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

