SAN ONOFRE COMMUNITY ENGAGEMENT PANEL

SPENT FUEL SOLUTIONS

Community Engagement Panel/Spent Fuel Solutions Joint Meeting

Department of Energy Funding to Support Community Engagement on Consent-Based Siting of Consolidated Interim Storage Facilities

Thursday, June 15, 2023

5:30 – 8:30 p.m. PDT

Laguna Hills Community Center, Laguna Hills
and virtually via Microsoft Teams

THIS MEETING IS BEING RECORDED

Agenda Topic	Presenter(s)	Time
CEP and SCE opening comments	David Victor Dan Stetson	5:30 – 5:35
Spent Fuel Solutions coalition and the federal spent fuel management program • Federal legislation and federal spent fuel program • Coalition webinar on international best practices	Supervisor Katrina Foley (Orange County, District 5)	5:35 – 5:45
DOE funding for consent-based siting of consolidated interim storage facilities • U.S. Department of Energy funding to support community engagement on consent-based siting of consolidated interim storage facilities	Natalia Saraeva (Department of Energy Team Lead)	5:45 – 6:00
DOE public comment period and facilitated dialogue		6:00 – 6:30
CEP general community updates • Nuclear Energy Institute Used Fuel Management Conference recap • CEP member consultation meeting recap	David Victor Dan Stetson	6:30 – 6:45
SONGS decommissioning update • The big picture • Dismantlement update: recent accomplishments	Doug Bauder Vince Bilovsky	6:45 – 7:00 7:00 – 7:25
Break		7:25 – 7:30
General public comment period		7:30 – 8:00
Facilitated public dialogue	Dan Stetson Martha McNicholas	8:00 – 8:25
SCE and CEP summary comments	Doug Bauder Dan Stetson David Victor	8:25 – 8:30

Opening Comments

David Victor and Dan Stetson

SAN ONOFRE COMMUNITY ENGAGEMENT PANEL

- Defining roles
  - CEP = decommissioning, with an interest in spent fuel
  - Spent Fuel Policy Working Group = policy principles
  - Spent Fuel Solutions coalition = advocacy
- Spent Fuel Policy Working Group
  - Spring 2023 meetings to align on policy principles
- Nuclear Energy Institute Used Fuel Management Conference on April 25
- NRC approves license for Holtec CIS facility, New Mexico enacts SB-53
- SONGS tour with Senator Josh Newman (CA 29th District) on April 28

SPENT FUEL SOLUTIONS

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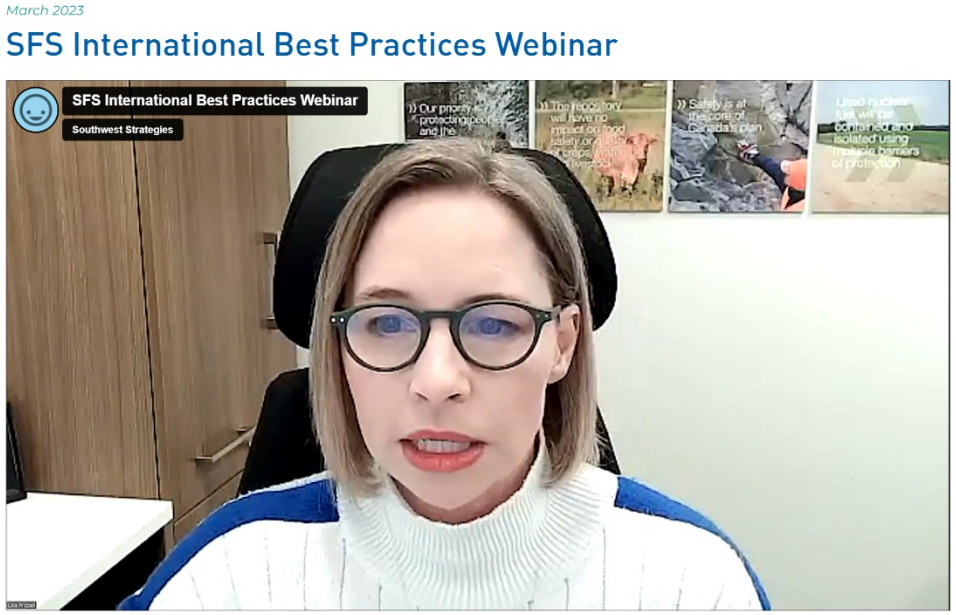
Advocating for Spent Fuel Solutions

Supervisor Katrina Foley

Orange County (District 5) and Spent Fuel Solutions Co-Chair

Coalition Update

- Coalition is seeking additional resolutions of support from local cities
- In March, we held our second webinar featuring speakers from the Canadian, Swedish and Finnish spent fuel management programs
- We will continue to hold these educational events, including tonight's joint webinar with the SONGS Community Engagement Panel



Opening Comments

Dan Stetson and Supervisor Foley

From left: Spent Fuel Solutions Executive Director Chris Wahl, Kristal Jabara from Supervisor Desmond's office, Supervisor Katrina Foley, Rep. Mike Levin, Secretary Jennifer Granholm, SCE President & CEO Steve Powell, and SONGS CEP Co-Chair Dan Stetson

- Secretary of Energy Jennifer Granholm and Representative Mike Levin (D-CA) visited SONGS on June 9
- Secretary Granholm announced the 13 awardees that will receive a portion of $26 million as a next step in Department of Energy's (DOE) consent-based siting process for interim storage facilities for spent fuel
- Recipients of awards were groups of university, nonprofit, and private sector partners interested in collaborating on the DOE's community-centered approach to storing and disposing of spent nuclear fuel
- Link: Energy Secretary Granholm and Rep. Levin Visit SONGS | SONGS (songscommunity.com)

DOE Public Comment Period

SPENT FUEL SOLUTIONS

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Instructions for meeting participation available online

Submitting comments and questions in advance

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Public dialogue to be facilitated by Dan Stetson and Martha McNicholas

CONSENT-BASED SITING

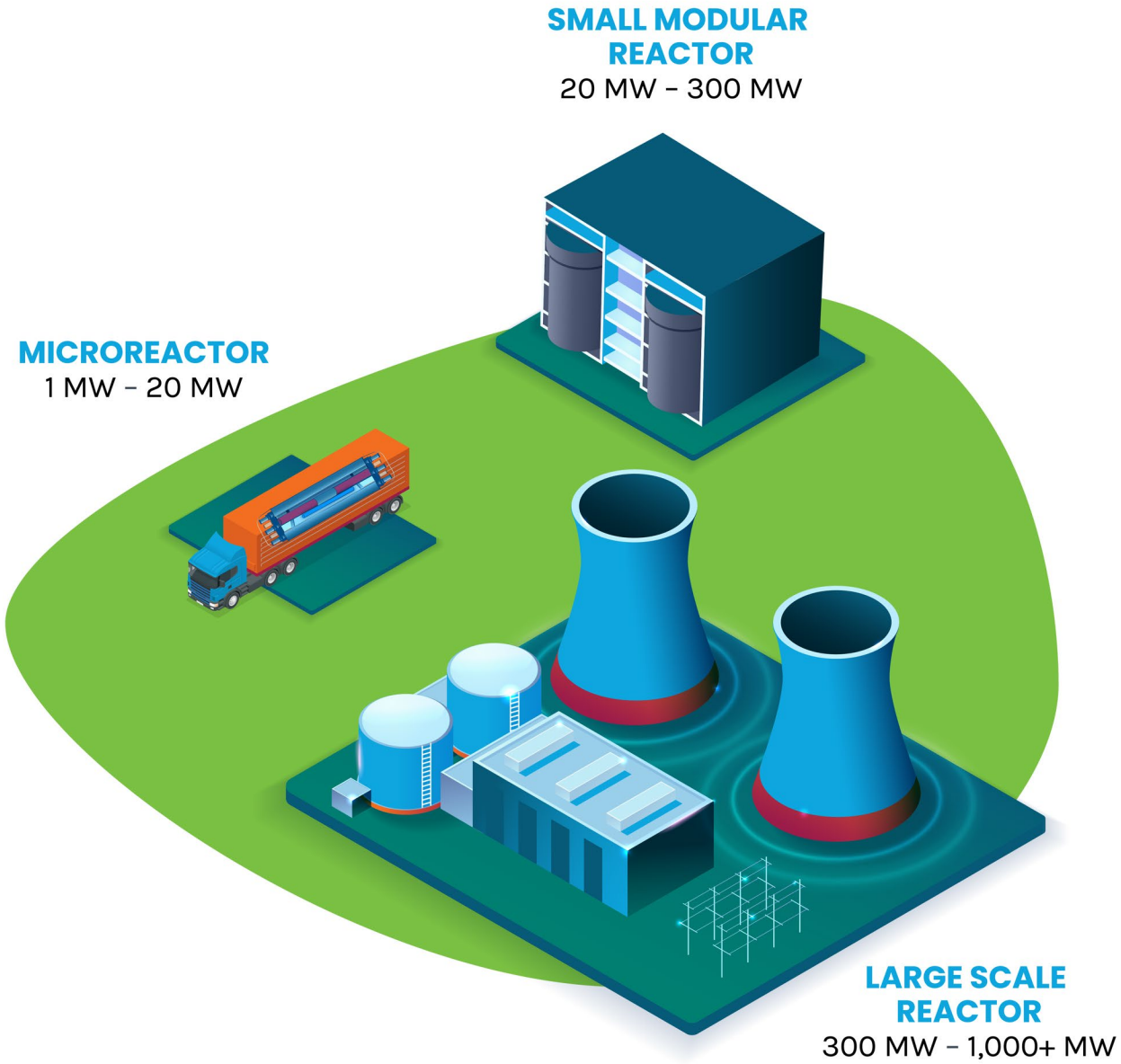
FOR FEDERAL CONSOLIDATED INTERIM STORAGE

Natalia Saraeva, Team Lead for Consent-Based Siting, Office of Nuclear Energy, U.S. Department of Energy

U.S. DEPARTMENT OF ENERGY | Office of NUCLEAR ENERGY | CONSENT-BASED SITING

NUCLEAR ENERGY…

- Currently makes up 19% of our nation's electricity
- Is essential to tackling climate change
- Provides half of our nation’s clean energy
- We need nuclear to reach our ambitious goals of:
  - 50% reduction of carbon emission by the end of the decade
  - 100% clean electricity by 2035, and
  - A net-zero economy by 2050

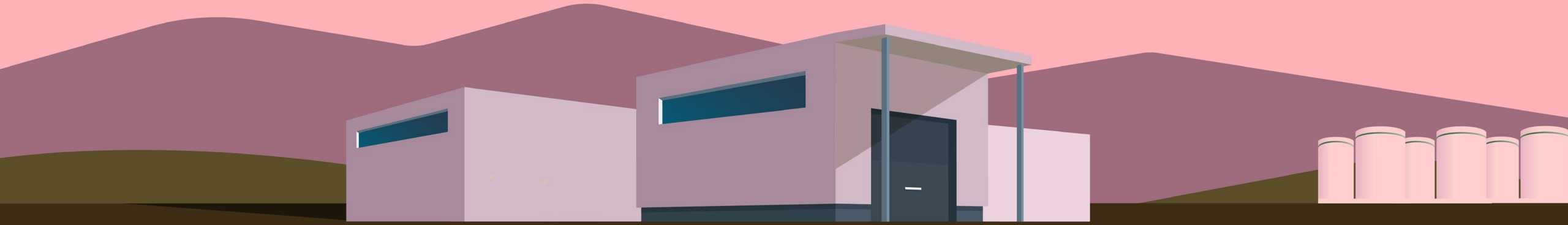


INTEGRATED WASTE MANAGMENT

- The continued deployment of nuclear energy — as a solution for tackling climate change and meeting increasing energy demand — requires progress on the back-end of the fuel cycle
- DOE is responsible for managing the nation's spent nuclear fuel and high-level radioactive waste. This includes finding sites to store and dispose of the spent nuclear fuel
- While spent nuclear fuel is safely stored across the country, the communities hosting this material never agreed to do so long term

FEDERAL INTERIM STORAGE

- Is an important component of a waste management system
- Allows for the removal of spent nuclear fuel from existing reactor sites
- Help to re-build trust and confidence with communities and stakeholders
- Begins to address taxpayers' liability
- Provides useful research opportunities

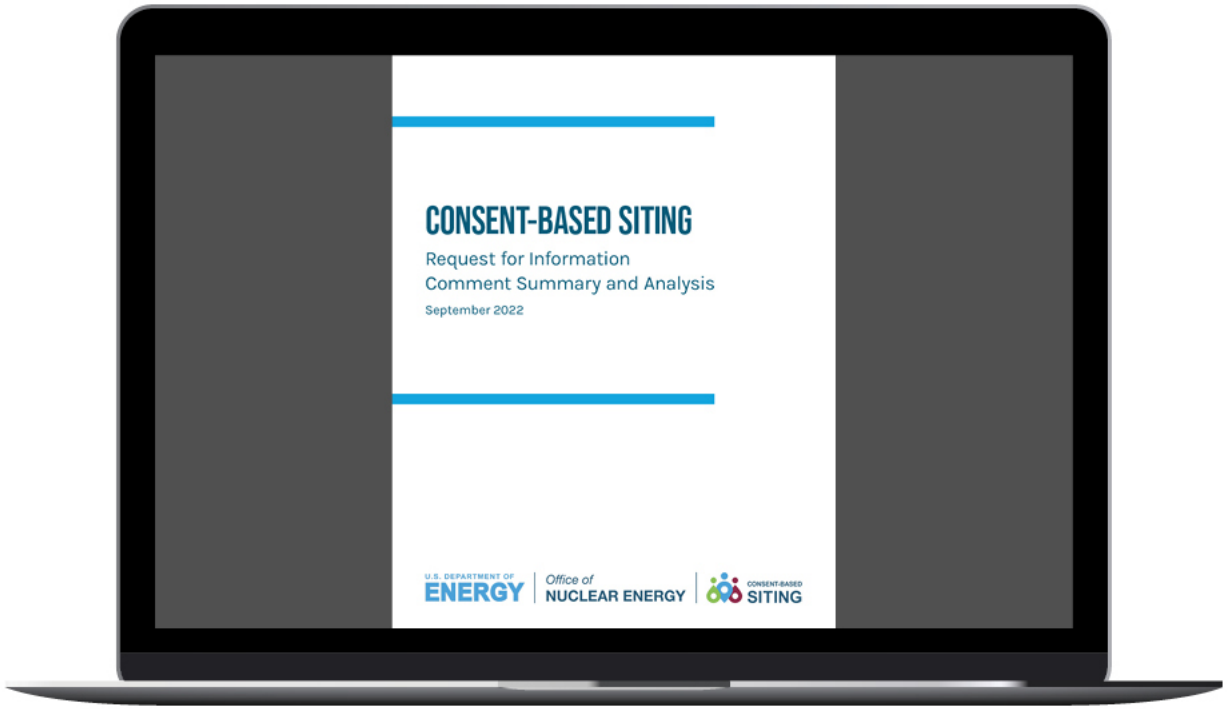


CONSENT-BASED SITING

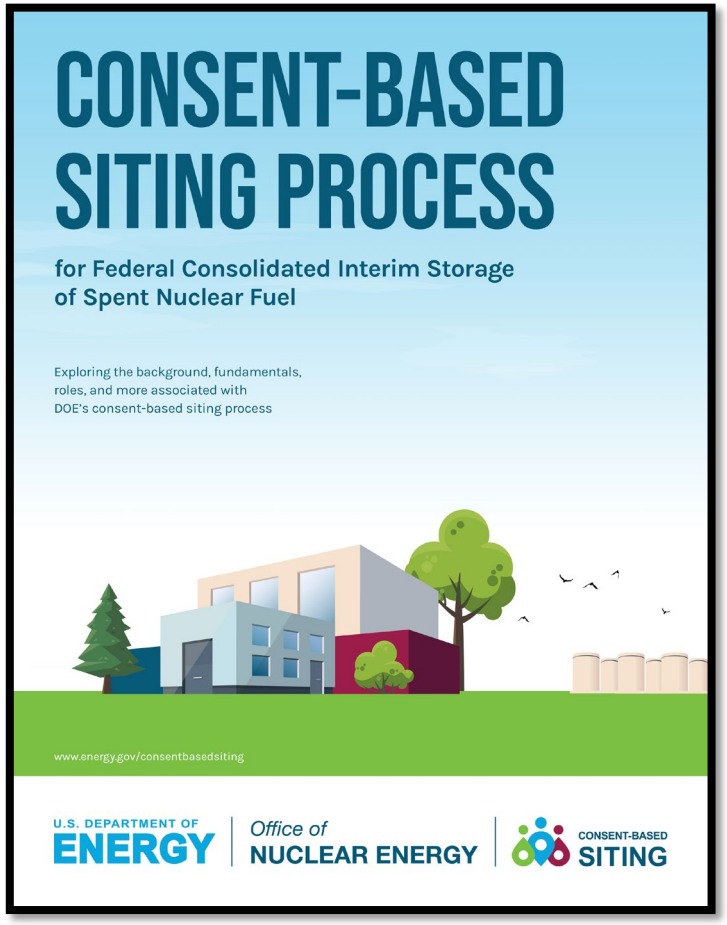
- Consent-based siting is an approach to siting facilities that focuses on the needs and concerns of people and communities
  - Special focus on ensuring issues of equity and environmental justice are built into the consent-based siting process
- By prioritizing communities and people, DOE believes it can find a solution to the decades-long stalemate on managing the nation's spent nuclear fuel
- A consent-based approach to siting, driven by each community's well-being and needs, is both the right thing to do and our best chance for success

PUBLIC FEEDBACK

- On December 1, 2021, DOE issued a request for information on using consent-based siting to identify sites for interim storage of spent nuclear fuel
- DOE received 225 submissions from a wide variety of commenters:
  - Tribes, State, local governments, NGOs, industry, members of academia, general public
- The Comment Summary and Analysis Report is available at energy.gov/consentbasedsiting
  - Also includes comments received on the 2017 Draft Consent-Based Siting Process



THE CONSENT-BASED SITING PROCESS



- Prioritizes people and communities
- Centers equity and environmental justice
- Collaborative, phased, and adaptive

PROCESS STAGES

Stage 1: Planning and Capacity Building

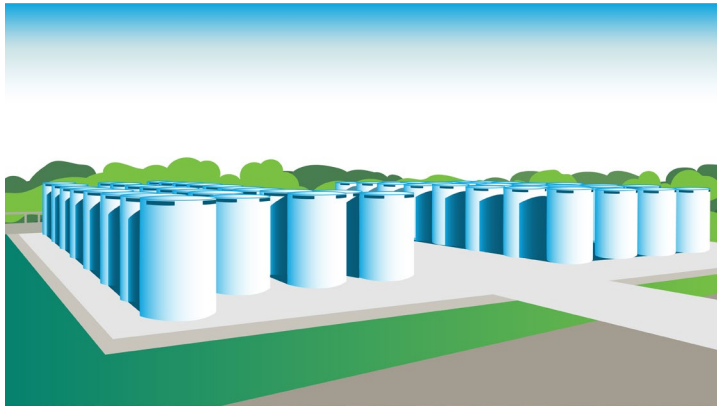
Build relationships, encourage mutual learning, develop a common understanding of nuclear waste management-related topics.

Phases 1A & 1B
ANTICIPATED REMAINING DURATION 2-3 YEARS

Stage 2: Site Screening and Assessment

Issue screening and assessment criteria, community-led development of additional criteria; preliminary and detailed assessments.

Phases 2, 3, & 4
ANTICIPATED DURATION 4-7 YEARS



Stage 3: Negotiation and Implementation

Negotiate agreements with willing and informed host communities with licensing, construction, and operation activities to follow.

Phases 5, 6A, & 6B
ANTICIPATED DURATION TO INITIAL OPERATION READINESS 4-5 YEARS

FIRST STAGE

PLANNING AND CAPACITY BUILDING STAGE (ANTICIPATED REMAINING DURATION 2-3 YEARS)

PHASE 1A: PLANNING (COMPLETE)

- ✓ Receive authority and funding
- ✓ Initiate outreach and engagement
- ✓ Issue request for information (RFI)
- ✓ Issue RFI summary analysis report
- ✓ Issue revised consent-based siting process
- ✓ Prepare for Phase 1B

PHASE 1B: BUILD CAPACITY (2-3 YEARS)

- ✓ Issue Funding Opportunity Announcement (FOA) to provide resources to communities interested in learning more
- Conduct robust outreach and engagement
- Enable mutual learning
- Refine consent-based siting process
- ★ **DOE is not looking for volunteer hosts in this phase**

CONSENT-BASED SITING STAGE 1: FUNDING OPPORTUNITY

$26 million in funds; 6-16 awards; period of performance is 18-24 months

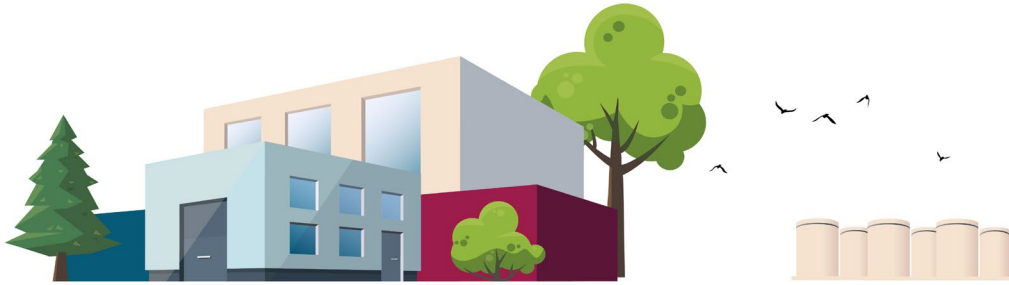
- FOA application deadline was extended per multiple requests
- Funding amount was increased from $16 million with the FY23 Appropriations

Eligible awardees includes:

- Higher-education institutions,
- Tribal, State, and local governments
- Community foundations
- Non-governmental organizations

Geographically and institutionally diverse awardees

- Across the continental United States



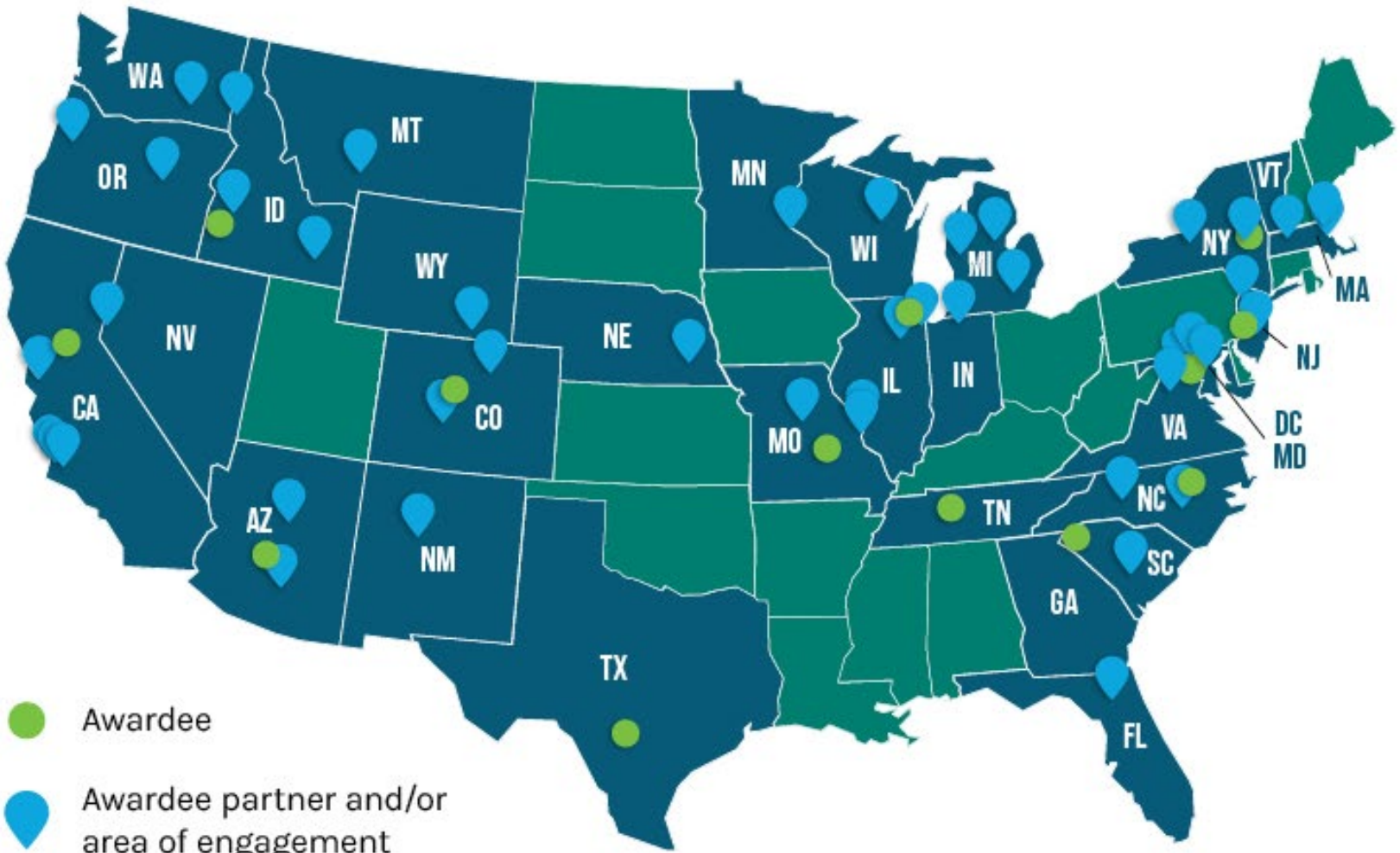
Builds capacity for future engagement

- Establishes a community of practice
- Strengthens involvement and mutual learning aimed at building trust
- Ensures commitment to environmental justice

CONSENT-BASED SITING CONSORTIA

The U.S. Department of Energy selects **13 awardees** across the country to serve as **information, engagement, and resource hubs,** referred to as consent-based siting consortia. The consortia will foster community discussion and capture feedback on interim storage of spent nuclear fuel.

The locations on the map represent awardee partners and areas of engagement, not places being considered for federal consolidated interim storage facilities.



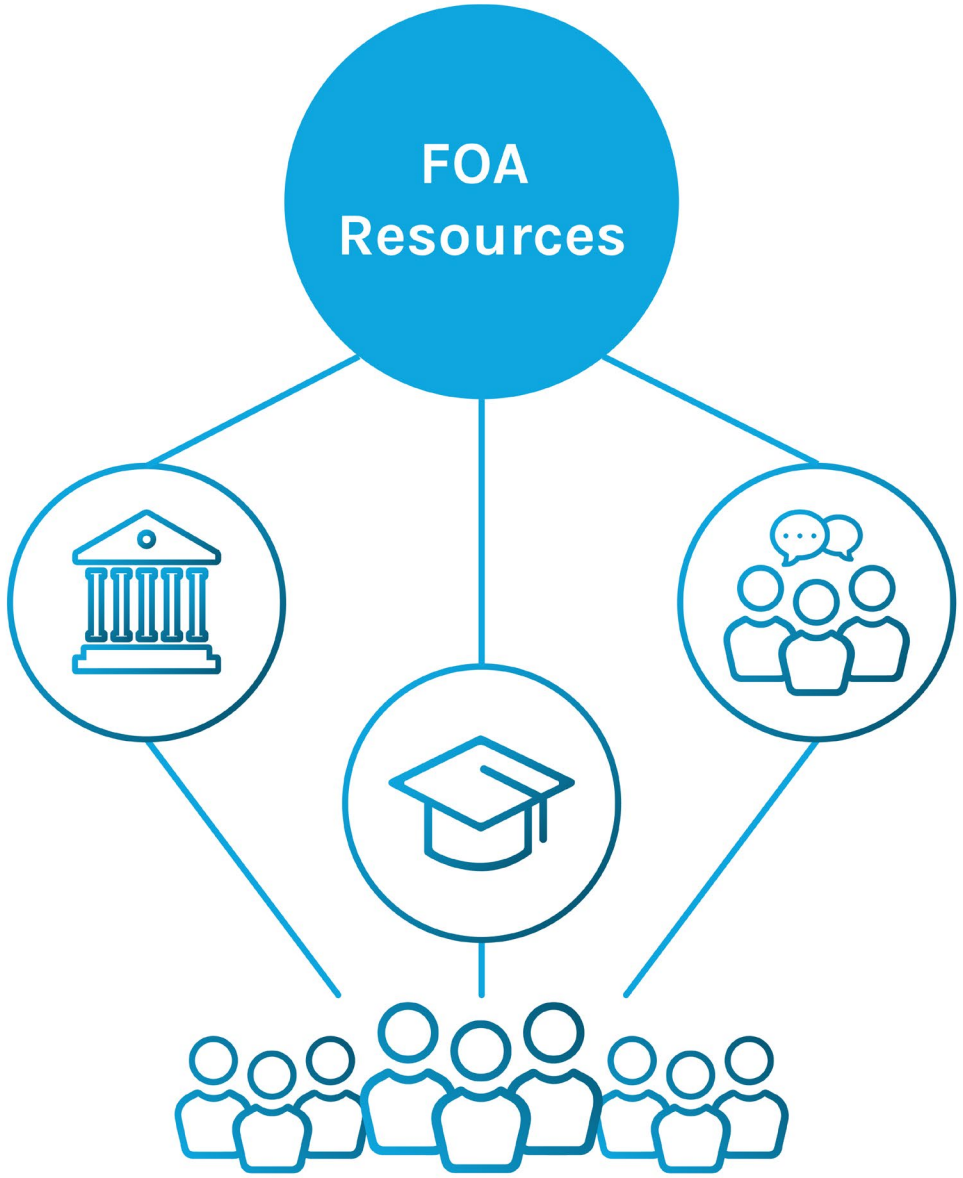
energy.gov/consent-based-siting

U.S. DEPARTMENT OF ENERGY | Office of NUCLEAR ENERGY | CONSENT-BASED SITING

FUNDING OPPORTUNITY AWARD RECIPIENTS

WILL REPRESENT CONSENT-BASED SITING CONSORTIA

- Award recipient is a hub for community engagement and resources
- Reduce barriers for participation
- Increase outreach (multiplication factor)
- Allow for greater community engagement
- Allow for cohort development/capacity



NEXT STAGES: Stage 2 and Stage 3

PUBLIC FEEDBACK INFORMING NEXT STEPS IN CONSENT-BASED SITING

1

Awarding cooperative agreements

2

Work with Consortia and their cohorts towards mutual learning

3

Further updating consent-based siting process based on lessons learned

LEARN MORE

CONSENT-BASED SITING

For Federal Consolidated Interim Storage of
Spent Nuclear Fuel

energy.gov/consentbasedsiting

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THANK YOU

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SPENT FUEL SOLUTIONS

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DOE Public Comment Period

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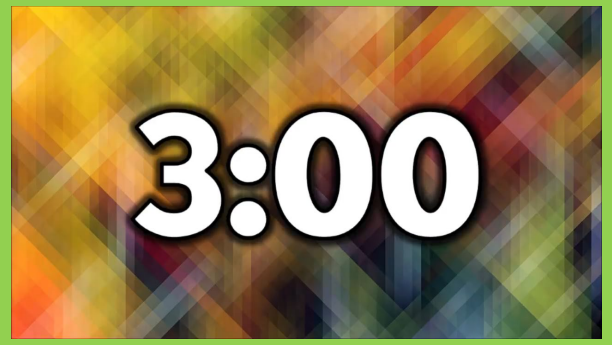

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General Community Updates

David Victor

CEP Member Consultation Meeting

David Victor and Dan Stetson

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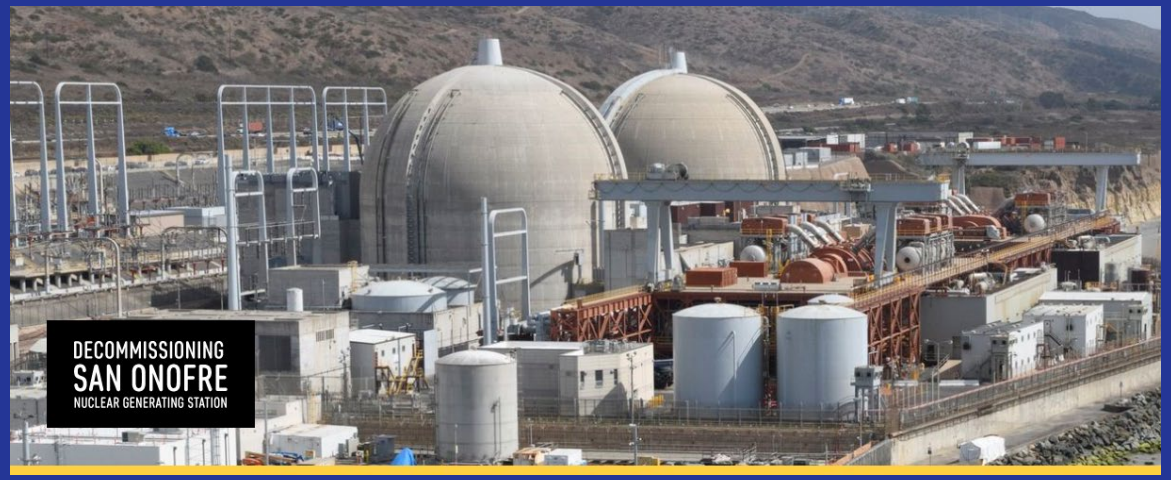
- CEP Member Consultation meeting, April 13, 2023
  - Topics:
    - David Victor provided an update on the Spent Fuel Policy Working group efforts to unite communities and draft principals to advocate for federal policy changes to support permanent and consolidated interim storage facilities
    - Dan Stetson shared his efforts to support Surfrider with ocean water sampling before and after SONGS waste-water discharges
    - SCE provided a updates on SONGS safety, decommissioning 2022 achievements and major dismantlement work planned for 2023
    - Katrina Foley, Orange County Supervisor (District 5) and Spent Fuel Solutions (SFS) Co-chair provided an update on coalition advocacy efforts
    - Members provided feedback and discussed 2023/2024 agenda topics

SONGS: The Big Picture

Doug Bauder
Vice President & Chief Nuclear Officer



Safety | Stewardship | Engagement

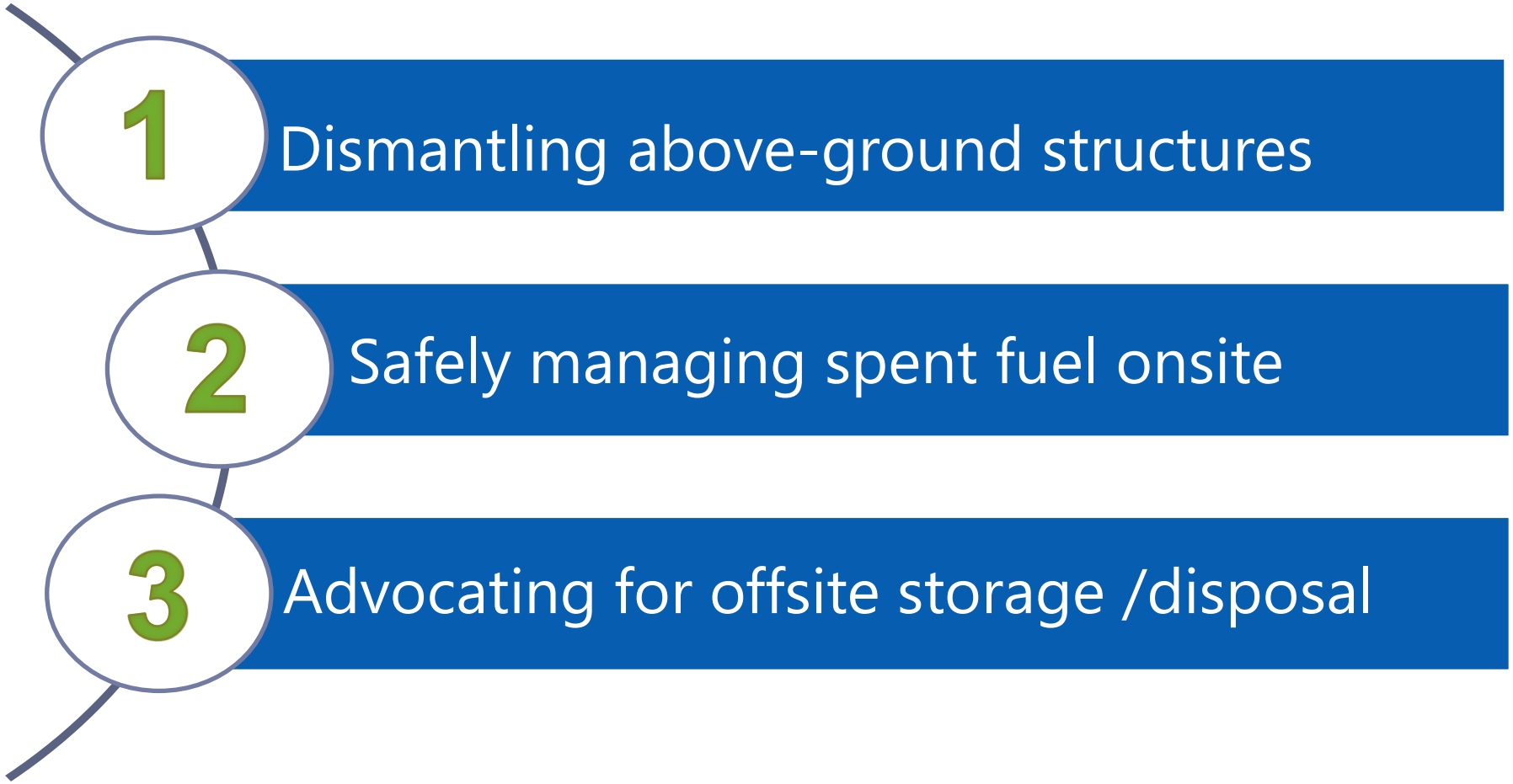
Decommissioning Principles

SAFETY

STEWARDSHIP

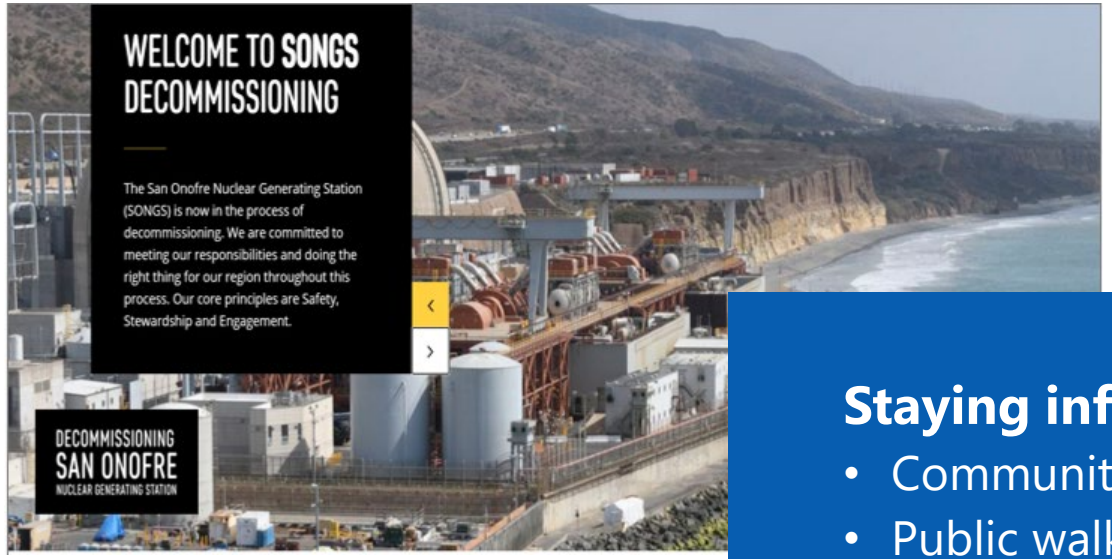
ENGAGEMENT

Major Workstreams



Resources

Learn about decommissioning
www.songscommunity.com



Staying informed

- Community Engagement Panel meeting dates
- Public walking tour dates and sign ups
- Decommissioning blog and news updates
- SONGS monthly community update email
- Facebook, Twitter, YouTube, Instagram

SONGS Dismantlement Update

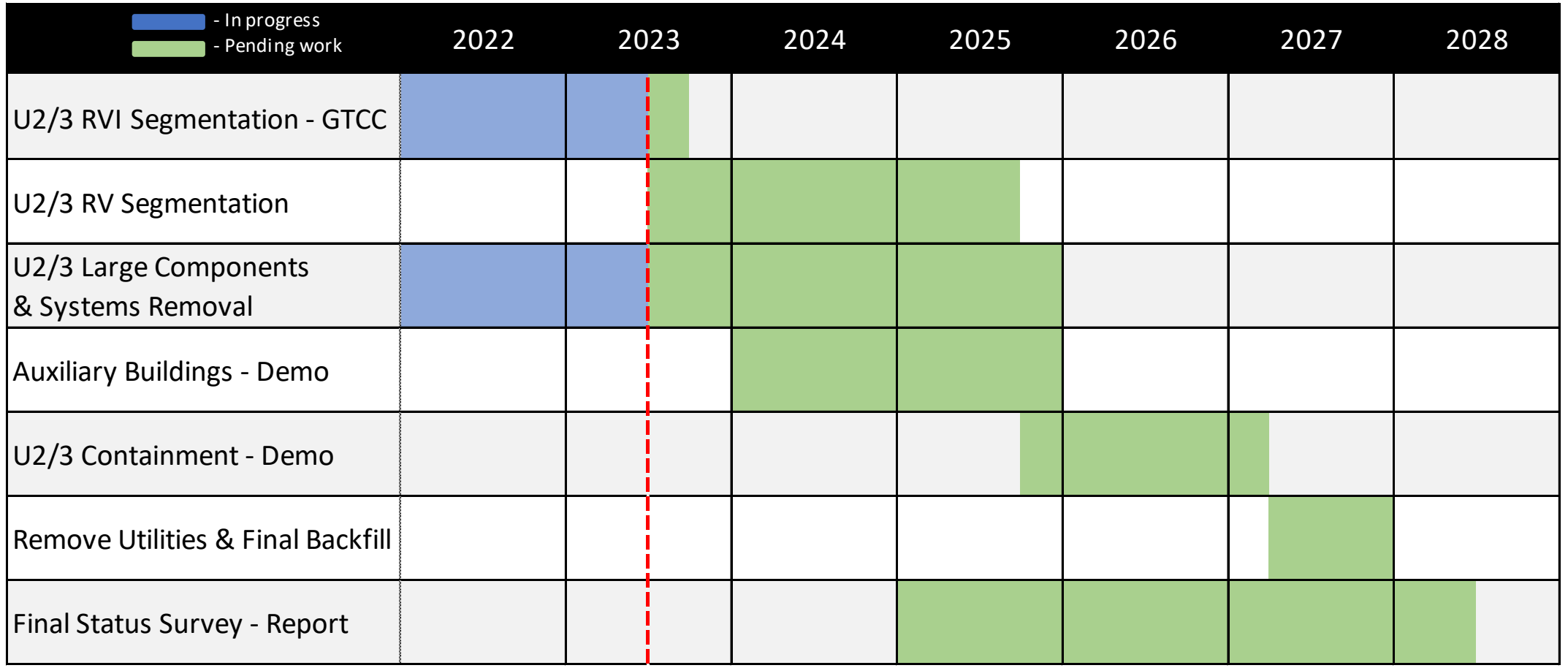
Vince Bilovsky
Director,
Decommissioning Project

1 Year Look Ahead Work Activities

- Inside containment domes and power block buildings
  - Class B and C[1] waste packaging and shipments
  - Complete cutting of greater than class C (GTCC) reactor vessel internal (RVI) segments
  - GTCC packaging, processing, and transfer to independent spent fuel storage installation (ISFSI)
  - Start removal of large components, including Reactor Vessels
  - Preparation for demolition of auxiliary buildings
  - Removal of spent fuel racks in Unit 3
- Outside work
  - Continued class A waste, recycling, and landfill shipments
  - Complete intake structure final status surveys and backfill

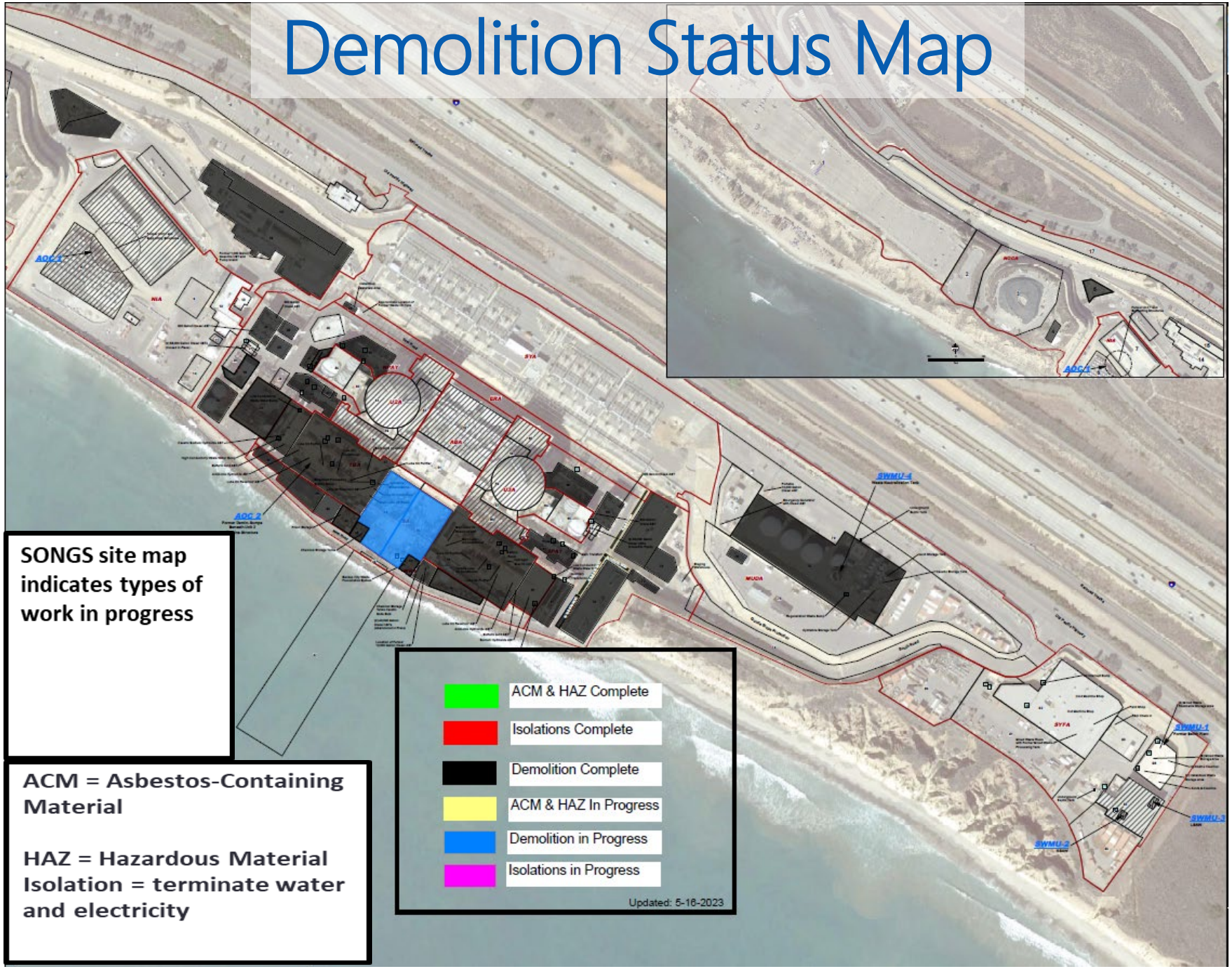
[1]Low-level radiological waste is characterized as Class A (most benign), B, C, or Greater-Than-Class C (GTCC); GTCC is most highly activated and stored much like spent fuel

Dismantlement Project Schedule: Key Activities



Demo - Demolition
FSS - Final Status Survey
GTCC - Greater Than Class "C" Waste
NRC – United States Nuclear Regulatory Commission
Prep – Preparation
RV - Reactor Vessel
RVI - Reactor Vessel Internals

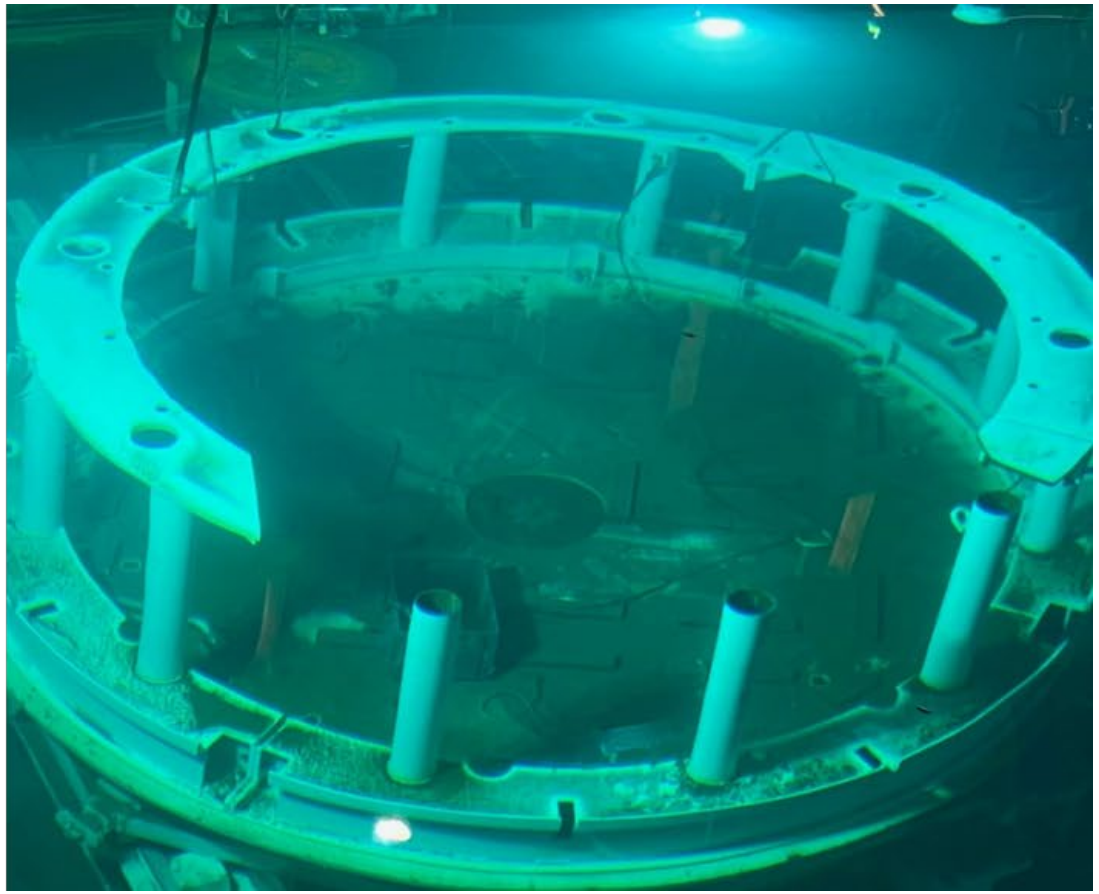
Demolition Status Map



2017

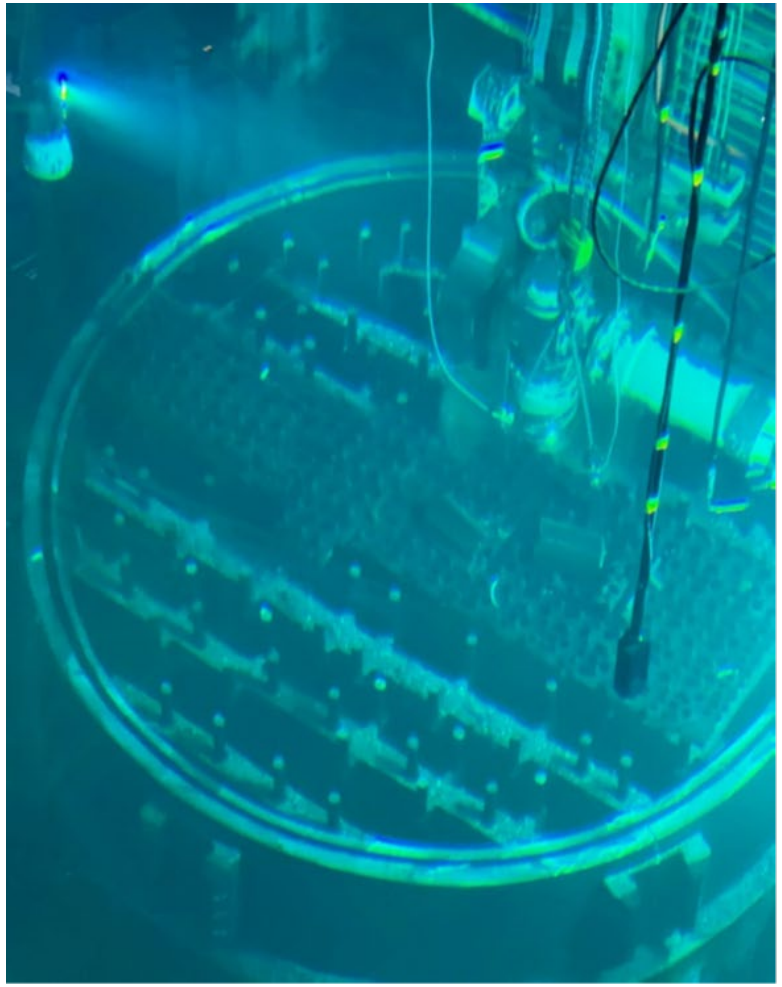
2023

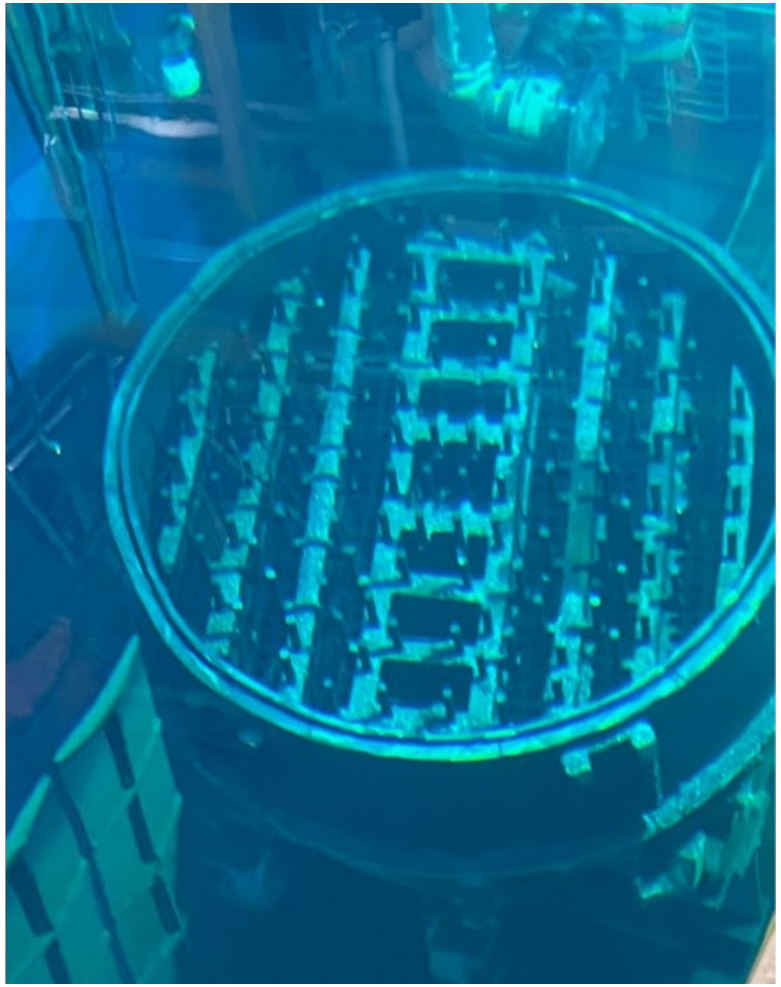
RVI Segmentation in Final Stages



Segmentation of reactor vessel internals remaining components

GTCC Cutting Complete in Unit 3





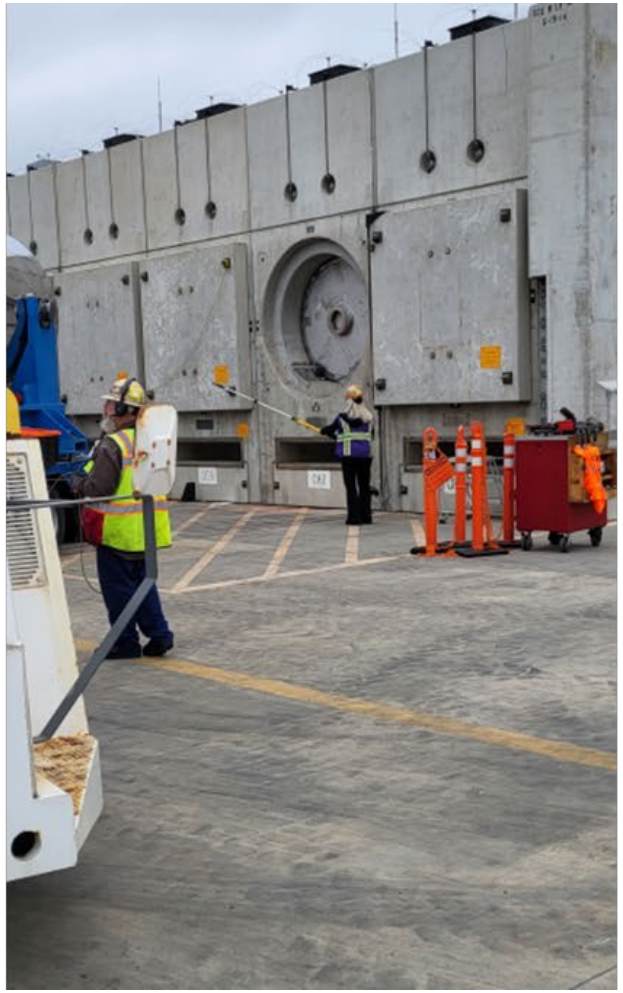
Segmentation of the core plate in Unit 3 was completed in April

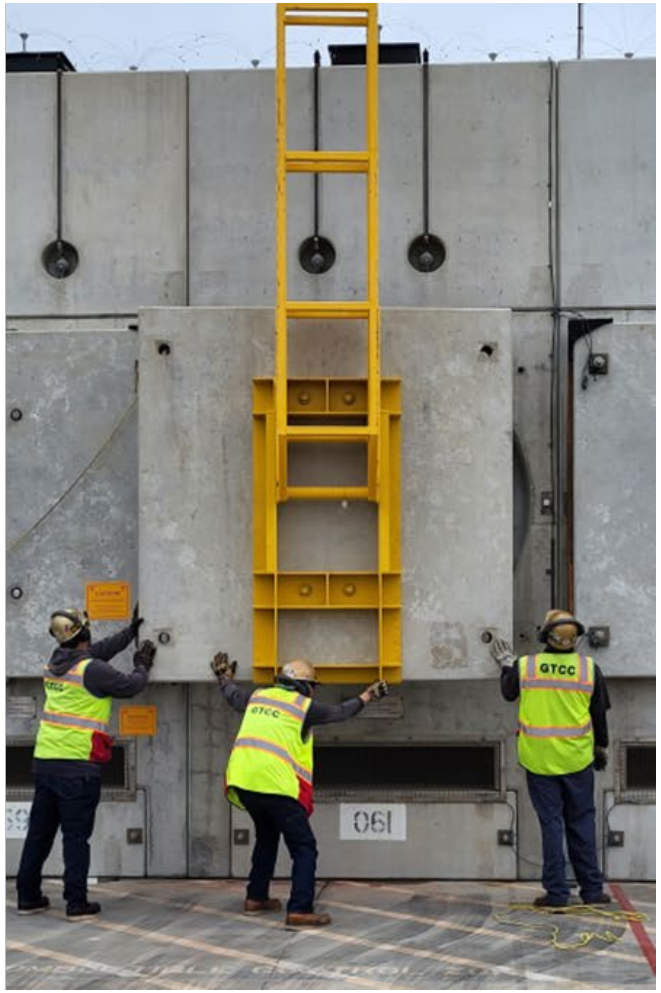
GTCC Campaign 75% Complete

GTCC container being rigged for removal from containment

GTCC container being transported from containment to ISFSI

GTCC Canister Transfer





A GTCC canister loaded into a concrete horizontal storage module

Spent Fuel Rack Removal

Unit 2 spent fuel rack removal is complete and Unit 3 rack removal is underway

Unit 3 Turbine Building Demolition

Flowable Fill Into Intake Structure

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BREAK

Public Comment
David Victor

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Directions for the public comment period:

To submit comments and questions in writing:

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- Use hardcopy CEP Question/Comment Card if participating in person
  - Cards available at the facility entrance and at the back of the room

To sign up to speak:

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Comments and questions will be addressed in the order received

Dan Stetson and Martha McNicholas will facilitate

Speaker Queue:

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General Public Comment

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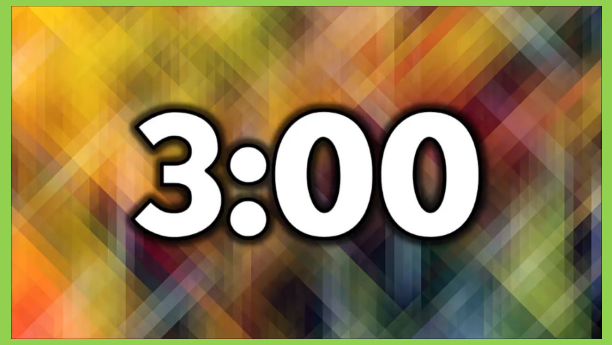

CLOSING COMMENTS

DOUG BAUDER

KEY TAKEAWAYS

DAVID VICTOR AND DAN STETSON

2023 CEP Meeting Schedule
(subject to change)

Focus Topics	Date
1Q CEP Regular Meeting Environmental Stewardship	March 23
CEP Member Consultation Meeting	May 31
2Q Joint CEP-Spent Fuel Solutions Meeting DOE Funding to Support Community Engagement on Consent-Based Siting of Consolidated Interim Storage	June 15
3Q CEP Regular Meeting Onsite Spent Fuel Dry Cask Storage Defense-In-Depth	August 17
4Q CEP Regular Meeting SONGS Dismantlement Update by SONGS Decommissioning*Solutions*	October 26
CEP Member Consultation Meeting	December 7

2024 CEP Meeting Topics
(subject to change)

Focus Topics
1Q CEP Regular Meeting Environmental Stewardship
CEP Member Consultation Meeting
2Q CEP Regular Meeting Update on Consent-Based Siting for Federal Consolidated Interim Storage Facilities
3Q CEP Regular Meeting Onsite Spent Fuel Dry Cask Storage Defense-In-Depth
4Q CEP Regular Meeting SONGS Dismantlement Update by SONGS Decommissioning*Solutions*
CEP Member Consultation Meeting

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Thank you
Stay safe and healthy

Acronyms

ACM	Asbestos Containing Material
AHSM	Advanced Horizontal Storage Module
ALARA	As Low As Reasonably Achievable
AMP	Aging Management Program
ASME	American Society of Mechanical Engineering
C&D	Cold & Dark
CAP	Corrective Action Program
CCC	California Coastal Commission
CBS	Core Barrel Support
CCR	Current Conditions Report
CDP	Coastal Development Permit
CDPH	California Department of Public Health
CEC	California Energy Commission; Cavity Enclosure Container
CEP	Community Engagement Panel
CEQA	California Environmental Quality Act
CFR	Code of Federal Regulations
CH&S	Corporate Health & Safety
CIS	Consolidated Interim Storage
CNO	Chief Nuclear Officer
CPEN	Camp Pendleton
CPUC	California Public Utilities Commission
CSLC	California State Lands Commission
D&D	Decontamination & Dismantlement
DA	Decommissioning Agreement; Decommissioning Agent
DCE	Decommissioning Cost Estimate
DGC	Decommissioning General Contractor
DGCL	Derived Concentration Guideline Levels
DID	Defense-in-Depth
DOE	Department of Energy
DoN	Department of Navy

DOR	Division of Responsibility
DPH	Department of Public Health
DSAR	Defueled Safety Analysis Report (replaces FSAR)
DSC	Dry Storage Canister
D-SEIS	Draft Supplemental Environmental Impact Statement
D-SER	Draft Safety Evaluation Report
DSFM	Division of Spent Fuel Management (NRC)
DTF	Decommissioning Trust Fund
DTSC	Department of Toxic Substances Control
EAL	Emergency Action Level
EH&S	Environmental, Health & Safety
EIR	Environmental Impact Report (under CEQA)
EIS	Environmental Impact Study (under NEPA)
EP	Emergency Plan
EPA	Environmental Protection Agency
EPRI	Electric Power Research Institute
ERO	Emergency Response Organization
ET	Experts Team
FA	Fuel Assembly
FEIR	Final Environmental Impact Report
FERC	Federal Energy Regulatory Commission
FSAR	Final Safety Analysis Report
FSS	Final Status Surveys
FSSR	Final Status Survey Report
FTO	Fuel Transfer Operations; Field Training Officer
GTCC	Greater Than Class C (Waste)
HAZ	Heat Affected Zone
HI-TRAC	Holtec International Transfer Cask
Hi-PORT	Holtec International Transporter
HI-STORM	Holtec International Storage Module
HSM	Horizontal Storage Module

Acronyms

IOEP	ISFSI-Only Emergency Plan
IPC	Interjurisdictional Planning Committee
IRMS	ISFSI Radiation Monitoring System
ISA	Industrial Security Area
ISFSI	Independent Spent Fuel Storage Installation
LAR	License Amendment Request
LLRW	Low-Level Radioactive Waste
LOED	Large Organism Exclusion Device
LTP	License Termination Plan
MARSSIM	Multi-Agency Radiation Survey Site & Investigation Manual
MOU	Memorandum of Understanding
MPC	Multi-Purpose Canister
NDTF	Nuclear Decommissioning Trust Fund
NEI	Nuclear Energy Institute
NEPA	National Environmental Policy Act
NOP	Notice of Preparation
NOV/IO	Notice of Violation and Investigative Order
NPDES	National Pollutant Discharge Elimination System
NPP	Nuclear Power Plant
NRC	Nuclear Regulatory Commission
NTP	Notice to Proceed
NUREG	Nuclear Regulation
NUHOMS	Nutech Horizontal Modular Storage
OC	Orange County
O&M	Operation & Maintenance
OE	Operating Experience
OSHA	Occupational Safety & Health Administration
PA	Protected Area
PDEP	Permanently Defueled Emergency Plan
PDTS	Permanently Defueled Technical Specifications
PPE	Personal Protective Equipment
PSDAR	Post-Shutdown Decommissioning Activities Report

Q&A	Questions and Answers
REIR	Request for Environmental Impact Review
REMP	Radiological Environmental Monitoring Program
RP	Radiological Protection
RPV	Reactor Pressure Vessel
RSI	Request for Supplemental Information
RV	Reactor Vessel
RVI	Reactor Vessel Internals
RWQCB	Regional Water Quality Control Board
SCE	Southern California Edison
SD	San Diego
SDDEH	San Diego Department of Environmental Health
SDS	SONGS Decommissioning*Solutions*
SFP	Spent Fuel Pool; Support Foundation Pad (ISFSI)
SFPI	Spent Fuel Pool Island
SLC	State Lands Commission (CA)
SLR	Sea Level Rise
STP	Sewage Treatment Plant
SWPPP	Storm Water Pollution Prevention Plan
T&D	Transmission & Distribution
TBA	To Be Announced
TBD	To Be Determined
TEDE	Total Effective Dose Equivalent
UFSAR	Updated Final Safety Analysis Report
UGS	Upper Guide Structure
UT	Ultrasonic Testing
UU	Unrestricted Use
VCT	Vertical Canister Transporter
VLLW	Very Low-Level Waste
VRS	Volume Reduction Station
WHI	Wheeler North Reef (Marine Mitigation)