Appalachian Power Company (APCo)

Quality Assurance Program Description for Nuclear Quality Assurance Program (APCo ESP QAPD, Revision 0)

Information needs

Note: On February 28, 2025, the U.S. Nuclear Regulatory Commission (NRC) determined the topical report for the Quality Assurance Program description (Agencywide Documents Access and Management System (ADAMS) Accession Package No.ML25028A159) for the Appalachian Power Small Modular Reactor Early Site Permit Activities was acceptable for review (ADAMS ML25058A240).

1. NQA-1-2015 Requirement 2 Section 302 “Inspection and Test” include specific requirements for personnel performing inspections and tests.

   Issue: QAPD Section 10.2 “Inspector Qualification” states that “Appalachian Power shall establish qualification programs for personnel performing quality inspections. The qualification program requirements are described in Part II, Section 2”. QAPD Section 11 “Test Control” states that “Personnel that perform or evaluate tests are qualified in accordance with the requirements established in Part II, Section 2”. No further description of the inspector and test personnel qualification program referenced in QAPD Part II, Section 2 was found by the staff.

Information need: Please clarify if the qualification requirements associated with inspector and test personnel are covered by your commitment to NQA Part I, Requirement 2, Section 302, Inspection and Test.

2. QAPD Section 7.1 “Acceptance of Item or Service” states that “A grace period not to exceed 25% of the audit or survey interval may be allowed under exigent conditions with the following requirements…” In SE dated August 6, 2020 (ML20216A681), the NRC staff approved a 25% extension of audit or survey frequency during extenuating circumstances. The 25% extension of audit or survey frequency is allowed if several conditions included in the SE are met.

   Issue: The staff notes that not all of the conditions were included in the QAPD. Some of the conditions not included in the QAPD include: (1) “The allowance would only apply to existing suppliers on the Qualified Supplier’s List” (2) “For audits/surveys performed during the 25% grace period, the audit/survey “clock” does not have to reset backwards to the original expiration date for which the audit/survey should have been performed. The end of the audit or survey would determine the date of the next triennial audit/survey”.

   Information need: Please clarify if you intend to meet all the conditions included in the SE when implementing the extended audit or survey frequency during extenuating

circumstances. If so, please state so and include all the conditions in the QAPD. Also, please include the definition of the term “exigent conditions” in the QAPD.

3. QAPD Section 7.1 “Acceptance of Item or Service” states “When remote assessments are necessitated by exigent conditions, the guidance provided in EPRI TR 3002020796, “Remote Assessment Techniques, Planning and Conducting Audits and Surveys Using Remote Techniques During Exigent conditions,” shall be implemented.

   Issue: In an SE dated June 22, 2021 (ML21161A201) the NRC staff determined that the implementation of EPRI Technical Report 3002020796 will continue to meet the requirements of Criterion VII of Appendix B to 10 CFR Part 50, and, therefore, was acceptable. However, the NRC staff notes that the conditions included in that SE must be met before implementing the guidance in EPRI Technical Report 3002020796. Section 3.0 of the SE states that following regarding the conditions for use: “The proposed change will provide alternate methods of conducting audits and CGSs at the contractor or subcontractor source under certain conditions. The use of these methods of verification will only be applicable when a pandemic or similar state of emergency has been declared restricting access or travel to and/or from those locations affected by State and national declarations. Furthermore, these methods (i.e. provisional and fully remote assessments) are to be used for those previously qualified suppliers to renew their qualifications. These methods are not to be used to qualify new suppliers.”

   Information need: Please clarify if you intend to meet the conditions included in the SE when implementing EPRI Technical Report 3002020796 during exigent conditions. If so, please state so and include the conditions in the QAPD.

4. QAPD Section 7.2 “NQA-1 Commitments/Exceptions” statement regarding using calibration laboratories accreditations in lieu of surveys states, in part, that “When purchasing commercial grade calibration services from a calibration laboratory, procurement source evaluation and selection measures need not be performed provided each of the following conditions are met […]”

   Regulatory Guide (RG) 1.28, “Quality Assurance Program Criteria (Design and Construction),” Revision 5 (ML17207A293), states that for Laboratory and Testing Services, the NRC finds that Nuclear Energy Institute (NEI) 14-05A, “Guidelines for the Use of Accreditation in Lieu of Commercial Grade Surveys for Procurement of Laboratory Calibration and Test Services,” Revision 1, provides an acceptable approach for licensees and suppliers subject to the QA requirements of Appendix B to 10 CFR Part 50. This acceptability is focused on the use of laboratory accreditation by Accreditation Bodies that are signatories to the International Laboratory Accreditation Cooperation (ILAC) Mutual Recognition Arrangement (MRA). Further, this acceptability would be in lieu of performing commercial-grade surveys as part of the commercial-grade dedication process for procurement of calibration and testing services performed by domestic and international laboratories accredited by signatories to the ILAC MRA.

   Also, NEI 14-05A, Revision 1, was endorsed by the NRC safety evaluation report (SER), “Guidelines for the Use of Accreditation in Lieu of Commercial Grade Surveys for Procurement of Laboratory Calibration and Test Services,” dated November 23, 2020 (ML20322A019). Section 3.4, “Implementation of the ILAC Accreditation Process in Lieu of a Commercial Grade Survey,” of the SER includes a series of actions and steps that

are necessary for a licensee and/or a supplier of basic components to accept accreditation of domestic and international calibration and test laboratory services by ILAC MRA signatories in lieu of performing a commercial-grade survey as part of the commercial-grade dedication process.

Issue #1 - The NRC staff identified that the APCo QAPD does not cover all the provisions/conditions for the use of the ILAC process.

Information need#1 –

a) Please clarify if APCo plans to implement Revision 1 of NEI 14-05A, as endorsed by the NRC. If so, please include all the conditions referenced in Section 3.4 of the SER in the QAPD.
b) Discuss whether the information provided in QAPD Section 7.2 would apply to both calibration and testing services..

Issue #2 - Revision 1 of NEI 14-05A recognizes the 2017 edition of ISO/IEC 17025 as the basis for the ILAC accreditation process. The APCO QAPD does not state the edition of the referenced ISO/IEC 17025.

Information need#2 - Please clarify if it is APCo's intention to reference the 2017 edition of ISO/IEC 17025 and update the QAPD accordingly.

5. The staff notes that in Part IV of the QAPD "Regulatory Commitments" APCo commits to the following RG:

    a. Regulatory Guide 1.8, Rev. 4, June 2019, Qualification and Training of Personnel for Nuclear Power Plants
    b. Regulatory Guide 1.164, Rev. 0, June 2017, Dedication of Commercial-Grade Items for Use in Nuclear Power Plants
    c. Regulatory Guide 1.234, Rev. 0, April 2018, Evaluating Deviations and Reporting Defects and Noncompliance Under 10 CFR Part 21

    Issue #1 - RG 1.8 is not applicable to an ESP application.

    Information need #1 - Clarify the applicability of RG 1.8 to an ESP application.

    Issue #2 - The most recent revisions of RG 1.164 and RG 1.234 are Revision 1 dated April 2024 and March 2024, respectively.

    Information need #2 - Please explain the rationale for not committing to meeting the latest revision of RGs. 1.164 and 1.234.