DUKE ENERGY®

CHRISTOPHER M. FALLON
Vice President
Nuclear Development

Duke Energy
EC12L/526 South Church Street
Charlotte, NC 28202

Mailing Address:
EC12L / P.O. Box 1006
Charlotte, NC 28201-1006

o: 704.382.9248
c: 704.519.6173
f: 980.373.2551

christopher.fallon@duke-energy.com

Serial: NPD-NRC-2015-025
July 16, 2015

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 REQUEST FOR ADDITIONAL INFORMATION LETTER NO. 127 RELATED TO SRP SECTION 7.3, ENGINEERED SAFETY SYSTEM FEATURES, FOR THE LEVY NUCLEAR PLANT, UNITS 1 AND 2, COMBINED LICENSE APPLICATION

Reference:
1) Letter from Donald Habib (NRC) to Christopher M. Fallon (DEF), dated May 20, 2015, "Request for Additional Information Letter No. 127 Related to Standard Review Plan Section 7.3, Engineered Safety System Features, for the Levy Nuclear Plant, Units 1 and 2, Combined License Application" (ML15140A475).

2) Letter from Christopher M. Fallon (DEF) to U.S. Nuclear Regulatory Commission (NRC), dated March 26, 2015, "Response to Request for Additional Information Letter No. 122 Related to SRP Section 6.4, Control Room Habitability," Serial: NPD-NRC-2015-003 (ML15089A193)

Ladies and Gentlemen:

Duke Energy Florida, Inc. (DEF) hereby submits our response to the Nuclear Regulatory Commission's (NRC) request for additional information provided in Reference 1. DEF's response to the NRC request is addressed in Enclosure 1 to this letter. Attachment A to Enclosure 1 contains the non-proprietary version of the response and Attachment B to Enclosure 1 contains the proprietary version of the response.

This response modifies a previously proposed site-specific change to a Tier 2 Licensing Bases Document that was provided in Reference 2. This modified change is shown in Enclosure 1. The associated change to the Final Safety Analysis Report is also provided and will be included in a future update of the COLA.

Also enclosed is the Westinghouse Application for Withholding Proprietary Information from Public Disclosure CAW-15-4242, accompanying Affidavit, Proprietary Information Notice, and Copyright Notice. (Enclosures 2 and 3)

As Attachment B to Enclosure 1 contains information proprietary to Westinghouse Electric Company LLC, it is supported by an Affidavit signed by Westinghouse, the owner of the information. The Affidavit sets forth the basis on which the information may be withheld from public disclosure by the Commission and addresses with specificity the considerations listed in paragraph (b)(4) of Section 2.390 of the Commission's regulations. Accordingly, it is

D094
NRO

respectfully requested that the information which is proprietary to Westinghouse be withheld from public disclosure in accordance with 10 CFR Section 2.390 of the Commission's regulations.

Correspondence with respect to the copyright or proprietary aspects of the items listed above or the supporting Westinghouse Affidavit should reference CAW-15-4242 and should be addressed to James A. Gresham, Manager, Regulatory Compliance, Westinghouse Electric Company, 1000 Westinghouse Drive, Building 3 Suite 310, Cranberry Township, Pennsylvania 16066.

If you have any further questions, or need additional information, please contact Bob Kitchen at (704) 382-4046, or me at (704) 382-9248.

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

Executed on July 16, 2015.

Sincerely,

Christopher M. Fallon
Vice President
Nuclear Development

Enclosures/Attachments:
1. LNP Response to NRC RAI Letter No. 127
   A. Response to NRC RAI (Non - Proprietary)
   B. Response to NRC RAI (Proprietary)
2. Westinghouse Application Letter CAW-15-4242 and Affidavit
3. Proprietary Information Notice and Copyright Notice

cc (w/o enclosures): U.S. NRC Region II, Regional Administrator
cc (w/ enclosures): 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. 127 Related to Standard Review Plan Section 7.3, Engineered Safety System Features, dated May 20, 2015

NRC RAI #	Duke Energy RAI #	Duke Energy Response
07.03-1	L-1133	Response enclosed – see following pages

NRC Letter No.: LNP-RAI-LTR-127

NRC Letter Date: May 20, 2014

NRC Review of Final Safety Analysis Report

NRC RAI NUMBER: 07.03-1

Text of NRC RAI:

Provide design information on isolation and separation between the proposed, safety-related main control room (MCR) load shedding panels and their non-safety electrical loads or explain why such information is not necessary. Also clarify how the proposed change to provide two new MCR load shedding panels meets the single failure criterion. In addition, clarify how the post-accident monitoring (PAM) parameters are revised to include the status of the two safety-related MCR load shedding panels.

10 CFR 50.55a(h), "Protection and Safety Systems," requires compliance with IEEE Std. 603-1991, "IEEE Standard Criteria for Safety Systems for Nuclear Power Generating Stations," and the correction sheet dated January 30, 1995. Clause 5.1 of IEEE Std. 603-1991 requires, in part, that safety systems shall perform all safety functions required for a design basis event in the presence of: (1) any single detectable failure within the safety systems concurrent with all identifiable but non-detectable failures; (2) all failures caused by the single failure; and (3) all failures and spurious system actuations that cause or are caused by the design basis event requiring the safety functions. Clause 5.6.3 requires, in part, that the safety system design shall be such that credible failures in and consequential actions by other systems, as documented in 4.8 of the design basis, shall not prevent the safety systems from meeting the requirements of this standard. 10 CFR Part 50, Appendix A, General Design Criterion 13, requires, in part, that instrumentation shall be provided to monitor variables and systems over their anticipated ranges for normal operation, for anticipated operational occurrences, and for accident conditions as appropriate to assure adequate safety.

In response to NRC RAI Number 06.04-4 on the MCR heat-up concern, the applicant proposed two safety-related MCR load shedding panels to de-energize some non-safety-related electrical loads. However, it is not clear how physical separation and electrical isolation are achieved between the new safety-related MCR load shedding panels and non-safety electrical loads to be controlled. Also in the response to NRC RAI Number 06.04-4, there is inconsistent description on how the non-safety electrical loads will be controlled by the two new MCR load shedding panels. For example, in Section 3.0 of Enclosure 2, it states that two redundant MCR load shed panels are added. However, later it states that each panel de-energizes separate nonessential nonsafety-related electrical loads. Provide a functional diagram to demonstrate how the proposed two MCR load shedding panels will be used to control the non-safety electrical loads. In response to NRC RAI Number 06.04-4, it mentioned that the PAM system will be revised to include the status of the two new MCR load shedding panels. However, in the revised Table 7.5-1, it says that MCR electrical load status will be added. Clarify how many new parameters will be added, what they are, and their associated parameters.

DEF RAI ID#: L-1133

DEF Response to NRC RAI:

See Attachment A for the non-proprietary, redacted version of the response to NRC RAI 07.03-1.

See Attachment B for the proprietary version of the response to NRC RAI 07.03-1.

Associated LNP COL Application Revision:

COLA Part 2, FSAR Section 7.5, will be revised to add a departure from DCD Table 7.5-1, Post-Accident Monitoring System, Sheet 11 of 12, as new FSAR Table 7.5-203, with a LMA of LNP DEP 6.4-2. This Table shall also be added to the list of tables in Chapter 7. Table 7.5-203 is shown below.

LNP DEP 6.4-2 Table 7.5-203

POST-ACCIDENT MONITORING SYSTEM

Variable	Range/ Status	Type/ Category	Qualification		Number of Instruments Required	Power Supply	QDPS Indication (Note 2)	Remarks
			Environmental	Seismic				
MCR air delivery isolation valve status	Open/ Closed	D2	Mild	Yes	1/valve (Note 7)	1E	Yes	
MCR Electrical Load status	Open / Closed	D2	Mild	Yes	1/Contactor	1E	Yes	
Instrument air header pressure	0-125 psig	F3	None	None	1	Non-1E	No	
Service water flow	0-10,000 gpm	F3	None	None	1/pump	Non-1E	No	
Service water pump status	On/Off	F3	None	None	1/pump	Non-1E	No	
Service water pump discharge valve status	Open/ Closed	F3	None	None	1/valve	Non-1E	No	
Service water pump discharge temperature	50-150°F	F3	None	None	1/pump	Non-1E	No	
Main control room supply air radiation	Note 5	E3, F3	Mild	Yes	2 (Note 9)	1E	No	
Plant vent air flow	0-110% design flow	E2	Mild	None	1	Non-1E	No	
Turbine island vent discharge radiation level	10^{-6} - 10^{+5} µCi/cc	C2, E2	Mild	None	1	Non-1E	No	
Steam generator blowdown discharge radiation	10^{-6} - 10^{-1} µCi/cc	C2	Mild	None	1	Non-1E	No	
Steam generator blowdown brine radiation level	10^{-6} - 10^{-1} µCi/cc	C2	Mild	None	1	Non-1E	No	

Attachments to Response to NRC:

A. Non-proprietary version of the response to NRC RAI 07.03-1.

B. Proprietary version of the response to NRC RAI 07.03-1.

Attachment A
Response to NRC RAI (Non- Proprietary)

Response Information:

1. In response to the request to:
   Provide a functional diagram to demonstrate how the proposed two MCR load shedding panels will be used to control the non-safety electrical loads.

   Provide design information on isolation and separation between the proposed, safety-related main control room (MCR) load shedding panels and their non-safety electrical loads or explain why such information is not necessary.

   Also clarify how the proposed change to provide two new MCR load shedding panels meets the single failure criterion.

The non-Class 1E loads shed by the MCR Load Shed Panels are isolated from each of the Class 1E Divisions (A & C) through the use of two fuses in series. These fuses provide Class 1E to non-Class 1E and Division to Division isolation. Spatial separation between Division A and Division C within the panel and between 1E and non-Class 1E circuits is provided to meet the requirements of IEEE 384 and Regulatory Guide 1.75 in accordance with AP1000 commitments and exceptions.

[ ] a,c

[ ] a,c

[ ] a,c

Westinghouse Non-proprietary Class 3

[ ] a,c

Westinghouse Non-proprietary Class 3

a,c

[ ] a,c

2. In response to the second question: *In addition, clarify how the post-accident monitoring (PAM) parameters are revised to include the status of the two safety-related MCR load shedding panels.*

   Clarify how many new parameters will be added, what they are, and their associated parameters.

Each load shed panel provides feedback to PMS via individual digital input/output for affirmative display of de-energization of non-safety MCR electrical loads status on the Primary Dedicated Safety Panel. Two Stage 1 feedbacks and two Stage 2 feedbacks per Division (8 total) are provided. Each MCR electrical load status signal is reported as closed when the contactor is closed (and loads are energized). When the contactor input is open, the PMS inverts the signal to report that the contactor is open (and MCR loads are de-energized). The revised portion of Table 7.5-1 is shown below.

Table 7.5-1 (Sheet xx of xx)

POST-ACCIDENT MONITORING SYSTEM

Variable	Range/ Status	Type/ Category	Qualification		Number of Instruments Required	Power Supply	QDPS Indication (Note 2)	Remarks
			Environmental	Seismic				
MCR air delivery isolation valve status	Open/ Closed	D2	Mild	Yes	1/valve (Note 7)	1E	Yes	
MCR electrical load status	Open/ Closed ~~Energized/ De-Energized~~	D2	Mild	Yes	1/contactor	1E	Yes	

Westinghouse Application Letter CAW-15-4242 and Affidavit
(7 pages including cover page)

Westinghouse Electric Company
Engineering, Equipment and Major Projects
1000 Westinghouse Drive, Building 3
Cranberry Township, Pennsylvania 16066
USA

U.S. Nuclear Regulatory Commission
Document Control Desk
11555 Rockville Pike
Rockville, MD 20852

Direct tel: (412) 374-4643
Direct fax: (724) 940-8560
e-mail: greshaja@westinghouse.com
Proj letter: APC_APG_000275

CAW-15-4242

10 July 2015

APPLICATION FOR WITHHOLDING PROPRIETARY
INFORMATION FROM PUBLIC DISCLOSURE

Subject: **Responses to NRC RAIs 126 and 127; APP-VES-GF-001, APP-VES-GF-002, APP-VES-GF-003**

The proprietary information for which withholding is being requested in the above-referenced report is further identified in Affidavit CAW-15-4242 signed by the owner of the proprietary information, Westinghouse Electric Company LLC. The Affidavit, which accompanies this letter, sets forth the basis on which the information may be withheld from public disclosure by the Commission and addresses with specificity the considerations listed in paragraph (b)(4) of 10 CFR Section 2.390 of the Commission's regulations.

Accordingly, this letter authorizes the utilization of the accompanying Affidavit by APOG.

Correspondence with respect to the proprietary aspects of the Application for Withholding or the Westinghouse Affidavit should reference CAW-15-4242, and should be addressed to James A. Gresham, Manager, Regulatory Compliance, Westinghouse Electric Company, 1000 Westinghouse Drive, Building 3 Suite 310, Cranberry Township, Pennsylvania 16066.

Very truly yours,

Richard A. DeLong, Director
International Licensing & Regulatory Support

CAW-15-4242
10 July 2015

AFFIDAVIT

COMMONWEALTH OF PENNSYLVANIA:

ss

COUNTY OF BUTLER:

I, Richard A. DeLong, am authorized to execute this Affidavit on behalf of Westinghouse Electric Company LLC (Westinghouse), and that the averments of fact set forth in this Affidavit are true and correct to the best of my knowledge, information, and belief.

Richard A. DeLong, Director
International Licensing & Regulatory Support

(1) I am Director, International Licensing and Regulatory Support, Westinghouse Electric Company LLC (Westinghouse), and as such, I have been specifically delegated the function of reviewing the proprietary information sought to be withheld from public disclosure in connection with nuclear power plant licensing and rule making proceedings, and am authorized to apply for its withholding on behalf of Westinghouse.

(2) I am making this Affidavit in conformance with the provisions of 10 CFR Section 2.390 of the Commission's regulations and in conjunction with the Westinghouse Application for Withholding Proprietary Information from Public Disclosure accompanying this Affidavit.

(3) I have personal knowledge of the criteria and procedures utilized by Westinghouse in designating information as a trade secret, privileged or as confidential commercial or financial information.

(4) Pursuant to the provisions of paragraph (b)(4) of Section 2.390 of the Commission's regulations, the following is furnished for consideration by the Commission in determining whether the information sought to be withheld from public disclosure should be withheld.

(i) The information sought to be withheld from public disclosure is owned and has been held in confidence by Westinghouse.

(ii) The information is of a type customarily held in confidence by Westinghouse and not customarily disclosed to the public. Westinghouse has a rational basis for determining the types of information customarily held in confidence by it and, in that connection, utilizes a system to determine when and whether to hold certain types of information in confidence. The application of that system and the substance of that system constitute Westinghouse policy and provide the rational basis required.

Under that system, information is held in confidence if it falls in one or more of several types, the release of which might result in the loss of an existing or potential competitive advantage, as follows:

(a) The information reveals the distinguishing aspects of a process (or component, structure, tool, method, etc.) where prevention of its use by any of

Westinghouse's competitors without license from Westinghouse constitutes a competitive economic advantage over other companies.

(b) It consists of supporting data, including test data, relative to a process (or component, structure, tool, method, etc.), the application of which data secures a competitive economic advantage, e.g., by optimization or improved marketability.

(c) Its use by a competitor would reduce his expenditure of resources or improve his competitive position in the design, manufacture, shipment, installation, assurance of quality, or licensing a similar product.

(d) It reveals cost or price information, production capacities, budget levels, or commercial strategies of Westinghouse, its customers or suppliers.

(e) It reveals aspects of past, present, or future Westinghouse or customer funded development plans and programs of potential commercial value to Westinghouse.

(f) It contains patentable ideas, for which patent protection may be desirable.

(iii) There are sound policy reasons behind the Westinghouse system which include the following:

(a) The use of such information by Westinghouse gives Westinghouse a competitive advantage over its competitors. It is, therefore, withheld from disclosure to protect the Westinghouse competitive position.

(b) It is information that is marketable in many ways. The extent to which such information is available to competitors diminishes the Westinghouse ability to sell products and services involving the use of the information.

(c) Use by our competitor would put Westinghouse at a competitive disadvantage by reducing his expenditure of resources at our expense.

(d) Each component of proprietary information pertinent to a particular competitive advantage is potentially as valuable as the total competitive advantage. If competitors acquire components of proprietary information, any one component may be the key to the entire puzzle, thereby depriving Westinghouse of a competitive advantage.

(e) Unrestricted disclosure would jeopardize the position of prominence of Westinghouse in the world market, and thereby give a market advantage to the competition of those countries.

(f) The Westinghouse capacity to invest corporate assets in research and development depends upon the success in obtaining and maintaining a competitive advantage.

(iv) The information is being transmitted to the Commission in confidence and, under the provisions of 10 CFR Section 2.390, it is to be received in confidence by the Commission.

(v) The information sought to be protected is not available in public sources or available information has not been previously employed in the same original manner or method to the best of our knowledge and belief.

(vi) The proprietary information sought to be withheld in this submittal is that which is appropriately marked in APP-VES-GF-001, APP-VES-GF-002, and APP-VES-GF-003 for submittal to the Commission, being transmitted by APOG letter and Application for Withholding Proprietary Information from Public Disclosure, to the Document Control Desk. The proprietary information as submitted by Westinghouse is that associated with the topic of Condensate Return and may be used only for that purpose.

(a) This information is part of that which will enable Westinghouse to:

(i) Provide the NRC and customers with technical information on the additional information on the MCR Habitability Changes.

(b) Further this information has substantial commercial value as follows:

(i) Westinghouse plans to sell the use of similar information to its customers for the purpose of providing more products and services.

(ii) Westinghouse can sell support and defense of industry guidelines and acceptance criteria for plant-specific applications.

(iii) The information requested to be withheld reveals the distinguishing aspects of a methodology which was developed by Westinghouse.

Public disclosure of this proprietary information is likely to cause substantial harm to the competitive position of Westinghouse because it would enhance the ability of competitors to provide similar systems in commercial power reactors and licensing defense services for commercial power reactors without commensurate expenses. Also, public disclosure of the information would enable others to use the information to meet NRC requirements for licensing documentation without purchasing the right to use the information.

The development of the technology described in part by the information is the result of applying the results of many years of experience in an intensive Westinghouse effort and the expenditure of a considerable sum of money.

In order for competitors of Westinghouse to duplicate this information, similar technical programs would have to be performed and a significant manpower effort, having the requisite talent and experience, would have to be expended.

Further the deponent sayeth not.

Proprietary Information Notice and Copyright Notice
(2 pages including cover page)

PROPRIETARY INFORMATION NOTICE

Transmitted herewith are proprietary and/or non-proprietary versions of documents furnished to the NRC in connection with requests for generic and/or plant-specific review and approval.

In order to conform to the requirements of 10 CFR 2.390 of the Commission's regulations concerning the protection of proprietary information so submitted to the NRC, the information which is proprietary in the proprietary versions is contained within brackets, and where the proprietary information has been deleted in the non-proprietary versions, only the brackets remain (the information that was contained within the brackets in the proprietary versions having been deleted). The justification for claiming the information so designated as proprietary is indicated in both versions by means of lower case letters (a) through (f) located as a superscript immediately following the brackets enclosing each item of information being identified as proprietary or in the margin opposite such information. These lower case letters refer to the types of information Westinghouse customarily holds in confidence identified in Sections (4)(ii)(a) through (4)(ii)(f) of the Affidavit accompanying this transmittal pursuant to 10 CFR 2.390(b)(1).

COPYRIGHT NOTICE

The reports transmitted herewith each bear a Westinghouse copyright notice. The NRC is permitted to make the number of copies of the information contained in these reports which are necessary for its internal use in connection with generic and plant-specific reviews and approvals as well as the issuance, denial, amendment, transfer, renewal, modification, suspension, revocation, or violation of a license, permit, order, or regulation subject to the requirements of 10 CFR 2.390 regarding restrictions on public disclosure to the extent such information has been identified as proprietary by Westinghouse, copyright protection notwithstanding. With respect to the non-proprietary versions of these reports, the NRC is permitted to make the number of copies beyond those necessary for its internal use which are necessary in order to have one copy available for public viewing in the appropriate docket files in the public document room in Washington, DC and in local public document rooms as may be required by NRC regulations if the number of copies submitted is insufficient for this purpose. Copies made by the NRC must include the copyright notice in all instances and the proprietary notice if the original was identified as proprietary.