June 9, 2023

TO PARTIES OF RECORD IN RULEMAKING 20-08-022:

This is the proposed decision of Administrative Law Judge (ALJ) Sophia Park and ALJ Garrett Toy. Until and unless the Commission hears the item and votes to approve it, the proposed decision has no legal effect. This item may be heard, at the earliest, at the Commission’s July 13, 2023 Business Meeting. To confirm when the item will be heard, please see the Business Meeting agenda, which is posted on the Commission’s website 10 days before each Business Meeting.

Parties to the proceeding may file comments on the proposed decision as provided in Rule 14.3 of the Commission’s Rules of Practice and Procedure (Rules).

The Commission may hold a Ratesetting Deliberative Meeting to consider this item in closed session in advance of the Business Meeting at which the item will be heard. In such event, notice of the Ratesetting Deliberative Meeting will appear in the Daily Calendar, which is posted on the Commission’s website. If a Ratesetting Deliberative Meeting is scheduled, ex parte communications are prohibited pursuant to Rule 8.2(c)(4).

/s/ MICHELLE COOKE
Michelle Cooke
Acting Chief Administrative Law Judge

MLC:nd3
Attachment
PROPOSED DECISION

BEFORE THE PUBLIC UTILITIES COMMISSION OF THE STATE OF CALIFORNIA

Order Instituting Rulemaking to Investigate and Design Clean Energy Financing Options for Electricity and Natural Gas Customers.  
Rulemaking 20-08-022

DECISION ON CLEAN ENERGY FINANCING PROPOSALS
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Table 1: Utilities’ Current On-Bill Financing Loan Caps and Loan Terms
DECISION ON CLEAN ENERGY FINANCING PROPOSALS

Summary

This decision authorizes the expansion of the on-bill financing programs for non-residential customers administered by Pacific Gas and Electric Company (PG&E), Southern California Edison Company (SCE), Southern California Gas Company (SoCalGas), and San Diego Gas & Electric Company (SDG&E) (collectively, the investor-owned utilities or IOUs) to support clean energy technologies beyond energy efficiency (EE). This decision also approves the proposal of the California Alternative Energy and Advanced Transportation Financing Authority (CAEATFA) to expand the clean energy technologies eligible under the California Hub for Energy Efficiency Financing programs.

This decision declines to adopt SoCalGas’ proposal to offer an on-bill financing program for residential customers; CAEATFA’s request for reauthorization for the Municipal Government, School, Hospital, and Large Commercial financing program; as well as the Local Government Sustainable Energy Coalition’s proposal to create a new decarbonization incentive rate.

This proceeding remains open to further develop a record and consider Tariff On-Bill (TOB) proposals, which would enable residential customers to finance EE or other clean energy technologies through a utility tariff. The IOUs are directed to establish a TOB Working Group within 45 days of the issuance of this decision. PG&E, SCE, SDG&E, and SoCalGas shall file a Joint TOB Proposal in this proceeding within 180 days of the issuance of this decision.

1. Background

The California Public Utilities Commission (Commission) has historically authorized regulated, investor-owned utilities (IOUs) to offer financial support to customers adopting energy efficiency (EE) and clean energy technologies in
compliance with state and federal legislation. In August 2020, the Commission launched the instant proceeding, Rulemaking (R.) 20-08-022, to evaluate the potential efficiencies of providing financing strategies that allow for larger or broader investments in multiple types of clean energy improvements. This rulemaking aims to ensure that the financing programs backed by ratepayer funding are targeted to attract investment by third-party partners to increase their efficacy and scope. Through this rulemaking, the Commission also sought to provide a venue for proposers to receive comments and consideration from the Commission, utilities, stakeholders, and the public on the implementation of new clean energy financing programs.

Comments and replies on the Order Instituting Rulemaking (OIR) were filed in September 2020 and October 2020, and a workshop was held on January 28, 2021, and January 29, 2021, to further define the procedural scope. Following the workshop, a prehearing conference was held on February 5, 2021, to address the issues of law and fact, determine the need for hearing, set the schedule for resolving the matter, and address other matters, as necessary.

On March 5, 2021, the assigned Commissioner issued a Scoping Memo and Ruling (Scoping Memo) setting forth the issues to be considered and a schedule

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1 A background of the Commission’s activities related to clean energy financing was provided as Section 2 of the Order Instituting Rulemaking 20-08-022, as issued by the Commission on September 4, 2020. The IOUs referenced throughout this decision are Pacific Gas and Electric Company (PG&E), Southern California Edison Company (SCE), Southern California Gas Company (SoCalGas), and San Diego Gas & Electric Company (SDG&E).

2 R.20-08-022 at 1-2. The Rulemaking was launched during the August 27, 2020 Commission meeting, and the OIR was formally issued on September 4, 2020.

3 R.20-08-022 at 2.

for the proceeding. The Scoping Memo structured the proceeding schedule along three tracks.

Track 1 was set to address near-term issues related to the California Alternative Energy and Advanced Transportation Financing Authority’s (CAEATFA) existing California Hub for Energy Efficiency Financing (CHEEF) programs. Track 2 was set to examine existing financing structures that the Commission should explore expanding or modifying to facilitate a more significant scale of clean energy investments. Track 3 was set to consider proposals for clean energy financing programs from utilities and other parties to this proceeding and to evaluate the most effective clean energy financing mechanisms.

On April 1, 2021, the assigned Commissioner issued a Ruling Seeking Party Feedback on the Track 1 Issues (Track 1 Issues Ruling) in this proceeding, related to extension and expansion of the IOUs’ existing clean energy financing programs that are administered by CAEATFA. Parties filed comments on the Track 1 Issues Ruling on April 16, 2021 and reply comments on April 30, 2021.

The Commission resolved the Track 1 issues in this proceeding through Decision (D.) 21-08-006, which: (1) granted a five-year extension for the existing financing programs administered by CAEATFA; (2) authorized up to $75.2 million in additional ratepayer funding to support the extended programs; and (3) authorized CAEATFA to leverage the technology platform it has established with ratepayer funds to use alternative, non-ratepayer funding resources to offer similar financing options to customers that receive non-IOU gas and/or electric service.

The assigned Commissioner issued an Amended Scoping Memo and Ruling (Amended Scoping Memo) on November 19, 2021. The Amended
Scoping Memo consolidated Track 2 and Track 3 to allow adequate time for the development of new financing options and stakeholder feedback before issuing a final decision. The Amended Scoping Memo asked that parties present new and additional financing options that incentivize or ease customers’ ability to adopt clean energy technologies, to decrease emissions, and aid California in reaching its decarbonization goals. The Amended Scoping Memo also asked the proposers to keep in mind various topics while designing the programs, including metrics, marketing and outreach, customer protections, alignment with other state programs or goals, rate impacts, and program scalability.

A virtual workshop was held on March 25, 2022, to allow parties to present and receive comments on their initial high-level clean energy financing proposals.

On April 15, 2022, clean energy financing proposals were filed by PG&E, SCE, SDG&E, SoCalGas, the Local Government Sustainable Energy Coalition (LGSEC), and Silicon Valley Clean Energy Authority (SVCE). On the same date, CAEATFA served its clean energy financing proposals.5

An additional virtual workshop on the proposals was held on May 12, 2022, to give the seven proposal proponents an opportunity to present their proposals and allow other parties to ask clarifying questions. Each IOU also hosted one or more community meetings on their respective clean energy financing proposals during May 2022. Based on the feedback from the workshop and community meetings, all the proposal proponents except for CAEATFA filed revised proposals on June 15, 2022.

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5 An Administrative Law Judge (ALJ) ruling on June 15, 2022 added CAEATFA’s proposals to the proceeding record for party comment.
Opening comments⁶ to the seven clean energy financing proposals were filed on June 28, 2022, and June 30, 2022, by SVCE, SoCal Gas, SCE, PG&E, National Diversity Coalition (NDC), RENEW Energy Partners (Renew), California Coast Credit Union, ENGIE North America, Inc. (ENGIE), First U.S. Community Credit Union (First U.S.), East Bay Community Energy, Travis Credit Union (Travis), Small Business Utility Advocates (SBUA), Prime Capital Funding (Prime Capital), Environmental Defense Fund (EDF), Rewiring America, San Diego Community Power, Gridium, Inc. (Gridium), and VEIC. Opening comments were also filed jointly by the National Consumer Law Center, California Low-Income Consumer Coalition, The Utility Reform Network, and Center for Accessible Technology (CforAT) (collectively, Joint Consumers) and jointly by the Greenlining Institute and Green for All.

Joint reply comments⁷ to the clean energy financing proposals were filed on July 21, 2022, by the County of Ventura and Association of Bay Area Governments (Local Governments). Additional reply comments were filed on July 22, 2022, by NDC, SCE, SBUA, LGSEC, PG&E, SVCE, SDG&E, SoCal Gas, EDF, the Joint Parties, VEIC, and joint reply comments were filed by Green for All and Greenlining Institute. CAEATFA also served reply comments on July 22, 2022, which were added to the record by an Administrative Law Judge (ALJ) ruling issued on May 24, 2023.

On March 22, 2023, the assigned ALJs issued a ruling seeking additional comment regarding proposals to expand non-residential on-bill financing (OBF)

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⁶ Unless otherwise specified, all citations to opening comments in this decision are to the opening comments filed on June 28, 2022 and June 30, 2022.

⁷ Unless otherwise specified, all citations to reply comments in this decision are to the reply comments filed on July 21, 2022 and July 22, 2022.
programs. On April 3, 2023, SCE, SoCalGas, PG&E, SDG&E, CforAT, and SBUA filed comments in response to the March 22, 2023 ruling. CAEATFA served reply comments to the ruling on April 6, 2023, which were added to the record by an ALJ ruling issued on May 24, 2023. NDC, PG&E, SoCalGas, SDG&E, and SBUA filed reply comments on April 10, 2023.

1.1. Submission Date

This matter was submitted on April 10, 2023 upon the filing of reply comments to the March 22, 2023 ruling.


PG&E proposes the development of a Clean Energy Financing Options (CEFO) Finance Platform (Finance Platform), which would allow third-party Financial Program Implementers (FPI) to propose and implement customer financing mechanisms, including tariff on-bill (TOB) and OBF.\(^8\) PG&E intends for the Finance Platform to attract outside debt funding, which will allow for the eventual displacement of customer program funding. PG&E states that the development of a scalable finance platform is an optimal way to attract outside investment, rather than at the individual customer or program level.\(^9\)

PG&E plans to develop Finance Platform rules, which will include guidelines and timing for program proposal submittal, details on how to calculate proposed program inflows and outflows, and program oversight details. PG&E plans to engage in a stakeholder process to finalize the platform

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\(^8\) PG&E’s Clean Energy Financing Options Program Proposal filed April 15, 2022 (PG&E Proposal) at 4-5.

\(^9\) Id. at 7.
rules and submit the rules for Commission approval via a Tier 1 advice letter.\textsuperscript{10} PG&E also intends to use a Tier 1 advice letter to update the platform rules as needed.

PG&E plans to leverage the Finance Platform to expand its OBF program offerings to non-residential customers, as well as allow for the implementation of TOB programs for residential customers.\textsuperscript{11} For programs developed in other Commission proceedings, PG&E proposes to submit each program to the Commission for approval via a Tier 1 advice letter.\textsuperscript{12} For programs not related to any other ongoing proceeding, PG&E intends to solicit programs through a single-stage request for proposals and requests authorization to submit the program for Commission approval via a Tier 2 advice letter.\textsuperscript{13} The advice letter would describe program details, responsibilities of the customer and outside debt funder, projected volumes and losses, and a lead sheet describing cashflows for the program.\textsuperscript{14}

PG&E contemplates a financing mechanism where defined program inflows are used to repay outside debt funding but ultimately any shortfall would be collected from customers or ratepayers so the debts are repaid in full.\textsuperscript{15} PG&E notes that in an extreme instance, customers or taxpayers could fund the

\textsuperscript{10} PG&E Clean Energy Financing Options Revision dated June 15, 2022 (PG&E Revised Proposal) at 5.

\textsuperscript{11} PG&E Proposal at 8.

\textsuperscript{12} PG&E Revised Proposal at 11.

\textsuperscript{13} Ibid.

\textsuperscript{14} Id. at 4.

\textsuperscript{15} Id. at 12-13. Program inflows include participating customer repayments, government subsidies, program benefits/avoided costs, and customer program funds. (Id. at 13.)
entire repayment.\textsuperscript{16} PG&E asserts that having the ability to collect from customers, if necessary, results in risk-minimization through the collective power of socialization of those costs amongst customers, without ever actually needing to collect those funds.\textsuperscript{17} PG&E proposes to file quarterly and annual reports that will highlight collection deficits, which will enable the IOUs and stakeholders to immediately identify program operations that need to be remedied.\textsuperscript{18}

At the time of its proposal, PG&E intended to seek ratepayer funding of up to $1.4 million in 2022 and $5.3 million in 2023 for platform development and oversight.\textsuperscript{19} PG&E also intended to seek funding from non-ratepayer sources prior to seeking ratepayer funding for the platform development costs.

PG&E requests authority to establish the CEFO Balancing Account to record costs for the CEFO programs, including costs to develop the Finance Platform and oversee programs.\textsuperscript{20}

We decline to authorize any ratepayer funding for development of the Finance Platform. With the exception of PG&E’s TOB and OBF proposals, there is a lack of specificity regarding what programs would be supported by the Finance Platform. Instead, PG&E defers many of the programmatic details, including customer protections, to be developed by third-party FPIs. Furthermore, although PG&E states it intends to rely on outside debt funding, there is no explanation as to how this funding would be sourced. The lack of

\textsuperscript{16} Id. at 12.
\textsuperscript{17} Ibid.
\textsuperscript{18} Id. at 13.
\textsuperscript{19} Id. at 10.
\textsuperscript{20} Id. at 4, 10. PG&E states it may establish the balancing account by using its existing EE Financing Balancing Accounts, with applicable subaccounts as necessary and renaming the accounts.
specificity is concerning given that PG&E proposes that any shortfalls ultimately be collected from customers (or taxpayers). Given the lack of details, we do not find that PG&E provides adequate justification for the platform. There is no indication that such a platform would be required to implement the TOB and expanded OBF programs that PG&E has specifically proposed. Other IOUs propose to implement TOB and expanded OBF programs without such a platform and it is unclear why one would be required for PG&E. PG&E’s specific proposals for a TOB and expanded OBF program are addressed below.

3. Proposals to Expand Non-Residential On-Bill Financing Programs

3.1. Overall Goals and Principles

In California, each of the major utilities administers an OBF program within its own territory. The OBF programs provide loans to qualified non-residential customers to pay for the costs of upgrades, currently limited to EE measures, which are then repaid through a fixed monthly installment on the customers’ utility bills. The OBF programs use ratepayer money to fund a revolving loan pool and offer no-interest, no-fee loans. There is no prepayment penalty and loans are not transferable. The loan charge holds equal priority to the energy charge, meaning failure to pay the OBF loan may result in energy service disconnection.

PG&E, SCE, and SoCalGas\(^2\) propose expansion of their non-residential OBF programs to support comprehensive clean energy projects beyond EE. SDG&E proposes a separate, more limited OBF program (the Clean Energy On-Bill Financing Program (CEOBF)) to provide financing to small and medium

\(^{2}\) SoCalGas calls its proposed expansion of the current OBF program, the OBF+ program. SoCalGas also proposes to create an OBF program for residential customers called OBF-Consumer. SoCalGas’ OBF-Consumer proposal is addressed in Section 4 below.
business customers to electrify existing natural gas water heating and space heating equipment. SDG&E proposes to offer CEOBF as part of the Business Customer Clean Energy Financing Program (BCCEF), which would also include various rebates and incentives to help offset a portion of equipment and installation costs, as well as education and outreach to EE program implementers and program participants.22

Expanding the existing OBF program to support technologies beyond EE has many advantages. Expanding the OBF program to support clean energy technologies will help to accelerate the state’s transition to clean energy and reduction of greenhouse gas (GHG) emissions. The expanded program would enable customers who may lack easy access to capital at attractive terms or have other priorities for capital to obtain no-interest, no-fee financing for clean energy projects, which are currently not available through OBF or other programs. Allowing customers to obtain financing for multiple technologies through a single program, as opposed to separate programs by technology, will also be more efficient and help reduce complexities for customers pursuing comprehensive clean energy projects.

The proposals build on past experience and leverage the established mechanisms and systems of the current OBF program. As of the end of 2021, PG&E’s OBF program has issued over 5,000 loans with a default rate of 0.007 percent.23 Since 2004, SCE’s OBF program has issued over 2,400 loans,

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22 SDG&E Revised Proposal at 1. The SDG&E Revised Proposal is included as Appendix A to SDG&E’s Clean Energy Financing Proposal Submitted Pursuant to the Assigned Commissioner’s Amended Scoping Memo and Ruling filed June 15, 2022.

23 PG&E’s 2021 Energy Efficiency Annual Report dated June 1, 2022, at 47. The annual report is available at: https://cedars.sound-data.com/documents/standalone/list/.
representing $99 million in funding, with a 0.7 percent default rate.\textsuperscript{24} Since 2007, SDG&E’s OBF program has funded over 1,600 loans totaling approximately $67 million with a default rate of less than one percent.\textsuperscript{25} To date, SoCalGas has originated approximately 110 loans and disbursed over $4.8 million in EE upgrades, with defaults accounting for less than one percent.\textsuperscript{26}

We find expansion of the existing OBF program to be a progressive step to further support and help accelerate achievement of the state’s clean energy and climate goals. Therefore, we authorize PG&E, SCE, SDG&E, and SoCalGas to modify their current OBF programs to support comprehensive clean energy technologies and projects beyond EE. We decline to adopt SDG&E’s specific proposal to provide financing limited to small and medium business customers to electrify existing natural gas water heating and space heating equipment. Under the expanded OBF program we authorize today, SDG&E is not precluded from offering this financing to small and medium business customers for electrifying heating equipment. However, we find that the expanded OBF program should not be limited to these customer segments and technologies.

We intend for the expanded OBF program to build upon and leverage the existing OBF program. Unless specifically modified by this decision or otherwise authorized by the Commission, the currently approved requirements of each utility’s OBF program shall remain in effect.

\textsuperscript{24} SCE Revised Proposal at 5. The SCE Revised Proposal is included as Appendix A to SCE’s Revised Clean Energy Financing Program Proposal and Community Engagement Feedback Report filed June 15, 2022 (SCE June 15, 2022 Filing).

\textsuperscript{25} SDG&E Revised Proposal at 12.

The expansion of the IOUs’ OBF programs is contingent upon receiving any necessary approvals from the California Department of Financial Protection and Innovation (DFPI), which regulates debt collectors. The IOUs are able to operate their existing OBF programs because they all have received an exemption from California lending laws from DFPI to offer no-interest, no-fee loans to non-residential customers for EE measures.\(^ {27}\) PG&E has already received DFPI approval to expand its OBF program to provide financing for comprehensive projects to enable resiliency through clean energy sources.\(^ {28}\) Additional authorization from DFPI may be needed for the other IOUs to offer an expanded OBF program that applies to non-EE technologies.

3.2. Program Requirements

3.2.1. Customer Eligibility

3.2.1.1. Credit Eligibility Criteria

The utilities’ existing OBF programs are available to non-residential customers who are in good credit standing with the utility. Each utility uses the customer’s bill payment history with the utility to assess the customer’s credit standing; the utilities do not use outside credit scores or debt-to-income ratios.\(^ {29}\) The utilities do not propose any changes to their customer credit eligibility criteria for expanded OBF.

As noted above, the default rates for the utilities’ existing OBF programs are low. Therefore, we do not find the need to impose any additional requirements with respect to the IOUs’ customer credit eligibility criteria.

\(^ {27}\) PG&E Proposal at 14; SCE June 15, 2022 Filing at 2, fn. 1.

\(^ {28}\) PG&E Revised Proposal at 6.

\(^ {29}\) PG&E Proposal at 25-26; SCE Revised Proposal at 21; SDG&E Revised Proposal at 20-21; SoCalGas Revised OBF+ Proposal at 9-10. SoCalGas’ Revised OBF+ Proposal is included as Appendix A, Attachment 1 to SoCalGas June 15, 2022 Filing.
In addition to meeting credit eligibility criteria, participating customers must confirm that the financed project would not have been undertaken in the same capacity if it was not for the availability of the OBF loan. Since the OBF loan pool is funded by ratepayers, to guard against potential waste of ratepayer-funded resources, the Commission has prohibited each of the IOUs from using OBF funds for EE projects that were already moving toward implementation absent OBF funding.\textsuperscript{30} For the same reason, this same prohibition shall extend to OBF funds for all technologies and projects eligible under the expanded OBF program.

\textbf{3.2.1.2. Bill Neutrality}

Each of the utility’s OBF programs currently pursues a goal of utility bill neutrality \textit{(i.e.,} the projected average monthly bill savings are equal to or exceed the monthly loan payments such that the customer’s utility bill is the same or less after completion of the project) to help mitigate financial impacts and maximize customer repayments.\textsuperscript{31} PG&E notes that OBF has historically used utility bill neutrality to measure customers’ ability to repay loans and proposes to continue to use this criterion for expanded OBF.\textsuperscript{32} SoCalGas also proposes to continue to target (but not require) bill neutrality in all instances.\textsuperscript{33}

On the other hand, SDG&E states that bill neutrality is not to be expected with respect to its proposal to replace existing natural gas water/storage and

\footnotesize
\textsuperscript{30} D.19-03-001 at 11.

\textsuperscript{31} PG&E Proposal at 25; SCE Revised Proposal at 38; SDG&E Revised Proposal at 11; SoCalGas June 15, 2022 Filing at 8. Although current OBF loans are calculated to be bill neutral, the actual bill may not result in bill neutrality if the installed equipment does not perform as estimated.

\textsuperscript{32} PG&E Proposal at 25.

\textsuperscript{33} SoCalGas June 15, 2022 Filing at 8.
space heating with electric heat pump technologies due to the high costs of the fuel substitution measures, including the potential need for customer panel upgrades, and the potential increase in electric consumption.34

SCE also states that it may be difficult or impossible to maintain the goal of bill neutrality with the expansion of the OBF program to include more technologies.35 SCE notes the difficulties in calculating a customer’s overall energy usage due to limited accessible information about customers’ non-electricity fuel usage. Despite potential difficulties in calculating bill neutrality in the short term, SCE expects customers who implement efficient clean energy technologies would save on overall energy costs in the long term as well as receive other long-term benefits. SCE’s view is that loosening the bill neutrality goals would be suitable for non-residential customers. However, given the potential increase in defaults, SCE proposes that appropriate protections be adopted, such as ensuring informed consent, limiting the expected increase to a customer’s bill to not more than 25 percent of a customer’s average bill over the prior 12 months, and requiring the customers and their contractors to perform financial analysis of the costs and benefits of the equipment.36

NDC argues that while bill neutrality is especially important for residential clean energy financing programs, it is also desirable for business customers, especially for small, medium, and hard-to-reach (HTR) businesses.37 In contrast,

34 SDG&E Revised Proposal at 14.
35 SCE Revised Proposal at 38.
36 Id. at 39.
37 NDC Opening Comments at 13.
EDF argues that net bill savings is a vestige from the EE approach and recommends the use of total energy burden as a more appropriate metric.\(^{38}\)

Although the utilities currently target bill neutrality in their OBF programs, this is not a Commission-imposed requirement. In considering a bill neutrality requirement for non-residential EE on-bill repayment (OBR) programs,\(^{39}\) the Commission noted that most businesses have access to more internal or external expertise on energy costs and usage impacts and can effectively evaluate the economic impact of the EE projects and associated financing costs.\(^{40}\) The Commission declined to adopt a bill neutrality requirement and instead required customers to receive an estimate of the bill impacts of the EE project to be financed to ensure customers are able to make informed decisions.\(^{41}\)

Targeting utility bill neutrality with respect to technologies other than EE may effectively result in few or no non-EE projects qualifying for financing. EE measures typically decrease energy usage, and therefore, generally provide energy bill savings to customers, which can offset loan costs. In contrast, bill savings or bill neutrality may not be possible with other clean energy technologies.

Moreover, with the expansion of technologies that will be eligible under expanded OBF, assessment of bill impacts based solely on the utility bill may not provide an accurate picture of a customer’s overall energy usage and costs. For

\(^{38}\) EDF Opening Comments at 4.

\(^{39}\) On-bill repayment is an arrangement by which a third-party lender provides the funds for the improvement and the utility collects repayment as part of the monthly bill. In contrast to OBF, the utility or its ratepayers do not provide the capital for the loan.

\(^{40}\) D.12-05-015 at 131.

\(^{41}\) Id. at 139.
example, a customer’s electric bill may increase due to the installation of electrification measures but the customer’s bills for natural gas and other fuel sources may decrease. However, there may be challenges for the IOUs to assess overall energy usage and costs since information regarding customers’ non-utility energy usage and costs, which is not readily available to the IOUs, would also need to be taken into account.

Recognizing differences in the needs of each IOU’s service territory, the Commission has given discretion to the IOUs to design the OBF program in their respective territories. The low default rates of the IOUs’ OBF programs demonstrate that the IOUs have prudently administered their programs. We do not preclude the IOUs from continuing to target (but not require) bill neutrality. However, with the expansion of OBF to include additional clean energy technologies, we encourage the IOUs to also consider non-utility sources of energy usage and costs, to the extent feasible, to obtain a more accurate estimate of a customer’s overall energy usage and costs, before and after a project. SCE’s proposal to loosen the bill neutrality target to 25 percent while maintaining other requirements, such as requiring customers to be in good credit standing and providing customers with the necessary information to make an informed decision, presents one viable solution to expand support for additional clean energy technologies while still providing reasonable safeguards for the program. As addressed below in Section 3.5 (Reporting and Metrics), we intend to monitor the impact of the expansion of OBF on the default rate and make adjustments to the program, if warranted.
3.2.1.3. **SDG&E Proposal to Limit to Small and Medium Business Customers**

Under SDG&E’s proposal, only qualified, small and medium business customers with a maximum monthly demand of 100 kilowatts and/or a maximum annual consumption of 250,000 therms would be eligible for financing.\(^{42}\) SDG&E proposes to reserve a minimum of 50 percent of the funds for underserved HTR customers in SDG&E’s service territory.\(^{43}\)

As noted above, SDG&E’s specific proposal to create a separate CEOBF program is rejected. However, to the extent SDG&E pursues expanded OBF, we do not preclude SDG&E from initially focusing on a particular segment within the non-residential class. Given limitations in the loan pool and resources, a focused effort may prove to be more effective in SDG&E’s territory and could provide learnings for the other IOUs.

San Diego Community Power seeks clarification regarding how SDG&E’s proposed program will be implemented for community choice aggregation (CCA) customers.\(^{44}\) SDG&E has clarified that its proposed BCCEF program would be available to both bundled and unbundled customers and that there would be no difference in program implementation, marketing and outreach, other program services, or requirements between bundled and unbundled customers.\(^{45}\) The same should hold true for SDG&E’s offerings under the expanded OBF program.

\(^{42}\) SDG&E Revised Proposal at 17.
\(^{43}\) Ibid.
\(^{44}\) San Diego Community Power Opening Comments at 3.
\(^{45}\) SDG&E Reply Comments at 4-5.
3.2.2. Project Eligibility

The IOUs’ existing OBF programs are limited to financing for EE measures. The IOUs have varying proposals for expanding their current OBF programs to support additional technologies and projects.

PG&E proposes that its existing OBF program be expanded to support comprehensive clean energy projects for PG&E’s non-residential customers.\(^{46}\) PG&E generally proposes that its expanded OBF program would support policy objectives, including resiliency, reliability, and decarbonization.\(^{47}\) However, PG&E’s proposal does not specify the types of technologies that would be eligible through its proposed expanded OBF program.

SCE proposes to expand OBF beyond EE measures to support building electrification (BE) and transportation electrification (TE) technologies that:

1. do not meet the eligibility criteria for the Zero-Emissions Truck, Bus, and Infrastructure Finance (ZETBIF) Program that was proposed as part SCE’s 2021-2024 Low Carbon Fuel Standard Holdback Implementation Plan on June 15, 2021, in Advice Letter (AL) 4518-E; and/or
2. for the financing or out of pocket project costs not covered by the ZETBIF Program or any available SCE incentive programs.\(^{48}\) SCE also states it may add other clean energy technologies as appropriate provided that the technologies contribute to meeting at least one of the state’s clean energy goals.\(^{49}\)

SoCalGas proposes to include all qualifying gas clean energy technologies in its expanded OBF program: (1) distributed energy (combined heat to power,

\(^{46}\) PG&E Proposal at 14.

\(^{47}\) Id. at 15.

\(^{48}\) SCE Revised Proposal at 52-53.

\(^{49}\) Id. at 11.
waste to power, fuel cells); (2) micro-grid and resiliency; (3) renewable natural
gas (RNG) (digester, biogas conditioners, renewable fuel technology); and
(4) RNG interconnections, compressed natural gas, and hydrogen (heavy duty
trucks and refueling stations) applications. SoCalGas also proposes that
individual qualifying projects would have to be tied to another qualifying clean
energy program (e.g., an EE loan would require participation in an EE incentive
program) and demonstrate a net GHG reduction.

ENGIE supports all the IOUs’ proposals to expand OBF. However, ENGIE
recommends that all the IOU OBF programs should not restrict the type of
Distributed Energy Resources (DER) technologies that would be eligible.
ENGIE argues that expanding OBF to apply to additional EE, BE, and TE
technologies would be popular among customers and enable more solutions that
would benefit the electric system as a whole while helping to advance
California’s climate goals.

EDF also encourages the Commission to expand the proposals submitted
in this proceeding to accommodate the expansion of energy usage as a clean
ergy finance strategy. In particular, EDF stresses the need for financing
solutions that would enable small commercial-level fleets operating
medium- and heavy-duty vehicles to finance electric charging service equipment

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50 SoCalGas Revised OBF+ Proposal at 11.
51 SoCalGas June 15, 2022 Filing at 9; SoCalGas Revised OBF+ Proposal at 9.
52 ENGIE Opening Comments at 4.
53 Id. at 4-5.
54 EDF Opening Comments at 4.
and other clean energy upgrades to promote their conversion to zero-emission vehicles.\textsuperscript{55}

In this proceeding, we seek to endorse financing strategies that will help California achieve its ambitious climate protection goals in the energy sector, including the decarbonization of the retail delivery of electricity by the year 2045, as articulated in Senate Bill (SB) 100 (De León, 2018) and Executive Order B-55-18, signed by then-Governor Brown. The purpose of this proceeding is not to develop clean energy policies, but rather to approve financing solutions that will complement and work synergistically with policy direction provided in other Commission proceedings and by other state agencies.

Therefore, in expanding the OBF program, we authorize the IOUs to expand OBF to any technology that supports Commission-endorsed clean energy policies, including but not limited to reduction of GHG emissions, building decarbonization, TE, resiliency, and distributed energy. For example, technologies that are incentivized or supported by other Commission-approved programs would be eligible for support under expanded OBF. Conversely, a technology that is inconsistent with policy direction provided by the Commission would not be eligible for OBF support (\textit{e.g.}, a technology would not be eligible under OBF if it has been deemed ineligible or support for the technology is being phased out of another Commission-approved program).

Prior to issuing any loans pursuant to an expanded OBF program, each IOU shall submit a Tier 2 advice letter setting forth the types of clean energy technologies that will be eligible under its expanded OBF program. The Tier 2 advice letter shall specify which clean energy policy the technology supports.

\textsuperscript{55} Id. at 7-10.
with reference to the applicable Commission decision or other authority endorsing the policy and/or technology. Loans issued under each IOU’s expanded OBF program shall be limited to supporting the clean energy technologies, which are approved via this advice letter process. Each IOU offering loans under an expanded OBF program shall submit a Tier 2 advice letter every two years to update the eligible technologies list.

3.2.3. Loan Terms and Repayment

Each utility’s existing OBF program has minimum and maximum loan amounts and maximum terms for the length of the loans. The Commission initially adopted maximum loan amounts and terms for OBF in D.09-09-047. In D.19-03-001, the Commission authorized PG&E to increase its OBF loan cap for business customers to $250,000, extend the loan term to 10 years, and increase the loan cap to up to $4 million per facility where there are exceptional unique opportunities to capture large savings and when all other terms are met.\(^{56}\) D.19-03-001 also authorized SCE, SoCalGas and SDG&E to submit advice letters to modify their OBF programs consistent with the modifications adopted for PG&E.\(^{57}\) SCE and SoCalGas subsequently submitted advice letters pursuant to the authorization in D.19-03-001. The utilities’ current loan caps and loan terms are as follows:\(^{58}\)

<table>
<thead>
<tr>
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<th>PG&amp;E</th>
<th>SCE</th>
<th>SoCalGas</th>
<th>SDG&amp;E</th>
</tr>
</thead>
<tbody>
<tr>
<td>Commercial Loan Cap</td>
<td>$5,000-$250,000</td>
<td>$5,000-$250,000</td>
<td>$5,000-$250,000</td>
<td>$5,000-$100,000</td>
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\(^{56}\) D.19-03-001 at 18, Ordering Paragraph (OP) 1.  

\(^{57}\) Id. at 18, OP 2.  

\(^{58}\) PG&E Electric Schedule E-OBF; SCE AL 4051-E; SoCalGas AL 5853-A. To date, SDG&E has not submitted any advice letter to request a change to its loan caps and loan terms.
SCE proposes to retain existing loan caps and maximum loan terms for the expanded OBF program but also requests authorization to submit a Tier 2 advice letter to modify the loan caps or loan terms for certain projects or entities.\(^{62}\) PG&E and SoCalGas note that potentially longer financing terms may be warranted depending on the technology.\(^{63}\) With respect to its proposal, SDG&E proposes to limit loans to a maximum loan term of five years.\(^{64}\)

SBUA argues that longer terms are better and that the terms should be long enough to provide positive cash flow for investment.\(^{65}\)

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\(^{59}\) EUL refers to the expected useful life of the bundle of proposed measures.

\(^{60}\) Loan maximum of $1,000,000 for the State of California.

\(^{61}\) Loan maximum of $1,000,000 for the State of California.

\(^{62}\) SCE Revised Proposal at 22.

\(^{63}\) PG&E Proposal at 20; SoCalGas June 15, 2022 Filing at 8.

\(^{64}\) SDG&E Revised Proposal at 29.

\(^{65}\) SBUA Opening Comments at 1.
ENGIE recommends that the financial cap for the non-residential OBF program be increased to at least $1,000,000 per project with terms out to 20 years to allow customers to expand the scale and type of clean energy solutions they can finance.\(^{66}\)

Increasing loan terms and maximum loan amounts may potentially increase the risks of customers defaulting. In the absence of a specific proposal from any of the IOUs to extend the maximum loan amount or term, and lack of information in the record regarding the EULs and costs of the additional technologies that will be found to be eligible under expanded OBF, we decline to extend the maximum loan amounts or terms at this time.

To the extent any IOU’s OBF program is not set at the maximum loan amount or term authorized by the Commission, per the authorization granted in D.19-03-001, the IOU may submit a Tier 2 advice letter to modify its OBF program consistent with the modifications adopted in D.19-03-001. Each utility may also file a petition for modification of D.19-03-001 and this decision if it believes that potentially larger financing amounts and longer financing terms are warranted based on the additional technologies ultimately approved for the expanded OBF program. In determining whether the maximum loan amount or term should be extended, we will consider whether the expansion of OBF has had any appreciable impact on the default rate.

The utilities’ existing OBF programs currently do not charge interest, fees, or prepayment penalties. PG&E is the only utility that proposes possible financing charges or interest payments subject to approval by DFPI.\(^{67}\) The other

\(^{66}\) ENGIE Opening Comments at 5.

\(^{67}\) PG&E Proposal at 14, 20; PG&E Revised Proposal at 7.
utilities propose to continue to provide OBF with no interest or finance charges or prepayment penalty.\textsuperscript{68}

SBUA notes the importance of a zero percent interest rate, especially for small businesses that may not have much capital.\textsuperscript{69}

We find that the OBF program should continue to provide loans with no interest, finance charges, or prepayment penalties. Adding financing charges and interest payments to OBF loans would fundamentally change the nature of the OBF program, which has always offered loans with no interest or fees. Moreover, it appears that such an offering would be duplicative of loans already available to non-residential customers through the existing OBR process.

3.2.4. Transferability

Under PG&E’s, SoCalGas’, and SDG&E’s OBF programs, the loans are non-transferable. Customers participating in the OBF program are required to repay the loan in full if they vacate the property.\textsuperscript{70}

Under SCE’s OBF program, when the premises are vacated, the debt obligation stays with the participating customer.\textsuperscript{71} However, the customer has the option to pay the loan balance, continue repayment through any other active service account with SCE, or transfer the loan to the new customer at the premises contingent on the new customer’s written agreement to assume the loan and satisfaction of OBF’s eligibility requirements.\textsuperscript{72}

\textsuperscript{68} SCE Revised Proposal at 19; SoCalGas Revised OBF+ Proposal at 6; SDG&E Revised Proposal at 11.

\textsuperscript{69} SBUA Opening Comments at 1.

\textsuperscript{70} PG&E Proposal at 23; SoCalGas Revised OBF+ Proposal at 9; SDG&E Revised Proposal at 15.

\textsuperscript{71} SCE Revised Proposal at 22.

\textsuperscript{72} Ibid.
No modifications have been proposed and the transferability provisions would remain unchanged for expanded OBF.

3.2.5. Program Delivery

Each IOU administers its own OBF program within its service territory. The utility oversees calculation of the eligible loan amounts, determines eligible measures for OBF, and enters into the loan agreement with the participating customer. The customer chooses and retains a licensed contractor to install measures, and the utility is not a party to the contract between the customer and its contractor. Under OBF, the participating customer owns and is responsible for any maintenance or repairs of equipment installed behind the meter (BTM).

Gridium recommends consolidating and having PG&E administer all OBF programs in the state.\textsuperscript{73} Gridium argues that having multiple program administrators (PA) means increased costs for implementers and customers, and that PAs have had varying degrees of enthusiasm and success.\textsuperscript{74}

The IOUs argue that it is not feasible or optimal to have PG&E run a statewide OBF program.\textsuperscript{75} We agree that the OBF programs should not be consolidated. OBF loan agreements are between the customer and IOU, and the OBF program relies on customer billing systems unique to each IOU.\textsuperscript{76} Furthermore, the IOUs have separate authorized OBF loan pools and the authorization from DFPI does not extend to providing OBF to customers of other IOUs.

\textsuperscript{73} Gridium Opening Comments at 10.

\textsuperscript{74} Id. at 11.

\textsuperscript{75} PG&E Reply Comments at 3; SCE Reply Comments at 12; SoCalGas Reply Comments at 8-9; SDG&E Reply Comments at 10.

\textsuperscript{76} PG&E Reply Comments at 3.
Therefore, we do not find that changes to how the existing OBF program is administered and delivered are warranted with respect to the expanded OBF program.

3.2.6. Coordination with Existing Incentives

SCE proposes that any program incentives that the customer is eligible for would still be delivered through the normal path for those incentives. SCE’s proposal would allow for financing options in addition to the current incentives offered through programs such as TECH Clean California, Self-Generation Incentive Program Heat Pump Water Heater, California Energy-Smart Homes Program, and other EE programs.

Under SoCalGas’ expanded OBF proposal, the OBF loan must be tied to another qualifying clean energy program. SoCalGas plans to retain the existing OBF model, where incentives or rebates are “delivered” via the connected clean energy program.

As part of CEOBF, SDG&E proposes to create the following incentives funded through non-ratepayer sources: (1) an Investment Incentive of up to 50 percent of electric panel upgrade costs; and (2) an Electric Credit to help offset higher installation costs when replacing gas equipment with electric heat pump technology. SDG&E plans to use a third-party implementer to oversee the coordination of the loan and incentives. Proposal participants would also be

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77 SoCalGas Reply Comments at 8-9; SCE Reply Comments at 12.
78 SCE Revised Proposal at 53.
79 SoCalGas Revised OBF+ Proposal at 11.
80 SDG&E Revised Proposal at 17, 27-28. SDG&E proposes to fund the Investment Incentive and Electric Credit by requesting an allocation from the State General Fund. Alternatively, SDG&E intends to seek other potential funding sources, e.g., Department of Energy or California Energy Commission (CEC) grants.
required to participate in an EE program to obtain rebates/incentives and agree to participate in an appropriate Demand Response (DR) program.\textsuperscript{81}

In the past, the Commission required that customers participating in the OBF program also participate in one of the IOU’s incentive programs.\textsuperscript{82} This is no longer a requirement of the OBF program, and we do not adopt such a requirement for the expanded OBF program. If, however, there is an applicable incentive or rebate program for a clean energy technology, which a customer seeks to finance through the OBF program, then it is reasonable for the IOU to require the customer to participate in that program in order to maximize savings for the customer, as well as to ensure the most efficient use of OBF funds, with the following exceptions: (1) OBF loans of more than $250,000 shall not be combined with rebates or incentives pursuant to the conditions set forth in OP 3 of D.19-03-001; and (2) customers participating in PG&E’s On-Bill Financing Alternative Pathway program\textsuperscript{83} are not required to participate in a rebate or incentive program. We expect the IOUs to directly provide customers or coordinate with contractors and implementers to provide customers with marketing, education, and outreach regarding available rebate and incentive programs. Consistent with past practice, any rebates or incentives should be delivered through the connected clean energy program and should not be accounted for in the OBF program.

\textsuperscript{81} SDG&E Revised Proposal at 23.

\textsuperscript{82} See OIR 20-08-022 at 16, fn. 18.

\textsuperscript{83} The Commission approved PG&E’s AL 3697-G/AL 4812-E and AL 3697-G-A/AL 4812-E-A setting forth the OBF-Alternative Pathway program effective July 1, 2016. The purpose of the program is to use metered energy data with an alternative OBF option to test whether financing alone without an incentive can support high EE projects.
To the extent SDG&E is able to secure non-ratepayer funding, we authorize SDG&E to offer the Investment Incentive and Electric Credit to qualifying customers in conjunction with an expanded OBF program. SDG&E shall account for any non-ratepayer funds separately from ratepayer funded OBF funds. SDG&E is authorized to create new balancing accounts or subaccounts in existing balancing accounts via a Tier 1 advice letter process to ensure the separate accounting of ratepayer and non-ratepayer funds.

3.3. Customer Protections

Customers participating in the OBF program can face financial risks, particularly if a project is not appropriately scoped, fails to perform as estimated, or does not produce the anticipated financial benefits. Failure to repay an OBF loan could ultimately lead to utility service disconnection in accordance with each IOU’s standard disconnection procedures.84

One of the benefits of expanding OBF is that OBF is an established program and the IOUs already have in place measures to mitigate risks to customers. As noted above, the IOUs’ existing OBF programs have a default rate of less than one percent. In determining eligibility for an OBF loan, each IOU considers the customer’s ability to repay the loan based on the customer’s payment history and standing with the IOU. Each IOU also considers the impact of the project and loan on the customer’s utility bill and pursues a goal of utility bill neutrality to help mitigate financial impacts and maximize customer repayments.85 The IOUs have additional risk mitigation measures, including

84 PG&E Proposal at 22; SCE Revised Proposal at 37; SoCalGas Revised OBF+ Proposal at 8; SDG&E Revised Proposal at 14.

85 PG&E Proposal at 25; SCE Revised Proposal at 38; SDG&E Revised Proposal at 11; SoCalGas June 15, 2022 Filing at 8. Although current OBF loans are calculated to be bill neutral, the actual bill may not result in bill neutrality if the installed equipment does not perform as estimated.
requiring the customer to sign and directly submit the OBF loan documents to the IOU, and marketing materials, disclosures, and other communications to provide information regarding the program and terms and conditions of the loan.86

PG&E contends that the current OBF program has been successful in mitigating customer risks, as evidenced by the very low customer default rate, and does not envision any changes to the customer protections for expanded OBF.87 SoCalGas also does not propose any additional customer protection measures with respect to its expanded OBF proposal.88

SCE does propose additional customer protection measures for expanded OBF. SCE states that it may be difficult or impossible to maintain the current goal of bill neutrality if the OBF program is expanded to include more technologies. In SCE’s view, given the potential benefits of expanding OBF to additional clean energy technologies, loosening the bill neutrality goals would be appropriate for non-residential customers, provided there are appropriate protections, such as ensuring informed consent, limiting the expected increase to a customer’s bill to not more than 25 percent of a customer’s average bill over the prior 12 months, and requiring the customers and their contractors to perform financial analysis of the costs and benefits of the equipment.89

For its proposal, SDG&E states it may consider a metric that looks at the percentage of the monthly loan repayment amount per total monthly bill as

86 SCE Revised Proposal at 37-38; SoCalGas Revised OBF+ Proposal at 8-9.
87 PG&E Proposal at 20.
88 SoCalGas Revised OBF+ Proposal at 8.
89 SCE Revised Proposal at 39.
another way to determine repayment ability.\footnote{SDG&E Revised Proposal at 15.} However, SDG&E does not make a specific proposal as to what percentage would be warranted. SDG&E also intends to provide a loan summary to customers detailing the total project cost, rebate/incentive amounts, the financed amount, and loan terms, as well as a disclosure highlighting the fact that converting a natural gas to a heat pump electric measure could lead to increased energy costs for the customer.\footnote{Ibid.}

Although the OBF program is well established with respect to EE measures, expanding the program beyond EE measures does potentially involve additional risks. EE measures typically decrease energy usage, and therefore, generally provide bill savings to customers. In contrast, bill savings or bill neutrality may not be possible with other clean energy technologies.

We do not find it necessary to adopt a bill neutrality requirement for non-residential customers participating in the expanded OBF program for the reasons discussed in Section 3.2.1.2 above (Bill Neutrality). The risk of defaults is already mitigated due to the IOUs’ credit eligibility criteria and assessment of the customer’s ability to repay the loan. Moreover, we expect that most commercial and institutional customers would have more access to the necessary expertise to effectively evaluate the economic impacts of clean energy projects and associated financing costs. Therefore, we emphasize the importance of providing non-residential customers with the necessary information regarding potential cost impacts and benefits to enable them to make informed decisions regarding which clean energy projects and financing to pursue. The IOUs have been providing or requiring contractors to provide this information as part of the
current OBF program and we expect that they will continue to do so for the expanded OBF program.

3.4. Budgets

The IOUs’ OBF programs currently use ratepayer funds to fund a revolving loan pool in which loan repayments are used to make additional loans in the future. Ratepayer funds also serve as a backstop for any defaults. The IOUs have varying proposals regarding the funding source and budgets for their expanded OBF programs.

3.4.1. Investor-Owned Utility Proposals

PG&E lends approximately $70 million per year based on the currently authorized loan pool. PG&E intends to request approximately $20 million for a TE OBF pilot via a Tier 3 advice letter through the Near-Term Priority Decision (D.21-07-028). PG&E then plans to leverage the CEFO Platform to match the initial $20 million with outside funding sources to expand the reach of the pilot. As discussed above, PG&E proposes to establish the CEFO Balancing Account to track and recover costs associated with the CEFO platform and multiple programs. PG&E proposes to collect additional ratepayer funds only if program inflows (from sources such as non-IOU debt, existing program funds, net customer repayments, federal and state subsidies, and avoided costs) are insufficient to balance outflows.

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92 PG&E Revised Proposal at 6-7.
93 *Id.* at 7.
94 *Ibid*.
95 PG&E Revised Proposal at 1, 8.
96 *Id.* at 9.
SCE proposes for its expanded OBF program to continue to be funded 100 percent from ratepayer funds through the Public Purpose Program (PPP) Charge. SCE estimates a budget of $16.7 million for the first year of the expanded OBF program, which includes $15 million already in SCE’s OBF loan pool balancing account and $1.7 million for operational costs. SCE requests authorization to use the existing EE loan pool balance to finance all clean energy projects that meet the updated program eligibility and does not seek additional ratepayer funding at this time. SCE forecasts that this budget will support 900 OBF loans during the first year of the program’s expansion: 245 EE projects, 459 BE projects, 108 TE projects, 76 EE/BE projects, and 12 EE/BE/TE projects.

SoCalGas’ current OBF program has a revolving loan pool of $10 million. SoCalGas proposes a combined loan pool of $50 million for its OBF+ and OBF-Consumer proposals. SoCalGas proposes to fund the increased loan pool from cap-and-trade allowance proceeds at $5 million to $10 million per year, for at least five years. SoCalGas estimates that the increased loan pool could support an additional 50 to 100 loans per year, depending on the timing and introduction of new technologies and subject to loans per year.

97 SCE Revised Proposal at 54.
98 Ibid.
99 Ibid.
100 Id. at 57.
101 SoCalGas AL 5853-A.
102 SoCalGas Revised OBF+ Proposal at 11.
103 Ibid.
104 Id. at 12.
SoCalGas has established the On-Bill Financing Balancing Account (OBFBA), which currently records the difference between ratepayer funding and actual loans provided to customers participating in the OBF program. SoCalGas proposes to use the OBFBA or a newly established balancing account, to track and record the requested cap-and-trade allowance proceeds, loans provided to customers participating in SoCalGas’ OBF+ and OBF-Consumer proposals, costs associated with loan defaults, and associated costs to administer the OBF-Consumer proposal.105

SDG&E’s current authorized revolving OBF loan pool is approximately $26 million.106 SDG&E requests a separate CEOBF loan pool of $4.5 million be created from ratepayer funds collected through electric PPP charges.107 SDG&E requests that program administration and management costs, billing system enhancements, the education and outreach component, and evaluation measurement & verification costs also be funded through the PPP charge.108 SDG&E also intends to request an allocation from the State General Fund for funding an Investment Incentive (total budget of $1.04 million to fund installations of electric panel upgrades) and an Electric Credit (total budget of $2.40 million to offset higher installation costs when replacing gas equipment with electric heat pump technologies).109 SDG&E’s proposed budget is for a

105 Id. at 14. OBF loan defaults in existing SoCal Gas’ existing OBF program are recovered through the Demand Side Management Balancing Account.

106 SDG&E April 3, 2023 Comments at 6.

107 SDG&E Revised Proposal at 25, Table 3.

108 Ibid.

109 Id. at 20, 25, Table 3. SDG&E’s proposal for the Investment Incentive and Electric Credit are addressed above in Section 3.2.6 (Coordination with Existing Incentives).
4-year program, with one year of preparation followed by three years of enrollments.

SDG&E proposes to establish the Clean Energy On-Bill Financing Balancing Account (CEOBFBA), which will be an interest bearing, two-way balancing account, to track the difference between ratepayer funding and actual loans provided to customers participating in the program. SDG&E proposes to file a Tier 1 advice letter within 90 days of the effective date of a Commission decision approving the program to establish the CEOBFBA. SDG&E requests that any undercollection in the first two years be allowed but that SDG&E would not collect over the four years in rates the total amount requested.

3.4.2. Funding Source

PG&E’s and SCE’s OBF loan pools are currently funded through PPP charges. SDG&E’s OBF program is funded through electric distribution and gas transportation rates and SoCalGas’ OBF program is funded through transportation rates. PG&E and SCE support the use of a single loan pool for both EE and non-EE technologies. SDG&E and SoCalGas propose separate loan pools be created for non-EE technologies and be funded through different mechanisms than their current OBF loan pools.

We find it preferable for each IOU to establish a single expanded OBF program. We expect that this will be more administratively efficient and streamline the application process for customers, particularly customers who are pursuing financing for comprehensive energy projects. Moreover, as discussed further below, funds currently authorized for the OBF program are not being

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110 SDG&E Revised Proposal at 26.
111 PG&E April 3, 2023 Comments at 2; SCE April 3, 2023 Comments at 2.
112 SDG&E April 3, 2023 Comments at 1; SoCalGas April 3, 2023 Comments at 3.
fully utilized and could be used to support additional clean energy technologies. Therefore, rather than create separate funding mechanisms and loan pools, we adopt PG&E’s and SCE’s proposals to use a single loan pool for both EE and non-EE technologies.

Except as noted below, we also find that the IOUs’ expanded OBF programs should continue to be funded through the same funding mechanisms currently funding their respective OBF programs. Use of the same funding mechanism is the most administratively efficient and no party identified any restriction that would prohibit using the IOUs’ current funding mechanisms to support non-EE clean energy projects.

SoCalGas proposes to use natural gas cap-and-trade allowance proceeds to fund the loan pool for non-EE technologies.¹¹³ Many parties support SoCalGas’ proposal to not seek additional ratepayer funds.¹¹⁴ While we support SoCalGas’ efforts to identify non-ratepayer sources of funding, we decline to adopt SoCalGas’ proposal to use cap-and-trade allowance proceeds for the expanded OBF program. There is a finite amount of cap-and-trade allowance proceeds and using the allowance proceeds for OBF would mean there are fewer proceeds available to be returned to ratepayers.¹¹⁵ Therefore, we direct SoCalGas to continue to fund the OBF program through transportation rates.

PG&E intends to pursue additional funding through the Near-Term Priority Decision (D.21-07-028), which PG&E will then leverage to obtain outside funding. We do not preclude PG&E from seeking additional funding through

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¹¹³ SoCalGas Revised OBF+ Proposal at 11.
¹¹⁴ See, e.g., CforAT April 3, 2023 Comments at 5-6; NDC April 10, 2023 Comments at 3; SBUA April 10, 2023 Comments at 2.
¹¹⁵ See D.23-02-014 at 3; D.15-10-032 at 35-36.
other ratepayer or non-ratepayer sources. This decision does not prejudge any ratepayer funding requests, which may be litigated and considered in other proceedings. As discussed below, PG&E shall ensure that any different funding sources are accounted for separately and that there is no comingling of ratepayer and non-ratepayer funds.

CforAT raises concerns about the focus on ratepayer funding and lack of clear pathways for non-ratepayer support for the non-residential OBF proposals. CforAT recommends that the Commission direct the IOUs to conduct a thorough review of potential state and federal funding streams available to support clean energy efforts and make specific proposals on potential public funding that may be available in conjunction with their proposed OBF expansions.

SDG&E states that it is exploring options for potential access to non-ratepayer resources, such as through participation in the CEC’s Request for Information on the Equitable Building Decarbonization Program. SDG&E also identifies other potential sources of federal and state funds, such as Federal Infrastructure Investment and Jobs Act funds, federal Department of Energy grants, and CEC grants. PG&E notes that SB 1112 (Stats. 2022) requires the CEC to take a number of steps relating to state and federal financing or

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116 PG&E indicates the use of private capital may result in participating customers paying fees for the loan as opposed to the current no fee program. (PG&E Proposal at 14, 20; PG&E Revised Proposal at 7.) As discussed above in Section 3.2.3 (Loan Terms and Repayment), we do not approve the use of fees for the OBF program at this time.

117 CforAT April 3, 2023 Comments at 3-6.

118 SDG&E April 10, 2023 Comments at 1-2.

119 SDG&E Revised Proposal at 10-11.
investment solutions that will enable entities, including electrical corporations, to provide zero-emission, clean energy, or decarbonizing building upgrades.\textsuperscript{120}

We direct the IOUs to identify and pursue non-ratepayer funding streams from federal and state sources, which are available to fund OBF, and to report on their efforts in their annual reports on the expanded OBF program addressed in Section 3.5, below. The IOUs shall ensure that any different funding sources are accounted for separately, including loan pool inflows and outflows, defaults, and administrative costs. In particular, each IOU shall ensure that there is no comingling of ratepayer and non-ratepayer funds. Each IOU is authorized to submit a Tier 1 advice letter to establish any necessary balancing accounts or subaccounts within existing balancing accounts to ensure the separate accounting of different funding sources.

3.4.3. Amount of Authorized Funding

With the exception of PG&E, the IOUs’ existing OBF loan pools are not being fully utilized. According to SCE, its authorized loan pool for its OBF program for 2018-2022 was $75,500,000, which was funded by unused funds from previous program cycles and loan repayments.\textsuperscript{121} As of December 31, 2022, SCE’s total available and unused OBF loan pool was $44,217,139 and an additional $54,000,000 from SCE’s EE Finance Programs Balancing Account has been allocated to fund the OBF for program years 2023-2027.\textsuperscript{122} SDG&E has a revolving authorized OBF loan pool of approximately $26 million and its current

\footnotesize{\textsuperscript{120} PG&E Revised Proposal, Appendix A at 2. SB 1112 was proposed legislation at the time PG&E filed its Revised Proposal but has since been enacted.}

\footnotesize{\textsuperscript{121} SCE April 3, 2023 Comments at 5.}

\footnotesize{\textsuperscript{122} Ibid.}
available and unused loan pool amount is $15,940,866.\textsuperscript{123} There is currently $8.8 million available in SoCalGas’ authorized revolving loan pool of $10 million.\textsuperscript{124} Since SCE’s, SDG&E’s, and SoCalGas’ previously authorized loan pools are not being fully utilized, we do not find an increase in the size of the loan pools to be warranted at this time.

PG&E states that the amount of loan reservations for EE projects as of December 31, 2022, exceeds the amount of funds in its OBF balancing account.\textsuperscript{125} However, PG&E does not make any specific request for additional funding for expanding its OBF program at this time but, as described above, instead intends to pursue other ratepayer and non-ratepayer funding. Moreover, funds that have been lent will be paid back (minus defaults), which will also replenish the account. Therefore, we do not find cause to increase the size of PG&E’s loan pool at this time.

Although we do not authorize any additional ratepayer funding at this time, as discussed above, the IOUs are directed to pursue non-ratepayer sources of funding to further support the program.

### 3.5. Reporting and Metrics

PG&E proposes various key performance indicators (KPI) to evaluate the health and success of each finance program and its proposed CEFO Platform overall.\textsuperscript{126} Examples of PG&E’s proposed KPIs include: cost effectiveness, administrative cost for program outflows versus project dollars, administrative costs for program inflows versus customer repayments, carbon emissions

\textsuperscript{123} SDG&E April 3, 2023 Comments at 6.
\textsuperscript{124} SoCalGas April 3, 2023 Comments at 6.
\textsuperscript{125} PG&E April 3, 2023 Comments at 4.
\textsuperscript{126} PG&E Revised Proposal at 31-34.
reduction, projected transactable grid benefits/customer cost, and customer participation details. PG&E states that its proposed metrics are examples, which may not apply to every program, and are subject to change.\textsuperscript{127}

SCE believes metrics should be discretely defined; driven by quantitative data; remove consideration of outside factors, where possible; and leverage any available data points and existing reporting.\textsuperscript{128} SCE identifies that there are challenges and limitations associated with the proper evaluation of its OBF expansion proposals, such as the fact that it is difficult to account for energy savings for fuels not provided by SCE and the fact that energy saving metrics may be calculated and reported through an underlying incentive program and not easily accessible to SCE.\textsuperscript{129}

In light of these considerations, SCE proposes to track metrics in the areas of financing product performance, customer profile, project and site information, and marketing education and outreach activities. SCE proposes the following KPIs for OBF: authorized loan pool amount, issued loans, fully repaid loans, defaulted loans, committed loans, outstanding issued loan balance, size of available loan pool, loans by market segment, and loans by technology type.\textsuperscript{130} SCE believes OBF expansion can begin within six months after a final Commission decision with the reporting of metrics following in the next year.\textsuperscript{131}

\textsuperscript{127} Id. at 31.
\textsuperscript{128} SCE Revised Proposal at 59-60.
\textsuperscript{129} Id. at 60.
\textsuperscript{130} Id. at 61.
\textsuperscript{131} Ibid.
SCE recommends the use of third-party evaluators to evaluate the success of the initial phase.\textsuperscript{132}

SoCalGas proposes the following KPIs for the expanded OBF program:\textsuperscript{133}

- Number of loans and loan amounts issued by sub-segment to measure whether the program is successful in delivering benefits and addressing specific market barriers;
- Net GHG reduction by site/total to measure whether the program aligns with local and regional clean energy goals;
- Number of defaults, late payments, and projects denied to measure whether and when the program needs to be reconfigured or closed; and
- Number of loans/projects in-progress.

SoCalGas proposes to provide quarterly and annual reporting, starting after the first full quarter of OBF+ program operation.

SDG&E proposes the following KPIs to monitor overall engagement, adoption, and success of SDG&E’s proposal: GHG emission and refrigerant reductions metrics, therm reduction/increase in electric load, number of participating customers, number of HTR/disadvantaged communities participating customers, and education and outreach metrics.\textsuperscript{134}

SDG&E also proposes that the following data be collected and reported: number of projects; number of projects that required panel upgrades; cost of panel upgrades; total project cost; loan applications initiated; time taken to process loans; completed issuance of loans; loans provided to HTR customers; number and total value of loans approved; number of abandoned loan

\begin{footnotesize}
\begin{itemize}
  \item \textsuperscript{132} Id. at 60.
  \item \textsuperscript{133} SoCalGas Revised OBF+ Proposal at 12-13.
  \item \textsuperscript{134} SDG&E Revised Proposal at 30.
\end{itemize}
\end{footnotesize}
applications and reasons for abandonment; loan amount, monthly payment, and loan period; and default rates and reasons for default.\textsuperscript{135}

SDG&E proposes that the final KPIs, data collection, and program reporting be determined in consultation with Energy Division and stakeholders.

The expanded OBF program is not a clean energy program in and of itself but is intended as a financing tool to support clean energy policies. Therefore, we find it appropriate for reporting on the program to focus on the program’s performance as a financing tool and use of ratepayer funds. We direct each of the IOUs to submit an annual status report on the expanded OBF program to the Commission’s Energy Division with the following information: annual authorized loan pool amount, number and dollar amount of issued loans, number and dollar amount of fully repaid loans, number and dollar amount of defaulted loans, number and dollar amount of committed loans, total outstanding issued loan balance, size of available loan pool, number and dollar amount of loans by market segment, and number and dollar amount of loans by technology type.\textsuperscript{136} If an IOU’s expanded OBF program has more than one funding source, the annual report shall provide the above information for each funding source. Each annual report shall be submitted by June 15 each year and

\textsuperscript{135} \textit{Id.} at 30.

\textsuperscript{136} The IOUs are currently required to file an annual status report regarding the OBF program with the Commission’s Energy Division, which may be included with the EE Annual Reports. (D.19-03-001 at 12.) The report must show default rates, energy savings, and the degree of free ridership, if any associated with EE projects financed through the OBF program. (\textit{Ibid.}) Since the expanded OBF program will include projects beyond EE, reporting on the expanded OBF program should not be included with the EE Annual Reports. However, the IOUs should continue to report on EE projects financed through the OBF program in their EE Annual Reports pursuant to D.19-03-001.
cover the previous calendar year. The information required in this report may be periodically updated by Energy Division.

As noted by SCE, there are challenges and limitations for an IOU to account for energy savings for fuels not provided by the IOU, as well as to account for energy saving metrics that may be calculated and reported through an underlying incentive program. There are additional challenges in developing metrics for energy savings or GHG emissions reductions given that the IOUs’ lists of technologies eligible for expanded OBF have not yet been established and multiple technologies or clean energy programs may be implicated. If a clean energy technology is eligible for a rebate or incentive through a clean energy program, the energy savings and/or GHG emissions reductions should continue to be calculated and reported through that program. As the eligible list of technologies for the expanded OBF program becomes more established, we may in the future consider whether it is feasible or necessary for the reporting on the expanded OBF program to report on energy savings or GHG emission reduction metrics.

4. Southern California Gas Company
   On-Bill Financing-Consumer Proposal

   As discussed above, the IOUs’ existing OBF programs are limited to non-residential customers. SoCalGas proposes to create a new OBF program for residential customers called OBF-Consumer. With the OBF-Consumer program, SoCalGas proposes to retain the key elements of the existing OBF program: zero percent interest, no fees, 100 percent financing, levelized payments, non-transferable, and a simple credit check based on bill history.\textsuperscript{137}

\textsuperscript{137} SoCalGas June 15, 2022 Filing at 10.
SoCalGas proposes that bill neutrality be a requirement of the OBF-Consumer program, at least in the initial stages of the program, because it has proven to be a great proxy of a customer’s ability to repay a loan.\footnote{Ibid.} Since non-EE technologies may not meet bill neutrality requirements, SoCalGas proposes to initially limit eligibility to EE measures (tied to approved programs).\footnote{Id. at 11.} Intended eligible measures include water heating, space heating, solar thermal, pool heaters, standby generators, and later fuel cells.

SoCalGas notes there are potentially substantial legal and regulatory implications and obligations, which could prohibit the program’s implementation or limit its application.\footnote{Id. at 7-8.} SoCalGas notes that licensed debt collectors are subject to substantial compliance obligations pursuant to the California Debt Collection Licensing Act. There are also several federal laws governing consumer lending, which may impose additional requirements.

The Joint Consumers point out that, although SoCalGas notes consumer lending laws may apply, SoCalGas has not yet been able to determine its responsibilities and it is unclear what customer protections would be available to participants under the OBF-Consumer program.\footnote{Joint Consumers Opening Comments at 21-22.} The Joint Consumers argue that substantial improvements to SoCalGas’ proposal are needed if the Commission seeks to consider the proposal.

We agree with the Joint Consumers that there are many details of the OBF-Consumer program, particularly relating to consumer protections, that would need to be developed and addressed in order for the Commission to

\footnote{Ibid.}

\footnote{Id. at 11.}

\footnote{Id. at 7-8.}

\footnote{Joint Consumers Opening Comments at 21-22.}
approve the program. As addressed in Section 5 below, the Commission in this proceeding is considering several proposals for a TOB model for financing for residential customers. SoCalGas has not proposed a TOB program and raises concerns regarding the feasibility and risks of implementing a TOB program. However, SoCalGas states it is open to exploring the TOB model.\textsuperscript{142} As discussed further below, we require SoCalGas to participate in a TOB Working Group and to file a Joint TOB Proposal with PG&E, SCE, SDG&E, and SVCE for the Commission’s consideration. Given the work on TOB that is ongoing, we decline to adopt SoCalGas’ proposal for a separate residential financing program at this time.

5. Tariff On-Bill Proposals

The OIR listed TOB as one of the financing mechanisms that proposers should consider in determining how to best support customer investment in energy savings or technologies producing clean energy. The OIR defines TOB (or Tariff-Based Recovery) as an opt-in tariff that allows customers to pay for EE or related technologies without any out-of-pocket expenses or incurring debt.\textsuperscript{143} This type of proposal is most beneficial where the energy cost reduction to the customer is greater than the cost of repayment for the improvements. The utility finances qualifying technologies generally through its own capital. The investment by the utility is seen as increasing the energy performance of homes and buildings and is recognized as a system reliability investment, allowing the utility to utilize its authority to add a tariff for the investments to the bill of the customer as the cost recovery mechanism. The investment is tied to the meter of

\textsuperscript{142} SoCalGas June 15, 2022 Filing at 8.

\textsuperscript{143} OIR 20-08-022 at 8.
the property and is transferable with the sale of the property or resumption of utility service by a new customer at the location of investment. To institute the new tariff, the utility first must receive approval from the Commission.

Following the clean-energy financing proposal development process described above, proposals for new TOB programs were submitted by PG&E, SVCE, and SCE on April 15, 2022, with revisions submitted by PG&E, SVCE, and SCE on June 15, 2022. This section will first describe the TOB proposals and then provide a review of comments. At this time, the Commission directs the IOUs to work with SVCE to create a working group to continue to develop the TOB proposals, with a requirement that the IOUs and SVCE file a Joint TOB Proposal in this proceeding within 180 days after the issuance of this decision.

5.1. Pacific Gas and Electric Company Tariff On-Bill Proposal

PG&E states that its proposed Finance Platform will ease the expansion of its OBF program as well as the creation of TOB programs. In its original proposal, PG&E did not propose its own TOB program, and instead stated it would aid in the development of the SVCE Proposal (discussed below in Section 5.3) and any others that may be proposed by FPIs. In PG&E’s Revised Proposal, it stated that the Fixed Power Solutions program included in its 2022 Wildfire Mitigation Plan and 2023 General Rate Case (GRC) could be integrated into the Finance Platform to provide residential customers with the opportunity to utilize a direct install program, leveraging funding from the Fixed Power Solutions and Self-Generation Incentive Program funding. PG&E requests that the Commission approve a process by which PG&E can consider and approve financing programs via a Tier 2 advice letter process.

144 PG&E Revised Proposal at 6.
PG&E envisions that any participating TOB programs would allow residential customers to pay for improvements through a tariffed service charge on their utility bill. The charge would be for a specified amount and time period. PG&E would rely on FPIs to confirm program benefits, conduct contractor oversight, apply consumer protections, and ensure compliance with laws and regulations. FPIs would also be tasked with calculating program benefits/avoided costs and arranging federal and state incentives.

PG&E plans to utilize the Energy Finance Line-Item Charge or Line-Item Billing functionality in its system to track TOB charges. PG&E’s Proposal would allow for transferability of charges but does not require obligatory assumption of the TOB charge. PG&E believes this will incentivize FPIs to only support DER deployment that provides long term value to both customers and the grid. PG&E would require FPIs to have a protocol for dealing with customers that do not wish to continue with the charge, which could include disabling or removing the equipment asset. Penalties for non-payment could include disconnection or any other actions that would occur if a customer did not pay their energy statement. To discourage this outcome, PG&E states that FPIs should be required to conduct an affordability review with each customer, to ensure bill-neutrality and income reasonableness. PG&E also plans to have FPIs monitor customer bill impacts following installation. Customer agreements should specify asset performance levels as well as customer options if assets do not meet performance expectations.

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145 PG&E proposes a draft TOB tariff in its initial PG&E Proposal, Attachment B.
146 Id. at 20.
147 Id. at 22.
148 Id. at 23.
The FPI will be left to develop a number of program design specifics, including customer eligibility standards, credit checks, debt ratios, energy savings calculations, and DER eligibility. The FPI will be responsible for all program marketing and should include community-based organizations (CBO) in the process. PG&E also does not believe that IOU-ownership of BTM assets would be necessary, but notes that the final structure of outside debt funding would ultimately dictate the type of accounting needed.

PG&E does not have projected benefits, savings, or program duration at this time, as this will mainly be determined by FPI program specifics. Additionally, PG&E does not propose specific KPIs and/or metrics at this time. PG&E states that the FPIs must track program funding flows, to ensure that programs are adequately meeting debt obligations imposed by outside debt financing.\textsuperscript{149} PG&E notes that intervenors highlighted the need to ensure customers of all classes can participate in these programs, institute rigorous customer protections, incentivize contractor participation, and involve CBOs in the process.\textsuperscript{150} To solve these and other issues, PG&E asks for the creation of an ongoing stakeholder engagement process, facilitated by PG&E and CBOs, in coordination with the Energy Division. PG&E requests funding to compensate the CBOs for their participation in this stakeholder process.\textsuperscript{151}

PG&E’s proposal for funding the Finance Platform is described in Section 2 above. As with other CEFO programs, PG&E proposes for TOB program costs to be covered by outside debt funding, which will be repaid with program

\textsuperscript{149} PG&E proposes a number of KPIs that could be used to track program inflows (see id. at 32-34).

\textsuperscript{150} PG&E Revised Proposal at 3-4.

\textsuperscript{151} Id. at 4.
inflows, but any shortfalls would need to be covered by ratepayers or taxpayers.

5.2. Southern California Edison Company Tariff On-Bill Proposal

SCE submitted an initial Clean Energy Financing Proposal on April 15, 2022, and a Revised Proposal on June 15, 2022. SCE’s TOB Program proposal (SCE TOB Proposal) seeks to enable greater residential adoption of clean energy technologies and advance the state’s decarbonization goals. The program would provide utility investment for EE and BE measures in homes and other clean energy technologies. This financing would be recovered through a tariff service charge, added to the SCE electric meter for the site, meaning any financial obligation created by the installation of technologies pursuant to the program would be the obligation of any future customers at the site as opposed to running with the specific customer. The TOB service charge would continue until the costs incurred by the utility have been fully recovered. The TOB program would be administered by SCE, with a third-party program implementer responsible for customer outreach, project development, hiring solution providers, verification of project installation, maintenance and repairs, and measurement and verification of projects through the recovery period.

SCE TOB Program participants will include property owners as well as renters (single family, multifamily, mobile home) with landlord approval. Credit

152 Inflows include customer repayments, government subsidies, program benefits/avoided costs, and customer program funds. (PG&E Proposal at 12.)
153 Ibid.
154 SCE Revised Proposal at 13.
155 Ibid.
156 Id. at 25.
verification would be completed based on customers’ individual payment history and standing with SCE. Participants would enter into an agreement with SCE, noting the total amount authorized to be paid for eligible improvements at the site through the TOB program, the amount of the monthly tariff service charge, and the number of expected billing cycles over which the tariff would apply to service at that location.

Ownership and maintenance of the technology would be the responsibility of the property owner. SCE plans to focus on the installation of technologies that will be cash positive at each site, when considering total energy cost savings due to the technology.\textsuperscript{157} Cash positivity, or bill neutrality, protects customers by ensuring their bill does not increase due to the installation of the technology. These technologies will include EE and BE, with the potential to include others that contribute to meeting the state’s clean energy goals.

Financing terms will be dictated by expected savings as well as the expected useful life of the installed technologies.\textsuperscript{158} Subsequent service account holders would pay the tariff as part of their energy bill, with SCE giving notice of the tariff upon account change.\textsuperscript{159} Pauses in active account status at a site would pause the investment recovery period. If the technology becomes non-operational for reasons other than customer negligence or wrongdoing, the

\textsuperscript{157} Id. at 13, 51. In order to determine cost savings of a TOB project, factors considered may include the technology being installed, climate zones, estimated useful life, hours of operation, and anything else that can impact overall energy usage and customer bill costs. SCE notes that it may be challenging to estimate these costs.

\textsuperscript{158} Id. at 14.

\textsuperscript{159} Id. at 25.
tariff service charge would end, and SCE would seek reimbursement from the program implementer, with ratepayer funds as a backup.\textsuperscript{160}

SCE states that it is considering giving current customers of record or property owners the option to pay off all unbilled TOB cost recovery charges (pay off the technologies) at once prior to transition of service to a new customer. Service would be disconnectable, consistent with any current standards regarding lack of payment. Partial energy bill payments would be allocated proportionally between the TOB service charge and the other energy charges on the bill.

SCE forecasts a total of 2,571 projects over the initial three years of the program.\textsuperscript{161} SCE forecasts natural gas savings in the total of 1.04 million therms based on its proposed TOB program, and an increase in electric usage of 4.7 million kilowatt-hours. SCE notes that there is no precedent for the model and any savings are aspirational.\textsuperscript{162}

With regards to KPIs, SCE proposes to work with the program implementers and a third-party evaluator to track tariff pool amounts, financed projects, fully recovered investments, unrecoverable investments, number of transferred tariffs, financial impacts on customers, committed investment amounts, outstanding tariff investment balance, size of available tariff pool, project types (by market and by technology), and disadvantaged community

\textsuperscript{160} Id. at 25-26.
\textsuperscript{161} Id. at 56.
\textsuperscript{162} Ibid.
investments.\textsuperscript{163} SCE also notes a number of confounding factors that could prevent accurate analysis of these metrics.\textsuperscript{164}

To implement the program, SCE seeks Commission approval to place TOB charges on customer utility bills as a charge related to the provision of electric service, not as a loan obligation. SCE notes that its TOB proposal is still in the early concept phase.\textsuperscript{165} It has not provided a draft tariff for consideration at this time.

5.2.1. Southern California Edison Company Tariff On-Bill Program Funding

SCE’s TOB Proposal requests that initial funding for the capital and administrative costs for the program come from ratepayer funds, in the form of capital raised in the normal course of business. Such investments would be authorized by the Commission to receive regulatory asset treatment over the cost recovery period. With this funding SCE would create a funding pool and create an optional tariff for residential customers for the installation of clean energy equipment. Interest and finance charges would also be covered by ratepayer funds for the initial program phase. SCE projects a budget of $27.7 million for the first three program years at this time, but notes that this is a rough estimate.\textsuperscript{166} SCE would fund $20 million, while $7.7 million would come from ratepayers. As noted earlier, SCE would treat any investments as regulatory assets.

\textsuperscript{163} Id. at 61-62.

\textsuperscript{164} Id. at 60.

\textsuperscript{165} Id. at 3.

\textsuperscript{166} Id. at 53-54.
SCE believes that the TOB program must be both customer credit-neutral and technology-neutral in order to achieve the scale necessary to meet California’s clean energy goals. SCE presents a number of options for scaling up funding in the future, including IOU funding as a capital/regulatory asset, ratepayer funding, third-party private capital, and public funding.\footnote{167 Id. at 32-36.}

The first option proposed by SCE is IOU funding as a capital and regulatory asset. In this option, although SCE would not be the asset owner, SCE would create a regulatory asset equal to the amount of the financings that would earn the authorized rate of return and amortize based on TOB program participants’ expected payments of the service charges pursuant to the tariff. SCE notes that this prospect may be too costly for residential customers, unless ratepayers cover the cost of capital, either for all or low-income qualified customers.\footnote{168 Id. at 33.}

Another option is ratepayer funding, in which installed projects are expensed and immediately recovered from all customers through one-year recovery periods via balancing accounts. Ratepayer funding in this manner would exacerbate affordability concerns, as upfront payment by customers of infrastructure would significantly increase bill payments.\footnote{169 Ibid.}

The third option proposed is third-party private capital. This can include funding from banks, credit unions, or investment firms. Under this scenario, it would need to be determined who is borrowing the private capital, who pays the borrowing costs, and who bears the risks of charge-offs (or non-payment of the tariff service charge) that could impact loan repayment. SCE recommends that
the legislature authorize the utility to dedicate a specific revenue stream for the repayment of a debt security, which will allow for a lower interest rate. SCE recommends that the IOUs not be directed to borrow money solely to fund a TOB program, as the additional debt would be added to the IOU’s balance sheet, increasing the company’s leverage, hurting the IOU’s credit metrics and costs of future borrowing.170

Finally, SCE highlights public (government) funding as an option for funding its TOB program. Public funding through legislative or executive agency would mitigate risks posed by a TOB program as costs would be spread amongst a large group, allowing for more aggressive equity promotion in the program.171 However, if a smaller pool is dedicated to the program, it may be necessary to implement income caps to the program in order to ensure it reaches lower income brackets with the limited funding it is likely to receive.172

5.2.2. Southern California Edison Company Customer Protections

SCE notes that when designing the TOB program, there will necessarily need to be a balancing of TOB participant protections and potential costs to ratepayers (or whoever shoulders the risk of charge-off). If SCE’s TOB program mandates that installed technologies be cash positive, allows participation in all incentive programs, does not include disconnections, allows subsequent customers at a site to decline the tariff charge, and includes the cost of maintenance in the tariff charge, this would greatly reduce risk to TOB program participants, while increasing the risk of charge-off and decreasing program

170 Id. at 35.
171 Id. at 35-36.
172 Id. at 36.
participation. If SCE does not require bill neutral or cash positive outcomes, subjects customers to disconnection, requires subsequent occupants to pay the TOB tariff whether or not they received notice, and places maintenance requirements on the program participant, this would better protect and likely be less costly for ratepayers.\(^{173}\)

SCE recommends that the program include a fixed monthly tariff charge assigned to a location or meter, in order to remove the risk of a specific residential customer obligating itself to long-term debt even if the customer moves. SCE also believes that robust notice requirements will be necessary to ensure subsequent occupants are aware of the tariff charge. If proper notice is not given, SCE proposes that the prior customer or landlord be responsible for the entire obligation and indemnify SCE for any damages.\(^{174}\) SCE also recommends utilizing incentives and co-pays (by property owners, in the case of tenant account holders) to meet the goal of cash positivity. SCE also highlights the need for a capable program implementer who will enforce consumer protections, contractor standards, and perform accurate savings estimate verifications.\(^{175}\) SCE also highlights the need for a customer dispute resolution process.

Finally, SCE highlights the need for comprehensive customer outreach prior to TOB program enrollment, to ensure participants understand the responsibilities the program entails. SCE notes that it will work closely with CBOs to develop seminars, information packets, newsletters, and emails to

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\(^{173}\) Id. at 40.

\(^{174}\) Id. at 42-43.

\(^{175}\) Id. at 44-45.
conduct outreach.\textsuperscript{176} The TOB program implementer will also be required to conduct outreach with CBOs, churches, homeowners’ associations, and other local community groups to promote the TOB program.

5.3. **Silicon Valley Clean Energy Authority Tariff On-Bill Proposal**

SVCE states that its proposed TOB program is designed to prioritize decarbonization, scalability, customer protection, transparency, and equity. SVCE’s TOB proposal, initially submitted on April 15, 2022, with a Revised Proposal on June 15, 2022 (SVCE Proposal) functions similarly to PG&E’s and SCE’s proposals. SVCE will work with PG&E to invest in site-specific decarbonization technologies. TOB program investments shall run with the metered location rather than the individual. SVCE proposes that the tariff service charge implemented on a customer following TOB technology installation should be less than the cost savings for that customer, ensuring cash positivity.\textsuperscript{177} SVCE highlights the potential of this and other TOB programs to expand customer access to capital, including those customers that are typically disqualified from conventional loan and incentive programs due to underwriting criteria or property ownership requirements.\textsuperscript{178} SVCE also highlights the need to encourage additional decarbonization in order to reach California’s clean energy goals, beyond the types of historical grant programs previously implemented.\textsuperscript{179} SVCE notes that similar programs (based on the Pay As You Save® (PAYS)\textsuperscript{177} Id. at 1-11.

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\textsuperscript{176} Id. at 47.

\textsuperscript{177} SVCE Revised Proposal for an Inclusive Utility Investment Pilot, Attachment B (SVCE Revised Proposal) at 1-1 to 1-2. The SVCE Revised Proposal is included as Attachment B to SVCE’s Revised Proposal for an Inclusive Utility Investment Pilot filed June 15, 2022.

\textsuperscript{178} Id. at 2-21.

\textsuperscript{179} Id. at 1-11.
system) have been authorized in other states, including Missouri, North Carolina, and Virginia.\textsuperscript{180} A number of case studies have shown that PAYS systems are effective and have yielded savings for program participants.\textsuperscript{181}

SVCE asks that the Commission approve a PG&E Inclusive Utility Investment\textsuperscript{182} (IUI) tariff as laid out in the SVCE Proposal, direct PG&E to establish the necessary infrastructure to allow for third-party participation (including the SVCE Proposal) with PG&E’s proposed Finance Platform, allow for IOU cost of capital recovery on program participant installed technologies, and allow for utility investment with recovery via treatment as a regulatory asset, with other expenses chargeable to ratepayers. The SVCE Proposal would require the involvement of PG&E, as SVCE, a CCA, resides in PG&E’s territory. SVCE would rely on PG&E for certain aspects of program implementation. The SVCE Proposal is much more detailed and is closer to implementation than SCE’s and PG&E’s, as discussed below. However, the SVCE Proposal requires additional work with PG&E to finalize before it can be implemented.

\textbf{5.3.1. Silicon Valley Clean Energy Authority Proposal Details}

SVCE proposes to serve as the program implementer of a TOB (or IUI) program. As in the PG&E TOB Proposal and the SCE TOB Proposal, the SVCE Proposal would involve the implementation of an on-bill service charge connected to a specific utility meter or site.\textsuperscript{183} The charge would continue until

\begin{flushright}
\textsuperscript{180} \textit{Id.} at 2-25.
\textsuperscript{181} \textit{Id.} at 2-26.
\textsuperscript{182} As used in this decision, IUI shall mean a TOB program with certain design principles implemented, such as positive cash flow, automatic succession, and continued monitoring of energy usage after installation of technologies.
\textsuperscript{183} SVCE Revised Proposal at 2-21.
\end{flushright}
the cost of the installed technology is fully recovered. The SVCE Proposal would be technology neutral and could support decarbonization upgrades such as EE, BE, rooftop solar, and energy storage.\textsuperscript{184} Locations will be pre-qualified for investments based on bill savings opportunities; technologies would be owned by the property owner.\textsuperscript{185} Landlords will be required to co-pay for installed technologies that landlords are statutorily required to provide to tenants, which include space heating and hot water services. This will establish program funding while also aiding in renter participation in the program.

Participant qualification shall be based on bill repayment history.\textsuperscript{186} The SVCE Proposal limits the on-bill tariff service charge to a fixed amount less than the expected bill savings to the TOB customer. Cash positivity provides a number of programmatic benefits, including customer protection, equitable program participation, customer acceptance and understanding, and programmatic risk management.\textsuperscript{187} The charge shall be less than 80 percent\textsuperscript{188} of the customer’s predicted annual savings derived from the investment, and should not run for a period longer than the project’s estimated useful life.\textsuperscript{189} SVCE estimates that the proposal will reduce GHG emissions by 23,000 metric tons of carbon dioxide equivalents, and lead to a savings in natural gas of

\begin{itemize}
  \item \textsuperscript{184} SVCE Revised Proposal at 1-8, 3-54. These technologies could include smart thermostats, battery storage systems, electric cooktops, heat pump water heaters, service panel upgrades, solar panels, and heat pump air conditioning.
  \item \textsuperscript{185} Id. at 2-22.
  \item \textsuperscript{186} Id. at 2-46.
  \item \textsuperscript{187} Id. at 2-42.
  \item \textsuperscript{188} SVCE notes that this number may need field testing and will be re-considered after the pilot period (see SVCE Revised Proposal at 2-42).
  \item \textsuperscript{189} Id. at 2-22.
\end{itemize}
4,806 Mtherms. SVCE estimates this program will lead to savings of $1.45 million for participating customers, net of program service charges.\footnote{Id. at 1-13.} SVCE estimates that these savings will come from reductions in gas consumption, shifting of load to non-peak periods, EE, and shifting customer usage to lower electrification rates.\footnote{Ibid.} SVCE also provides the assumptions, calculations, and infrastructure costs used to calculate these savings.\footnote{Id. at 1-13 to 1-15.} SVCE states that natural gas costs are forecasted to remain volatile and increase at a rate faster than electric prices in the coming years.\footnote{Id. at 2-47.}

SVCE notes that its proposed TOB program differs from PG&E’s in that PG&E’s does not contain automatic succession (while SVCE’s does\footnote{Id. at 2-22.}); nor does PG&E’s TOB Proposal framework require bill savings. SVCE believes automatic succession of the tariff service charge is warranted in this case due to the program’s implied cost savings.\footnote{Id. at 2-46.} SVCE notes potential risks if occupancy or usage changes over time. For example, if the initial customer has more usage compared to subsequent residents, this will likely lead to reduced savings. SVCE states that it will attempt to mitigate this by implementing automatic succession of the tariffed charge as well as leveraging current usage and typical occupancy when calculating the tariff service charge for that location.\footnote{Id. at 2-47.} The SVCE Proposal, like SCE’s and PG&E’s, would have the utility treat any uncollectible

\begin{footnotesize}
\begin{enumerate}
\item Id. at 1-13.
\item Ibid.
\item Id. at 1-13 to 1-15.
\item Id. at 2-47.
\item Id. at 2-22.
\item Id. at 2-46.
\item Id. at 2-47.
\end{enumerate}
\end{footnotesize}
charges due to the TOB program in a manner similar to other uncollectible charges — as a cost of service to be recovered from ratepayers. Nonpayment could lead to disconnection, under the same provisions as any other electric service, although SVCE notes that the Commission could establish a less severe penalty.

SVCE requires PG&E participation in the proposal, as SVCE lacks the authority to adopt tariffs and obtain cost recovery. As envisioned by the SVCE Proposal, in the initial planning phase SVCE would be responsible for TOB program approval, development of program regulations and implementation, and securing operating funds. PG&E initially would be responsible for submitting its TOB Platform for Commission approval, adopting the TOB Program tariff proposed by SVCE (or making accommodating edits), establishing parameters for TOB Platform access, and conducting billing system upgrades to smooth out the program. SVCE highlights the fact that its TOB proposal will be reliant on integration with PG&E’s billing system and notes the need for Commission action to begin this process.

In the implementation phase, SVCE would begin marketing and outreach, hire and oversee a Program Operator, and transmit tariff service charge information to PG&E. PG&E would fund investments, recover its costs, and return revenues to capital providers. The TECH Clean California initiative

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197 SVCE notes that treatment in this manner will properly distinguish tariff service charges as cost recovery for utility investment, rather than a third-party debt. (See SVCE Revised Proposal at 2-30 to 2-31.)

198 Id. at 2-31.

199 SVCE Opening Comments at 6.

200 SVCE Revised Proposal at 2-22 to 2-23.
(TECH program) working with Energy Solutions would provide initial funding for SVCE’s Proposal as well as provide implementation support. The Program Operator hired by SVCE would be responsible for TOB program operations, including customer acquisition, quality control, contractor management, marketing, project assessment, and customer service. Customers shall be responsible for notifying the Program Operator of non-functioning equipment, and would be liable for improper maintenance or removal of any installed technologies.

SVCE provides a draft tariff laying out these provisions, and expects that it could work with PG&E to submit a Tier 1 advice letter to implement this tariff, following Commission approval. SVCE estimates approximately 6 months to program implementation, with a progress report two years after that. SVCE states that it does not believe DFPI approval for the program is needed, as this is not a consumer loan.

5.3.2. Silicon Valley Clean Energy Authority Proposal Customer Protections

SVCE proposes a number of customer protections for its TOB proposal:

- Partners shall verify that technologies are appropriate and that first-year measured and verified savings exceed the tariff service charge;

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201 The TECH program was authorized by SB 1477 (2018) to encourage electrification retrofits of space heating and water heating technologies. The Commission oversees the program in proceeding R.19-01-011.
202 Id. at 2-39.
203 Id. at 2-31 to 2-36; SVCE Opening Comments at 7.
204 SVCE Revised Proposal at 4-62 to 4-63.
205 Id. at 6-70 to 6-71.
206 Id. at 2-21 to 2-22.
• Mid-term increases in the tariff service charge are not permitted;
• Should the property fall vacant, charges shall be suspended and added to the cost recovery period;
• Charges shall be suspended if the installed technologies cease to work, until repair is completed;
• Early payment of charges is acceptable;
• Disconnection is the only consequence of non-payment;
• Program contractors shall be vetted to ensure qualifications and price-competitiveness;
• There shall be no end-of-lease charges or transfer of ownership financial obligation;
• Program Operator acquires customers and determines project scope, while installation costs are negotiated programmatically rather than by individual project. These costs would be pre-determined between SVCE, the FPI, and any participating program contractors. This protects program participants from being upsold unnecessarily;\textsuperscript{207}
• Ensuring that customer equipment functions properly by requiring 10-year warranties on installed technologies, labor warranties, and performing quality control inspections;\textsuperscript{208} and
• Hardship exemptions may be provided for payments due, for up to six months.\textsuperscript{209}

Subsequent customers shall receive a disclosure when applying for new service at an upgraded location. The disclosure shall state the types of upgrades made, the in-service date of the technologies, the cost of the monthly charge, and the expected date of completion for cost recovery (or directions for obtaining

\textsuperscript{207} \textit{Id.} at 2-40.
\textsuperscript{208} \textit{Id.} at 2-45.
\textsuperscript{209} \textit{Id.} at 2-46.
such information).\footnote{Id. at 2-49.} For rental property upgrades, landlords shall be required to notify tenants of the upgrades and lower operating costs.

### 5.3.3. Silicon Valley Clean Energy Authority Proposal Key

#### Performance Indicators and Metrics

SVCE proposes to track cost per metric ton of avoided GHG emissions, projected annual and lifetime utility bill savings, market share data, customer outreach and satisfaction, and contractor performance. To ensure programmatic equity, SVCE also proposes to track number of residential equity-targeted households served; expected first-year energy, GHG, and utility bill savings for equity-targeted participants; marketing effectiveness; the impact of billing history screening on customer eligibility and payment arrears; as well as health and safety benefits and issues related to installation. SVCE will also track energy and energy cost savings, average investment amounts, and customer, low-income, and renter acceptance rates.\footnote{Id. at 5-65 to 5-66.}

SVCE notes that savings estimates must be accurate to control for programmatic risk of charge-off or misallocation of funding. To mitigate these risks, SVCE proposes to apply CalTRACK protocols to screen candidates for baseline model stability, ensure Program Operators follow data collection protocols and utilize error detection software to avoid inaccurate engineering modeling, and ensure accurate savings estimates.\footnote{Id. at 2-44.} SVCE proposes to conduct post-facto analyses when estimates prove to over-estimate cost savings. SVCE also plans to conduct post-facto analysis of programmatic performance given
differing verification strategies.\textsuperscript{213} Energy savings will be calculated and tracked via CalTRACK hourly methods with a control group.\textsuperscript{214}

5.3.4. Customer Outreach

SVCE plans to initially target households with the greatest energy savings opportunities. SVCE plans to apply the CalTRACK analysis methods to customers’ historical energy usage, which will allow disaggregation of gas and electricity usage at the utility meter, in order to estimate potential savings due to EE or other improvements.\textsuperscript{215} SVCE states targeted households will initially be customers with annual base load natural gas consumption of greater than 360 therms per year for heat pump water heater installations, and for heat pump measures, targets of baseline annual cooling loads exceeding 1,600 kilowatt hour and baseline annual heating loads exceeding 400 therms.\textsuperscript{216} SVCE plans to initially focus on moderate- and middle-income single-family customers with aging mechanical systems that are not on a California Alternate Rates for Energy or Family Electric Rate Assistance rate, have homes smaller than 3,000 square feet, do not have a swimming pool, and are in a census track with an average household income less than 200 percent of area median income. In year two, SVCE will look to expand to multifamily dwellings and will reach out to low-income and other equity-targeted customers. CBOs will work to convey program benefits and increase program participation during this initial period, and may serve as a customer advocate in interactions with the program implementer.

\begin{footnotesize}
\begin{enumerate}
\item \textsuperscript{213} Id. at 2-45.
\item \textsuperscript{214} Id. at 3-52.
\item \textsuperscript{215} Id. at 2-49 to 2-50.
\item \textsuperscript{216} Id. at 3-51.
\end{enumerate}
\end{footnotesize}
5.3.5. **Funding**

SVCE estimates funding of $17.6 million\textsuperscript{217} over two program years to fund its TOB program, with funding coming from a combination of the TECH program (GHG reduction funds), monetization of grid benefits, utility incentives, and participants and ratepayers (including potential property owner co-pays).\textsuperscript{218} TECH program funding would help indemnify SVCE for up to $3 million for program costs that are due to poor savings estimates.\textsuperscript{219} SVCE does not believe a program fully funded by private capital would be optimal, as it estimates that savings from electrification alone will be insufficient to cover investment costs. SVCE contends that state policy goals support building decarbonization for environmental, health, grid, and economic benefits, and public funding is needed to ensure these programs reach customers and communities who have historically faced challenges participating in energy and environmental technology upgrade programs.\textsuperscript{220}

SVCE proposes a number of options for obtaining capital, including PG&E investment, the California Climate Catalyst Fund, and the United States Department of Energy loan guarantees. SVCE initially recommended that the Commission adopt a target cost of capital of three percent, as this amount properly reflects the lower risk that these investments present.\textsuperscript{221}

Ratepayers could be responsible for paying uncollectible cost recovery charges, incremental expenses to PG&E for service delivery, any cost of

\textsuperscript{217} Id. at 2-38.

\textsuperscript{218} Id. at 1-12.

\textsuperscript{219} Id. at 2-44.

\textsuperscript{220} Id. at 2-37.

\textsuperscript{221} Id. at 2-38. In its reply comments, SVCE stated that it was removing this recommendation.
third-party capital in excess of the proposed three percent target, and any rate of return the Commission approves.

5.4. General Party Comments on Tariff On-Bill

Parties had a number of general policy recommendations for the Commission to consider when reviewing TOB proposals. Many discussed the potential for TOB to aid in the electrification of households, which will aid the state in reaching its GHG reduction goals, provide health benefits by reducing pollution, and potentially provide bill savings to customers.\(^{222}\) Some parties highlighted the need to find financing solutions that would enable vehicle electrification, including small commercial-level fleets of medium- and heavy-duty vehicles.\(^{223}\)

Many parties highlighted the need to ensure that these programs are available for all Californians to participate in, and not just those who are already financially well-off.\(^{224}\) Scalability will both make the program more attractive for investment while also increasing inclusivity.\(^{225}\) Stringent consumer protections will be needed to incentivize customer participation.\(^{226}\) Parties were appreciative of the consumer protections proposed by SCE and SVCE,\(^{227}\) noting that such provisions should increase low- and moderate-income household TOB program participation. Some parties went further, recommending that the Commission standardize all TOB programs, to ensure maximum scalability, with variations

\(^{222}\) Rewiring America Opening Comments at 4-6; EDF Opening Comments at 2-5.
\(^{223}\) EDF Opening Comments; SBUSA Reply Comments at 2.
\(^{224}\) Rewiring America Opening Comments at 7-8; Greenlining Institute and Green for All Opening Comments at 12-13; Local Governments Reply Comments at 2-4.
\(^{225}\) Greenlining Opening Comments at 14-15.
\(^{226}\) Rewiring America Opening Comments at 12.
\(^{227}\) Id. at 7-8.
only for specific reasons such as tailoring to reach low-income or historically underserved customers.\textsuperscript{228} Such actions could include Commission funded risk-mitigation support to aid in the qualification of otherwise disqualifiable customers.\textsuperscript{229} Some parties recommended going beyond looking at bill savings to simply checking whether the investment promoted clean energies, even if it comes with a corresponding increase in billed energy costs.\textsuperscript{230}

However, others noted that low-income customers that are unable to participate in the proposed TOB programs and are left stranded on natural gas systems will have to pay increased costs for natural gas as others electrify.\textsuperscript{231} EDF and Joint Consumers suggested the possibility of geographic targeting of electrification, to counterbalance this risk. Parties also noted that the proposals should put greater protections in place for low-income participants, especially with knowledge of past experiences in the Property Assessed Clean Energy (PACE) loan programs, which often caused significant harm to low-income and otherwise vulnerable customers.\textsuperscript{232} For example, SCE’s TOB Proposal does not require advance notification to successors of program participants — only notification after move in. This could put new tenants into an unwelcome position that they otherwise would have avoided if notification had occurred when they were still considering housing options.\textsuperscript{233} Parties also noted that low-income customers are unlikely to even qualify for these programs, due to the

\textsuperscript{228} Rewiring America Opening Comments at 14.
\textsuperscript{229} Greenlining Opening Comments at 16-17.
\textsuperscript{230} EDF Opening Comments at 4.
\textsuperscript{231} Joint Consumers Opening Comments at 15.
\textsuperscript{232} Joint Consumers Opening Comments at 18-31.
\textsuperscript{233} Joint Consumers Opening Comments at 35.
lower energy bills some enjoy due to low-income customer support programs, and that the interactions between TOB proposals and these programs would need to be determined.\textsuperscript{234} Given these uncertainties, some parties suggest that the initial pilots focus on non-low-income customers initially.

Most parties were supportive of SVCE’s TOB Proposal to require bill savings (cash positivity) and automatic succession of the tariff service charge, stating that these requirements will ensure program effectiveness.\textsuperscript{235} SCE’s TOB Proposal requires cash positivity, which parties also appreciated.\textsuperscript{236} PG&E’s TOB proposal does not require cash positivity or automatic succession, which parties noted disagreement with, given the potential risks to participants (equipment removal) and to ratepayers (having to pay any remaining costs).\textsuperscript{237}

Parties applauded PG&E’s ambition and commitment to obtaining the third-party investment needed to scale the program.\textsuperscript{238} Parties also supported PG&E’s proposal to allow TOB program participants to monetize DR capabilities and other grid services,\textsuperscript{239} but noted they would like to see additional specific example calculations of potential savings.\textsuperscript{240} Parties also noted that PG&E seemed to raise issues with SVCE’s Proposal that PG&E did not provide

\textsuperscript{234} Joint Consumers Reply Comments at 9, 11.
\textsuperscript{235} NDC Opening Comments at 3, 6-7.
\textsuperscript{236} VEIC Opening Comments at 4.
\textsuperscript{237} NDC Opening Comments at 10-11, VEIC Opening Comments at 7.
\textsuperscript{238} Rewiring America Opening Comments at 8; NDC Opening Comments at 8-9; VEIC Opening Comments at 4.
\textsuperscript{239} Rewiring America Opening Comments at 8.
\textsuperscript{240} Greenlining Opening Comments at 23.
adequate reasoning for, including the potential for vague problems during Finance Platform implementation or resource allocation.\textsuperscript{241}

Some parties noted that the low initial investment by SCE and SVCE would be slow and unlikely to provide significant benefits in the initial pilot phases.\textsuperscript{242} However, others noted that a smaller pilot would better protect against potential damaging consequences for low-income households.\textsuperscript{243}

Many parties noted the potential risk to ratepayers in these TOB proposals. Parties questioned whether SVCE’s proposal could lead to ratepayers having to shoulder a large amount of the cost of the TOB program, and noted that ratepayers should only shoulder a reasonable amount of expenses when considering the benefits the program provides.\textsuperscript{244} PG&E’s proposal carries similar risk, in that ratepayer funding could be used to fund entire technology repayment.\textsuperscript{245} However, all parties were supportive of customer/participant ownership of the technology.

Parties also noted that additional outreach should be conducted with landlords as well as CBOs and Local and Tribal Governments to ensure that the TOB proposals are appropriately designed to garner participation from their constituents. Outreach should also be done by the Commission to ensure that necessary agency partners are ready to provide support for any implemented proposals.\textsuperscript{246}

\textsuperscript{241} Greenlining Reply Comments at 11.
\textsuperscript{242} Rewiring America Opening Comments at 11.
\textsuperscript{243} Joint Consumers Opening Comments at 5, Greenlining Institute Reply Comments at 9-10.
\textsuperscript{244} NDC Opening Comments at 5.
\textsuperscript{245} Id. at 8.
\textsuperscript{246} Greenlining Opening Comments at 19.
5.4.1. Party Comments on Pacific Gas and Electric Company’s Proposal

As a potential participant in PG&E’s Finance Platform, SVCE seeks clarification from PG&E regarding the portion of outside debt funding for which it could potentially be responsible. SVCE also notes that the monitoring requirements PG&E proposes as part of participation in the Finance Platform that FPIs must annually report on, including equipment performance and bill impacts, may be burdensome. SVCE believes each FPI should retain flexibility to balance tracking program performance with cost-effectiveness.247

5.4.2. Party Comments on Silicon Valley Clean Energy Authority’s Tariff On-Bill Proposal

Parties were generally supportive of the SVCE Proposal. PG&E however notes that the SVCE Proposal could conflict with its own in a number of ways.248 With regards to financing, PG&E notes that the SVCE Proposal mentions a number of potential funding sources, beyond the third-party capital that PG&E hopes to leverage. PG&E also notes that the SVCE Proposal diffuses implementation responsibility amongst multiple organizations, which could make it difficult for PG&E to determine when its intervention is needed. SVCE and VEIC state that SVCE would be the responsible party.249 Finally, PG&E notes that the SVCE Proposal, which calls for automatic succession of the tariff service charge, could implicate different lending laws than PG&E’s, which may cause regulatory concerns. VEIC and SVCE believe their proposal satisfies

247 SVCE Opening Comments at 8.
248 PG&E Opening Comments at 6-8.
249 VEIC Reply Comments at 5.
conditions for exemption from consumer lending regulations, but would plan to seek DFPI opinion on the matter.250

SVCE notes that it is continuing to discuss how to integrate its TOB Proposal into PG&E’s Finance Platform.251 SVCE states that discussions have centered around integrating PG&E’s billing system with SVCE’s TOB Proposal and SVCE’s TOB tariff proposal with PG&E’s Finance Platform tariff. SVCE has provided PG&E with amendments to PG&E’s proposed Finance Platform tariff that will allow for SVCE participation.252 SVCE also notes that it does not intend to seek alternative capital sources than what is provided by PG&E’s Finance Platform, assuming SVCE’s TOB proposal is properly integrated into the system. SVCE states that it will continue work with PG&E to ensure its proposal works within the confines of PG&E’s Finance Platform, with the goal of submitting a Tier 1 advice letter for SVCE TOB Program approval, as proposed by PG&E.253

5.5. Analysis

The Commission greatly appreciates the hard work proposers and parties have put into creating and reviewing these novel TOB program proposals. At this time, further development is necessary before any of the TOB proposals can be approved. Although this rulemaking was opened in recognition of the fact that California must urgently take steps towards decarbonization of the grid in order to meet its GHG reduction goals, parties noted significant concerns that could cause harm to ratepayers or program participants. Many of the proposers themselves noted significant unresolved questions to address before their

250 Id. at 6.
251 SVCE Reply Comments at 3-4.
252 Id. at 4.
253 Id. at 7.
proposals are ready to be considered.\textsuperscript{254} PG&E, SCE, SoCalGas, and SDG&E are therefore directed to launch a TOB Working Group to aid in developing an implementable TOB proposal. This section will discuss issues that the TOB Working Group should address and also sets the parameters for the Working Group to consider these issues, so that the Commission can consider a Joint TOB Proposal in this proceeding.

5.5.1. Pacific Gas and Electric Company’s Tariff On-Bill Proposal Discussion

Parties were generally receptive to PG&E’s proposal to develop a Finance Platform for use across all DER programs. However, PG&E’s focus on this platform seems to have come to the detriment of its TOB proposal, as PG&E’s TOB Proposal is not well-defined, lacking detail regarding how it will address customer eligibility standards and protections, energy savings calculations, and DER eligibility. In the forthcoming TOB Working Group, PG&E and the other IOUs should consider the customer protections, KPIs, program eligibility standards, financing terms, and other requirements laid out in the SCE and SVCE TOB Proposals so that it can present a joint TOB proposal (as further discussed in Section 5.5.4) in this proceeding within 180 days after the issuance of this decision.

5.5.2. Southern California Edison Company’s Tariff On-Bill Proposal Discussion

SCE’s TOB proposal was generally well developed, although SCE asks that the Commission provide direction on a number of issues, including technology

\textsuperscript{254} See PG&E Revised Proposal at 4.
ownership and maintenance, notice protocols, funding sources, and which customer classes to initially target in the pilot. SCE shall utilize the TOB Working Group to further solidify its positions on these issues and others so that SCE can present a joint TOB Proposal (as further discussed in Section 5.5.4) in this proceeding within 180 days after the issuance of this decision.

5.5.3. Silicon Valley Clean Energy Authority’s Tariff On-Bill Proposal Discussion

Parties were very supportive of SVCE’s TOB Proposal. They noted that the IUI standards presented were likely to lead to success, as they mirrored many of the requirements that successful PAYS systems have used (estimated bill savings required as well as automatic succession of the tariff). SVCE noted that in order to successfully implement its proposal it must continue to work with PG&E on a number of issues, mainly related to billing system integration and tariff drafting. SVCE is encouraged to continue this dialogue with PG&E, both inside and outside the TOB Working Group, so that it can present a joint TOB Proposal (as further discussed in Section 5.5.4) in this proceeding within 180 days after the issuance of this decision.

5.5.4. Review of Recommended Program Design and Issues for Tariff On-Bill Working Group Consideration

Having received PG&E’s, SCE’s, and SVCE’s TOB proposals, and related party comments, the Commission finds that the proposals require further development and direction before they are finalized. The SVCE Proposal is the

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255 SCE Revised Proposal at 25.
256 Id. at 43.
257 Id. at 32.
258 Id. at 5, noting SCE uncertainty about whether to include low-income customer classes.
most well-developed and closest to implementation, and its design draws from examples of other implemented TOB programs in other states. The SVCE Proposal provides a useful starting off point for many of the major design and policy choices that must be considered in implementing a successful TOB program. In the interest of ensuring that an implementable TOB proposal is presented, the IOUs and SVCE are directed to collaborate to file a joint TOB proposal (Joint TOB Proposal) in this proceeding, based on the SVCE Proposal, within 180 days after the issuance of this decision.

After reviewing PG&E’s, SCE’s, and SVCE’s TOB Proposals, as well as party comments, the Commission directs the IOUs and SVCE to implement the following design choices in the Joint TOB Proposal: the IUI principles laid out by the United States Environmental Protection Agency,259 especially those that pertain to customer protections; savings estimates and affordability reviews to be conducted with all participants prior to official program signup; and automatic succession of the tariff service charge. By requiring at minimum estimated bill neutrality, the potential risks to participants due to automatic succession will lessen, but proposers are encouraged to consider potential remedies and safeguards to protect successors, especially during this initial TOB pilot.

With regards to ownership of the TOB technologies, no party suggested IOU ownership was necessary, or that property-owner ownership would prevent treatment of the equipment as a regulatory asset. If proposers wish to utilize a different ownership model, such as third-party implementer ownership, they should be prepared to explain why in their proposals.

Although many parties noted the urgent need to fund decarbonization across California, the Commission finds that a more measured approach as proposed by the parties is the best course of action. Given the novelty of these programs in California and potential unforeseen interactions with California programs and policies, it is reasonable to limit the initial scope of these programs for the first two years until program data can be analyzed. A pilot will also provide FPIs and IOUs with the time to scale up operations and ensure that everyone from CBOs, contractors, program implementers, and customers are fully aware of their responsibilities. Although the initial pilot period will target limited involvement, proposers and parties should design programs with future scalability in mind.

Program metrics should accurately track GHG emissions savings, bill savings, contractor performance, household-type (income, disadvantaged community, renter) participation, energy savings, technology types, and payment history KPIs.

To aid the IOUs and SVCE in preparing the Joint TOB Proposal, and in recognition of the fact that significant TOB program design choices remain to be made, the IOUs are directed to create a TOB Working Group, which shall be tasked with aiding in the development of the Joint TOB Proposal. While developing the Joint TOB Proposal, the TOB Working Group should consider the following core principles in its deliberations: The TOB Program should provide benefits to disadvantaged communities, promote the goals of the Environmental and Social Justice (ESJ) Action Plan, provide strong consumer protections, draw funding from non-ratepayer sources, and leverage simplicity in its design and implementation. Where this decision has not made a TOB program design choice, the TOB Working Group should use the SVCE Proposal position as a
starting point for discussion. The TOB Working Group should also consider the following questions and provide feedback for the IOUs and SVCE to consider in developing the Joint TOB Proposal:

**Technology Types**

- What technologies are most likely to reliably provide savings to customers, and therefore reliably produce cash positivity (bill neutrality)? For technologies for which the primary value is system related, do the current programs adequately share this value with the customer? Would the customer need to be on a peak time rewards or similar billing schedule to fully realize the benefits?
- What TE technologies could fit within the parameters of a TOB program? Could such technologies be made equitably available to all residential customers?
- How should technology benefits be calculated?

**Customer Groups**

- Should the program initially be available to low-income or otherwise vulnerable customer classes, or should initial pilots focus on middle-income or high-income customers to lower the risk of charge-off or energy insecurity? Should a limit initially be established on low-income customer participation?
- If not initially available to low-income customers, what metrics should be evaluated to determine when and if the TOB programs should be made available to low-income customers?
- Are there any incentives or protections that can be implemented to lower the risk for participating low-income customers?
- How can TOB programs be designed for renter participation?
• What amount of co-pay balances would be sufficient to incentivize renter participation with landlord agreement to participate?

• Should specific groups be targeted based on greatest potential for cost savings, as proposed by SVCE, and if so, how?

**Customer Protections**

• What consumer protections would limit bill increases post upgrade and encourage bill savings?

• How should notice of the presence of a tariff service charge on a property be provided? What options are available for renters to be notified, beyond requiring the landlord to provide notice? What language should be used in the notification to assuage the doubts of the new property owner/renter at the location? How should the notice requirements of SB 1112 (2022) be implemented?

• What pre-approval disclosures should be provided to TOB program participants, beyond financing term length, potential savings, and non- or underpayment repercussions? In what manner should these disclosures be provided, balancing program cost?

• What steps should be implemented to ensure predatory practices, such as occurred under the PACE program, does not occur with TOB programs?

• What is the most efficient, least-cost, and protective way to ensure continued operation and maintenance of upgrades? What are reasonable customer responsibilities given that past PAYS® programs keep participant responsibilities to a minimum?

• Should disconnection for underpayment be permitted? Should disconnection be permitted for non-payment of the TOB charge alone? Are there other types of disincentives that could be used?
Implementation

- Is an examination of bill repayment history a sufficient or necessary participant eligibility check? Should this initial pilot phase initially not exclude participants based on bill repayment history, for testing purposes?

- Should SCE’s proposal that maintenance costs be accounted for in the tariff service charge, with maintenance responsibility then falling on the program implementer (or some entity other than the customer), be adopted? If not, how should maintenance costs be accounted for and who should be responsible?

- How should property/service meter vacancies be accounted for? If a vacancy extends past a certain time period, should the landlord become responsible for payment of the tariff service charge?

- SVCE proposes a top-down TOB Program wherein contractor management, quality control, marketing, and project assessment are closely controlled. Is such a system preferable or does it restrict consumer choice unnecessarily?

- Should project estimates be conducted by a closed list of approved estimators/contractors? If unforeseen project costs emerge, who should bear the cost overrun?

- Should a Pay As You Save-based program be implemented in California?

- Could a statewide TOB program be implemented? What barriers exist for IOU and CCA participation?

Funding

- How can ratepayer risk be limited if ratepayer funds are needed to initially capitalize the program? If ratepayer funds are required to capitalize the program into the future, what revenue streams could be utilized?

- What KPIs will accurately track default rates and uncollectible costs, to ensure that non-participant ratepayers are not shouldering an undue burden?
- Should a cap on project amount be instituted, to maximize the number of projects and limit service charge amounts? If so, what amount?
- What other funding sources could be utilized, including government funds and private capital?

PG&E, SCE, SDG&E, and SoCalGas shall convene a TOB Working Group within 45 days following the issuance of this decision, to consider these issues and any others necessary to aid in finalizing a Joint TOB program proposal. Although PG&E and SCE are the only IOUs that have proposed TOB programs, SDG&E and SoCalGas are directed to participate and aid in the development of the Joint TOB Proposal with the expectation that it will be implemented in PG&E, SCE, SDG&E, and SoCalGas service territories. The TOB Working Group shall consist of the major IOUs (PG&E, SCE, SDG&E, SoCalGas) and other organizations necessary to finalize the TOB Proposals. This should include SVCE and the Commission’s Energy Division. The TOB Working Group may seek input from non-member organizations, including landlord and real estate associations. PG&E, SCE, and SVCE may solicit the formal or informal participation of any groups deemed necessary, but the Energy Division shall have the ability to veto or add any members as necessary to ensure the TOB Working Group has balanced discussion. An equity committee within the TOB Working Group shall be established to focus on customer protection and equity concerns, also led by the IOUs and SVCE. Membership of the equity committee shall be open to any who wish to participate but should specifically include groups representing tenants, disadvantaged communities, tribal communities, and low-income groups.

PG&E, SCE, SDG&E, and SoCalGas shall coordinate with SVCE to file a finalized Joint TOB Proposal for consideration in this proceeding within 180 days.
of the issuance of this decision. The Joint TOB Proposal shall include the framework of a TOB proposal that would be implementable in each IOU service territory. Where there are disagreements on design choices, or otherwise necessary differences in implementation (such as cost recovery mechanisms), the Joint TOB Proposal should note them. The Joint TOB Proposal should also include a proposed tariff for each utility that implements the proposal. IOUs and other parties shall also be prepared to consider implementation of a PAYS® based program across some or all IOUs if the TOB proposals submitted are unable to be implemented.

5.5.5. Conclusion

PG&E, SCE, SDG&E, and SoCalGas, with SVCE, shall file a Joint TOB Proposal that can be implemented across all IOU territories. The Joint TOB Proposal should use the SVCE Proposal as a starting point. The TOB Working Group is established to aid in the development of the joint proposal. The Joint TOB Proposal shall be filed for consideration in this proceeding within 180 days after the issuance of this decision.

6. Local Government Sustainable Energy Coalition and Santa Barbara Clean Energy Joint Proposal

LGSEC is an organization whose members include cities and counties as well as EE, DR, building decarbonization, and other energy-related program implementers. Santa Barbara Clean Energy (SBCE) is a CCA serving approximately 5,000 customers. LGSEC and SBCE present a joint proposal to develop a pilot decarbonization incentive rate (DIR) in SCE’s territory (DIR Proposal). LGSEC and SBCE propose that SCE design the DIR, in consultation with SBCE.

260 LGSEC Revised Proposal to Pilot a Decarbonization Rate filed June 15, 2022, at 1.
6.1. Decarbonization Incentive Rate Proposal

LGSEC’s DIR Proposal would allow customers who switch heating, ventilation, air conditioning, or other natural gas, methane, or propane appliances to electric appliances to pay a discounted, marginal cost-based price for the incremental electricity consumed.\(^{261}\) LGSEC’s DIR Proposal would be open to single family residential customers, as well as renters if the building owner agrees to permit SBCE or SCE to install upgrades that replace fossil-fuel appliances. The initial plan is for a minimum of 300 upgrades to be completed.\(^{262}\) Customers would also be required to enroll in Load-Serving Entity (LSE) programs such as DR. LGSEC and SBCE estimate that the pilot could save 13,275 metric tons of carbon dioxide equivalent\(^ {263}\) and save participating customers $3.1 million.

In designing and tracking the pilot, LGSEC proposes to focus on a number of metrics and performance indicators, such as cost neutrality, emissions savings, participant and technology data, and equity factors.\(^ {264}\)

LGSEC and SBCE propose that after a customer installs approved electrification measures, the customer would be enrolled in DIR and pay a reduced rate for added loads associated with the adopted electrification measure.\(^ {265}\) According to LGSEC and SBCE, a reduced rate is justified because this added load should not be subject to any legacy costs for past generation or procurement costs, since any costs related to such loads were dedicated without

\(^{261}\) Id. at 5-6.
\(^{262}\) Id. at 12.
\(^{263}\) Id. at 14.
\(^{264}\) Id. at 16.
\(^{265}\) Id. at 6-7.
foreknowledge of this program’s costs. Particularly, LGSEC and SBCE argue that this pilot’s costs should not be subject to the Power Charge Indifference Adjustment (PCIA) stranded assets charge to recover legacy generation costs.266

LGSEC and SBCE propose that the new DIR associated with the program be based on the long-run marginal cost of new electric demand.267 As noted by LGSEC and SBCE, such costs are generally determined in GRCs or in Avoided Cost Calculator proceedings.268 LGSEC argues that this is appropriate because new incremental electrification demand is met in a separate market from previously accounted-for demand. Added load from new electrification is met with extra renewables, as opposed to being met with load bid in by LSEs to the California Independent System Operator.

LGSEC and SBCE propose a total budget of $6.34 million, with roughly $3.7 million being project capital investments, $1.3 million in incentives, and $1.2 million in operating costs.269 They propose that $4.8 million of the total budget be recovered from ratepayers, with incentives and SBCE funds covering the remainder.

To implement the pilot, LGSEC and SBCE ask that the Commission:

- Order SCE to work with LGSEC and SBCE to develop the DIR;
- Require SCE to issue an Advice Letter Filing within 90 days of the Commission decision detailing the DIR; and
- Authorize $6.1 million to be directed to SBCE for the pilot program, with a requirement that at least 300

266 Id. at 5-6.
267 Id. at 7.
268 Id. at 8.
269 Id. at 14.
decarbonization measures be implemented via the program.

LGSEC also proposes alternatives, such as the Commission ordering all IOUs to waive the PCIA for the portion of CCA load that is created by electrification decarbonization programs, or that the Commission order IOUs to develop the DIR on their own and incorporate it into TOB financing programs.270 Further details are not provided for these alternatives.

6.2. Party Comment

A number of parties were in favor of LGSEC’s proposal.271 Parties in support noted that the proposed DIR rate would ameliorate the economic burden of new technology investments, thus improving the economic argument for individual households for electrification.272 Parties also noted potential rate shifting that would occur due to the proposal that would need to be addressed.273 Parties expressed the urgent need to incentivize electrification, and stated that LGSEC’s proposal had the potential to greatly expedite this process.

PG&E, SCE, and SDG&E do not support LGSEC’s proposal. They state that although the proceeding was categorized as ratesetting, rate design was not initially considered among the issues originally scoped for this phase of the proceeding. The ratesetting categorization was selected in recognition of the fact that proposals may have used customer funds from the sources listed in the OIR. PG&E states that rate design proposals are typically saved specifically for

270 Id. at 4.
271 Greenlining Institute and Green for All Opening Comments at 17; VEIC Opening Comments at 8-9; Rewiring America Opening Comments at 13; SVCE Opening Comments at 9; Local Governments Reply Comments at 4-5.
272 VEIC Opening Comments at 8.
273 Id. at 8-9.
specialized rate proceedings for each utility, given the ample record building required, where all affected parties can participate. Past Commission proceedings have declined to implement changes that could affect rate design, due to the multitude of factors involved, leaving the issue to be considered in individual utility rate proceedings. For example, the Commission has declined to conduct or consider rate design in proceedings considering and designing time periods for use in Time-of-Use rates, citing the need to (and inability in the proceeding at hand) to consider a wide range of individual utility variables. In addition to implicating rate design, the DIR rate proposed by LGSEC would implicate issues related to the PCIA proceeding. Changes to the PCIA could lead to significant rate impacts for non-participating customers. Both PG&E and SCE note that the LGSEC’s DIR Proposal is not a financing proposal, but rather a rate design proposal.

SCE also notes complications with the LGSEC DIR Proposal, namely that customers may wish to install EE measures concurrently, but that such measures would decrease the incremental load created by other technologies. It would be difficult to calculate the incremental load due only to the new technologies. SCE also states that LGSEC’s proposal to bypass the PCIA stranded asset charge for customers signing up for the DIR rate is prohibited by statute, and that the

274 PG&E Opening Comments at 4-5; SDG&E Reply Comments at 5-6.
276 PG&E Opening Comments at 5.
277 SCE Opening Comments at 5.
278 SCE Proposal at 5-6.
proposal should be declined for numerous other policy reasons. SDG&E notes that other proceedings at the Commission are considering rate design principles with regards to electrification, and that SDG&E has its own electrification rate proposal under consideration.

LGSEC, in response to IOU opposition, notes that the DIR Proposal would prevent shifting of costs from current ratepayers onto customers who have electrified. LGSEC states that without a DIR, customers who make investments into electrification will pay for their own technological investments while defraying already-existing revenue requirement responsibilities of other customers, lowering the bills of those other customers. LGSEC also states that the PCIA has been waived before, for direct access customers who had departed before 2009, and that the Economic Development Rate tariff utilizes marginal cost findings in the same manner as its DIR Proposal. LGSEC also disputes SCE’s claim that each proposal must be able to finance all energy investments, stating that SCE’s proposal does not meet that criteria.

6.3. Analysis
LGSEC’s DIR Proposal would open up the potential for participating households to pay a reduced rate for any incremental electric load created by the installed electrification technologies. LGSEC’s DIR Proposal is a novel approach that has the potential to greatly improve the economic calculus for those seeking to electrify their households. Although this DIR Proposal is intriguing, we

279 SCE Opening Comments at 10-12.
280 SDG&E Reply Comments at 7.
281 LGSEC Reply Comments at 10.
282 Id. at 4-5.
283 Id. at 5-6.
decline to review it in this proceeding, for reasons stated above by the IOUs. The Amended Scoping Memo noted that the ratesetting category was selected due to the potential need to develop new tariffs for proposal implementation or identify new funding sources for incremental financing programs.\textsuperscript{284} Parties other than the IOUs also noted that the ratesetting categorization was in expectation of the need to approve tariffs, not conduct rate design.\textsuperscript{285} Although the OIR noted that there may be “Additional mechanisms that the Commission should investigate in the course of the proceeding to support customer investments,” a proposal that involves rate design is not among those initially named in the OIR, such as loans, Green funds, PACE, OBF, OBR, TOB, loan loss reserves, and interest rate buydowns.\textsuperscript{286} This proceeding also is not the appropriate venue to consider all of the ramifications of rate design, especially given the proposed bypassing of PCIA charges. The financial payback periods for these technologies will likely run for a number of years — any potential miscalculations or unforeseen circumstances due to the creation of a DIR could create hazards that may be difficult to remedy given the reliance of participants on the financial incentives created. The DIR Proposal is therefore out of scope for this proceeding.

Although we decline to review LGSEC’s proposal in this proceeding, we encourage LGSEC and SCE to continue discussions and consider other venues in which it may be appropriate to consider this proposal.

\textsuperscript{284} Amended Scoping Memo at 13-14.
\textsuperscript{285} Greenlining Institute and Green for All Opening Comments at 18.
\textsuperscript{286} OIR 20-08-022 at 3-11.
7. California Alternative Energy and Advanced Transportation Financing Authority Proposals

CAEATFA asks for authorizations for two separate programs in Track 2. For the first program, CAEATFA asks for authorization to expand its credit enhancement funds to support financing of clean energy technology beyond EE and DR measures for its GoGreen Financing Programs (GoGreen Proposal). CAEATFA also proposes to make other changes to its family of GoGreen Programs, including expansion of debt-based financing options for median and moderate-income borrowers. CAEATFA seeks to fund this GoGreen Proposal via external funds, or through the $75.2 million already authorized though 2027 to support the California Hub for Energy Efficiency Financing (CHEEF) programs (which include the GoGreen Programs). For the second program, CAEATFA asks for authority to develop and re-start its Nonresidential/Large Commercial Program, which it was unable to start by 2019 as required by D.17-03-026. This program would provide OBR options for large commercial and municipal/state government universities, and hospitals without the use of a credit enhancement (MUSH Program).

7.1. GoGreen Program Technology Expansion Proposal

The GoGreen Programs funded through the CHEEF facilitate better than market-rate financing terms for EE and DR improvements to IOU customer single-family residences (GoGreen Home), small businesses (GoGreen Business), and affordable multi-family buildings (GoGreen Multifamily) (collectively, the GoGreen Programs). Ratepayer funds facilitate credit enhancements and cover administrative costs, while borrowers shoulder 100 percent of their own project costs via private capital. Credit enhancement contributions of ratepayer funds are deposited back into the credit enhancement funding pool as loans are fully
paid back. The GoGreen Home program currently has eight participating credit union lenders, who offer unsecured loans with rates between 2.95 percent and 8.12 percent, in amounts up to $50,000, with payback terms up to 15 years, to borrowers with credit scores as low as 580.\textsuperscript{287} GoGreen Business and GoGreen Multifamily loans can be made in amounts up to $5 million, with the first $1 million receiving a credit enhancement and being “claim-eligible” in the event of a default.\textsuperscript{288}

D.13-09-044, which approved the original CHEEF credit enhancement programs, only allowed for their use with EE and DR measures. This prevents financing companies participating in CHEEF programs from financing other clean energy technologies, as they do not have access to the credit enhancements provided by CHEEF programs. GoGreen residential participants are unable to receive underwriting from financing companies for EE and DR measures when receiving a loan for other clean energy technologies, such as heat pumps.

CAEATFA’s GoGreen Proposal would open up the CHEEF GoGreen Programs to a broader range of clean energy technologies.\textsuperscript{289} CAEATFA seeks Commission approval to allow CAEATFA to determine a list of pre-qualified technologies and improvements that CAEATFA will vet through its own public rulemaking process.\textsuperscript{290} The GoGreen Proposal states that the newly approved technologies must produce benefits for all of the following three groups to

\textsuperscript{287} Id. at 11.
\textsuperscript{288} Id. at 16.
\textsuperscript{289} CAEATFA Proposal to Expand California Hub for Energy Efficiency Financing/GoGreen Financing Programs to Incorporate Comprehensive Clean Energy Technologies and Re-authorize the Nonresidential/Large Commercial Financing Program (CAEATFA Proposal) dated April 15, 2022.
\textsuperscript{290} CAEATFA Proposal at 5.
qualify for the proposed expanded GoGreen Programs: the customers, the utility, and society (Benefits Test). To determine this, CAEATFA proposes that new technologies be assessed for the benefits they provide in nine categories. Technologies that don’t meet the Benefits Test could potentially be bundled with technologies that do meet the criteria. CAEATFA states that approval of the program expansion would allow the GoGreen Programs and portal to serve as a centralized starting point for customers to finance comprehensive clean energy projects.

Current program policies, customer eligibility criteria, and features, including customer protections, would continue. GoGreen Home caps interest rates at the value of the 10-year United States Treasury rate plus 750 basis points, and requires that borrowers have a minimum 580 credit score for loans above $5,000 and a maximum debt-to-income ratio of 55 percent. Participating finance companies must comply with state and federal lending laws, including disclosure rules. For all GoGreen Programs, participating finance companies are capped with regards to the amount of losses they may recover, meaning they are not incentivized to approve loans that are unlikely to be paid off. To date, only 25 out of 2,200 GoGreen Home loans and zero GoGreen Business loans have been marked as bad debt and written off.

291 Id. at 5. These benefits include bill savings, bill stability, energy reduction, peak load reduction, load shifting, avoided transmission and distribution upgrades, emission reductions, energy reliability, and resiliency.
292 CAEATFA Proposal at 28.
293 Id. at 20-24.
294 Id. at 20.
295 Id. at 21.
Eligible clean energy technologies could include on-site generation, solar domestic hot water, solar lighting and fans, combined heat and power, battery storage, electric vehicle charging infrastructure, hydrogen fueling infrastructure, and microgrids. Battery storage, for example, provides customer benefits through bill savings, bill stability, energy reduction, and peak reduction; utility benefits through load shifting, backup, and resilience; and societal benefits via energy reduction and emissions reduction. Technologies that may not qualify alone, such as rooftop solar (which according to CAEATFA does not provide utility or society benefits) could be eligible if paired with an eligible technology, such as battery storage. CAEATFA proposes to preserve existing consumer protections as a part of any new regulations. CAEATFA proposes a number of metrics to measure program performance, including emissions reductions, peak demand reduction, number of customers served, and monthly payment reductions for customers. CAEATFA expects that this expansion will provide ESJ benefits by improving financing terms available to ESJ communities as well as increasing climate resiliency in those areas.

CAEATFA asks for an additional staff person to organize and develop the technology expansion, but states that the costs could be absorbed under existing budgets. Additional funds would be needed to increase the size of the loss reserve contributions for finance companies making loans for comprehensive

\footnotesize{296 Id. at 6.} 
\footnotesize{297 Ibid.} 
\footnotesize{298 Ibid.} 
\footnotesize{299 Id. at 13-16.} 
\footnotesize{300 Id. at 12.}
projects. To pay for increased costs, CAEATFA proposes three options, two of which it recommends:\textsuperscript{301}

1. Recommended: Seek external, non-IOU, non-PPP funds for the expansion, such as state or federal funds. In particular, CAEATFA states that the Commission should allow for the incorporation of non-IOU ratepayer funds into the CHEEF, as CAEATFA has already developed the tools and practices to track external funds.

2. Recommended: Determine that the $75.2 million in incremental funds authorized to support the CHEEF by D.21-08-006 through June 30, 2027 be utilized to support clean energy technologies beyond EE and DR. CAEATFA states that this option would allow for quick and easy deployment of the money already authorized for credit enhancement purposes, and that CAEATFA can seek additional funding should the funds start to run out.

3. Not recommended: Authorize new ratepayer funds to support this expansion. This would require IOUs to pass on additional surcharges to ratepayers, and would add administrative burden due to the need for separate accounting between two sources of IOU ratepayer funds for different technologies.

CAEATFA expects that its GoGreen Proposal will greatly increase customer enrollment in GoGreen Programs, and projects approximately 500 additional GoGreen Home projects, 25 additional GoGreen Business projects, and $24 million in additional GoGreen financing in fiscal year 2023-2024.\textsuperscript{302} CAEATFA projects a corresponding usage of $3.6 million in allocated credit enhancements. CAEATFA proposes that the metrics ordered in D.21-08-006 also be used to measure program performance for the GoGreen technology

\textsuperscript{301} Id. at 7.

\textsuperscript{302} Id. at 36.
expansion. CAEATFA notes that adjustments can be made through its public rulemaking process.

7.1.1. Party Comments

Parties are generally supportive of the proposed technology expansion for the GoGreen Programs. Parties note that the expansion of the GoGreen Programs will lead to increased climate resilience, deployment of clean energy technologies, and increased program participation.

NDC states that although CAEATFA should be allowed to draw from the already authorized $75 million for CHEEF through 2027, any additional funding needs if the funds run out should be sought from other sources. NDC also suggests that the Commission should consider whether to direct CAEATFA to consider additional customer protections, and whether the GoGreen Programs website should be expanded to include languages other than Spanish and English.

EDF states that the GoGreen Programs and others should focus on concentrating electrification upgrades in such a way as to reduce natural gas infrastructure costs. EDF, Greenlining, and Rewiring America all note that scalability of programs should be considered in considering whether to approve or modify programs.

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303 Id. at 37. These measures include comparison of interest rates and monthly payments between GoGreen program financing and market rate products, financing feasibility metrics, and metrics tracking participation by underserved customers and disadvantaged communities.

304 Travis Opening Comments at 3; SoCalGas Opening Comments at 2; ENGIE Opening Comments at 1-2; First U.S. Opening Comments at 3-4; Cal Coast Opening Comments at 4-5; Prime Capital Opening Comments at 3.

305 NDC Opening Comments at 16.

306 EDF Opening Comments at 5-6.

307 EDF Opening Comments at 3-4; Greenlining Opening Comments at 10-11.
The Disadvantaged Communities Advisory Group (DACAG) encourages the expansion of financing mechanisms to include new types of clean energy storage and technologies, as well as a pathway to combined financing for multiple technology types. DACAG also recommends that participants must fully understand their obligations when they agree to pay for any upgrades, and that any financing program requirements should not be overly restrictive with regards to utility bill payment history, credit history, and other factors that would hamper low-income customer participation.

In response to comments, CAEATFA notes that its GoGreen Home and Multifamily Programs are inclusive, as they are available to property tenants, report a loan approval rate of 65 percent, and do not require minimum household incomes.

7.1.2. Analysis

At the outset, we note that CAEATFA has been vested with program administration responsibilities for all aspects of its GoGreen Programs, within the reasonable parameters established by the Commission. CAEATFA is authorized to utilize its own public input and rulemaking process where there is ambiguity or in the absence of explicit direction. However, when in the past CAEATFA has sought to adjust or change the eligible GoGreen program technologies, the Commission has exercised its authority. CAEATFA proposes

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309 CAEATFA Reply Comments at 2.
310 D.17-03-026 at 10. CAEATFA has authority over the pilot program design, financing mechanism designs, finance credit support, and measure eligibility, among other program design characteristics.
311 D.21-08-006 at 34-35.
to add to the list of eligible technologies, to include additional clean energy measures.

There exist ample policy reasons to expand the list of technologies eligible for GoGreen Program financing assistance. As noted by CAEATFA and the parties, technologies such as on-site solar generation, battery storage, electric vehicle charging infrastructure, combined heat and power, and others, are increasing in popularity. These clean energy measures provide benefits to the grid, aid in the reduction of GHG emissions, and can provide participating customers with bill reductions.\textsuperscript{312} Customers seeking to install EE measures may also be considering the installation of these clean technologies, and vice versa. Providing financing for comprehensive packages may therefore induce additional EE investment, if the customer would only proceed with EE measures if they can also receive improved financing terms for clean technologies through the GoGreen Programs. As noted by the parties, ensuring programs are scalable is crucial to meeting California’s GHG emissions reductions goals, and increasing the types of technologies eligible should increase participation in GoGreen Programs. Centralizing clean technology financing onto the GoGreen platform also provides benefits by simplifying the process for interested customers.\textsuperscript{313} Extra costs would be minimal, since CAEATFA states it can integrate the additional measures into its already existing programs with minimal administrative burden.\textsuperscript{314} CAEATFA also states that the expansion will allow it to expand the number of debt-based financing options for moderate- and

\textsuperscript{312} CAEATFA Proposal at 32; First U.S. Opening Comments at 3.

\textsuperscript{313} CAEATFA Proposal at 9.

\textsuperscript{314} Id. at 3.
median-income borrowers, allowing it to save subsidies for very-low-income customers.\footnote{Ibid.}

D.21-08-006 noted concerns that expansion of the GoGreen Programs to additional technologies without appropriate consideration of the effect could lead to non-EE measures utilizing the whole CHEEF budget.\footnote{Ibid.} This would be problematic, as the funding comes from IOU EE funds.\footnote{Id. at 16.} Two separate issues need to be addressed here — the number and quality of newly eligible technologies, and the amount of project funding that can be dedicated to non-EE measures. With regards to the first concern, CAEATFA plans to implement a test to determine whether a non-EE/DR measure is eligible.\footnote{Id. at 28-29.} Eligible technologies must provide benefits to customers, the utility, and to society. In determining whether a technology benefits those three groups, CAEATFA plans to look at nine factors, including bill savings, bill stability, energy reduction, peak reduction, load shifting, avoided transmission and distribution upgrades, emissions reductions, system resilience, and grid islanding/backup. We find this framework reasonable, but encourage CAEATFA to solicit comments through its rulemaking process on this proposed Benefits Test. CAEATFA is also considering whether otherwise ineligible measures and technologies under the Benefits Test could be “bundled” with eligible technologies to still qualify for GoGreen eligibility.\footnote{Id. at 28.} CAEATFA may determine through its rulemaking process what technologies may qualify for GoGreen eligibility.
With regards to the second concern, there are two safeguards. Currently, loan amounts for GoGreen Home, the largest CHEEF program, are capped at $50,000, limiting the speed with which funds can be dedicated. Previous decisions have also held that only 30 percent of an eligible project for financing can be for non-EE related measures. This means that 70 percent of GoGreen funding for any given project must be spent on EE-measures. That restriction should remain in place, and should serve as a safeguard against rapid depletion of CHEEF funds. CAEATFA should also consider whether the increase in technologies could negatively affect its currently low default rates.

Given that this is an expansion of the CHEEF GoGreen Programs, it is reasonable to allow CAEATFA to utilize the already approved $75.2 million for CHEEF programs to also pay for the increased costs to administer this GoGreen Proposal technology expansion. The amount already allocated should be sufficient to cover additional costs presented by the expansion, based on past expenditure history, but CAEATFA is also authorized to seek additional external funding from other sources for its GoGreen Programs, and is encouraged to do so. Should external funding be obtained, CAEATFA may determine whether that funding should be subject to the same project non-EE budget restrictions that current CHEEF funding is subject to.

7.1.3. Conclusion

CAEATFA’s GoGreen Proposal to expand the technologies eligible for GoGreen Home, GoGreen Business, and GoGreen Multifamily is approved,

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320 Id. at 34, D.13-09-044 at 31.

321 See Track 1 Issues Ruling, Attachment A (CAEATFA CHEEF Status Update (March 2021) noting that from September 2014 to December 2020 only $38.5 million of an allocated $75.2 million was expended on CHEEF programs and administrative expenses.) CAEATFA projects that its GoGreen Proposal will require less than $4 million per year to fund.
subject to existing restrictions regarding project budget composition. CAEATFA shall follow its own public rulemaking process to determine what clean energy technologies are eligible, subject to the framework and requirements discussed above. CAEATFA is authorized to utilize the $75.2 million approved for CHEEF programs though June 30, 2027 in D.21-08-006 to fund additional loan loss reserves and administrative costs for the GoGreen Proposal. CAEATFA is also authorized to seek external funding for its GoGreen Proposal.

7.2. Proposed Reauthorization of Nonresidential/Large Commercial On-Bill Repayment Program

CAEATFA’s second proposal is for the re-authorization of a non-residential/large commercial program it had originally received authorization for in D.13-09-044 but was unable to start before the end of 2019, as required by D.17-03-026. This program would allow eligible MUSH building IOU customers, as well as large commercial IOU customers, to finance EE, DR, and comprehensive infrastructure upgrades and pay for them via OBR, without the use of a credit enhancement (MUSH/Large Commercial Program). The main goal of the program is to facilitate OBR functionality. CAEATFA expects that the program will provide significant energy savings and resilience benefits during public safety power shutoffs, where the benefits of large-scale EE and DR retrofits are most important.

CAEATFA asks for one additional staff person to manage the MUSH/Large Commercial Program, and asks for authorization to use a portion of the $75.2 million authorized by D.21-08-006 for use for CHEEF programs through June 30, 2027, to support the MUSH/Large Commercial Program. Other

322 Id. at 13.
costs should be minimal, as this program would for the most part utilize existing GoGreen Business resources, and no credit enhancement dollars are proposed. CAEATFA proposes to cap the amount of funding for each project at $5-10 million, depending on OBR operational reserves and public feedback.\footnote{CAEATFA proposes to cap the amount of funding for each project at $5-10 million, depending on OBR operational reserves and public feedback.} CAEATFA states that the program should have more demand at this point, due to the implementation of OBR programs in all IOU territories.\footnote{CAEATFA states that the program should have more demand at this point, due to the implementation of OBR programs in all IOU territories.} The program would be added as an expansion to the GoGreen Business program, and should only require an additional staff member which could be covered under the existing budget.\footnote{The program would be added as an expansion to the GoGreen Business program, and should only require an additional staff member which could be covered under the existing budget.}

### 7.2.1. Party Comments
Renew, Gridium, SoCalGas, and Prime Capital\footnote{SoCalGas Opening Comments at 2-3; Prime Capital Opening Comments at 3-4.} support the re-authorization of the MUSH/Large Commercial Program and encourage a credit enhancement for the program as well. Renew states that large commercial and industrial building owners lack cash on hand and themselves do not benefit from EE upgrades and therefore do not care to implement such upgrades. Renew and Gridium also state that the properties themselves (and small business tenants) do not have the ability to consider retrofits without credit enhanced financing terms.\footnote{Gridium states that it has had loan applicants’ projects rejected at the underwriting stage due to a financing institution’s concerns about the buildings’ credit quality due to increased office vacancy rates since the} Gridium states that it has had loan applicants’ projects rejected at the underwriting stage due to a financing institution’s concerns about the buildings’ credit quality due to increased office vacancy rates since the
Covid-19 pandemic.\textsuperscript{328} They therefore recommend also that the MUSH/Large Commercial Program be approved with credit enhancement funding. Gridium, however, also notes that MUSH buildings are different from other privately-owned buildings, as they are generally owner-occupied and therefore do not suffer from the same misalignment of incentives.

PG&E does not support the use of credit enhancement for the MUSH/Large Building Program, as these customers should represent low credit risk and credit enhancement for this program was not originally proposed in D.13-09-044.\textsuperscript{329}

\textbf{7.2.2. Analysis}

CAEATFA states that it has seen demand amongst large commercial and MUSH lenders and customers for OBR financing options.\textsuperscript{330} CAEATFA does not propose offering credit enhancements for the revival of the MUSH/Large Commercial Program. No additional budget is sought, other than what was already authorized for CHEEF programs in D.21-08-006. Intervenors, such as Renew, Gridium, and Prime Capital suggest that the credit enhancement is needed to ensure program success. Given the lack of a credit enhancement, it is unclear what, if any, benefit large commercial or MUSH customers would see from participating in this program. Although it may be easier to pay for financing on bill, such sophisticated customers can also obtain and track financing separate from the GoGreen platform. Through 2020, the GoGreen

\begin{footnotesize}
\textsuperscript{328} Gridium Opening Comments at 4.\\
\textsuperscript{329} PG&E Reply Comments at 3-4.\\
\textsuperscript{330} CAEATFA Proposal at 10.
\end{footnotesize}
Business program has had only facilitated seven finance agreements.\textsuperscript{331} At this point, CAEATFA has not provided sufficiently compelling evidence that demand for the MUSH/Large Commercial Program without a credit enhancement exists. Additionally, given the expansion of the eligible GoGreen Home, GoGreen Business, and GoGreen Multifamily technologies, it would not be prudent at this time to also approve this MUSH/Large Commercial Program, given unknowns regarding how long the $75.2 million approved for the CHEEF through 2027 will be available.

Past decisions have also dictated that the program should not be re-authorized at this time. D.17-03-026 noted that if any pilots (including the MUSH/Large Commercial Program) were not launched by December 31, 2019, any further pilot launches will be canceled and the Commission’s attention and funding will focus on those already launched pilots.\textsuperscript{332} D.21-08-006 also notes that the $75.2 million approved should be “used solely to support ongoing CHEEF program offerings for IOU ratepayers.”\textsuperscript{333}

7.2.3. Conclusion

CAEATFA’s request to re-instate its MUSH/Large Commercial Program is denied, for lack of evidence of need.

8. Summary of Public Comment

Public comments received in this proceeding voiced support for SVCE’s, CAEATFA’s, and LGSEC’s proposals. Comments stated that clean energy financing programs are needed to meet the state’s ambitious decarbonization

\textsuperscript{331} See Track 1 Issues Ruling, Attachment A (CAEATFA CHEEF Status Update (March 2021)) at 11.

\textsuperscript{332} D.17-03-026 at 11.

\textsuperscript{333} D.21-08-006 at 17.
commitments and to ensure that the clean energy transition is equitably conducted. Commenters provided principles to consider in developing TOB and IUI programs, including inclusivity, bill neutrality, automatic succession, impacts on non-participant ratepayers, and ensuring adequate funding for programs. Comments also noted factors and issues to consider in making these programs available to renters, including potential credit enhancements, bill savings guarantees, maintenance and insurance responsibilities, and technology eligibility. Comments were also received stating that the Commission should consider Smart Grid data interoperability standards to smooth data exchange, thereby easing the deployment and management of analytics and financing mechanisms for both IOUs and third parties.

Comments were also received from DACAG, which provided a number of recommendations to evaluate clean energy financing proposals. DACAG agreed with many party comments in this proceeding, highlighting the need to ensure equitable access to clean energy technology upgrades for tenants, low-income households, and other disadvantaged communities. DACAG highlighted the importance of providing technical assistance and conducting outreach to reach these groups. DACAG also highlighted design recommendations to encourage disadvantaged communities, such as not using credit histories, histories of defaults and disconnections, and other discriminatory methods to screen applicants, and providing financing for upgrades through zero percent unsecured loans with no application fees.

9. Comments on Proposed Decision

The proposed decision of the ALJs in this matter was mailed to the parties in accordance with Section 311 of the Public Utilities Code and comments were allowed under Rule 14.3 of the Commission’s Rules of Practice and Procedure.
Comments were filed on ________________, and reply comments were filed on ________________ by ________________.

10. Assignment of Proceeding

Genevieve Shiroma is the assigned Commissioner and Sophia Park and Garrett Toy are the assigned ALJs in this proceeding.

Findings of Fact

1. With the exception of PG&E’s TOB and OBF proposals, there is a lack of specificity regarding what programs would be supported by PG&E’s proposed Finance Platform.

2. PG&E defers many of the details regarding the programs to be supported by the Finance Platform, including customer protections, to be developed by third-party FPIs.

3. PG&E does not explain how it will source outside debt funding for its Finance Platform.

4. PG&E does not provide adequate details or justification for the Finance Platform.

5. Expanding the OBF program to support more clean energy technologies will help to accelerate the state’s transition to clean energy and reduction of GHG emissions.

6. An expanded OBF program will enable customers who lack easy access to capital at attractive terms or have other priorities for capital to obtain no-interest, no-fee financing for clean energy technologies and projects, which are currently not available through the OBF or other programs.

7. The IOUs’ current OBF programs have a default rate of less than one percent.
8. There is no need to impose any additional requirements with respect to the IOUs’ customer credit eligibility criteria for the non-residential OBF program.

9. The IOUs currently target bill neutrality in their OBF programs but bill neutrality is not a Commission-imposed requirement.

10. Targeting utility bill neutrality with respect to technologies other than EE may effectively result in few or no non-EE projects qualifying for financing.

11. It is not necessary to adopt a bill neutrality requirement for non-residential customers participating in the expanded OBF program.

12. Assessment of bill impacts based solely on the utility bill may not provide an accurate picture of a customer’s overall energy usage and costs.

13. SCE’s proposal to loosen the bill neutrality target to 25 percent while maintaining other requirements, such as requiring customers to be in good credit standing and providing customers with the necessary information to make an informed decision, presents one viable solution to expand support for additional clean energy technologies while still providing reasonable safeguards for the program.

14. Increasing loan terms and maximum loan amounts potentially increases the risks of customers defaulting.

15. The IOUs do not present a specific proposal to extend the maximum loan amount or term for the OBF program.

16. There is a lack of information in the record regarding the EULs and costs of the additional technologies that will be found to be eligible under expanded OBF.

17. Adding financing charges and interest payments to OBF loans would fundamentally change the nature of the OBF program, which has always offered loans with no interest or fees.
18. It is not feasible or optimal to have PG&E run a statewide OBF program.
19. One of the benefits of expanding OBF is that OBF is an established program and the IOUs already have in place measures to mitigate risks to customers.
20. The risk of defaults is mitigated due to the IOUs’ credit eligibility criteria and assessment of the customer’s ability to repay the loan.
21. Commercial and institutional customers are likely to have more access to the necessary expertise to effectively evaluate the economic impacts of clean energy projects and associated financing costs.
22. PG&E’s and SCE’s OBF loan pools are currently funded through PPP charges.
23. SDG&E’s OBF program is currently funded through electric distribution and gas transportation rates.
24. SoCalGas’ OBF program is currently funded through transportation rates.
25. It is more administratively efficient and will streamline the customer application process for each IOU to have a single OBF program with a single loan pool for both EE and non-EE technologies.
26. No party identified any restriction that would prohibit using the IOUs’ current funding mechanisms to support non-EE clean energy projects.
27. Funds currently authorized for the OBF program are not being fully utilized and could be used to support additional clean energy technologies.
28. There is a finite amount of natural gas cap-and-trade allowance proceeds and using the proceeds for OBF would mean there are fewer proceeds available to be returned to ratepayers.
29. Many program design elements regarding SoCalGas’ proposed OBF-Consumer program, particularly relating to consumer protections, are not adequately developed.

30. CAEATFA operates CHEEF Pilot Programs, under the marketing brand of the GoGreen Home, GoGreen Business, and GoGreen Multifamily Financing Programs.

31. The GoGreen Programs provide program participants with credit enhancements for loans to incentivize energy-efficiency upgrades.

32. CAEATFA was authorized in D.21-08-006 an additional $75.2 million to fund the GoGreen Programs through 2027.

33. Current GoGreen Programs regulations do not allow for credit enhancements to support clean energy technology other than EE or DR measures.

34. CAEATFA proposes to expand its GoGreen Programs to include additional clean energy technologies, such as heat pumps.

35. CAEATFA proposes to develop a Benefits Test through its own rulemaking process to determine whether any given technology or project should qualify for GoGreen enhanced credit financing.

36. CAEATFA’s rulemaking process will include public input.

37. CAEATFA proposes to develop a Benefits Test through its own rulemaking process to determine whether any given technology or project should qualify for GoGreen enhanced credit financing.

38. Increasing the number of eligible GoGreen Program technologies is likely to make EE and clean energy project technologies more attractive to potential program participants.
39. GoGreen Programs do not approve projects that lead to default or inability to pay in any significant amount.

40. CAEATFA is not seeking additional Commission funds at this time to support its proposed eligible-technology expansion in the GoGreen Programs.

41. The GoGreen Programs are currently funded by PPP funds.

42. The GoGreen Programs currently only allow for 30 percent of project funding to go towards non-EE measures.

43. The proposed technology expansion for CHEEF programs is unlikely to increase risk of default or other customer harms.

44. CAEATFA’s rulemaking process will ensure that the implementation of the proposed expansion of GoGreen Programs eligible-technology is reasoned.

45. CAEATFA seeks authorization to re-establish a non-residential and large commercial financing program, targeting municipal government, school, and hospital IOU customers (MUSH Program).

46. The MUSH Program does not include credit enhancements for participants, and mainly provides OBR functionality.

47. The GoGreen Small Business program has only facilitated seven finance agreements through 2020.

48. CAEATFA has not sufficiently demonstrated demand for the MUSH Program.

49. CAEATFA seeks to utilize the existing CHEEF budget for the MUSH Program.

50. MUSH and large commercial customers may seek to finance large projects which have the potential to utilize significant amounts of the CHEEF budget.

51. CAEATFA’s MUSH Program may cause the currently authorized CHEEF budget to diminish, to the detriment of other CHEEF programs.
52. TOB programs allow customers to pay for EE or related improvements without any out-of-pocket expenses or incurring debt.
53. TOB programs may lead to savings on energy consumption such that the amount of bill reduction may be greater than an amortized cost of the technology improvement.
54. PG&E’s TOB proposal lacked specifics regarding benefits, savings, program duration, and KPIs.
55. PG&E proposes that FPIs would use its Finance Platform to track TOB charges.
56. PG&E proposes that FPIs must conform to PG&E’s proposed tariff in order to utilize the Finance Platform.
57. SCE’s TOB Proposal would provide participants with funding to install EE and BE measures, in exchange for the addition of a tariff service charge to the customer’s bill.
58. SCE’s TOB Proposal includes unresolved policy questions.
59. SCE forecasts that its three-year pilot would create natural gas savings of 1.04 million therms for the initial three years of its TOB program.
60. SVCE’s TOB Proposal would provide participants with funding to install clean energy technologies in exchange for the addition of a tariff service charge to the customer’s bill.
61. SVCE’s TOB Proposal would require bill neutrality/cash positivity for technology installations to qualify for the program, and limit the tariff service charge to less than 80 percent of projected annual savings due to the technology installation.
62. SVCE’s TOB Proposal would require automatic succession of the tariff service charge to the bill of the next customer at the property, until the cost of the technological upgrade is fully paid.

63. SVCE, as a CCA, would require access to PG&E’s billing system and other administrative support from PG&E to implement its proposal.

64. SVCE has unresolved implementation issues to address with PG&E.

65. SVCE projects that its two-year TOB pilot will save 23,000 metric tons of carbon dioxide equivalents.

66. A number of outstanding questions remain regarding design and implementation for the PG&E, SCE, and SVCE TOB proposals.

67. A tariff service charge shown on the customer bill will ensure TOB program billing visibility for participants.

68. IOU expertise is needed to design TOB programs, given that any program would require access to IOU billing systems.

69. Expediency in developing TOB proposals is needed to meet California’s decarbonization goals.

70. A TOB Working Group would allow for continued development of PG&E’s, SCE’s, and SVCE’s TOB proposals.

71. Robust stakeholder participation in the TOB Working Group will allow for rapid finalization of TOB Proposals.

72. LGSEC’s DIR Proposal would allow customers who install electrification technologies to sign up for a cheaper electric rate, based on the marginal cost of new electric load, for any new load created by the electrification technologies.

73. LGSEC proposes that its DIR not include PCIA charges for the portion of CCA load created by electrification decarbonization programs.
74. Implementing new rates that affect PCIA charges could lead to substantial unforeseen ramifications.

75. This proceeding was categorized as ratesetting in contemplation of the implementation of new tariffs and spending of ratepayer funds.

Conclusions of Law

1. Ratepayer funding for PG&E’s proposed Finance Platform should not be authorized.

2. PG&E, SCE, SDG&E, and SoCalGas should be authorized to modify their current OBF programs to support comprehensive clean energy projects beyond EE.

3. Unless specifically modified by this decision or otherwise authorized by the Commission, the currently approved requirements of each utility’s OBF program should remain in effect.

4. The prohibition on using OBF funds for EE projects that were already moving toward implementation absent OBF should extend to OBF funds for all projects eligible under the expanded OBF program.

5. The IOUs should not be precluded from continuing to target bill neutrality, but bill neutrality should not be a requirement.

6. The IOUs should consider non-utility sources of energy usage and costs, to the extent feasible, to obtain a more accurate estimate of a customer’s overall energy usage and costs, before and after a project.

7. SDG&E’s CEOBF proposal should be rejected but SDG&E should not be precluded from expanding its OBF program to a particular segment within the non-residential class.

8. The IOUs should be authorized to expand OBF to any technology that supports Commission-endorsed clean energy policies.
9. The maximum loan amounts or terms for the OBF program should not be extended at this time.

10. The OBF program should continue to provide loans with no interest, finance charges, or prepayment penalties.

11. Gridium’s proposal to consolidate and have PG&E administer all OBF programs in the state should be denied.

12. If there is an applicable incentive or rebate program for a customer’s proposed project to be financed through the OBF program, then it is reasonable for the IOU to require the customer to participate in that program in order to maximize savings for the customer, as well as to ensure the most efficient use of OBF funds, with the following exceptions: (a) OBF loans of more than $250,000 should not be combined with rebates or incentives pursuant to the conditions set forth in OP 3 of D.19-03-001; and (b) customers participating in PG&E’s On-Bill Financing Alternative Pathway program should not be required to participate in a rebate or incentive program.

13. Consistent with past practice, any rebates or incentives should be delivered through the connected clean energy program and should not be accounted for in the OBF program.

14. SDG&E’s proposal to offer the Investment Incentive and Electric Credit to qualifying customers if it is able to secure non-ratepayer funding should be approved.

15. A single OBF loan pool for both EE and non-EE technologies should be authorized for each IOU.

16. The IOUs’ expanded OBF programs should continue to be funded through the same funding mechanisms currently funding their respective OBF programs.
17. The IOUs should identify and pursue non-ratepayer funding streams from federal and state sources to fund OBF and report on these efforts in their annual reports on the expanded OBF program.

18. The IOUs should ensure that any different funding sources are accounted for separately, including loan pool inflows and outflows, defaults, and administrative costs.

19. Each IOU should submit a Tier 1 advice letter to establish any necessary balancing accounts or subaccounts within existing balancing accounts to ensure the separate accounting of different funding sources.

20. An increase in the size of the authorized loan pools is not warranted at this time.

21. Since the expanded OBF program is not a clean energy program in and of itself but is intended as a financing tool to support clean energy policies, it is appropriate for reporting on the program to focus on the program’s performance as a financing tool and use of ratepayer funds.

22. SoCalGas’ proposed OBF-Consumer program should be denied at this time.

23. It is reasonable to maintain the requirement that a maximum of 30 percent of each individual GoGreen Program project’s budget go towards non-EE measures, since the programmatic funding is not changing.

24. The proposed technology expansion for CHEEF programs is unlikely to increase risk of default or other customer harms.

25. It is reasonable to approve CAEATFA’s proposed expansion of GoGreen Program technologies.

26. CAEATFA’s MUSH Program should be denied.
27. Significant questions remain to be resolved for the PG&E, SCE, and SVCE TOB proposals.
28. A TOB Working Group should be established to provide a forum for the Joint IOUs and SVCE to develop a Joint TOB Proposal.
29. IOU participation in a TOB Working Group is necessary, as is participation from SVCE.
30. Other Commission proceedings are better situated to consider the consequences of LGSEC’s proposed DIR.
31. Rate design is out of scope for this proceeding.
32. LGSEC’s DIR Proposal should be rejected for being out of scope.

**ORDER**

**IT IS ORDERED** that:
1. Pacific Gas and Electric Company, Southern California Edison Company, San Diego Gas & Electric Company, and Southern California Gas Company (individually referred to as “utility”) are authorized to modify their current On-Bill Financing (OBF) programs to support comprehensive clean energy projects beyond energy efficiency to the extent specified in this decision. Unless specifically modified by this decision or otherwise authorized by the California Public Utilities Commission, the currently authorized requirements of each utility’s OBF program shall remain in effect.
2. Pacific Gas and Electric Company, Southern California Edison Company, San Diego Gas & Electric Company, and Southern California Gas Company (individually referred to as “utility”) shall each submit a Tier 2 advice letter setting forth the types of clean energy technologies that will be eligible under its expanded On-Bill Financing (OBF) program prior to issuing any loans. The Tier 2 advice letter shall specify which clean energy policy the technology
supports with reference to the applicable California Public Utilities Commission decision or other authority endorsing the policy and/or technology. Loans issued under each utility’s expanded OBF program shall be limited to the clean energy technologies, which are approved via this advice letter process.

3. Pacific Gas and Electric Company, Southern California Edison Company, San Diego Gas & Electric Company, and Southern California Gas Company shall each submit a Tier 2 advice letter every two years, as specified by the California Public Utilities Commission’s Energy Division, to update the eligible technologies list if offering loans under an expanded On-Bill Financing program.

4. Pacific Gas and Electric Company, Southern California Edison Company, San Diego Gas & Electric Company, and Southern California Gas Company are each authorized to submit a Tier 1 advice letter to establish any necessary balancing accounts or subaccounts within existing balancing accounts to ensure the separate accounting of different funding sources for the expanded On-Bill Financing program.

5. Pacific Gas and Electric Company, Southern California Edison Company, San Diego Gas & Electric Company, and Southern California Gas Company (individually referred to as “utility”) shall each submit an annual status report on the expanded On-Bill Financing (OBF) program to the California Public Utilities Commission’s Energy Division with the following information: annual authorized loan pool amount, number and dollar amount of issued loans, number and dollar amount of fully repaid loans, number and dollar amount of defaulted loans, number and dollar amount of committed loans, total outstanding issued loan balance, size of available loan pool, number and dollar amount of loans by market segment, and number and dollar amount of loans by technology type. If a utility’s expanded OBF program has more than one
funding source, the annual report shall provide the above information for each funding source. Each annual report shall be submitted by June 15 each year and cover the previous calendar year. The information required in this report may be periodically updated by Energy Division.

6. The California Alternative Energy and Advanced Transportation Financing Authority (CAEATFA) is authorized to expand the energy-related technology offerings for its California Hub for Energy Efficiency Financing Pilot Programs, namely the GoGreen Home, GoGreen Business, and GoGreen Affordable Multi-Family Energy Financing Programs. CAEATFA is authorized to finalize eligible technologies through its own rulemaking process.

7. The California Alternative Energy and Advanced Transportation Financing Authority is authorized to utilize the budget approved in Decision (D.) 21-08-006 to expand the energy-related technology offerings for its California Hub for Energy Efficiency Financing (CHEEF) Pilot Programs. Up to 30 percent of the total amount loaned from CHEEF funds authorized in D.21-08-006 for any given project may be used for non-energy efficiency technologies.


10. Rulemaking 20-08-022 remains open.

   This order is effective today.

   Dated _________________, at San Francisco, California.