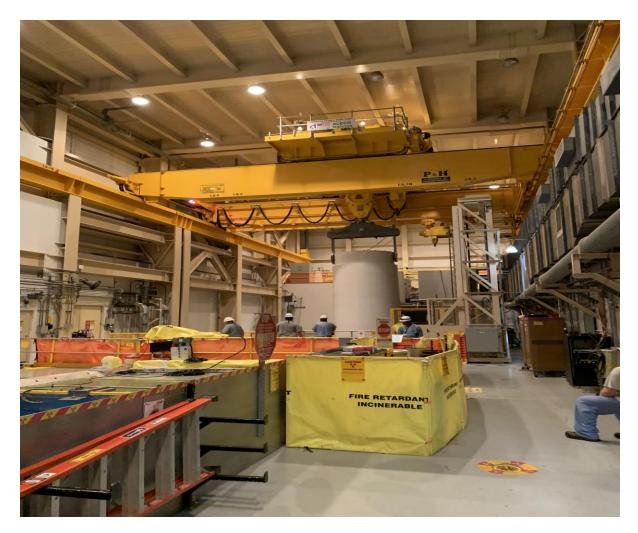
CONNECTICUT SNF UPDATE 2024 FALL MEETING

Presented by: Mike Firsick, Radiation Office Director, Division of Radiation, Connecticut Department of Energy and Environmental Protection ONNECTICU

ENVIR

CASK SHIPMENT OF BLOOD IRRADIATOR







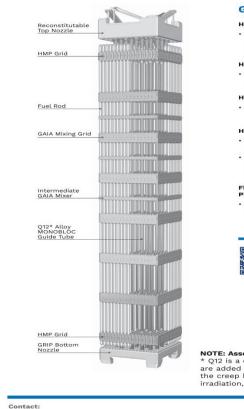








GAIA FUEL



Sales-fuel@framatome.com

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GAIA Key Features

High Thermal Performance & Fretting Resistance

• The GAIA spacer combines the mixing principle of Framatome's vaned spacers (MK-BW, AFA) with the fretting resistance of the HTP spacer, resulting in a significant advancement in spacer design.

High Debris Filter Efficiency

 The GRIP bottom nozzle combines features of Framatome's TRAPPER and FUELGUARD designs, resulting in improved filtering efficiency.

High Grid Stability

 The GAIA spacer has a favorable deformation mode under lateral loads leading to excellent behavior even under seismic conditions.

High Fuel Assembly Dimensional Stability

 Guide Thimbles (GT) are made of Q12 material with increased creep resistance

 Increased guide thimble outer diameter and reinforced GT-to-grid connections increase cage lateral stiffness, providing improved resistance to fuel assembly distortion and reduced stresses in the guide thimbles

Flexible Fuel Management and Low End-of-Life Pin Pressure

 GAIA fuel rods are made of M5 cladding, with options for chromia doped fuel and a reduced pellet-tocladding gap for increased loading



NOTE: Assembly depicted is the 12 ft. GAIA design * Q12 is a quaternary alloy derived from M5: Tin and Iron are added to Zirconium and Niobium in order to improve the creep behavior under operating temperature and irradiation, while maintaining high corrosion resistance.

Connecticut Department of Energy & Environmental Protection

Boron			
Arial			
Density			
Gauge			
Evaluating			
Racks			



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