



Decommissioning San Onofre

Nuclear Generating Station

NRC Public Meeting

October 27, 2014

Post-Shutdown Decommissioning
Activities Report



Decommissioning
San Onofre
Nuclear Generating Station

Decommissioning Principles

Safety

Stewardship

Engagement

*For more information on SONGS
please visit www.SONGScommunity.com*



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San Onofre Milestone Timeline

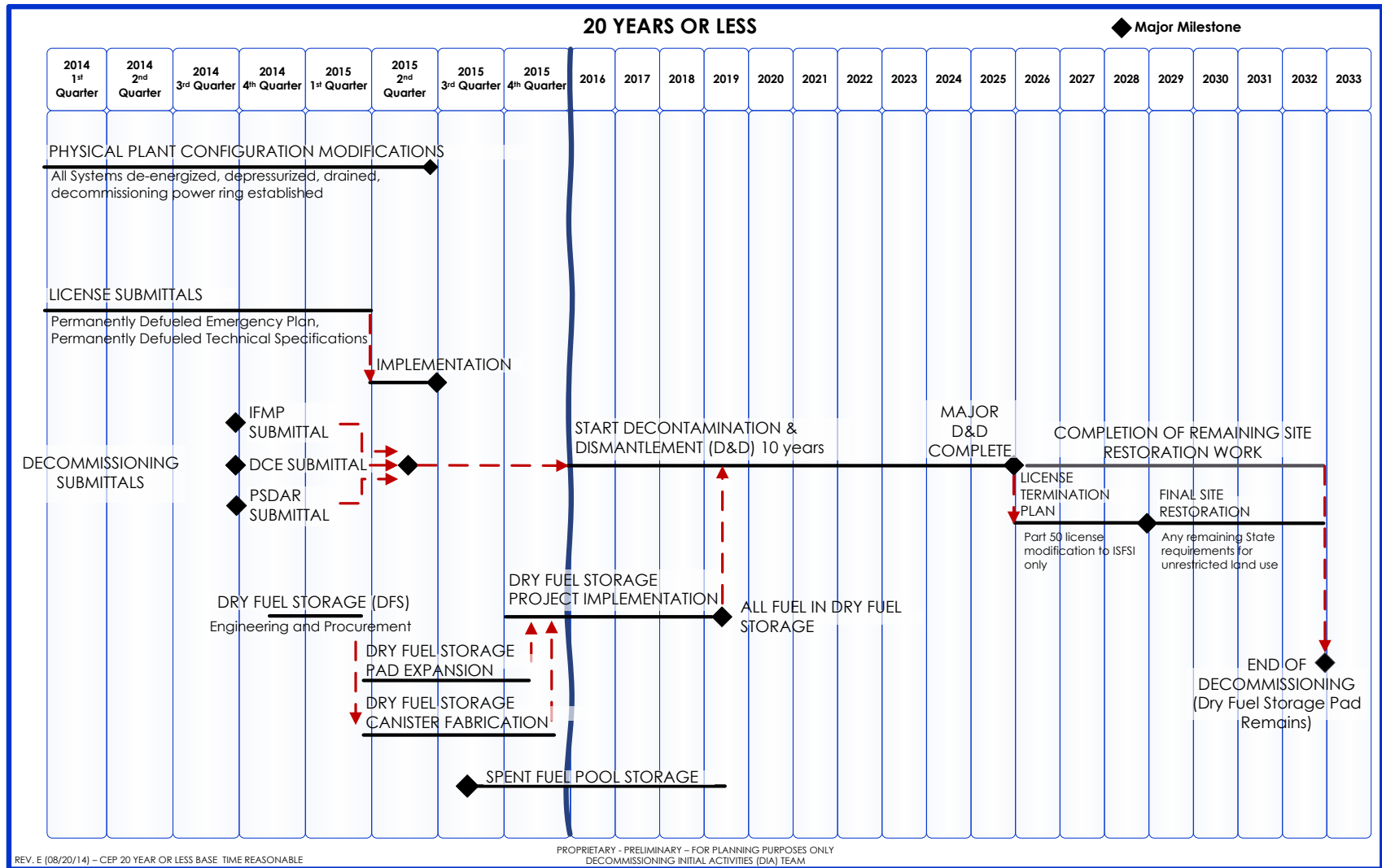
June 7, 2013	Decision to Shut Down Units 2 and 3
June 12, 2013	Certification of Permanent Cessation of Power Operations
August 2013	Transition to Decommissioning Staffing
January 2014	20 Year Decommissioning Plan
September 2014	Submittal of Regulatory Filings <ul style="list-style-type: none">• Post-Shutdown Decommissioning Activities Report• Irradiated Fuel Management Plan• Decommissioning Cost Estimate



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SONGS Decommissioning Plan

Decommissioning Plan





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Post-Shutdown Decommissioning Activities Report

Basis

- 10CFR50.82 and NRC Reg Guide 1.185 Rev 1
- Review of recent decommissioning plants' Post-Shutdown Decommissioning Activities Report submittals to NRC from other utilities

Content

- Description of the planned decommissioning activities
- Schedule for the completion of these activities
- Expected costs
- Discussion of environmental impacts

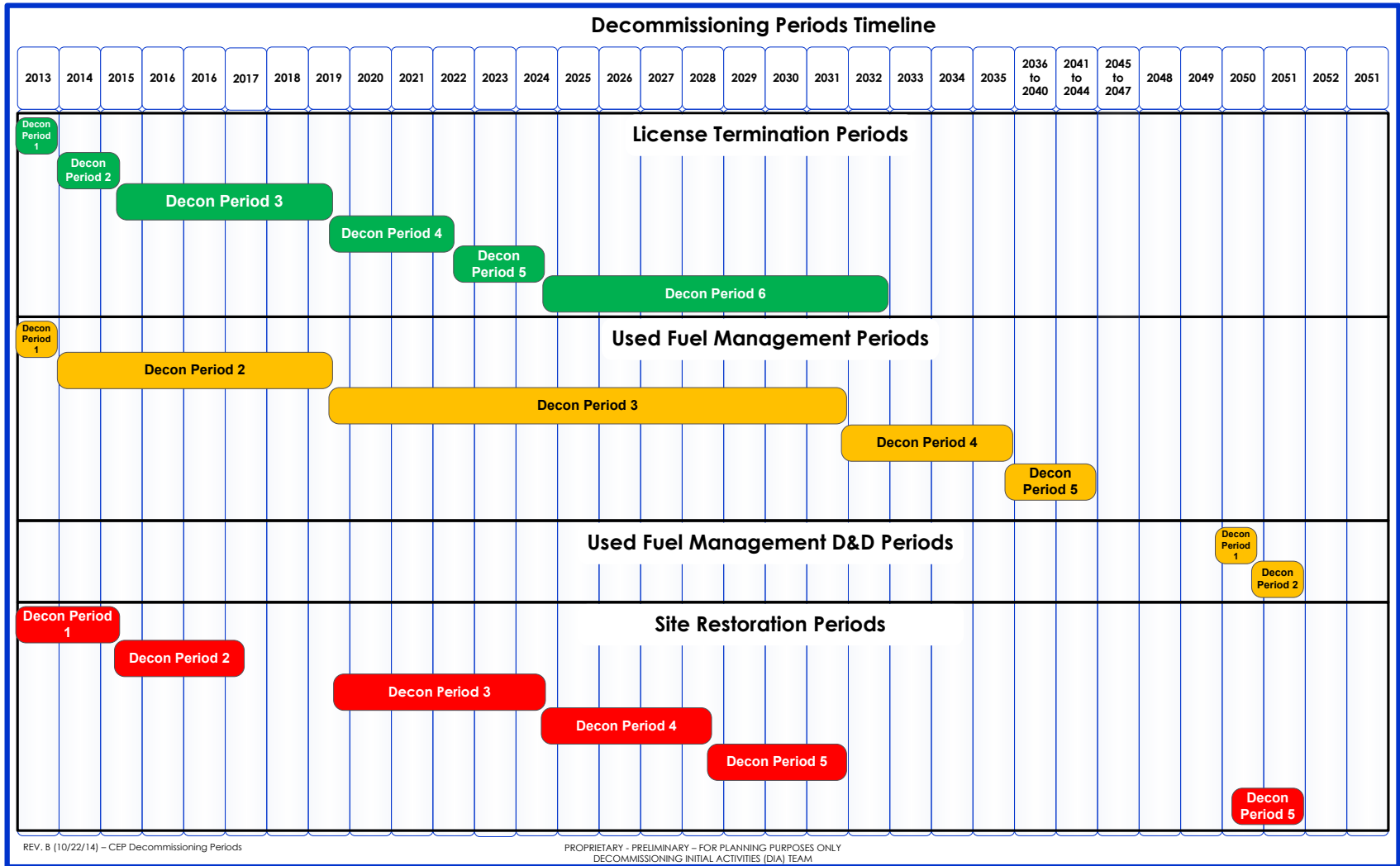


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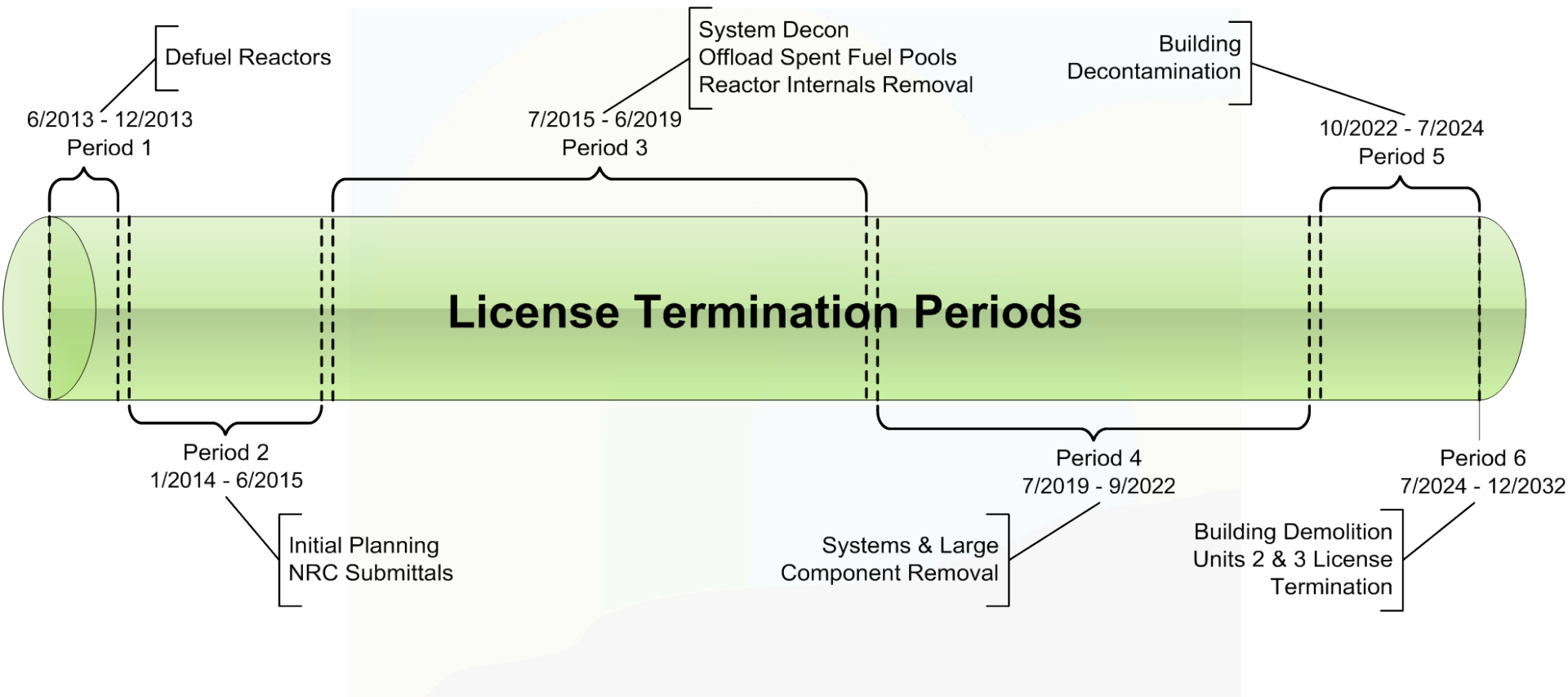
Decommissioning Periods

- License Termination
- Used Fuel Management
- Site Restoration

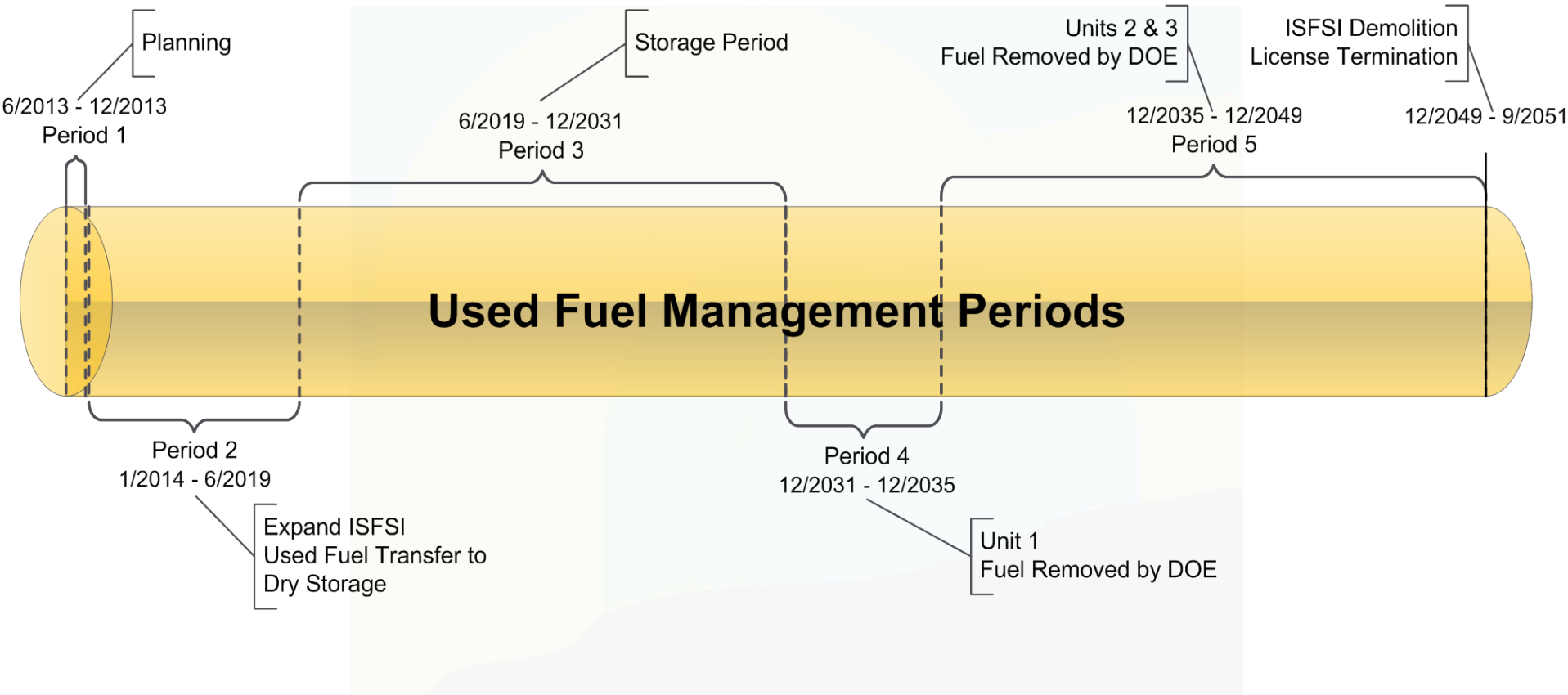
Decommissioning Periods



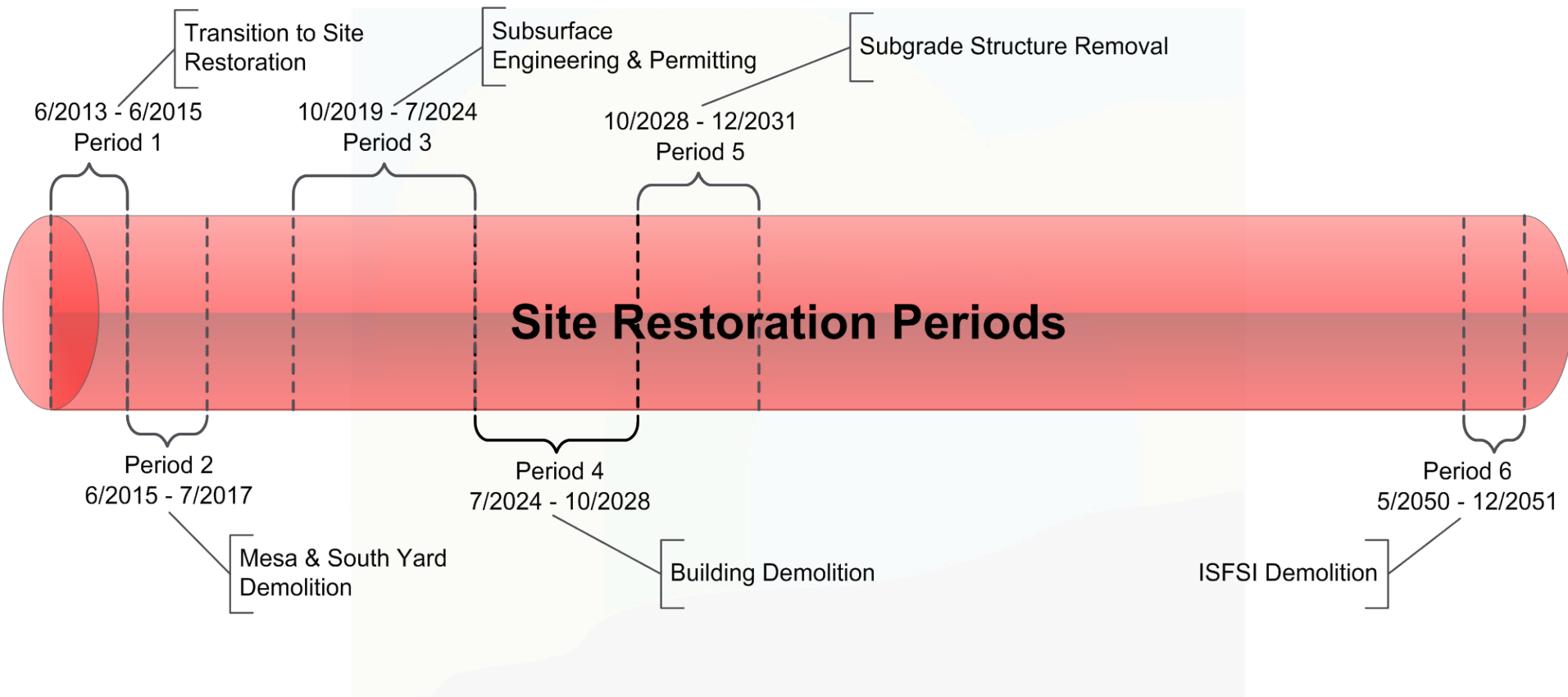
Description of License Termination Periods



Description of Used Fuel Management Periods



Description of Site Restoration Periods





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Irradiated Fuel Management Plan



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Current Dry Fuel Storage



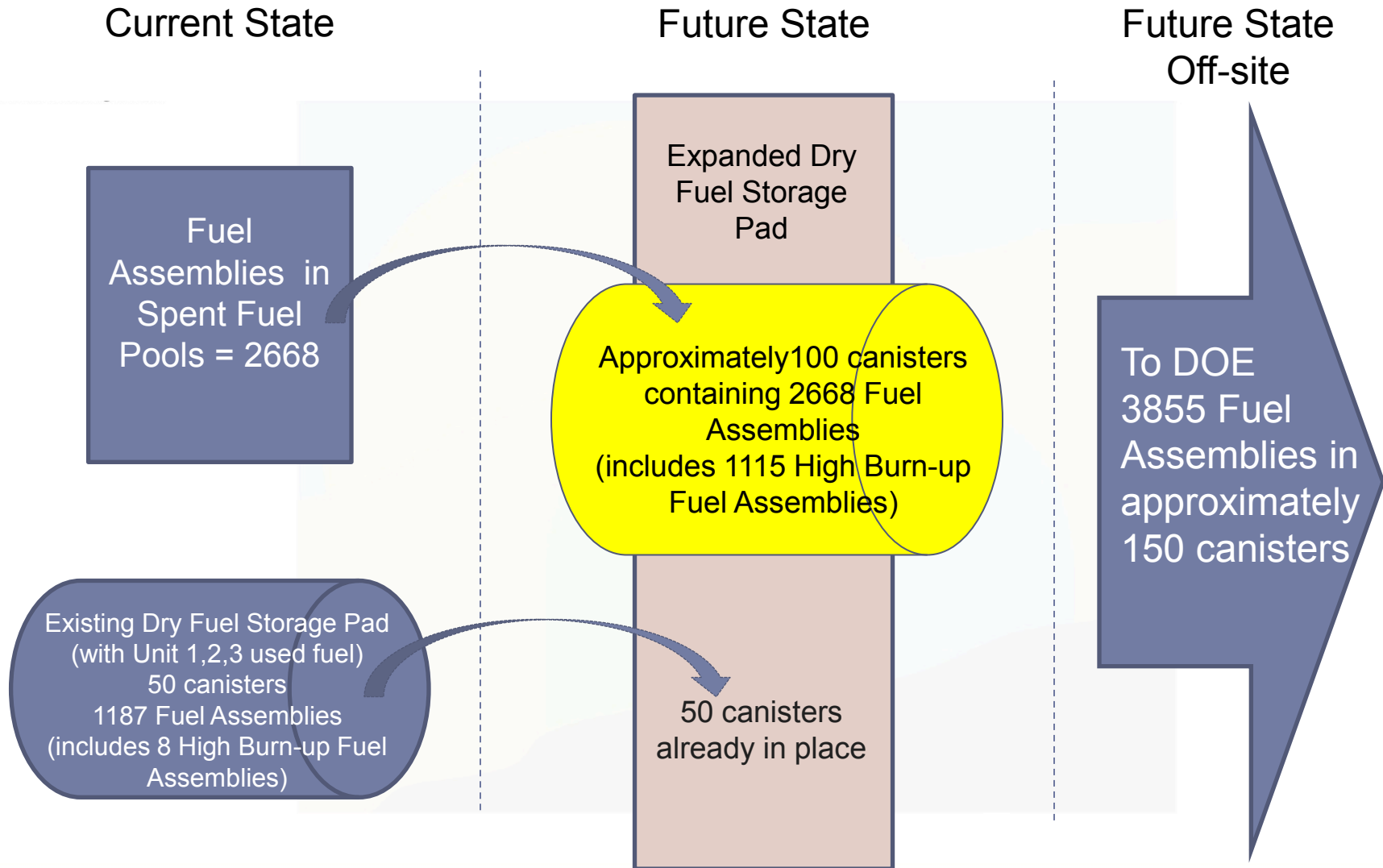
Current ISFSI facility:

- 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



Used Fuel Storage





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Irradiated Fuel Management Plan

Basis

- 10 CFR 50.54 (bb)
- NRC review in accordance with its standard process
- No standard format or specific guidance

Structure

- Written notification discussing the Decommissioning Plan within 2 years following permanent cessation of operation of the reactor
- Program by which the licensee intends to manage and provide funding for the management of all irradiated fuel until the fuel is transferred to the Secretary of Energy for its ultimate disposal in a repository
- San Onofre's "program" is to move the fuel from wet storage in the spent fuel pools to the dry storage pad

San Onofre Irradiated Fuel Management Plan Overview

- 2668 fuel assemblies in spent fuel pools to be safely transferred to the dry fuel storage pad by 2019
- Assumed start date of 2024 for DOE
- San Onofre fuel target removal date 2049
- Adequacy of existing funds
- Spent fuel pools cooled by stand-alone cooling and filtration units



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Decommissioning Cost Estimate



Decommissioning Cost Estimate

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Basis

- 10CFR50.75(c), 10CFR72.30, 10CFR50.54(bb)
- EnergySolutions estimating model and data
- SONGS-specific walk down validation for quantities

Structure

- Discusses the Decommissioning Plan
- Assurance of the Adequacy of Funding
- Provides Total Cost by Period
- Plan for Adjusting Funding
- Summarizes the Costs of Services
- Summarizes Undistributed Costs
- Outlines Costs For:
 - License Termination
 - Spent Fuel Management
 - Site Restoration



Decommissioning Cost Estimate

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Key Assumptions:

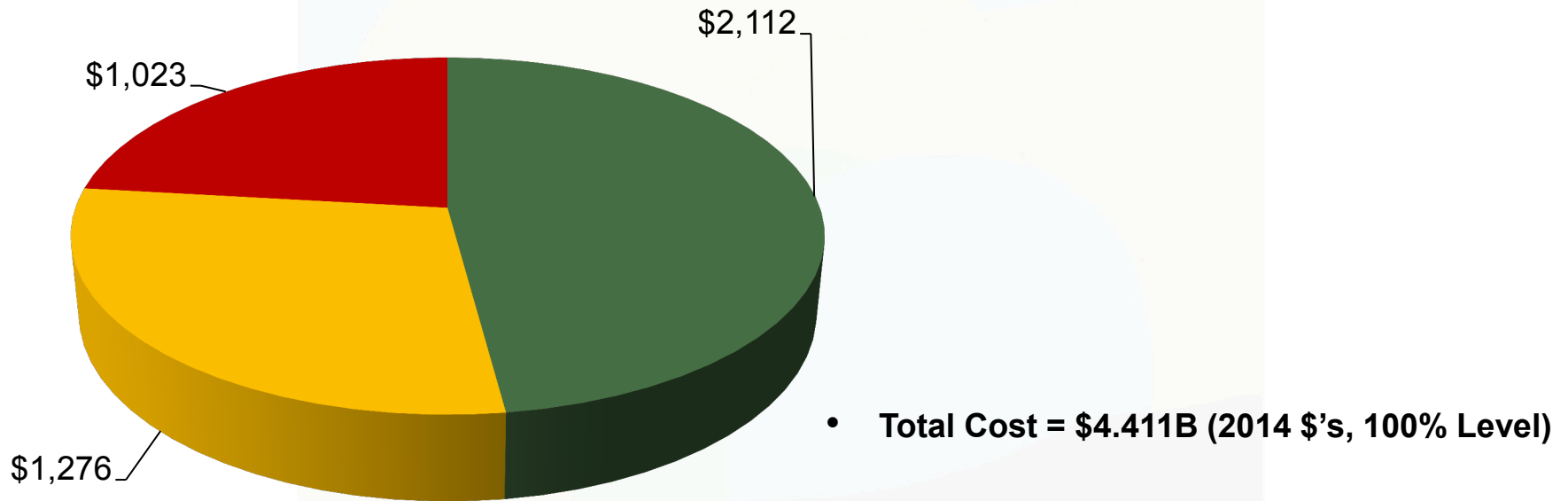
Assumption	DCE Assumption
Date Fuel is Out of Spent Fuel Pool	June 2019
DOE Performance Start Date	2024
Pool Islanding Date	June 2015
Substructure Excavation	All Substructures Removed
Duration of Decontamination & Dismantlement (D&D)	10 Years
Contingency	25% (22.8% weighted)
Ocean Conduits	Remove
Treatment of Class A Waste	No Class A Waste Exempt
Start of D&D	January 2016
Low Level Waste Burial Cost Escalation	D&D - CPI Post - D&D 7.33%



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Decommissioning Cost Estimate Breakdown

Total Cost Breakdown (2014 \$'s in millions)



■ License Termination ■ Spent Fuel Management ■ Site Restoration



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Trust Fund and Regulatory Oversight

SCE Decommissioning Trust Committee

- The Nuclear Decommissioning Trusts are overseen by a five member committee (2 internal, 3 external) who are nominated by management, confirmed by the Edison Board, and approved by the CPUC

Regulatory Oversight of Decommissioning Trusts

- CPUC regulates all spending from the Nuclear Decommissioning Trust, including review, approval and reasonableness
- NRC regulates all radiological decommissioning
- NRC regulates used fuel management



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Open Communication

Public engagement and education includes:

- A Community Engagement Panel to foster open dialogue
- Decommissioning Education Fairs
- Walking tours open to the public
- Private tours for key stakeholders
- Website with robust information: www.SONGScommunity.com



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