

## PMLevyCOLPEm Resource

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**Subject:** DRAFT REQUEST FOR ADDITIONAL INFORMATION 5245 RELATED TO SRP SECTION 13.3 FOR THE LEVY COUNTY NUCLEAR PLANT, UNITS 1 AND 2 COMBINED LICENSE APPLICATION  
**Attachments:** DRAFT RAI 5245.docx

Attached is draft RAI 5245 related to SRP Section 13.3 for the Levy County, Units 1 and 2 combined license application. Please let me know when you would like to schedule a conference call to discuss this RAI.

Thank you,  
Denise

*Denise L. McGovern*

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**Subject:** DRAFT REQUEST FOR ADDITIONAL INFORMATION 5245 RELATED TO SRP SECTION 13.3 FOR THE LEVY COUNTY NUCLEAR PLANT, UNITS 1 AND 2 COMBINED LICENSE APPLICATION

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# DRAFT

Draft Request for Additional Information No. 5245

Levy County, Units 1 and 2  
Progress Energy Florida, Inc.  
Docket No. 52-029 and 52-030  
SRP Section: 13.03 - Emergency Planning  
Application Section: Part 5

QUESTIONS for Licensing and Inspection Branch (NSIR/DPR/LIB) (EP)

13.03-\*\*\*

Subject: On-shift and Augmentation Emergency Response Staff

Basis: Supplemental to RAI 13.03-18(D)(1) and (6) and 13.03-29(1), NUREG-0654/FEMA-REP-1, Revision 1, Evaluation Criterion B.5, O.4.c, Appendix E, Section IV.A.4, and Appendix E, Section IV.F.1(b)(iii)

SRP Acceptance Criteria: Requirements A and B; Acceptance Criteria 1 and 2

1. In response to RAI 13.03-18(D)(6) regarding the basis for ERO staffing levels and consideration for Instrument and Controls (I&C) Maintenance, and Information Technology (IT) personnel, the applicant stated, in part, that its basis for the staffing composition identified in Table B-1 of the LNP Emergency Plan is Table B-1 of NUREG-0654/FEMA-REP-1, Revision 1. In addition, the applicant stated that Table B-1 includes positions needed for most types of emergencies and is not an all inclusive list of emergency response organization members that will respond to an event.  
**Discuss whether Digital I&C Maintenance personnel were considered as part of its staffing basis for Table B-1, and whether Table B-1 meets the site-specific needs of LNP to effectively respond, on shift and for an extended period of time, to a declared emergency event, for a new generation passive design reactor, the AP1000.**
2. In response to RAI 13.03-18(D)(1) regarding augmented staffing times, the applicant stated that notification of the ERO typically occurs within the first 15 minutes of an event. Once notified, ERO members are expected to respond to their respective ERFs within 30 or 60 minutes and be ready to assume responsibility for their ERO function within approximately 15 minutes. Therefore, the ranges of 30-45 minutes and 60-75 minutes shown on Table B-1 include the initial ERO notification time (not to exceed 15 minutes) and turnover time to assume the ERO role and responsibility for their respective Table B-1 function. The staff find's the applicant's response to RAI 13.03(D)(1) acceptable, however, the applicant's responses to RAIs 13.03-21(B) and RAI 13.03-44(2) appear to

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conflict with the above discussion increasing the augmentation times an additional 15 minutes, totaling 90 minutes.

**Discuss why the LNP Emergency Plan and responses to RAI 13.03-21B and 13.03-44(2) appear inconsistent with the discussion provided in RAI 13.03-18(D)(1), or revise the LNP Emergency Plan to incorporate the response to RAI 13.03-18(D)(1) (excluding the Crystal River operating experience), and ensure that Section H.4., "Activation and Staffing of Emergency Response Facilities," of the LNP Emergency Plan and the EP-ITAAC in LNP Table 3.8-1 align with this information.**

3. In response to RAI 13.03-29(1) regarding Radiological Control Team members identified to perform on-shift Protective Actions (In-Plant) in LNP Table B-1 of the Emergency Plan, the staff finds the applicant's response to RAI 13.03-29(1) acceptable, with exception. The proposed revision to Table B-1 in the LNP Emergency Plan is not consistent with the applicant's response to this RAI, which incorrectly reflects a minimum shift staffing size (1 versus 3) of Radiological Control Team members on-shift, for Units 1 and 2, specific to the major task of On-shift Protective Actions (In-Plant). In addition, the applicant added footnote (f) to the position indicating that task may be performed by shift personnel assigned other functions.

**Discuss why Table B-1 does not reflect the additional Radiological Control Team members described in response to RAI 13.03-29(1), or revise Table B-1 to include this information. Regarding footnote (f), discuss who will assume this function in the event of an emergency, including any collateral duties or competing priorities. Revise the emergency plan accordingly.**

4. Section 4.1, "On-site Dose Assessment," of the LNP Emergency Plan states that the Radiation Monitoring Team has sole responsibility for plume monitoring until such time as the State monitoring teams arrive and assume this responsibility for areas beyond the site boundary. LNP Table B-1 identifies Environmental Monitoring Team Personnel as performing the major task of off-site surveys from the EOF.

**Discuss in the LNP Emergency Plan whether the Radiation Monitoring Team personnel described in Section 4.1 are the same as the Environmental Monitoring Team personnel identified in LNP Table B-1. If not, describe in the LNP Emergency Plan the team makeup, general responsibilities, and training provided for the Environmental Monitoring Team.**

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Subject: Notification of the NRC

Basis: Appendix E, Section IV.A.4, 10 CFR 50.72(a)(3), and 10 CFR 50.72(c)(3)

SRP Acceptance Criteria: Requirements B and F; Acceptance Criteria 1, 2, and 29

The LNP Emergency Plan provides discussion regarding how the NRC will be notified in the event of an emergency (including backup capability), the time frame in which notification will occur, and the individuals responsible for direct interface with offsite authorities.

**Describe in the LNP Emergency Plan whether an open, continuous channel for communication with the NRC will exist, if requested, and the individual(s) who will perform this function.**

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Subject: Emergency Communications Plan

Basis: NUREG-0654/FEMA-REP-1, Revision 1, Evaluation Criterion F.1.d, Appendix E, Section IV.E.9(c) and (d)

SRP Acceptance Criteria: Requirements A and B; Acceptance Criteria 1 and 2

The LNP Emergency Plan, Section F.1.d, describes communication links between the LNP ERFs (e.g., control rooms, TSCs, and EOF), State and county EOCs, and the Florida Department of Health's Bureau of Radiation Control (DHBRC). Section F.3 of the LNP Emergency Plan describes communication tests and test frequencies that occur between the LNP site, State and county warning points, State and local EOCs, and Environmental Monitoring Teams (State of Florida DHBRC) within the plume exposure pathway EPZ, and the NRC Operations Center.

- 1. Describe in the LNP Emergency Plan the provisions for communications from the EOF to the Progress Energy Radiological Monitoring Teams that are dispatched for offsite monitoring, as needed, prior to the arrival of the State of Florida DHBRC support.**
- 2. Describe in the LNP Emergency Plan the communications test frequency between the LNP site (e.g., Control Rooms, TSCs, OSCs as applicable, and EOF), and the offsite LNP Radiological Control Teams.**

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- 3. Describe in the LNP Emergency Plan the frequency of testing communications between the LNP Control Rooms, TSCs, and EOF and the appropriate NRC Regional Office.**

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Subject: Public Education and Information

Basis: NUREG-0654/FEMA-REP-1, Revision 1, Evaluation Criterion G.1

SRP Acceptance Criteria: Requirements A and B; Acceptance Criteria 1 and 2

In response to RAI 13.03-20 regarding Progress Energy's efforts to coordinate public education and information with the Crystal River 3 Plant (CR3), specifically in areas where the CR3 and LNP EPZs overlap, the applicant stated, in part, that the development and distribution of public safety information materials to resident, business, and transient populations will be shared between the two sites. Due to the proximity of the sites and overlapping EPZs, Progress Energy will develop and distribute one set of public information materials describing the 10-mile EPZs for both Levy and CR3.

**Discuss whether provisions exist to ensure that the initial public information publications, developed in coordination with CR3, are distributed consistent with the Emergency Plan, or propose an ITAAC or License Condition to develop and distribute the initial public information publications, in coordination with CR3, within 180 days prior to fuel load at LNP.**

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Subject: TSC and EOF Plant Records

Basis: Supplement 1 to NUREG-0737, Criteria 8.2.1.i, 8.4.1.h

SRP Acceptance Criteria: Requirements A and B; Acceptance Criteria 1, 2, and 30

Section H.1.2.c.3, "Emergency Equipment and Supplies," of the LNP Emergency Plan states the TSCs contain reference materials that include: Mechanical and Electrical Systems Drawings; the Plant Operating Manual; FSAR; and corporate, plant, State, and local emergency plans that are available in hardcopy or online. Section H.2.1.c.5, "Emergency Equipment and Supplies," of the LNP Emergency Plan states a selection of technical documents is stored in the EOF at all times and are available whenever the EOF is activated.

- 1. Discuss why the LNP Emergency Plan does not provide reference to Technical Specifications and Emergency Operating Procedures as materials in the TSC**

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**essential for the evaluation of LNP under accident conditions, or revise the emergency plan to include this information.**

- 2. Discuss why the LNP Emergency Plan does not include a listing of technical documents (e.g., Technical Specifications, Emergency Operating Procedures, FSAR, Licensee, State, and local emergency response plans, and licensee employee radiation exposure histories) available in the EOF to support functions essential for evaluation of LNP under accident conditions, or revise the emergency plan to include this information.**

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Subject: Emergency Operations Facility

Basis: Supplement 1 to NUREG-0737, Criteria 8.4.1.e, 8.4.1.j

SRP Acceptance Criteria: Requirements A and B; Acceptance Criteria 1, 2, and 30

Section H.2.1.a of the LNP Emergency Plan states that the EOF is a shared facility with the CR3.

- 1. Describe whether the EOF is environmentally controlled to provide room air temperature, humidity and cleanliness appropriate for personnel and equipment and include a statement regarding environmental controls in the LNP Emergency Plan, or provide justification as to why this information is not required.**
- 2. Describe in the LNP Emergency Plan whether industrial security is provided at the EOF to exclude unauthorized personnel and when it is idle to maintain its readiness, or provide justification as to why this information is not required.**

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Subject: Emergency Facilities and Equipment

Basis: NUREG-0654/FEMA-REP-1, Revision 1, Evaluation Criterion H.7, Appendix E, Section IV.E.4, Appendix E, Section IV.G

SRP Acceptance Criteria: Requirements A and B; Acceptance Criteria 1, 2, and 30

- 1. Section H.7, "Off-site Radiological Monitoring Equipment," of the LNP Emergency Plan states Progress Energy maintains the capability and resources for field monitoring with additional dosimetry as specified in the Offsite Dose Calculation Manual concerning the**

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Environmental Radiological Monitoring Program. Thermo luminescent dosimeter (TLD) stations have been placed around the Site in each accessible sector at various distances. Additional Support can be requested from The Department of Health, Bureau of Radiation Control (DHBRC) and the Mobile Emergency Radiological Laboratory (MERL). **Describe in the LNP Emergency Plan whether the availability of offsite radiological monitoring equipment (other than environmental TLDs) exists in the vicinity of LNP to facilitate Progress Energy's response to a radiological emergency prior to receiving support from the State of Florida DHBRC.**

2. Section L.2.2, "First Aid Kits," of the LNP Emergency Plan states that first aid kits are located in various areas of the site, which contain equipment/items necessary to treat injured personnel until offsite support is available to transport patients to the appropriate treatment centers. **Describe in the LNP Emergency Plan whether any facilities and associated supplies (other than what is supplied in first aid kits) exist onsite for emergency first aid treatment, or provide justification as to why this information is not required.**
  
3. Section H.9, "Emergency Equipment and Supplies," of the LNP Emergency Plan states that emergency equipment and supplies to carry out provisions of the Emergency Plan are specified in the Emergency Plan Administrative Procedures. Section H.9 also provides discussion regarding procedures that contain provisions for the inventory, inspection, calibration, and operational checks of emergency equipment/instruments. **Describe in the LNP Emergency Plan what provisions exist to ensure that emergency supplies are maintained up-to-date.**

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Subject: Emergency Response Data System

Basis: Section VI of Appendix E to 10 CFR Part 50

SRP Acceptance Criteria: Requirements A and B; Acceptance Criteria 2, 12, and 30

Section VI, "Emergency Response Data System," of Appendix E to 10 CFR Part 50 states that each licensee shall develop and submit an ERDS implementation program plan that includes, but not limited to, information on the licensee's computer system configuration (i.e., hardware and software), interface, and procedures. Section F.1, "Description of Communication Links," states that ERDS provides a real-time transfer of plant data from LNP to the NRC in which Progress Energy will activate within one hour of the declaration of an Alert or higher emergency classification in accordance with implementing procedures. **Clarify in the Emergency Plan whether the plant data transmitted from the plant computer system to the NRC Operations Center via ERDS will be representative of reactor core and coolant system conditions, reactor containment conditions, radioactivity release rates, and plant**

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**meteorological data, pursuant to the requirements of Section VI.2 of Appendix E to 10 CFR Part 50. Include in your discussion a listing of parameters that will be available to transmit from each unit at the LNP site.**

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Subject: Accident Assessment

Basis: NUREG-0654/FEMA-REP-1, Revision 1, Evaluation Criterion I.5, and 10 CFR 52.80(a)

SRP Acceptance Criteria: Requirements A, B, and D; Acceptance Criteria 23

In response to Supplemental RAI 13.03-32, the applicant proposed EP-ITAAC 8.4 to display meteorological parameters in the TSC and Control Room. The data is provided in the format needed for the appropriate implementing procedures. Section I.5, "Meteorological Information," of the LNP Emergency Plan states that a permanent meteorological monitoring station is located within the Exclusion Area Boundary. It records the data that are required for performing dose projections and this information is presented in the CR, TSC, and EOF. **Discuss why EP-ITAAC 8.4 proposed in response to Supplemental RAI 13.03-32 does not include reference to the EOF, or revise EP-ITAAC 8.4 to include this information.**

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Subject: Radiological Exposure Control

Basis: NUREG-0654/FEMA-REP-1, Revision 1, Evaluation Criterion K.5.b, Appendix E, Section IV.E.3

SRP Acceptance Criteria: Requirements A and B; Acceptance Criteria 1, 2, and 30

Section K.5 of the LNP Emergency Plan states that LNP provides decontamination supplies with emergency kits. Section H.1.2, "Technical Support Centers," of the LNP Emergency Plan states that TSC contains a decontamination area and monitoring area, and that the TSC is equipped with a survey meter and an area radiation monitor. **Describe in the LNP Emergency Plan whether any other onsite decontamination facilities (e.g., Rm. 40355 - HP area of Annex bldg.) and associated decontamination supplies, other than supplies in emergency kits, exists to be used for decontaminating onsite personnel. In addition, include in this description additional detail regarding the existence of a decontamination and monitoring area in the TSC since these locations are not identified in the AP1000 DCD drawings (Figure 1.2-19).**

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Subject: Exercises and Drills

Basis: NUREG-0654/FEMA-REP-1, Revision 1, Evaluation Criterion N.1.a, N.1.b, N.3.a-f, Appendix E, Section IV.F.2, Appendix E, Section IV.F.2.f

SRP Acceptance Criteria: Requirements A and B; Acceptance Criteria 1, 2, and 30

1. Section N, "Exercises and Drills," of the LNP Emergency Plan states that Progress Energy implements a program of periodic exercises to evaluate major portions of emergency response capabilities and to develop and maintain key emergency response skills.
  - a. **Describe in the LNP Emergency Plan whether EP exercises will simulate an emergency that results in offsite radiological releases which would require response by offsite authorities, and are conducted as set forth in NRC and FEMA rules, or provide justification as to why this information is not required.**
  - b. **Describe in the LNP Emergency Plan whether the following provisions for the conduct of EP exercises have been made: 1) exercises will test the adequacy of timing and content of implementing procedures and methods; 2) exercises will test emergency equipment, communication networks, and the public notification system; and 3) exercises will ensure the members of the ERO are familiar with their duties, or provide justification for why this information is not required.**
2. Section N.1.a, "Exercise Scope and Frequency," and N.1.b, "Exercise Scenario and Participation," provide discussion regarding the frequency of exercise play, participation by the State of Florida, and scope of scenarios such that all major elements of the LNP Emergency Plan are tested. Major elements to be tested include: management and coordination of emergency response, accident assessment, protective action decision-making, and plant system repair and corrective action. **Describe in the LNP Emergency Plan whether the following provisions for the conduct of EP exercises have been made: 1) an EP exercises shall start between 6:00 p.m. and 4:00 a.m. once every six years; 2) exercises will be conducted during different seasons of the year to vary weather conditions; and 3) some exercise will be unannounced, or provide justification for why this information is not required.**
3. **Describe in the LNP Emergency Plan whether remedial exercises will be conducted for unsatisfactory performance during a biennial exercise that results in the loss of NRC and FEMA reasonable assurance that adequate protective measures can and will be taken in the event of a radiological emergency.**

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4. Section N.3, "Conduct of Drills and Exercises," of the LNP Emergency Plan describes who is responsible for the overall development and direction of an exercise, and criteria included in an exercise plan. **Clarify in the LNP Emergency Plan whether the discussion provided in Section N.3 is also applicable for drills.**

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Subject: Radiological Emergency Training

Basis: NUREG-0654/FEMA-REP-1, Revision 1, Evaluation Criterion O.4.i, O.4.j, Appendix E, Section IV.F.1(b)(viii)

SRP Acceptance Criteria: Requirements A and B; Acceptance Criteria 1 and 2

Section O.4 of the LNP Emergency Plan states, in part, that Progress Energy conducts a program for instructing and qualifying all personnel, and Company personnel not assigned to the site are utilized as members of this program. **Clarify in the LNP Emergency Plan the specialized initial and periodic refresher training (including the scope, nature, and frequency) for Corporate support personnel, including ENC and Corporate Communication personnel responsible for communicating with the media and public during an emergency.**

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Subject: Supporting Plans

Basis: NUREG-0654/FEMA-REP-1, Revision 1, Evaluation Criterion P.6

SRP Acceptance Criteria: Requirements A and B; Acceptance Criteria 1 and 2

Section P.6, "Supporting Plans," of the LNP Emergency Plan contains a list of plans that support the LNP Emergency Plan. Section L.1.3, "Off-site Medical Support Plans," of the LNP Emergency Plan states that both Seven Rivers Regional Medical Center and Citrus Memorial Hospital have plans for emergency handling of radiation accident cases from the LNP to carry out the terms of the hospital's agreement with Progress Energy. **Explain why the plans from Seven Rivers Regional Medical Center and Citrus Memorial Hospital were not referenced in Section P.6 of the emergency plan, or revise the emergency plan to include this information.**

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Subject: Security-Based Event Considerations

Basis: 10 CFR 50.47; Appendix E to 10 CFR 50; Regulatory Guide 1.206, Section C.I.13.3.1

SRP Acceptance Criteria: 1, 2, and 30

In response to RAI 13.03-37 regarding an evaluation of the potential effect to onsite staffing with augmentation, and onsite evacuation strategies in consideration of a security event from damage to nearby hazardous, facilities, dams, and other nearby sites, the applicant stated, in part, that regardless of the origin (onsite or offsite) of the initiating condition, the LNP Emergency Plan adequately addresses the ability to classify, notify, and augment staffing during an emergency. LNP Appendix 4 and Table A4-4 (Recognition Category H) will be used to determine if the declaration of an emergency is warranted. In a prior response to RAI 13.03-30 regarding emergency classification, the applicant stated that the EALs listed in Appendix 4 are consistent with NEI 07-01, Revision 0; however since the EALs are not approved specifically for LNP, Appendix 4 will be designated as "Not Used". The LNP Emergency Plan will be revised to state that the EAL scheme information and details will be contained in an Emergency Plan Implementing Procedure. **Discuss why the response to RAI 13.03-37 refers to information previously deleted by the applicant, or supplement the RAI response to take into consideration the information provided in response to RAI 13.03-30.**

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Subject: Update and Maintenance of Emergency Plan Implementing Procedures and Written Agreements

Basis: NUREG-0654/FEMA-REP-1, Revision 1, Evaluation Criterion P.4, Appendix E.IV.G to 10 CFR Part 50

SRP Acceptance Criteria: Requirements A and B; Acceptance Criteria 1 and 2

Section P.4, "Plan Reviews and Updates," of the LNP Emergency Plan states that the emergency plan will be reviewed, updated, and certified to be current on an annual basis by the Emergency Planning Coordinator. Revisions to the Plan will be reviewed in accordance with 10 CFR 50.54(q) requirements. **Describe in the LNP Emergency Plan whether provisions exist to ensure written agreements and implementing procedures are maintained up-to-date.**

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Subject: Inspection, Test, Analysis, and Acceptance Criteria (EP-ITAAC)

Basis: 10CFR 52.80(a)

SRP Acceptance Criteria: Requirements A, B, and D; Acceptance Criteria 23

In response to RAI 13.03-44(2) regarding inconsistencies between EP-ITAAC 12.1.1.E.3 and 8.1.B.3, and the augmentation times identified in LNP Table B-1, the applicant committed to revise EP-ITAAC 12.1.1.E.3 to align with LNP Table B-1. The discussion in this RAI response is inconsistent with the discussion provided in response to RAI 13.03-D.1 in which the staff found acceptable. In addition, the applicant did not address EP-ITAAC 8.1.B.3 in its response.

**Revise EP-ITAAC 12.1.1.E.3 and 8.1.B.3 to align with the response provided in RAI 13.03-D.1 regarding staff augmentation times.**