



Florida Power & Light Company, 6351 S. Ocean Drive, Jensen Beach, FL 34957

December 16, 1998

L-98-279  
10 CFR 50.90

U. S. Nuclear Regulatory Commission  
ATTN: Document Control Desk  
Washington, D. C. 20555

RE: St. Lucie Unit 1 and Unit 2  
Docket Nos. 50-335 and 50-389  
Proposed License Amendments  
Facility Staff Qualifications

Pursuant to 10 CFR 50.90, Florida Power & Light Company (FPL) requests to amend Facility Operating Licenses DPR-67 for St. Lucie Unit 1 and NPF-16 for St. Lucie Unit 2 by incorporating the attached Technical Specifications (TS) revisions. The proposed amendments will revise administrative controls TS 6.3, "Unit Staff Qualifications," and incorporate specific staff qualifications for a Multi-Discipline Supervisor (MDS) position. FPL plans to establish multi-discipline work groups that will be led by an MDS to improve teamwork and efficiency in the performance of maintenance activities. This request is equivalent to a previous proposed license amendment submitted by FPL for the Turkey Point plants under Docket Nos. 50-250 and 50-251 (FPL letter L-98-170: 10/28/98).

Attachment 1 is an evaluation of the proposed changes. Attachment 2 is the "Determination of No Significant Hazards Consideration." Attachments 3 and 4 contain copies of the affected Technical Specifications pages marked up to show the proposed changes.

The proposed amendments have been reviewed by the St. Lucie Facility Review Group and the FPL Company Nuclear Review Board. In accordance with 10 CFR 50.91 (b) (1), copies of the proposed amendments are being forwarded to the State Designee for the State of Florida.

Please contact us if there are any questions about this submittal.

Very truly yours,

J. A. Stall  
Vice President  
St. Lucie Plant

JAS/RLD

Attachments

cc: Regional Administrator, Region II, USNRC  
Senior Resident Inspector, USNRC, St. Lucie Plant  
Mr. W.A. Passetti, Florida Department of Health and Rehabilitative Services

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

J. A. Stall 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;

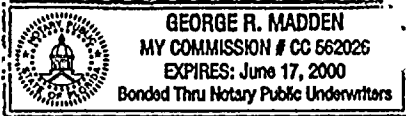
That he has executed the foregoing document; that the statements made in this document are true and correct to the best of his knowledge, information and belief, and that he is authorized to execute the document on behalf of said Licensee.

  
\_\_\_\_\_  
J. A. Stall

STATE OF FLORIDA  
COUNTY OF ST. LUCIE

Sworn to and subscribed before me  
this 16 day of DECEMBER, 1998  
by J. A. Stall, who is personally known to me.

  
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Signature of Notary Public-State of Florida



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Name of Notary Public (Print, Type, or Stamp)



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St. Lucie Unit 1 and Unit 2  
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Facility Staff Qualifications

ATTACHMENT 1 to FPL letter L-98-279

EVALUATION OF PROPOSED TS CHANGES

## EVALUATION OF PROPOSED TS CHANGES

### 1.0 Introduction

The proposed amendments to Facility Operating Licenses DPR-67 for St. Lucie Unit 1 (PSL1) and NPF-16 for St. Lucie Unit 2 (PSL2) will revise administrative controls Technical Specification (TS) 6.3, "Unit Staff Qualifications," and incorporate specific staff qualifications for a Multi-Discipline Supervisor (MDS) position. The proposed changes are discussed in detail below.

### 2.0 Background/Discussion

#### 2.1 Background

As a result of continuous improvement efforts, Florida Power and Light Company (FPL) intends to implement multi-discipline work teams consisting of electricians, mechanics, instrument and control specialists, radiation control technicians, and field operators. These teams are essential in performing efficient work for the day-to-day maintenance of the plant. Through the establishment of these teams, FPL expects to improve teamwork, improve schedule adherence, reduce equipment out of service time, and reduce administrative burden due to fewer turnovers and hand-offs between disciplines. In order to meet FPL's high standards for operational safety and reliability, the multi-discipline work teams need to have Multi-Discipline Supervisors (MDS) with the necessary education, experience, and training to oversee the tasks performed.

Currently at St. Lucie, the regulatory requirements for staff qualifications are defined in PSL1 and PSL2 TS Section 6.3.1, "Unit Staff Qualifications." TS 6.3.1 references ANSI/ANS-3.1-1978, and Section 4.3.2 of this standard requires supervisors not requiring NRC licenses to have a high school diploma or equivalent and a minimum of four years of experience in the craft or discipline they supervise.

The current TS requirements assume single discipline supervisors. The requirements for the MDS position are not defined in an ANSI standard. The MDS position is discussed in the Institute of Nuclear Power Operations (INPO) Academy Document (ACAD) 90-010, Rev 2, "Guidelines for Maintenance Supervisor Selection, Training, and Development." The ACAD specifically discusses supervisors that have oversight responsibility for multi-discipline work teams. The ACAD denotes that these supervisors will have a fundamental working knowledge of the tasks being performed as well as broad knowledge of applicable station work practices, industrial safety practices, and "soft skills" necessary to effectively interact with team members. FPL proposes to amend the TS in order to incorporate specific qualification requirements applicable to MDS.

#### 2.2 Discussion

According to section 4.3.2 of ANSI/ANS-3.1-1978, non-licensed supervisors must have a high school diploma or equivalent and a minimum of four years of experience in the craft or discipline they supervise. At this time, non-licensed supervisors meet or exceed ANSI/ANS-3.1-1978 requirements. Besides meeting the education and experience requirements, the supervisors are further prepared with appropriate supervisor training.

In accordance with 10 CFR 50.120, the current St. Lucie plant maintenance supervisor training program is based on a Systems Approach to Training (SAT) which ensures that personnel have obtained qualifications commensurate with the performance requirements of their job. This training program ensures that candidates receive instruction in leadership skills, interpersonal communication, command responsibilities and limitations, motivation of personnel, problem analysis and decision making, and administrative policies and procedures. These skills are not discipline specific skills but are commensurate with their job responsibility as supervisors.

FPL intends to implement multi-discipline work teams. The implementation of multi-discipline work teams results in a need for a supervisor who is capable of overseeing tasks from various disciplines. The MDS shall be the person in charge and the most accountable individual toward accomplishing quality and efficient work objectives in a multi-discipline work team. The purpose of the MDS is to oversee preventive, predictive, and corrective maintenance on plant mechanical, electrical, and instrument and control systems and components as required by TS, plant procedures, and NRC requirements. Although there are qualification requirements for the single discipline supervisor in the ANSI standards, there are no specific qualification requirements defined for the MDS position. This proposed TS change is to delineate the qualification requirements for the MDS.

FPL intends to implement a selection and qualification process for the MDS. Since qualification is defined in terms of education, experience and training, the proposed TS changes define the MDS qualification requirements in terms of education, experience and training. The MDS shall have a fundamental working knowledge of the tasks being performed as well as the broad knowledge of applicable station expectations, work practices, and industrial safety practices to ensure safety and procedural adherence is enforced at all times.

- a. The selection process recognizes the responsibilities unique to the multi-discipline supervisory position. Specific criteria are established for the selection of the MDS candidate. These include education, experience, and technical competence. Additional selection criteria include supervisory qualities such as leadership, judgement, motivation, integrity, and teamwork skills. An assessment of the candidates' supervisory experience and potential is conducted.
- b. The MDS candidates must have a high school diploma or equivalent. This minimum educational requirement is the same for all single or multi-discipline supervisors.
- c. In terms of experience, the MDS candidates must have a minimum of four years experience in one or more technical disciplines (maintenance, operations, engineering, or other related technical discipline). The four years of experience shall include three years of power plant experience, of which one year is at a nuclear power plant.

Some of the typical jobs to be supervised by an MDS include pump/motor overhauls, valve and actuator overhauls, and reactor disassembly/reassembly. These work activities contain many steps that are not discipline-specific. FPL believes that four years of experience in technical disciplines exposes personnel not only to the technical aspects of specific disciplines, but to fundamental principles that can be applied to maintenance activities. Therefore, four years experience in any related technical discipline or disciplines provides sufficient fundamental technical knowledge for proper maintenance supervisory oversight.

Once selected, the MDS candidates will receive additional training. A SAT based job and task analysis has been conducted for the MDS position and as a result a training program has been designed to address the additional identified needs. Fundamental working knowledge of tasks being performed is acquired by the MDS SAT program. The training concentrates on developing the skills and knowledge of an MDS to safely oversee tasks for multi-discipline work teams. The candidates obtain knowledge of work control processes since they need to have a perspective of both maintenance and plant operations, as well as an understanding of administrative procedures. The MDS initial training program consists of three parts; classroom and laboratory training, mentoring and evaluation, and a final interview with maintenance management. The classroom/laboratory training includes print reading, troubleshooting, electrical safety, mechanical practices (alignments, pump/valve fundamentals), electrical practices (electrical components, test equipment, grounding), and control circuit maintenance.

After completing the classroom and laboratory training, the MDS will then temporarily work under the guidance of a mentor when the work assigned is outside of the discipline of expertise. The mentor will be assigned by maintenance management. This mentoring process is a part of the overall MDS training and it is required for the successful completion of initial training. Finally, interviews will be conducted by training and maintenance management to ensure that each MDS candidate possesses the required skills and knowledge to supervise work tasks from other disciplines in order to be considered qualified to direct the activities of multi-discipline work teams.

The MDS will also attend continuing training. The lessons presented during continuing training are selected by training review committees and are based upon feedback of performance issues, operating experience, industry events and initiatives, procedure changes, and plant modifications, as well as SAT based selected topics.

There will be a qualification tracking process for the MDS position. A qualification matrix will list the initial and specialized task areas and the qualifications that each MDS possesses. This matrix will be used to ensure only qualified supervisors are assigned to oversee multi-discipline tasks. Control of proper supervision assignment will be through the use of the qualification matrix similar to the qualification matrix which is currently used for the craft.

In addition to the MDS training provided, the Maintenance Department will establish administrative controls that govern multi-discipline work teams. These controls will focus on providing guidance for work assignments to qualified craft and supervisors. These administrative controls will provide defense-in-depth to ensure safe, and high quality maintenance work.

### **3.0 Proposed Changes: Description and Bases/Justification**

#### **3.1 Description of Changes**

The affected TS pages, marked up to show the proposed changes, are included in Attachment 3 (PSL1) and Attachment 4 (PSL2).

TS 6.3.1 is revised to provide clarification of the existing requirements by including the words "for comparable positions", and reformatting the exceptions to ANSI/ANS-3.1-1978 as individual line items. This specification is also amended to include the requirements for MDS.

6.3.1 Each member of the facility staff shall meet or exceed the minimum qualifications of ANSI/ANS-3.1-1978 for comparable positions, except for:

- (1) the Health Physics Supervisor who shall meet or exceed the qualifications of Regulatory Guide 1.8, September 1975,
- (2) the Shift Technical Advisor who shall have a bachelor degree or equivalent in a scientific or engineering discipline with specific training in plant design and plant operating characteristics, including transients and accidents, and
- (3) the Multi-Discipline Supervisors who shall meet or exceed the following requirements:
  - a. Education: Minimum of a high school diploma or equivalent.
  - b. Experience: Minimum of four years of related technical experience, which shall include three years power plant experience of which one year is at a nuclear power plant.
  - c. Training: Complete the Multi-Discipline Supervisor training program.

### 3.2 Basis/Justification for Proposed Changes

TS 6.3.1 is rewritten to clarify the exceptions taken from the ANSI/ANS-3.1-1978 standards for the facility staff qualifications, and item 6.3.1.(3) is added to specify minimum qualification requirements for the MDS. In the case of single discipline supervisors, the education and experience qualification requirements shall continue to be in accordance with the ANSI/ANS-3.1-1978 standards.

The proposed new Specification 6.3.1.(3) delineates the qualification requirements in the areas of education, experience, and training for the MDS since the functional level for such a position is different than that of a single discipline supervisor, and not specifically defined in any ANSI standard. INPO addresses the required experience for multi-discipline supervisors by stating that they need to have a fundamental working knowledge of tasks being performed. FPL will ensure that an MDS possesses this fundamental working knowledge by requiring that each MDS meets or exceeds the proposed TS MDS qualification requirements as defined herein.

6.3.1.(3).a: The proposed TS requirement for education is a high school diploma or equivalent. This is identical with the educational requirement identified in the ANSI standards for non licensed supervisors.

6.3.1.(3).b: The proposed TS requirement for experience requires a minimum of four years of related technical experience, which shall include three years power plant experience of which one year is at a Nuclear Power Plant. Experience is one of the areas evaluated in order to assess their technical competence and to determine training needs for qualifying the candidates to the performance requirements of the job. The requirement for four years of related technical experience is based on a supervisor selection criteria that requires the MDS candidates to be proficient in one or more technical disciplines in order to be considered. The four years of related technical experience exposes personnel



to the general work principles common to maintenance disciplines such as work practices and management expectations, analytical ability, questioning attitude, collaboration and involvement among craft and facility staff, and conservative approach toward nuclear and industrial safety. These skills are needed by personnel in either a single or multi-discipline supervisory position. Since these and other soft skills are a common factor in every technical discipline, it is expected that such skills promote consistency in supervision independent of a discipline. Accordingly, related technical experience for four years provides sufficient insight on general principles needed for maintenance supervision.

The proposed TS requires that the four years of experience shall include three years of power plant experience, of which one year is at a nuclear power plant. This requirement is more restrictive than Section 4.3.2 of ANSI/ANS-3.1-1978 and is consistent with part of the experience requirement found in ANSI 3.1-1993.

Experience is supplemented with additional technical knowledge and skills required for job performance by the specific MDS training. Based on the job specific analysis conducted, the MDS training program ensures that a fundamental working knowledge of the tasks being performed is acquired by all Multi-Discipline Supervisors.

6.3.1.(3).c: The proposed requirement for training is to complete the Multi-Discipline Supervisor training program. Initial and continuing MDS training ensure that personnel are qualified to perform the job requirements. The training process is based on a systematic approach to training and utilizes INPO Academy Standards.

The MDS initial training program is established to develop the skills and knowledge necessary to supervise multi-discipline work teams. The basic elements for establishing a systematic MDS training program include the following:

- a. The systematic analysis of the job to be performed. The MDS position is analyzed, and the skills and knowledge requirements of the tasks performed are determined to ensure competent job performance.
- b. Establishment of prerequisite education, skills, and knowledge required for entry into the MDS training program.
- c. Design and development of the MDS training program curriculum and associated lessons based on job performance requirements identified in the job analysis.
- d. Implementation of the MDS training program to ensure knowledge and skills are obtained to meet job performance requirements.
- e. Evaluation of the MDS candidate's ability to satisfy job performance requirements.
- f. Evaluation and revision of the MDS training program to ensure program effectiveness is maintained.

The MDS initial training program also includes instruction in the following supervisory skills commensurate with their job responsibilities: leadership, interpersonal communication, command responsibilities and limitations, motivation of personnel, problem analysis, conservative decision making, and administrative policies and procedures.

MDS continuing training is implemented to maintain and enhance the proficiency of an MDS. The program is structured commensurate to the position needs and includes the following: significant plant system modifications, applicable procedure changes, industry events and initiatives, selected topics on plant fundamentals, and other training needed to address performance issues.

#### 4.0 Environmental Consideration

The proposed amendments change requirements with respect to administrative procedures or requirements. Accordingly, FPL has determined that the proposed amendments meet the eligibility criteria for categorical exclusion as set forth in 10 CFR 51.22(c)(10) and that, pursuant to 10 CFR 51.22(b), an environmental impact statement or environmental assessment need not be prepared in connection with issuance of the amendments.

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ATTACHMENT 2 to FPL Letter L-98-279

**DETERMINATION OF NO SIGNIFICANT HAZARDS CONSIDERATION**

## DETERMINATION OF NO SIGNIFICANT HAZARDS CONSIDERATION

*Description of amendment request:* The proposed amendments will incorporate specific staff qualifications for a Multi-Discipline Supervisor (MDS) position into administrative controls Technical Specification 6.3, "Unit Staff Qualifications," for St. Lucie Units 1 and 2.

Pursuant to 10CFR50.92, a determination may be made that a proposed license amendment involves no significant hazards consideration if operation of the facility in accordance with the proposed amendment would 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. Each standard is discussed as follows:

**(1) Operation of the facility in accordance with the proposed amendment would not involve a significant increase in the probability or consequences of an accident previously evaluated.**

The proposed amendments do not involve a significant increase in the probability or consequences of an accident previously evaluated because the proposed changes are administrative in nature addressing personnel qualification issues. The Multi-Discipline Supervisor (MDS) position will be filled with personnel who are experienced in one or more technical disciplines (maintenance, operations, engineering, or other related technical discipline). Fundamental working knowledge of tasks being performed will be acquired through the MDS initial training program. The training concentrates on developing the skills and knowledge of an MDS to safely oversee tasks for multi-discipline work teams. Therefore, four years experience in any related technical discipline or disciplines combined with the MDS training program provide adequate technical knowledge for proper job oversight. These proposed changes will not involve a significant increase in the probability or consequences of an accident previously evaluated because they do not affect assumptions contained in plant safety analyses, the physical design and/or operation of the plant, nor do they affect Technical Specifications that preserve safety analysis assumptions. Therefore, operation of either facility in accordance with its proposed amendment would not involve a significant increase in the probability or consequences of an accident previously evaluated.

**(2) Operation of the facility in accordance with the proposed amendment would not create the possibility of a new or different kind of accident from any accident previously evaluated.**

The changes being proposed are administrative in nature and do not affect assumptions contained in plant safety analyses, the physical design and/or modes of plant operation defined in the facility operating license, or Technical Specifications that preserve safety analysis assumptions. These changes address qualification requirements for the MDS position. Since the proposed changes do not change the qualifications for those individuals responsible for the actual licensed operation of the facility, operation of the facility in accordance with the proposed amendments would not create the possibility of a new or different kind of accident from any accident previously evaluated. No new failure mode is introduced due to the administrative changes since the proposed changes do not involve the addition or modification of equipment nor do they alter the design or operation of affected plant systems, structures, or components. Therefore, operation of either facility in accordance with its proposed

amendment would not create the possibility of a new or different kind of accident from any accident previously evaluated.

**(3) Operation of the facility in accordance with the proposed amendment would not involve a significant reduction in a margin of safety.**

The operating limits and functional capabilities of the affected systems, structures, and components are unchanged by the proposed amendments. The proposed changes to add the MDS position have management and administrative controls associated with the required qualification requirements. The St. Lucie Unit 1 and Unit 2 Technical Specifications will ensure that any individual filling the MDS position has the requisite education, experience, and training. The proposed changes do not alter the basis for any technical specification that is related to the establishment of, or the maintenance of, a nuclear safety margin. Therefore, operation of either facility in accordance with its proposed amendment would not involve a significant reduction in a margin of safety.

Based on the above discussion and the supporting Evaluation of Technical Specification changes, FPL has determined that the proposed license amendments involve no significant hazards consideration.

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ATTACHMENT 3 to FPL Letter L-98-279

**ST. LUCIE UNIT 1 MARKED-UP TECHNICAL SPECIFICATION PAGES**

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Insert - A