SDG&E TPR Stakeholder Meeting

April 10, 2024

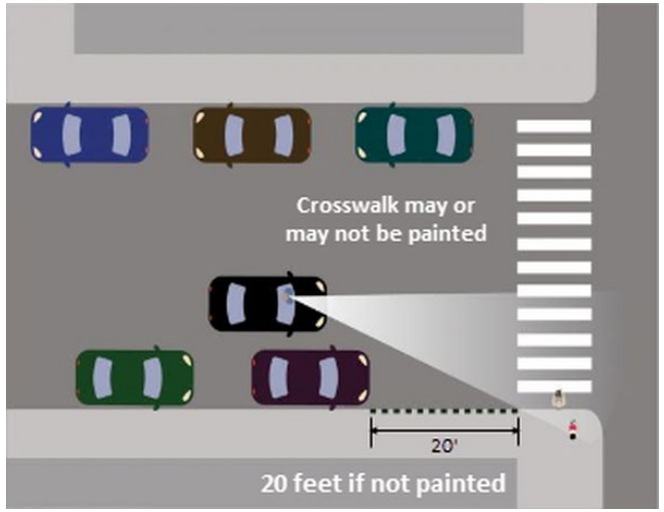
Welcome

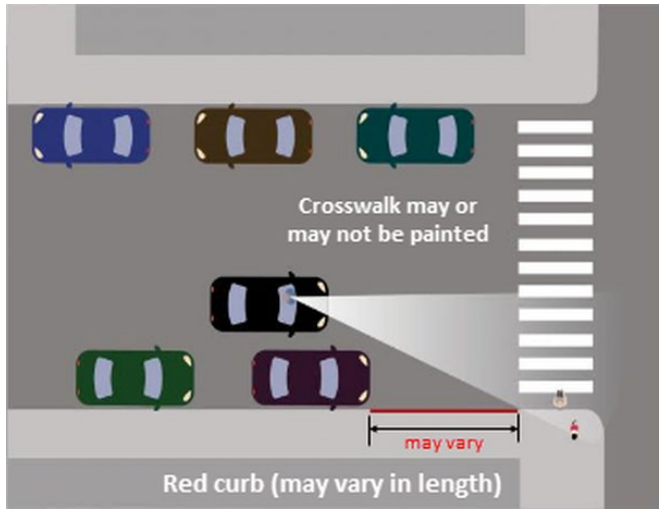
Kris Bourbois – Regulatory Case Manager

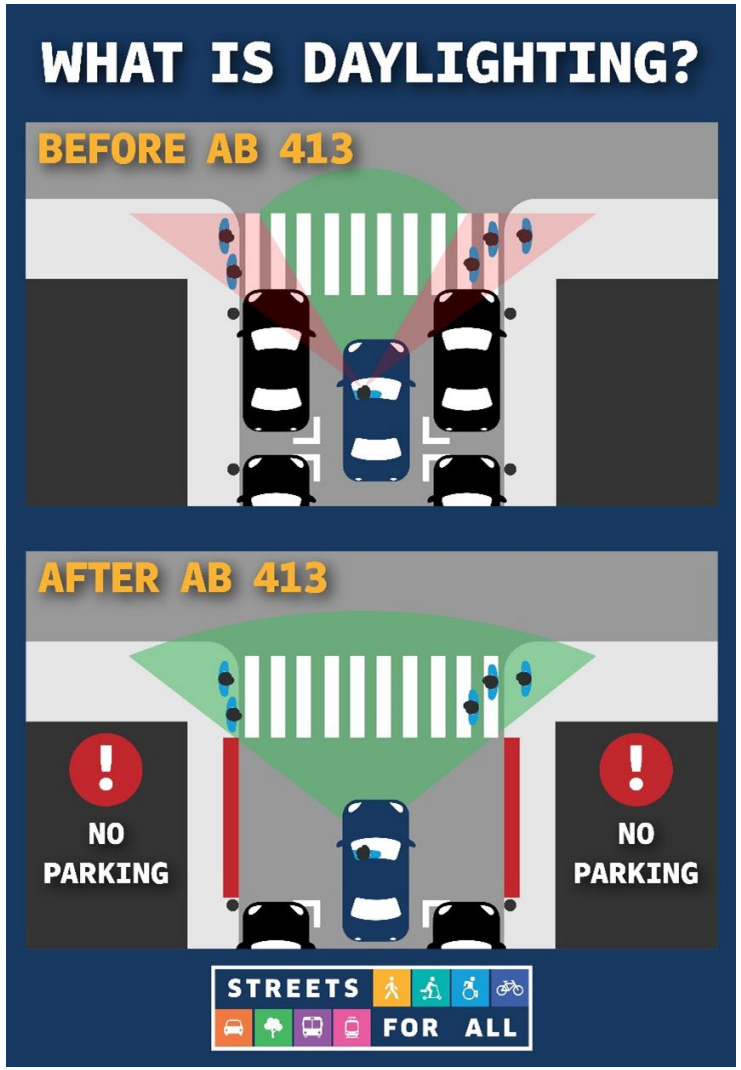
California's New "Daylighting" Parking Law

- Became effective January 1, 2024.
- Increase the visibility for both drivers and pedestrians.
- If red curb or parking prohibition sign are indicated follow that distance.
- If there are no paint or signs, the 20-foot distance applies.
- California's pedestrian fatality rate is nearly 25% higher than the national average.
- 1,013 pedestrian fatalities 2020*
- 1,108 pedestrian fatalities 2021*
- 136 bicycle fatalities 2020*
- 125 bicycle fatalities 2021*

- *Source: LA times/California Office of Traffic Safety







Agenda

Item
Welcome, Agenda & Logistics
SDG&E TPR Process Data Sheet
Project Prioritization and Approval
Copperleaf
Cost Benefit Analyses
Grid Enhancing Technologies
Projects with Both Electric Transmission & Distribution
Break (if necessary)
Wildfire Mitigation Programs on the Transmission System
Wood to Steel Pole Replacement Programs
CAISO Policy-Driven Projects
Direct Buried Cable Projects
Supply Chain Issues
Stakeholder Requested Items
Wrap-Up

Virtual Meeting Logistics

Meeting Agreements

- No confidential information will be discussed.
- Please be mindful that others in this virtual meeting may also have questions.
- Mute your line if you are not speaking.
- Detailed questions that cannot be addressed in the meeting should be addressed via stakeholder questions and comments due on April 23.

Engaging in Discussion

- SDG&E SMEs will present and then take live questions.
- Raise your hand (icon).
- When asking questions, please state your name and organization.

Important

- SDG&E welcomes stakeholder ideas and feedback on how to improve this meeting in written comments.

SDG&E TPR Process – Remaining Schedule

Event	Date
Stakeholder Meeting	April 10
Stakeholders' questions and comments related to Stakeholder Meeting	April 23
Written responses to questions and comments related to Stakeholder Meeting	May 14
Last day for Stakeholders to submit project-specific, follow-up questions to SDG&E	May 21
Written responses from SDG&E to Stakeholder project-specific follow-up questions	June 5
Last day for Stakeholders to submit comments to SDG&E. There is no expectation of written responses.	June 7
SDG&E releases semi-annual Project Spreadsheet	July 1

SDG&E TPR Process Data Sheet

Adam Currey – Transmission Revenue Manager

SDG&E TPR Process Data Sheet

SDG&E TPR Process Data Sheet

a. Please describe SDG&E's process for pulling data. Identify source systems, records, accounting data, etc.

b. Please discuss issues in preparing first TPR Process Data Sheet and planned improvements for Cycle 2 (due July 1).

Project Prioritization and Approval

Brandon Pate – Transmission Project Manager

Project Prioritization and Approval

Project Prioritization and Approval

a. Please describe how SDG&E prioritizes and approves reliability and wildfire projects.

b. Please discuss SDG&E's process for identifying utility self-approved reliability projects versus inclusion of a project in the Transmission Planning Process.

High-Level Prioritization Process & Considerations

LEVEL 1: Project Driver

**see next page for details*

1. Safety
2. Federal/State Regulatory
3. Customer Driven
4. Reliability

LEVEL 2: Budget & Schedule

- Funding source / split
  - 100% FERC TAC
  - 100% FERC
  - Split FERC-CPUC
  - 100% CPUC
  - Responsive, Proactive, Strategic; In-flight
- Total budget ($'s)
- Schedule / timing of cash flows

LEVEL 3: Complexity & Risk

- Permitting
- Project Execution Risk
- Other
  - Multi-disciplinary (project includes more than one of Transmission, Substation, and Distribution work / asset types)
  - Regulatory considerations (mandates, cost / tax recovery, approval, certainty)
  - Public relations / media
  - Procurement / vendor concerns

Prioritization – Project Driver Criteria

1. Safety
   - I. Fire Mitigation
   - II. Compliance
   - III. Other Safety Enterprise Risk Reduction

2. Federal / State Regulatory Commitment
   - I. ISO Planning (Reliability, Capacity, Economic, Public Policy, Generator Interconnect, etc.)
   - II. CPUC (Non-GRC) Commitment (Clean Transportation, DDOR (Capacity), Generator Interconnect, etc.)
   - III. Non-Safety Compliance (Environmental, Other Agencies, etc.)

3. Customer Driven
   - I. New Business (incl. Capacity upgrades)
   - II. Franchise (Surcharge 20SD, 20A, Large scale municipal projects / politically driven, etc.)
   - III. Conversions / Relocations (Governmental/Public - Municipalities / SANDAG, Rail Agencies, Caltrans, Water Authorities, etc.; Commercial / Residential)

4. Reliability
   - I. Aging Infrastructure (Rebuild, Equipment replacement)
   - II. Non-ISO Reliability/Capacity (New circuits, DER / Microgrid, Battery Storage)
   - III. Operational Enhancements (Sectionalize, Remote operation / automation)
   - IV. Generation
   - V. Sustainability

Notes:

1)The project driver is one of several criteria used for prioritization, and other aspects of a project (budget, schedule, complexity, etc.) are taken into consideration as well for overall project prioritization. Additional project characteristics, such as RAMP, ICP, Sustainability, etc. are also considered when prioritizing projects.

2)Driver top level and subcategories were developed such that every electric transmission, substation, and/or distribution capital project can be assigned to one primary driver to support prioritization discussions and ranking. The primary driver assignment for each budget code is reflected in the TM1 system at the X.X level (i.e. 1.1 Safety – Fire Mitigation). Capital Portfolio Management facilitates an annual review of this the driver criteria to ensure alignment to company vision, strategy, and priorities.

3)The driver criteria developed was intended for detailed prioritization during project execution (after project funding approval is received). The Asset Mgmt initiative establishing the value framework for investment funding will align with the driver top level and subcategories contained in this document to the extent possible and be incorporated into the overall prioritization of projects during execution.

Copperleaf

Timothy Juarez – Asset Management Sr. Engineer

Copperleaf

Copperleaf

a. Please describe how SDG&E uses the platform for decision making.

b. Please walk through the examples provided in response to CPUC Data Request 1-3C (Risk Reduction Benefits for TL691-Avocado to Camp Pendleton, Mission 69kV Sub Rebuild, TL667 Direct Buried Cable Replacement (El Camino Real).

Risk Reduction Benefits Walkthrough

SDG&E RESPONSE 1-3c

	TL691 - Avocado to Camp Pendleton 2023	Mission 69kV Substation Rebuild 2023	TL667 - Direct Buried Cable Replacement (El Camino Real) 2023
Reliability (SAIDI / SAIFI)	$13,397,248	$191,842,183	$-
Acres Burned	$214,475,307	$-	$-
Safety (Fatality / Serious Injury)	$710,947,233	$82,843,530	$-
Financial	$1,486,877,946	$155,936,079	$30,477,140
Total Investment Risk Reduction Benefit	**$2,425,697,735**	**$430,621,792**	**$30,477,140**

SDG&E does not have the data available to provide a benefit to cost ratio for the Chicarita 12kV Breaker project.

Cost Benefit Analyses

Timothy Juarez – Asset Management Sr. Engineer
Brandon Pate – Transmission Project Manager

Cost Benefit Analyses

Cost Benefit Analyses

a. Please explain how SDG&E develops these analyses, including the source of the inputs.

b. Please explain how the values provided in Field 56 of the TPR Process Data Sheet are used in the cost benefit analysis.

c. Please explain whether SDG&E is using the last authorized budget amounts in its cost benefit calculations or total project costs. Depending on the value used, please explain how it interacts with values shown in Interaction with values reported in Field 56 of the TPR Process Data Sheet.

Grid Enhancing Technologies

Adam Currey – Transmission Revenue Manager

Grid Enhancing Technologies

Grid Enhancing Technologies

a. Please discuss SDG&E's new "line ratings calculator" and describe how it informs SDG&E's project planning/corrective maintenance programs.

b. Please discuss where SDG&E is evaluating Dynamic Line Ratings and describe any initial feedback from testing.

c. Please describe the performance of advanced, low-sag conductor in SDG&E's system.

d. Please explain whether SDG&E is using or plans to use advanced power flow and/or grid topology software. Please include how these technologies could be or have been deployed in SDG&E's service territory.

Projects with Both Electric Transmission & Distribution

Adam Currey – Transmission Revenue Manager

Projects with Both Electric Transmission & Distribution

Projects with Both Electric Transmission & Distribution

Please identify any projects where original costs and final costs differed significantly due to accidentally including both the CPUC and FERC costs in the original cost estimate (as opposed to just the FERC costs in the final estimate).

Break

Return at:

Wildfire Mitigation Programs

Shaun Gahagan – Wildfire Mitigation Program Manager

Wildfire Mitigation Programs

Wildfire Mitigation Programs on the Transmission System

a. Significant part of future forecast. Please discuss SDG&E's WMP as it affects the electric transmission system.

b. SDG&E's TPR Spreadsheet includes 24 projects with a primary purpose of "Wildfire Mitigation." Please provide an overview of the Cleveland National Forest, Electric Transmission Small Reliability Projects, and Transmission Construction & Maintenance HFTD Projects and how these provide "wildfire mitigation" benefits.

Wood to Steel Pole Replacement Programs

a. Significant part of "Wildfire Mitigation" purpose. Describe what has been done to date, benefits derived, and lessons learned.

b. For the completed towers, please clarify whether the general height of the original towers differs from the replacement towers and explain whether the maximum voltages that the towers carry has changed.

c. Remaining work to be done – when will SDG&E have completed all of its planned replacement work?

d. Please explain any induced current challenges with SDG&E's steel pole conversions.

SDG&E 2023-2025 Wildfire Mitigation Plan: https://www.sdge.com/2023-wildfire-mitigation-plan

CAISO Policy-Driven Projects (2022-23 TPP)

Adam Currey – Transmission Revenue Manager

CAISO Policy-Driven Projects (2022-23 TPP)

CAISO Policy-Driven Projects (2022-23 TPP)

a. Please provide any updates on the CAISO's award of Imperial Valley-north of SONGS 500 kV Line and Substation; North of SONGS-Serrano 500 kV line; and North Gila-Imperial Valley 500 kV line.

b. Please describe SDG&E's process/timeline for incorporating new TPP projects into the TPR Data Spreadsheet.

Direct Buried Cable Projects

Paul Greco – Transmission Engineering Manager

Direct Buried Cable Projects

Direct Buried Cable Projects

a. Overview of Direct Buried Cable Projects in SDG&E's Territory

b. Assessment of emerging reliability issues with direct buried cable that has not been replaced.

c. Projects completed to date

d. Projects proposed in future

Supply Chain Issues

Brandon Pate – Transmission Project Manager

Supply Chain Issues

Supply Chain Issues

Please explain whether SDG&E is encountering any supply chain issues for transformers, circuit breakers, and other critical transmission-related infrastructure. If it is, please explain them and describe SDG&E's plans to address.

Stakeholder Requested Items (Q&A)

Thank you