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December 17, 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. 1705)
Ltr# WLG2008.12-26

Reference: Letter from Tanya Simms (NRC) to Peter Hastings (Duke Energy),
*Request for Additional Information Letter No. 057 Related to SRP Section
9.5.1 for the William States Lee III Units 1 and 2 Combined License
Application*, dated December 8, 2008

This letter provides the Duke Energy responses to the Nuclear Regulatory Commission's request for additional information (RAI) included in the referenced letter.

The responses to the NRC information request 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

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Enclosures:

- 1) Duke Energy Response to Request for Additional Information Letter 057,
RAI 09.05.01-004
- 2) Duke Energy Response to Request for Additional Information Letter 057;
RAI 09.05.01-005

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
Bryan J. Dolan

Subscribed and sworn to me on *December 17, 2008*

Kim N. Slays
Notary Public

My commission expires: *4/19/2010*



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xc (w/o enclosures):

Loren Plisco, Deputy Regional Administrator, Region II
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. 057

NRC Technical Review Branch: SFPT

Reference NRC RAI Number(s): 09.05.01-004

NRC RAI:

RG 1.206, Regulatory Position C.III.1, Section C.I.9.5.1.1 identifies that the COL applicant should provide site specific information on the fire water supply system. RG 1.189 states that fire water supplies should be filtered and treated as necessary to prevent or control biofouling or microbiologically induced corrosion (MIC) of fire water systems. COLA FSAR Section 9.2.11 identifies the Raw Water System (RWS) as the makeup water source to the primary and secondary fire water tanks. The RWS takes its water from the Broad River. The applicant needs to clarify that the FSAR's RWS treatment and clarifying process will be able to monitor and maintain an acceptable level of quality for use in fire protection systems, which includes addressing the issues of biofouling and MIC.

Duke Energy Response:

As discussed in COLA FSAR Section 9.2.11, the Raw Water System (RWS) provides treated river water for makeup to the fire protection system (FPS). The clarification subsystem, as noted in FSAR Subsection 9.2.11.2.2 under Clarifier and Accessories, and as shown in FSAR Figure 9.2-204, provides filtering and chemical treatment. The subsystem injects pH adjustor and sodium hypochlorite as necessary into the clarified water transfer tank. The sodium hypochlorite controls or prevents biofouling or microbiologically-induced corrosion (MIC). The treated and filtered water is transferred to the clarified water storage tanks, shown in Figure 9.2-205, and then used as necessary to automatically fill the fire water storage tanks.

Administrative controls will ensure that the makeup water supply to the fire water storage tanks is monitored and treated such that appropriate standards are maintained to prevent or control biofouling or MIC, which meets Regulatory Guide 1.189 guidance.

FSAR Subsection 9.5.1.2.3 will be revised to clarify how FPS makeup water quality is monitored and maintained.

Associated Revisions to the Lee Nuclear Station Final Safety Analysis Report:

FSAR Subsection 9.5.1.2.1.3

Attachment:

- 1) Revision to FSAR Subsection 9.5.1.2.1.3

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

Attachment 1 to RAI 09.05.01-4

Revision to FSAR Subsection 9.5.1.2.1.3

COLA Part 2, FSAR. Chapter 9, Subsection 9.5.1.2.1.3, will be revised as follows:

9.5.1.2.1.3 Fire Water Supply System

STD SUP 9.5-1 Add the following ~~paragraph information~~ at the end of DCD Subsection 9.5.1.2.1.3:

Threads compatible with those used by the offsite fire department are provided on all hydrants, hose couplings and standpipe risers, or a sufficient number of thread adapters compatible with the offsite fire department are provided.

WLS SUP 9.2-2 Makeup water is provided to the fire water storage tanks by RWS as described in Section 9.2.11. The makeup water is filtered, treated, and monitored in the clarification process to prevent or control biofouling or microbiologically induced corrosion which meets RG 1.189 guidance.

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

RAI Letter No. 057

NRC Technical Review Branch: SFPT

Reference NRC RAI Number(s): 09.05.01-005

NRC RAI:

RG 1.189, Position 1.6.1 states that the engineer in charge of the fire protection program (FPP) should have training and experience in both fire protection and nuclear plant safety to provide a comprehensive approach in directing the FPP for the nuclear plant. However, the William Lee COLA makes no reference to the nuclear plant safety training and experience requirement for the engineer in charge of fire protection. The applicant should include this requirement in FSAR Section 13.1.2.1.2.9 or justify why the fire protection engineer is not required to have nuclear safety knowledge, training, and/or experience.

Duke Energy Response:

As noted in RG 1.189, Regulatory Position 1.6, the fire protection program (FPP) should be under the direction of an individual who has available staff personnel knowledgeable in both fire protection and nuclear safety. In addition, Regulatory Position 1.6.1 states the formulation and assurance of the FPP and its implementation should be the responsibility of personnel prepared by training and experience in fire protection and in nuclear plant safety to provide a comprehensive approach in directing the FPP for the nuclear power plant. As such, the responsible individual should either be knowledgeable in nuclear safety or have available staff personnel knowledgeable in nuclear safety.

A change to the FSAR Subsection 13.1.2.1.2.9 will be made to include a requirement for either the engineer in charge of fire protection and/or someone available to the fire protection engineer to have training and experience in nuclear plant safety.

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

FSAR Subsection 13.1.2.1.2.9

Attachment:

- 1) Revision to FSAR Subsection 13.1.2.1.2.9

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

Attachment 1 to RAI 09.05.01-5

Revision to FSAR Subsection 13.1.2.1.2.9

COLA Part 2, FSAR. Chapter 13, Subsection 13.1.2.1.2.9, will be revised as follows:

The engineer in charge of fire protection and the fire protection program staff are responsible for the following:

- Fire protection program requirements, including consideration of potential hazards associated with postulated fires, knowledge of building layout, and system design.
- Post-fire shutdown capability.
- Design, maintenance, surveillance, and quality assurance of fire protection features (e.g., detection systems, suppression systems, barriers, dampers, doors, penetration seals and fire brigade equipment).
- Fire prevention activities (administrative controls and training).
- Pre-fire planning including review and updating of pre-fire plans at least every two years.

The engineer in charge of fire protection reports through engineering department management to the site executive in charge of plant management who has ultimate responsibility for fire protection of the plant. Additionally, the engineer in charge of fire protection works with the assistant manager in charge of operations support to coordinate activities and program requirements with the operations department. In accordance with Regulatory Guide 1.189 the engineer in charge of fire protection is a graduate of an engineering curriculum of accepted standing and has completed not less than six years of engineering experience, three of which were in a responsible position in charge of fire protection engineering work. The engineer in charge of fire protection is trained and experienced in nuclear plant safety or has available personnel who are trained and experienced in nuclear plant safety.