

DCPP License Renewal Pre-Submittal Presentation

Presented by:
Philippe Soenen
Director, Strategic Initiatives

December 8, 2022



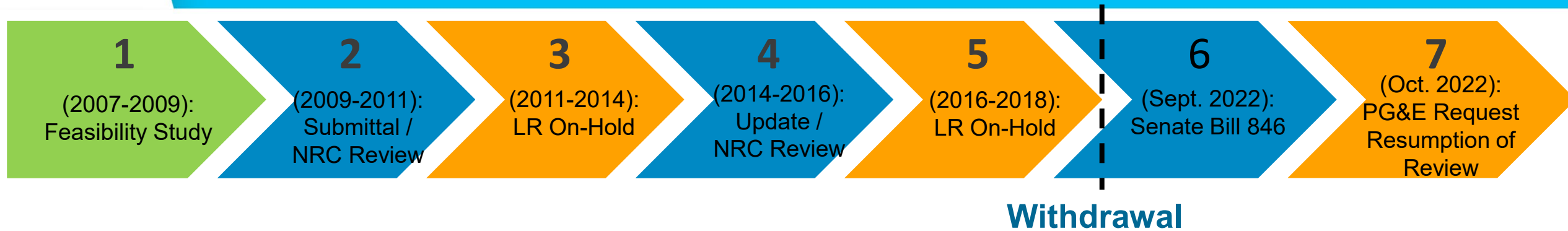
- **Background on DCPP License Renewal (LR)**
- **Specific License Renewal Topics**
 - Environmental Report Updates
 - Operating Experience
 - Timing of LR Application (LRA) Implementation
 - Severe Accident Mitigation Alternatives (SAMA) Analysis
 - Reactor Vessel Coupon Withdrawal Update
 - License Renewal Duration

Background on DCPD LR



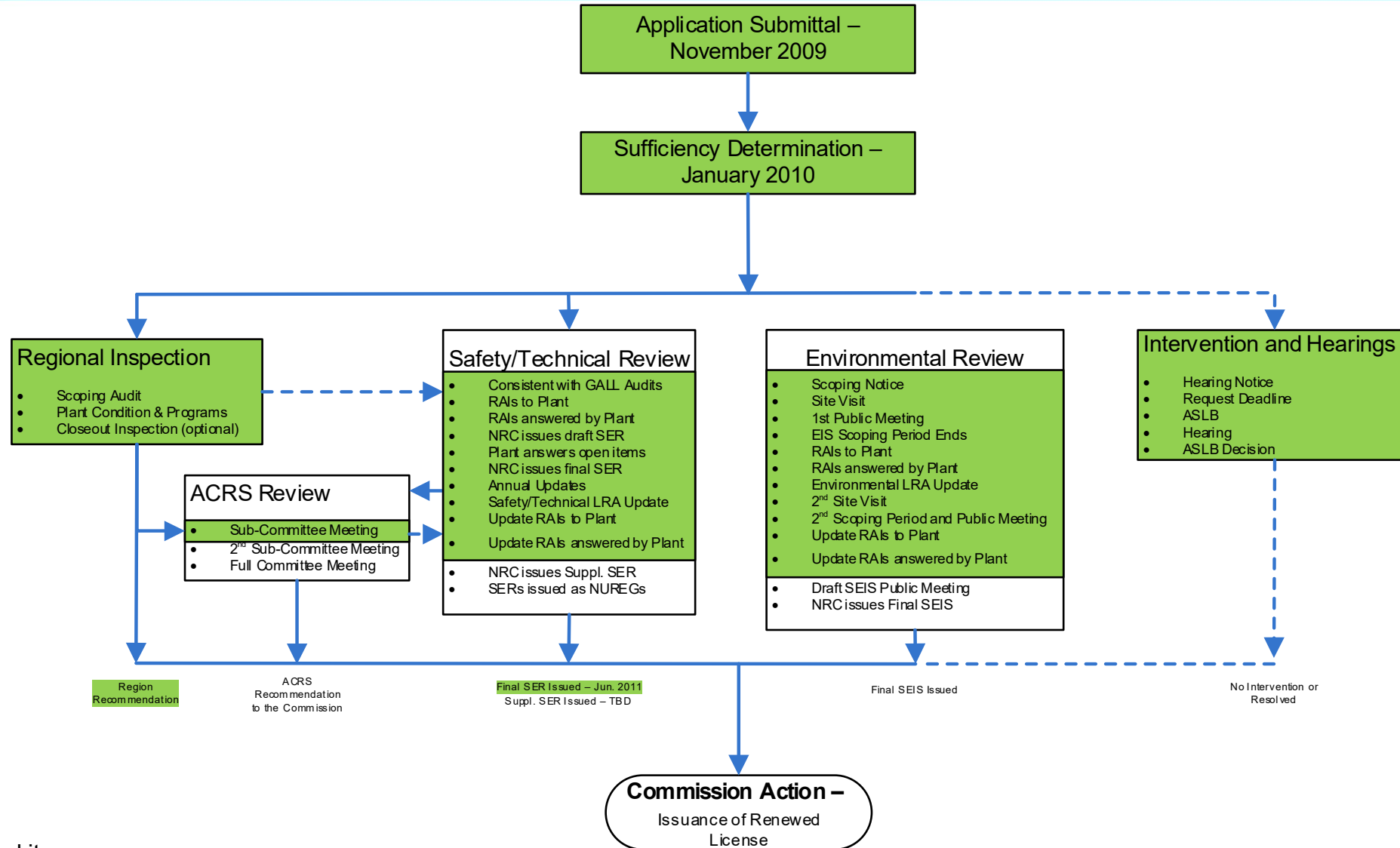


DCPP License Renewal History



- **Multi-year update of LRA completed in 2014 (block 4) for NRC review:**
 - Typical annual update items (e.g., review of component database for changes, review of operating experience)
 - Addressed new LR Interim Staff Guidance (LR-ISGs)
 - Updated Environmental Report (e.g., census data, threatened and endangered species, alternatives evaluation, and SAMA Analysis)
- **Current license expiration dates for DCPP, Unit 1 and Unit 2, are November 2, 2024 and August 26, 2025, respectively**

DCPP License Renewal NRC Review Progress





State and Federal Updates

Assembly Bill (AB) 180

- Signed by the California Governor on June 30, 2022
- Authorized \$75 million for near-term fuel purchasing, fuel storage, licensing and project team to preserve option of extended DCPD operations

Senate Bill (SB) 846

- Signed by the California Governor on September 2, 2022
- Directed PG&E to pursue continued operations for 5 years beyond 2025
- Addresses both near-term and long-term funding needs
- Includes state policy "off ramps" that could terminate the path of renewing the operating licenses

U.S. Department of Energy Civil Nuclear Credit (CNC) Program

- DCPD has been certified to participate in the CNC program's first award period



Request to Resume Review of DCPD LRA

PG&E's October 2022 Submittal

- PG&E requested the NRC resume review of the LRA as it existed when the review ceased in 2016 and confirm that the NRC will not deem the existing licenses to have expired until the LRA has been finally determined
 - PG&E believes resumption is within NRC authority and is consistent with precedent
 - PG&E would submit an update to the LRA by December 2023
- If the request to resume review of the DCPD LRA is not granted, PG&E requested an exemption from 10 CFR 2.109(b) to ensure DCPD Units 1 and 2 can continue to operate while the application is under review
 - PG&E concluded the exemption (if needed) is permissible because it is authorized by law, will not present an undue risk to the public health and safety, is consistent with the common defense and security, and because special circumstances are present

Environmental Report Updates





Environmental Report Updates

PG&E plans to submit an updated environmental report

- Update evaluations with current information related to potential environmental impacts associated with the renewed license
- Update format consistent with current NRC guidance
- Incorporate updated information from site-specific Decommissioning studies
- Recent, extensive environmental work was completed to support decommissioning activities

Operating Experience





Operating Experience Updates

PG&E plans to consider operating experience in the LRA

- During the original LRA review, PG&E addressed NRC questions related to Generic Aging Lessons Learned (GALL), Revision 2, and made updates to aging management programs (AMPs) through the request for additional information process
- PG&E plans to review all AMPs for potential updates from newer operating experience or NRC guidance
 - GALL, Revision 2
 - GALL – Subsequent License Renewal (SLR)
 - Initial LR and SLR – Interim Staff Guidance

Timing of License Renewal Implementation





Precedent – Sites with Shorter Implementation Timeframes

PG&E's implementation timeframe is unique compared to industry precedent

- The timeframe for DCCP is to address significant needs identified by the State of CA to protect public health and safety by having adequate energy supply

Site	LRA Submittal Date	Initial SER Issued	PEO Began	Implementation Time*	Renewed License Issued
Indian Point, Unit 2	Apr 2007	Nov 2009	Sep 2013	~4 years	Sep 2018
Prairie Island, Unit 1	Apr 2008	Oct 2009	Aug 2013	~4 years	Jun 2011
Vermont Yankee	Jan 2006	Feb 2008	Mar 2012	~4 years	Mar 2011
Oyster Creek	Jul 2005	Dec 2006	Apr 2009	~2.75 years	Apr 2009
Nine Mile Point, Unit 1	May 2004	Jun 2006	Aug 2009	~3 years	Oct 2006

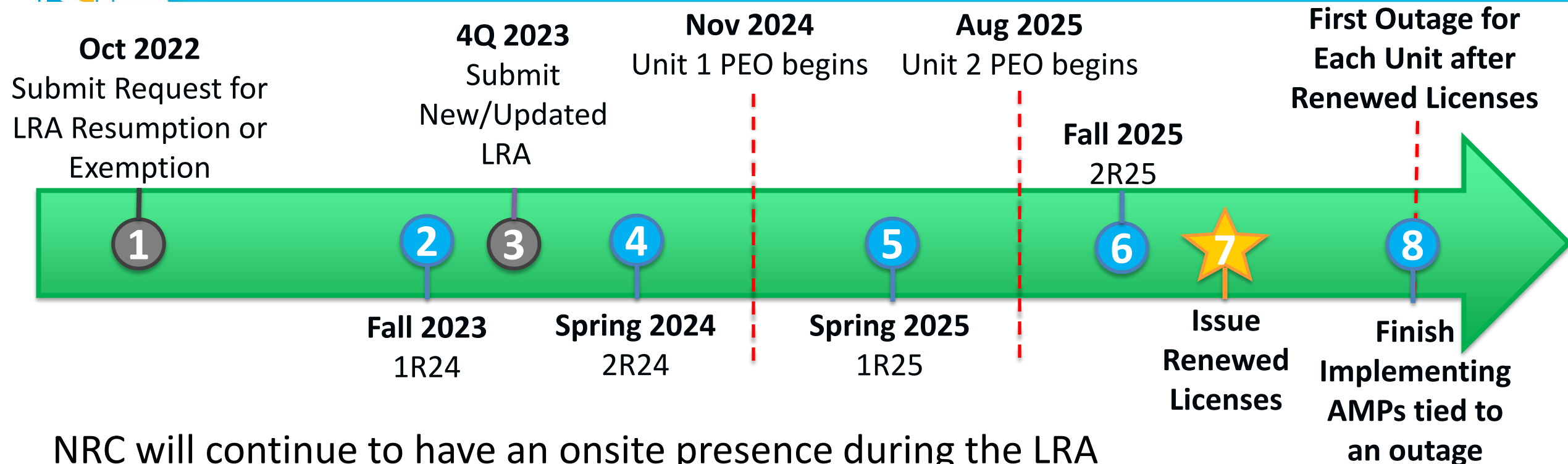
* Implementation timeframe considered from issuance of initial Safety Evaluation Report (SER) to period of extended operation (PEO)

Implementation Timing

Aging Management Program (AMPs)

- At the time the DCCP LRA was withdrawn, implementation of most AMPs was prior to the PEO
- Recent shift in state policy has compressed the schedule for implementation of DCCP AMPs
- Considering revising timeframe given remaining refueling outages prior to the PEO (see next slide)
 - Renewed operating licenses do not change the existing robust requirements for safe operations, on-going maintenance, and recurring inspections; rather, license renewal adds more inspection requirements
 - Risk and plant-specific operating experience will be used to inform implementation timing
 - Will take advantage of opportunistic inspections

Sample Implementation Schedule for DCP



NRC will continue to have an onsite presence during the LRA review period and will retain its authority to conduct all regulatory activities associated with licensing, inspection and oversight. This includes taking whatever actions may be necessary to ensure adequate protection of public health and safety.

Severe Accident Mitigation Alternatives (SAMA) Analysis





DCPP SAMA Background

- **In 2009, PG&E performed SAMA analysis for initial LRA**
 - NRC requests for additional information (RAIs) complete
 - LR review put on-hold prior to NRC issuance of the Supplemental Environmental Impact Statement (SEIS)
- **In 2015-2016, PG&E updated the initial SAMA analysis**
 - Incorporated updated information, including new plant Probabilistic Risk Assessment (PRA), census data, and seismic information
 - NRC on-site audit and RAIs complete
 - LR review put on-hold prior to NRC issuance of the SEIS



SAMA Update Approach

- **PG&E plans to complete a new full SAMA with the current DCPD PRA model-of-record**
 - Changes to the DCPD PRA model-of-record during the NRC review will be addressed via the LRA amendment or RAI process
- **PG&E currently does not plan to use the Nuclear Energy Institute (NEI) 17-04 new and significant information approach**
 - No previously approved DCPD SAMA as baseline for comparison

DCPP Reactor Vessel Coupon Updates



Reactor Vessel Coupon Updates

- **Reactor vessel coupon withdrawal requirements for the current 40-yr operating period have been satisfied**
- **Unit 2 reactor vessel coupons have all been withdrawn**
 - Data was used in original LRA to demonstrate acceptability through the PEO (i.e., 60 years of operation)
- **Unit 1 reactor vessel coupons**
 - Data was used in original LRA to demonstrate acceptability through the PEO (i.e., 60 years of operation)
 - LRA credited withdrawing one final coupon to support the DCCP PEO and to benefit the industry
 - PG&E plans to retrieve the Unit 1 coupon in the Fall 2023 refueling outage (~96 Effective Full Power Years)

License Renewal Duration



Balancing State Needs

- **SB-846 directed continued DCCP operations for 5 years beyond 2025**
 - SB-846 requires ongoing assessment of need for DCCP to support state reliability needs
- **As allowed by NRC regulations, original LRA sought NRC license renewal for 20 years**
 - NRC review for 20 years of extended operations is consistent with PG&E's current LRA restart plans
 - Actual operating duration will be controlled by the State legislative and regulatory processes
 - Consistent with Indian Point precedent for NRC's bounding review of up to 20 years
 - Allows for maximum flexibility by State of California to ensure electric resource adequacy

Questions?

