

August 27, 2007

Mr. Robert J. Duncan II
Vice President
Carolina Power & Light Company
P.O. Box 165, Mail Zone 1
New Hill, NC 27562

SUBJECT: REQUESTS FOR ADDITIONAL INFORMATION FOR THE REVIEW OF THE
SHEARON HARRIS NUCLEAR POWER PLANT, UNIT 1, LICENSE RENEWAL
APPLICATION

Dear Mr. Duncan:

By letter dated November 14, 2006, Carolina Power & Light Company submitted an application pursuant to Title 10 of the *Code of Federal Regulations* Part 54, to renew the operating license for Shearon Harris Nuclear Power Plant, Unit 1, for review by the U.S. Nuclear Regulatory Commission (NRC or the staff). The staff is reviewing the information contained in the license renewal application and has identified, in the enclosure, areas where additional information is needed to complete the review.

These requests for additional information were discussed with Roger Stewart, and a mutually agreeable date for the response is within 30 days from the date of this letter. If you have any questions, please contact me at 301-415-3137 or via e-mail MLH5@nrc.gov.

Sincerely,

/RA/

Maurice Heath, Project Manager
License Renewal Branch A
Division of License Renewal
Office of Nuclear Reactor Regulation

Docket No. 50-400

Enclosure:
Requests for Additional Information

cc w/encl: See next page

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SHEARON HARRIS NUCLEAR POWER PLANT, UNIT 1
LICENSE RENEWAL APPLICATION
REQUESTS FOR ADDITIONAL INFORMATION (RAIs)

RAI 2.3.3-1

The top of license renewal application (LRA) page 3.3-440 reads: "Notes for Tables 3.3.2-1 through 3.3.2-68:" It appears that these Notes are also applicable to Tables 3.3.2-69 through 3.3.2-71. Also, the top of page 3.5-198 reads: "Notes for Tables 3.5.2-1 through 3.5.2-26." It appears that these Notes are also applicable to Tables 3.5.2-27 through 3.5.2-29. Please confirm.

RAI 2.3.3-2

Plant Specific Note No. 716 for Tables 3.3.2-1 through 3.3.2-68 (LRA Page 3.3-447) reads "Alignments for piping and ducting may be considered equivalent components. This is supported by equivalencies in NUREG-1801, such as found in NUREG-1801, Section V.A-1." NUREG-1801 Section VA Engineered Safety Features – Containment Spray System (PWR) has an Item V.A-1 for Steel Ducting, piping and components external surfaces in Air – Indoor uncontrolled (External) environment with the effect being loss of material/general corrosion and identifies the applicable aging management program as NUREG-1801 Chapter XI.M36, "External Surfaces Monitoring." Is this the "Section V.A-1" being referred to? What is the definition of "alignments"? Are "alignments for piping and ducting" referring to supports, fittings / components, assemblies or something else? In what sense or with what are they "considered equivalent components" and exactly how does NUREG-1801 Section VA Item V.A-1 support this equivalency determination?

RAI 2.3.3-3

Drawing 8-G-0517-LR has a box shaded green titled "DISCHARGE FROM CRDM COOLING FANS" at grid location G-9. Is this depicting a common discharge ductwork plenum – or just a containment volume where mixing occurs? If the latter, why is it highlighted green?

RAI 2.3.3-4

Drawing 8-G-0517-SO3-LR Grid B-2 shows fan P-5 1B housing as being partially highlighted while fan P-5 1A housing is entirely highlighted. Is fan P-5 1B housing entirely in scope?

RAI 2.3.3-5

Drawing 8-G-0548-LR Grid B-8 shows a Screen that is partially highlighted. Is the Screen, the "bird screen" and is it entirely in scope? At Grid J-4 two damper bodies/enclosures, DG-GD3 (SA-1) and DG-GD4 (SA-1) appear to be partially highlighted. Are they entirely in scope?

Enclosure

RAI 2.3.3-6

In Section 2.1.1.1, the requirements of Title 10 of the *Code of Federal Regulations* (10 CFR) 54.4(a)(1) pertaining to safety-related systems, structures, and components (SSCs) within the scope of the license renewal were compared to those of PassPort Equipment Data Base (EDB) Quality Class A designation. It was stated that the definition of PassPort EDB Quality Class A is determined to be consistent with the scoping criteria of 10 CFR 54.4(a)(1), such that this designation is sufficient to facilitate scoping of the Shearon Harris Nuclear Power Plant (HNP) SSCs under 10 CFR 54.4(a)(1). However, it was stated in Section 2.1.1.2 (2nd paragraph in page 2.1-11) that an evaluation of components located in Turbine Building and classified as safety-related has determined that these components do not meet the license renewal definition of safety-related. Please explain the differences in the safety-related classifications between HNP Passport EDB and license renewal and how a component that is classified as safety-related in PassPort EDB may not meet the license renewal safety-related classification?

RAI 2.3.3-7

In Section 2.3 “Scoping and Screening Results,” the following statements were made for many systems (e.g. Sections 2.3.2.1, 2.3.3.56, 2.3.3.57):

“The — system contains nonsafety-related components that have the potential to cause an adverse physical interaction with safety related equipment and/or nonsafety-related piping components connected to and providing support for the safety-related functional boundary of the system. These components have been included in scope of license renewal as a result of the 10 CFR 54.4(a)(2) review. Also, the system contains components that are conservatively assumed to meet the criteria of 10 CFR 54.4(a)(2) based on their quality class and are, therefore, included in scope of license renewal.”

- a) What are the intended functions of the non-safety related components? Are they reflected in Table 2.0-1 “Intended Function Abbreviations and Definitions,” Table 3.2.1 “Summary of Aging Management Evaluations in Chapter V of NUREG-1801 for Engineered Safety Features,” Table 3.2.2 “Engineered Safety Features - Summary of Aging Management Evaluation,” and Table 3.3.2 “Auxiliary Systems - Summary of Aging Management Evaluation?”
- b) What components are included in scope of License Renewal due to the conservative assumption that they meet the criteria of 10 CFR 54.4(a)(2)? Are they reflected in the appropriate tables mentioned in the question above? Take any one system as an example and clarify how this information can be traced in the LRA.

Letter to R. Duncan, from M. Heath, dated August 27, 2007

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Shearon Harris Nuclear Power Plant, Unit 1 -2-

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