



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

October 24, 2019

MEMORANDUM TO: Christopher M. Regan, Deputy Director
Division of Fuel Management
Office of Nuclear Material Safety
and Safeguards

FROM: Nishka Devaser, Project Manager */RA/*
Spent Fuel Licensing Branch
Division of Fuel Management
Office of Nuclear Material Safety
and Safeguards

SUBJECT: SUMMARY OF SEPTEMBER 24, 2019, MEETING WITH DAHER-TLI
TO DISCUSS PROPOSED AMENDMENTS TO THE VERSA-PAC
TRANSPORTATION PACKAGE

Purpose

Daher-TLI (Daher) requested a pre-application meeting to provide to the U.S. Nuclear Regulatory Commission (NRC) staff an overview of two upcoming amendments to the Model No. Versa-Pac spent fuel transportation package.

Background

On September 24, 2019, an open meeting was held in Rockville, Maryland, at the request of Daher with the NRC staff to discuss Daher's upcoming amendments to the Versa-Pac transportation package. The list of meeting attendees, including those participating via telephone, is provided as an Enclosure.

The meeting was noticed on September 3, 2019 (see Agencywide Documents Access and Management System [ADAMS] Accession No. ML19246A074). The meeting attendance list is provided as an Enclosure, the presentation slides are in ADAMS at Accession No. ML19294A279.

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Discussion

Daher-TLI is planning to submit two amendment requests for the Versa-Pac package Certificate of Compliance No. 9342 to support Centrus and X-energy with their pebble bed reactor project by adding TRISO fuel materials and 5A/B UF₆ cylinders as allowable contents for the Versa-Pac.

The first amendment is to be submitted later this month and is a change in allowable contents. The amendment will cover TRISO fuel related materials (TRISO particles, fuel compacts, etc.) and will be limited to one additional criticality analysis to increase the fissile limit for the 20 weight percent enrichment band by limiting the acceptable hydrogenous packing materials.

The second amendment is planned for submittal in the late spring 2020 and will cover the 5A/B UF₆ cylinder content (enrichment ≤ 20 weight percent). This amendment will add a new package variant: the VP-55XL. The design will be nearly identical to the VP-55; however, fabricated with a double height 55-gallon drum to increase the cavity height enough to fit a 5A/B cylinder. The amendment will include a significant revision to the safety analysis report with a licensing drawing for the new package, additional drop testing, and supplemental structural, thermal, and criticality analyses.

NRC staff had various questions regarding the criticality analysis of the first amendment to which Daher-TLI supplied answers. NRC staff had various questions regarding the structural layout of the second amendment to which Daher-TLI supplied answers.

Docket No.: 71-9342

EPID No.: L-2019-LRM-0062

Enclosure:

Meeting Attendees

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DATED: October 24, 2019

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ADAMS Memo Accession No.: ML19

OFFICE	DSFM	DSFM	DSFM
NAME	NDevaser	SFigueroa	DDoyle
DATE	10/16/19	10/16/19	10/24/19

MEETING ATTENDEES

Meeting Title: PRE-APPLICATION FOR MODEL NO. VERSA-PAC TRANSPORTATION PACKAGE

Participants: Daher-TLI and the NRC

Date: September 24, 2019

Location: U.S. NRC Headquarters, 0-8-B04

NAME

AFFILIATION

In attendance

Andrew Barto	NRC/NMSS/DSFM
Nishka Devaser	NRC/NMSS/DSFM
Marty Karr	Centrus Energy
Charlie Murphy	Daher-TLI
Philip Sewell	Daher-TLI

Phone Attendees

Andy Langston	Daher-TLI
Paul Balis	Daher-TLI
Antonio Rigato	NRC/NMSS/DSFM