

Decommissioning San Onofre

Nuclear Generating Station

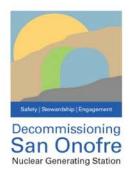
Decommissioning Update

March 24, 2016

Tom Palmisano

Vice President Decommissioning & Chief Nuclear Officer



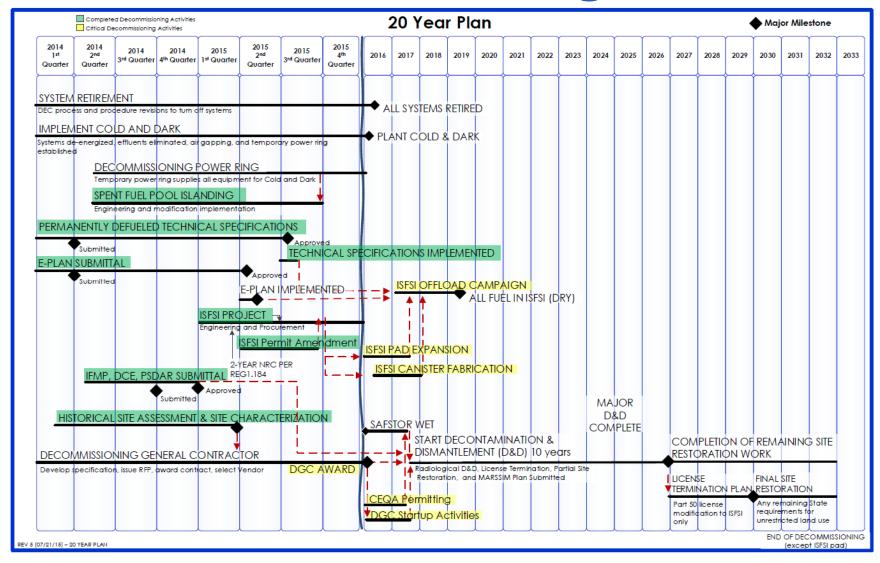


Decommissioning Principles Safety Stewardship Engagement

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



Decommissioning Plan



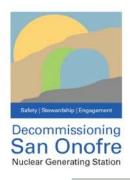












NRC Licensing

Activity/Submittals	Status	
PSDARDCEIFMP	PSDAR & DCE Accepted IFMP SER Approved	
Defueled Quality Assurance Plan Submittal Approved		
Inspections: 50.59, Corrective Action Program, 3 rd Quarter Decommissioning Activities, Security Access Authorization Complete		
Defueled Emergency Plan Complete		
Defueled Technical Specification Complete		
Cyber License Amendment Report – Milestone 8 Complete		
License Amendment Request for Spent Fuel Pool cooling system	em Completed – March 11, 2016	
Records Retention Exemption Request Submittal	March 2016	
Insurance Exemption (Offsite) Request Submittal	June 2016	
Insurance Exemption (Onsite) Request Submittal	June 2016	

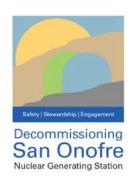




NRC Inspections

- NRC continues to conduct inspections to ensure decommissioning activities are being conducted safely and compliantly.
- Inspections review the station's effectiveness in the following areas:
 - Safety Reviews, Design Changes & Modifications
 - Controls
 - Decommissioning Performance & Status
 - Effluent and Environmental Monitoring
 - Protection of Radioactive Material





NRCs Decommissioning Rulemaking

- Amend current regulations to support a more efficient decommissioning process
 - Some regulations do not differentiate between operating and decommissioning plants
 - Use of exemption process
- Extended public commenting period ended March 18





SITE ACTIVITIES UPDATE





Preparing Plant for Decommissioning

- Cold & Dark (C&D) is de-energizing the plant and draining and isolating plant systems not required
- Removes remaining hazards from the plant
- Places the plant in a safe condition for a nonoperating configuration
- Prepares the plant for its eventual safe decommissioning while protecting the used fuel
- Preparations complete by July 2016







ISFSI PROJECT UPDATE





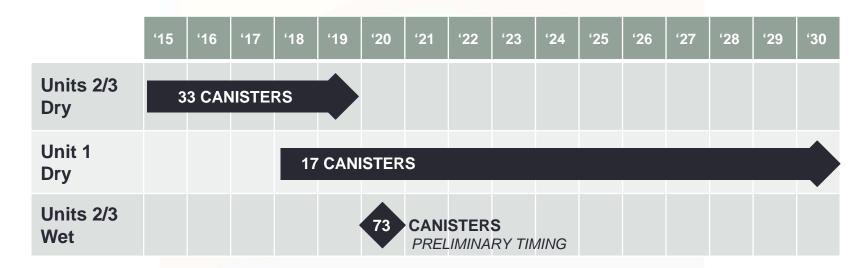
ISFSI Project Update

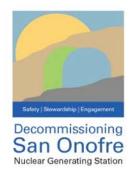
• Pro	oject Initiated	Fall 2015
• Co	nstruction scheduled to complete	Mid 2017
• Fu	el Offload to start	En <mark>d of 2017</mark>
 All 	Fuel on ISFSI	Mid 2019



Fuel Readiness for Transportation

- Transfer estimated at 10 years from start to finish
- Some fuel qualified for transport now
- Other fuel qualifies over time





DOE Activities

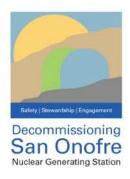
DOE Consent-based Siting Public Meetings

March 29	Chicago, Illinois
April 11	Atlanta, Georgia
April 26	Sacramento, California
Late May	Denver, Colorado
June	Boston, Massachusetts
June	Tempe, Arizona
July	Boise, Idaho
July	Minneapolis, Minnesota

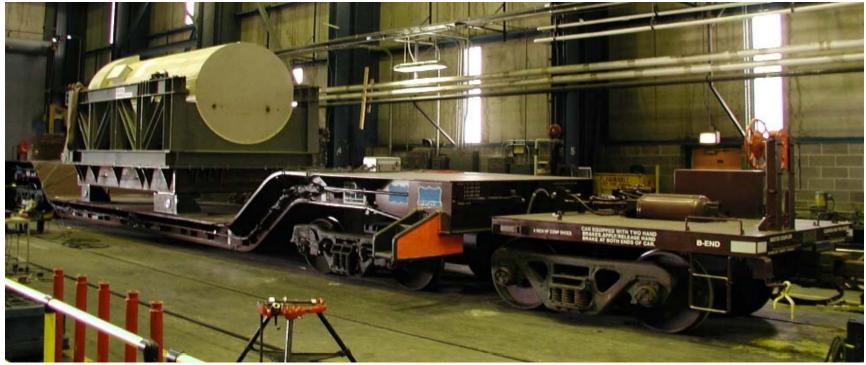
For more information:

http://energy.gov/ne/consent-based-siting





DOE Concept Rail Car



 Awarded \$8.63 million fixed price contract to AREVA Federal Services on August 21, 2015 for development of cask and buffer railcars





DOE Remarks on Private Storage

- DOE would like to advance storage (public or private) to remove fuel from shutdown reactors
- DOE sees a role for private storage
- Private storage would allow for an accelerated schedule, more flexibility and firm costs
- If private storage facility is approved/licensed by NRC, DOE is prepared to work with them
- Agrees that even if Yucca Mountain is opened, capacity at other storage sites is needed





DECOMMISSIONING VS OPERATIONS ECONOMIC OUTPUT





Economic Impact Comparison

- Decommissioning FTEs are 17% of those employed during operation
- Decommissioning Labor Income is 12% of the Labor Income during operation
- Decommissioning Total Output is 9% of the Total
 Output during operation

