant organizations are not divided into separate Unit 1 and Unit 2 groups. Additionally, many of the procedures that govern site activities are not unit specific and require the consideration of operating experience information obtained from several sources, including St. Lucie Plant, FPL's Turkey Point Plant, and the nuclear industry. Some of these procedures are discussed below.

The St. Lucie Plant condition report procedure governs the documentation, analysis, and corrective action associated with plant nonconformances and other conditions of concern. This procedure is not unit specific and requires the subject condition of one unit to be reviewed for generic implications that may be applicable to the other unit at St. Lucie and to FPL's Turkey Point Plant. In addition, the Turkey Point condition report procedure requires the sharing of Turkey Point conditions that may be applicable to St. Lucie Plant.

The St. Lucie Plant procedure governing the preparation, revision, and approval of plant procedures is also not unit specific. This procedure requires that new procedures and procedure changes that are proposed for one unit also consider applicability to the "other" unit.

The 10 CFR 50.65 maintenance rule implementing procedure requires the consideration of operating experience from industry sources such as the NRC, nuclear vendors, and INPO. This operating experience is factored into condition monitoring programs, root cause evaluations, and the establishment of system/component goals.

St. Lucie Plant also has an administrative procedure 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; this information is received from such sources as the NRC (e.g.,

NRC Information Notices), INPO, NSSS vendor reports/notices, other vendor reports/notices, and in-house operating experience. If an item is potentially applicable to St. Lucie Plant, then the information item is addressed in the plant's Corrective Action Process.

Plant Environments

St. Lucie Unit 2 is physically located adjacent to St. Lucie Unit 1 on South Hutchinson Island. Because of its shared location and similar plant design, the internal and external environments of St. Lucie Unit 2 are similar to those of St. Lucie Unit 1. As such, plant aging effects experienced on St. Lucie Unit 1 are also likely to be experienced on St. Lucie Unit 2. This is one of the primary reasons why, when dispositioning nonconforming or degraded equipment on either St. Lucie unit, plant procedures require consideration of the condition on the other St. Lucie unit.

As demonstrated above, the St. Lucie Unit 1 operating experience is directly applicable to St. Lucie Unit 2. Furthermore, St. Lucie Unit 2, as evidenced by the similarities in design, operation, maintenance and use of operating experience, and environments noted above, continually incorporates operational experience gained from St. Lucie Unit 1, as well as that gained from industry sources. This accumulated operating experience is more than sufficient to satisfy the underlying purpose of 10 CFR 54.17(c).

IV. Conclusion

This exemption request provides sufficient basis to support the issuance of an exemption from the schedular requirement of 10 CFR 54.17(c). As required by 10 CFR 50.12, the requested exemption is authorized by law, presents no undue risk to public health and safety, is consistent with the common defense and security, and is supported by "special circumstances."

St. Lucie Units 1 and 2 are similar in design, operation, maintenance, and environments. As such, the operating experience of Unit 1 is directly applicable to Unit 2. Between the two St. Lucie units, over 42 reactor-years of experience are currently available to support the preparation and review of an application for license renewal. This accumulated operating experience is more than enough to satisfy the underlying purpose of the license renewal schedular requirement. In addition, operating experience from other sources, such as that gained from FPL's Turkey Point Plant and from industry sources, is used to the extent it is available and applicable.

FPL hereby requests NRC authorization to permit the submittal of a license renewal application for St. Lucie Unit 2, concurrent with St. Lucie Unit 1, prior to meeting the 10 CFR 54.17(c) schedular requirement. It is expected that any operational experience that might otherwise be gained by waiting until April 6, 2003 to submit the St. Lucie Unit 2 application would be minimal and would not significantly impact the license renewal process.

This request is similar to and consistent with the exemption request made by Duke Energy Corporation⁹ and granted by the NRC.¹⁰

⁹ Duke Energy Corporation letter to the USNRC, Request for Exemption Pursuant to 10 CFR §§ 54.15 and 50.12 – Exemption to the Schedular Requirements of 10 CFR § 54.17(c), dated June 22, 1999.

¹⁰ Safety Evaluation by the Office of Nuclear Reactor Regulation Exemption from 10 CFR 54.17(c) Regarding Schedule to Apply for a Renewed Operating License - Catawba Nuclear Station, Units 1 and 2 Docket Nos. 50-413 and 50-414 and McGuire Nuclear Station, Unit 2 Docket No. 50-370, October 1, 1999.

ENVIRONMENTAL IMPACTS OF THE PROPOSED EXEMPTION FROM 10 CFR 54.17(C)

Identification of the Proposed Action:

10 CFR 54.17(c) requires that an application for a renewed operating license not be submitted earlier than 20 years before expiration of that license. Based on this limitation, St. Lucie Unit 2 would not be able to submit an application for license renewal prior to April 6, 2003. The proposed action would allow submittal of a license renewal application for St. Lucie Unit 2 prior to April 6, 2003.

The Need for the Proposed Action:

FPL desires an exemption from the requirements of 10 CFR 54.17(c) so that the license renewal application for St. Lucie Unit 2 may be developed and submitted concurrent with the St. Lucie Unit 1 application. This will allow FPL to use personnel for the St. Lucie license renewal effort who have just recently completed the Turkey Point license renewal application and are thus experienced in the methods, procedures, and analyses required by the license renewal process. Additionally, because the two St. Lucie units are similar in design, operation, maintenance, and environments, many of the analyses to be performed for St. Lucie Unit 1 will be directly applicable to St. Lucie Unit 2. As a result, FPL estimates that concurrently processing the Unit 1 and Unit 2 license renewal applications will save approximately \$2 million over the cost of preparing and submitting separate applications at different times. The NRC also stands to benefit from the efficiencies gained by reviewing a single application for these two similar plants.

Environmental Impacts of the Proposed Action:

Based on FPL's evaluation, the exemption will not endanger life or property and is otherwise in the public interest. The proposed action will not require changes to the as-built plant design or existing plant procedures. As a result, the proposed action will not increase the probability or consequences of accidents. No changes are being made in the types of any effluents that may be released off site, and there is no increase in occupational or public radiation exposure. Therefore, there are no radiological environmental impacts associated with the proposed action. With regard to potential non-radiological impacts, the proposed action does not involve any historic sites. The proposed exemption will not affect non-radiological plant effluents and has no other environmental impact. Therefore, there are no non-radiological environmental impacts associated with the proposed action. Accordingly, FPL concludes that there are no environmental impacts associated with the proposed action.

Alternatives to the Proposed Action:

As an alternative to the proposed action, FPL considered not proposing the exemption. In such a case, there would be no change in current environmental impacts. The environmental impacts of the proposed action and the alternative action are similar.

Alternative Use of Resources:

This action does not involve the use of any resources not previously considered in the Final Environmental Statement for St. Lucie Unit 2.

Conclusion:

The proposed action will not have an effect on the quality of the human environment. Accordingly, preparation of an environmental impact statement for the proposed action is not required.