

ENCLOSURE 1

M240233

Open Session Presentation Slides for RAJ-II Meeting

Non-Proprietary Information



SHIPMENT OF LEAD USE ASSEMBLIES IN THE RAJ-II PACKAGE

Presentation to the NRC
November 13, 2024

Agenda and Speakers

Meeting to discuss the need for a Letter Authorization to allow shipment of a new fuel design as LUAs

- Open Session:
 - Overview of the LUA Design – Weston Cundiff
 - Overview of the RAJ-II Package – Jess Gee
- Closed Session:
 - Proprietary Overview of the LUA Design – Weston Cundiff
 - Comparison of the LUA Design to the Current RAJ-II CoC – Jess Gee
 - Discussion of Letter Authorization SAR Contents – Jess Gee
 - GNF Schedule Requests – Jess Gee



OVERVIEW OF THE LUA DESIGN

LUA Purpose & Design Overview

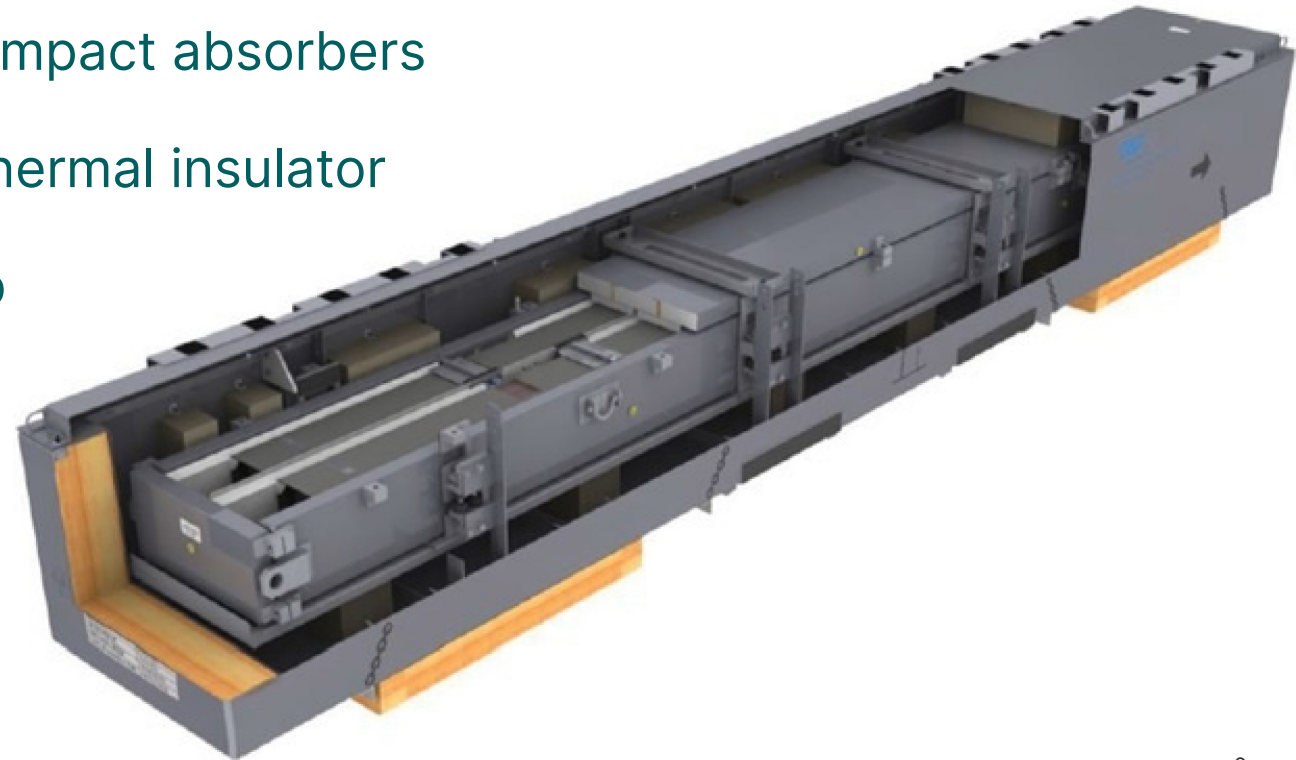
- **Lead Use Assembly (LUA)** Definition: Pre-production prototype of a new fuel design, which contains a new design features that are distinctly different from previous fuel designs.
- **Purpose of LUAs:** Confirm expected operation of a new fuel design rather than to gather specific technical information.
- New Fuel Design:
 - 11x11 fuel matrix
 - Utilizes currently used and/or approved materials
 - Mechanical design similar to current GNF fuel products



OVERVIEW OF THE RAJ-II PACKAGE

Overview of the RAJ-II Package

- Certificate of Compliance (CoC) USA/9309/B(U)F-96, Revision 14
- NRC approved for Type B fissile material up to 8 wt% ^{235}U
- Composed of an Outer Container (OC) and Inner Container (IC)
- Stainless Steel (SS) OC body and lid, with impact absorbers
- SS IC body and lids, with alumina silicate thermal insulator
- Inner container contains cavities to hold up to two fuel assemblies, or loose rods
- Fuel rod cladding and welded end plugs act as primary containment





END OF OPEN SESSION