BEFORE THE PUBLIC UTILITIES COMMISSION

OF THE

STATE OF CALIFORNIA

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Joint Application of Pacific Gas and Electric Company (U39E), Southern California Edison (U338E) and San Diego Gas & Electric Company (U902E) Requesting Commission Approval of Proposals for a BCR Calculation Methodology, Audit Methodology, and Cost Recovery Conditions as Specified in Resolution SPD-37.	**Application 26-02-005** **(Filed February 09, 2026)**

OPENING BRIEF OF THE ENERGY PRODUCERS AND USERS COALITION

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STANDARDIZED BENEFIT COST RATIO (BCR) CALCULATION METHODOLOGY

- The Commission should reject the IOUs' "Total Implementation Costs" proposal because it excludes significant components of the costs ultimately borne by ratepayers and therefore understates the true cost of undergrounding projects. Instead, the Commission should require that the cost component of the Benefit Cost Ratio (BCR) be calculated using the Present Value Revenue Requirement (PVRR), which captures the full stream of lifecycle costs associated with utility investments.

- The Commission should adopt Staff's recommended Method 3 and treat estimated Operation and Maintenance (O&M) savings as benefits in the BCR numerator rather than as offsets to costs in the denominator. Method 3 promotes methodological consistency, accurately reflects the uncertain nature of projected O&M savings, and prevents the systematic overstatement of BCR results caused by denominator-based cost offsets.

- The Commission should require inclusion of Net Salvage Value in undergrounding BCR calculations to ensure that all material costs borne by ratepayers are reflected in the analysis. Undergrounding projects often require the premature retirement of existing overhead assets, creating substantial removal, retirement, and stranded-asset costs that arise directly from the investment. Excluding Net Salvage Value understates the true cost of undergrounding and risks overstating project cost-effectiveness.

- The Commission should adopt a risk-neutral approach as the default methodology for evaluating undergrounding projects and require IOUs to submit unscaled BCRs unless and until a standardized risk-scaling framework is established. The record demonstrates significant concerns regarding the validity, consistency, and comparability of the utilities' existing risk-scaling methodologies, with multiple parties recommending that projects be evaluated on an unscaled basis. A risk-neutral approach would promote transparency, ensure consistent treatment across utilities, and provide a more reliable basis for comparing project cost-effectiveness.

- The Commission should reject the IOUs' proposal to apply system-wide values of service (VOS) estimates to HFTD-specific reliability data and instead require location-specific VOS calculations. By combining localized HFTD interruption metrics with system-average outage valuations, the IOUs' methodology inflates reliability benefits in the very areas most likely to receive undergrounding investments, biasing BCR results upward. A location-specific VOS approach would better reflect actual customer outage experiences, comply with SB 884 Guidelines, and provide a more transparent and equitable basis for comparing undergrounding with alternative mitigations.

- The Commission should require all IOUs to use a common discount rate when evaluating and selecting undergrounding projects. Allowing utilities to choose different discount

rates would undermine the comparability of BCR results, create inconsistent project-selection outcomes, and conflict with SPD-37's directive to establish a standardized and consistent methodology for evaluating undergrounding and alternative mitigations. The Commission should therefore designate a single discount-rate framework, preferably the Weighted-Average Cost of Capital scenario, to ensure transparent, consistent, and comparable evaluations across utilities.

- The Commission should require comprehensive backcasting for undergrounding projects consistent with SPD-37 and reject the IOUs' proposal to limit backcasting to circumstances involving sporadic and utility-determined "substantive" risk model updates. Backcasting is intended to provide an apples-to-apples comparison between original and updated project evaluations and is critical to assessing changes in project cost-effectiveness over time. Conditioning backcasting on subjective utility determinations would reduce transparency, hinder meaningful comparisons, and weaken the Commission's ability to evaluate whether projects continue to provide the best value to ratepayers.

- The Commission should reject the IOUs' attempt to abandon the stakeholder-approved and Commission-adopted definition of BCR Year Zero, which is currently the date upon which a new asset becomes "used and useful." The SPD-37 definition appropriately ties discounting to the point at which project benefits actually begin accruing to ratepayers, ensuring that BCR calculations accurately reflect project economics. By contrast, the IOUs' proposal would artificially extend the discounting period for project costs, inflate BCR values for projects with lengthy construction schedules, and create a systematic bias in favor of undergrounding projects with delayed in-service dates.

AUDIT AND ACCOUNTABILITY FRAMEWORK

- The Commission should require that all EUP audits be conducted under Generally Accepted Government Auditing Standards rather than American Institute of Certified Public Accountants Consulting Standards. The IOUs' proposal would grant auditors unnecessary discretion in determining audit procedures, potentially undermining the Commission's role in establishing the standards governing cost recovery reviews.

- The Commission should reject the IOUs' proposal to limit audit review to portfolio-level compliance and exclude scrutiny of all BCR benefits. Portfolio-level averaging risks masking underperforming projects, including those with BCRs below 1.0, and undermines the Commission's ability to assess whether individual projects satisfy SB 884's cost-effectiveness requirements. Auditors should evaluate both the denominator and numerator of the BCR equation at the project level so that projected benefits, including reliability improvements and O&M savings, are subject to an equivalent level of auditor scrutiny as project costs.

- The Commission should clarify that all EUP audits must apply the Commission's longstanding "used and useful" standard and prohibit utilities from adopting their own definitions for purposes of cost recovery review. The "used and useful" doctrine serves as a critical safeguard against premature recovery of utility investments and has long been central to Commission ratemaking policy. Retaining a uniform Commission-approved standard will enhance audit integrity, ensure consistency across IOUs, and provide greater assurance that ratepayers are charged only for investments that are actually providing service and benefits.

ADDITIONAL COST RECOVERY CONDITIONS

- The Commission should reject the IOUs' proposed balancing account 2 percent variance threshold and require strict compliance with all approved cost recovery conditions. Cost recovery conditions are intended to function as clear and enforceable safeguards, not aspirational targets. Allowing projects to exceed approved cost caps, unit-cost thresholds, or BCR requirements without additional review would weaken ratepayer protections and undermine the Commission's compliance framework. Any costs that fail to satisfy approved conditions should instead be subject to further scrutiny through the memorandum account process.

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OPENING BRIEF OF THE ENERGY PRODUCERS AND USERS COALITION

The Energy Producers and Users Coalition (EPUC)[1] submits this opening brief pursuant to Rule 13.12 of the California Public Utilities Commission (Commission) Rules of Practice and Procedure, and the schedule set by the Assigned Commissioner in the April 10, 2026, *Assigned Commissioner's Scoping Memo And Ruling* (Ruling).

I. INTRODUCTION

Enacted in 2022, Senate Bill (SB) 884 requires the Commission to establish an expedited electric utility distribution infrastructure undergrounding program in Tier 2 and Tier 3 High Fire-Threat District (HFTD) and wildfire rebuild areas for the State's large electrical corporations.[2] The Commission implemented the program in Resolution SPD-15, which adopted the initial guidelines for Commission review of any large electrical corporation's 10-year distribution

[1] EPUC represents the electricity end-use interests of the following companies in this proceeding: California Resources Corp., Chevron U.S.A. Inc., PBF Holding Company, Phillips 66 Company, and Tesoro Refining & Marketing Company LLC.

[2] Senate Bill No. 884 (2021–2022 Reg. Sess.) (Stats. 2022, ch. 819).

infrastructure undergrounding plan (EUP) application and conditional approval or denial of related costs.[3] In Resolution SPD-37, the Commission refined its guidelines and aligned the program with the guidelines adopted by Office of Energy Infrastructure Safety (Energy Safety).[4] In addition, SPD-37 directed the IOUs to file the instant application to resolve additional issues including:

1) how Cost-Benefit Ratios (CBR) must be calculated;
2) whether large electrical corporations' proposed audit methodology is adequate; and
3) whether any additional conditions should be placed on what costs are allowed to be recovered through the one-way balancing account adopted in Resolution SPD-15.[5]

The determinations made in this proceeding are critical because they will affect the Commission's review of potentially billions of dollars in ratepayer-funded investments under 10-year EUPs—taking such investments outside of the historical venue of General Rate Cases (GRC). Given the substantial costs associated with undergrounding, the Commission must ensure that ratepayers are adequately protected from unjust and unreasonable EUP costs during the entire 10-year EUP period.

Undergrounding—the conversion of overhead electric facilities to underground facilities—is a large-scale and capital-intensive venture. It is up to ten times more expensive

[3] *See* Resolution SPD-15, Mar. 8, 2024 at 7.
[4] Resolution SPD-37, *Update and Revision of Senate Bill 884 Program: CPUC Guidelines, Program for Expediting the Undergrounding of Distribution Equipment of Large Electrical Corporations*, Dec. 10, 2025 at 10 (Specifically, SPD-37 "introduces refinements to the guidelines to: (1) align programmatic information required by the Energy Safety Guidelines and CPUC Guidelines, (2) clarify the procedure for an audit as anticipated in Resolution SPD-15, (3) add new data reporting requirements pursuant to SPD-15's directive, and (4) provide additional information needed to ensure the Commission can effectively assess cost recovery for EUPs.").
[5] *Ibid*.

than installing new overhead lines and eight times more expensive than installing covered conductors.[6] Undergrounding existing overhead lines costs approximately $350 to $1150 per foot, or $1.85 million to $6.072 million per mile.[7] California has approximately 239,557 miles of distribution lines, including roughly 147,000 miles of overhead distribution lines.[8]

> Based on an average cost of $3.8 million per circuit mile of conversion for undergrounding distribution infrastructure (across the three utilities), the ratepayers would be required to pay $559 billion to convert all 147,000 miles of overhead distribution lines in the State.[9]

The potential cost of undergrounding even a portion of this infrastructure is substantial. For example, the estimated costs for undergrounding existing overhead distribution infrastructure in PG&E's service territory ranges between $3.4 - $6.1 million per mile.[10] With approximately 25,000 circuit miles of distribution lines in Tier 2 and Tier 3 HFTDs, undergrounding those facilities could cost PG&E ratepayers a staggering $152.5 billion.[11] The costs could be even higher with inclusion of rebuild areas. For comparison, PG&E's authorized 2023 Test Year base revenue requirement of approximately $13.5 billion is a fraction of the potential undergrounding costs described above.[12]

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[6] California Senate Rules Committee, Senate Floor Analysis of SB 884, Aug. 30, 2022 at 4 (available at: Bill Analysis - SB-884 Electricity: expedited utility distribution infrastructure undergrounding program.).
[7] *Id*. at 4-5.
[8] CPUC Website, CPUC Undergrounding Programs Description, Conversion of Overhead Electric Lines to Underground Facilities and Construction of New Underground Electric Lines (available at: CPUC Undergrounding Programs Description).
[9] *Ibid*.
[10] California Senate Rules Committee, Senate Floor Analysis of SB 884, Aug. 30, 2022 at 5 (available at: Bill Analysis - SB-884 Electricity: expedited utility distribution infrastructure undergrounding program.).
[11] Assembly Committee on Utilities and Energy, SB 884 Analysis, Jun. 22, 2022 at 4 (available at: Bill Analysis - SB-884 Electricity: expedited utility distribution infrastructure undergrounding program.).
[12] D.23-11-069, *Decision on Test Year 2023 General Rate Case for Pacific Gas and Electric Company*, A.21-06-021, Nov. 11, 2023 at 3.

In enacting SB 884, the Legislature recognized that undergrounding is a costly investment for ratepayers to bear and imposed conditions related to wildfire risk reduction, public safety, cost efficiency, and reliability benefits to safeguard ratepayers.[13] Further, any electric utility's forthcoming Phase 2 EUP Application requesting review and conditional approval of EUP costs must include:

> (A) Any substantial improvements in safety risk and reduction in costs compared to other hardening and risk mitigation measures over the duration of the plan;
>
> (B) The cost targets, at a minimum, that result in feasible and attainable cost reductions as compared to the large electrical corporation's historical undergrounding costs;
>
> (C) How the cost targets are expected to decline over time due to cost efficiencies and economies of scale; and
>
> (D) A strategy for achieving cost reductions over time.[14]

While utility participation in the EUP program is voluntary, it does not relieve the Commission of its obligation to ensure that expenditures are reasonable, prudent, and cost-effective. The Commission has noted that the ratepayer costs associated with 10 years' worth of undergrounding projects could be substantial.[15] The proposals approved in this proceeding must ensure that EUP expenditures demonstrably reduce wildfire risk and improve system

[13] *See* Pub. Util. Code § 8388.5(c)(2) ("In order to participate in the program, a large electrical corporation shall submit to the office a distribution infrastructure undergrounding plan that shall address or include, at minimum, all of the following components … Identification of the undergrounding projects that will be constructed as part of the program, including a means of prioritizing undergrounding projects based on wildfire risk reduction, public safety, cost efficiency, and reliability benefits. Only undergrounding projects located in tier 2 or 3 high fire-threat districts or rebuild areas may be considered and constructed as part of the program.").
[14] Pub. Util. Code § 8388.5(e)(1)(A)-(D).
[15] SPD-15 at 9.

reliability in the most reasonably cost-effective manner from the perspective of utility ratepayers.

> The Commission has a fundamental responsibility under Public Utilities Code § 451 to ensure that rates are just and reasonable. As a result, SB 884 implementation should include reasonable ratepayer protections.[16]

II. STANDARDIZED BENEFIT COST RATIO (BCR) CALCULATION METHODOLOGY

In SPD-37, the Commission identified BCR Calculation, Audit Methodology and Cost Recovery Conditions as issues that would benefit from further exploration and refinement.[17] Recognizing the need for a consistent framework to evaluate undergrounding investments, the Commission directed the IOUs to propose a standardized and consistent BCR methodology for assessing the cost efficiency of undergrounding relative to alternative mitigation measures.[18] The BCR methodology is intended to ensure that BCR calculations are transparent, traceable, and comparable across utilities, thereby enabling meaningful review of project proposals and associated costs.[19] The BCR calculation serves as a critical decision-making tool for the Commission. It enables objective evaluation of competing utility investments by quantifying both mitigation costs and the benefits of avoided harm in a common, dollar-denominated framework that permits direct comparison of alternative mitigation strategies.[20]

The Ruling also identified standardization of a BCR calculation methodology as a central issue in this proceeding:

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[16] SPD-15 at 9.
[17] SPD-37 at 25.
[18] *Id.* at 25-26.
[19] *Id*. at 26.
[20] *Id.* at 24.

> What standardized methodology should be adopted for calculating Benefit-Cost Ratios (BCRs) for applications filed by large electrical corporations for review pursuant to Pub. Util. Code Section 8388.5 (optional 10-year electrical undergrounding plans) that will assess cost efficiency and reasonably account for costs, benefits, discounting, risk treatment, and related inputs in a manner consistent with the Commission's Risk-Based Decision-Making Framework (RDF), including any refinements necessary to address wildfire mitigation and reliability impacts associated with PSPS, EPSS, and other outage programs? [21]

The Commission should address, at a minimum, the following BCR-related issues and adopt the recommended refinements to ensure a robust, standardized BCR calculation methodology.

A. The Commission Should Require a PVRR-Based Cost Methodology to Ensure BCR Calculations Reflect the Full Lifetime Costs Borne by Ratepayers

The Commission listed Total Capital Cost as a key component that was to be included in the IOUs proposed BCR methodology.[22] Total Capital Cost is defined as "capital expenditures tied to project implementation."[23] The IOUs' proposal was required to address the relationship between Total Capital Costs and other categories, such as Operating and Maintenance (O&M) Costs, O&M Savings, or Net Salvage values.[24]

In their Phase 1 Application (Application),[25] the IOUs[26] proposed that the Total Capital Costs in the BCR calculation include all costs incurred to implement an undergrounding project

[21] *Assigned Commissioner's Scoping Memo and Ruling* (Ruling), A.26-02-005, Apr. 10, 2026 at 5.
[22] SPD-37 at 26.
[23] *Ibid.*
[24] *Ibid.*
[25] *Joint Application of Pacific Gas and Electric Company, Southern California Edison and San Diego Gas & Electric Company Requesting Commission Approval of Proposals for a BCR Calculation Methodology, Audit Methodology, and Cost Recovery Conditions as Specified In Resolution SPD-37* (Phase 1 Application or Application), A.26-02-005 at 7-9.
[26] PG&E, SCE, and SDG&E.

from initiation through close-out.[27] This would include design, engineering, permitting, and construction costs.[28] The IOUs contend that this approach is consistent with the RDF's direction to include incremental expenses associated with a capital investment.[29] The IOUs recommend that any non-capital expense cost for project implementation also be included in the Total Capital Cost.[30] With the inclusion of expense amounts, the IOUs propose renaming "Total Capital Costs" to "Total Implementation Costs."[31]

The IOUs' "Total Implementation Costs" BCR proposal understates the total costs associated with undergrounding by excluding significant key components of the revenue requirement borne by ratepayers. Indeed, one-time implementation costs are not fully representative of the total costs ratepayers bear for multiyear, capital-intensive projects. Cal Advocates identifies additional costs for capital projects that should be included:

> rate of return on capital; income taxes; recurring property taxes; ongoing O&M costs over the life of the asset; depreciation; negative net salvage; retirement.[32]

These additional costs represent significant components of the true total cost ratepayers will ultimately pay to support undergrounding investments, and therefore should be reflected in the BCR calculation on a present value basis.

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[27] Application at 8.
[28] *Ibid*.
[29] *Ibid*. (citing D.25-08-032, Appendix A, at A-18, Row 25).
[30] *Id.* at 8.
[31] *Ibid.*
[32] *Response of The Public Advocates' Office to Scoping Memo Request for Comments and Counter Proposals to Joint IOUs' Proposals for a BCR Calculation Methodology, Audit Methodology, and Cost Recovery Condition as Specified in Resolution SPD-37* (Cal Advocates Response), A.26-02-005, Jun. 9, 2026 at 51.

Relatedly, TURN flags this omission and recommends that all IOUs should be required "to assess the cost part of the BCR (denominator) by calculating the present value revenue requirement (PVRR) of the project."[33] PG&E currently uses the PVRR approach, but SCE and SDG&E do not.[34] TURN articulates that:

> Ratepayers pay for utility revenue requirements through rates, not direct costs. For capital undergrounding projects, revenue requirements significantly exceed direct costs over the assets' depreciation lifetime due to utility return (debt and equity), taxes, and other loaders that form the calculation of a revenue requirement.[35]

With potentially billions of dollars at stake, the Commission should employ the most accurate measure of ratepayer costs to ensure a robust and informed reasonableness review. TURN's PVRR-based approach better accomplishes that objective by capturing the full stream of costs borne by ratepayers over the life of a project. TURN's reasoning is sound: "[t]otal lifetime revenue requirement is a more accurate representation of ratepayer costs than direct costs incurred for a project."[36] Additionally, the Commission has already recognized that PVRR will make BCR calculations more accurate and representative of the lifetime costs of a risk reporting unit.[37] Similarly, in the *Order Instituting Rulemaking to Refine the Risk Based Decision Making Framework for Electric and Gas Utilities* (R.26-04-016), the Commission is considering whether a

[33] Counterproposal and Comments of The Utility Reform Network on Joint Application of Pacific Gas and Electric Company, Southern California Edison, and San Diego Gas & Electric Company Requesting Commission Approval of Proposals for a BCR Calculation Methodology, Audit Methodology, and Cost Recovery Conditions as Specified in Resolution SPD-37 And Staff White Paper (TURN Comments), A.26-02-005, Jun. 6, 2026 at 2.
[34] *Id*. at 6, citing Data Request TURN-PG&E-1 (TURN-1), Question 2.
[35] *Id*. at 6.
[36] *Ibid.*
[37] D.25-08-032, *Phase 4 Decision*, R.20-07-013 at 121.

PVRR metric should be required in BCR calculations "to increase transparency and improve assessment of risk mitigations."[38]

Accordingly, the Commission should standardize BCR calculations by requiring the use of undergrounding project PVRR to evaluate the cost implications of undergrounding investments over the lifetimes of those expensive utility assets. This approach would ensure consistency among the IOUs and promote a uniform evaluation of ratepayer impacts in both EUP and Risk Assessment Mitigation Phase (RAMP) wildfire risk mitigation review processes.

B. The Commission Should Treat Estimated O&M Cost Savings as Benefits in the BCR Numerator to Avoid Overstating Project Cost-Effectiveness

The IOUs' BCR Phase 1 Application proposal was to include recommendations on the relationship between Total Capital Cost and other categories, such as Operating and Maintenance (O&M) Costs, and O&M Savings (i.e., avoided O&M Costs).[39] Estimated O&M Savings attributable to electric undergrounding projects can be incorporated into the BCR analysis via three primary methods:[40]

- Method 1 - as a deduction to undergrounding O&M Costs reflected in Net O&M Costs in the undergrounding project BCR denominator;

[38] R.26-04-016, *Order Instituting Rulemaking to Refine the Risk Based Decision Making Framework for Electric and Gas Utilities*, Apr. 30, 2026 at 14; *see also* D.25-08-032, Appendix A at A-7 (A risk reporting unit is a Commission jurisdictional effort within Electric Operations or Gas Operations that simultaneously removes or mitigates the risk associated with a group of contiguous assets or systems that exhibit high levels of risk.).
[39] SPD-37 at 26.
[40] Staff White Paper on Benefit-Cost Ratio Methodology (Staff White Paper), April 10, 2026 at 24.

- Method 2 - by penalizing the covered conductor alternative to undergrounding by excluding covered conductor O&M Savings from the covered conductor project BCR denominator; and
- Method 3 - by including undergrounding O&M Savings as positive benefits in the undergrounding project BCR numerator.

The Staff[41] BCR White Paper concluded that the BCR methodology needs to be "a well-defined, structurally stable formulation that doesn't fail under practical use cases and [ ] enforcing methodological consistency across all projects, utilities, and mitigation types, with key methodological nuances explicitly defined rather than left to interpretation."[42] Staff recommended Commission adoption of Method 3, treating estimated O&M Savings as benefits placed in the numerator of the BCR equation.[43] All responding and commenting parties except the IOUs supported Staff's recommendation.[44] The IOUs recommended adoption of their

[41] The Commission's Safety Policy Division.
[42] Staff White Paper at 27.
[43] *Ibid.*
[44] *See* Cal Advocates Response at 5-6; *Mussey Grade Road Alliance Comments on Joint Utility Proposal and Safety Policy Division Benefit Cost Ratio Proposal* (MGRA Comments), A.26-02-005, Jun. 9, 2026 at 3. TURN Comments at 15; *Reply Comments of the Public Advocates Office* (Cal Advocates Reply Comments), A.26-02-005, Jul. 7, 2026 at 14; *EPUC Reply Comments on Joint IOUS' Proposals for a BCR Calculation Methodology, Audit Methodology, and Cost Recovery Conditions, Intervenor Counterproposals, and Staff White Paper* (EPUC Reply Comments), A.26-02-005, Jul. 7, 2026 at 5; *MGRA Reply Comments on Joint Utility Proposal and Safety Policy Division Benefit Cost Ratio Proposal* (MGRA Reply Comments), A.26-05-002, Jul. 7, 2026 at 5; *Reply Comments of The Utility Reform Network on Joint Application of Pacific Gas and Electric Company, Southern California Edison, and San Diego Gas & Electric Company Requesting Commission Approval of Proposals for a BCR Calculation Methodology, Audit Methodology, and Cost Recovery Conditions as Specified in Resolution SPD-37 and Staff White Paper* (TURN Reply Comments), A.26-02-005, Jul. 7, 2026 at 1-4.

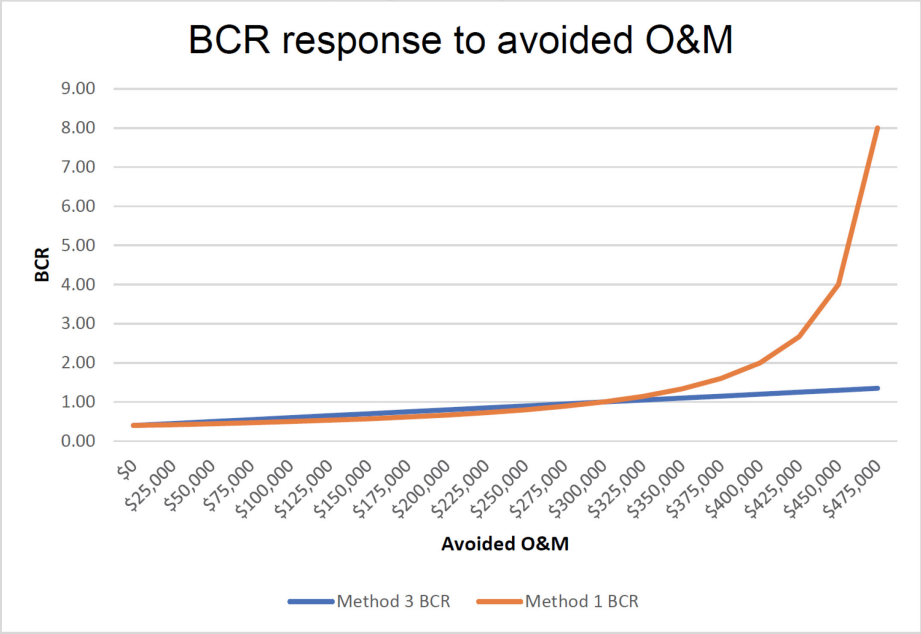
currently used and preferred Method 1, which places O&M Savings in the denominator as an offset to mitigation project capital and operating costs.[45]

The Commission should adopt Method 3 because it is mathematically sound, administratively workable and enables the Commission to fulfill both SB 884 requirements and the Commission's Risk Decision Framework (RDF) objectives.[46] There are many supporting reasons for adopting Staff's recommended Method 3 treatment of estimated O&M Savings as benefits in the BCR numerator, including the following:

- Treatment of avoided costs as benefits in the BCR numerator is consistent with academic literature and Cost-Benefit Analysis practice and guidance followed by both non-governmental and governmental agencies and entities;[47]
- California energy efficiency cost-effectiveness tests treat avoided costs as benefits;[48]
- Avoided O&M costs do not reduce upfront capital costs because they do not reduce the capital costs the utilities incur or record in rate base;[49] and
- The IOUs' treatment of avoided costs as reductions in project costs in the denominator of the BCR calculus (Method 1) incorporates a mathematical non-linearity that systemically increases BCR values with increasing O&M Savings.[50]

[45] *See Joint Comments of Pacific Gas and Electric Company, Southern California Edison and San Diego Gas and Electric Company on Staff BCR White Paper* (Joint IOU Comments), A.26-02-005, Jun. 9, 2026, at 3-5, 6-15.
[46] EPUC Reply Comments at 5-10.
[47] Staff White Paper at 5-7; Cal Advocates Response at 16-17; TURN Reply Comments at 2.
[48] TURN Reply Comments at 2.
[49] TURN Reply Comments at 2-3.
[50] Cal Advocates Reply Comments at 5-8, Footnote 28 at 6, Figure 1 at 8.

Figure 1[51]



Estimated O&M Savings logically belong in the numerator with other project benefits because they are highly uncertain. The IOUs do not guarantee the realization of O&M Savings, nor do they commit to making customers whole if such savings fail to materialize.[52] Additionally, the Commission in Resolution SPD-37 set forth an EUP requirement that all proposed mitigation projects have a BCR greater than 1.0.

> The Fifth New Application Requirement is added to ensure that undergrounding projects presented in a Phase 2 Application provide a cost-efficient overall benefit to ratepayers. As discussed in SPD-15 and the SPD-15 Guidelines, CBR is calculated by dividing the monetized benefits of a particular mitigation by its costs. A CBR of 1.0 is considered a breakeven point, where the benefits of a particular mitigation are equal to its costs. Conversely, CBRs less than 1.0 indicate that the costs of a particular mitigation exceed its benefits. Allowing undergrounding projects that have

[51] *Ibid.*
[52] EPUC Reply Comments at 10.

> forecasted CBRs below 1.0 to be included in a Phase 2 Application would be unreasonable.[53]
>
> …
>
> By adding this requirement, the Commission does not intend to imply that all projects submitted in a Phase 2 Application with a forecasted CBR greater than or equal to 1.0 are necessarily a good investment.[54]

Given this high bar set by Commission, where undergrounding projects with BCRs greater than 1.0 may still not be deemed to be in the best interests of ratepayers, the Commission should adopt Staff's recommended Method 3 treatment of estimated O&M Savings. This will avoid the inherent non-linear bias shown above in Figure 1 that would lead to the systemic overstatement of BCR values, making such undergrounding projects appear to be much more cost effective than they truly are. By placing estimated O&M Savings in the BCR numerator as a benefit, the Commission can ensure that any impacts of O&M Savings on resulting BCR values will scale linearly,[55] minimizing the risk of overstating undergrounding project cost effectiveness.

The adoption of Method 3 is further supported given that at least one IOU (PG&E) does not intend to track actual O&M cost savings over time at the project level once undergrounding projects are completed, making it difficult or impossible to identify project-specific O&M Savings. PG&E responses to the Administrative Law Judge's (ALJ) questions,[56] specific to the treatment of estimated O&M Savings, further justify Commission adoption of Staff's recommended Method 3 treatment of estimated O&M Savings as a benefit in the BCR

[53] SPD-37 at 16.
[54] *Ibid.*
[55] Cal Advocates Reply Comments at 6, footnote 28.
[56] *See Email Ruling Questions for Joint IOUs Electric Undergrounding*, A.26-02-005, Jun. 18, 2026.

numerator. For example, in response to an ALJ question of whether PG&E intended to track recorded O&M Savings at the project or subproject level, PG&E responded that it did not intend to do so, despite the benefits accruing over potentially 50+ years.[57] Similarly, in response to a related ALJ question regarding how the Commission would be able to verify the project O&M Savings post-construction, PG&E responded that it only intended to track O&M Savings at the program level and not at the project or subproject levels.[58]

Irrespective of whether O&M Savings accruing over multi-decade asset lifetimes of 50 years or more can be meaningfully quantified through the use of modeled estimates, the Commission should not adopt Method 1 because it is inferior to Method 3.[59] Specifically, placing "O&M [S]avings in the denominator of the BCR calculus, would lead to an artificial cost reduction, obscuring the true cost of risk mitigation projects."[60] Due to their uncertain and speculative nature, and given the ongoing rate affordability crisis in California, O&M Savings should be treated as benefits in the BCR numerator.

> Given that O&M savings from implementation of risk mitigation projects provide no certainty of being achieved and thereby reducing customer rates, they logically belong in the numerator with other project benefits. The Joint IOUs do not guarantee the realization of O&M cost savings, nor do they commit to a mechanism that would make customers whole if such savings fail to materialize.[61]

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[57] *Responses of Pacific Gas and Electric Company, Southern California Edison Company, and San Diego Gas and Electric Company to the Hon. Regina M. Deangelis Ruling*, A.26-02-005, Jun. 18, 2026, Attachment 1 at 7-8; see also, similar SDG&E response to Question 2.b, at 12.
[58] *Id.*, Attachment 1 at 8, 12.
[59] EPUC Reply Comments at 6; see also Cal Advocates Response at 5-6, 14-21.
[60] *Id.* at 10.
[61] *Ibid.*

As Cal Advocates rightly observes, the IOUs mischaracterize the RDF language to include avoided costs in the BCR denominator,[62] improperly characterize the BCR equation as a risk reduction metric,[63] and mischaracterize Staff's proposed Method 3 as a cost-saving metric.[64] Further, as EPUC expressly stated in reply comments, treatment of O&M Savings is a case of first impression regarding SB 884 project analysis, and the Commission has full discretion to choose Method 3 to fulfill SB 884 requirements and its own RDF objectives:

> Neither SB 884 nor the RDF expressly addresses or provides guidance on the treatment of avoided costs, or netting of costs. Accordingly, the Commission has discretion to adopt the BCR methodology that will produce BCR metrics best enabling it and the Joint IOUs to fulfill SB 884 statutory requirements and RDF objectives. Specifically, Method 3 will best enable the prioritization of utility undergrounding projects for wildfire risk reduction, public safety, cost efficiency, and reliability benefits. All four of these criteria must be considered by the Commission in prioritizing undergrounding projects.[65]

Further, SB 884 expressly requires that an analysis of the "projected economic benefits over the life of the assets"[66] be included in an IOU's EUP filing. As discussed above, avoided O&M costs are not recorded "costs," are treated by governmental and non-governmental agencies as benefits in the BCR numerator, and such treatment is firmly supported by academic literature.

Lastly, a big "red flag" for the Commission regarding the IOUs' proposal to include O&M Savings as an offset to capital and O&M costs in the BCR denominator is the IOUs' conclusion

[62] Cal Advocates Response at 15.
[63] Cal Advocates Reply Comments at 3-4.
[64] *Id.* at 4-5.
[65] EPUC Reply Comments at 9-10.
[66] Pub. Util. Code § 8388.5(c)(6).

that at least three "guardrails" would be necessary to address Staff's concerns about Method 1.[67] These guardrails would endeavor to enhance consistency, auditability, and comparability across projects if the IOUs' Method 1 is adopted.[68] Unlike Method 1, Staff's recommended Method 3 is mathematically sound and administratively simple, requiring no supportive guardrails to ensure consistency, auditability, and comparability across projects. Therefore, the Commission should adopt Method 3 for its administrative simplicity and efficiency, in addition to the other justifications discussed above.

1. The IOUs' Exclusion of Net Salvage Costs Undervalues the True Costs Borne by Ratepayers

Despite SPD-37's explicit requirement that the IOUs address the relationship between Total Capital Costs and Net Salvage Values, the IOUs exclude Net Salvage Values from their BCR calculation.[69] Net Salvage Value is defined as the "salvage value of an electrical infrastructure related asset that has been retired less the cost of removal of that asset."[70] Undergrounding projects generally necessitate the premature retirement of existing overhead assets before the end of their useful operating life, rendering those assets no longer used and useful yet not fully depreciated. As Cal Advocates highlights, "[n]et salvage can also represent a significant additional cost to ratepayers."[71] Net salvage costs arise directly from undergrounding

[67] Joint IOU Comments at 4, 16-19.
[68] *Id.* at 16.
[69] See SPD-37 at 26; see also Application at 15-16.
[70] *Id*. at 26, fn. 69.
[71] Cal Advocates Response at 52 ("As one example, SCE in its Test year 2018 General Rate Case estimated a $12 billion negative salvage value for Distribution Poles, Towers, and Fixtures (FERC account 364), and a $14.4 billion negative salvage value for Distribution Underground Conductors and Devices."); *see also* TURN Comments at 7 ("Since salvage values are part of the revenue requirement, this value is also appropriately included in the PVRR calculation.").

investments. Excluding them undervalues the true costs borne by ratepayers. Therefore, the undepreciated value of stranded overhead assets constitutes a legitimate cost of undergrounding and should be factored in the BCR calculation as a component of Net Salvage Value.

C. The Commission Should Require the Use of Risk-Neutral BCRs Until a Standardized Risk Scaling Methodology Is Adopted

The IOUs claim that their current risk scaling methodologies are compliant with both SPD-37 and the RDF, and that neither SPD-37 nor the RDF require that a standardized risk scaling methodology be used.[72] The IOUs also argue that adoption of a standardized risk scaling approach is out of scope in this proceeding,[73] and that the IOUs should be permitted to use their current risk scaling methodologies in their EUP filings.[74] TURN states this is not surprising because "the entire purpose of scaling utility modeling results is to increase the total risk, and therefore the risk reduction, of mitigations, which necessarily increases the BCR making more projects cost-effective."[75] In its protest to the IOUs' Phase-1 Application recommendation that each IOU be allowed to employ its own risk scaling methodology, MGRA stated that its prior reviews of PG&E and SDG&E risk scaling functions found them to be "ill-founded and faulty."[76]

MGRA recommends that the Commission adopt a risk-neutral default position requiring the IOUs to justify EUP projects on a risk-neutral basis, and that the Commission ultimately adopt a common risk scaling function to be used by all utilities.[77] TURN generally aligns with

[72] Joint IOU Reply Comments at 16-17.
[73] *Id.* at 17-18.
[74] *Id.* at 18-25.
[75] TURN Comments at 9.
[76] MGRA Opening Comments at 1.
[77] *Id.* at 1-2, 32; *see also* MGRA Reply Comments at 1.

MGRA, stating that risk scaling is unnecessary and that the Commission should require submission of EUPs with unscaled (i.e., risk neutral) BCRs.[78]

Likewise, Cal Advocates roundly criticizes both PG&E's catastrophic (CAT) bond-market risk pricing approach and SDG&E's power law scaling methodology as not being representative of societal, versus utility, aversion to certain risk-related outcomes.[79] Specifically, Cal Advocates faults PG&E for conflating the cost of transferring risk (i.e., via CAT bond costs) with the cost of avoiding risk,[80] and faults SDG&E for applying a loss-of-life risk aversion metric to both reliability and financial risk of loss.[81] Cal Advocates also recommends the use of risk neutral BCRs.[82]

MGRA, TURN and Cal Advocates raise valid concerns with the IOUs' risk scaling functions and prudently recommend adoption of unscaled BCRs for EUP project analysis until a standardized risk scaling approach is ultimately adopted. A uniform risk-scaling methodology is necessary to ensure that undergrounding projects are evaluated consistently and comparably across the IOUs. The Commission should adopt the risk neutral approach as the default methodology.

D. The IOUs' Use of System-Wide VOS Values for HFTD Projects Overstates Reliability Benefits and Distorts the BCR Methodology

The Lawrence Berkeley National Laboratory (LBNL) Interruption Cost Estimate (ICE) "produces a dollar estimate of the cost to customers from electric service outages, with results

[78] TURN Comments at 10; TURN Reply Comments at 6-7.
[79] Cal Advocates Response at 22.
[80] *Id.* at 25.
[81] *Id.* at 28-30.
[82] Cal Advocates Reply Comments at 14.

that are differentiated by customer type (i.e., residential, commercial, and industrial) and the duration of the outage."[83] The RDF requires the IOUs to use the "most current version of the LBNL ICE Calculator to determine a standard dollar valuation of electric reliability risk for the Reliability Attribute."[84] The IOUs recommend using customer-class-specific VOS estimates for residential and non-residential customers derived from the ICE Calculator without incorporating location-specific information.[85] The IOUs' proposal would not distinguish between HFTD and non-HFTD regions.[86] This approach does not conform to the SB 884 Guidelines, which state: "[s]ince SB-884 requires undergrounding projects to be completed within the HFTD, the ICE Calculator inputs must be relevant only to the HFTD."[87] The IOUs "must also disaggregate their inputs according to HFTD and non-HFTD regions."[88]

The IOUs propose to utilize separate, system-average VOS estimates for residential and non-residential customer classes, but recommend against using location-specific information to calculate those VOS values. The purpose of the BCR framework is to quantify and compare the cost-efficiency of undergrounding and alternative mitigations.[89] Thus, VOS estimates should reflect customer reliability impacts at a level of granularity that reasonably approximates actual outage conditions on specific circuit segments constituting discrete projects. These impacts are

[83] D.22-12-027, Phase II Decision Adopting Modifications to the Risk-Based Decision-Making Framework Adopted in Decision 18-12-014 and Directing Environmental and Social Justice Pilots, R.20-07-013, Dec. 21, 2022 at 32.
[84] *Id.* at 38.
[85] Application at 11; *see also* D.22-12-027 at 32 ("…the ICE Calculator produces a dollar estimate of the cost to customers from electric service outages, with results that are differentiated by customer type (i.e., residential, commercial, and industrial) and the duration of the outage.").
[86] *Id.* at 11.
[87] SB 884 Guidelines at A1-9.
[88] *Ibid.*
[89] SPD-37 at 25-26.

directly related to customer class, duration of outages, and customer location (e.g., within a HFTD, coastal area, or urban area).[90] By relying on a single system-wide VOS for each customer class, the IOUs' proposal disregards the location-specific dimension of reliability impacts and implicitly assumes that customers within the same class assign the same value to service reliability, regardless of location.[91] This assumption is inconsistent with the realities of wildfire risk and outage exposure, which vary significantly across geographic areas. As a result, the IOUs' approach is likely to overstate the reliability benefits attributable to undergrounding projects in HFTDs, and distort the comparison of alternative mitigations.

Cal Advocates correctly identifies a fundamental inconsistency in the IOUs' proposed methodology. HFTDs generally experience higher levels of customer interruptions due to increased PSPS events and fast-trip operations.[92] These areas will be the main candidates for undergrounding investments, given the SB 884's requirement that EUPs only include circuit segments in HFTD Tier 2 and Tier 3, and rebuild areas.[93] Yet the IOUs propose to evaluate reliability benefits using HFTD-specific interruption data while applying a system-average VOS that does not reflect the outage characteristics of HFTD customers. Cal Advocates explains that:

> By pairing location-specific lookback data to generate CMI (which will be greater than the average of the system), and system-wide data to calculate VOS (which will be greater than the VOS from HFTD customers alone) the reliability benefits of undergrounding in particular will be overstated in the areas already most likely to be targeted for mitigations.[94]

[90] EPUC Reply Comments at 12.
[91] *Ibid.*
[92] Cal Advocates Response at 43.
[93] Senate Bill No. 884 (2021–2022 Reg. Sess.) (Stats. 2022, ch. 819).
[94] Cal Advocates Response at 43.

There should be symmetry between the granularity of the data used for generating CMI and the reliability value of each CMI. Additionally, Cal Advocates notes that customers in HFTDs experience longer average outage durations, which, under the ICE model framework, should correspond to lower marginal outage costs and lower VOS values.[95] This effect is not merely theoretical. As Cal Advocates observes, PG&E's own estimates show that non-residential VOS declines from $23.11 per minute to $7.57 per minute when PG&E explicitly accounts for HFTD and non-HFTD customers in the calculation.[96]

By applying a higher system-average VOS to HFTD-specific interruption data, the IOUs overstate the value of reliability improvements in the very locations most likely to receive undergrounding investments, thereby skewing upwards the reliability benefit in the BCR analysis. Accordingly, the Commission should require that the VOS derived from the ICE calculator use location-specific values, preferably at the circuit segment or project level. Absent this adjustment, the methodology will systematically bias BCR results upwards in favor of undergrounding projects and undermine SPD-37's objective of providing transparent and comparable evaluations of undergrounding versus feasible alternative mitigations.

E. Allowing Utility-Specific Discount Rates Undermines the Standardization and Comparability Required by SPD-37

When calculating BCRs for each mitigation, the RDF currently requires IOUs to provide three scenarios: Societal Discount Rate Scenario, Weighted-Average Cost of Capital Discount Rate Scenario, and Hybrid Discount Rate Scenario.[97] Although SPD-37 did not require the IOUs

[95] *Ibid.*
[96] *Ibid.*
[97] D.25-08-032, Appendix A, at A-19, Row 25.

to submit a discount rate proposal for calculation of BCR values, the IOUs seek discretion to "make risk-based decisions based on the discount rate [each utility] chooses" when selecting undergrounding projects.[98] This discretion is consequential because "[d]iscount rates directly affect the present value of mitigation investments and therefore the relative attractiveness of competing mitigation strategies."[99] Permitting each IOU to select its own discount rate would therefore undermine the comparability of BCR results and could result in similarly situated projects to be evaluated and prioritized differently across utilities. Cal Advocates correctly observes that "there is no conceptual, theoretical, or policy basis for utilities operating under the same regulatory framework and evaluating similar mitigation projects to apply different discount rates in the estimation of costs and benefits."[100]

The IOUs' proposal is inconsistent with SPD-37's clear directive that the IOUs provide at least one "standardized and consistent [BCR] methodology for evaluating and comparing the cost efficiency of undergrounding and alternative mitigations in SB 884-related applications."[101] Allowing utility-specific discount rates would be administratively inefficient and contrary to SPD-37's requirements that the IOUs' proposals promote comparability, transparency, and traceability.[102] The Commission should instead require all undergrounding project selection decisions to rely upon a common discount scenario, preferably the Weighted-Average Cost of

[98] Application at 14.
[99] Cal Advocates Response at 48.
[100] *Ibid.*
[101] SPD-37 at 26.
[102] *Ibid.*

Capital Discount Rate Scenario identified in the RDF, given that ratepayers pay the costs and receive the benefits of undergrounding.[103]

F. The IOUs' Restrictive Backcasting Proposal Would Obscure Changes in Project Cost-Effectiveness Following EUP Approval

SPD-37 describes backcasting as a key component that must be included in the IOUs BCR proposal.[104] Backcasting is "a method for recalculating [BCRs] and unit costs using updated Risk Reporting Unit (RRU) structures and risk model inputs to establish a bridge between prior inputs and new inputs, to ensure an 'apples-to-apples' comparison."[105] The Commission found "that the requirement for backcasting is reasonable and allows for greater alignment with the Energy Safety Guidelines."[106] The IOUs' proposal to conduct a backcast only when a utility "introduces substantive updates to its risk models" is deficient and undermines the cost-effectiveness objectives underlying the EUP program.[107] SPD-37's focus on capturing changes in a project's BCR after the filing of an EUP application is critical, and should not be reliant upon an IOU's determination of whether and when it deems its risk model updates substantive. The IOUs' proposal is inconsistent with both the rationale for backcasting and the requirements set forth in SPD-37:

> When a large electrical corporation elects to use the subproject designation, the concept of a backcast is essential in the SB 884 context to enable a consistent comparison between the forecasted RRU values reported in the progress reports and the backcasted RRU values that would have been calculated had the

[103] *See* Cal Advocates Response at 49 ("Again, the utilities should have provided a joint methodology. The framework work provided provides no rigor or consistency for evaluating the projects. The Joint IOUs should use the same discount rate for evaluating mitigation projects.").
[104] SPD-37 at 26-28.
[105] *Id.* at 27.
[106] *Id*. at 28.
[107] Application at 7.

> RRU structure been applied in the Phase 2 Application using the data submitted at that time.[108]

The IOUs purported concerns about "misalignment" and "recalculations" do not justify departing from SPD-37's express requirements.[109] To the contrary, limiting backcasting to IOU-determined risk-model updates of unspecified substance and timing would hinder the Commission's ability to thoroughly evaluate changes in project cost-effectiveness on a consistent and transparent basis. The IOUs' proposal would obscure, rather than illuminate, changes in project cost-effectiveness following the filing of an EUP application.

G. Redefining BCR Year Zero to the EUP Effective Date Would Decouple BCR Calculations from When Project Benefits Actually Accrue to the Benefit of Ratepayers

The IOUs' proposed BCR methodology must incorporate the BCR Year Zero approved by the Commission as a foundational component. SPD-37 defines BCR Year Zero as "the year a project becomes 'used and useful,' which serves as the reference year for discounting both costs and benefits."[110] SPD-37 recognized that the selection of BCR Year Zero is not a mere procedural detail, but a critical assumption that directly affects the calculation of a project's BCR and, in turn, its eligibility for cost recovery. As SPD explained:

> The calculation of the CBR for undergrounding and alternative projects is a critical factor in determining project eligibility for cost recovery. In addition, the selection of CBR Year Zero plays a pivotal role in accounting for the time value aspect of CBR calculations.[111]

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[108] SPD-37 at 28.
[109] Application at 15.
[110] SPD-37 at 27.
[111] Safety Policy Division, Consolidated Stakeholder Responses to Post-Workshop Questions on CPUC's SB-884 Guidelines, Apr. 11, 2025 at 6 (available at: informal-responses-to-postworkshop-questions_v2.pdf).

All stakeholders unanimously agreed on SPD-37's definition and the Commission mandated its inclusion in the IOUs' proposal.[112] Nevertheless, the IOUs now seek to abandon this agreed-upon definition and instead redefine BCR Year Zero as the year that a utility's EUP becomes effective, meaning the year a utility begins recording project costs to an EUP balancing account.[113] This proposal violates SPD-37 and would replace the stakeholder-approved definition that the IOUs themselves previously endorsed.[114] The IOUs' proposal would extend the discount period for EUP capital expenditures, thereby creating a systematic bias toward higher BCR values for projects with longer investment and completion timelines.

The IOUs attempt to justify their proposed redefinition on the grounds that using the year the EUP becomes effective would facilitate portfolio-wide comparisons and aggregation of project BCRs.[115] The Commission adopted a project-specific BCR Year Zero using the year a project becomes "used and useful" because that date serves as the appropriate reference year for discounting costs and benefits. Indeed, SPD expressly recognized that the selection of BCR Year Zero "plays a pivotal role in accounting for the time value aspect of CBR calculations."[116]

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[112] SPD-37 at 27.
[113] Application at 16, fn. 39.
[114] *See PG&E's Response to Post-Workshop Questions for Stakeholders Regarding the CPUC SB 884 Guidelines*, Apr. 25, 2025 at 19 ("CBR year zero should be the year the project is expected to become used and useful because the risk reduction and other benefits of an undergrounding project do not start to accrue until the underground line is energized (used and useful)."); *see also SDG&E Response to CPUC Postworkshop Questions SB-884 Guidelines*, Apr. 25, 2025 at 11 ("The life cycle of the assets is assumed to be 55 years and the EUP requires calculating benefits associated with the assets out to this point. The calculation should be from the year the project becomes used and useful in calculating its cost and benefits. This will provide a more accurate view of project value than subtracting up to ten years from the project life.").
[115] Application at 16.
[116] Safety Policy Division, Consolidated Stakeholder Responses to Post-Workshop Questions on CPUC's SB-884 Guidelines, Apr. 11, 2025 at 6 (available at: informal-responses-to-postworkshop-questions_v2.pdf).

The relevant question is not whether a common reference year would simplify comparisons across projects, but whether the BCR accurately reflects the costs and benefits of each project from a ratepayer perspective. The Commission's objective is to ensure that each project's BCR accurately reflects the timing of its costs and benefits. By replacing the Commission-approved definition with a portfolio-wide reference year, the IOUs would decouple the discounting analysis from the point at which project benefits actually begin to accrue, undermining the very purpose of BCR Year Zero. A uniform BCR Year Zero tied to the effective date of an EUP would improperly treat projects with materially different operational timelines as though they begin generating benefits at the same point in time.

The IOUs' claim that a single BCR Year Zero is necessary to ensure "apples-to-apples" comparisons is unpersuasive.[117] Projects with different construction schedules, permitting requirements, and in-service dates are not similarly situated. Using the year a project becomes used and useful ensures that each project's costs and benefits are evaluated relative to the date those benefits actually begin to accrue to ratepayers. As PG&E previously acknowledged, project benefits do not begin accruing until the underground facilities are energized.[118] The IOUs offer no persuasive explanation for abandoning the position they previously supported, or for replacing a project-specific definition approved in SPD-37 with a definition tied solely to the effective date of an EUP. The Commission should reject the IOUs' proposed deviation and adopt the SPD-37 BCR Year Zero definition.

[117] Application at 16.
[118] *See PG&E's Response to Post-Workshop Questions for Stakeholders Regarding the CPUC SB 884 Guidelines*, Apr. 25, 2025 at 19.

III. AUDIT AND ACCOUNTABILITY FRAMEWORK

In SPD-15, pursuant to Public Utilities Code §§ 314 and 314.6, the Commission determined that "it is reasonable for the Commission to require costs recorded in the balancing accounts to be subject to audits and refund as an added ratepayer protection."[119] SPD-15 further provides that EUP costs recorded in the one-way balancing account will be subject to audit and that costs found not to comply with the conditions adopted in the Commission's Phase 2 decision may be refunded to ratepayers.[120] However, SPD-15 deferred the specific audit procedures and requirements to a future Commission decision.[121] SPD-37 later adopted an audit procedure, identified primary and secondary objectives, and required the IOUs to propose a methodology for conducting the audit in the instant Phase 1 Application.[122]

A. SPD-37 Creates a Foundational Audit Framework for Verifying Compliance and Safeguarding Ratepayer Funds

Overall, the audit process is designed to protect ratepayers from EUP costs that are not just and reasonable. Specifically, SPD-37 establishes a comprehensive audit framework to ensure that costs recorded in a utility's EUP balancing account satisfy the requirements adopted by the Commission and are appropriate for recovery from ratepayers. SPD-37 requires annual audits of the balancing account and reviews projects that became used and useful during the audit period and, where appropriate, costs for projects not yet used and useful.[123]

[119] SPD-15 at 19.
[120] *Id.* at 2.
[121] *Id.* at 15.
[122] SPD-37 at 4.
[123] *Id*. at 22.

The primary purpose of each audit is to determine whether recorded costs comply with all Phase 2 conditions established by the Commission.[124]

In addition to evaluating compliance with Phase 2 requirements, the EUP balancing account audits serve several important secondary objectives. Specifically, the audits verify that projects are in fact used and useful, and confirm that recorded costs are incremental and not duplicative of costs authorized through another Commission decision, recovery mechanism, or third-party funding source.[125]

Upon completion, each audit results in a publicly filed audit report and an opportunity for parties to submit comments.[126] Following review of the audit report, progress reports, and stakeholder comments, the Commission may reopen the Phase 2 proceeding to consider whether refunds are warranted.[127] Where a project fails to satisfy the audit objectives or otherwise does not comply with Commission requirements, the Commission may direct the utility to refund associated costs to ratepayers.[128]

To preserve the integrity and independence of the audit process, SPD-37 limits the utility's role in directing the audit while requiring full cooperation with audit requests.[129] Utilities must provide requested information, records, and personnel necessary to support the audit.[130] This framework establishes a foundational mechanism for verifying compliance with

[124] *Ibid.*
[125] *Id.* at 23.
[126] *Ibid.*
[127] *Ibid.*
[128] *Ibid.*
[129] *Ibid.*
[130] *Id.* at 23-24.

Commission directives and safeguarding ratepayers from bearing costs that do not satisfy those requirements.

B. The Audit Process Serves a Central Function in Ensuring EUP Costs Borne by Ratepayers Are Just and Reasonable.

The specific method the auditor will use to verify whether the costs of underground projects recovered in the one-way balancing account met the Commission's primary and secondary objectives will be decided in this proceeding.[131] SPD-37 requires the IOUs to propose, as part of the instant Phase 1 Application, a detailed methodology for verifying compliance with the Phase 2 Conditions and the audit's secondary objectives.[132] The audit methodology serves as a critical ratepayer protection and therefore must be transparent, objective, and known in advance to both utilities and stakeholders.

As SPD-37 explains, establishing the audit methodology upfront provides clarity regarding the expectations of the audit process, and enables auditors to efficiently evaluate whether costs were appropriately recorded in the balancing account.[133] Accordingly, SPD-37 requires that the IOUs propose a detailed methodology for validating compliance with each of the Commission's approved safeguards. For the primary objectives, this method must include an approach for:

> a. Verifying that the total annual costs did not exceed the approved cost cap for a given year of the EUP (Condition #1);
>
> b. Verifying that any third-party funding obtained was applied to reduce the established cost cap for the specific year in which the third-party funding was obtained (Condition #2);

[131] *Id*. at 22.
[132] *Id.* at 29.
[133] *Ibid.*

c. Determining that the average recorded unit cost for all projects completed in any given two-year period did not exceed the approved average unit cost cap (Condition #3);

d. Determining that the average recorded CBR for all projects completed in any given two-year period equals or exceeds the approved threshold CBR value. (Condition #4).[134]

For the secondary objectives, this method must include an approach for:

e. Verifying that a project is used and useful.

f. Verifying the incrementality showing found in Application Requirement No. 2.[135]

These objectives are central to protecting ratepayers and ensuring that only prudently incurred and Commission-compliant costs are ultimately recovered through rates.

C. The IOUs' Proposed Use of AICPA Consulting Standards Improperly Affords Auditors Discretion Over Commission-Approved Audit Methodologies

The IOUs propose that the auditor be required to meet American Institute of Certified Public Accountants (AICPA) Consulting Standards.[136] The IOUs argue that the AICPA Consulting Standards provide auditors with flexibility and "professional judgement in determining the appropriate procedures and methodologies to assess recovery of costs through a one-way balancing account."[137] However, the Commission, not the auditor, establishes the procedures and methodologies governing the audit. That authority rests with the Commission, not the auditor, and should not be delegated through broad grants of professional discretion. Indeed, SPD-37 requires the IOUs to propose a detailed methodology for Commission review and

[134] *Ibid.*
[135] *Id.* at 23 ("Determine whether the recorded costs are incremental – and do not duplicate costs allowed through another decision, mechanism or received from a third party.").
[136] Application at 18.
[137] *Ibid.*

approval precisely so that the standards for evaluating cost recovery are determined through the Commission's regulatory process. The auditor's role is not to exercise independent discretion in selecting the criteria for review, but rather to apply the Commission-approved methodology and verify whether recorded costs satisfy the audit objectives established in this proceeding.[138]

Instead, the auditor should adhere to the Generally Accepted Government Auditing Standards (GAGAS), which are specifically designed to promote transparency, independence, and public accountability in oversight of government-regulated programs.[139] Given the potentially billions of dollars in EUP costs that may ultimately be recovered from ratepayers under the SB 884 program, GAGAS provides a more appropriate framework for the audit than standards that afford auditors broad discretion in determining the methodologies used to evaluate cost recovery. Further, Public Utilities Code Section 314.6, the statutory authority the Commission exercised in SPD-15 to establish the audit requirement, references the Commission's Standard Practice Audit Manual, which utilizes the GAGAS.[140] For these reasons, the Commission should reject the IOUs' proposed usage of AICPA Consulting Standards and instead require that EUP audits be conducted in accordance with already known and

[138] SPD-37 at 22.
[139] United States Government Accountability Office, *Government Auditing Standards*, 2018 Revision Technical Update, Apr. 2021 at 1 (available at: https://www.gao.gov/assets/gao-21-368g.pdf).
[140] *See* Pub. Util. Code § 314.6(d) ("Beginning January 15, 2020, and every year thereafter, the commission shall post on its internet website its standard practice audit manual, titled Utility Audit, Finance and Compliance Branch UAFCB Audit and Attestation Standard Practice, and updates to that manual, if any."); *see also* CPUC Utility Audit Branch, *Standard Practice Manual*, January 2026 at 2 ("UAB performs most of its audits and attestation engagements in accordance with generally accepted government auditing standards (GAGAS), which requires that we plan and perform the audit to obtain sufficient, appropriate evidence to provide a reasonable basis for any findings and conclusions based on the audit objectives.").

implemented GAGAS to ensure a consistent, transparent, independent, and rigorous evaluation of costs proposed for recovery from ratepayers.

D. Project-Level Auditing of Both Costs and Benefits Is Necessary to Ensure Compliance with SPD-37 and Protect Ratepayers

The IOUs strongly oppose auditing of individual projects or subprojects against EUP compliance criteria, including scrutiny of project BCRs less than 1.0, in preference for compliance evaluation performed at the aggregate portfolio level.[141] TURN[142] and Cal Advocates[143] both generally oppose portfolio-level auditing, in preference for retention of more granular project-level compliance auditing. Project-level compliance is consistent with the Commission's determination that "[a]ny proposed methodology shall apply to the project level..."[144] As TURN aptly observes, "[t]he Commission should absolutely evaluate forecast versus actual BCRs at the project level, especially since this is how undergrounding investments are evaluated for Commission approval in the first place."[145]

TURN and Cal Advocates have it correct. Projects with BCR less than 1.0 are not in compliance with the express language of SPD-37[146] and should not automatically be presumed to be eligible for cost recovery purposes via balancing account treatment. This is especially true if such sub-1.0 BCR projects are hidden within a portfolio of projects, or, if actual miles undergrounded is different than proposed, as emphasized by TURN.[147]

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[141] Application at 33.
[142] *See* TURN Comments at 10-12; *see also* TURN Reply Comments at 6-8.
[143] See Cal Advocates Response at 56-58 ("Because it can never be efficient for a subproject with a BCR less than 1 to be included in a portfolio, all subprojects should be required to have a BCR > 1; and any subproject with a BCR < 1 should be moved to the memorandum account for further evaluation.").
[144] *Id.* at 26.
[145] TURN Comments at 11.
[146] SPD-37 at 17.
[147] TURN Comments at 12-13.

In order for the auditor to faithfully measure IOU performance versus SB 884's mandate of cost-effectiveness,[148] auditing must be done at the project level, even if an IOU's overall compliance is assessed at the portfolio level. Indeed, SB 884 requires the IOUs to do a project-level evaluation of project costs and benefits as part of their EUP filing, so the granularity of those data should not be an impediment to robust auditing of actual costs and benefits achieved including supply chain economies of scale.[149] Adoption of Cal Advocates' mileage-weighted BCR compliance[150] based upon project-level BCRs should also be very feasible for both the utilities and the independent auditor(s) if project-level data are both included in EUP filings and tracked by the IOUs during project execution.

Regarding the specific audit framework to be applied by the auditor in determining utility compliance with a to-be-established portfolio BCR Threshold,[151] the IOUs recommend that the auditor review actual cost and "modeled or estimated benefits."[152] The IOUs further propose that the Auditor "should only audit costs (denominator) in the BCR calculation and not the risk reduction benefits (numerator),"[153] arguing that "[i]t is not possible for the utility to provide the actual risk reduction achieved."[154] Instead, the IOUs propose using estimated mitigation effectiveness, claiming that they cannot validate the actual risk reduction or the

[148] Pub. Util. Code § 8388.5(c)(2) ("Identification of the undergrounding projects that will be constructed as part of the program, including a means of prioritizing undergrounding projects based on wildfire risk reduction, public safety, cost efficiency, and reliability benefits.").
[149] Pub. Util. Code 8388.5(c)(6): "An evaluation of project costs, projected economic benefits over the life of the assets, and any cost containment assumptions, including the economies of scale necessary to reduce wildfire risk and mitigation costs and establish a sustainable supply chain."
[150] Cal Advocates Response at 12, 55-56.
[151] To be established in Phase 2 of this proceeding, see SPD-37 at 5.
[152] Application at 24.
[153] *Ibid*.
[154] *Ibid*.

O&M Savings achieved.[155] This argument further supports the recommendation of Staff, EPUC, and the other commenting intervenors that O&M Savings should be reflected as a benefit in the numerator. Since the IOUs claim they cannot validate actual O&M Savings, then those savings are speculative, and should not be counted as offsets to project capital and O&M costs in the BCR denominator, as described in Section II.B. above.

Indeed, the IOUs in their proposed BCR auditing framework highlight that they must provide the auditor with "Benefits Information – Mitigation effectiveness values, reliability benefits estimates, and/or other supporting information."[156] All benefits included in the BCR numerator (including O&M Savings if the Commission chooses to adopt Staff's recommended Method 3 BCR equation) should be subject to scrutiny by the auditor, even if modeled estimates must be used in the absence of recorded data.

The Commission should reject the IOUs' recommendation to exclude the benefits in the BCR numerator, including O&M Savings, from auditor scrutiny. Excluding the numerator, or benefit side, of the equation from the audit would hinder the Commission's ability to verify whether projected benefits used to justify the EUP expenditure actually materialized. It is imperative that the utilities be required to audit the benefits realized or expected to be realized from undergrounding investments to ensure accountability and validate forecasted benefits. The IOUs' proposed approach fails to promote cost-effective utility spending and robust after-the-fact auditing, and it would weaken ratepayer safeguards against unjust and unreasonable EUP costs.

[155] *Ibid*.
[156] *Id*. at 25, Table 6, row 4.

E. The Audit Framework Should Apply the Commission's "Used and Useful" Standard Rather Than Permit Utility-Specific Definitions

The IOUs propose an audit framework under which:

> [e]ach IOU determines if a project and/or subprojects is used and useful based on its own criteria," and the auditor merely "apply[ies] the individual IOU's criteria … to validate that each project and/or subproject meets the established used and useful criteria.[157]

This proposal improperly delegates to the utilities the authority to define a foundational ratemaking standard that has long been enforced by the Commission. TURN correctly observes that "[t]he IOUs should not have discretion when defining the term 'used and useful' for a project. The Commission has defined this on multiple occasions, and a common definition should be used across IOUs."[158] The "used and useful" doctrine is not a discretionary utility-specific policy choice, one that can simply be set aside. It is a well-established ratemaking principle that impacts whether utility investments are eligible for recovery from ratepayers. Indeed, the Commission "has closely adhered to the 'used and useful' principle, which requires that utility property be actually in use and providing service in order to be included in the utility's ratebase."[159] Allowing each IOU to develop and apply its own definition would undermine consistency across utilities, impair meaningful audit review, and create the risk that investments not yet providing demonstrable benefits to customers could nevertheless be deemed recoverable. The Commission should therefore make clear that its longstanding "used and useful" doctrine governs all EUP audits, and reject the IOUs' attempt to supplant the Commission's standard with utility-specific definitions.

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[157] Application 26.
[158] TURN Comments at 3.
[159] D. 84-09-089, 1984 Cal. PUC LEXIS 1013 at 72.

IV. ADDITIONAL COST RECOVERY CONDITIONS

SPD-37 reflects the Commission's expectation that EUP costs be evaluated using objective, measurable standards. The Commission directed the IOUs to propose additional portfolio or project-level conditions, together with numerical thresholds, to ensure that costs booked to balancing accounts are just and reasonable.[160] The IOUs must "address how an undergrounding project compares to alternative mitigations; conditions that address how the actual CBR of a project compares to its forecasted CBR; conditions that address how the actual unit cost of an undergrounding project compares to its forecasted cost."[161] These quantitative conditions must establish meaningful cost accountability and verification of EUP outcomes.

A. Allowing a Variance Threshold Would Erode Accountability for Cost-Effective Undergrounding Investments

The IOUs propose that "the SPD-37 conditions for cost recovery be revised to include a 2 percent cost recovery variance threshold."[162] The IOUs' proposed 2 percent variance threshold for annual cost caps, unit costs, and BCR values should be rejected because it would dilute the conditions expressly contemplated by SPD-37 and weaken ratepayer protections. The Commission required the IOUs to propose quantitative conditions and numerical thresholds precisely so that cost recovery eligibility could be evaluated against clear and measurable standards. Permitting a blanket variance would allow projects that exceed approved cost caps, fail to achieve required BCR thresholds, or surpass authorized unit costs, to continue recording costs to the balancing account without additional scrutiny. This approach would enable utilities

[160] SPD-37 at 30.
[161] *Ibid.*
[162] Application at 34.

to avoid the more rigorous reasonableness review associated with memorandum account treatment, and would diminish the effectiveness of the Commission's compliance framework.

The IOUs' assertion that forecasting challenges justify a variance threshold is unpersuasive.[163] Forecast uncertainty is not a basis for weakening the safeguards adopted to ensure that only prudent and cost-effective expenditures are eligible for cost recovery. If a project fails to satisfy a Commission-approved cost recovery condition, that project should be subject to further review, rather than shielded by an arbitrary tolerance band. Allowing a variance threshold would transform mandatory cost recovery conditions into aspirational targets, undermining the accountability and ratepayer protections that SPD-37 was designed to achieve. Further, any utility EUP spend in excess of cost caps can be recorded in the EUP memorandum account for reasonableness review there.[164] The Commission should therefore reject the proposed 2 percent variance threshold and require strict compliance with the cost recovery conditions established in this proceeding.

[163] *Ibid.*

[164] SPD-37 at 17, citing SPD-15 at 8 ("The memorandum account was intended for amounts above the one-way balancing account cost cap, and that review would "determin[e] whether the costs recorded in the memorandum account were prudently incurred, incremental to other funding granted to the large electrical corporation, and just and reasonable.'").

V. CONCLUSION

The Energy Producers and Users Coalition appreciates this opportunity to submit this opening brief.

Respectfully submitted,

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