

October 24, 2017

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

SUBJECT: AEROTEST RADIOGRAPHY AND RESEARCH REACTOR—REQUEST FOR
ADDITIONAL INFORMATION REGARDING THE RENEWAL OF FACILITY
OPERATING LICENSE NO. R-98
(CAC/DOCKET/EPID NO. 000955/05000228/L-2017-RNW-0027)

Dear Dr. Slaughter:

Aerotest Operations, Inc. (Aerotest) holds U.S. Nuclear Regulatory Commission (NRC) Facility Operating License No. R-98 for the operation of the Aerotest Radiography and Research Reactor (ARRR). By application dated February 28, 2005 (Agencywide Documents Access and Management System (ADAMS) Accession No. ML13120A434), as supplemented by letters dated May 5, 2008 (ADAMS Accession No. ML103370137), and March 9, 2009 (ADAMS Accession No. ML120900629), Aerotest applied for renewal of the ARRR operating license. On July 24, 2013, the NRC staff denied Aerotest's license renewal application for the ARRR because Aerotest's parent company, Autoliv, Inc. (Autoliv), was a foreign corporation for the purposes of the Atomic Energy Act of 1954, as amended (AEA) and the NRC's regulations and, as such, its continued ownership of Aerotest was in violation of AEA Section 104d and Title 10 of the *Code of Federal Regulations* (10 CFR) 50.38, "Ineligibility of certain applicants."

On February 28, 2017, the NRC staff issued an order and safety evaluation (SE) consenting, subject to certain conditions, to the indirect transfer of the ARRR license to Nuclear Labyrinth, LLC (Nuclear Labyrinth) (ADAMS Accession Nos. ML16333A446, ML16333A448, and ML16333A449). This license transfer, once consummated, would cause Nuclear Labyrinth, and not Autoliv, to be the parent company of Aerotest. In its SE approving the license transfer, the NRC staff found that following the transfer, Aerotest would no longer be in violation of AEA Section 104d and 10 CFR 50.38, because Nuclear Labyrinth is not a foreign corporation for the purposes of the AEA and the NRC's regulations. The license transfer was consummated on July 17, 2017 (ADAMS Accession No. ML17138A310), and therefore the circumstances warranting the NRC staff's July 24, 2013, denial of Aerotest's license renewal application for the ARRR were no longer present. Consequently, by letter dated August 8, 2017 (ADAMS Accession No. ML17138A309), the NRC staff withdrew its July 24, 2013, denial of the ARRR operating license renewal. Therefore, the NRC staff is continuing its review of Aerotest's application for the renewal of Facility Operating License No. R-98 for the ARRR.

During our review, questions have arisen for which additional information is needed. The enclosed request for additional information (RAI) identifies the additional information needed to continue our review. We request that you provide responses to the enclosed RAIs within 60 days from the date of this letter.

In accordance with 10 CFR 50.30(b), "Oath or affirmation," you must execute your response in a signed original document under oath or affirmation. Your response must be submitted in accordance with 10 CFR 50.4, "Written communications." Information included in your response that is considered sensitive or proprietary, that you seek to have withheld from the public, must be marked in accordance with 10 CFR 2.390, "Public inspections, exemptions, requests for withholding." Any information related to safeguards should be submitted in accordance with 10 CFR 73.21, "Protection of Safeguards Information: Performance Requirements." Following receipt of the additional information, we will continue our evaluation of your renewal request.

If you have any questions, or need additional time to respond to this request, please contact me at 301-415-4067, or by electronic mail at Edward.Helvenston@nrc.gov.

Sincerely,

/RA/

Edward Helvenston, Project Manager
Research and Test Reactors Licensing Branch
Division of Licensing Projects
Office of Nuclear Reactor Regulation

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

Enclosure:
As stated

cc: See next page

Aerotest Operations, Inc.

Docket No. 50-228

Sandra Warren, General Manager
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San Ramon, CA 94583

California Energy Commission
1516 Ninth Street, MS-34
Sacramento, CA 95814

Radiologic Health Branch
P.O. Box 997414, MS 7610
Sacramento, CA 95899-7414

Test, Research and Training
Reactor Newsletter
P.O. Box 118300
University of Florida
Gainesville, FL 32611

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DATED: OCTOBER 24, 2017

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ADAMS Accession No.: ML17277B261;***concurred via email**

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NAME	EHelvenston	NParker	AAdams	EHelvenston
DATE	10/11/17	10/11/17	10/23/17	10/24/17

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OFFICE OF NUCLEAR REACTOR REGULATION
REQUEST FOR ADDITIONAL INFORMATION
REGARDING THE RENEWAL OF
THE AEROTEST RADIOGRAPHY AND RESEARCH REACTOR
LICENSE NO. R-98; DOCKET NO. 50-228

The U.S. Nuclear Regulatory Commission (NRC) is continuing its review of your application for the renewal of Facility Operating License No. R-98 for the Aerotest Radiography and Research Reactor (ARRR) dated February 28, 2005 (a redacted version of the application is available on the NRC public Web site at www.nrc.gov under Agencywide Documents Access and Management System (ADAMS) Accession No. ML13120A434), as supplemented. In the course of reviewing the ARRR renewal application, the NRC staff has determined that additional information or clarification is required to continue the review of the safety analysis report (SAR) in support of the development of its safety evaluation report. The ARRR facility, as described in the SAR, is primarily evaluated using the appropriate regulations in Title 10 of the *Code of Federal Regulations* (10 CFR), and the following guidance, as applicable:

- NUREG-1537 Part 1, "Guidelines for Preparing and Reviewing Applications for the Licensing of Non-Power Reactors, Format and Content," issued February 1996 (ADAMS Accession No. ML042430055)
- NUREG-1537 Part 2, "Guidelines for Preparing and Reviewing Applications for the Licensing of Non-Power Reactors, Standard Review Plan and Acceptance Criteria," issued February 1996 (ADAMS Accession No. ML042430048)
- "Interim Staff Guidance on the Streamlined Review Process for License Renewal for Research and Test Reactors," dated October 2009 (ADAMS Accession No. ML092240244)
- American National Standards Institute/American Nuclear Society-15.1-2007, "The Development of Technical Specifications for Research Reactors"

Enclosure

RAI GEN-1

The regulations in 10 CFR 50.9(a) require that information provided to the NRC by a licensee shall be complete and accurate in all material respects.

The NRC staff notes that, given the time that has passed since Aerotest's February 28, 2005, submittal of its application for renewal of the ARRR license, and any changes to facility conditions or status that have occurred since 2005; changes in ownership and management of the ARRR resulting from the July 17, 2017, license transfer of the ARRR; and, the July 17, 2017, issuance of License Amendment No. 5 to the ARRR license and technical specifications (TSs) to reflect the license transfer (ADAMS Accession No. ML17138A310), Aerotest may need to update or supplement the ARRR SAR, Aerotest's proposed TSs for the renewed ARRR license, and other portions of the ARRR license renewal application (i.e., the environmental report, operator requalification plan, physical security plan, and emergency plan), in order to ensure that the license renewal application is complete and accurate, before the NRC continues its review of the application.

Please provide updates and/or supplements, as appropriate, such that the ARRR license renewal application, as supplemented, will be complete and accurate in all material respects; or, state that no updates and/or supplements to the application are required.

RAI GEN-2

The regulation in 10 CFR 50.21(c) states that a class 104c license will be issued to an applicant who qualifies to possess and use "a production or utilization facility, which is useful in the conduct of research and development activities of the types specified in section 31 of the [Atomic Energy Act of 1954, as amended (the Act)], and which is not a facility of the type specified [...] in [10 CFR 50.22]." The regulation in 10 CFR 50.22 states that a class 103 license will be issued to an applicant who qualifies to "[...] use a production or utilization facility for industrial or commercial purposes; *Provided, however*, That in the case of a production or utilization facility which is useful in the conduct of research and development activities of the types specified in section 31 of the Act, such facility is deemed to be for industrial or commercial purposes if the facility is to be used so that more than 50 percent of the annual cost of owning and operating the facility is devoted to the production of materials, products, or energy for sale or commercial distribution, or to the sale of services, other than research and development or education or training."

Aerotest currently holds a class 104c license for the ARRR. The SAR, Chapter 15, states that the ARRR is a class 104 facility because less than 50 percent of the cost of owning and operating the facility is devoted to the cost of conducting commercial activities. The SAR, Chapter 15, also provides information regarding the percentage of the total revenue derived from all Aerotest activities that is spent to operate and maintain the ARRR in a safe manner. However, the basis for the statement that less than 50 percent of the cost of owning and operating the facility is devoted to the cost of conducting commercial activities is still not clear. Additionally, the NRC staff notes that the information in the SAR, Chapter 15, was submitted to the NRC in 2005, and may not reflect the current facility status or Aerotest's current plans for operation of the ARRR.

Please justify that Facility Operating License No. R-98 for the ARRR should be renewed as a class 104c license. Your response should reflect Aerotest's plans for future operation of the ARRR, and the types of activities that Aerotest intends to perform with the ARRR following a

restart. Your response should provide information showing that less than 50 percent of the total cost of owning and operating the ARRR will be expended toward conducting commercial activities, including the sale of services (other than research and development of the types specified in section 31 of the AEA, or education or training), with the remainder (50 percent or more) expended toward research and development of the types specified in section 31 of the AEA, or education or training. Alternatively, clarify that Facility Operating License No. R-98 for the ARRR should be renewed as a different class of license; or, justify why no additional information is required.