



SONGS Decommissioning Project

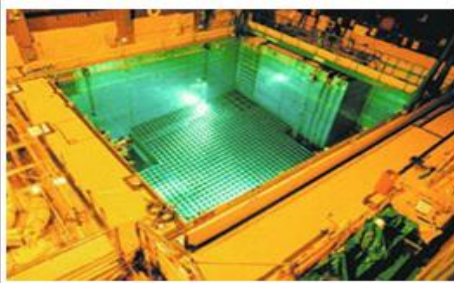
Community Engagement Panel Workshop

Spent Fuel Storage

05/06/14

Spent Fuel Storage

Two Options for storage of spent fuel prior to Department of Energy (DOE) taking possession:



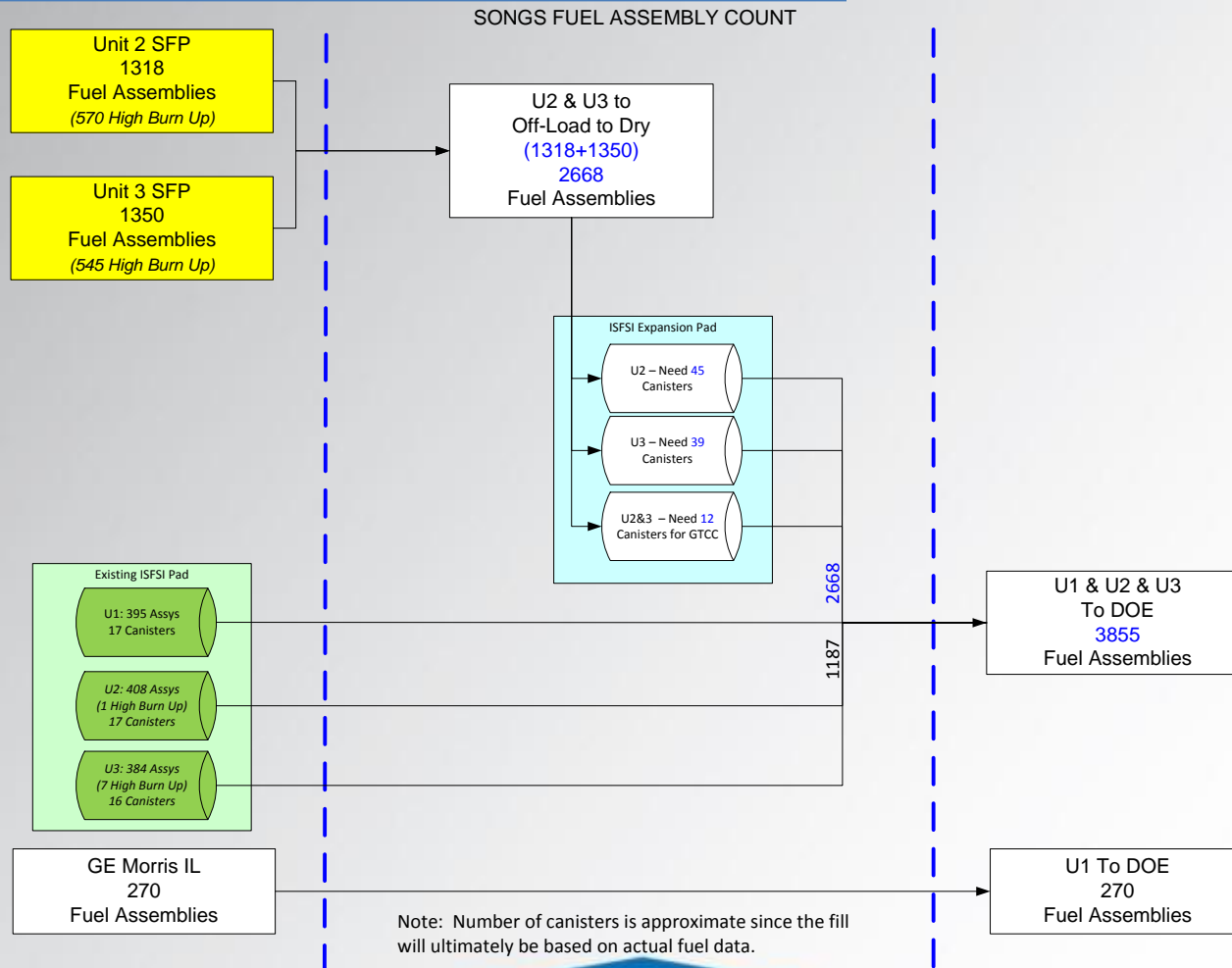
- ‘wet’ storage in existing spent fuel pools*



- Independent Spent Fuel Storage Installation (ISFSI) ‘dry’ cask storage.

* Note: as part of the Decommissioning process, all spent fuel must be removed from the Spent Fuel Pools prior to dismantling the Spent Fuel pool building and potentially some adjacent buildings.

Spent Fuel Storage



SONGS Spent Fuel Storage

- Approximately 1/3 of the Spent Fuel for SONGS Units 1,2, and 3 have been transferred to dry cask storage
- Currently 2668 Spent Fuel Assemblies reside in the SONGS Unit 2 and Unit 3 spent fuel pools
- Approximately 1/3 of the Spent Fuel for SONGS Units 1,2, and 3 are characterized as “High Burn Up” Fuel:
 - Unit 2 Pool – 570 Spent Fuel Assemblies
 - Unit 3 Pool – 545 Spent Fuel Assemblies
 - Dry Cask - 8 Spent Fuel Assemblies

Spent Fuel Storage



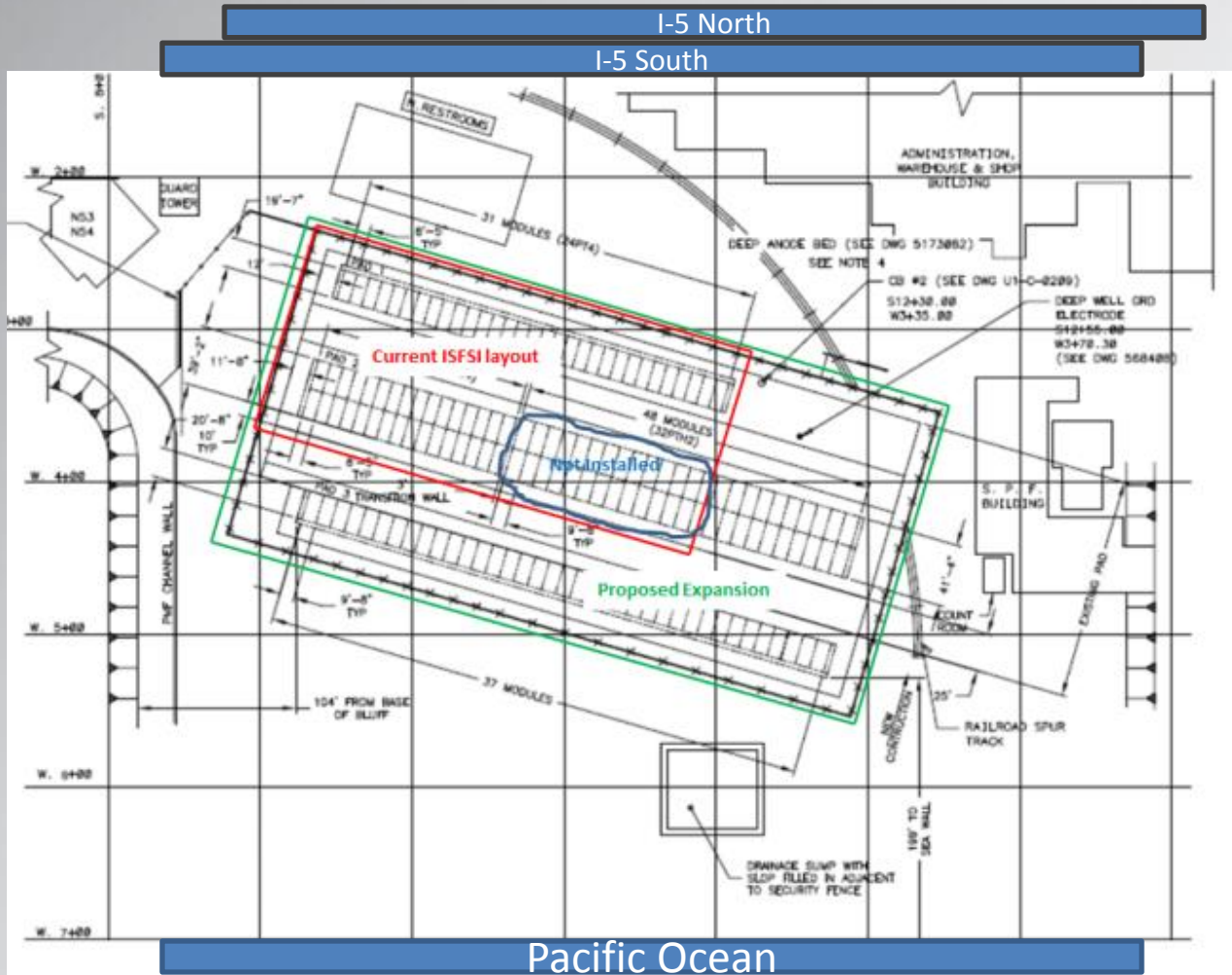
Current ISFSI facility:

- 50 loaded Spent Fuel canisters
- 12 empty modules
- Space for 26 more modules

The existing ISFSI storage facility must be increased to accommodate approximately 100 additional canisters



SONGS – ISFSI Expansion



The existing ISFSI storage facility must be increased to accommodate approximately 100 additional canisters

The concept to the left shows relative expansion requirement

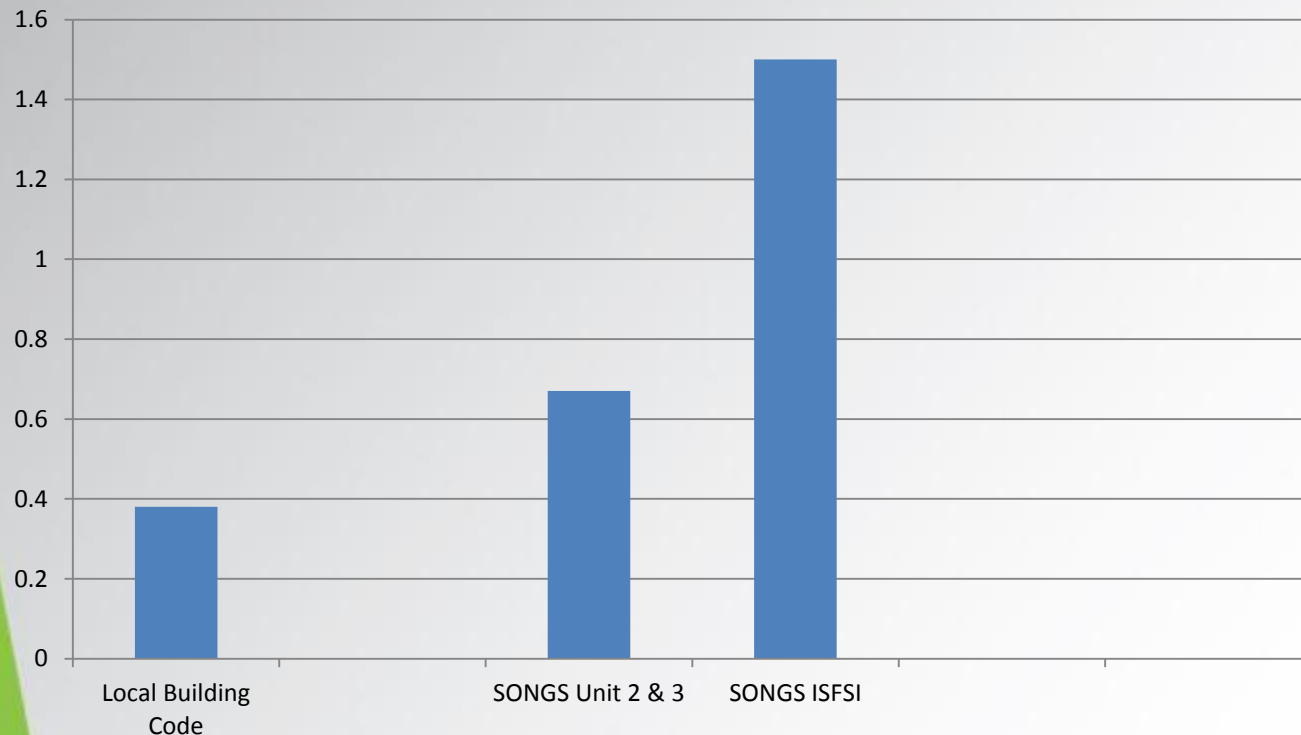
Red line shows existing installation

Seismic

- Nuclear plants are licensed to withstand earthquakes of a specific anticipated 'ground movement', or peak ground acceleration measured as a ratio of gravitational acceleration
- SONGS Units 2 and 3 were designed and built to withstand an earthquake with a peak ground acceleration of at least 0.67g
- For comparison, the current California Building Code design requires any buildings built in the vicinity of SONGS to be designed to withstand an earthquake motion that has peak ground acceleration of 0.38g

Seismic

Comparison of Seismic 'Acceleration' in the horizontal direction for Local Building Code, SONGS Plant, SONGS ISFSI Design



Reference: www.songscommunity.com/earthquake-safety.asp & AREVA Information