

## LeeRAIsPEm Resource

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**From:** Hughes, Brian  
**Sent:** Sunday, November 01, 2009 8:47 AM  
**To:** LeeRAIsPEm Resource  
**Subject:** LEE-RAI-LTR-081 RELATED TO SRP 02.03.01, 02 FOR THE W.S. LEE Units 1 and 2 COLA  
**Attachments:** LEE-RAI-LTR-081.doc

**Hearing Identifier:** Lee\_COL\_RAI  
**Email Number:** 98

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**Subject:** LEE-RAI-LTR-081 RELATED TO SRP 02.03.01, 02 FOR THE W.S. LEE Units 1  
and 2 COLA  
**Sent Date:** 11/1/2009 8:46:39 AM  
**Received Date:** 11/1/2009 8:46:39 AM  
**From:** Hughes, Brian

**Created By:** Brian.Hughes@nrc.gov

**Recipients:**  
"LeeRAIsPEm Resource" <LeeRAIsPEm.Resource@nrc.gov>  
Tracking Status: None

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**Options**  
**Priority:** Standard  
**Return Notification:** No  
**Reply Requested:** No  
**Sensitivity:** Normal  
**Expiration Date:**  
**Recipients Received:**

P.Hastings

November 1, 2009

Mr. Peter S. Hastings, P.E.  
Licensing Manager, Nuclear Plant Development  
Duke Energy  
526 South Church Street  
Charlotte, NC 28201-1006

SUBJECT: REQUEST FOR ADDITIONAL INFORMATION LETTER NO. 081 RELATED TO  
SRP 02.03.01, 02 FOR THE WILLIAM STATES LEE III UNITS 1 AND 2  
COMBINED LICENSE APPLICATION

Dear Mr. Hastings:

By letter dated December 12, 2007, as supplemented by letters dated January 28, 2008, February 6, 2008 and February 8, 2008, Duke Energy submitted its application to the U. S. Nuclear Regulatory Commission (NRC) for a combined license (COL) for two AP1000 advance passive pressurized water reactors pursuant to 10 CFR Part 52. The NRC staff is performing a detailed review of this application to enable the staff to reach a conclusion on the safety of the proposed application.

The NRC staff has identified that additional information is needed to continue portions of the review. The staff's request for additional information (RAI) is contained in the enclosure to this letter.

To support the review schedule, you are requested to respond within 30 days of the date of this letter. If changes are needed to the final safety analysis report, the staff requests that the RAI response include the proposed wording changes.

P.Hastings

If you have any questions or comments concerning this matter, you may contact me at 301-415-6582.

Sincerely,

**/RA/**

Brian Hughes, Senior Project Manager  
AP1000 Projects Branch 1  
Division of New Reactor Licensing  
Office of New Reactors

Docket Nos. 52-018  
52-019

Enclosure:  
Request for Additional Information

CC: see next page

P.Hastings

If you have any questions or comments concerning this matter, you may contact me at 301-415-6582.

Sincerely,

**/RA/**

Brian Hughes, Senior Project Manager  
AP1000 Projects Branch 1  
Division of New Reactor Licensing  
Office of New Reactors

Docket Nos. 52-018  
52-019

eRAI Tracking No. 3798, 3799

Enclosure:  
Request for Additional Information

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NAME	CLauron*	TGalletta*	BHughes*
DATE	09/23/09	09/23/09	10/29/09

\*Approval captured electronically in the electronic RAI system.

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Request for Additional Information No. 3798

10/29/2009

William States Lee III, Units 1 and 2  
Duke Energy Carolinas, LLC  
Docket No. 52-018 and 52-019  
SRP Section: 02.03.01 - Regional Climatology  
Application Section: 2.3.1

QUESTIONS for Siting and Accident Consequence Branch (RSAC)

02.03.01-11

This is a follow-up to WLS RAI 2.3.1-10:

NUREG-0800, Section 2.3.1, states the applicability of data on severe weather phenomena to represent site conditions during the expected period of reactor operation should be substantiated.

The response to WLS 2.3.1-10 addressed the issue of severe weather phenomena to represent site conditions during the expected period of operation for the Lee nuclear plants, but this information was not included in the FSAR. Please update FSAR section 2.3.1 to include this information.

Request for Additional Information No. 3799

10/29/2009

William States Lee III, Units 1 and 2  
Duke Energy Carolinas, LLC  
Docket No. 52-018 and 52-019  
SRP Section: 02.03.02 - Local Meteorology  
Application Section: 2.3.2

QUESTIONS for Siting and Accident Consequence Branch (RSAC)

02.03.02-10

This is a follow-up to WLS RAI 2.3.2-09 regarding the SACTI cooling tower plume modeling:

The response to WLS RAI 2.3.2-09 included SACTI input files, and an elaborate justification (with sensitivity studies, plume extent, plume shadowing, fogging/icing) for using Charlotte (CLT) data as spatially representative for the Lee Site, but did not provide a revision to the FSAR. Update the FSAR accordingly.

FSAR (Rev. 1) Subsection 2.3.2.5.1 Cooling Tower Plumes addressed salt deposition on vegetation but not on plant equipment.

Provide in the FSAR a description of the potential impacts of the mechanical draft cooling towers on plant design and operation. In particular, address the effects of salt deposition on electrical transmission lines, electrical equipment (including transformers and switchyard), heating, ventilation, and air conditioning (HVAC) intakes. Also include justification for the use of CLT data as spatially representative considering the differing wind distributions.