

Diablo Canyon Decommissioning Engagement Panel Meeting

Date/Time:	3-13-19 / 6:00 PM – 10:00 PM	Facilitator:	Chuck Anders				
Meeting Location:	1055 Monterey Street, SLO; County Government Offices	Recorder: Brandy Lope					
Webcast:	SLO-SPAN Channel 21						
TV Broadcast:	Channel 21 (Charter)						
Purpose:	Review information received at the spent fuel storage workshops for the public and receive additional public input on concerns and suggestions regarding spent fuel storage.						
Desired Outcomes:	By the end of today's meeting, the panel will: Review information and observations from the spent fuel workshops; Receive information from the Diablo Canyon Independent Safety Committee on their possible role to support the DCDEP; Review public outreach metrics; Receive and discuss public comment; Review the 2019 Panel meeting schedule and associated decommissioning topics; and Record actions and evaluate the meeting. Gather information to prepare recommendations to PG&E on spent fuel and Greater Than Class C (GTCC) management.						

	AGENDA						
Item #	What – Content	Action Path	Who	Target Start Time			
1.	Open house poster session with Q&A (25 min)	InformDiscussRecord comments	All	6:00 PM (25)			
2.	Break		All	6:25 PM (5)			
3.	Panel Meeting Start		All	6:30 PM			
4.	Safety Minute (911, AED, CPR)	Consensus	PG&E	6:30 PM (2)			
5.	PG&E welcome and update on status of DCDEP Vision Report filing with the CPUC	Present	Jones	6:32 PM (5)			
6.	Jim Welsch Introduction	Welsch	6:37 PM (5)				
7.	Review meeting agenda, introduce meeting topic, and review desired outcomes (Public comment window closes at 8:10 PM)	Anders (Facilitator)	6:42 PM (3)				
8.	Report from Dr. Robert Budnitz regarding DCISC activities and spent fuel storage	Present Discussion	Budnitz	6:45 PM (45) 7:30 PM (15)			
9.	Overview of PG&E Spent Fuel Storage Strategy and Schedule	Present	Jones/Mayer	7:45 PM (20)			
10.	Panel discussion of Spent Fuel Workshops	PresentDiscussion	Anders Panel	8:05 PM (5) 8:10 PM (25)			
11.	Break			8:35 PM (10)			
12.	Review public comments and metrics	Present	Anders	8:45 PM (5)			
13.	Public comment	PresentRecord	All	8:50 PM (45)			
14.	Panel observations, discussion, and path forward	Discussion	Panel	9:35 PM (15)			
15.	Introduction to next meeting topic: Panel Structure	Present	Anders	9:50 PM (5)			
16.	Meeting Summary and $(+/\Delta)$	DiscussRecord	Anders	9:55 PM (5)			
17.	Adjourn Meeting*	Action	Anders	10:00 PM			

Rev. 031319

Meeting Evaluation				
Plus +	Delta Δ			
1.	1.			
2.	2.			
3.	3.			

Action Items						
Description	Owner	Due Date				



Diablo Canyon Decommissioning Engagement Panel

1055 Monterey St.
San Luis Obispo
County Government Building
March 13, 2019

Safety Moment



AED (DCPP FIRE)



CPR (DCPP FIRE)



Call 911 (PASION)



Meet and Guide Emerg. Personnel (PASION)



Evacuation
Plan
(JONES)



Earthquake 'Duck, Cover, Hold' (JONES)



Active Shooter 'Get Out, Hide Out, Take Out, Call Out' (JONES)

PG&E Welcome and Update

Tom JonesPG&E Director of Strategic Initiatives

March 13, 2019



Introduction

Jim Welsch
PG&E Vice President of Nuclear Generation
and Chief Nuclear Officer

March 13, 2019



Agenda Overview

Wednesday, March 13						
Diablo Canyon Independent Safety Committee Activities and Spent Fuel Storage	Budnitz					
Overview of PG&E Spent Fuel Storage Strategy and Schedule	Jones / Mayer					
Panel discussion of Spent Fuel Workshops	Anders (Facilitator) / Panel					
10 minute break (8:35-8:45 p.m.)	All					
Review public comments and metrics	Anders					
Public comment	All					
Panel observations, discussion, and path forward	Panel					
Introduction to next meeting topic: Panel Structure	Anders					
Meeting summary	Anders					
Adjourn meeting	Anders					

Diablo Canyon Independent Safety Committee Activities and Spent Fuel Storage

Dr. Robert Budnitz

March 13, 2019

Spent Nuclear Fuel Storage Strategy and Schedule

Tom JonesPG&E Director of Strategic Initiatives

Mark Mayer
PG&E Nuclear Fuels Purchasing Manager

March 13, 2019





Purpose

 Describe PG&E's current spent nuclear fuel storage systems

Describe the next steps in the process



DCPP Spent Fuel Storage



Expedited Spent Fuel Offload Evaluation





Basis for Expedited Fuel Offload Evaluation

Purpose

"the site-specific decommissioning study will update the 2015 NDCTP (Nuclear Decommissioning Cost Triennial Proceeding) forecast and incorporate the costs of ...a plan for expedited post-shut-down transfer of spent fuel to Dry Cask Storage as promptly as is technically feasible using the transfer schedules implemented at the San Onofre Nuclear Generating Station as a benchmark for comparison, and provided PG&E will also provide the plan to the CEC (California Energy Commission), collaborate with the CEC, and evaluate the CEC's comments and input..."

Joint Proposal Agreement (JPA), page 13



Basis for Expedited Fuel Offload Evaluation

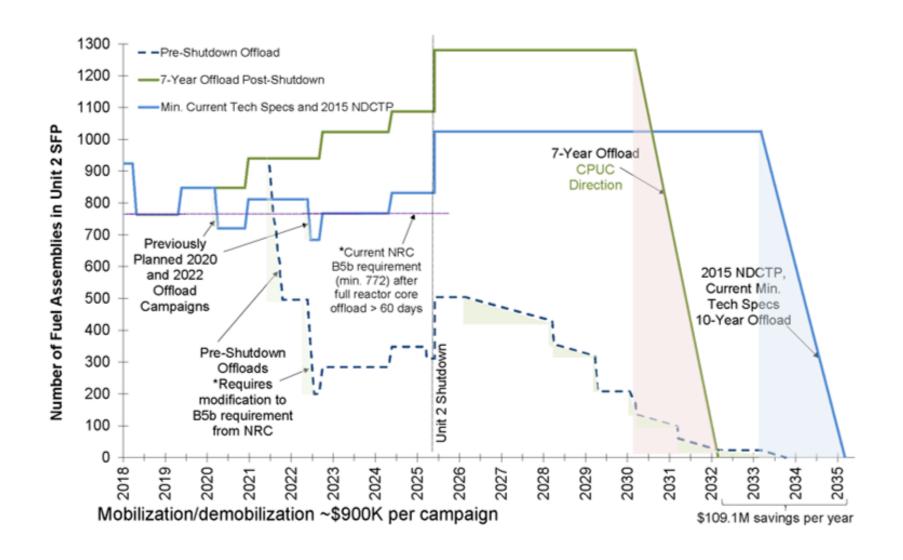
Conclusion 5

"It is reasonable to assume for cost estimation purposes that some spent nuclear fuel assemblies will require 7 years of wet cooling. In the 2018 Nuclear Decommissioning Cost Triennial Proceeding, the Commission would benefit from Pacific Gas and Electric Company providing information comparing annual cost impacts of strategies to reduce wet cooling periods, including assessment of expedited dry cask loading pre and post-shutdown."

CPUC Decision on the 2015 NDCTP (D.17-05-020, page 78)

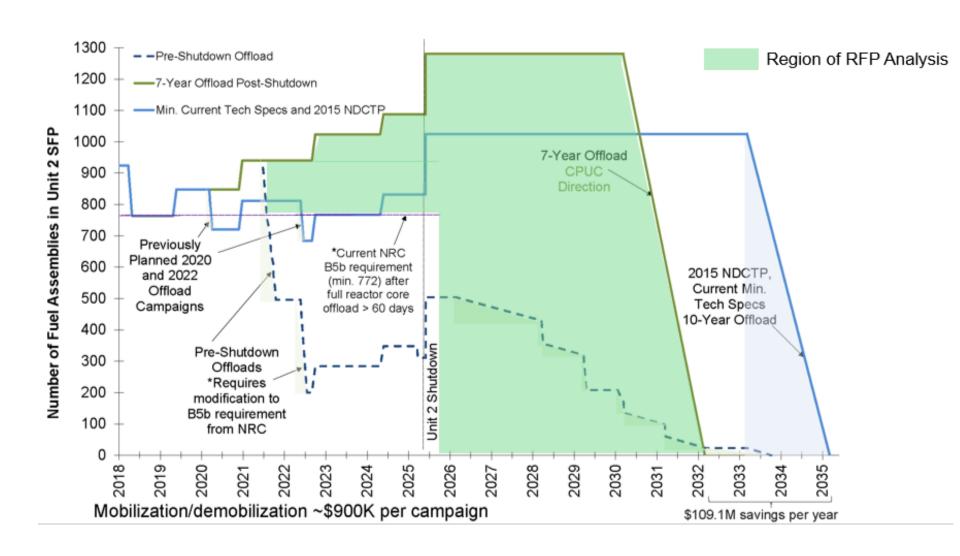


June 2018 Spent Fuel Offload Scenarios





June 2018 Spent Fuel Offload Scenarios

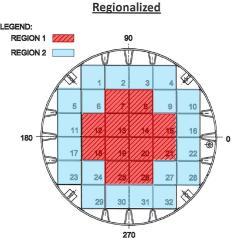




Components for Nuclear Fuel Handling

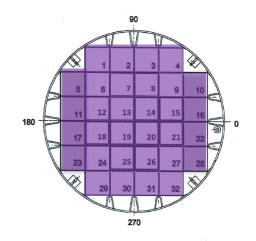
MPC-32 Loading Limits for DCPP

- Initial fuel assembly enrichment ≤ 5.0 wt. % ²³⁵U
- Technical Specification calculation provides burnup (Licensing Basis Limit ≤ 62 GWD/MTU*)
- Loading pattern in cask determines heat limits
 - Regionalized loading total allowable MPC heat load: 25,572 Watts (W)
 - ➤ Region 1 assembly limit ≤ 1,131 W (red)
 - ➤ Region 2 assembly limit ≤ 600 W (blue)
 - Uniform loading total allowable MPC heat load: 28,736 W
 - ➤ Each assembly limit: 898 W (purple)



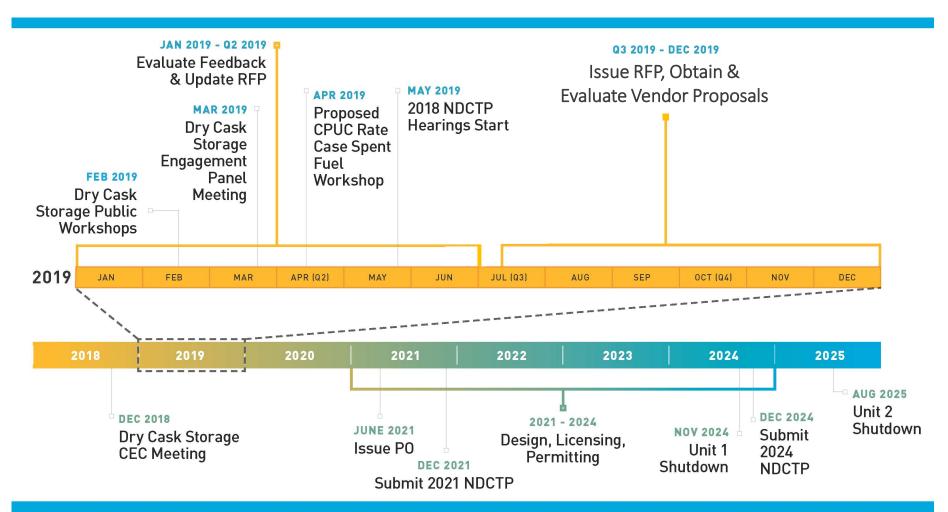
Region 1 - 12 inner cells Region 2 - 20 outer cells

Uniform



32 cells without regions

^{*}Gigawatt-days per metric ton of uranium



PG&E will use a request-for-proposal process to develop a holistic GTCC waste and SNF storage strategy.



2018 NDCTP Conclusions

Confirmed:

- It is safe and feasible to offload spent fuel from the spent fuel pools to the DC ISFSI within 7 years after final Unit 2 shutdown
- Significant additional engineering is required to determine a holistic strategy in concert with Greater Than Class C waste
- Further expediting might be achieved and will be driven by responses to the RFP process
- Additional loading campaigns during operations extends critical path of decommissioning Diablo Canyon – delaying fuel transfer to ISFSI – and committed additional SNF to current dry cask system design
- NRC licensing action needed for any strategy to reduce loading time to ISFSI from spent fuel pool



DCPP Expedited Fuel Offload Future Actions

Action Plan:

- PG&E's 2018 NDCTP Application: cost estimate based on a 7-year offload schedule
- Issue a vendor RFP in 2019 after CEC, Engagement Panel, NDCTP SNF public workshops, and other stakeholder consultation
- PG&E anticipates offload schedules will be less than 7 years
- 2021 NDCTP: Update the cost estimate using RFP responses
- Pursue LAR and other needed regulatory approval for updated ISFSI system

Thank You

Tom Jones

PG&E Director of Strategic Initiatives Tom.Jones@pge.com

Mark Mayer

PG&E Nuclear Fuels Purchasing Manager Mark.Mayer@pge.com

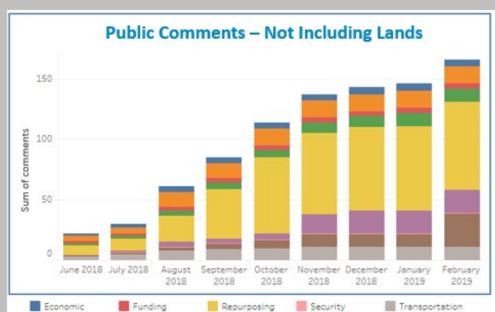


Panel Discussion on Spent Fuel Workshops

Break

10 Minutes

Public Comments and Metrics Review



Safety

Spent Fuel

Environmental Outreach



Date	Repurposing	Lands	Transportation	Environmental	Economic	Funding	Safety	Security	Outreach	Spent Fuel	Strategic Vision
Jun-18	8	3	3	4	2	2	0	0	2	1	0
Jul-18	10	16	5	5	3	2	1	0	2	2	0
Aug-18	22	218	8	12	5	3	4	0	4	3	0
Sep-18	41	309	9	12	5	4	4	0	5	5	0
Oct-18	63	335	10	14	5	4	5	0	6	7	0
Nov-18	67	340	11	14	5	4	16	0	9	11	430
Dec-18	69	349	11	14	6	4	19	0	9	11	468
Jan-19	70	350	11	14	6	4	19	0	11	11	468
Feb-19	73	350	11	14	6	4	19	0	11	28	468

Strategic Vision (468)

Lands (350)

Total Comments: 984

Public Comment Session

Left Podium	Right Podium				

Panel observations, discussion and path forward

Introduction to next meeting topic

Meeting Summary

Thank You

Meeting Adjourned