

January 8, 2024

Kristin Ralff Douglas
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Office of Energy Infrastructure Safety
715 P Street, 20th Floor
Sacramento, CA 95814

Re: **Pacific Gas and Electric Company's Comments on the Office of Energy Infrastructure Safety's Working Group Meetings on the Development of Guidelines for Submission of 10-Year Electric Undergrounding Distribution Infrastructure Plans Pursuant to Senate Bill 884**

Dear Ms. Douglas:

Pacific Gas and Electric Company (PG&E) appreciates the opportunity to provide the following comments related to the topics discussed at the five working group meetings that the Office of Energy Infrastructure Safety (Energy Safety) held in November and December 2023¹ on the development of guidelines for submission of 10-year electric undergrounding distribution infrastructure plans (Undergrounding Plans) pursuant to Senate Bill 884 (SB 884). In Sections I-VII of these comments, PG&E focuses on key issues the parties discussed during the working group meetings.² In Section VIII, PG&E discusses procedural matters relating to future Undergrounding Plan guidelines that were not specifically addressed in the working group meetings. In Appendix A, PG&E provides a sample outline for an Undergrounding Plan for Energy Safety's consideration while drafting SB 884 guidelines.

If there are issues that PG&E does not address in these comments that Energy Safety wishes to discuss in more detail, we would be pleased to provide additional information upon request.

¹ Working group meetings were held on November 7, 14, 21, and 28 and December 12, 2023.

² These comments are focused on key issues only and are not meant to comprehensively address every point raised during the working group meetings.

I. PROJECT SELECTION

During the November 21 and December 12 working group meetings, parties discussed issues related to undergrounding project selection. Below, PG&E comments on the following project selection issues addressed by the working group: (a) allowing electric corporations to use multiple cost-benefit metrics for project selection; (b) establishing threshold cost-benefit ratio (CBR) values; and (c) recognizing the importance of reliability benefits when analyzing mitigation alternatives.

a. Electric Corporations Should Be Allowed to Use Multiple Cost-Benefit Metrics for Project Selection

SB 884 requires an evaluation of project costs and projected economic benefits over the life of the asset.³ While SB 884 does not require a particular method for measuring costs and benefits, PG&E and other stakeholders agree that it is appropriate to include a CBR based on the methodology adopted in the California Public Utility Commission's (CPUC's) Rulemaking (R.) 20-07-013 proceeding.⁴

D.22-12-027 modified the Risk-Based Decision-Making Framework and now requires that each Investor-Owned Utility (IOU) rank mitigation options by CBRs in their respective General Rate Cases (GRC) while also affirming that a utility is not bound to select its mitigation strategy solely on CBR ranking as long as it explains how other factors affected its mitigation selections.⁵ PG&E strongly recommends following the CPUC's guidance by allowing an electric corporation to use both a CBR and other metrics—such as a net benefit metric—for project selection in its Undergrounding Plan. An electric corporation should have the opportunity to explain how factors not included in a CBR calculation impact mitigation selection.

³ Public Utilities Code (PUC) §8388.5(c)(6).

⁴ Decision (D.) 22-12-027.

⁵ D.22-12-027, Finding of Fact 11.

While a CBR describes the relationship between the cost and benefits of pursuing one mitigation over another at a given location, it may not fully capture the location’s absolute contribution to overall risk reduction in High Fire Threat Districts (HFTDs) and High Fire Risk Areas (HFRA). If the absolute risk reduction benefits are not considered, some high-value locations may be missed. Net benefit (calculated by subtracting costs from benefits at a given location) uses the same inputs as CBR but captures absolute contribution to risk reduction. Thus, the conditions for approval of plan costs should include both the CBR and other metrics (like net benefit) rather than narrowly requiring reliance on a single metric (CBR).

b. Energy Safety and the CPUC Should Align Threshold CBR Values

At the November 21 working group meeting, stakeholders discussed issues related to the “CPUC Cost/Benefit Approach.”⁶ The suggested option presented by Energy Safety stated that any project meeting the average CBR of the overall plan would be eligible to be substituted in for another project, and Energy Safety or the CPUC would need to determine how to calculate the average.⁷

PG&E recommends that the suggested cost/benefit eligibility language be modified to align with the CPUC’s final decision on this same issue.⁸ PG&E proposes that the final language read, “Any project that meets the minimum cost-benefit ratio that must be achieved, on average, would be eligible to be substituted in for another project.”⁹ The period of time over which a CBR threshold should be calculated must be shorter than the 10-year plan period and should

⁶ Topics for Working Group #5 on Development Guidelines for the 10-Year Undergrounding Distribution Infrastructure Plan (Docket #2023-Ups) (Topics for Working Group #5), November 30, 2023, p. 1.

⁷ Topics for Working Group #3, November 15, 2023, Appendix 1, Item 5.

⁸ PG&E addressed this issue our Opening Comments on Draft Resolution SPD-15 that adopts the Commission’s *Staff Proposal for the Senate Bill 884* Program. See Section III and Appendix A, p. 9. Comments will be available at <https://www.cpuc.ca.gov/about-cpuc/divisions/safety-policy-division/risk-assessment-and-safety-analytics/electric-undergrounding-sb-884>

⁹ PG&E’s Opening Comments on Draft Resolution SPD-15, December 28, 2023, Section III and Appendix A.

align with the CPUC’s final decision on this issue. PG&E recommends that the electric corporation establish the CBR and the average minimum CBR for the relevant period of time.¹⁰

c. Reliability Benefits Are a Critical Element of the Mitigation Alternatives Analysis

SB 884 states that utility undergrounding projects should be prioritized based on wildfire risk reduction, public safety, cost efficiency, and reliability benefits.¹¹ Further, an Undergrounding Plan may only be approved if it will substantially increase electrical reliability.¹² Thus, in order to give effect to SB 884’s underlying purpose, Energy Safety must consider public safety and reliability benefits when reviewing and approving an Undergrounding Plan.¹³ This conclusion is based on the plain, commonsense meaning of the statutory language¹⁴ which refers generally to “distribution infrastructure undergrounding programs” that consider the various prioritization factors identified above rather than wildfire risk reduction alone.

Accordingly, PG&E supports project selection and prioritization in an Undergrounding Plan that addresses reliability risk, public safety, in addition to wildfire risk and cost efficiency. Consideration of reliability benefits will involve reviewing how undergrounding plans will improve overall customer reliability including by reducing reliance on wildfire risk mitigation de-energization events such as Public Safety Power Shutoff (PSPS) events and Enhanced Powerline Safety Settings (EPSS). These are significant benefits from undergrounding that often cannot be replicated by other wildfire mitigations. In addition, undergrounding presents significant public safety benefits in locations that are either rebuilding in the aftermath of a

¹⁰ PG&E’s Opening Comments on Draft Resolution SPD-15, December 28, 2023, Section III.

¹¹ PUC §8388.5(c)(2).

¹² PUC §8388.5(d)(2).

¹³ See generally *Unzueta v. Akopyan* (2022) 85 Cal.App.5th 67, 82, (when interpreting a statute, a court’s “core task ... is to determine and give effect to the Legislature’s underlying purpose in enacting the statutes at issue”).

¹⁴ See generally *City of Hesperia v. Lake Arrowhead Community Services Dist.* (2019) 37 Cal.App.5th 734, 748 (when examining statutory language, courts give the language, “a plain and commonsense meaning”).

wildfire or presenting ingress/egress constraints and other community risk factors. These benefits beyond wildfire risk and cost efficiency must be considered when reviewing an Undergrounding Plan.

At the November 7th working group meeting, stakeholders specifically discussed how outage programs should be defined for better understanding reliability benefits from undergrounding.¹⁵ PG&E recommends that “outage programs” be defined by each electrical corporation because their systems and territories vary significantly, and establishing baseline reliability is a complex process that does not lend itself to a simple, standardized definition. PG&E’s definition of “outage program” includes any interruption to customers’ electric service which includes all planned and unplanned outages. PG&E believes this definition to be both representative of the customer’s full experience of utility electrical service and in alignment with the legislation which did not refer to the undergrounding programs or the bill itself as exclusively focused on wildfire-related topics. PG&E also encourages Energy Safety to adopt a guiding principle that allows each utility to describe and justify its method for establishing the reliability baseline unique to its systems and territories. This will help electrical corporations submit plans that address the prioritization factors prescribed in SB 884 and Energy Safety to analyze all benefits from the undergrounding projects selected.

II. CHANGES TO AN UNDERGROUNDING PLAN

The parties discussed potential changes to 10-year Undergrounding Plans during the November 21st working group meeting. In this section, PG&E discusses the importance of an Undergrounding Plan’s framework when making changes to a 10-year plan and how new technologies may impact long-term plans.

¹⁵ Electrical Undergrounding Plans Guidelines Development, Working Group #1, November 7, 2023, slides 5 and 7.

a. Undergrounding Plans Should Establish a Framework for Selecting and Prioritizing Projects that Can Be Updated with New Data

At the November 21st working group meeting, parties discussed options for updating an Undergrounding Plan and the type of review that should be required when updates are made.¹⁶ An Undergrounding Plan will include the process used to select and prioritize projects and a list of undergrounding projects. PG&E recommends that in Undergrounding Plans submitted to Energy Safety, an electric corporation describe its process for selecting and prioritizing underground projects. This process—or framework—and the assumptions, underlying data, and risk models that support it, should be open to regulatory and public review during the approval process. Once the framework is approved, it should not be subject to further review.

An electric corporation should be allowed to update underlying data and risk models that serve as inputs into the project selection and prioritization framework. The underlying data and risk model could be subject to further review through limited discovery but the framework itself should not. For example, if the cost per mile to install undergrounding changes, a utility would update its project evaluation models with the new cost as an updated input. Regulatory agencies and stakeholders could review the new cost per mile, but the way in which the cost per mile is used by the approved framework to select and prioritize underground projects would have already been approved and would not be subject to further review.

An electric corporation will submit a list of projects that make-up its 10-year Undergrounding Plan, and over the life of the plan the list of projects will likely change. If throughout the Undergrounding Plan period all projects are selected and prioritized using the approved framework, changes to individual projects (including addition, removal, or rescheduling) should not require regulatory approval. An electric corporation should be allowed to make changes to the project list—subject to meeting risk reduction, cost recovery, or other thresholds that may be established— and provide visibility to such changes during the regular six month and annual reporting cycle without additional approvals.

¹⁶ Topics for Working Group #3, November 15, 2023, Topic 1.

b. New Technologies and Construction Techniques May Call for Updates to Existing Undergrounding Plans

During the November 21st working group meeting, Energy Safety noted that the introduction of new technologies or construction techniques could change the elements of an Undergrounding Plan over the course of 10 years.¹⁷ PG&E believes that it is reasonable to allow an electric corporation to introduce new technologies or construction techniques into an existing Undergrounding Plan as needed. For example, today undergrounding consists primarily of burying conduit approximately 30 inches below ground and remove existing overhead lines. Over time, there may be more efficient ways to remove overhead distribution powerlines while providing customers reliable electricity. Incorporating new technologies supports innovation and continuous improvement, which are valuable in our collective efforts to aggressively reduce wildfire risk.

The framework described by PG&E in Section II (a) above is a reasonable mechanism for electric corporations to introduce new technologies, or construction methods in place of traditional undergrounding, into the mitigation selection process without requiring another approval of the 10-year plan. To qualify for an Undergrounding Plan and cost recovery, new technologies or construction methods would need to remove existing overhead electric distribution lines from service and result in a similar level of wildfire risk reduction and reliability improvement as traditional undergrounding.

III. ALLOWING INCREMENTAL MILES OUTSIDE OF THE HFTD IN AN UNDERGROUNDING PLAN

SB 884 states that only undergrounding projects located in Tier 2 or 3 HFTDs or fire rebuild areas may be considered and constructed as part of the program.¹⁸ During the November 7th working group meeting, Energy Safety asked if projects located in utility-defined HFRA

¹⁷ Electrical Undergrounding Plans Guidelines Development, Working Group #3, November 21, 2023, slide 5.

¹⁸ PUC §8388.5(c)(2).

should be eligible as well.¹⁹ The HFTD maps were approved by the CPUC six years ago in January 2018. PG&E has developed HFRA maps to account for the evolution of wildfire risk since the HFTD maps were produced. PG&E strongly supports making projects in the HFRA maps eligible as utilities' HFRA maps reflect updated information as compared to the static HFTD maps (adopted in January 2018 but developed in the preceding years).²⁰ Including projects in the HFRA in an Undergrounding Plan is aligned with the intent of SB 884 to reduce wildfire risk.²¹

In our Opening Comments on Draft Resolution SPD-15,²² PG&E commented that a reasonable implementation of SB 884 would allow incremental miles outside of an HFTD to be included in an Undergrounding Plan if doing so is explained and justified. These additional miles could include miles in the HFRA and miles outside the HFTD/HFRA that are adjacent to a planned project. For example, an Undergrounding Plan may include undergrounding a 10-mile circuit of which 9.5 miles is in a Tier 3 area and 0.5 miles is outside of the HFTD boundary reaching to the substation that serves the area. It would make little sense, in that case, to underground 9.5 miles and leave the remaining 0.5 miles above ground simply because it is outside an HFTD area. Most electrical circuits in California were designed and built well before HFTD areas were adopted by the CPUC and thus circuit configurations have little alignment with HFTD boundaries.

IV. COMPLIANCE

SB 884 states that the electric corporation shall hire an independent monitor to review and assess the electric corporation's compliance with its plan and submit a report each year over the course of the Undergrounding Plan.²³ During the November 28th working group meeting,

¹⁹ Electrical Undergrounding Plans (Docket #2023-Ups), Request for Comments on Development of Guidelines for the 10-Year Electrical Undergrounding Distribution Infrastructure Plan, Part II (b).

²⁰ <https://www.cpuc.ca.gov/industries-and-topics/wildfires/fire-threat-maps-and-fire-safety-rulemaking>

²¹ PUC §8388.5(c).

²² See Section IV, E, "Inclusion of Incremental Undergrounding Plan Miles Where Justified."

²³ PUC §8388.5(f)(3). *Note*, SB 884 states that the independent monitor report should be submitted December 1 of each year. PG&E discusses timing of the independent monitor report in Section V of these comments.

parties discussed the elements of a compliance evaluation and the independent monitor’s annual report.²⁴

PG&E agrees that the Independent Monitor is responsible for evaluating an electric corporation’s progress against its approved Undergrounding Plan. Importantly, SB 884 does not contemplate a separate “compliance evaluation” by Energy Safety. Rather, Energy Safety’s role is to “consider the independent monitor’s report and whether the large electrical corporation has cured any deficiencies. . .”²⁵ PG&E also agrees that the Independent Monitor should consider the applicable elements in Section 8388.5(c) but notes that certain elements (e.g., workforce development) may not require an annual compliance review. While cost efficiency, unit cost targets, and project costs are listed in Section 8388.5(c) and could be evaluated by the Independent Monitor, the CPUC is responsible for determining if an electric corporation complies with the Undergrounding Plan’s cost requirements.²⁶ Similarly, SB 884 requires electric corporations to apply for non-ratepayer moneys to reduce program costs.²⁷ Applying for non-ratepayer funding is not part of the Undergrounding Plan approval process and should not be part of the Independent Monitor’s review.

During the discussion on compliance, Energy Safety asked parties to consider any specific reporting requirements related to penalty recommendations.²⁸ SB 884 states that Energy Safety may recommend penalties to the CPUC after considering the Independent Monitor’s report if the electric corporation fails to cure any deficiencies. The CPUC is responsible for assessing penalties if the electric corporation fails to substantially comply with the approved plan.²⁹

²⁴ Topics for Working Group #4, November 22, 2023, Items 1 and 3.

²⁵ PUC §8388.5(i).

²⁶ PUC §8388.5(e)(1).

²⁷ PUC §8388.5(j).

²⁸ Topics for Working Group #4, November 22, 2023, Item 1.

²⁹ PUC §8388.5(i)(1) and (2).

PG&E recommends that any deficiencies—instances in which the utility fails to substantially comply with its plan— identified by the Independent Monitor be addressed in a subsequent six-month progress report (as discussed in the next section) that would be reviewed by Energy Safety to determine if the electric corporation cured the deficiency. If the electric corporation does not satisfactorily cure the deficiency, then Energy Safety could recommend penalties to the CPUC.

V. REPORTING

Undergrounding Plan reporting was discussed during the November 28 working group meeting.³⁰ The discussion focused on what information should be provided in progress reports, coordinating SB 884 reports with other proceedings, and the timelines for producing progress reports.

PG&E agrees that progress reports should address the Undergrounding Plan components set forth in Section 8388.5(c), but not all components (e.g., workforce development) will need to be updated every six months. PG&E suggests that progress reports include the following: number of underground miles completed, overhead miles replaced, circuit segment ID, project status, CBR and net benefits, total cost and cost per mile of underground completed, risk model used to select the project, risk reduction achieved, and updates to the project workplan. A narrative accompanying the report could include reporting on lessons learned and continuous improvements. PG&E supports giving stakeholders the opportunity to comment on progress reports, but we do not support utilities being required to update progress reports in response to comments given the frequency of our reporting. Similarly, a formal approval process for status reports is unnecessary and would be administratively burdensome.

PG&E strongly supports coordination between Energy Safety and the CPUC to align reporting requirements with the goal of leveraging the same report to address requirements in multiple proceedings. This would include aligning reporting requirements for the

³⁰ Topics for Working Group #4, November 22, 2023, Item 2.

Undergrounding Plan with related proceedings including the Wildfire Mitigation Plan (WMP) and, at least in PG&E’s case, the GRC.³¹

During the November 28th working group meeting, Energy Safety requested that PG&E provide a progress reporting schedule that included progress report deadlines, time periods covered by the reports, and incorporated the Independent Monitor report. Table 1 below is a proposed timeline for SB 884 reports as well as related reports in other proceedings.

Table 1 – Proposed Undergrounding Progress Reporting

Timeline and Scope of Report / Plan	Due Date	Author	Proceeding
Forward Looking WMP Plans (three year or annual update)	Q1	Electrical Corporation	WMP
SB 884 Annual Progress Report: Progress achieved in Q1-Q4 of the previous calendar year and summarize progress achieved since the start of the program	April 1	Electrical Corporation	SB 884
Annual Accountability Report of Year Prior	July 1	PG&E	GRC
SB 884 Six-Month Progress Report: Q1 and Q2 of Current Year	October 1	Electrical Corporation	SB 884
Independent Monitor Annual Report of Year Prior	October 1	Independent Monitor	SB 884

VI. REGULATORY AGENCY COORDINATION

PG&E appreciates close coordination between Energy Safety and the CPUC with regards to electric corporations’ Undergrounding Plans. At the November 21st working group meeting, parties discussed several areas of agency coordination.³² PG&E supports consistency in defining key terms, the project data required by each agency, and reporting requirements. Additionally, PG&E requests that agencies not create conflicting requirements and that elements of a plan approved by one agency should be adopted by the other without additional substantive review. If the same element of a plan is litigated by multiple agencies it could lead to inconsistent findings

³¹ For example, the 2020 GRC D.20-12-005 (OP 1), 2020 WMCE D.23-02-017 (Appendix 1) and the 2023 GRC D.23-11-069 all require additional system hardening reporting. The 2020 GRC and WMCE have reporting requirements with no end dates. The final 2023 GRC System Hardening Annual Accountability Report is due on July 1, 2027 (OP 20, p. 930).

³² Topics for Working Group #3, November 15, 2023, Topic 3.

and create conflicting requirements. PG&E also recommends that the discovery process for the Undergrounding Plan be coordinated between Energy Safety and the CPUC. Coordinating discovery and posting it publicly (and making it easily available) will help avoid repetitive discovery requests and wasted effort by multiple parties.

VII. ADDRESSING ISSUES RELATED TO COMMUNICATIONS PROVIDERS

During the December 12th working group meeting, a communications provider suggested that Energy Safety hold an additional workshop to discuss communications issues associated with undergrounding. PG&E does not support an additional Energy Safety workshop on this topic since the CPUC, not Energy Safety, is responsible for communications issues. PG&E has partnered and plans to continue to partner with telecommunications providers and other potential joint trench partners to explore joint trench opportunities. This includes inviting feedback from potential joint trench partners on locations of interest in the 2022-2023 work plan and seeking insight about these partners' capital planning processes to further understand how we might engage with those processes to enable coordination.

VIII. PROCEDURAL ISSUES NOT DISCUSSED DURING WORKING GROUP MEETINGS

Given Energy Safety's invitation to comment generally on future Undergrounding Plan guidelines,³³ PG&E discusses two procedural items that were not discussed during the workshops but that merit inclusion in future guidelines from Energy Safety. PG&E also provides a sample outline for an Undergrounding Plan in Appendix A to these comments for Energy Safety's consideration.

a. Energy Safety Should Conduct a Pre-Submission Completeness Review for Undergrounding Plans

SB 884 requires Energy Safety to review and approve or deny an Undergrounding Plan within nine (9) months. However, Energy Safety may require an electric corporation to modify

³³ Schedule for Comments and Reply Comments for the Development of Guidelines for the 10-Year Undergrounding Distribution Infrastructure Plan, December 13, 2023, p. 1.

the plan before issuing a decision.³⁴ Similarly, the CPUC can require an electrical corporation to modify its cost recovery application following Energy Safety's approval of an Undergrounding Plan.³⁵ With this in mind, the CPUC has proposed that large electrical corporations provide a copy of their intended cost recovery applications for a completeness review before the applications are formally submitted. This pre-submission process is a precursor to, and separate from, the CPUC's application review process. The intent of the completeness review is to identify obvious omissions or errors and avoid unnecessary delays resulting from post-submittal modification of the applications to address omissions or errors. The CPUC will perform the completeness review within 10 business days and issue a report noting any deficiencies that should be corrected in the final application.³⁶

PG&E recommends that this same pre-submission completeness review be incorporated into Energy Safety's SB 884 guidelines. This will ensure that there are no unnecessary delays in Energy Safety's substantive review of a large electrical corporation's Undergrounding Plan due to inadvertent omissions or errors in the submission.

b. Discovery Process Requirements for Undergrounding Plans

In its draft SB 884 guidelines, the CPUC has proposed that parties respond to discovery requests within five (5) business days in either Phase of the SB 884 process due to the program's expedited schedule.³⁷ In our Opening Comments to the draft guidelines, we agreed with this discovery schedule. We further recommended that all parties have access to all discovery responses and be expected to review the other responses to facilitate the exchange of information among interested parties and to avoid duplicative requests. Finally, PG&E suggested that parties be required to work together on reasonable requests for discovery extensions and meet and confer as needed to work through discovery issues.³⁸

PG&E recommends that these same methods to facilitate an efficient discovery process be incorporated into Energy Safety's SB 884 guidelines as well. It is reasonable for parties to

³⁴ PUC §8388.5(d)(2).

³⁵ PUC §8388.5(e)(5).

³⁶ Draft Resolution SPD-15, Staff Proposal, p. 2.

³⁷ Draft Resolution SPD-15, Staff Proposal, p. 4.

³⁸ See Section IV(A), p. 10.

respond to data requests within five business days and to meet and confer about reasonable extensions, when needed. Additionally, ensuring access to prior data requests and responses relating to an electric corporation's Undergrounding Plan will limit the number of duplicative requests and ease administrative burdens for all parties involved in the process.

IX. CONCLUSION

PG&E appreciates the opportunity to provide these comments and looks forward to continuing to partner with the Energy Safety and stakeholders on this important work. If you have any questions, please do not hesitate to contact the undersigned at Jamie.Martin@pge.com.

Very truly yours,

/s/ Jamie Martin

Jamie Martin

Appendix A - Proposed Undergrounding Plan Outline

In Table 2 below, PG&E provides a sample outline for an Undergrounding Plan for consideration by Energy Safety as it prepares draft SB 884 guidelines. The high-level table includes the proposed sections for the plan, area(s) of SB 884 each section would address, general contents of each section, and supporting information and workpapers. Each of the bullets included in Table 2 below would be addressed in greater detail in the Undergrounding Plan submitted to Energy Safety by the electrical corporation.

Table 2 - Proposed Undergrounding Plan Outline

Section No.	Section Title	Legislative Requirement	Section Contents	Workpapers and Supporting Information
1	Evaluation of Alternatives	8388.5(c)(4)	<ul style="list-style-type: none"> • Description of the risk model(s) and/or other analytical tools used to calculate wildfire risk reduction and reliability impacts. • Description of the analytical tools used to compare mitigation alternatives and/or combinations of mitigations to a baseline. • Description of the inputs into the analytical tools including risk exposure, risk tolerance values, mitigation effectiveness, project costs, quantifiable benefits, and public safety attributes. • Summary of outputs from the mitigation alternatives analyses including CBR and other decision-influencing metrics, including net-benefit values. 	<ul style="list-style-type: none"> • Output from risk model(s) and/or other analytical tools. • Mitigation cost/benefit analysis tool.
2	Program Costs and Benefits	8388.5(c)(6) 8388.5(d)(2)	<ul style="list-style-type: none"> • Description of the models used to analyze the costs and quantifiable benefits of each mitigation alternative. • Unit costs for each mitigation alternative and lifecycle cost associated with each. • Monetary value for each quantifiable benefit included in the cost/benefit calculations. • Description of non-quantifiable benefits related to undergrounding. 	<ul style="list-style-type: none"> • Models used to analyze the costs and quantifiable benefits of each mitigation alternative. • Workbooks showing the costs and quantifiable benefits for each mitigation alternative.
3	Site Selection and Prioritization	8388.5(c)(1) 8388.5(c)(2) 8388.5(c)(3)	<ul style="list-style-type: none"> • Description of the framework for how project sites will be selected and prioritized incorporating wildfire risk, public safety, reliability, and cost efficiency. • Description of the inputs to the project selection and prioritization framework that will evolve and update over the course of the 10-year plan. • Utility approach to pursuing undergrounding work in the HFRA. 	<ul style="list-style-type: none"> • Quantified framework for project site selection and mitigation selection for each year of the 10-year undergrounding plan. • List of Projects included in the 10-year undergrounding plan.
4	Operational Considerations	8388.5(c)(6)	<ul style="list-style-type: none"> • Plan for implementing, managing, and monitoring an undergrounding program. 	

Table 2 - Proposed Undergrounding Plan Outline

Section No.	Section Title	Legislative Requirement	Section Contents	Workpapers and Supporting Information
			<ul style="list-style-type: none"> • Description of the phases of an undergrounding project and the timelines for completing an undergrounding project. • Utility strategies for managing schedule and cost risk. • Considerations related to non-traditional undergrounding technologies and construction techniques. • Considerations for establishing and maintaining a sustainable supply chain for the 10-year undergrounding plan period. 	
5	External Funding and Financing	8388.5(j)	<ul style="list-style-type: none"> • Approach for identifying external funding opportunities and determining which opportunities to pursue. • Description of external funding applications that are in process (if applicable). 	<ul style="list-style-type: none"> • Link to any external funding applications that are in process.
6	Resourcing and Workforce Development	8388.5(c)(5)	<ul style="list-style-type: none"> • Description of an undergrounding program resource model and forecasted resource needs. • Resourcing and workforce development strategy for internal and external resources. 	<ul style="list-style-type: none"> • Undergrounding program resource model.
7	Customer and Community Engagement		<ul style="list-style-type: none"> • Customer, agency, and property owner outreach and education strategy. 	
8	Progress Reporting and Accountability	8388.5(f)(1)	<ul style="list-style-type: none"> • Undergrounding targets and objectives for the SB 884 plan. • Outline and description of the contents of the six month and annual progress reports, and progress reporting timelines. 	<ul style="list-style-type: none"> • Proposed six month and annual reporting templates.