



Decommissioning
San Onofre
Nuclear Generating Station

Dry Fuel Storage Defense in Depth

July 23, 2015

Overview

- Feedback from the Community Engagement Panel and public
- Partnering with Holtec
- Dry cask system with robust defense in depth (DID) strategies
- Long term effort

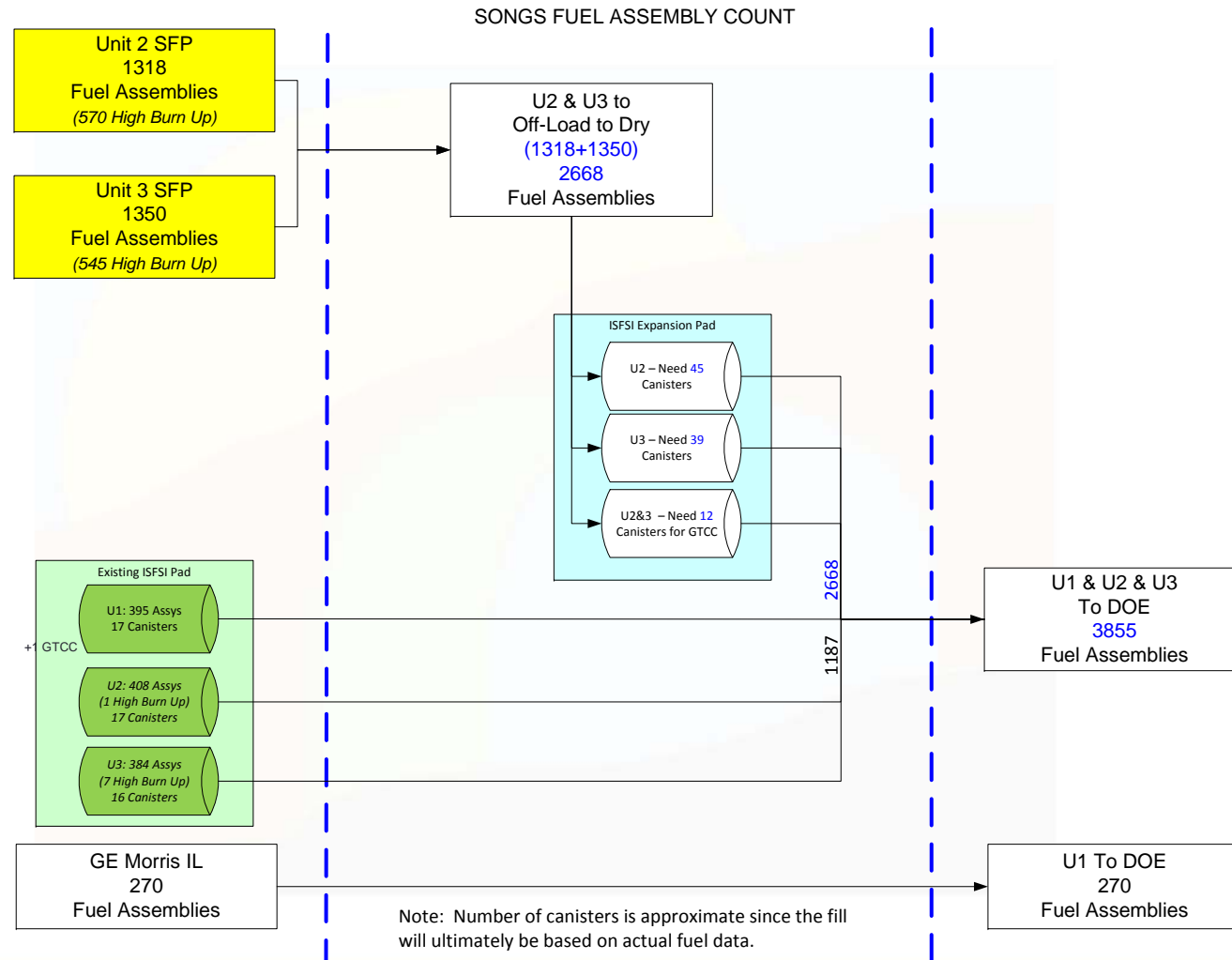
CEP Feedback

- How long will the casks be on site?
- How is DID concept applied?
- How will we monitor the casks?
- How can we detect corrosion?
- How will we mitigate a crack?
- How do we protect against physical threats?



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SONGS Used Fuel Status



SONGS

Existing ISFSI Installation

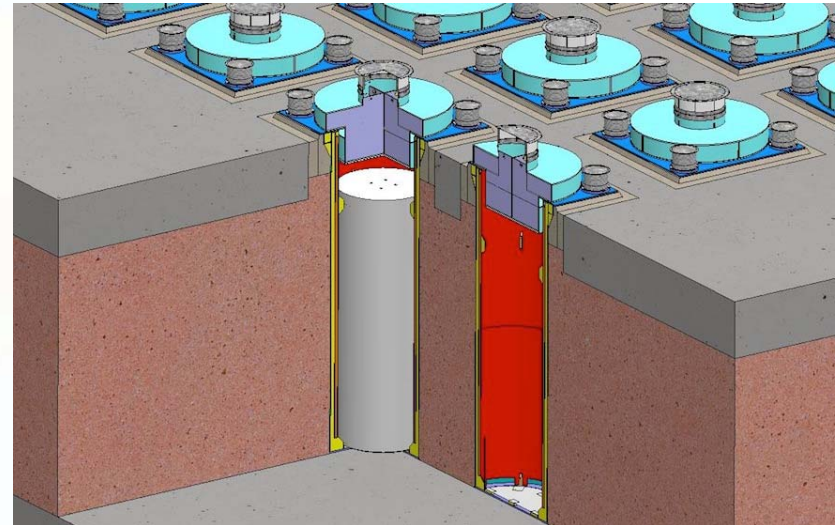
- SONGS Independent Spent Fuel Storage Installation (ISFSI) site is located adjacent to Units 2 and 3
- The SONGS ISFSI currently has 50 Dry Storage Canisters (canisters) filled with used fuel
- The existing canisters were manufactured by AREVA-TN
- The canisters are “Horizontal Storage Modules” with passive cooling



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Proposed ISFSI Installation

- The proposed SONGS ISFSI expansion site is located adjacent to the existing ISFSI
- The expansion will add approximately 70 canisters for fuel and 6 to 10 for waste
- The canisters are being manufactured by HOLTEC International
- The canisters are “Vertical Storage Modules” with passive cooling



HOLTEC

ISFSI Expansion at Another Site



Definition

Defense in Depth

- Designing and operating facilities in a way that prevents and mitigates accidents
- Creating multiple independent and redundant layers of defense
- Minimize the reliance on any single feature

Dry Storage Defense in Depth

Three principal functions:

- Maintain sub-criticality
- Prevent radiation exposure from exceeding regulatory limits
- Prevent release of radioactive materials from exceeding regulatory limits

Strategies include:

- Engineered Controls (design / material)
- Programmatic Controls (fabrication)
- Mitigating Controls (Aging Management - testing, inspection, surveillance)



Highlights of SONGS Defense in Depth Program

SONGS program includes engineered, programmatic and mitigating controls that will ensure:

- Prevention – Using corrosion resistant 316L stainless steel and thickness that exceeds regulatory requirements
- Prediction/Detection – Canister test and coupon programs
- Inspection – Developing inspection tools
- Remediation – Repair techniques or use of overpack