

Public Version





CoC 1042 Amendment 1 Pre-Application Meeting

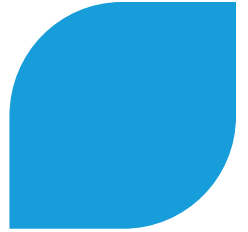
**(NUHOMS® EOS 37PTH TYPE 4 Fuel Basket
& MATRIX HSM)**

November 2017

TN Americas LLC


AREVA
forward-looking energy

Purpose of Meeting/Agenda



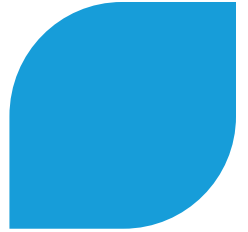
► PURPOSE OF MEETING

- ◆ To discuss Plans for Amendment 1 to CoC 1042 license
- ◆ Obtain NRC feedback and facilitate NRC planning

► AGENDA

- ◆ General Overview
- ◆ System Components
- ◆ Design Criteria and Analyses Methodologies
- ◆ Submittal Schedule
- ◆ Questions

EOS Amendment 1 SCOPE

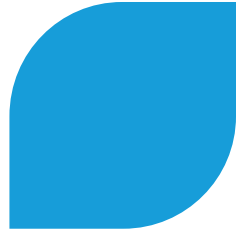


- ▶ **New EOS 37PTH Type 4 Fuel Basket for EOS 37 PTH DSC (up to 4 failed or 8 damaged PWR assemblies)**
- ▶ **New MATRIX HSM**
- ▶ **Minimum cooling time of 2 years**



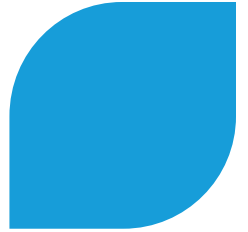
NUHOMS® EOS 37PTH TYPE 4 FUEL BASKET

EOS 37PTH TYPE 4 Fuel Basket – Design Overview



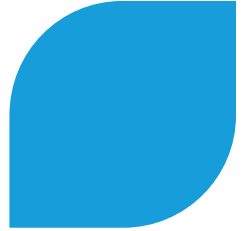
- ▶ Damaged, failed, or intact fuel assemblies can be loaded in an EOS 37PTH Type 4 Basket
- ▶ Authorizes the storage of up to 4 failed or 8 damaged PWR assemblies
- ▶ Stored in NUHOMS® EOS HSM or NUHOMS® MATRIX HSM
- ▶ Transferred in EOS TC 125/135
- ▶ No changes to the confinement boundary (DSC shell)

EOS 37PTH Type 4 Fuel Basket – Fuel Structural Evaluation



- ▶ EOS-37PTH DSC damaged fuel assembly is analyzed for normal/off-normal loading conditions.
- ▶ Damaged fuel rod structural integrity is performed based on the damaged fuel evaluation in CoC 1004 for the NUHOMS® 37PTH DSC.

EOS 37PTH TYPE 4 Fuel Basket – Nuclear Analyses



► Criticality

◆ Intact Fuel

- Methodology consistent with EOS 1042 Amendment 0

◆ Damaged/Failed Fuel

- Methodology consistent with CoC 1004

► Shielding

◆ Methodology consistent with EOS 1042 Amendment 0

◆ Address impact of new HLZCs

◆ Determine impact on dose rates



Proprietary Information on Slides 9 through 11
Withheld Pursuant to 10 CFR 2.390



MATRIX HSM

TN Americas ... Be certain.™

CoC 1042 Amendment 1 Pre-Application Meeting

November 16, 2017

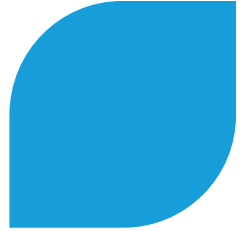
Slide 12





Proprietary Information in Slides 13 through 24
Withheld Pursuant to 10 CFR 2.390

SCHEDULE



- ▶ **Application Submittal - TBD**
- ▶ **Requested Approval**