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10 CFR 52.79

U.S. Nuclear Regulatory Commission  
Attention: Document Control Desk  
Washington, D.C. 20555-0001

**LEVY NUCLEAR PLANT, UNITS 1 AND 2  
DOCKET NOS. 52-029 AND 52-030  
RESPONSE TO NRC RAI LETTER NO. 120 UNCLASSIFIED ENCLOSURE, RELATED TO  
STANDARD REVIEW PLAN SECTION 1.05 – OTHER REGULATORY CONSIDERATIONS  
FOR THE LEVY NUCLEAR PLANT UNITS 1 AND 2 COMBINED LICENSE APPLICATION  
(RAI 7568)**

References: Letter from Donald Habib (NRC) to Christopher M. Fallon (DEF), dated July 2, 2014, "Request for Additional Information Letter No. 120 Related to Standard Review Plan Section 1.05 – Other Regulatory Considerations for the Levy Nuclear Plant Units 1 and 2 Combined License Application (RAI 7568)."

Ladies and Gentlemen:

Duke Energy Florida, Inc. (DEF) hereby submits a response to the Nuclear Regulatory Commission's (NRC) request for additional information (RAI) cited in the References section. The enclosure to this letter contains DEF's response. The enclosure also identifies changes that will be made in a future revision of the Levy Nuclear Plant Units 1 and 2 COL application.

If you have any further questions, or need additional information, please contact me at (704) 382-4046.

I declare under penalty of perjury that the foregoing is true and correct.

Executed on September 18, 2014

Sincerely,

Robert Kitchen  
Director-Nuclear Licensing  
Nuclear Development

DO94  
MR0

Enclosure:

Levy Nuclear Plant Units 1 and 2 (LNP) Response to NRC Request for Additional Information Letter No. 120 Unclassified Enclosure Related to Standard Review Plan Section 1.05 – Other Regulatory Considerations for the Levy Nuclear Plant Units 1 and 2 Combined License Application (RAI 7568).

cc: U.S. NRC Region II, Regional Administrator  
Mr. Donald Habib, U.S. NRC Project Manager

**Levy Nuclear Plant Units 1 and 2 (LNP)  
Response to NRC Request for Additional Information Letter No. 120 Unclassified  
Enclosure Related to Standard Review Plan Section 1.05 – Other Regulatory  
Considerations for the Levy Nuclear Plant Units 1 and 2 Combined License Application  
(RAI 7568), Dated 07/02/14**

<u>NRC RAI #</u>	<u>Duke Energy RAI #</u>	<u>Duke Energy Response</u>
01.05-3	L- 1105	Response enclosed –See the following pages

**NRC Letter No.:** LNP-RAI-LTR-120

**NRC Letter Date:** July 2, 2014

**NRC Review of Final Safety Analysis Report**

**Text of NRC RAI:**

**QUESTIONS**

01.05-3

Explain how the applicable special nuclear material of low strategic significance requirements of 10 CFR 73.67 "Licensee fixed site and in-transit requirements for the physical protection of special nuclear material of moderate and low strategic significance" will be met. Specifically, describe how the fixed site requirements of 10 CFR 73.67(a)(1), (a)(1)(i), a(1)(ii), (a)(2)(i), (a)(2)(ii), (a)(2)(iii), (a)(2)(iv), and 10 CFR 73.67(f)(1)-(4) will be met?

The FSAR in Table 13.4-201 states that 10 CFR 73.67 will be implemented before fuel is accepted and the protected area (PA) is declared operational. Therefore, because the applicant will have more than 10kg of Cat III special nuclear material, a security plan that covers how 10 CFR 73.67(f) will be addressed must be submitted for NRC approval (see 10 CFR 73.67(c)). The plan must describe how the above requirements will be met and reference how the requirements of 10 CFR 73.67(g) are planned to be met. In addition, the plans must explicitly address the protection of both the special nuclear material of low strategic significance reactor fuel and the special nuclear material of low strategic significance non-fuel items mentioned in Appendix 11F of the application.

**Duke RAI ID #:** L-1105

**DEF Response to NRC RAI:**

DEF will comply with the special nuclear material (SNM) of low strategic significance requirements of 10 CFR 73.67 "Licensee fixed site and in-transit requirements for the physical protection of special nuclear material of moderate and low strategic significance" as follows:

Pursuant to 10 CFR 73.67 (a)(1): DEF has updated the Levy Special Nuclear Material Physical Protection Program (SNMPPP) description previously submitted to include the non-fuel Category III special nuclear material of low strategic significance listed on Appendix 11F of the application.

The revised SNMPPP description ensures 10CFR73.67 requirements are met for fuel and non-fuel special nuclear material, specifically:

Note: Sections listed in parentheses are from the revised Levy SNMPPP description:

For 10 CFR 73.67 (a):

(a)(1): The objectives of "establishing and maintaining a physical protection system" are addressed in the revised SNMPPP description. (Sections: 1. Scope, 4.4)

- (a)(1)(i): The revised SNMPPP description minimizes the possibilities for unauthorized removal of special nuclear material on the Levy Site consistent with the potential consequences of such actions. (Sections: 1. Scope, 5.3.1, 5.3.2)
- (a)(1)(ii): The revised SNMPPP Description contains steps that facilitate the location and recovery of missing special nuclear material. (Sections: 1. Scope and 5.10)
- (a)(2)(i): Provide the ability to have early detection and assessment of unauthorized access or activities by an external adversary for the Levy SNM CAA. (Sections: 1. Scope, 5.3.1, 5.3.2)
- The location chosen for a Controlled Access Area (CAA) on the Levy site during the construction period is designed and has processes described in the revised SNMPPP description to perform the required physical protection system functions: (SNMPPP Figures)
- (a)(2)(ii): Provide the ability to have early detection of removal of special nuclear material by an external adversary for the Levy SNM CAA. (Sections: 1. Scope, 5.3.1, 5.3.2)
- (a)(2)(iii): Assure proper placement and transfer of custody of special nuclear material. (Sections: 1. Scope, 5.1.1, 5.1.2)
- (a)(2)(iv): Respond to indications of an unauthorized removal of special nuclear material and then notify the appropriate response forces of its removal in order to facilitate its recovery. (Sections: 1. Scope, 4.1, 5.10, 5.11, 5.12)

For 10 CFR 73.67 (f):

The fixed site requirements for special nuclear material of low strategic significance are met in the revised SNMPPP description steps which describe:

- (f)(1): Storage and use of the material within the Controlled Access Area. (Sections: 5.8, 5.2)
- (f)(2): Monitoring of the area with an intrusion alarm or other device and the procedure for responding to unauthorized penetrations or activities. (Sections: 5.3.1, 5.3.2, 4.1)
- (f)(3): The response for unauthorized penetrations or activities for a watchman or offsite force. (Sections: 5.10, 5.3.1, 5.3.2, 4.1)
- (f)(4): The establishment of response procedures for dealing with threats or thefts including thefts of this material. (Sections: 5.10, 4.1, 5.3.1, 5.3.2, 5.7)

For Retention Requirements:

The revised SNMPPP description describes the record retention rules and was based on 10CFR 73.67 (f)(4), (g)(3)(i), (g)(5)(i), and (c)(1). (Sections: 5.7, 4.1)

For 10 CFR 73.67(g):

The in-transit requirements for special nuclear material of low strategic significance are addressed in the revised SNMPPP description. (Section: 6.1)

The requirements for receiving SNM are addressed in the revised SNMPPP description (Section: 6.2).

Transport of fuel back to the manufacturer is addressed in the revised SNMPPP description. (Section: 6.3)

Revisions to include the non-fuel SNM, the in-transit requirements for receiving special nuclear material of low strategic significance discussed in 10 CFR 73.67(g) are as follows:

- (g)(2)(i) Check integrity of the containers and seals upon receipt of the shipment. (Sections: 5.1.1.4, 5.1.2.4)
- (g)(2)(ii) Notify the shipper of receipt of the material as required per § 74.15 (Sections: 5.1.1.1, 5.1.2.1)
- (g)(2)(iii) Arrange for the in-transit physical protection of the material (Section 6.1)
- (g)(3)(i) Establish and maintain procedures for dealing with threats and thefts of SNM. This includes record retention of a minimum of 3 years for response procedures. (Sections: 5.7, 4.1)
- (g)(3)(ii) Make arrangements to be notified immediately of the arrival of the shipment at its destination point, or of any such shipment that is lost or unaccounted for after the estimated time of arrival at its destination. (Sections: 5.1.1.1, 5.1.2.1)
- (g)(3)(iii) Conduct immediately a trace investigation of any shipment that is lost or unaccounted for after the estimated arrival time and notify the NRC Operations Center within one hour. (Sections: 5.1.1.2, 5.1.2.2, 4.1)
- (g)(4) Compliance with paragraphs (c), (g)(1) and (3) for exporters of SNM. This includes retention requirements. DEF will not export SNM, except in the rare case covered by the New Fuel Shipping Plan – Part 11E. (Sections: 6.3, 5.7)
- (g)(5)(i) Compliance with paragraphs (c), (g)(2), and (3) for importers of SNM. This includes record retention requirements. (Sections: 6.2, 5.7)
- (g)(5)(ii) Notify the person who delivered the SNM to the carrier for transport of the arrival of the material. (Sections: 5.1.1.1, 5.1.2.1)

As described above, the revised Levy SNMPPP description, submitted in parallel as a Safeguards submittal, addresses the protection of SNM of low strategic significance new fuel and the SNM of low strategic significance non-fuel items mentioned in Appendix 11F of the application.

As a result of the addition of non-fuel SNM to the SNMPPP description, LNP COLA FSAR Chapter 13, Section 13.5.2.2.8, "Security Procedures" will be revised to reflect the change.

A future revision of the LNP COLA will reflect the changes discussed in this response.

**Associated LNP COL Application Revisions:**

COLA Part 2, Chapter 13 will be revised to insert text in the second sentence of Section 13.5.2.2.8 to indicate that non-fuel SNM is included in the SNM Physical Protection Program along with new fuel. The left-hand margin annotation for this added text will be "LNP COL 13.5-1."

**13.5.2.2.8 Security Procedures**

A discussion of security procedures is provided in the Security Plan. The Special Nuclear Material (SNM) Physical Protection Program describes the 10 CFR Part 70 required protection program in effect for the period of time during which new fuel as SNM or non-fuel SNM is received and stored in a controlled access area (CAA), in accordance with the requirements of 10 CFR 73.67.

**Attachments/Enclosures:**

None.