

REQUEST FOR ADDITIONAL INFORMATION
REGARDING NRC ASSESSMENT OF THE QUALITY ASSURANCE PROGRAM PLAN
FOR SODIUM FAST REACTORS METALLIC FUEL DATA QUALIFICATION
ARGONNE NATIONAL LABORATORY
EPID. L-2019-TOP-0023

The following requests for additional information are based on the U.S. Nuclear Regulatory Commission (NRC) staff's review of Argonne National Laboratory's (ANL) Quality Assurance Program Plan (QAPP) for sodium fast reactor (SFR) Metallic Fuel Data Qualification. This requested information is necessary to demonstrate ANL's compliance with Title 10 of the *Code of Federal Regulations* (10 CFR) Part 50, "Domestic Licensing of Production and Utilization Facilities." The responses to this request for information regarding confirmatory testing and document control will support NRC staff's reasonable assurance determination.

RAI-1: Confirmatory Testing

The criteria of Appendix B, "Quality Assurance Criteria for Nuclear Power Plants and Fuel Reprocessing Plants," to 10 CFR Part 50, require the following:

Criterion III, "Design Control," states in part that, "Measures shall be established for the identification and control of design interfaces."

Criterion XI, "Test Control," states in part that, "A test program shall be established to assure that all testing required to demonstrate that structures, systems, and components will perform satisfactorily in service."

Criterion XII, "Control of Measuring and Test Equipment," states in part that, "Measures shall be established to assure that tools, gages, instruments, and other measuring and testing devices used in activities affecting quality are properly controlled, calibrated, and adjusted."

Criterion XIV, "Inspection, Test, and Operating Status," states in part that, "Measures shall be established to indicate, by the use of markings such as stamps, tags, labels, routing cards, or other suitable means, the status of inspections and tests performed upon individual items of the nuclear power plant or fuel reprocessing plant."

In ANL QAPP section 4.2.3.3, "Confirmatory Testing," the applicant describes confirmatory testing as a method available for data validation. However, ANL's QAPP does not provide for the applicability of test control; control of measuring and test equipment; design control configuration management and interface; and inspection, test, and operating status to the confirmatory test data validation methodology.

Clarify how the regulatory requirements for test control; control of measuring and test equipment; design control configuration management and interface; and inspection, test, and operating status will be met or describe how they are not applicable to the confirmatory test data validation methodology.

RAI-2: Document Control

10 CFR Part 50, Appendix B, Criterion VI, "Document Control," states in part that, "Measures shall be established to control the issuance of documents, such as instructions, procedures, and drawings, including changes thereto, which prescribe all activities affecting quality."

In ANL's QAPP section 3.2.6, "Document Control," the applicant described the control of data qualification documents that may include ten types of documents identified by letters A through J. However, it is unclear to the staff whether the control of documents is limited to the document types identified by letters A through J listed in section 3.2.6 or is applicable to all activities affecting quality.

Clarify how the control of documents described in QAPP section 3.2.6 may include but not be limited to the ten types of documents for data qualification activities affecting quality.