OPERATING QUALITY ASSURANCE MANUAL (OQAM) REVISION 33 DESCRIPTION AND JUSTIFICATION FOR CHANGES

The descriptions and justifications listed below for OQAMCNs 17-001, 17-002, 17-003 and 17-004 refer to OQAM section changes as indicated by the marked-up pages of interim Revision 32b provided in Attachment 2. The OQAMCNs were previously reviewed internally, and the OQAM continues to meet the requirements of 10 CFR 50 Appendix B. None of the changes to the approved Quality Assurance Program were determined to constitute a reduction in commitment in accordance with 10 CFR 50.54(a)(3). The basis for the conclusion that these changes did not constitute a reduction in commitment is provided in the change descriptions below.

OQAMCN 17-001

Sections	Description	Justification
18.11 and 18.12	Added; "A 90-day grace period may be applied to this activity."	Addition of grace period is not considered a reduction in commitment in accordance with 10 CFR 50.54(a)(3) due to approval by an NRC SER of a similar change at another facility. This change is consistent with the SER provisions. Reference NRC ADAMS accession number ML101820108 dated 07/22/1998.
Appendix A, Regulatory Guide 1.144 discussion.	Added verbiage: "Supplier Audits – Section C.3.b.(2) of Reg. Guide 1.144, Revision 1 states that audits be performed on a "triennial basis". The 90-day grace period may be applied to this activity. Supplier Evaluation – Section C.3.b.(2) of Reg. Guide 1.144, Revision 1 states that documented evaluations be performed "annually". The 90-day grace period may be applied to this activity."	Addition of grace period is not considered a reduction in commitment in accordance with 10CFR 50.54(a)(3) due to approval by an NRC SER of a similar change at another facility. This change is consistent with the SER provisions. Reference NRC ADAMS accession number ML101820108 dated 07/22/1998.

OQAMCN 17-002

Sections	Description	Justification
1.2, 1.3.3, 1.7.3, 1.7.4, 2.11, 2.12, 3.14, 18.5, Appendix A RG 1.38 discussion page 12 of 28, and RG 1.146 discussion on page 27 of 28.	Changes made to replace gender specific verbiage with gender neutral verbiage. Examples include; "he is" to "they are" or "this individual is", "he" to "they", "the individual" or "this person", "he has" to "they have", "his" to "their" and, infrequently, deleted the pronoun. These are editorial in nature.	Editorial changes.
1.2.2	Added a new section stating: "The Senior Vice President and Chief Nuclear Officer is responsible for ensuring an independent review of matters involving safe operation of the plant is conducted at least once per twelve months. The review addresses matters that management determines warrant special attention, such as plant programs, performance trends, employee concerns, or other matters related to safe plant operations. The review is performed by a team consisting of personnel with experience and competence in the activities being reviewed, but independent (from cost and schedule considerations) from the organizations responsible for those activities. The review is supplemented by outside consultants or organizations as necessary to ensure the team has the requisite expertise and competence. Results are documented and reported to the Senior Vice President and Chief Nuclear Officer."	See below.
1.6	Revise to read, "The Onsite Review Committee (ORC) and NOS shall provide the required independent review function."	See below.
1.7.5	Delete "and the NSRB."	See below.
1.7.6.f and l	Delete "and to the NSRB."	See below.
1.7.6.i and j	Delete "and shall submit recommended changes to the NSRB."	See below.
1.7.6.n	Replace "Chairman of the NSRB" with "Senior Vice President and Chief Nuclear Officer."	See below.

1.7.6.p	Delete "and submitting recommended changes to the NSRB."	See below.
1.7.7.d	Delete "and the NSRB."	See below.
1.7.7.e	Delete "NSRB and the."	See below.
1.8	Delete section.	See below.
2.4	Revise title of "Director, Engineering Design or Projects" to "Director, Engineering Design & Projects." Typographical change reflecting combination of the two groups under one director.	Editorial change to reflect current organization.
3.18	In first paragraph, delete "and the Nuclear Safety Review Board (NSRB)." In second paragraph replace "NSRB" with "ORC."	See below.
5.6.6	Replace ", ORC and/or NSRB" with "and ORC."	See below.
16.8	Delete "the NSRB and."	See below.
17.11.2.k	Delete "and the NSRB."	See below.
18.6	Delete "The NSRB shall selectively review audit reports of onsite audits." In the next to last sentence, replace "The NSRB shall also periodically review the onsite audit program as developed by the NOS Department," with "The Director, Nuclear Oversight shall ensure an independent review of the onsite audit program is conducted periodically."	See below.
18.8	Delete first bullet. Revise wording to split the introductory sentence after "functions" and include the remaining wording in the first bullet list introduction.	See below.
18.8.i	Delete "the NSRB or."	See below.
18.8.1	Delete "In addition to audits conducted under the cognizance of the NSRB," and capitalize "The."	See below.
18.8.2	Change: "18.8.a) - j) "should be "18.8.a) – i)." (Typographical correction)	Correct typo.
18.15.1	Delete "under the cognizance of the NSRB."	See below.
Appendix A	Change reference in last sentence of lead-in under Regulatory Guide 1.8 from "ANSI/ANS	Correct typo.

	18.1-1971" to "ANSI/ANS N18.1-1971." (Typographical correction)	
Appendix A	Changed the year referred to in the lead-in under Regulatory Guide 1.39 from "ANSI N45.2.3-1975" to "ANSI N45.2.3-1973." This corrected an error in which a non-existent revision was referenced consistent with multiple references in the following discussion to the correct standard "ANSI N45.2.3 – 1973". (Typographical correction)	Correct typo.

Justification for OQAMCN 17-002 Changes

The wording changes to replace gender specific wording with gender neutral wording are editorial improvements. Additionally, other changes noted as "typographical" in nature reflect clarifications and corrections. Per 10 CFR 50.54(a)(3) changes of this nature are not considered reductions in commitment.

The remaining changes collectively eliminate the Nuclear Safety Review Board (NSRB). These changes are equivalent to changes approved for another nuclear organization, i.e., the Nuclear Management Company (NMC), as documented in the NRC Safety Evaluation Report (SER) for those changes, dated 1/13/2005 (Reference: ADAMS accession number ML050210276). Callaway Energy Center's (CEC's) proposed OQAM changes are consistent with the NMC SER in that they allow for the reviews conducted by On-site Review Committee (ORC) and Nuclear Oversight (NOS) to be an acceptable method for performing the independent reviews of the subjects and activities listed in ANSI N18.7 – 1976, without the need for an NSRB (when coupled with the additional annual review activity described in OQAM section 1.2.2). As such, the changes are not considered a lessening of commitment in accordance with 10 CFR 50.54(A)(3)(ii). These changes are described in further detail below.

<u>Conformance to Independent Review Requirements Specified per Industry Standard/Guidance</u>

OQAM Appendix A describes Callaway Energy Center's commitment to ANS-3.2 /N18.7-1976, American National Standards Institute (ANSI) Administrative Controls and Quality Assurance for the Operational Phase of Nuclear Power Plants, as endorsed by Revision 2 (February 1978) of NRC Regulatory Guide 1.33, Quality Assurance Requirements. Section 4.1 of the standard describes general program requirements for reviews and audits of activities affecting plant safety during the operational phase. It notes these programs may take different forms. Examples given are assigning these functions to separate organizational units independent of the onsite operating organization, or appointing a standing committee comprised of individuals from within the owner organization to perform reviews and exercise overview of audits. The section further describes that an independent offsite organizational unit may be assigned review responsibilities, including review of audit reports provided by onsite staff members, or both functions may be assigned an organizational unit that is independent of line responsibility for operating activities.

The OQAM changes (eliminating the NSRB) would not undermine compliance with the recommendations and guidance of the above. In lieu of using the NSRB as a standing committee

to perform the noted review functions, an alternative method relying more on independent reviews by organizational units will be utilized.

To date, CEC has used a mixture of organizational units and two standing committees to perform independent reviews. The two standing committees consist of the ORC and the NSRB. ORC functions to perform independent reviews and advise the Senior Director Nuclear Operations, who chairs the ORC, on all matters related to Nuclear Safety. Results of ORC activities are reported to the SVP/CNO. The NSRB functions to report to and advise the Senior Vice President and Chief Nuclear Officer (SVP/CNO) on assigned independent reviews and audits of designated activities, which include reviews of matters related to nuclear safety that are redundantly performed by the ORC and/or specific areas that are already audited under OQAM section 18.8.

A comparison of the review functions performed by the NSRB to those performed by the ORC shows that for the review functions/activities noted in Table 1 below, there is sufficient redundancy such that the review functions/activities are satisfied by the ORC alone (i.e., without the NSRB). Table 1 provides this comparison.

Table 1
Current OQAM ORC and NSRB Review Requirements

NSRB	ORC
1.8.10 a) The 10 CFR 50.59 and 10 CFR72.48 evaluations regarding: • procedures, • changes to procedures, equipment, systems or facilities; and • tests or experiments completed under the provision of Section 10 CFR 50.59 and 10 CFR 72.48, to verify that such actions did not require prior NRC approval;	1.7.6 b) Review of 10 CFR 50.59 and 10 CFR 72.48 evaluations regarding: • procedures, • changes to procedures, equipment, systems or facilities; and • tests or experiments completed under the provision of 10 CFR 50.59 and 10 CFR 72.48 to verify that such actions did not require prior NRC approval.
b) Proposed changes to procedures, equipment, systems or facilities which involve a license amendment as defined in 10 CFR 50.59 and 10 CFR 72.48;	c) Review of proposed procedures and changes to procedures, equipment, systems or facilities which may involve prior NRC approval as defined in 10 CFR 50.59 and 10 CFR 72.48;
c) Proposed tests or experiments which involve prior NRC approval as defined in 10 CFR 50.59 and 10 CFR 72.48,	d) Review of proposed test or experiments which may involve prior NRC approval as defined in 10 CFR 50.59 and 10 CFR 72.48;
d) Proposed changes to Technical Specifications or the Operating License;	e) Review of proposed changes to Technical Specifications or Operating License;
e) Violations of Codes, regulations, orders, Technical Specifications, license requirements, or of internal procedures or instructions having nuclear safety significance;	f) Investigation of all violations of the Technical Specifications including the forwarding of reports covering evaluation and recommendations to prevent recurrence to the Senior Vice President and Chief Nuclear Officer and to the NSRB;

f) Significant operating abnormalities or deviations from normal and expected performance of unit equipment that affect nuclear safety;	g) Review of report of operating abnormalities, deviations from expected performance of plant equipment and of unanticipated deficiencies in the design or operation of structures, systems or components that affect nuclear safety;
g) ALL REPORTABLE EVENTS;	h) Review of all REPORTABLE EVENTS;
h) All recognized indications of an unanticipated deficiency in some aspect of design or operation of structures, systems or components that could affect nuclear safety;	m) Review of Unit operations to detect potential hazards to nuclear safety;

NOS is a separate organizational unit at CEC that is independent of the operational organization and its activities. The Director, NOS is currently a member of the NSRB, and NOS performs the majority of independent reviews and all audits detailed to the NSRB. The Director, Nuclear Oversight reports directly to the SVP/CNO and is responsible for ensuring the Operating Quality Assurance Program (OQAP) is being effectively implemented for operating activities, directing the overall OQAP for CEC (including program development, maintenance), and providing constant and independent overview of nuclear plant safety as described in OQAM section 1.3.

Consistent with the NRC's basis for approval documented in the NMC SER, independent review activities will continue to be performed by the ORC and NOS. OQAM section 1.7 describes the applicable ORC activities. These assessments include reviews of matters related to nuclear safety. NOS will continue to perform the required independent audit activities specified in OQAM section 18.

The scope, implementation, and effectiveness of NOS is periodically assessed as described in OQAM section 2.12 to assure compliance with policy, commitments, and the requirements of 10 CFR 50 Appendix B. This assessment remains the responsibility of the SVP/CNO thus assuring his continued cognizance of NOS performance.

Additional independent review/ verification requirements and implementing organizational units/ groups are incorporated throughout the OQAM. These reviews are also subject to review by the ORC and NOS to ensure sufficient independence and technical adequacy. These changes are consistent with CEC's commitment to ANS-3.2 /ANSI N18.7-1976 as endorsed by NRC Regulatory Guide 1.33.

NMC's submittal to the NRC requesting elimination of their NSRB equivalent, included addition of the following to their Quality Assurance Program:

> *"NMC periodically performs independent reviews of matters involving the safe operation of its fleet of nuclear power plants, with a minimum of one such review being conducted for each generating site each year. The review addresses matters that plant and corporate management determine warrant special attention, such as plant programs, performance trends, employee concerns, or other matters related to safe plant operations. The review is performed by a team consisting of personnel with experience and competence in the activities being reviewed, but independent (from cost and schedule considerations) from the organizations responsible for those activities. The review is supplemented by outside*

consultants or organizations as necessary to ensure the team has the requisite expertise and competence. Results are documented and reported to responsible management."

The NRC's SER recognized this in approving the change:

"The addition of this focused, performance-based review is intended to support plant and corporate management in identifying and resolving issues potentially affecting safe plant operation. The requirement is that management periodically consider plant trends, performance, and employee input and determine what issues warrant an independent review. Such reviews would supplement the existing corrective action programs and self-assessments. With the exception that at least one review be performed at each site each calendar year, plant and corporate management determine the scheduling and scope of review and also the composition of the team performing the review."

CEC has included a similar requirement in section 1.2.2 to remain consistent with the basis for the NRC's approval as described in the SER.

OQAMCN 17-003

Sections	Description	Justification
1.9	Delete section.	See below.

Deletion of the Independent Technical Review section (1.9) is not considered a reduction in commitment in accordance with 10 CFR 50.54(a)(3) due to approval by an NRC Safety Evaluation Report (SER) of a similar change at another facility, i.e., the NRC SER approving eliminating License Conditions requiring the Independent Safety Engineering Group (ISEG) for Tennessee Valley Authority's Sequoyah Nuclear Plants, Units 1 and 2 (ADAMS accession number ML013320500 dated 10/12/1999). The SER approval was based on concluding the ISEG function was one of oversight only, that it did not directly make changes to structures, systems, or components (SSCs), would not impact the ability of SSCs to perform safety functions, or negatively impact the ability of licensee personnel to ensure SSCs are capable of performing intended safety functions. In addition, the SER noted that the functions the ISEG was intended to provide were now an everyday aspect of TVA's operations and that improvement in TVA's operating environment, industry initiatives, and some rulemaking since 1979 have superseded the ISEG functions.

CEC Nuclear Oversight has reviewed the SER and concluded it is applicable to the subject OQAM change. CEC implements organizational elements and everyday operational activities consistent with those described for TVA in the SER approving removal of the ISEG. These are implemented by procedures, which are considered part of the CEC quality assurance program. Most pertinent among these include:

- Location of the Engineering organizations at the CEC with responsibilities encompassing development and maintenance of plant design bases, configuration management programs, and SSC monitoring, trending, maintenance optimization, performance reporting, and issue resolution.

- CEC has a mature operating experience review program implementing Institute of Nuclear Power Operations (INPO) guidance.
- Industry training requirement implemented to comply with 10 CFR 50.120, Training and Qualification of Nuclear Power Plant Personnel.
- Establishment of a probabilistic safety analysis for CEC and incorporated risk assessments into work activities and use of software tools to enhance risk oversight.
- Self-assessments and trending are conducted by line organizations as tools to monitor and improve performance.
- NOS incorporates reviews of the above areas into normal assessments.

This section is considered redundant to the verbiage contained in section 1.7 for the Onsite Review Committee (ORC) and for verbiage in other sections describing independent NOS assessment activities such as 10.) Inspection, 16.) Corrective Action and 18.) Audits. It is also noted that other independent review/verification requirements are specified in other OQAM sections and are incorporated into plant processes. Examples include:

- Section 2.9 requiring independent third-party inspection coverage of 'Code' items by an Authorized Nuclear Inspector.
- Section 3.14 requiring an independent third-level review be employed as an additional verification when Ameren Missouri judges that a design involves unique or special design features. This section also includes requirements for design verification to be performed by competent personnel other than those who performed the original design and who shall not have established a singular design approach, have ruled out certain design considerations, or have established the design inputs for the particular design aspect being verified.
- Section 4.10 requiring the originating organization perform a documented independent review of procurement documents.
- Section 5.6 provides requirements for modifications, tests and experiments, and procedures for or affecting safety-related structures, systems, and components to be reviewed by individuals/ groups other than the individuals/ groups which designed or prepared the product.
- Section 10.1 requiring inspection and monitoring of processes which serve an inspection function be performed by personnel qualified to perform assigned tasks and who are independent of individuals who perform the activity.
- Section 14.3 requiring plant procedures governing the operational status of safety-related structures, systems, and equipment include independent verification to assure necessary changes have been implemented correctly.

OQAM independent review/verification requirements for ORC, NOS, and plant groups ensure reviews are performed by appropriately qualified personnel. The specific wording remaining in OQAM section 1.9 was previously performed by the Independent Safety Engineering Group (ISEG). The ISEG implemented NUREG-0737 requirements which were incorporated into licensing documents for plants licensed after June 26, 1980. The ISEG was originally a stand-alone group at CEC. The ISEG was later incorporated into NOS, along with many of its review

requirements. These are performed as part of NOS normal assessment activities and other plant review activities regardless of the ITR requirements/guidance specified in OQAM section 1.9. As discussed above, specific independent review requirements are also specified in other OQAM sections.

OQAMCN 17-004

Sections	Description	Justification
7.18	Clarifies that only Quality Control personnel performing receipt inspection are required to be certified to ANSI N45.2.6-1978.	Personnel assigned receipt inspections duties are provided training as needed for the type of assigned inspection. Personnel performing general receipt inspections and those inspection requiring unique technical skills or knowledge do not require QC inspector qualification. Training to ANS 3.1-1978 is sufficient for these personnel.
15.7	Deletes sentence describing QC personnel involvement in verification nuclear fuel nonconformance dispositions.	The change aligns nuclear fuel nonconformance resolution closure responsibilities with Nuclear Engineering and Fuel Cycle management personnel. This is consistent with OQAM section 15.4.

These changes address subjective language that was challenged by members of the 2017 Nuclear Industry Evaluation Program (NIEP) assessment team. The OQAMCN 17-004 changes are not considered a reduction in commitment in accordance with 10 CFR 50.54(a)(3).