

Callaway2COLPEm Resource

From: Arora, Surinder
Sent: Monday, June 08, 2009 1:14 PM
To: Shafer, David E
Cc: Callaway2COL Resource; Colaccino, Joseph; Hodgdon, Ann; Peralta, Juan; Tomon, John; Roy, Tarun; NPUnt2-EPR@ameren.com
Subject: FW: Final RAI N0. 20 (eRAI 2612) - Public
Attachments: FINAL RAI 2612.doc

Dave,

Attached please find the subject request for additional information (RAI). A draft of this RAI was provided to you on May 21, 2009. Based on your request, a clarification telecon was held on June 5, 2009 to discuss this RAI. No changes were made to the original questions.

The schedule we have established for review of your application assumes technically correct and complete responses within 30 days of receipt of RAIs. For any RAIs that cannot be answered within 30 days, it is expected that a schedule date for submitting your technically correct and complete response will be provided to the staff within the 30 day period so that the staff can assess how this information will impact the review schedule.

Your response letter should also include a statement confirming that the response does or does not contain any sensitive or proprietary information.

Thanks.

SURINDER ARORA, PE
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Request for Additional Information No. 2612 Revision 0

6/08/2009

Callaway Unit 2

AmerenUE

Docket No. 52-037

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

QUESTIONS for Quality and Vendor Branch 1 (AP1000/EPR Projects) (CQVP)

17.5-1

Section 17.5 of the Callaway FSAR references the AmerenUE Quality Assurance Program Description (QAPD) Revision 1 as the quality assurance program description (QAPD) that will be used to satisfy Appendix B to 10 CFR Part 50 requirements. The AmerenUE QAPD Revision 1 incorporates Revision 1 of the Unistar Nuclear Energy QAPD (UN-TR-06-001-A) in its entirety, with the exception of changes to reflect the AmerenUE organization in section A. Revision 0 of UN-TR-06-001-A was reviewed and approved by the staff on March 14, 2007. In a letter dated September 11, 2008, UniStar Nuclear submitted Revision 1 of the UniStar Nuclear Topical Report UN-TR-06-001-A. The staff noted the following differences between Revision 1 of the UN-TR-06-001-A1 and Revision 1 of the AmerenUE QAPD:

- a. Section U of Revision 1 of the AmerenUE QAPD is missing the commitment to RG 1.37, Revision 1, March 2007, "Quality Assurance Requirements for Cleaning of Fluid Systems And Associated Components of Water-Cooled Nuclear Power Plants."
- b. Section U of Revision 1 of the AmerenUE QAPD is missing the dates for RG 1.26, Revision 4, "Quality Group Classifications and Standards for Water-, Steam-, and Radioactive-Waste-Containing of Nuclear Power Plants," and RG 1.29, Revision 4, "Seismic Design Classification," from UN-TR-06-001-A Revision 1.
- c. Section D of Revision 1 of the Ameren UEQAPD includes the requirement for the Ameren UE approval of partial and full work releases, which was deleted from Section D of UN-TR-06-001-A Revision 1.
- d. Section G of Revision 1 of the Ameren UEQAPD is missing the requirement to reflect the acceptability of using other domestic-based signatories to the ILAC MRA, in addition to A2LA and NVLAP for commercial grade calibration services from Section G of UN-TR-06-001-A Revision 1.
- e. Section G of Revision 1 of the AmerenUE QAPD includes the statement "Uses of this method is limited to the National Voluntary Laboratory Accreditation Program, the American Association for Laboratory Accreditation, and ACLASS Accreditation Services as recognized by ILAC signatories," which was deleted from Section G of UN-TR-06-001-A Revision 1.

f. Section V of Revision 1 of the AmerenUE QAPD makes the commitment to regulatory position 1.7, "Quality Assurance," in RG 1.189, April 2001, "Fire Protection for Nuclear Power Plants," which is an earlier revision of RG 1.189 and inconsistent with the revision stated in UN-TR-06-001-A Revision 1.

g. Section V of Revision 1 of the AmerenUE QAPD is missing the requirement for corrective actions to be taken under the "Test and Test Control" area from Section V of UN-TR-06-001-A Revision 1.

h. Section V of Revision 1 of the AmerenUE QAPD is missing the revision to the "24 months (Maximum interval of) Fire Protection Audit," requiring that the installed fire protection systems and barriers are appropriate for the SSCs important to safety based on a comparison with the NRC regulatory requirements and the approved Fire Protection Program (FPP) from Section V of UN-TR-06-001-A Revision 1.

i. Section V of Revision 1 of the AmerenUE QAPD is missing the revisions to the "Triennial Fire Protection Audit," from Section V of UN-TR-06-001-A Revision 1.

j. Item #2 of Table 1 of the AmerenUE QAPD is missing paragraphs 2 through 6 in the "Source/Basis for Acceptance" section, which was added to UN-TR-06-001-A in Revision 1.

The staff requests that the applicant include these revisions from UN-TR-06-001-A Revision 1 to the AmerenUE QAPD or provide justification for their exclusion.

17.5-2

Revision 1 to AmerenUE QAPD, Section D, "Procurement Document Control," proposed to add the following:

Additionally 10 CFR 50.55 "Conditions of construction permits, early site permits, combined licenses, and manufacturing licenses," paragraph (e) is imposed on suppliers of QA Level 1 materials and services until approval of the operating license by the NRC in accordance with 10 CFR 52.103(g), "Operation under a combined license."

The NRC staff notes that not all of the requirements in 50.55(e) are applicable to suppliers of basic components. Section D already correctly invokes 10 CFR Part 21 "during siting, design, fabrication, construction, and testing for QA Level 1 procurement or dedication of items and services including the dedication of items or services used to satisfy the requirements of 10 CFR 50, Appendix B." Please explain why the addition of 50.55(e) requirements is necessary or delete the statement from Revision 1 of the AmerenUE QAPD.

17.5-3

Ameren UE QAPD, Revision 1, "Quality Assurance Program Description," describes how the quality assurance requirements of Appendix B to 10 CFR Part 50 will be implemented. The regulatory guides identified below provide methods acceptable to the

staff for describing in the QAPD how the subject requirements of Appendix B to 10 CFR Part 50 will be met. Ameren UE QAPD should commit to these regulatory guides or provide justification of any proposed alternatives. Exceptions to methods described by these regulatory positions should be explicitly addressed in Ameren UE QAPD with justification with detail sufficient for the staff to evaluate compliance with the requirements of Appendix B to 10 CFR Part 50. Further, Ameren UE QAPD should be revised to clarify that changes to regulatory commitments described in the QAPD or incorporated by reference are subject to the change process defined by 10 CFR 50.54(a).

a. RG 1.8, Rev. 3, May 2000, “Qualification and Training of Personnel for Nuclear Power Plants”

This regulatory guide provides guidance acceptable to the NRC staff for complying with the personnel training and qualification requirements of 10 CFR Part 50, Section 50.120f. RG 1.8, Rev. 3 finds ANSI/ANS-3.1-1993 subject to the Regulatory Position established in Section C to provide an acceptable method for meeting requirements for training and qualification of nuclear power plant personnel. Section C exceptions include conditions applicable to personnel performing activities within the scope of the quality assurance program described in NEI 06-14A.

b. RG 1.28, Rev. 3, August 1985, “Quality Assurance Program Requirements (Design and Construction)”

This regulatory guide describes a method acceptable to the NRC staff for complying with the provisions of Appendix B to 10 CFR Part 50 with regard to establishing and implementing the requisite quality assurance program for the design and construction of nuclear power plants. RG 1.28, Rev. 3 finds NQA-1-1983 subject to the Regulatory Position established in Section C to provide an acceptable method for use in implementing the requirements of Appendix B to 10 CFR Part 50 during the design and construction phase.

c. RG 1.33, Rev. 2, February 1978, “Quality Assurance Program Requirements (Operations)”

This regulatory guide describes a method acceptable to the NRC staff for complying with the provisions of Appendix B with regard to overall quality assurance program requirements for the operation of nuclear power plants. RG 1.33 finds ANSI N18.7-1976/ANS 3.2 to provide an acceptable basis for overall quality assurance compliance with Appendix B to 10 CFR Part 50 subject to the Regulatory Position established in Section C.

17.5-4

The use of the term "Guidance" in Section 17.5, "Quality Assurance Program Guidance" of the Callaway Unit 2 FSAR is misleading as provisions described therein are requirements not guidance. Please insert the term "Requirements" in lieu of "Guidance" to identify Section 17.5 of the Callaway Unit 2 FSAR.

17.5-5

The applicant states in section 17.5.1 of the FSAR that Ameren UE contracted with Unistar Nuclear Energy (Unistar), Paul C. Rizzo and Associates Inc (Rizzo) and Black & Veatch Corporation to develop the Callaway Unit 2 COL application, including site characterization activities. The staff requests that the applicant discuss the contractual agreement between Unistar Nuclear Energy and Ameren UE with respect to Ameren UE's incorporating the UniStar QA program with modifications.

17.5-6

In the FSAR section 17.5.1 the applicant states that the Ameren UE QAPD is submitted as Part 11 of the COL application and that the QAPD is applicable to the siting, fabrication, construction (including pre-operational testing), operation (including testing), maintenance and modification of the facility. However, the staff requests that the applicant provide a clear statement in the FSAR as to when the QA program described in the Ameren UE QAPD (Part 11 of the application) will be in place.