



UNITED STATES
NUCLEAR REGULATORY COMMISSION
WASHINGTON, D.C. 20555-0001

June 21, 2018

EA-2018-079

Dr. David M. Slaughter
President and Reactor Administrator
Aerotest Operations, Inc.
3455 Fostoria Way
San Ramon, CA 94583

SUBJECT: AEROTEST OPERATIONS, INC. – CLOSURE OF NRC CONFIRMATORY
ACTION LETTER NO. NRR-2011-001 (EPID NO. L-2017-PMP-0014)

Dear Dr. Slaughter:

The purpose of this letter is to inform Aerotest Operations, Inc. (Aerotest) that the U.S. Nuclear Regulatory Commission (NRC) has closed NRC confirmatory action letter (CAL) No. NRR-2011-001, dated February 26, 2011 (Agencywide Documents Access and Management System (ADAMS) Accession No. ML103640183). The NRC staff is issuing this letter in response to Aerotest's letter dated April 3, 2018 (ADAMS Accession No. ML18096A688), requesting that CAL No. NRR-2011-001 be closed because its commitments are no longer relevant.

In 2010, Aerotest and X-Ray Industries, Inc. submitted a license transfer application to the NRC requesting that the NRC consent to the proposed sale of all of the stock in Aerotest from Autoliv ASP, Inc. to X-Ray Industries, Inc. to resolve Foreign Ownership, Control, or Domination (FOCD) issues related to Autoliv ASP, Inc.'s ownership of Aerotest. The NRC staff consented to the proposed transfer; however, the proposed transfer was never consummated. As a result, Aerotest remained in violation of Section 104d of the Atomic Energy Act of 1954, as amended (AEA), and Title 10 of the *Code of Federal Regulations* (10 CFR) 50.38, "Ineligibility of certain applicants," which prohibit foreign corporations from owning, controlling, or dominating NRC licensees. (For further details regarding Aerotest's historic FOCD issues and the proposed license transfer to X-Ray Industries, Inc., see ADAMS Accession No. ML17138A306.)

On February 26, 2011, the NRC issued CAL No. NRR-2011-001, which confirmed actions that Aerotest stated by letter dated January 7, 2011 (ADAMS Accession No. ML110180463), that it had taken, or would take, following the failure of the FOCD issues to be resolved by a license transfer to X-Ray Industries, Inc. The actions discussed in the CAL include ceasing operations, requesting a possession-only license, maintaining staffing levels, preparing a decommissioning plan, developing plans to manage and provide funding for the disposition of fuel, and obtaining necessary regulatory approvals before resuming research or commercial X-Ray work. Although the CAL reflected Aerotest's commitment to a cessation of operations as of October 15, 2010, Aerotest could still operate the Aerotest Radiography and Research Reactor (ARRR) to the extent needed to continue to perform testing, sampling, and fuel observations necessary to comply with the current ARRR license.

During 2011, following the issuance of the CAL, Aerotest provided the NRC staff with status updates regarding the commitments in the CAL, and certain of the commitments were clarified or revised based on communications between Aerotest and the NRC staff. Additionally, Aerotest continued to negotiate with other entities regarding the potential sale of Aerotest. On January 18, 2012, the NRC staff held a public meeting with Aerotest to discuss the status of the items in the CAL (a public meeting summary, dated January 20, 2012, which includes a summary of the communications between Aerotest and the NRC staff during the time period between the issuance of the CAL and the public meeting, may be found at ADAMS Accession No. ML120200203). By letter dated January 24, 2012 (ADAMS Accession No. ML12027A010), Aerotest stated that by the end of March 2012, it would submit to the NRC either (1) a schedule for submitting an application for license transfer to a selected buyer of Aerotest, or (2) a notice that negotiations for the sale of Aerotest had ended, and a commitment to submit a decommissioning plan for the ARRR and a possession-only license amendment application, as originally discussed in the CAL, by the end of April 2012. By letter dated March 30, 2012 (ADAMS Accession No. ML12093A399), Aerotest stated that it had selected a buyer, Nuclear Labyrinth LLC (Nuclear Labyrinth), and that, by May 30, 2012, it would submit an application for license transfer. By letter dated May 30, 2012 (ADAMS Accession Nos. ML12152A233 and ML12180A384), as supplemented, Aerotest and Nuclear Labyrinth submitted a license transfer application to the NRC. (For further details regarding Aerotest and Nuclear Labyrinth's license transfer application, see ADAMS Accession No. ML17138A306.)

On February 28, 2017, the NRC staff issued an order consenting, subject to certain conditions, to the indirect transfer of the ARRR license to Nuclear Labyrinth (ADAMS Accession Nos. ML16333A446 and ML16333A448). In its supporting safety evaluation (ADAMS Accession No. ML16333A449), the NRC staff found, in part, that as a result of the indirect license transfer, Aerotest's ultimate corporate parent would be Nuclear Labyrinth, which is incorporated in the State of Utah, headquartered in Sandy, Utah, and managed by its chief executive officer and sole owner, Dr. David M. Slaughter, who is a U.S. citizen. Based on this information, the NRC staff determined that Nuclear Labyrinth was not a foreign corporation for the purposes of the AEA and the Commission's regulations. The NRC staff also stated that the indirect license transfer application had provided the names and addresses of the members of Aerotest's board of directors and its principal officers, and that all were U.S. citizens. Therefore, the NRC staff concluded that, upon the consummation of the indirect license transfer, Aerotest would not be in violation of AEA Section 104d and 10 CFR 50.38. On July 17, 2017, Aerotest and Nuclear Labyrinth consummated the transfer of the ultimate ownership of Aerotest to Nuclear Labyrinth (ADAMS Accession No. ML17138A310).

As noted in Aerotest's letter requesting closure of the CAL, dated April 3, 2018, and in the NRC staff's Inspection Report No. 50-228/2012-204 for the ARRR, dated August 14, 2012 (ADAMS Accession No. ML12213A001), the ARRR was defueled in July 2012. The fuel was removed from the core to allow for a complete inspection of all fuel in the core, following the discovery of cracks in some of the ARRR fuel elements in December 2011. The ARRR currently remains defueled, and, therefore, cannot currently be operated. As discussed above, the CAL allowed Aerotest to continue to perform testing, sampling, and fuel observations necessary to comply with the current ARRR license. However, Aerotest's letter, dated April 3, 2018, requesting closure of the CAL, stated that ARRR surveillances related to reactor performance that require reactor operation, such as thermal power calibrations and reactivity measurements, were suspended following the defueling of the ARRR. Additionally, the portion of the ARRR Operator Requalification Plan that related to the ARRR NRC-licensed operators' performance of a minimum number of reactor manipulations per quarter was also suspended.

Aerotest's letter requesting closure of the CAL, dated April 3, 2018, stated that the performance of ARRR surveillances related to reactor performance, and the ARRR NRC-licensed operators' performance of reactor manipulations, would be addressed in an ARRR Restart Plan. Aerotest's letter requesting closure of the CAL, dated April 3, 2018, further stated that "no movement of fuel for an approach to criticality measurement will be attempted until the necessary [Aerotest Reactor Safeguards Committee] and NRC approvals are granted." In its separate letter dated April 3, 2018 (ADAMS Accession No. ML18096A689), submitting an ARRR Restart Plan to the NRC and requesting review of the plan, Aerotest stated that the critical assembly of the ARRR core, and the reactor calibrations that would be subsequently performed, "will not be initiated until the NRC indicates the [ARRR Restart Plan] and evaluations [(i.e., evaluations related to the ARRR restart which Aerotest did not propose to submit to the NRC, but which Aerotest stated would be held at Aerotest and be available for NRC inspection at any time)] are adequate."

Because the indirect transfer of the ARRR license to Nuclear Labyrinth resolved Aerotest's FOCD issues, the NRC staff finds that the circumstances that formed the basis for Aerotest's January 7, 2011, commitments to the NRC, and the NRC staff's subsequent issuance of CAL No. NRR-2011-001, issued February 26, 2011, are no longer present.

The NRC staff also finds that the actions, discussed in the CAL, related to the submission of a possession-only license amendment application, preparations for decommissioning, and planning for fuel management, are no longer necessary or relevant because Aerotest is no longer in violation of AEA Section 104d and 10 CFR 50.38, and because Aerotest plans to ultimately resume ARRR operation (however, the NRC staff notes that Aerotest continues to be subject to the conditions related to decommissioning funding and spent fuel management in the NRC's February 28, 2017, order approving the license transfer to Nuclear Labyrinth).

The NRC staff finds that the action, discussed in the CAL, related to maintaining ARRR staffing levels in accordance with the ARRR technical specifications (TSs), is no longer necessary or relevant as a CAL commitment because Aerotest plans to ultimately resume ARRR operation, and because Aerotest continues to be subject to all of the conditions of the ARRR license and TSs.

The NRC staff finds that the actions, discussed in the CAL, related to the cessation of operations (except for testing, sampling, and fuel observations necessary to comply with the ARRR license) and the performance of research or commercial work at the ARRR, are no longer necessary or relevant as CAL commitments because Aerotest is no longer in violation of AEA Section 104d and 10 CFR 50.38, and because Aerotest plans to ultimately resume ARRR operation. The NRC staff notes that because the ceased actions discussed in the CAL do not include tests and surveillances needed to comply (or to demonstrate compliance with) the ARRR TSs, the CAL would not prevent Aerotest from reloading a core and operating the ARRR as needed to demonstrate the core's compliance with the ARRR TS. However, based on Aerotest's commitments in its April 3, 2018 letters, discussed above, the NRC staff's understanding is that Aerotest will not begin to reload the ARRR core or operate the ARRR until NRC inspections have determined that there are no outstanding findings of significance and no outstanding inspector follow-up items related to significant issues with the ARRR Restart Plan or associated documents. The NRC staff communicated this understanding to Aerotest by letter dated June 8, 2018 (ADAMS Accession No. ML18127B703), and also provided Aerotest with the results of its preliminary review of the ARRR Restart Plan.

Because the circumstances which led to the issuance of CAL No. NRR-2011-001 on February 26, 2011, are no longer present, and because, as discussed above, the NRC staff has

also determined that the actions in CAL No. NRR-2011-001 are no longer necessary or relevant as CAL commitments, the NRC staff is closing CAL No. NRR-2011-001.

If you have any questions, please contact Edward Helvenston, Project Manager, NRC, Office of Nuclear Reactor Regulation, at 301-415-4067, or by electronic mail at Edward.Helvenston@nrc.gov.

Sincerely,

/RA/

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Docket No. 50-228
License No. R-98

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SUBJECT: AEROTEST OPERATIONS, INC. - CLOSURE OF NRC CONFIRMATORY ACTION LETTER NO. NRR-2011-001 DATED JUNE 21, 2018

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ADAMS Accession No. ML18127B706; *concurring via e-mail**NRR-106**

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