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October 28, 2008

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U.S. Nuclear Regulatory Commission  
Washington, DC 20555-0001

Subject: Duke Energy Carolinas, LLC.  
William States Lee III Nuclear Station - Docket Nos. 52-018 and 52-019  
AP1000 Combined License Application for the William States Lee III  
Nuclear Station Units 1 and 2  
Response to Request for Additional Information (RAI No. 662)  
Ltr # WLG2008.10-17

Reference: Letter from Tanya Simms (NRC) to Peter Hastings (Duke Energy),  
*Request For Additional Information Letter No. 021 Related To SRP  
Section 9.5.2 for the William States Lee III Units 1 And 2 Combined  
License Application*, dated September 23, 2008.

This letter provides the Duke Energy response to the Nuclear Regulatory Commission's requests for additional information (RAIs) included in the referenced letter.

Responses to the NRC information requests described in the referenced letter are addressed in separate enclosures, which also identify associated changes, when appropriate, that will be made in a future revision of the Final Safety Analysis Report for the Lee Nuclear Station.

If you have any questions or need any additional information, please contact Peter S. Hastings, Nuclear Plant Development Licensing Manager, at 980-373-7820.

Bryan J. Dolan  
Vice President  
Nuclear Plant Development

1093  
RPO

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Enclosures:

- 1) Duke Energy Response to Request for Additional Information Letter 021, RAI  
09.05.02-001
- 2) Duke Energy Response to Request for Additional Information Letter 021, RAI  
09.05.02-002
- 3) Duke Energy Response to Request for Additional Information Letter 021, RAI  
09.05.02-003

AFFIDAVIT OF BRYAN J. DOLAN

Bryan J. Dolan, being duly sworn, states that he is Vice President, Nuclear Plant Development, Duke Energy Carolinas, LLC, that he is authorized on the part of said Company to sign and file with the U. S. Nuclear Regulatory Commission this supplement to the combined license application for the William States Lee III Nuclear Station and that all the matter and facts set forth herein are true and correct to the best of his knowledge.

  
\_\_\_\_\_  
Bryan J. Dolan

Subscribed and sworn to me on October 28, 2008

  
\_\_\_\_\_  
Notary Public

My commission expires: Feb. 27, 2011

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xc (w/o enclosures):

Michael Johnson, Director, Office of New Reactors  
Gary Holahan, Deputy Director, Office of New Reactors  
David Matthews, Director, Division of New Reactor Licensing  
Scott Flanders, Director, Site and Environmental Reviews  
Glenn Tracy, Director, Division of Construction Inspection and Operational Programs  
Charles Ader, Director, Division of Safety Systems and Risk Assessment  
Michael Mayfield, Director, Division of Engineering  
Luis Reyes, Regional Administrator, Region II  
Loren Plisco, Deputy Regional Administrator, Region II  
Thomas Bergman, Deputy Division Director, DNRL  
Stephanie Coffin, Branch Chief, DNRL

xc (w/enclosures):

Brian Hughes, Senior Project Manager, DNRL  
Tanya Simms, Project Manager, DNRL

**Lee Nuclear Station Response to Request for Additional Information (RAI)**

**RAI Letter No. 021**

**NRC Technical Review Branch: Instrumentation, Controls and Electrical Engineering 1 (ICE1)**

**Reference NRC RAI Number(s): 09.05.02-001**

**NRC RAI:**

Sections 9.5.2.2.3.1 and 9.5.2.5.1 of the William States Lee III Combined Operating License (COL) Final Safety Analysis Report (FSAR) provide a description of the offsite interfaces for the Lee Station Communications System. The FSAR states that the primary means of communication between the Station and the NRC is the Emergency Telephone System (ETS). Onsite systems supporting the ETS phones are provided with alternate or backup power sources with automatic transfer capability to maintain continuity of communication in the event the normal power source is lost. NRC Bulletin 80-15 requests the licensees to provide a sufficient back-up power source for the Emergency Notification System (ENS) in case of loss of off-site power. Demonstrate how the alternate or back-up power sources provided meets NRC Bulletin 80-15, or justify another alternative. Provide specific design details regarding the types of backup power sources used.

**Duke Energy Response:**

The primary power source to the Emergency Offsite Communication System (EOCS) will be provided by on-site power supplies fed from non-safety DC systems. To prevent a loss of communication between the facility and the NRC Operations Center during or after a loss of offsite power event the power to the EOCS will be backed up by non-safety related diesel generators. When the primary source of power is out of service, power will be transferred from the normal power supply to the diesel generator automatically with batteries keeping the EOCS powered until the loads have been synched to the diesel. Although the final design has not been completed, it is envisioned that the normal supply would be a battery charger supplied from a diesel generator backed MCC. With a loss of normal power the battery would supply power automatically until such time the battery charger is restarted on the diesel generator.

Based on the above information, communications equipment will remain operable from independent power sources in the event of the loss of normal power as recommended in NRC Bulletin 80-15.

Enclosure No. 1  
Duke Letter Dated: October 28, 2008

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**Associated Revision to the Lee Nuclear Station Final Safety Analysis Report:**

None

**Attachments:**

None

**Lee Nuclear Station Response to Request for Additional Information (RAI)**

**RAI Letter No. 021**

**NRC Technical Review Branch: Instrumentation, Controls and Electrical Engineering 1 (ICE1)**

**Reference NRC RAI Number(s): 09.05.02-002**

**NRC RAI:**

Sections 9.5.2.2.3.2.1, 9.5.2.2.3.2.2, and 9.5.2.5.2 of the Lee Combined Operating License (COL) Final Safety Analysis Report (FSAR) describe the emergency offsite communications system. 10 CFR 50.47(a)(8) "Equipment and Facilities to Support Emergency Response" provides requirements for emergency offsite communication system. The FSAR states that the primary means of communication between the station and offsite agencies for emergency communication is the selective signaling system using private lease lines. The secondary means for communication to these offsite agencies are commercial telephone lines. The design utilizes existing corporate telecommunications equipment to complete calls without having to go through a local telephone company switch. Describe how these existing telecommunications equipment will complete calls without using the local company switch.

**Duke Energy Response:**

As stated in Subsection 9.5.2.2.3.1.2, Duke Energy telecommunication interfaces are used in the selective signaling system for State/Local/Corporate offsite interfaces. These telecommunication interfaces are located offsite in Duke Energy's corporate headquarters in Charlotte, North Carolina. The power supplies to this equipment are provided with battery-back up and can also be supplied from a diesel generator located at the corporate headquarters. This equipment is in current use by existing Duke Energy nuclear plants and the Lee Nuclear Station will be integrated into the system.

The calls originating at the Station are directed by way of a selective signaling system that utilizes private lines leased from the local telephone companies that go directly to the Duke Energy corporate headquarters. The selective signaling system operates as a bridge or "party" line. However, the calls are not routed through a local telephone company switch. Instead, the bridge lines between the site, state, local and corporate interfaces are established and maintained by Duke Energy telecommunication equipment.

**Associated Revision to the Lee Nuclear Station Final Safety Analysis Report:**

None

**Attachments:**

None

**Lee Nuclear Station Response to Request for Additional Information (RAI)**

**RAI Letter No. 021**

**NRC Technical Review Branch: Instrumentation, Controls and Electrical Engineering 1 (ICE1)**

**Reference NRC RAI Number(s): 09.05.02-003**

**NRC RAI:**

Sections 9.5.2.2.3.2.1, 9.5.2.2.3.2.2, and 9.5.2.5.2 of the Lee Combined Operating License (COL) Final Safety Analysis Report (FSAR) describe the emergency offsite communications system. 10 CFR 73.55(f)(4) requires non-portable communications equipment controlled by the licensee and required by this section remain operable from independent power sources in the event of loss of normal power. The Lee FSAR only states that sufficient backup or alternate power sources are provided with automatic transfer capability for emergency offsite communications systems, but does not provide specific detail on the design of these backup or alternate power sources to demonstrate their quality or adequacy. Provide the specific design detail of these backup or alternate power sources to demonstrate their sufficiency in meeting 10 CFR 73.55(f)(4) requirements.

**Duke Energy Response:**

Information regarding emergency offsite communication equipment is addressed in response to NRC RAI 09.05.02-001 (this letter). The WLS Security Plan provides a description of how the requirements of 10 CFR 73.55(f)(4) regarding security communications are satisfied.

**Associated Revision to the Lee Nuclear Station Final Safety Analysis Report:**

None

**Attachments:**

None