

# EOS Amendment 4 Scope

## 1) Add damaged and failed fuel storage capability to the EOS-89BTH

- Existing staggered basket concept from EOS-37PTH
- Two new basket types

## 2) Introduce a steel-plate composite option for the EOS-HSM (EOS-HSM-SC)

- Steel-plate composite components instead of reinforced concrete
- Steel shells pre-fabricated and shipped to site for concrete placement at the ISFSI

## 3) Demonstrate MAVRIC software capability for use in dose rate analyses

- Comparison of MCNP runs with MAVRIC software runs to demonstrate similar results

## 4) Apply Maximum Heat Load Configuration (MHLC) concept to EOS-37PTH

# Apply the MHLC concept to the EOS-37PTH

**Same as EOS-89BTH discussed in UFSAR Section 2.4.3.1**

- **Maximum per zone and per compartment decay heats provided on in an MHLC in the TS, applicable HLZCs provided in UFSAR Chapter 2**
  - Increased maximum per assembly heat load to 4.5 kW
- **Maintain methodology from UFSAR Section 2.4.3.1 for qualifying new HLZCs**
  - Thermal criteria, blocked vent accident condition, Total time for transfer must remain unchanged
- **Limitations to methodology for key inputs of the thermal model are also applied to the EOS-37PTH (Table from Section 2.4.3.1) for storage and transfer**

**Full shielding and thermal evaluations of MHLC to be provided in Amendment 4.**

- **Structural reconciliation as necessary based on thermal gradients**
- **Thermal and Shielding analyses methodologies for the EOS-37PTH MHLC will be the same as the EOS-89BTH MHLC analysis methodologies employed in Amd 3**

# Submittal Schedule

**Application Submittal- Quarter 3 2022**

**Requested Approval- Quarter 1 2024**