

September 18, 2008

Mr. Thomas L. Williamson  
Manager, GGNS COLA Project  
Entergy Nuclear  
1340 Echelon Parkway  
Jackson, MS 39213

SUBJECT: REQUEST FOR ADDITIONAL INFORMATION LETTER NO. 5 RELATED TO  
THE SRP SECTION 17.5 FOR THE GRAND GULF COMBINED LICENSE  
APPLICATION

Dear Mr. Williamson:

By letter dated February 27, 2008, Entergy Operations Incorporated (EOI) submitted for approval a combined license application pursuant to 10 CFR Part 52. The U. S. Nuclear Regulatory Commission (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 safety analysis report, the staff requests that the RAI response include the proposed wording changes.

If you have any questions or comments concerning this matter, I can be reached at 301-415-3104 or by e-mail at [Michael.Eudy@nrc.gov](mailto:Michael.Eudy@nrc.gov).

Sincerely,

**/RA/**

Michael Eudy, Project Manager  
ESBWR/ABWR Projects Branch 2  
Division of New Reactor Licensing  
Office of New Reactors

Docket Nos. 052-0024

eRAI Tracking No. 700

Enclosure:  
Request for Additional Information

September 18, 2008

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Entergy Nuclear  
1340 Echelon Parkway  
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Sincerely,  
**/RA/**  
Michael Eudy, Project Manager  
ESBWR/ABWR Projects Branch 2  
Division of New Reactor Licensing  
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Docket Nos. 052-0024  
eRAI Tracking No. 700  
Enclosure:  
Request for Additional Information  
Distribution:  
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BSosa, NRO  
MTonacci, NRO  
BAbeywickrama, NRO

AKeim, NRO  
SBrock, OGC  
RidsNroDsraSbpb

ADAMS Accession No.: ML082600717

NRO-002

OFFICE	SBPB/TR	SBPB/BC	NGE2/PM	OGC	NGE2/L-PM
NAME	AKeim	JNakoski	MEudy	SBrock	MTonacci
DATE	8/25/08	8/26/08	9/5/08	9/9/08	9/18/08

\*Approval captured electronically in the electronic RAI system.

OFFICIAL RECORD COPY

Grand Gulf, Unit 3 COLA  
Entergy Operations, Inc.  
Docket No. 52-024

SRP Section: 17.5 - Quality Assurance Program Description - Design Certification, Early Site Permit  
and New License Applicants  
Application Section: 17.5

## QUESTIONS

### 17.5-1

Section 17.1 of the Grand Gulf Nuclear Station, Unit 3 FSAR states, in part, the quality assurance program description (QAPD) discussed in Section 17.5 will be phased in based on the stage of the project and will be fully implemented in accordance with Table 13.4-201. Table 13.4-201 indicates that the Quality Assurance Program - Operation will be implemented 30 days prior to scheduled date for initial loading of fuel. Section 17.1 goes on to state that "During the implementation period, Entergy Corporate QA Manual will be applicable unless the QAPD requirements have been implemented. The phased implementation/conversion commenced with submittal of this COL application." The staff requests that the applicant clarify the expected scope of work for each program related to design, construction (and procurement), and operation activities from the time of docketing until the time the COL is expected to be issued. In particular, please identify when and where these design, construction (and procurement), and operation activities would take place, and specifically under which program the activities will be conducted. Additionally, please clarify the phased implementation of the new program.

### 17.5-2

Section A, "Organization," of SRP Section 17.5, indicates that the applicant's QAPD should contain an organizational description that addresses the organizational structure, functional responsibilities, levels of authority, and interfaces. The organizational description is to include the onsite and offsite organizational elements that function under the cognizance of the QA program. The NRC endorsed the Nuclear Energy Institute (NEI) QAPD template (NEI 06-14, "Template for an Industry Quality Program Description") as a method for providing a QAPD that meets the requirements of 10 CFR Part 50, Appendix B. The NEI template provides flowcharts (Figures II.1-1 and II.1-2) to delineate the organizational interfaces. Currently, for Grand Gulf, the Entergy New Nuclear QAPD does not provide equivalent flow charts. The staff requests that the application provide a clear illustration in the Entergy New Nuclear QAPD of the interrelationships between Grand Gulf/Entergy Corporate and QA organization. If using the flow charts in Chapter 13, then add them to the QAPD and also provide consistent titles between Chapter 13 and 17.5. Additionally, please include descriptions of organizational positions of the nuclear station and owner/applicant corporations and associated functions and responsibilities.

### 17.5-3

Subpart C of 10 CFR Part 52 identifies the general provisions for COLs. More specifically, 10 CFR 52.79 identifies the technical information required to be included in the FSAR. Section 2.5 of the Entergy New Nuclear QAPD states that "10 CFR 50.34(b)(6)(ii)" requires that the FSAR include, among other things, the managerial and administrative controls to be used to assure safe operation, including a discussion of how the applicable requirements of Appendix B [to 10 CFR Part 50] will be satisfied. The NRC staff notes that 10 CFR Part 52 was revised in August 2007. Therefore, the appropriate

citation for 10 CFR Part 52 applicants is 10 CFR 52.79(a)(27) and not 10 CFR 50.34(b)(6)(ii). The staff requests that the applicant update Section 2.5 of the Entergy New Nuclear QAPD accordingly.

#### 17.5-4

Section U, "Regulatory Commitments," of SRP Section 17.5 indicates that the applicant should commit to the most recent revision of certain Regulatory Guides (RGs) and Generic Letters (GLs). RG 1.37, "Quality Assurance Requirements for Cleaning of Fluid Systems and Associated Components of Water-Cooled Nuclear Power Plants," is included in this list. The staff has noted that the applicant did not include this reference in Section 13.2 of the New Entergy QAPD nor is it listed in Part IV, "Regulatory Commitments," of the New Entergy QAPD as a commitment. The staff requests that the applicant justify this exception.

#### 17.5-5

GGNS COL 17.2-2-A discusses Entergy's responsibilities for the establishment and execution of the quality assurance program during the design, construction and operation phases of Unit 3. It states that Entergy may delegate and has delegated to others the work of establishing and executing the quality assurance program, or any parts thereof, but retains responsibility for the quality assurance program. For example, NuStart Energy Development, LLC, Enercon Services, Inc., and GEH. The staff requests that the applicant clarify how Entergy will meet the requirements in order to retain responsibility when delegating the establishment and execution of the quality assurance program.

#### 17.5-6

As discussed at a July 1, 2008, public meeting with NEI and NRC staff, the staff requests that the applicant provide a description of GGNP's plan for incorporating revisions to NEI 06-14A, including:

1. the approval of additional calibration laboratories, including ACLASS Accreditation Services (ACLASS), International Accreditation Service (IAS), and Laboratory Accreditation Bureau (L-A-B).
2. the deletion of NRC Regulatory Information Summary 2002-22, which applies to digital upgrades, from the commercial graded dedication discussion.
3. the clarification of requirements for the Organization Section of the QAPD, including the use of specific organization titles throughout the QAPD.
4. the clarification of what revision of NEI 06-14A was used to develop the Entergy New QAPD and include in the Reference Section 17.5.1 of the FSAR.

#### 17.5-7

Part I, Section 1.1 of the Entergy New Nuclear QAPD lists the activities affecting quality to which the QAPD applies. Although this list is not all-inclusive, siting is listed as an activity affecting quality to which the QAPD applies. Additionally, the NRC has already issued an Early Site Permit for Grand Gulf, Unit 3 on April 5, 2007. The staff requests that the applicant provide the following:

1. a clarification on how siting activities would be subject to the Entergy New Nuclear QAPD.

2. an update to Part I, Section 1.1 and Part II, Section 2, "Quality Assurance Program," including Section 2.3, of the Entergy New Nuclear QAPD if siting activities are not subject to this QAPD.
3. an explanation of the commitment to NQA-1-1994, Subpart 2.20, "Quality Assurance Requirements for Subsurface Investigation for Nuclear Power Plants," in Section 3.5 of the Entergy New Nuclear QAPD.

17.5-8

The staff requests that the applicant provide clarifications for the following statements:

1. In Part I, Section 1 of the Entergy New Nuclear QAPD, the applicant states that the QAPD is the top-level policy document for ESP/COL/construction/pre-operation and/or operation activities conducted by or for Entergy. Please clarify how, where, and for whom the Entergy New Nuclear QAPD is applicable.
2. In Chapter 17.1 of the GGNS, Unit 3 FSAR, the applicant states that "NuStart maintains oversight for activities performed under the COLA contract. Entergy exercises oversight through their NuStart participation..." Please clarify NuStart's oversight involvement.