PUBLIC UTILITIES COMMISSION
505 VAN NESS AVENUE
SAN FRANCISCO, CA 94102-3298

September 15th, 2021

Sidney Dietz
Director, Regulatory Relations
Pacific Gas and Electric Company
77 Beale Street, Mail Code B13U
P.O. Box 770000
San Francisco, California 94177

Dear Mr. Dietz,

Energy Division (ED) approves the third-party contract advice letter 4466-G/6255-E for the statewide residential new construction program, to be implemented by TRC Solutions Inc. with a budget of $12.7M, effective September 15, 2021 and subject to compliance with ED direction to PG&E presented on page five of this disposition letter.

Background

Decision D.18-01-004, the Third-Party Solicitation Process Decision, requires the four California Investor-Owned Utilities (IOUs) to file a Tier 2 advice letter for each third-party contract, or batch of third-party contracts, that is valued at $5 million or more and/or with a term of longer than three years, for commission review.[1] On July 12th, 2021, PG&E filed this California Energy-Smart Homes Mixed Fuel Residential Program advice letter as part of its Statewide New Construction solicitation. On August 2nd, 2021 Sierra Club filed a protest to advice letter 4466-G/6255-E. On August 9 PG&E filed a reply to Sierra Club's protest.

In operationalizing the review of third-party advice letters, EE Staff focused its review on the fairness of the solicitations process, size of contract budget and forecasted savings, and the contract's contribution to the portfolio-level cost-effectiveness requirements. Approval of this advice letter is not evidence of Commission approval of future program implementation. It is PG&E's responsibility to manage its portfolio to ensure it remains in compliance with its approved business plan and all CPUC Decisions.

Sierra Club Protest

In its protest, Sierra Club asserts that PG&E's advice letter 4466-G/6255-E fails to provide sufficient transparency on the extent to which the residential mixed-fuel new construction program would incentivize fossil-fueled appliances. Sierra Club states that any such incentives should be removed from the Program. Sierra Club also requests that program eligibility requirements mirror the electrification ready requirements proposed in the 2022 Building Code. Sierra Club states there are space and plumbing readiness requirements that are needed to enable future installation of heat pump water heaters. Sierra Club points out that the proposed 2022 Building Code requires that systems "using gas or propane water heaters to serve individual dwelling units shall designate a space at least 2.5 feet by 2.5 feet wide and 7 feet tall suitable for future installation of a heat pump water heater" along with electric and plumbing readiness requirements.[2]

[1] D.18-01-004, pg. 57
[2] CEC, 21-BSTD-01, 15-Day Express Terms 2022 Energy Code- Residential and Nonresidential, Subchapter 7, Section 150.0(n) (July 14, 2021).

Last, Sierra Club requests that the CPUC direct SoCalGas to terminate its Energy Efficient New Homes program because it provides incentives for gas appliances in new construction which is not in-keeping with California's approach to new construction and would lead to improper competition among programs.

PG&E Reply to Protest

In its reply to protest, PG&E asserts the detail provided in advice letter 4466-G/6255-E provides details appropriate to the purpose of the advice letter filing requirement, which is to support CPUC review of third party contracts, not details of program plans. PG&E cites D.15-10-028 and D.18-01-004 as establishing that program implementation plans are the appropriate place to document program details.[3]

PG&E highlights the following details that are provided in the advice letter.

- The program includes both an "alterations" pathway and a "core" pathway, where greenfield new construction[4] is addressed in the core pathway.
- The alterations pathway "provides incentives for alterations to existing single family homes, duplexes, or low-rise multifamily buildings that convert one or more gas appliances or equipment to advanced electric systems.[5] PG&E clarifies the alterations path of the program *only* provides incentives for installing new electric equipment and does not offer incentives for new gas appliances.
- The core pathway provides escalating incentives based on energy efficiency improvements in the building design over what is required by the building code. Incentives are offered to participating builders for efficiency measures that yield code performance credit. Thus, it is possible that projects participating through the core pathway may receive whole-building-level incentives that include efficient gas appliances
- The core pathway also includes a requirement that participating builders install a suite of all-electric enabling technologies as a prerequisite for participation.[6] PG&E notes the advice letter specifies the required all-electric enabling technologies as: pre-wiring for future all-electric appliances and mechanical systems, communicating thermostats, segregated circuits for energy monitoring readiness, electric vehicle charging infrastructure pre-wiring, battery storage readiness, and thermostatic mixing valves.[7]

PG&E notes in its reply to Sierra Club that the mixed fuel new construction program is a statewide program designed to serve ratepayers of all four California IOUs, and to contribute to meeting CPUC assigned goals, which include kWh, kW and therm goals for 2022 and 2023.

In its reply to protest, PG&E expressed agreement with Sierra Club that the program should address space and plumbing readiness for heat pump water heaters in alignment with the 2022 Building Code. PG&E pledged to work with the program implementer to "explore incorporating a requirement"[8] that

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[4] A greenfield project is one that begins without consideration of any previous construction work on the site. Typically, a greenfield new construction involves development on a vacant or never-before-developed site.
[5] AL 4466-G/6255-E, July 12, 2021, page 7
[6] These all-electric enabling technologies are also required in the proposed 2022 Title 24 Building Code update.
[7] AL 4466-G/6255-E, July 12, 2021, page 6.
[8] PG&E Reply to Protest of AL 4466-G/6255-E, page 4

projects designate a space at least 2.5 feet by 2.5 feet wide and 7 feet tall to enable the future installation of a heat pump water heater, along with other electric and plumbing readiness requirements included in the 2022 Building Code.

In response to Sierra Club's request the CPUC direct SoCalGas to terminate its Energy Efficient New Homes Program, PG&E asserts that consideration of such direction is immaterial to the approval of the contract advice letter at hand (4466G/6255E) and should not impact CPUC approval of such.

Discussion

ED finds there is insufficient evidence in support of Sierra Club's assertion that the level of program detail provided in the advice letter does not meet CPUC standards for transparency regarding gas efficiency measures in a contract advice letter. Specific CPUC guidance for the content of contract advice letters include, but are not necessarily limited to:

- CPUC Decision 21-05-031 "encourages natural gas utilities to err on the side of transparency in program changes since these issues are quickly evolving." [9,10]
- CPUC Decision 18-01-004, ordering paragraph 9 sets the scope of CPUC review of program contract advice letters as encompassing:
    - "…compliance with the approved business plan, compliance with all Commission decisions, that the contract is not a result of a biased solicitation process, and that the solicitation process did not thwart the intentions of successful program design, delivery, and realized savings."
- ED staff developed a template which outlines the required information and documentation for each third-party advice letter submission. The template requires the following components:
    - Introduction: Purpose and Subject (Summary of Contracts)
    - Introduction: Solicitation Process Overview
    - Transition plan
    - Confidentiality
    - Final Independent Evaluator Report
    - Program-Level Measurement & Evaluation (M&V) Plan for NMEC programs seeking exceptions to the NMEC Rules
    - Selection spreadsheet
    - Executed third-party contract

There are no CPUC decisions prohibiting incentives for efficient gas appliances in new construction projects. There are policies regarding the appropriate baseline for new construction. Specifically, Resolution E-4818 states:

> "We direct the Program Administrators to apply a code baseline in cases where there is no reference operation for existing conditions, including new construction, expansions, added load, and projects that occur concurrently with a change in ownership or a lessee, or a change in the function of the space (e.g., office to laboratory), or a substantial change (i.e., 30% or more) in design occupancy."[11]

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[9] D.21-05-031 at 48
[10] Italics added for emphasis.
[11] Resolution E-4818, February 9,2017, Measure level baseline assignment and preponderance of evidence guidance to establish eligibility for an accelerated replacement baseline treatment. Ordering paragraph 4.

The advice letter clearly states the basis for incentives is the above code efficiency performance of the whole building. Page seven of the advice letter 4466-G 6255E states:

> "The core pathway will leverage approved California T24 Part 6 compliance software (T24 software) and home energy rating system (HERS) verification processes to capture efficiency improvements over code-built homes, through escalating incentives based on improvement over code as measured by the efficiency delta EDR (energy design rating). Participating builders can increase their incentives using any efficiency measure that yields code performance credit, including HVAC, envelope, hot water, and HERS verification procedures."

The advice letter also carefully defines program eligibility criteria for the 'alterations' pathway, and addresses required coordination with other programs to avoid duplicative incentives and/or energy savings claims. ED staff also reviewed the confidential program contract, which provides further details on the program, to ensure adherence to CPUC policy. Finally, additional program level details are included in Implementation Plans, which are filed following approval of program contracts. The Implementation Plan will provide a list of qualifying measures and incentives, as well as eligibility requirements, and program rules. The Implementation Plan also reports out program budget and savings information, including targets for kWh, kW and therm savings. Given these required components, the Implementation Plan offers a high level of transparency around the gas incentive offerings for new programs.

Overall, ED finds the detail provided in the advice letter regarding eligibility and treatment of gas measures in the program was sufficient to affirm compliance with CPUC policy. While not germane to the disposition of this advice letter, ED also notes PG&E could have been more forthcoming on the expected budget to be allocated to natural gas efficiency and the role of gas measures in the program, to help alleviate stakeholder questions. Moreover, there is no adopted CPUC standard for transparency of the gas components of a program in a contract advice letter that ED staff can apply, that go beyond existing requirements for contract advice letters.

Next, ED finds that CPUC policy does not substantiate the disallowance of incentives for gas-fueled efficiency measures. Per D.21-05-031, the CPUC

> "…decline[s] to adopt special rules for natural gas appliance programs or institute a special enforcement mechanism, as suggested by Sierra Club and Cal Advocates, respectively. Until such time as the Commission addresses broader policy questions related to natural gas efficiency, we find no current rationale for treating natural gas efficiency programs differently."[12] The decision adds that, "This could change, however, depending on the evolution of overall state policy with regard to building decarbonization." [13]

With respect to Sierra Club's request that CPUC terminate SoCalGas' Energy Efficient New Homes program, ED agrees with PG&E that the issue is immaterial to the approval of advice letter 4466-G/6255-E. Decision (D).16-08-019 designated residential new construction as a subprogram that shall be delivered under the statewide administration model,[14] where "statewide administration" meets criteria defined in ordering paragraph 5 and Section 4.9.1 of the D.16-08-019. However, D.18-05-041, ordering paragraph 21 states:

[12] D.21-05-031, page 47
[13] Ibid
[14] D.16-08-019, Section 4.9.2, page 61

> "All program administrators shall have the ability to continue local pilot activities that would otherwise qualify for statewide administration according to the terms of Decision 16-08-019 but that are not yet ready for such statewide treatment, provided that such local pilots or programs do not compete with, or otherwise impede the progress or activities of operational statewide programs."

Should Sierra Club wish to pursue a question on whether or how the EE portfolio should continue to support natural gas measures, they may consider a motion to the EE rulemaking asking such questions for consideration by the Assigned Commissioner and Administrative Law Judge. As stated above, current policy is permissive of natural gas energy efficiency programs and cannot be appropriately addressed through advice letter disposition.

The issue of whether the EENH program inappropriately competes with the statewide new construction program is not germane to the review of this advice letter. If Sierra Club has additional questions on the EENH program, those should be submitted via motion to the EE Rulemaking (R.13-11-005).

Direction to PG&E

PG&E made two pledges in its reply to protest. The first to ensure appropriate program details are included in the program implementation plan, which is to be made available to the public within 60 days of contract execution (see below). The second is a pledge to work with the implementer to consider including space requirements to enable future installations of heat pump water heaters. There is general agreement between Sierra Club and PG&E on the merit of including these requirements, and a long history of conformance between ratepayer funded new construction program requirements and Title 24 building code. For these reasons, ED directs PG&E to ensure the program includes a requirement that program-funded projects using the core pathway comply with the all-electric enabling space requirements of the upcoming building code. Thus, the program shall require each dwelling unit participating in the program core pathway designate a space at least 2.5 feet by 2.5 feet wide and 7 feet tall to enable the future installation of a heat pump water heater. Finally, ED emphasizes to PG&E that CPUC policy regarding incentives for gas appliances in new construction projects may evolve during the implementation of this contract, and that CPUC requires PG&E's full compliance with any such future policy changes, regardless of the status of this contract.

Implementation Plan Development

Decision D.18-05-041, the Business Plan Decision, Ordering Paragraph 2 requires implementation plans to be posted within 60 days of contract execution, or within 60 days of Commission approval if the contract meets the advice letter threshold. With the issuance of this disposition, implementation plan for this program is due to be posted no later than November 14, 2021.

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Please direct any questions regarding Energy Division's findings in this non-standard disposition to Christina Torok (christina.torok@cpuc.ca.gov).

Sincerely,

Edward Randolph
Deputy Executive Director for Energy and Climate Policy/
Director, Energy Division

Cc: Service List R.13-11-005
Matt Vespa, Senior Attorney, Earthjustice
Pete Skala, Energy Division
Jennifer Kalafut, Energy Division
Alison LaBonte, Energy Division
Jordan Christenson, Energy Division

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> "…decline[s] to adopt special rules for natural gas appliance programs or institute a special enforcement mechanism, as suggested by Sierra Club and Cal Advocates, respectively. Until such time as the Commission addresses broader policy questions related to natural gas efficiency, we find no current rationale for treating natural gas efficiency programs differently."[12] The decision adds that, "This could change, however, depending on the evolution of overall state policy with regard to building decarbonization." [13]

With respect to Sierra Club's request that CPUC terminate SoCalGas' Energy Efficient New Homes program, ED agrees with PG&E that the issue is immaterial to the approval of advice letter 4466-G/6255-E. Decision (D).16-08-019 designated residential new construction as a subprogram that shall be delivered under the statewide administration model,[14] where "statewide administration" meets criteria defined in ordering paragraph 5 and Section 4.9.1 of the D.16-08-019. However, D.18-05-041, ordering paragraph 21 states:

[12] D.21-05-031, page 47
[13] Ibid
[14] D.16-08-019, Section 4.9.2, page 61

> "All program administrators shall have the ability to continue local pilot activities that would otherwise qualify for statewide administration according to the terms of Decision 16-08-019 but that are not yet ready for such statewide treatment, provided that such local pilots or programs do not compete with, or otherwise impede the progress or activities of operational statewide programs."

Should Sierra Club wish to pursue a question on whether or how the EE portfolio should continue to support natural gas measures, they may consider a motion to the EE rulemaking asking such questions for consideration by the Assigned Commissioner and Administrative Law Judge. As stated above, current policy is permissive of natural gas energy efficiency programs and cannot be appropriately addressed through advice letter disposition.

The issue of whether the EENH program inappropriately competes with the statewide new construction program is not germane to the review of this advice letter. If Sierra Club has additional questions on the EENH program, those should be submitted via motion to the EE Rulemaking (R.13-11-005).

Direction to PG&E

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Implementation Plan Development

Decision D.18-05-041, the Business Plan Decision, Ordering Paragraph 2 requires implementation plans to be posted within 60 days of contract execution, or within 60 days of Commission approval if the contract meets the advice letter threshold. With the issuance of this disposition, implementation plan for this program is due to be posted no later than November 14, 2021.

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Please direct any questions regarding Energy Division's findings in this non-standard disposition to Christina Torok (christina.torok@cpuc.ca.gov).

Sincerely,

(for)

Edward Randolph
Deputy Executive Director for Energy and Climate Policy/
Director, Energy Division

Cc: Service List R.13-11-005
Matt Vespa, Senior Attorney, Earthjustice
Pete Skala, Energy Division
Jennifer Kalafut, Energy Division
Alison LaBonte, Energy Division
Jordan Christenson, Energy Division

Pacific Gas and Electric Company®

Sidney Bob Dietz II
Director
Regulatory Relations

Pacific Gas and Electric Company
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P.O. Box 770000
San Francisco, CA 94177

Fax: 415-973-3582

July 12, 2021

Advice 4466-G/6255-E
(Pacific Gas and Electric Company U 39 M)

Public Utilities Commission of the State of California

Subject: **Advice Letter Submittal of Pacific Gas and Electric Company's Third-Party Solicitations resulting from its Statewide New Construction Request for Proposal ("RFP") - California Energy-Smart Homes Mixed Fuel Residential Program, executed between TRC Solutions, Inc. and PG&E**

Purpose

In compliance with Decision (D.) 18-01-004, Pacific Gas and Electric Company ("PG&E") hereby requests the California Public Utilities Commission ("Commission" or "CPUC") and requests approval of the Energy Efficiency ("EE") Program Implementation Agreement ("PIA" or "Contract") executed between PG&E and TRC Solutions, Inc. This Contract results from PG&E's Statewide New Construction Request for Proposal ("RFP") solicitation for statewide resource EE customer programs and will contribute towards meeting PG&E's 60 percent third-party outsourcing compliance requirement.

Background

In Decision (D.) 15-10-028, the Commission established and adopted the Rolling Portfolio process for regular review and revision of the EE program administrators' (PAs') portfolios. In August 2016, the Commission adopted D.16-08-019, which defined the terms and the requirements for the utility PAs to administer statewide and third-party programs.

Under the framework of the rolling portfolio, the Commission adopted D. 18-01-004 for procurement of EE programs through a solicitation process. That Decision directed the investor-owned utilities ("IOUs"), including PG&E, to meet specific third-party outsourcing targets by certain dates in order to transition to a majority third-party-implemented portfolio by 2023. Specifically, D. 18-01-004 and D. 18-05-041 ordered the IOUs to have at least 25 percent of their 2020 program budgets under contract for programs designed and implemented by third-party providers by December 19, 2019[1], at least 40 percent by December 31, 2020, and at least 60 percent by December 31, 2022. Additional details are provided in the Public Section of this Advice Letter.

Compliance Requirements

Per D.18-01-004, the IOUs are required to file a Tier 2 advice letter for each EE third-party contract that is valued at $5 million or more and/or with a term longer than three years.

The Commission developed a template which outlines the required information and documentation for each third-party advice letter submission. The table below provides a list of the required content and indicates where PG&E is providing the content within this submission.

Table 1: Required Content for Advice Letter Submission

	Contents, Attachments, and Appendices	Part 1 Public	Part 2 Confidential
1	Introduction: Purpose and Subject (Summary of Contracts)	Part 1.1.A-1.1.B	Appendix D
2	Introduction: Solicitation Process Overview	Part 1.1.C	Appendix B
3	Transition Plan	Part 1.2	
4	Confidentiality	Part 1.3	
5	Final IE Report	Attachment A	Appendix A
6	Program-Level Measurement & Evaluation (M&V) Plan for NMEC programs seeking exceptions to the NMEC Rules	Attachment B	
7	Selection spreadsheet (in Excel)		Appendix C
8	Executed third-party contract		Appendix E

The public version of this advice letter is provided to the service lists for Rulemaking (“R.”) 13-11-005. The confidential version of the advice letter is provided only to the Commission.

[1] D. 18-05-041 OP (4). PG&E was granted an extension to June 30, 2020.

Protests

*****Due to the COVID-19 pandemic, PG&E is currently unable to receive protests or comments to this advice letter via U.S. mail or fax. Please submit protests or comments to this advice letter to EDTariffUnit@cpuc.ca.gov and PGETariffs@pge.com*****

Anyone wishing to protest this submittal may do so by letter sent via U.S. mail, facsimile or E-mail, no later than **August 2, 2021**, which is 21[2] days after the date of this submittal. Protests must be submitted to:

CPUC Energy Division
ED Tariff Unit
505 Van Ness Avenue, 4th Floor
San Francisco, California 94102

Facsimile: (415) 703-2200
E-mail: EDTariffUnit@cpuc.ca.gov

Copies of protests also should be mailed to the attention of the Director, Energy Division, Room 4004, at the address shown above.

The protest shall also be sent to PG&E either via E-mail or U.S. mail (and by facsimile, if possible) at the address shown below on the same date it is mailed or delivered to the Commission:

Sidney Bob Dietz II
Director, Regulatory Relations
c/o Megan Lawson
Pacific Gas and Electric Company
77 Beale Street, Mail Code B13U
P.O. Box 770000
San Francisco, California 94177

Facsimile: (415) 973-3582
E-mail: PGETariffs@pge.com

Any person (including individuals, groups, or organizations) may protest or respond to an advice letter (General Order 96-B, Section 7.4). The protest shall contain the following information: specification of the advice letter protested; grounds for the protest; supporting factual information or legal argument; name, telephone number, postal address, and (where appropriate) e-mail address of the protestant; and statement that the protest was

[2] The 20-day protest period concludes on a weekend; therefore, PG&E is moving this date to the following business day.

sent to the utility no later than the day on which the protest was submitted to the reviewing Industry Division (General Order 96-B, Section 3.11).

Effective Date

Pursuant to General Order (GO) 96-B, Rule 5.2, and OP 2 of D.18-01-004, this advice letter is submitted with a Tier 2 designation. PG&E requests that this Tier 2 advice submittal become effective on regular notice, **August 11, 2021**, which is 30 calendar days after the date of submittal.

Notice

In accordance with General Order 96-B, Section IV, a copy of this advice letter is being sent electronically and via U.S. mail to parties shown on the attached list and the parties on the service list for R.13-11-005. Address changes to the General Order 96-B service list should be directed to PG&E at email address PGETariffs@pge.com. For changes to any other service list, please contact the Commission's Process Office at (415) 703-2021 or at Process_Office@cpuc.ca.gov. Send all electronic approvals to PGETariffs@pge.com. Advice letter submittals can also be accessed electronically at: http://www.pge.com/tariffs/.

/S/
Sidney Bob Dietz II
Director, Regulatory Relations

Attachments

cc: Service List R.13-11-005

California Public Utilities Commission

ADVICE LETTER SUMMARY

ENERGY UTILITY

MUST BE COMPLETED BY UTILITY (Attach additional pages as needed)

Company name/CPUC Utility No.: Pacific Gas and Electric Company (U 39 M)

Utility type:
- [x] ELC
- [x] GAS
- [ ] WATER
- [ ] PLC
- [ ] HEAT

Contact Person: Stuart Rubio
Phone #: (415) 973-4587
E-mail: PGETariffs@pge.com
E-mail Disposition Notice to: SHR8@pge.com

EXPLANATION OF UTILITY TYPE

ELC = Electric GAS = Gas WATER = Water
PLC = Pipeline HEAT = Heat

(Date Submitted / Received Stamp by CPUC)

Advice Letter (AL) #: 4466-G/6255-E

Tier Designation: 2

Subject of AL: Advice Letter Submittal of Pacific Gas and Electric Company's Third-Party Solicitations resulting from its Statewide New Construction Request for Proposal ("RFP") - California Energy-Smart Homes Mixed Fuel Residential Program, executed between TRC Solutions, Inc. and PG&E

Keywords (choose from CPUC listing): Compliance

AL Type: [ ] Monthly [ ] Quarterly [ ] Annual [x] One-Time [ ] Other:

If AL submitted in compliance with a Commission order, indicate relevant Decision/Resolution #:
D.18-01-004

Does AL replace a withdrawn or rejected AL? If so, identify the prior AL: No

Summarize differences between the AL and the prior withdrawn or rejected AL: N/A

Confidential treatment requested? [x] Yes [ ] No

If yes, specification of confidential information: See Confidential Declaration and Matrix
Confidential information will be made available to appropriate parties who execute a nondisclosure agreement. Name and contact information to request nondisclosure agreement/access to confidential information: Matthew Braunwarth, MPBb@pge.com, 415-973-4058.

Resolution required? [ ] Yes [x] No

Requested effective date: 8/11/21

No. of tariff sheets: 0

Estimated system annual revenue effect (%): N/A

Estimated system average rate effect (%): N/A

When rates are affected by AL, include attachment in AL showing average rate effects on customer classes (residential, small commercial, large C/I, agricultural, lighting).

Tariff schedules affected: N/A

Service affected and changes proposed[1]: N/A

Pending advice letters that revise the same tariff sheets: N/A

[1]Discuss in AL if more space is needed.

Clear Form

Protests and all other correspondence regarding this AL are due no later than 20 days after the date of this submittal, unless otherwise authorized by the Commission, and shall be sent to:

CPUC, Energy Division Attention: Tariff Unit 505 Van Ness Avenue San Francisco, CA 94102 Email: EDTariffUnit@cpuc.ca.gov	Name: Sidney Bob Dietz II, c/o Megan Lawson Title: Director, Regulatory Relations Utility Name: Pacific Gas and Electric Company Address: 77 Beale Street, Mail Code B13U City: San Francisco, CA 94177 State: California Zip: 94177 Telephone (xxx) xxx-xxxx: (415)973-2093 Facsimile (xxx) xxx-xxxx: (415)973-3582 Email: PGETariffs@pge.com
	Name: Title: Utility Name: Address: City: State: District of Columbia Zip: Telephone (xxx) xxx-xxxx: Facsimile (xxx) xxx-xxxx: Email:

Clear Form

BEFORE THE PUBLIC UTILITIES COMMISSION OF THE STATE OF CALIFORNIA

PACIFIC GAS AND ELECTRIC COMPANY (U 39 M)

DECLARATION OF MATTHEW BRAUNWARTH SEEKING CONFIDENTIAL TREATMENT FOR CERTAIN DATA AND INFORMATION CONTAINED IN ADVICE LETTER 4466-G/6255-E

I, Matthew Braunwarth, declare:

1. I am presently employed by Pacific Gas and Electric Company ("PG&E") and have been an employee at PG&E since November 2010. I am the manager of Energy Efficiency Procurement department in PG&E's Energy Efficiency organization. In this position, my responsibilities include managing the solicitation and finalization of the Program Implementation Agreement ("PIA") submitted for approval in this Advice Letter. In carrying out these responsibilities, I have acquired confidential information related to offers received in this solicitation. Through this experience, I have become familiar with the type of information that could affect the negotiating position of energy efficiency sellers with respect to price and other terms, as well as with the type of information that such sellers consider confidential and proprietary.

2. Based on my knowledge and experience, and in accordance with ("D") 06-06-066, 0804-023, and relevant Commission rules, I make this declaration seeking confidential treatment for certain data and information contained in the attachments to Advice Letter 4466-G/6255-E.

3. Attached to this declaration is a matrix identifying the data and information for which PG&E is seeking confidential treatment. The matrix specifies that the material PG&E is seeking to protect constitutes confidential market sensitive data and information covered by the Public

Utilities Codes section 454.5(g), D. 06-06-066, D.08-04-023 and/or relevant Commission rules. The matrix also specifies why confidential protection is justified. Further, the data and information: (1) is not already public; and (2) cannot be aggregated, redacted, summarized or otherwise protected in a way that allows partial disclosure. By this reference, I am incorporating into this declaration all of the explanatory text that is pertinent to my testimony in the attached matrix.

I declare under penalty of perjury, under the laws of the State of California, that the foregoing is true and correct.

Executed on July 12, 2021, at San Francisco, California.

_/s/_

Matthew Braunwarth

PACIFIC GAS AND ELECTRIC COMPANY'S (U 39 M)
ADVICE LETTER 4466-G/6255-E

July 12, 2021

IDENTIFICATION OF CONFIDENTIAL INFORMATION

Redaction Reference	Category from D.06-06-066, Appendix 1, or Separate Confidentiality Order that Data Corresponds To	Justification for Confidential Treatment	Length of Time Date To Be Kept Confidential
Document: Advice Letter 4466-G/6255-E			
Confidential Appendix A: **Independent Evaluator Report**	Item VIII) A) Bid information and B) Specific quantitative analysis involved in scoring and evaluation of participating bids. Item VII) B) Contracts and power purchase agreements between utilities and non-affiliated third parties (non-RPS) Public Utilities Code section 454.5(g)	The purpose of the Independent Evaluator ("IE") Report is to determine on the basis of bid information whether PG&E's conduct of the EE statewide new construction program fulfilled Commission requirements. The IE Report relies extensively on confidential information for its analysis and findings, so to provide as much information about the statewide new construction as possible without divulging market sensitive information. This appendix discusses, analyzes, and/or evaluates the confidential terms of the non-RPS contracts and confidential negotiations between PG&E and the counterparty. Disclosure of this information will provide valuable market sensitive information to market participants. Release of this information could be damaging to future PG&E contract negotiations and ultimately detrimental to PG&E's customers. PG&E has redacted confidential bid information and quantitative analysis involved in scoring and evaluating the bids from the IE Report. A public version of the IE report has been filed with the Advice Letter. PG&E has compiled with the requirement to facilitate the public availability of its energy efficiency procurement information by masking its confidential data. Accordingly, the confidential version of the IE report should be protected from public disclosure.	3 years from July 12, 2021
Confidential Appendix B: **Solicitation Evaluation Criteria Scorecard and Program Savings Summary**	VIII) A) Bid information and B) Specific quantitative analysis involved in scoring and evaluation of participating bids	Appendix B provides the RFA and RFP evaluation criteria with associated scorecard weightings for each criteria and sub-criteria for PG&E's 2019-2020 PG&E energy efficiency statewide new construction RFA and RFP. Appendix B also includes summaries of program savings and cost-effectiveness.	Three years after CPUC approval

PACIFIC GAS AND ELECTRIC COMPANY'S (U 39 M)
ADVICE LETTER 4466-G/6255-E

July 12, 2021

IDENTIFICATION OF CONFIDENTIAL INFORMATION

Redaction Reference	Category from D.06-06-066, Appendix 1, or Separate Confidentiality Order that Data Corresponds To	Justification for Confidential Treatment	Length of Time Date To Be Kept Confidential
– in its entirety		Disclosure of this information will provide valuable market sensitive information to market participants prior to the conclusion of ongoing negotiations. Release of this information could also provide sensitive solicitation strategy information and be damaging to future PG&E solicitations and ultimately detrimental to PG&E's customers.	
Appendix C: **Statewide new construction Solicitation selection spreadsheet – in its entirety**	VIII) A) Bid information and B) Specific quantitative analysis involved in scoring and evaluation of participating bids Public Utilities Code section 454.5(g)	Appendix C provides a spreadsheet of all of the offers received in response to PG&E's 2019-2020 PG&E energy efficiency statewide new construction RFA and RFP. Appendix C also identifies those offers that were selected for the shortlist, contract negotiations, and contract award. Disclosure of this information will provide valuable market sensitive information to market participants. Release of this information could be damaging to future PG&E solicitations and ultimately detrimental to PG&E's customers.	Three years after CPUC approval
Appendix D: **Contract and Contract Terms Summary – in its entirety**	Item VII) B) Contracts and power purchase agreements between utilities and non-affiliated third parties (non-RPS)	These appendices contain the confidential contract summary and conditions of non-RPS contracts. Table 1: Table 1 includes the Confidential Summary Portion of the Bidders Proposed Compensation Type (Time and Materials, specific deliverables, quantity of installed measures, incremental savings payment, customer incentives and performance payments). Table 2: Table 2 includes the major contract provisions made to the standard form contract. The information contains confidential contract-related information exchanged between PG&E and the	Three years after CPUC approval

PACIFIC GAS AND ELECTRIC COMPANY'S (U 39 M)
ADVICE LETTER 4466-G/6255-E

July 12, 2021

IDENTIFICATION OF CONFIDENTIAL INFORMATION

Redaction Reference	Category from D.06-06-066, Appendix 1, or Separate Confidentiality Order that Data Corresponds To	Justification for Confidential Treatment	Length of Time Date To Be Kept Confidential
		counterparty. Release of this market sensitive information could put PG&E at a competitive disadvantage with regard to other market participants and could detrimentally impact PG&E customers and/or may disclose confidential information provided in confidence by a third party to PG&E. Table 3: Table 3 includes the major contract provisions made to the modifiable form contract. The information contains confidential contract-related information exchanged between PG&E and the counterparty. Release of this market sensitive information could put PG&E at a competitive disadvantage with regard to other market participants and could detrimentally impact PG&E customers and/or may disclose confidential information provided in confidence by a third party to PG&E. Table B1: Table B1 contains program level cost effectiveness measures on an individual level. Releasing this market sensitive information could put PG&E at a competitive disadvantage with regard to other market participants and could detrimentally impact PG&E customers. PG&E has redacted market sensitive information. A public version of the Table B1 has been filed with the Advice Letter. PG&E has compiled with the requirement to facilitate the public availability of its energy efficiency procurement information by masking its confidential data. Accordingly, the confidential version of Table B1 should be protected from public disclosure.	

PACIFIC GAS AND ELECTRIC COMPANY'S (U 39 M)
ADVICE LETTER 4466-G/6255-E

July 12, 2021

IDENTIFICATION OF CONFIDENTIAL INFORMATION

Redaction Reference	Category from D.06-06-066, Appendix 1, or Separate Confidentiality Order that Data Corresponds To	Justification for Confidential Treatment	Length of Time Date To Be Kept Confidential
Appendix E: **Executed Contracts**	Item VII) B) Contracts and power purchase agreements between utilities and non-affiliated third parties (non-RPS)	These appendices contain the confidential terms and conditions of Third-Party Energy Efficiency Program Implementation Agreements. The information contains confidential contract-related information exchanged between PG&E and the counterparty. Release of this market sensitive information could put PG&E at a competitive disadvantage with regard to other market participants and could detrimentally impact PG&E customers and/or may disclose confidential information provided in confidence by a third party to PG&E.	Three years after CPUC approval

PACIFIC GAS AND ELECTRIC COMPANY'S (U 39 M)
ADVICE LETTER 4466-G/6255-E
July 12, 2021

IDENTIFICATION OF CONFIDENTIAL INFORMATION

Redaction Reference	Civ. Code §§ 1798 et seq.; Govt. Code § 6254; 42 U.S.C. § 1320d-6; and General Order (G.O.) 77-M	Justification for Confidential Treatment
Attachment C Names of individual employees in Attachment C	Personal information that identifies or describes an individual (including employee), which may include home address or phone number; SSN; driver's license, or passport numbers; education; financial matters; medical or employment history (not including PG&E job titles); and statements attributed to the individual.	The Attachment C contains names of individual employees. PG&E has redacted the names of the individual employees. A public version of the Attachment C has been filed with the Advice Letter.

PACIFIC GAS AND ELECTRIC COMPANY

Approval of TRC Solutions, Inc. Contract Resulting from Statewide New Construction Competitive Solicitation for Third-Party Energy Efficiency Customer Programs

PART 1 PUBLIC VERSION

July 12, 2021

Together, Building
a Better California

TABLE OF CONTENTS

ADVICE LETTER PART 1: PUBLIC SECTION

1. INTRODUCTION

A. Purpose

Pursuant to the California Public Utilities Commission (CPUC or the Commission) Decision (D.)18-05-041 – Decision Addressing Energy Efficiency Business Plans, and in accordance with the requirements and timeline described in D.18-01-004 – Decision Addressing Third Party Solicitation Process for Energy Efficiency (EE) Programs, Pacific Gas and Electric Company (PG&E) hereby submits this advice letter to seek Commission approval of the EE program implementation agreement (PIA or contract) between TRC Solutions, Inc. (TRC) and PG&E resulting from PG&E's solicitation for Statewide New Construction (SWNC) resource EE customer programs.

As the designated lead Program Administrator (PA) for the SWNC Program, PG&E is submitting this Advice Letter for the SWNC Residential Mixed Fuel Program to be implemented on behalf of California's four Investor-Owned Utilities (IOUs) - Pacific Gas & Electric Company (PG&E), Southern California Edison (SCE), Southern California Gas Company (SCG or SoCalGas), and San Diego Gas & Electric Company (SDG&E).

TRC's program named California Energy-Smart Homes Program, Mixed Fuel Residential (the Program) proposes to serve the residential customer sub-sectors - single family, duplexes, multifamily low-rise and alteration projects in all California IOU service territories.

Furthermore, with a current total program budget of $11.1[1] million through December 31, 2025, the Program will fall within PG&E's 2018-2025 Business Plan annual budget levels approved by the Commission in D. 18-05-041[2]. The contract between PG&E and TRC was fully executed on July 6, 2021 and will contribute to the 60 percent outsourcing compliance target.

I. Background

On August 18, 2016, the CPUC issued D.16-08-019 – Decision Providing Guidance for

[1] The Program has a 5-year term, but the budget is through December 31, 2025 in compliance with the current approved ABAL. Program services and budget after December 31, 2025 shall be contingent upon CPUC approving funding for PG&E's energy efficiency program portfolio after 2025 and will require parties do a change order to add additional services and budget accordingly.

[2] PG&E's 2018-2025 Business Plan annual budgets were approved via D.18-05-041, p.2. The business plan budgets set expectations for the total annual EE portfolio spending and cost recovery budgets that are requested via an Annual Budget Advice Letter (ABAL) filed in September of each year (see D.15-10-028 pp.43, 62, and OP 4, p.123). The ABAL requests CPUC authorization of PG&E's total EE portfolio budget for spending and cost recovery in the upcoming program year, and the ABAL EE portfolio budget is comprised of individual program budgets forecasted for the upcoming program year. The EE portfolio budget spending request is generally capped at the approved business plan budget for that program year, however an ABAL budget can exceed the business plan budget in a given year as long as PG&E's cumulative budget for 2018-2025 remains within the total approved cumulative budget for 2018-2025 (D.18-05-041 OP 45, p.192). PG&E will include the annual forecasted Program budget in its upcoming ABAL portfolio budgets and expects these total ABAL portfolio budgets to fall within the current approved business plan annual portfolio budget caps.

Initial Energy Efficiency Rolling Portfolio Business Plan Filings, which, for EE program purposes, defined the term "third-party program"[3] and further defined the term "statewide".[4] Additionally, in D. 16-08-019, the Commission identified a list of programs to be administered statewide, including residential and non-residential new construction programs and laid out the basic structure of the requirements for statewide programs going forward.[5]

Pursuant to the Commission's April 14, 2017 Scoping Memo and Ruling,[6] PG&E filed its Solicitation Plan on August 4, 2017 which detailed the strategy and approach PG&E intended to implement for competitive solicitations and for building the new EE program portfolio.[7] On January 11, 2018, the Commission issued D.18-01-004 – Decision Addressing 3P[8] Solicitation Process EE Programs, which formalized the third-party solicitation process for EE programs and established key milestones on the path to maintaining a predominantly third-party implemented EE portfolio by 2023.

In D.18-05-041, the Commission approved PG&E's EE Business Plan for 2018-2025, outlined the Commission's vision for new construction programs including its rationale for assigning PG&E as the lead PA, and identified areas of sole responsibility for the lead PA including the responsibility of procurement and contract administration. D.18-05-041 also extended the 25 percent third-party portfolio outsourcing deadline to December 19, 2019.

On August 15, 2019, the Commission issued D.19-08-034 – Decision Adopting Energy Efficiency Goals for 2020 – 2030. D.19-08-034 identified potential achievable cost-effective electricity and natural gas efficiency savings, "established efficiency targets" for IOUs to achieve, and significantly reduced the savings and budget targets from the levels identified in previous years.

In accordance with D.18-01-004,[9] prior to launching any solicitations, PG&E first assembled a Procurement Review Group (PRG) composed of non-financially interested stakeholders to advise PG&E and provide oversight to all stages of the solicitation process. PG&E met with the PRG monthly to review solicitation progress. In accordance with D.18-01-004[10] and in consultation with the PRG, PG&E also solicited for and established a pool of five Independent Evaluators (IEs) with specific EE subject matter expertise to monitor the solicitation process for fairness and transparency, support PRG oversight efforts, and provide additional feedback to the IOUs. The Energy Division (ED) of the CPUC approved

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[3] D.16-08-019, p. 111, Ordering Paragraph (OP) 10.
[4] D.16-08-019, p. 109, OP 5.
[5] D.16-08-019, pgs. 62-64
[6] Scoping Memo and Ruling of Assigned Commissioner and Administrative Law Judges (April 14, 2017) p. 8 https://4930400d-24b5-474c-9a16-0109dd2d06d3.filesusr.com/ugd/0c9650_025db2dc8d354bb98df3cee59103a236.pdf
[7] Pacific Gas and Electric Company Third Party Solicitation Proposal (August 4, 2017) p. 6 https://www.pge.com/pge_global/common/pdfs/for-our-business-partners/energy-efficiency-solicitations/PGE_Third_Party_Solicitation_Process_Proposal.pdf
[8] Third-Party.
[9] D. 18-01-004, pgs. 61-62, OP 3-4.
[10] D. 18-01-004, pgs. 62-63, OP 5.

PG&E's IE pool via letter to PG&E on August 31, 2018.[11]

In the first quarter of 2019, PG&E began preparations for the SWNC solicitation. PG&E ran both the residential and non-residential solicitations concurrently as a single process. While this approach added complexity to solicitation administration, it provided bidders with the maximum flexibility to exercise innovative program design.

PG&E launched the SWNC Residential and Non-Residential Program Request for Abstracts (RFA) in May 2019 with responses received and scored in August 2019. The SWNC Request for Proposals (RFP) was issued in March 2020, with responses received and scored in July 2020. Throughout the solicitation process, PG&E worked closely with its PRG and its IEs to ensure fairness, transparency, and compliance with all Commission directives and program rules.

II. The Solicitation is in Conformance with State's Energy Policy Goals

PG&E's strategy for the SWNC solicitation was to closely align with California's energy and Greenhouse Gas (GHG) goals. The state has adopted multiple policy goals, such as California Senate Bill (SB) 1477,[12] California Assembly Bill (AB) 3232,[13] and the Governor's Executive Order EOB55-18,[14] focused on reducing GHG emissions to meet California's ambitious state climate goals. EE in California's new construction market is a key success factor to achieving these goals. In addition to direct reductions at the power plant, EE reduces the investment required to decarbonize buildings and, more generally, reduces the cost of renewables needed to achieve energy and climate goals.

As presented in the CEC's 2019 California Energy Efficiency Action Plan, "in 2018, two major pieces of legislation signaled the state's evolution from a relatively narrow focus on traditional energy efficiency to one that also embraces building decarbonization."[15] SB 1477 funds the Building Initiative for Low-Emissions Development and Technology (BUILD and TECH) and Equipment for Clean Heating and AB 3232 requires the CEC[16] to assess by January 1, 2021, the potential to reduce GHGs in buildings by 40 percent below 1990 levels by 2030.[17]

Also, on August 1, 2019, in D.19-08-009, the CPUC approved modifications to the "three-prong test" which clarify how IOUs/PAs are to demonstrate the cost effectiveness of electric technologies when substituting for natural gas appliances.[18]

[11] Edward Randolph Letter to Erik B. Jacobson regarding "Approval of Energy Efficiency Independent Evaluators." August 31, 2018.
[12] Codified in Section 748.6 of the Public Utilities Code.
[13] Codified in Section 25403 of the Public Resources Code.
[14] Governor Brown's Executive Order B-55-18 To Achieve Carbon Neutrality: https://www.gov.ca.gov/wp-content/uploads/2018/09/9.10.18-Executive-Order.pdf
[15] 2019 California Energy Efficiency Action Plan, p. 1.
[16] The CEC will work in consultation with the California Public Utilities Commission (CPUC), California Air Resources Board (CARB), and the California Independent System Operator (California ISO).
[17] "2019 California Energy Efficiency Action Plan", California Energy Commission Final Staff Report, November 2019, p. 1.
[18] D. 19-08-009

Additionally, as the 2022 code development cycle is already in progress, new construction programs will support the technologies, systems, and building types expected to be centerpieces in the 2025 and 2028 code cycles, and specific appliance standards that complement building code objectives.

Ultimately, as strategic market interventions, new construction programs can reduce barriers to new Codes and Standards (C&S) by collecting data to support code development and advocacy. By encouraging market changes which prepare the building industry for new C&S, and strengthening the compliance improvement supply chain, new construction programs can substantively impact energy code development and implementation.

Program Goals: PG&E anticipates that starting in Q1 2022, the Program will provide a statewide new construction EE program that serves the residential new construction sub-sectors: single family (SF), duplexes, and multifamily low-rise (MFLR) (three or fewer stories) in all 4 IOU service territories. The Program includes integrated QA/QC and M&V throughout program steps, designed by experts in these areas.

Program Design: The Program is a stand-alone mixed fuel program and will support California's aggressive decarbonization goals. The Program offers two pathways – the core pathway and alterations. The core pathway will serve new construction of SF, duplexes, and MFLR buildings. The Program will pay builder/developer incentives on an escalating scale for above-code construction, as well as require the inclusion of grid-harmonization and utility communication-enabling measures into residential new construction designs and buildings.

The core pathway will leverage approved California T24 Part 6 compliance software (T24 software) and home energy rating system (HERS) verification processes to capture efficiency improvements over code-built homes, through escalating incentives based on improvement over code as measured by the efficiency delta EDR (energy design rating). Participating builders can increase their incentives using any efficiency measure that yields code performance credit, including HVAC, envelope, hot water, and HERS verification procedures.

For SF, duplex, and MFLR, the Program core pathway will require that the builder installs a suite of specific enabling technologies: pre-wiring for future all-electric appliances and mechanical systems, communicating thermostats, segregated circuits for energy monitoring readiness, electric vehicle charging infrastructure pre-wiring, battery storage readiness, and thermostatic mixing valves. These are prerequisite requirements for participation; the Program does not incentivize these measures.

To promote code compliance, the Program will grant performance credit for measures or performance modeling options anticipated to be included in future code cycles, depending upon software capabilities.

Core pathway implementation will follow a Custom track of recruitment, enrollment, plan review, verification, incentive delivery, tracking, and reporting. Under the guidance of a case manager, participants will partake in educational webinars, and receive design and technical assistance to further understand how to maximize or increase the value of program participation and introduce financing and funding resources as a tool through TRC's partnership with the National Efficiency Investment Fund (NEIF). NEIF provides a customized portal, where participating customers can apply for financing, and the portal will identify the best lender for the customer's particular project and financing situation. However, the participating customers/building owners will not be required to use the financing portal. The program does not offer the financing option in lieu of incentives.

TRC's technical assistance team will coordinate with and leverage Energy Code Ace's training and resources and work closely with the California Association of Building Energy Consultants (CABEC), the state's trade organization for T24 energy modelers. The Program will leverage CABEC's code training and education resources and annual conference to engage with key program participants. The Program will require that all SF, duplex, and multifamily projects submit T24 energy models authored by professionals that hold CABEC's residential Certified Energy Analyst (CEA) designation.

In addition to greenfield new construction, the Program will address alterations: The Program will provide incentives for alterations to existing SF homes, duplexes, and MFLR buildings that partially electrify by converting one or more gas appliances and equipment to advanced electric systems: heat pump space conditioning, heat pump water heating (with a thermostatic mixing valve), and heat pump clothes dryers. The Program will consider a project an alteration (renovation/remodel) eligible for the new construction program when: changes in design or technology, or a complete replacement of the thermal (space conditioning) components plus at least 75 percent of the distribution system are part of the scope of work. The Program will claim avoided therms savings for the alteration projects.

The Program will work with other implementors to develop protocols for program coordination, to assure that customers are receiving the appropriate services and that the Program is not incentivizing projects and equipment receiving incentive funds from other programs that would preclude them from participating in the Program, such as mid- and up-stream programs or other third-party IOU programs. The Program Implementation Plan will include these coordination plans. At this time, the Program MFLR alterations projects will not be eligible to participate in the Energy Savings Assistance Common Area Measure program, as it does not currently incentivize fuel-switching measures.

PG&E believes this approach will drive the market to deeper energy savings, resulting in maximizing the energy efficiency of buildings and processes.

Innovative Program Features: To improve program effectiveness and increase customer participation, TRC has proposed the following innovative features into the Program:

- IDSM DR ready homes (prerequisite)
- National Efficiency Investment Fund (NEIF)
- Technical assistance leveraging current market resources
- Captures system

IDSM Ready homes

In order to leverage IDSM to lower carbon intensity and achieve demand flexibility and grid integration, the Program requires the following IDSM-ready measures as a condition of participation:

- Communicating thermostats
- Segregated circuits, oversized panel housing for energy monitoring readiness
- EV charging infrastructure prewiring
- Battery storage infrastructure

The Program has embedded the cost of promoting these measures within the program budget. The program design does not include any payment or incentives for these measures. The incremental cost to program implementation is negligible in terms of messaging, marketing, training, and incorporating these measures into the application process, and we believe the benefits to our end customers will be significant as we set their homes up for future success.

National Efficiency Investment Fund (NEIF)

The Program will increase participation in alterations projects through the introduction of financing and funding resources through TRC's partnership with the National Efficiency Investment Fund (NEIF). NEIF offers energy efficiency financing for residential and commercial projects. NEIF provides a customized program portal, where participating customers can use NEIF's portal to identify the best lender, for their particular project and financial situation.

Technical Assistance and Training

The Program will coordinate with and leverage technical assistance through Energy Code Ace's training and resources as well as work closely with the California Association of Building Energy Consultants (CABEC), the state's trade organization for T24 energy modelers. The Program will leverage CABEC's code training and education resources and annual conference to engage with key program participants. The Program will require that all SF, duplex, and multifamily projects submit T24 energy models authored by professionals that hold CABEC's residential Certified Energy Analyst (CEA) designation.

Captures system

The TRC Captures system is a comprehensive workflow management and tracking tool. It tracks energy savings projects and measure data in detail, while maintaining the flexibility to adapt the tool to specific program needs. The implementer will tailor Captures to precisely reflect the IOU's customer, marketing, measure, incentive, operational process, and reporting requirements identified through the program launch process. Captures serves as the primary, day-to-day program management tool for outreach and intake staff, technical staff, operational teams, field teams, subcontractors, program managers, and PG&E. Captures will transfer real-time data to the IOU-specified system via an easily designed and implemented API or FTP process at regular intervals and on an ad-hoc basis.

B. Subject

Table A below lists the four contract awards resulting from the negotiations following PG&E's SWNC solicitation. On April 28, 2021, ED issued a disposition letter approving two advice letters 4386-G/6094-E and 4387-G/6095-E for Willdan's two SWNC non-residential contracts. Per D.18-01-004, contracts resulting from this solicitation with terms longer than 36 months and/or values above $5 million, will require CPUC approval via Tier 2 advice letter.[19] The subject of this advice letter is the TRC – California Energy-Smart Homes Program, Mixed Fuel Residential contract which is proposing to serve customers in the Residential sector.

Table A: Contracts Resulting From PG&E's SWNC Solicitation			
		Budget ($M)[20]	**Duration** (months)
Non-Residential Sector			
1.1	Willdan Energy Solutions Non-Residential, All Electric - California New Construction	$30.7M	66
1.2	Willdan Energy Solutions Non-Residential, Mixed Fuel – California New Construction	$50.7M	66
Residential Sector			
2.1	TRC California Energy Smart Homes Program, All Electric Residential	$39.6M	67
2.2	TRC California Energy-Smart Homes Program, Mixed Fuel Residential	$12.7M	67

The following Table B provides a detailed contract summary for the contract that is the subject of this advice letter. PG&E has included the contract sensitive information as part of the Confidential Section D.

Table B2.2 General Contract Summary – TRC California Energy-Smart Homes Program, Mixed Fuel Residential		
1	Solicitation name	Third-Party Energy Efficiency Statewide New Construction Program
2	Type of program: local, regional or statewide	Statewide
3	Delivery Type – specify the delivery type (i.e., direct install, upstream, midstream, or downstream)	Whole building energy savings and measure-specific installation in residential new construction and alterations

[19] D. 18-01-004, p. 61, OP 2.

[20] The full 5-year program budgets are listed in the table; however, each program's contract authorizes Implementer Program Term to render Services until December 31, 2025. Implementer Program Services beyond 2025 are contingent upon CPUC approving additional funding for PG&E's EE portfolio that goes beyond 2025.

Table B2.2 General Contract Summary – TRC California Energy-Smart Homes Program, Mixed Fuel Residential		
	A. Direct Install/Downstream Customer Targeting (Yes or No)	No
	B. Customer Targeting brief description, if applicable	Marketing and outreach to single family, duplex, multifamily low rise new construction and alterations projects
	C. Midstream/Upstream Market Actors receiving incentives (i.e., manufacturers, distributors, contractors, or other (specify).	N/A
4	Market/Sector(s)	Residential new construction
5	Customer Segment(s)	Single family, duplexes, multifamily low-rise new construction and alterations projects
6	Third-Party Implementer/Subcontractor name	TRC
7	Name of program or service	California Energy-Smart Homes Program (CESHP) – Mixed Fuel
8	Brief description of program or service (2-3 sentences)	Mixed Fuel CESHP will emphasize installation of advanced energy efficiency technologies, allowing residential buildings to progress from high performance homes to energy-smart homes.
9	Total kWh Energy Savings (First year, net) for each year contract in effect	[redacted]
10	Total MW Energy Savings (First year, net) for each year contract in effect	[redacted]
11	Total therms Energy Savings (First year, net) for each year contract in effect	[redacted]

Table B2.2 General Contract Summary – TRC California Energy-Smart Homes Program, Mixed Fuel Residential		
		[redacted]
12	Hard to Reach (HTR) Customers. Provide forecasted total number of HTR customer accounts (by customer segment) receiving program and total savings (net first year kWh, kW, and therms) to HTR customers from program over all years program in effect	[redacted]
13	Disadvantaged Community (DAC)[2] Customers. Provide forecasted total number of DAC customer accounts (by customer segment) receiving program and total savings (net first year kWh, kW, and therms) to DAC customers from program over all years program in effect	[redacted]
14	Forecasted Number of Customers Served by Program Year	[redacted]

Table B2.2 General Contract Summary – TRC California Energy-Smart Homes Program, Mixed Fuel Residential		
15	Area(s) Served (including service territory, climate zones, cities, and/or counties, as applicable)	PG&E, SCE, SoCalGas, and SDG&E territories
16	Program TRC ratio (PG&E's SUMMARY CET output; Tab C1 of Attachment 2 Exhibit A)	[redacted]
17	Program PAC ratio (PG&E's SUMMARY CET output; Tab C1 of Attachment 2 Exhibit A)	[redacted]
18	Program $/kWh (TRC levelized cost, CET output) *	[redacted]
19	Program $/kWh (PAC levelized cost, CET output) **	[redacted]
20	Program $/therm (TRC levelized cost, CET output) *	[redacted]
21	Program $/therm (PAC levelized cost, CET output)**	[redacted]
22	Budget: Forecast budget by program year (PY) for each year contract in effect	[redacted]
23	Budget: Forecast expenditures by program year (PY) for each year contract in effect	[redacted]
24	Budget: Total Program Budget	Total $ 11,100,009 (through 12/31/2025) NOTE: The Agreement's CWA authorizing Implementer Program Term to render Services is until December 31, 2025. Per the Program Implementation Agreement Section 2.2(c), the Parties agree if the CPUC approves additional funding for PG&E's energy efficiency program portfolio that goes beyond 2025, and if such funding shall be available and authorized for paying Implementer's Program Services under this Agreement, the

Table B2.2 General Contract Summary – TRC California Energy-Smart Homes Program, Mixed Fuel Residential		
		Parties will enter into a change order to extend the Program Term and Authorized Budget until March 31, 2027 and all other terms under this Agreement at the time of such Change Order shall remain the same, unless otherwise mutually and expressly agreed to.
25	Budget: If EE/DR component to the program, provide dollar amount and percent of total budget dedicated to EE/DR component	100% of the budget is for EE
26	Measure(s)	[redacted]
27	Savings Determination Type (i.e. custom, deemed, Net Metered Energy Consumption, or Randomized Control Trial)	[redacted]
28	Savings Calculation Method(s) (Meter-Based, Deemed, Calculated, Multiple and/or Other) If Multiple or Other, please specify	[redacted]
29	Contract start date and end date	09/01/2021 - 12/31/2025 (estimated start date as CPUC Advice Letter approval is required) NOTE: The Agreement's CWA authorizing Implementer Program Term to render Services is until December 31, 2025. Per the Program Implementation Agreement Section 2.2(c), the Parties agree if the CPUC approves additional funding for PG&E's energy efficiency program portfolio that goes beyond 2025, and if such funding shall be available and authorized for paying Implementer's Program Services under this Agreement, the Parties will enter into a change order to extend the Program Term and

Table B2.2 General Contract Summary – TRC California Energy-Smart Homes Program, Mixed Fuel Residential		
		Authorized Budget until March 31, 2027 and all other terms under this Agreement at the time of such Change Order shall remain the same, unless otherwise mutually and expressly agreed to.
30	Program start date and end date. If program dates aren't defined by the period the program is open for customer participation, explain, and also include customer participation period.	[redacted]
31	NAICS codes eligible for the program	Eligible for program participation: 2361; the program will engage the following primary industries to support the program, but they are not directly eligible for the program: 2382, 423720, 423730
32	Geographically areas served by the program	Statewide

* $Levelized\ TRC\ Cost\ (kWh) = \frac{\sum_{i=1}^{n}(TRCCost_i * WeightedElecAlloc_i)}{\sum_{i=1}^{n}(DiscountedSavingsNetkWh_i)}$ $Levelized\ TRC\ Cost\ (kWh) = \frac{\sum_{i=1}^{n}(TRCCost_i * WeightedElecAlloc_i)}{\sum_{i=1}^{n}(DiscountedSavingsNetkWh_i)}$

$$** \; Levelized\ PAC\ Cost\ (kWh) = \frac{\sum_{i=1}^{n}(PACCost_i * WeightedElecAlloc_i)}{\sum_{i=1}^{n}(DiscountedSavingsNetkWh_i)} \qquad Levelized\ PAC\ Cost\ (Therm) = \frac{\sum_{i=1}^{n}[PACCost_i * (1 - WeightedElecAlloc_i)]}{\sum_{i=1}^{n}(DiscountedSavingsNetThm_i)}$$

where: i is the CET output row and n is the number of rows in a CET output

C. Solicitation Process Overview

I. Solicitation Strategy & Design

As prescribed in D.18-01-004,[21] PG&E designed a two-stage solicitation process that included an initial RFA solicitation stage followed by an RFP solicitation stage. To provide bidders with flexibility, the RFA was open in scope to promote innovative cross-sector program concepts. Bidders were allowed to include any building or occupancy type covered by California Code of Regulations Title 24, Parts 6 and 11, including whole new buildings, additions, alterations, and covered processes. Additionally, bidders were encouraged to propose strategies to support future C&S.

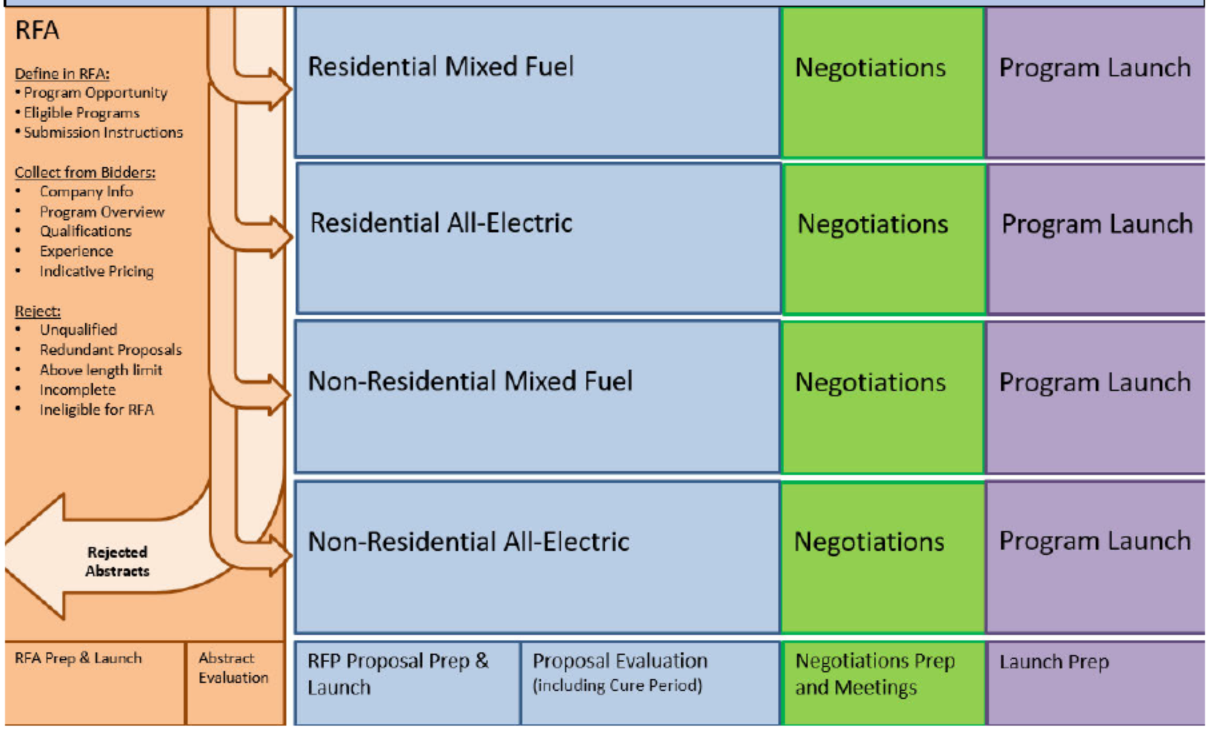
The RFP encouraged bidders to not only consider integrated design of whole new buildings, additions and/or alterations that exceed Title 24, Part 6 requirements, but also to incorporate design options for all-electric residential and/or non-residential buildings. Bidders were also asked to consider alterations activities within the framework of the SWNC to support the advancement of C&S.

PG&E consulted the non-lead IOU PAs when developing the scope and requirements for the SWNC RFA and RFP. The non-lead IOU PAs were not involved in the evaluation of any abstracts or proposals. PG&E as Lead-IOU PA was solely responsible for the end-to-end administration of the solicitation process and evaluation of the program submissions.

The primary components of the solicitation process are depicted in *Figure 1 – PG&E SWNC Solicitation Structure*.

[21] D.18-01-004, p. 57, Conclusion of Law (COL) 5.

FIGURE 1 – PG&E SWNC Solicitation Structure



Bidders shortlisted in the RFP were invited to participate in competitive contract negotiations to determine final contract awards. The use of competitive negotiations was borrowed as a best practice from PG&E's Energy Supply all-source procurements where assembling a portfolio solution from dissimilar project technologies with high levels of complexity is common.

Three IEs were assigned to observe the solicitation. IE activities included the review of solicitation materials such as solicitation plans, solicitation language, evaluation criteria, solicitation procedural steps, solicitation scoring, and Contracts as well as monitoring of pre-bid meetings and Contract negotiations to assist in implementing fairness and consistency with State of California statutes and Commission policies, guidance, and the IOUs' approved business plans. The IEs are listed below in *Figure 2 – PG&E EE Independent Evaluator Pool* along with their assigned area of responsibility in this solicitation. A weekly check-in call with the IEs to discuss issues was the typical baseline engagement.

FIGURE 2 – PG&E EE Independent Evaluator Pool

Customer Sector	Organization / Company	Independent Evaluator
Residential	The Mendota Group, LLC	Grey Staples Rachel Sours-Page
Non-Residential	EAJ Energy Advisors	Steve McCarty Norm Stone

FIGURE 2 – PG&E EE Independent Evaluator Pool		
Customer Sector	**Organization / Company**	**Independent Evaluator**
		Mike Alexander
Codes & Standards	Barakat Consulting	Elizabeth Lowe Lynn Landry

II. Solicitation Stage 1: Detailed RFA Overview

The purpose of the RFA was to collect, evaluate, and identify high potential program concepts and advance those program concepts to the RFP stage of the solicitation. The rest of this section describes in detail the execution of PG&E's SWNC RFA process. A detailed RFA solicitation timeline can be found in *Figure 10 – RFA and RFP Solicitation Process Events*.

RFA Scope & Structure: The RFA scope was intentionally broad to promote innovative cost-effective cross-sector program concepts. The RFA encouraged bidders to consider a new approach to traditional new construction incentive programs. Bidders not only could focus on single or multifamily residential projects and/or nonresidential buildings of any occupancy type covered by Title 24, Parts 6 and 11, but also propose programs that would extend beyond whole new buildings and additions, and target alterations that trigger energy code building permits to support the advancement of C&S. Including significant, multi-system alterations in the program's scope was critical to connect new construction programs with future C&S and to encourage customers to go beyond the state minimum standards and achieve more significant energy use reductions.

RFA Eligibility: The RFA was open to innovative program designs which employed new program configurations and were capable of serving the residential or non-residential sectors, both sectors, or a subset of either sector across all IOU territories. Bidders could submit multiple program ideas. Each submission was limited in length to reduce the burden on solicitation participants to respond and to promote the efficient evaluation of the program submissions.

RFA Submission Format: A complete RFA submission consisted of two documents; a Narrative Response Form which was provided as a pre-formatted Microsoft (MS) Word document collecting text question responses and a Program Data Response Form which was a pre-formatted MS Excel worksheet to collect numerical program information and facilitate automated data extraction for quantitative analysis. PG&E worked collaboratively with the IEs during RFA development to:

- Minimize the information requested in the RFA stage;
- Ensure that the information collected was utilized appropriately;
- Confirm that the instructions were clear; and
- Confirm the RFA forms were simple, understandable, and complete.

PG&E required bidders register and use the solicitation management platform PowerAdvocate when submitting documents or questions to PG&E.

RFA Evaluation Criteria: The RFA prompted bidders to provide descriptions of the proposed program design, innovative program features, plans to support C&S, team qualifications and prior new construction program experience. *Figure 3 – PG&E SWNC RFA Evaluation Criteria* lists the various criteria and sub-criteria used to evaluate abstract submissions.

FIGURE 3 – PG&E SWNC RFA Evaluation Criteria	
RFA Scoring Criteria	**Sub-Criteria**
Program Concept	Program Design Benefits Support for Future Codes and Standards Program Feasibility Innovative Program Design Features
Company Experience & Qualifications	Team Composition & Qualifications Prior New Construction Program Experience

Each abstract submission received the same evaluation regardless of customer sector focus. Additional information such as indicative pricing, savings estimates, and supply chain responsibility were collected to broadly characterize the focus and scale of the proposed program but was not factored into the evaluation scoring at this stage. Following evaluation of the RFA, participants with sufficiently high scoring abstract submissions were notified that they were shortlisted in the RFA and advanced further in the solicitation process.

RFA Final Document Review: In the months leading up to RFA launch, PG&E presented to the PRG its solicitation strategy, RFA structure, and evaluation approach for feedback. In May 2019, PG&E presented to the PRG the completed RFA solicitation documents including the solicitation instructions, the scoring criteria, criteria weighting, and the two RFA response forms. During the final document review process, PG&E collected a total of 94 comments and points of feedback from IOUs, IEs and the PRG regarding the overall RFA process and the RFA solicitation documents. PG&E provided a response to each comment and explained what action, if any, it planned to take with each comment. A high-level summary of the feedback received during the RFA document review can be found in section 1.C.IX.

RFA Launch: PG&E issued its SWNC RFA solicitation on May 28, 2019 as planned. PG&E uploaded all RFA solicitation documents to PG&E's EE Solicitations website where they were available for download without needing to register in PowerAdvocate. PG&E raised awareness of the solicitation launch by posting a Contract Opportunity Announcement (COA) to the California Statewide IOU EE Proposal Evaluation & Proposal Management Application (PEPMA) website, the California Energy Efficiency Coordinating Committee

(CAEECC) website, and relevant CPUC service lists.

RFA Bidders Conference: The RFA Bidders' Conference was held on June 6, 2019 via webinar and 78 participants (inclusive of utility and Commission personnel) attended the conference via WebEx. IEs provided feedback on the presentation materials prior to the conference and monitored the discussion during the event for accuracy and fairness.

RFA Question and Answer Period: The deadline for bidders to submit written questions to PG&E via the PowerAdvocate platform was June 14, 2019. PG&E received 9 questions from bidders. PG&E uploaded responses to questions in PowerAdvocate for all bidders to access on June 20, 2019. High level observations of the questions received can be found in section 1.C.VIII.

RFA Evaluation Team Training: The PG&E evaluation team was a committee composed of seven PG&E evaluators who had a broad understanding of residential and non-residential new construction EE programs, as well as understanding of C&S. Reviewers were screened for potential conflicts of interest before placement on the evaluation committee. Prior to receiving abstracts for evaluation, PG&E conducted a training session on June 19, 2019 with the evaluation team and IEs to provide an overview of the evaluation process steps, an orientation to the RFA scorecard, and guidance on how to apply the scoring criteria consistently and fairly.

RFA Submission and Validation: On June 28, 2019, PG&E received 13 Abstracts from 11 unique counterparties submitted through the PowerAdvocate platform. Prior to scoring, each Abstract was reviewed for conformance with solicitation eligibility requirements. No abstracts were rejected due to non-conforming with eligibility requirement. A breakdown of the abstracts received by sector can be found below in *Figure 4 – Breakdown of Abstracts Received*. Abstracts were grouped by the customer sector they focused on.

FIGURE 4 – Breakdown of Abstracts Received

Customer Sectors	Abstracts Received	Non-Conforming	Abstracts Evaluated
Residential	3	-	3
Non-Residential	7 (3 Commercial, 1 Public)	-	7
Both Sectors (Residential & Non-Residential)	3 (various combination of Agricultural, Industrial, Public, Residential, and Commercial)	-	3
Total	**13**	**-**	**13**

RFA Evaluation: The abstract evaluation process started on July 3, 2019 and lasted and lasted for 5 weeks. Each Abstract was reviewed against the 7 evaluation criteria: program design, benefits, Support for future C&S, program feasibility, innovative program design features, team qualifications, and prior new construction program experience. For each abstract, PG&E evaluation team members individually assigned a preliminary score for each of the 7 evaluation criteria. IEs performed a parallel evaluation of each abstract.

RFA Calibration: PG&E applied the same RFA evaluation process used in the local multi-sector solicitation originally presented to PRG in February 2019. After RFA evaluation, PG&E conducted calibration discussions across all scoring criteria and finalized abstract scores. Preliminary scores from the PG&E evaluation team members and the IEs were collected and compared. Calibration discussions were an opportunity to discuss points of disagreement observed in scoring and evaluation team members could adjust preliminary scores based on the insights shared by others. IEs participated in these calibration meetings and also monitored to ensure the discussion did not impart unfair bias for/against any Bidder. The process prioritized discussions on criteria with scores (including IE scores) with a total range of 3 between the maximum and minimum score. While the outcome of scoring calibration did not yield any significant shifts in the overall lineup, the discussions proved quite valuable in sharing knowledge across different teams and provided full transparency of the process to the IEs.

RFA Final Scores: After the calibration discussions concluded, any scoring adjustments were recorded, and final abstract scores were calculated. Final scores only considered PG&E evaluation team scores and did not include any IE scores in the calculation.

RFA Shortlist: The process for shortlisting proposals was straightforward with PG&E advancing the highest scoring abstracts within each category. PG&E did not have a predetermined number of submissions to advance and instead looked for natural breaks in the scoring to determine the shortlist. A breakdown of the shortlisted abstracts can be found below in *Figure 5 – PG&E SWNC RFA Shortlist*.

FIGURE 5 – PG&E SWNC RFA Shortlist

Customer Sectors	Abstracts Received	Non-Conforming	Abstracts Evaluated	Shortlisted in RFA	Advancing to RFP
Residential	3	-	3	1	1
Non-Residential	7	-	7	3	3
Both Sector (Residential & Non-Residential)	3	-	3	3	3
Total	**13**	**-**	**13**	**7**	**7**

PG&E dismissed 6 abstracts from the RFA and shortlisted 7 abstracts yielding an overall pass rate of 54% for the RFA. PG&E advanced all 7 abstracts to the subsequent RFP stage.

III. Solicitation Stage 2: Detailed RFP Overview

The purpose of the RFP was to conduct a comprehensive evaluation of each program proposal and identify a shortlist to advance to contract negotiations. The rest of this section describes in detail the execution of PG&E's SWNC RFP process. A detailed RFP solicitation timeline can be found in *Figure 10 – RFA and RFP Solicitation Process Events*.

RFP Scope & Structure: PG&E opted to draft a single modular RFP structure that could account for residential and non-residential program designs in a single format as opposed to developing individual RFPs for each sector. PG&E also provided additional information and clarity on the HTR/DAC and Low-income program functions. Inclusion of the specialized program functionality was optional for bidders.

Due to California's ambitious energy and Greenhouse Gas (GHG) policy goals, and the construction market being the key success factor to achieving those goals, the RFP scope focused bidders to propose new construction programs that encouraged energy-efficient design and influence advanced construction practices to produce more efficient, low-emission buildings throughout the state, and to reduce barriers to new C&S by collecting data from the alterations projects to support C&S advocacy. Therefore, bidders were encouraged to consider existing building alterations and additions as well as whole buildings.

To promote the state's increased focus on decarbonization, the RFP included refinements to encourage bidders to consider incorporating in their programs design options for all-electric residential and/or non-residential buildings while generally retaining the program designs embodied in their abstracts. Bidders were asked to split their programs into separate residential (all-electric and/or mixed-fuel programs) and non-residential (all-electric and/or mixed fuel programs) offerings; therefore, as an example, a single Abstract that targeted both sectors in the RFA could have been split into maximum 4 proposals.

Bidders were asked to align their program proposals to one of the categories defined below in *Figure 6 – PG&E SWNC Program Categories:*

FIGURE 6– PG&E SWNC Program Categories	
Category	**Description**
Category 1	Non-Residential mixed-fuel buildings
Category 2	Non-Residential all-electric buildings
Category 3	Residential mixed-fuel buildings
Category 4	Residential all-electric buildings

To calculate program cost effectiveness, bidders were asked to utilize the CPUC's approved Cost Effectiveness Tool (CET). Additionally, PG&E provided a tool for bidders to incorporate the avoided gas infrastructure benefits for the all-electric programs.

RFP Eligibility: Participation in the RFP was by invitation only and limited to bidders of the 7 abstracts shortlisted in the previous RFA stage.

In the RFP, the proposals had to remain within the sector focuses included in the Abstracts, but bidders were asked to elaborate and improve upon their Abstracts and had the option to include all-electric program designs.

Additional eligibility requirements included disclosing any potential conflict of interest as an IOU affiliate or any involvement as a CA EM&V program evaluator.

RFP Submission Format: A complete RFP submission consisted of a Narrative Response Form which was provided as a pre-formatted MS Word document collecting text question responses, a Program Data Response Form which was a pre-formatted MS Excel worksheet to collect numerical program information and facilitated automated data extraction for quantitative analysis, a contract term sheet for bidders to propose contract term redlines,[22] a complete set of program Cost Effectiveness Tool (CET) output files, team resumes, a transmittal letter, an Experience Modification Rate (EMR) Letter, a Supply Chain Responsibility Exhibit, and lastly the direct entry of Supply Chain Responsibility information into the PowerAdvocate platform.

RFP Evaluation Criteria: In the RFP, bidders were requested to submit a program proposal that provided a comprehensive understanding of the program including a detailed description of the program design and logic, C&S support, program management practices, aspects of program innovation, IDSM program features, analysis of program cost effectiveness, proposed payment structures, key contract terms (via a term sheet), program compliance requirements, and information responding to supply chain responsibility (the "Proposal"). *Figure 7 – PG&E SWNC RFP Evaluation Criteria* lists the various sub-criteria used to evaluate each proposal submission.

FIGURE 7 – PG&E SWNC RFP Evaluation Criteria

RFP Scoring Criteria	**Sub-Criteria**
Program Design	Program Design and Logic Model IDSM Program Features Program Innovation (Optional Enhanced C&S Support)
Program Benefits	Cost and Energy Savings TRC Net Benefits / TRC Ratio PAC Net Benefits / PAC Ratio C&S Support (Mandatory Baseline Level)

[22] At the launch of the RFP, PG&E's EE Third-Party Program Implementation Agreement was undergoing extensive revision and was not ready to include in its entirety at this stage of the solicitation. PG&E opted to provide a term sheet listing key contractual terms for bidders to review and propose redlines. While providing a full form contract is the ideal best practice, the utilization of a term sheet is an acceptable substitute when a full contract is not readily available.

Program Feasibility	End-to-End Implementation Risk Management Implementation Program Structure and Performance Measurement
Company Qualifications	Company Qualifications Prior Experience
Supply Chain Responsibility	Diverse Business Enterprise
HTR / DAC or Low-Income Program (optional)	HTR / DAC or Low-Income Program Design

RFP Final Document Review: In the months leading up to RFP launch, PG&E presented the SWNC RFP structure, refined program function detail, and RFP scoring methodology to IOUs, IEs, and the PRG for early feedback. During the process, PG&E collected a total of 148 comments regarding the overall RFP process and the RFP documents. PG&E provided a response to each comment and explained what action, if any, it planned to take with each comment. A high-level summary of the feedback received during the RFP document review can be found in section 1.C.IX.

On March 3, 2020, PG&E submitted the completed RFP solicitation documents, including the solicitation instructions, the scoring criteria and weighting, and the narrative and data response forms, for PRG's final review prior to the issuance of the RFP.

RFP Launch: PG&E issued the SWNC RFP solicitation on March 16, 2020. Since participation in the RFP was by invitation only, PG&E notified bidders of the RFP directly via the PowerAdvocate platform and did not broadly circulate a contract opportunity announcement as was done for the RFA. As this was a 'closed' solicitation, PG&E provided all RFP solicitation documents to bidders through the PowerAdvocate platform only. PG&E will post original RFP documents to the EE Solicitation website after the SWNC contracting is concluded.

RFP Bidders Conference: The RFP Bidders' Conference was held on March 26, 2020 via webinar, and 71 participants (inclusive of utility and Commission personnel) attended the conference via WebEx. IEs reviewed the presentation materials prior to the conference and monitored the discussion during the event for accuracy and fairness.

RFP Question and Answer Period: The deadline for bidders to submit written questions to PG&E via the PowerAdvocate platform was April 3, 2020. In total, PG&E received 39 questions (9 questions from Bidders Conference, 30 questions via PowerAdvocate) from bidders. PG&E uploaded the final Bidder Q&A Log to PowerAdvocate on April 10, 2020 for all bidders to access. High level observations of the questions received can be found in section 1.C.VIII.

RFP Evaluation Team Training: The PG&E RFP evaluation team consisted of 11 evaluators focused on the areas of program management in the residential and non-residential new construction sectors, C&S, CET modeling, IDSM, energy savings platforms (deemed, custom, NMEC), PG&E Sourcing and Supply Chain Responsibility. Prior to receiving proposals for evaluation, PG&E conducted a training session on May 11, 2020 with the evaluation team and IEs to provide an overview of the evaluation process, orientation to the scorecard, and guidance on how to apply the scoring criteria consistently and fairly.

RFP Submission and Validation: Due to the impact of COVID 19, several bidders requested the solicitation submission deadline to be extended. PG&E conducted a bidder survey, and based on the responses, PG&E extended the solicitation submission deadline for all bidders from April 27, 2020 to May 11, 2020 (two weeks) to allow adequate time for bidders to submit their program proposals. On May 11, 2020, PG&E received 13 proposals from 6 unique counterparties. Each proposal was reviewed for conformance with solicitation eligibility requirements prior to scoring. No proposals were rejected due to non-conforming with eligibility requirements. A breakdown of the proposals received can be found below in *Figure 8 – Breakdown of Proposals Received*.

FIGURE 8 – Breakdown of Proposals Received

RFP Program categories	Proposals Received	Non-Conforming	Proposals Evaluated
Non-Residential Mixed Fuel	6	-	6
Non-Residential All-Electric	4	-	4
Residential Mixed Fuel	1	-	1
Residential All-Electric	2	-	2
Total	**13**	**-**	**13**

ED Guidance Regarding SWNC Program Electrification Efforts: PG&E requested ED provide clarification and guidance on bidder's ability to include Avoided Gas Infrastructure Cost (AGIC) to correctly calculate program cost effectiveness and the ability to provide sufficient incentives to induce builders to forego natural gas appliances and infrastructure. ED responded to PG&E on May 13, 2020 providing guidance and clarification. The CPUC confirmed that PG&E's AGIC values may be used across all IOU service territories on

January 26, 2021 in an email response to a December 2020 PG&E letter[23] requesting interim use of PG&E AGIC values for the statewide new construction all electric program. The AGIC values provided by PG&E for bidders' use in preparing their cost effectiveness submissions were based on a letter to the CEC updating PG&E gas extension costs.[24]

PG&E provided additional cost effectiveness guidance to bidders on June 4, 2020 via PowerAdvocate. Bidders were provided the deadline of June 14, 2020 to submit questions regarding the cost effectiveness guidance. PG&E received a total of 12 questions from bidders and uploaded the responses to PowerAdvocate on June 17, 2020.

On April 28, 2021 ED issued a non-standard disposition letter approving two third-party contract advice letters 4386-G/6094-E and 4387-G/6095-E for the SWNC non-residential contracts. The disposition letter approved the ex-ante use of PG&E AGIC values but directed PG&E to "work with the other IOUs and ED to support the development of vetted and standardized AGIC values prior to filing of program accomplishments." PG&E will work with the SCE, SoCalGas, SDG&E, and ED to develop a set of AGIC values appropriate for Statewide program reporting.

PG&E will also include language in the program implementation plan that describes under what conditions AGIC values can be claimed for individual projects, including in areas where extension of gas lines is infeasible or prohibitively costly where the default net-to-gross ratio and AGIC values applicable to greenfield new construction may not apply.

Proposal Amendment Submittal: Bidders were given the choice to modify their proposals in response to the cost effectiveness guidance if they determined it was appropriate. The deadline to submit an amendment was June 25, 2020. Bidders had the option to provide a revised RFP Data Response Form and an addendum to include any proposed changes to the Narrative Response Form. PG&E received 10 amendment submittals by June 25, 2020.

RFP Cure Period: After the RFP was closed, PG&E reviewed bidders' CETs and invited each bidder to a meeting to discuss the CET output files and the program's underlying assumptions. Each bidder was provided with one opportunity to submit a revised CET based on the discussions in the meeting. The objective of the cure period was to provide feedback to bidders to improve the quality of their submissions, and the revised CETs were considered in the final evaluation and scoring of the proposals.

PG&E hosted 60-180-minute CET discussion meetings (time varied to accommodate bidders with multiple proposals) with bidders between July 8-10, 2020. The deadline to submit revised CET information to PG&E was on a rolling basis, 5-6 calendar days (depending on the number of proposals) after each CET discussion meeting. PG&E received 13 revised CETs and/or supporting documents for the programs' underlying assumptions. The CET review required substantial input from PG&E Subject Matter Experts (SMEs) with specialized skillsets and the intensity of the CET review proved time

[23] See Attachment C for PG&E letter and email response from Energy Division.
[24] See Attachment D for PG&E letter to the CEC regarding gas extension costs.

consuming. The Mendota Group, LLC was the IE assigned to monitor all feedback provided to bidders to ensure the information provided was unbiased.

RFP Evaluation: Individual scoring of proposals started in mid-May and lasted for 9 weeks which included the RFP Cure Period. Each proposal was reviewed against the evaluation criteria and sub-criteria listed in *Figure 7 – PG&E SWNC RFP Evaluation Criteria*. PG&E evaluation team members individually assigned a preliminary score for each sub-criterion within their area of specialization. IEs performed a parallel evaluation of each proposal within their assigned sectors. In total 13 program proposals from 6 individual bidders were evaluated in the RFP.

RFP Calibration: On July 22, 2020 PG&E conducted calibration discussions across all scoring criteria and finalized proposal scores. Preliminary scores from the PG&E evaluation team members and the IEs were collected and compared. Calibration discussions were an opportunity to discuss points of disagreement observed in scoring and evaluation team members could adjust preliminary scores based on the insights shared by others. IEs participated in these calibration meetings and also monitored to ensure the discussion did not impart unfair bias for/against any Bidder. The process prioritized discussions on criteria that exhibited high levels of disagreement and were limited to proposals with sub criteria scores (including IE scores) with a range between the maximum and minimum score of 3 or greater. The calibration discussions were significant and lasted 3 hours, but ultimately, the discussions did not substantively change the outcome.

RFP Final Scores: After the calibration discussions concluded, any scoring adjustments from PG&E evaluation team members were recorded and final proposal scores were calculated. Final proposal scores only considered PG&E evaluation team scores and did not include any IE scores.

RFP Shortlist: On July 28, 2020, PG&E presented the RFP shortlist to the PRG and discussed the proposed shortlisting approach.

A breakdown of the shortlisted proposals by program categories can be found below in *Figure 9 – PG&E SWNC RFP Shortlist*. PG&E dismissed 5 proposals from the RFP and shortlisted 8 proposals yielding an overall pass rate of 62% for the RFP.

FIGURE 9 – PG&E SWNC RFP Shortlist				
Program Categories	**Proposals Received**	**Non-Conforming**	**Proposals Evaluated**	**Advance to Negotiations**
Non-Residential Mixed Fuel	6	-	6	4
Non-Residential All-Electric	4	-	4	2
Residential Mixed Fuel	1	-	1	1
Residential All-	2	-	2	1

Electric				
Total	**13**	**-**	**13**	**8**

IV. Contract Negotiation Overview

Negotiations – Contracting: PG&E's EE Program Implementation Agreement (PIA) served as the starting point for negotiation of an executable agreement. The contract form included flexible annual program realignment provisions and a performance contract management framework. The contract was reviewed by IEs and presented to the PRG in the August 2020 monthly meeting. In contract negotiations, PG&E and bidders engaged in detailed discussions of pricing & compensation, performance contracting terms, key performance indicators (KPIs), program scope and budget, and other proposed changes to modifiable contract terms.

Final contract awards occurred when both parties were able to reach mutually agreeable terms and that agreement also provided the best overall available benefits to California customers while effectively managing program delivery risk. PG&E holistically considered the proposed program benefits, overall program cost effectiveness, adoption of performance contracting terms, the inclusion of program innovation, historical Bidder team experience, and overall risk mitigation approaches when making final contract award determinations.

Non-Residential Negotiations: As SWNC non-residential negotiations were concluded; PG&E came to agreement on terms with Willdan Energy Solutions and executed 2 contracts for 2 programs (1 mixed fuel, 1 all-electric). Both contracts were allocated to PG&E's 40 percent outsourcing compliance requirement ahead of the December 31, 2020 deadline.[25] PG&E filed the advice letters 4386-G/6094-E and 4387-G/6095-E on February 19, 2021 which were approved by the ED effective April 28, 2021.

Residential Negotiations: The negotiations for the residential programs are concluded; PG&E came to agreement on terms with TRC and executed 2 contracts for 2 programs (1 mixed fuel, 1 all-electric). Both contracts will contribute to PG&E's 60 percent outsourcing requirements.

V. Solicitation Timelines

The following figure depicts the planned timeline of solicitation events for PG&E's SWNC RFA and RFP compared to the actual timeline with notes on when and why deviations occurred.

[25] D.18-01-004 p. 61 OP. 1a

FIGURE 10 – RFA and RFP Solicitation Process Events			
Event	**Planned Date**	**Actual Date**	**Notes**
RFA Material Development Developed solicitation materials, evaluation criteria and definitions, and reviewed by IEs and PRG members.	Q1 2019	Q1 2019	
RFA Issued RFA documents were available to bidders on PG&E's EE Solicitation Website as well as PowerAdvocate for download.	May 2019	May 29, 2019	Start SWNC solicitation - Stage 1
RFA Pre-Bid Conference Conference made available via webinar to all interested participants. Registration was not required to attend this event.	Early-June 2019	June 6, 2019	78 people attended via WebEx (inclusive of utility and Commission personnel).
RFA Q&A Deadline Deadline to submit written questions to PG&E in PowerAdvocate.	Early-June 2019	June 14, 2019	
PG&E Q&A Response Deadline Deadline to respond to bidders' questions. bidders had access to all written questions and to PG&E's responses in PowerAdvocate.	Mid-June 2019	June 21, 2019	PG&E responded to 9 questions from potential bidders.
Abstract Submission Deadline Abstract submission due date. Registration in PowerAdvocate was required to submit an Abstract to PG&E.	Late-June 2019	June 28, 2019	
RFA Evaluation and Scoring Scoring and Calibration	Mid-July 2019	July 3 - August 7, 2019	
RFA Shortlist Finalized	Late-July 2019	August 12 - 16, 2019	

FIGURE 10 – RFA and RFP Solicitation Process Events			
Event	**Planned Date**	**Actual Date**	**Notes**
RFA Shortlist Presented to PRG	Late-July 2019	August 27, 2019	
RFA Shortlist Notification Bidders were notified whether their Abstract(s) were shortlisted through PowerAdvocate.	August 2019 (tentative date)	September 17, 2019	PG&E notified 13 bidders regarding the status of their Abstract(s).
RFP Material Development Developed solicitation materials, scoring rubric, scoring elements and criteria and presented to and reviewed by IEs and PRG members.	September - December 2019	October 2019 - February 2020	
RFP Issued RFP documents were available to bidders in PowerAdvocate for download.	January 2020	March 16, 2020	Bidders were notified that the RFP was launched.
RFP Pre-Bid Conference Pre-Bid Conference event registration and webinar access instructions available in PowerAdvocate.	Early-February 2020	March 26, 2020	71 people attended via WebEx (inclusive of utility and Commission personnel).
RFP Q&A Deadline Written questions regarding the RFP were due to PG&E in PowerAdvocate.	Mid-February 2020	April 3, 2020	PG&E received 39 questions in total.
PG&E Q&A Response Deadline Bidders had access to review PG&E's responses to all written questions submitted in the RFP.	Late-February 2020	April 10, 2020	PG&E uploaded the responses to 39 questions to PowerAdvocate on April 10.

FIGURE 10 – RFA and RFP Solicitation Process Events			
Event	**Planned Date**	**Actual Date**	**Notes**
Proposal Submission Deadline Bidders Proposals submission due date. Registration in PowerAdvocate was required to submit a Proposal.	Mid-March 2020	May 11, 2020	Based on several requests from bidders, PG&E extended the April 27, 2020 RFP close date due to COVID 19 to allow bidders adequate time to respond.
RFP Cure Period Bidders had one opportunity to submit a revised CET.	May - June 2020 (tentative date)	July 8 - 17, 2020	
RFP Evaluation and Scoring Scoring and Calibration	March - June 2020	May 15 - July 22, 2020	PG&E screened and scored 13 Proposals. This period includes the Cure Period.
RFP Shortlist Presented to PRG	June 2020	July 28, 2020	8 Proposals advanced to negotiations.
RFP Shortlist Notification Bidders were notified whether their Proposal(s) were Advancing through PowerAdvocate	July 2020 (tentative date)	August 13 - 21, 2020	
Contract Negotiations	July - August 2020 (tentative date)	August - October 2020	SWNC non-residential sector
	July - August 2020 (tentative date)	August 2020 – April 2021	SWNC residential sector
Contracts presented to PRG	September 2020 (tentative date)	October 27, 2020	SWNC non-residential sector
	September 2020 (tentative date)	April 27, 2021	SWNC residential sector
Execute Agreements Parties negotiations and successful agreement with counterparties reflected in executed Agreements	October 2020 (tentative date)	November 30, 2020 (SWNC non-residential sector)	PG&E executed 2 contracts resulting from SWNC non-residential sector RFP

FIGURE 10 – RFA and RFP Solicitation Process Events			
Event	**Planned Date**	**Actual Date**	**Notes**
	October 2020 (tentative date)	July 6, 2021 (SWNC residential sector)	PG&E executed 2 contracts resulting from SWNC residential sector RFP
Advice Letter PG&E filed Advice Letters	November 2020 (tentative date)	February 19, 2021 (SWNC non-residential sector)	PG&E filed 1 Advice Letter for each SWNC non-residential contract (2 Advice Letters total). ED approved advice letters 4386-G/6094-E and 4387-G/6095-E effective April 28, 2021
	November 2020 (tentative date)	July 2021 (SWNC residential sector)	PG&E filed 1 Advice Letter for each SWNC residential contract (2 Advice Letters total)

VI. Solicitation Marketing Outreach

To generate awareness of upcoming solicitation contracting opportunities in advance of a solicitation, PG&E utilized the following information distribution channels:

- PG&E Bidding Opportunities website
- PG&E EE Third-Party Solicitations website
- California Statewide IOU Energy Efficiency Proposal Evaluation & Proposal Management Application (PEPMA) website
- California Energy Efficiency Coordinating Committee (CAEECC) website
- CPUC service lists (R. 13-11-005, A. 17-01-013, A.17-01-012)

PG&E also engaged in the following workshops and facilitated other activities to prepared and support potential bidders in preparation for the upcoming solicitations.

FIGURE 11 – Vendor Outreach Activities	
Event Date	**Activity**
June 16, 2017	CPUC Third-Party Solicitation Process Workshop (PG&E hosted)
September 18, 2017	Joint IOU Bidder Conference #1 (PG&E hosted)
November 2017	Joint IOU Bidder Conference #2 (SDG&E hosted)
January 31, 2018	Supplier Diversity Vendor Matchmaker Workshop (PG&E hosted)
March 6, 2018	Joint IOU Bidder Conference #3 (SCE hosted)
July 2018	PG&E hosted CET training Workshop
July 17, 2018	PG&E hosted Energy Savings Platforms Training

VII. Efforts to increase bidder's awareness of the process and the tools/platforms used to communicate this opportunity.

In addition to the outreach and education efforts discussed in section 1.C.VI, PG&E also strived to improve awareness and engagement with the solicitation process in the following ways:

- EE resources were provided on PG&E's EE Solicitations website "Resources" tab.

  PG&E collected relevant EE reference materials on important CPUC Decisions, policies and other CA legislation, PG&E's EE Portfolio, PG&E's solicitation strategy, and PG&E's Energy Savings Platform Rulebook.

- RFA Solicitation documents posted to PG&E EE Solicitations website

  PG&E made all RFA documents available on the PG&E EE Solicitations website when launching the RFA. This allowed any interested party to easily access and review the solicitation documents without having to register within Power Advocate. PG&E will post original RFP documents to the EE Solicitation website after the SWNC contracting is concluded.

VIII. Communications with Bidders

Whenever possible, communications between PG&E and bidders was managed within the PowerAdvocate platform. Use of a single communications platform during a solicitation reduces the risk of conflicting information being shared in different venues, maintains a complete record of communications, and allows easy access for IEs to monitor discussion for bias. Communications with bidders in this process can broadly be categorized into two types: one-way communications and two-way communications. One-way communications were typically informational messages, instructions, or status updates from PG&E to the bidders that did not require a response beyond acknowledgement of receipt. Examples of one-way communications with bidders included mid-process status updates, and shortlist notifications. Two-way communications most often took the form of a question which required a response or a request for additional information. Most two-way communications occurred during the RFA Q&A period, the RFP Q&A period, the CET Review.

(a) RFA Question Themes Observed

At the RFA stage, PG&E received 9 questions from bidders and observed that the questions focused on submission process, and unique aspects of the RFA. In particular, the following themes were observed by PG&E in the RFA questions:

- **SWNC RFA Process:** Clarification of the number of abstracts each bidder could submit and the inclusion of web links and graphics in the abstract form;
- **Statewide Program Terms:** Clarification on contract term and CET requirement.

(b) RFP Question Themes Observed

In the RFP, PG&E observed the following question themes:

- **RFP Documents:** Clarifications of submission requirements, and acceptable formatting of forms;
- **CET for load shifting and Avoided Gas Infrastructure Costs:** How to recognize load shifting benefits in the CET, CET inputs, Net to Gross ratios, when would a project be eligible under an all-electric program for additions and alterations, and what data were used in the avoided gas infrastructure costs;
- **Program Budget:** Clarification on funding for the enhanced C&S, whether bidders were limited to the program's budget cost category targets, and if the budget for each sector was allocated to both all-electric and mixed fuel programs.

PG&E provided responses to these questions during allotted Q&A for the solicitation.

(c) Other Key Communication Points

PG&E would like to point out several other major topics that required a tailored communication approach:

Performance Contracting Framework: In parallel with this significant solicitation effort, PG&E was also giving its standard EE Contract a significant overhaul to address prior known issues of vendor performance and accountability. Ideally the form of this contract would be included as part of the RFP, however, this work was still in process and PG&E opted to include a term sheet of key contractual terms for bidders to redline. This is a common and acceptable solicitation practice adopted from Energy Supply when a solicitation is under schedule pressure. The updated contract terms were shared with the IEs and the PRG in advance of detailed contract negotiations.

Significant time was taken during the initial negotiation kickoff meetings to walk bidders through the new proposed framework and PG&E provided detailed definitions and an excel tool to demonstrate how to model each term.

IX. Independent Evaluators

PG&E engaged three IEs from the Commission's approved list of IEs for this SWNC RFA/RFP process. Each IE was assigned responsibility for a customer sector as outlined in *Figure 2 – PG&E EE Independent Evaluator Pool*. The unique approach of deploying multiple IEs simultaneously to a solicitation provided the following advantages:

- Documents were reviewed by all three IEs during drafting resulting in an extremely robust review process;
- IEs were able to meet collectively to discuss emerging issues and the feedback provided to PG&E included the full spectrum of available IE perspectives;
- Dividing the review responsibilities among all IEs reduced the risk of solicitation delays and mitigated against the risk of being dependent upon a single IE firm.

PG&E engaged the IE pool throughout the solicitation process. IE feedback was openly received, considered, and discussed. The principle areas of engagement with IEs included:

- Review of solicitation documentation before the solicitation was issued;
- Independent evaluation of the abstract and proposal submissions;
- Shortlist development;
- Monitoring communications, feedback calls, and contract negotiations with bidders;
- Reporting to the PRG and participation in monthly PRG meetings.

The final IE Contract Report[26] is provided as Public Attachment A, and the supplemental final IE Contract Report is provided as Confidential Appendix A.

(a) Summary of IE input in RFA

Throughout the development of the RFA solicitation materials and during the review of final solicitation documents, IEs recorded in a comment tracker all input and recommendations to: the general instructions and response forms; scoring criteria and weightings; and alignment between the scoring criteria and solicitation documents; and attended the Pre-Bid conference; and monitored communications with bidders and PG&E responses to bidder questions. PG&E generally accepted or partially accepted IE and PRG feedback. A summary of overall IE observations that PG&E incorporated into the RFA process included the following:

- Increased emphasis of innovation in RFA general instructions;
- Increased emphasis on the importance of savings, cost, and increasing cost effectiveness in RFA general instructions;

[26] "Given that we are not requiring that all third-party contracts be submitted for formal approval by the commission, we will require a formal IE report to accompany only those contracts required to be submitted via a Tier 2 advice letter." D. 18-01-004 p. 37.

- Collected and uploaded key CPUC/legislative decisions, references, and definitions on the PG&E EE Solicitation webpage;
- Adjusted RFA scoring criteria allocating more weight to company experience and innovation.

(b) Summary of IE input in RFP

Throughout the development of the RFP solicitation materials and during the review of final solicitation documents, IEs recorded in a comment tracker all input and recommendations to: the general instructions and response forms; the contract term sheet, scoring criteria and weightings; alignment between the scoring criteria and solicitation documents; and attended the Pre-Bid conference; and monitored communications with bidders and PG&E responses to bidder questions. PG&E generally accepted or partially accepted IE and PRG feedback. A summary of overall IE observations that PG&E incorporated into the RFP process included the following:

- Extensive revisions to narrative and data response forms to improve clarity and completeness;
- Discussed the appropriateness of adjusting the program categories from RFA to RFP;
- Discussed the methods to incorporate the AGIC into the solicitation evaluation;
- Refined definition of alteration;
- Refinement of baseline and enhanced C&S support definition;
- Revisions to scoring criteria and weighting;
- Improved training of evaluation team members in advance of proposal scoring.

During the CET review process, The Mendota Group, LLC monitored PG&E's responses to bidders to ensure consistency, accuracy, and free of any bias.

(c) Summary of IE input in Negotiations

All IEs reviewed the draft contract forms prior to kicking off contract negotiations. The IEs also monitored communications between PG&E and bidders during Contract Negotiations to ensure discussions were conducted fairly. During the CET review, The Mendota Group, LLC monitored communications between PG&E and bidders.

2. TRANSITION PLAN FROM EXISTING TO NEW PROGRAM

PG&E summarizes the transition from similar existing programs serving the SWNC Non-Residential sector to the new third party implemented program in *Figure 12 – Transition Plan* below. If the existing program is being fully replaced, the table defines the replacement programs; both new third party implemented program and existing programs. Existing programs that will not transition to the new third party implemented program have been identified as "Not Replaced" in the table below.

Figure 12: Transition Plan from existing IOU programs to the new statewide third-party implemented program.

Figure 12 – Transition Plan				
Transition Plan to New 3P Statewide Non-Residential New Construction Program	EXISTING PROGRAMS			
	PrgID	Program Name	Subprogram Name / Program Common Name	Subsector
Full Replacement by the following programs: SWNC Residential Program TRC - California Energy-Smart Homes Program Residential Statewide New Construction Mixed Fuel and All Electric Programs	Program ID# PG&E 21005	California Advanced Homes Program	CAHP	Residential Single Family and Multifamily Low Rise

3. Confidentiality

In support of this advice letter, PG&E provides the following confidential information: executed Third-Party Implementer Energy Efficiency Program contracts, information about the participants and offers submitted in response to PG&E's SWNC RFP including the evaluation and analysis of the value of such offers, information and program metrics, financial and performance statistics of the parties, and the confidential results of the solicitation.

A Declaration Seeking Confidential Treatment is submitted in support of this advice letter, as required by D. 08-04-023, to demonstrate the confidentiality of material and to invoke the Commission's protection of confidential utility data and information provided under D.06-06-066 (see, Appendix 1, ("IOU Matrix")) and Appendix C D. 08-04-023 or General Order 66-D.

Confidential Attachments:

Confidential Appendix A: Independent Evaluator Report (Redacted version included with public submittal)

Confidential Appendix B: Solicitation Process Overview

Confidential Appendix C: SWNC Selection

Confidential Appendix D: Third-Party Contract Summary

a) Table 1 Contract Summary
b) Table 2 and 3
c) Table B1 (Redacted version included with public submittal)

Confidential Appendix E: Third-Party Contracts

Public Attachment A

Energy Efficiency Third-Party Solicitation Advice Letter

Energy Efficiency Independent Evaluator's Final Report

(Redacted)

July 12, 2021

Energy Efficiency Independent Evaluator's Final Solicitation Report

Pacific Gas & Electric Company

Statewide New Construction Solicitation, Residential Sector

Contracts:

TRC Solutions, Inc.'s California Energy-Smart Homes Program – All-Electric

TRC Solutions, Inc.'s California Energy-Smart Homes Program – Mixed-Fuel

Prepared by:

THE MENDOTA GROUP LLC
the power of bright ideas

Independent Evaluator

July 8, 2021

Table of Contents

Executive Summary

In compliance with the requirements of the California Public Utilities Commission's (CPUC) Decision (D.) 16-08-019 and to fulfill commitments as presented in the Company's Business Plan[1] and Solicitation Plan,[2] Pacific Gas & Electric (PG&E or the Company) conducted its Statewide New Construction (SWNC) Solicitation to select one or more third-party contractors to implement a statewide energy efficiency program targeted at improving building energy efficiency.

This report covers the Residential portion of the solicitation. For the Residential sector, PG&E selected two TRC Solutions, Inc. programs: the California Energy-Smart Homes Program (CESHP) – All-Electric program and the California Energy-Smart Homes Program – Mixed-Fuel program. PG&E selected Willdan Energy Solutions' Non-Residential, All-Electric – California New Construction and Willdan's Non-Residential, Mixed-Fuel – California New Construction for the Non-Residential sectors.[3]

In our view, PG&E conducted the Statewide New Construction Solicitation fairly, transparently and without bias. Although we raised concerns regarding solicitation design issues, these issues did not affect the fairness or transparency with which the solicitation was conducted. The solicitation did experience significant delays, owing in part to a decision to change solicitation design at the RFP stage. Despite these challenges, the solicitation was successful in procuring programs that will help PG&E meet its regulatory obligations and transform California's new construction market.

As described in the contracts for the selected programs, TRC "developed the California Energy-Smart Homes Program based on our extensive experience and success in the California residential new construction (RNC) market. CESHP emphasizes installation of advanced energy efficiency measures and facilitates future opportunities through non-incentivized, pre-requisite measures that position homes to install demand response technologies more easily in the future." A summary of the programs' contracted terms and goals follow:

Table 1: Contract Summaries

Item	All-Electric	Mixed-Fuel
Contract Term	67 months	67 months
Budget	[redacted]	[redacted]
Net kWh (First Year)	[redacted]	[redacted]
Net Therms (First Year)	[redacted]	[redacted]
Total Resource Cost (TRC) Test	[redacted]	[redacted]
Program Administrator Cost (PAC) Test	[redacted]	[redacted]

1 "Energy Efficiency Business Plan (2018-2025)", Pacific Gas and Electric Company.
2 "Pacific Gas & Electric Company (U 39-M) Third Party Solicitation Process Proposal", August 4, 2017.
3 The Non-Residential programs are discussed in PG&E's Advice Letter Filings, Advice 4387-G/6095-E for All-Electric and Advice 4386-G/6094-E for Mixed-Fuel.

1. Background

The Independent Evaluator Final Solicitation Report (Report) provides an assessment of Pacific Gas & Electric Company's (PG&E or the Company) third-party energy efficiency (EE) program solicitation process and outcomes by PG&E's assigned Independent Evaluator (IE or EE IE) for the Residential Sector of the Statewide New Construction solicitation, The Mendota Group, LLC. This Report is intended to reflect and provide a record of the entire solicitation in compliance with California Public Utilities Commission direction.[4]

For its Statewide New Construction Solicitation, PG&E assigned three IEs, one for the Residential portion, one for the Non-Residential portion and one that covered all sectors with a focus on the solicitation's relationship with Codes & Standards. The three IEs worked together on general oversight and feedback to PG&E in the RFA and RFP stages, but focused on their individual sectors where applicable throughout the process (reviewing abstracts, proposals, and tracking contract negotiations). For the RFP scoring process and contracting stage, PG&E reduced its number of IEs, with EAJ Energy Advisors retained to monitor the Non-Residential contracts and The Mendota Group retained to monitor the Residential contracts. Barakat Consulting was not involved in RFP scoring or contract negotiations.

Table 2: IE Assignments

Sector	IE
Codes & Standards Coordination	Barakat Consulting, Inc.
Non-Residential	EAJ Energy Advisors
Residential	The Mendota Group, LLC

1.1 Regulatory Context

In August 2016, the CPUC adopted Decision 16-08-019, which defined a "third-party program" as a program proposed, designed, implemented, and delivered by non-utility personnel under contract to a utility program administrator (PA). On January 11, 2018, the CPUC adopted Decision 18-01-004 directing the four California IOUs—PG&E, Southern California Edison (SCE), San Diego Gas & Electric (SDG&E), and Southern California Gas Company (SoCalGas)—to ensure that their EE portfolios contained a minimum percentage of third-party programs by predetermined dates over the next three years. Further directions were included in Decision 18-05-041:

> *The third-party requirements of Decision 16-08-019 and Decision 18-01-004 are required to be applied to the business plans of the investor-owned utilities approved in this decision. All utility program administrators shall have at least 25 percent of their 2020 program year forecast budgets under contract for programs designed and implemented by third parties by no later than December 19, 2019.*[5]

[4] Decision 18-01-004, "Decision Addressing Third Party Solicitation Process for Energy Efficiency Programs", California Public Utilities Commission, January 11, 2018, OPN 5.

[5] Decision 18-05-041, "Decision Addressing Energy Efficiency Business Plans", California Public Utilities Commission, May 31, 2018, OPN 4. D. 18-01-004 had established an original due date of December 31, 2018 for the 25 percent requirement.

1.2 Two-Stage Solicitation Approach

The CPUC requires that IOUs conduct a two-stage solicitation approach for soliciting third party program design and implementation services as part of the energy efficiency portfolio "unless there is a specific schedule-related reason only one stage is possible".[6] The Decision further states that "The two-stage process should be the predominant approach."

The CPUC also required that each IOU assemble an Energy Efficiency Procurement Review Group (EE PRG or PRG). Each IOU's EE PRG, a CPUC-endorsed entity, is composed of non-financially interested parties such as advocacy groups, utility-related labor unions, and other non-commercial, energy-related special interest groups. The EE PRG is charged with overseeing the IOU's EE solicitation process (both local and statewide), reviewing procedural fairness and transparency. This oversight includes examining overall procurement prudence and providing feedback during all solicitation stages. Each IOU briefs its PRG on a periodic basis throughout the process on topics including RFA and RFP language development, abstract and proposal evaluation, and contract negotiations.

Each IOU is required to select and utilize a pool of EE IEs to serve as consultants to the PRG. The IEs are directed to observe and report on the IOU's entire solicitation, evaluation, selection, and contracting process. The IEs review and monitor the IOU solicitation process, valuation methodologies, selection processes, and contracting to confirm that the process has been unbiased, fair, transparent, and competitive. The IEs are privy to viewing all submissions. The IEs are invited to participate in the IOU's solicitation-related discussions and are bound by confidentiality agreements.

1.3 Extension Request

In a letter dated November 5, 2019, PG&E requested an extension to June 30, 2020 to meet the 25 percent requirement to allow for sufficient time for a detailed and thoughtful contract negotiation stage for its Local Multi-Sector RFP. In November 2019, the CPUC granted PG&E's request for extension of time to meet the 25 percent threshold by June 30, 2020.[7]

The CPUC further stated that, consistent with Decision 18-05-041, the IOUs must meet at least 40 percent of their EE portfolios under contract for programs designed and implemented by third parties by December 31, 2020. The CPUC further stated that it would not grant any more extensions for the IOUs for meeting the third-party percentage requirements specified in Ordering Paragraph 4 of Decision 18-05-041. PG&E confirmed in an email to the CPUC on December 21, 2020 that it had met the 40 percent milestone.[8]

[6] D.18-01-004, COL 5.

[7] CPUC Letter to IOUs regarding the "Request for Extension of Time to Comply with Ordering Paragraph 4 of Decision 18-05-041", November 25, 2019.

[8] Email from David Poster, Director of Energy Efficiency, Pacific Gas & Electric, to Jennifer Kalafut and Alison LaBonte, California Public Utilities Commission, December 21, 2020.

2. Solicitation Overview

2.1 Overview

PG&E utilized a single two-stage RFA and RFP solicitation process to solicit proposals for its Statewide New Construction program. The solicitation sought proposals from third parties for energy efficiency programs that aligned with the definition of third party from CPUC's D.16-08-019. Decision 18-05-041 assigned individual IOUs to "lead" the designated statewide solicitations and administer the programs after contractor selection (see Table 3).

Table 3: IOU Statewide EE Program Assignments

Description	Investor Owned Utility	Sector(s)
New Construction (SWNC)	Pacific Gas and Electric Company	Residential and Non-Residential
Codes and Standards	Pacific Gas and Electric Company	Cross-Cutting
State of California/Dept. of Corrections	Pacific Gas and Electric Company	Public – Institutional Partnerships
WE&T Career and Workforce Readiness	Pacific Gas and Electric Company	Cross-Cutting
WE&T K-12 Connections	Pacific Gas and Electric Company	Cross-Cutting
Lighting	Southern California Edison	Non-Residential
Government and Institutional Partnerships and Water/Wastewater Pumping	Southern California Edison	Public
Electric Emerging Technologies	Southern California Edison	Cross-Cutting
Gas Emerging Technologies	Southern California Gas Company	Cross-Cutting
Foodservice Point-of-Sale	Southern California Gas Company	Non-Residential
Midstream Water Heating	Southern California Gas Company	Commercial
Upstream & Midstream HVAC	San Diego Gas and Electric Company	Residential/Commercial
Downstream Residential HVAC Pilot	San Diego Gas and Electric Company	Residential
Plug Load and Appliances (PLA)	San Diego Gas and Electric Company	Residential

With respect to the Statewide New Construction program, since D.18-05-041 came after IOUs developed their 2018-2025 Business Plans (filed on January 17, 2017), and PG&E wasn't originally expected to manage the SWNC program, PG&E's Business Plan and subsequent Solicitation Plan

(August 4, 2017) do not outline the Company's plans for the new construction program.[9] However, PG&E's Business Plan highlights the importance of achieving the California Long-Term Energy Efficiency Strategic Plan's goals related to new construction Zero Net Energy (ZNE) homes for all new single family and low-rise multifamily buildings in 2020 and 100 percent of new and 50 percent of existing commercial buildings be ZNE by 2030. The RFA successfully sought programs that help meet these objectives and further expanded these goals to focus on helping California achieve its overall carbon reduction goals by directly reducing building energy use, guiding market trends in terms of design and construction practices, and collecting data to advance new codes and standards.

Also of note, PG&E originally envisioned running the Residential and Commercial (name later changed to Non-Residential) solicitations separately but later decided to combine them.

2.2 Objectives

PG&E's Statewide New Construction Solicitation sought to, on behalf of the state's IOUs, "take advantage of uniform opportunities across the state for customers and the building industry at large, prioritize easy program access to customers, and lower transaction costs." Program designs and incentives were permitted to "vary by climate zone, load shape, market sector, etc." Further, the RFA and RFP sought bids that encouraged "design of whole new buildings, additions and/or alterations that exceed Title 24, Part 6 requirements". The Solicitation recognized the program's role in market transformation as that term is defined in CPUC D.09-09-047, and the nexus between the new construction program and the CPUC's upcoming solicitation for a Market Transformation Administrator (MTA).[10]

a. Scope

As described in the RFA, the Solicitation sought proposals for "innovative EE program(s) that encourage(d) integration of high-performance whole building solutions" and that incorporated "cost-effective approaches to achieving the highest levels of efficiency in design and construction within residential and nonresidential sectors." The RFA also indicated an interest in increasing efficiency beyond the current building standards in alterations and additions as a key strategy for reducing GHG emissions in the building sector." Finally, the Solicitation stated the desire for bidders to include "significant, multi-system alterations in the program's scope" as this was deemed "critical to connecting new construction programs with future codes and standards and to encouraging customers to go beyond the state minimum standards and achieve more significant energy use reductions."

At the RFP stage, PG&E adjusted the solicitation's scope to permit bidders to modify the programs proposed at the RFA stage to promote either all-electric or mixed-fuel new construction. No bidders at the RFA stage had submitted all-electric programs. As further discussed in section 4.1,

[9] IOUs had proposed that Southern California Edison would administer the Commercial NC program and Southern California Gas would administer the Residential NC program. In D. 18-05-041, the CPUC stated its preference that a single IOU administer the entire new construction program and determined that PG&E, as the designated lead for codes and standards advocacy, was best suited to administer the combined program.

[10] Decision 09-09-047, "Decision Approving 2010 to 2012 Energy Efficiency Portfolios and Budgets", California Public Utilities Commission, September 24, 2009, OPN 8. The role of a Market Transformation Administrator was established by Decision 19-12-021, "Decision Regarding Frameworks for Energy Efficiency Regional Energy Networks and Market Transformation", California Public Utilities Commission, December 5, 2019.

PG&E strongly felt that, in response to the changing California policy landscape and the role that new construction plays in transforming the building market, the Solicitation should encourage bidders to incorporate into their programs features that promoted the state's increasing focus on decarbonization. Although bidders were requested to generally retain the program designs embodied in their abstracts, PG&E allowed bidders to incorporate into these design options for all-electric residential and/or non-residential buildings. bidders were also permitted to modify the design proposed with their RFA abstracts to focus only on all-electric construction

From the Solicitation's outset, there were questions about the role that alterations should play in the program's scope.

b. Timing

PG&E experienced minor delays in releasing the RFA and majors delay in the overall solicitation timeline relative to the schedule IOUs published on December 31, 2018. The published schedule envisioned solicitation release in Q1-2019 while the RFA was released in Q2-2019. However, the schedule anticipated program launch in Q2-2020. It is currently anticipated that the program will launch in the third quarter of 2021. The most significant delay occurred between the notification to bidders about shortlisting for the RFP and release of the RFP itself. The gap was approximately six months. IEs expressed concerns about these delays and the impacts on bidders and the market. For the Residential New Construction portion, there was another delay during the contract negotiation phase. The timing of the solicitation process is shown in Table 4.

The delay between RFA and RFP resulted from substantial changes to the RFP, which included refining the RFP to establish Mixed-Fuel (gas and electric) and All-Electric programs, incorporating Avoided Gas Infrastructure Costs (AGIC) into cost effectiveness calculations for the All-Electric program, and finalizing the definition of building alterations that are within the program's scope. For this report, we use a term that was part of the New Construction RFP, "code-enhancing alterations" to describe this aspect of the program (see further discussion in Sections 3.1 and 5). Code-enhancing alterations refers to the portion of each program that offers customers incentives for large-scale equipment changeouts wherein the program will actively collect data to help inform changes and enhancements to building codes and appliance standards.

Table 4: Key Milestones

Milestones	Completion Date
RFA Stage	
RFA Release	May 29, 2019
Bidder Conference	June 6, 2019
Bidder Abstracts Due	June 28, 2019
RFA Shortlist to PRG	August 25, 2019
Bidder Notifications	September 17, 2019
RFP Stage	
RFP Released	March 16, 2020
Bidder Conference	March 26, 2020

Table 4: Key Milestones	
Milestones	**Completion Date**
Bidder Proposals Due	May 11, 2020[11]
RFP Shortlist to PRG	July 28, 2020
Bidder Notifications	August 13, 2020
Contracting	
Negotiations Kick-Off	August 25, 2020
Contracts Presented to PRG	April 26, 2021
Contract(s) Signed	July 6, 2021

2.3 Key Observations

Table 5 represents a collection of key IE issues, observations and outcomes, where applicable, from the assigned IE for PG&E's Statewide New Construction solicitation. In addition, Section 7 includes a set of noteworthy Effective Solicitation Practices that PG&E employed during this solicitation.

Table 5: Key Issues and Observations			
Topic	**Observation**	**IE Recommendation(s)**	**Outcome (IOU Action/Response)**
General			
Schedule and Communication	IEs provided feedback on the need for better communication on scheduling to be able to plan and know when to expect documents for review.	Provide regular communication and updates on schedule. Provide frequent updates and ensure transparency for all solicitation schedules. Hold regular meetings even if the schedule is slipping.	PG&E improved communications on the RFA, but the IEs were unclear on the overall schedule for the RFP, when RFP materials would be available for review, and other details.
RFA Stage			
Involving IEs in communications with other PAs	At the RFA stage, IEs were not initially involved in PG&E's (lead PA) discussions with non-lead PAs. For transparency, IEs recommended being included in all communications with other PAs.	Include IEs in all IOU communications. This ensures that IEs are aware of non-lead PA positions on issues. It also gives the IEs the ability to help resolve/respond to issues.	PG&E agreed to include the IEs in communications with the non-lead PAs. For all statewide solicitations, IEs should be included in communications with non-lead PAs.

[11] The original due date was April 27, 2020. Due to California's COVID-19 shelter-in-place requirements, PG&E extended the deadline by two weeks.

Table 5: Key Issues and Observations			
Topic	**Observation**	**IE Recommendation(s)**	**Outcome (IOU Action/Response)**
[redacted]	[redacted]	[redacted]	[redacted]
[redacted]	[redacted]	[redacted]	[redacted]
[redacted]	[redacted]	[redacted]	[redacted]

Table 5: Key Issues and Observations			
Topic	**Observation**	**IE Recommendation(s)**	**Outcome (IOU Action/Response)**
[redacted]	[redacted]	[redacted]	[redacted]
RFA initially included standard 3-year program	The released version requested that bidders propose 3-year programs but, given the long lead time nature of construction projects, it made more sense to allow a longer program.	It is important to revisit "assumptions" about program parameters during the development of the initial solicitation as some features (such as program duration) may be less applicable.	Based on bidder feedback, PG&E revised the released RFA to request that bidders propose 5-year programs. This timeframe was in the RFP as well.
[redacted]	[redacted]	[redacted]	[redacted]
[redacted]	[redacted]	[redacted]	[redacted]

Table 5: Key Issues and Observations			
Topic	**Observation**	**IE Recommendation(s)**	**Outcome (IOU Action/Response)**
RFP Stage			
Bidder Conference Q&A	PG&E limited its communications with IEs when preparing its responses to bidder questions following the Bidder Conference. IEs were not involved in reviewing questions from responses to bidders.	IEs requested that draft responses to bidder questions be shared with the IEs for review prior to publishing the response on Power Advocate.	PG&E considered the recommendation but did not commit to including IEs in review of Q&A.
Changes to Program Envisioned by RFP (distinguishing between all-electric and mixed-fuel NC developments) vs. RFA	We expressed concern that changes to the program presented in the RFP and information requested of bidders were substantial changes to the program in contrast with program as proposed in the RFA (and bidder's abstracts). The other two IEs considered the RFP changes to be appropriate refinements given the new construction environment.	We provided PG&E suggested language to include in the RFP that explained the state's increasing focus on decarbonization and that this is one of the reasons for the request that bidder propose either mixed-fuel or all- electric programs.	PG&E refined the scope of the RFP by asking bidders to consider either an Electric Only program, a Mixed-Fuel program, or both. They believed this refinement did not change the scope in a way that required bidders to change what they proposed in the RFA. We were comfortable with this change given the State's focus on decarbonization.
Scoring Criteria	Although IEs received a version of the scorecard with complete weightings, we did not receive an "operationalized" scorecard with scoring guidance, including weightings, that reviewers can use to evaluator proposals.	PG&E should produce and solicit/receive feedback on an operationalized scorecard before proposals are due. This revised scorecard should be used for expected scoring team training prior to the solicitation deadline.	PG&E provided the operationalized scoring materials prior to training in time for receipt of proposals.
Changes to Program Envisioned by RFP (distinguishing between all-electric and mixed-fuel NC developments) vs. RFA	Mendota Group expressed concerns that modifications to the program structure as incorporated into the RFP and information requested of bidders were substantial changes to the program in contrast with program as proposed in the RFA (and bidder's	Mendota Group provided PG&E suggested language to include in the RFP that explained the state's increasing focus on decarbonization and that this is one of the reasons for the request that bidder propose either mixed-fuel or all- electric programs.	PG&E refined the scope of the RFP by asking bidders to consider either an Electric Only program, a Mixed-Fuel program, or both. They believed this refinement did not change the scope in a way that required bidders to change what they proposed in the RFA. Mendota Group was comfortable with this

Table 5: Key Issues and Observations			
Topic	**Observation**	**IE Recommendation(s)**	**Outcome (IOU Action/Response)**
	abstracts). The other two IEs considered the RFP changes to be appropriate refinements given the new construction environment.		change given the State's focus on decarbonization.
Use of an Alternative Cost Effectiveness (CET) Calculator to Incorporate Avoided Gas Infrastructure Costs for All-Electric Programs	PG&E proposed to incorporate into its RFP a cost effectiveness calculator that, for all-electric programs, credited programs for avoided gas infrastructure costs (AGIC). Mendota Group considered this problematic because such a methodology was not approved by the CPUC. Bidder advancement to negotiations would be based on these unapproved values. The other two IEs thought the alternative calculator was reasonable and necessary to allow for all-electric programs that support and further promote state policy.	Mendota Group recommended providing the alternative calculator as a tool that bidders could use to estimate their TRC and PAC scores for all-electric programs, but recommended the tool not be used to evaluate/select bids.	PG&E disagreed with the one IE and determined to use the calculator to evaluate all-electric programs. PG&E also provided a letter from the CPUC's Energy Division (ED) indicating support for use of AGIC. Based on the letter from ED, Mendota Group considered this issue resolved.
Contracting			
Competitive Contract Negotiations	It is important that PG&E is clear with IEs and the PRG about the approach it plans to take in contract negotiations with selected bidders to ensure that final selections are fair and based on transparent criteria, and to ensure that discussions with bidders are focused and expedient.	PG&E should clearly explain rationale for final selections, if different from the RFP scoring results. PG&E should further indicate what information the company received from bidders during negotiations that helped them determine their final selections.	PG&E was receptive to including the IEs in internal discussions of their impressions of meetings with bidders and rationale for the next steps. PG&E narrowed its negotiations to single bidders for both Residential and Non-Residential. These bidders were the top scoring bidders coming out of the RFP stage. IEs considered this issue resolved.

Table 5: Key Issues and Observations			
Topic	**Observation**	**IE Recommendation(s)**	**Outcome (IOU Action/Response)**
Code-enhancing Alterations in Contracts	The Residential program (both All-Electric and Mixed-Fuel) derived a large percentage of their savings from code-enhancing alterations. IEs were concerned that this would potentially conflict with other statewide and local downstream programs and that it wasn't consistent with the spirit of a program primarily focused on new construction. PG&E agreed that the SWNC program should not be primarily an alterations program.	IEs and the PRG recommended that PG&E seek to reduce the proportion of the programs' savings derived from alterations and clarify in contracts how overlaps between programs would be managed.	PG&E requested that TRC reduce the proportion of savings the programs derived from code-enhancing alterations. PG&E also requested that TRC include in the contract protocols for addressing potential overlaps between SWNC and other programs. Lastly, PG&E requested that TRC shift budget from Mixed-Fuel to All-Electric to reflect the strong likelihood that future building codes would seek to achieve net zero carbon (vs. net zero energy). IEs supported these changes.

3. RFA Development and Bidder Selections

3.1 RFA Development

PG&E revised the RFA instructions template used in previous solicitations to align with the SWNC Solicitation. The revisions process was open and transparent. High level recommendations from the IEs focused on things such as:

- Including more Statewide vision and context from PG&E's Business Plan;
- Including CPUC/legislative decisions, references and definitions;
- Emphasizing the importance of increased savings, cost, and cost-effectiveness;
- Requiring bidders to explain how, and under which circumstances, they would qualify code-enhancing alterations for inclusion as new construction;
- Rephrasing RFA language to encourage bidders to be more innovative in their abstracts;
- Explaining the scoring process to bidders, and
- Giving greater weight to company experience, innovation, and compliance in RFA scoring.

The RFA also requested that bidders, if they included code-enhancing alterations in the scope, clearly define what constitutes an alteration based on building code, CPUC guidance or other relevant sources and explain why the measures are appropriate for the New Construction program. PG&E considered this definition of alterations important to the program as it would enable collection of data to inform development and advancement of new codes and standards.

The RFA solicitation documents were generally well-designed, and PG&E attempted to strike an appropriate balance between obtaining sufficient information while not overburdening bidders. The three IEs coordinated closely and advised PG&E on several versions of the RFA Scorecard drafts. PG&E also conferred and received comments from the other IOUs. IEs applied the Checklist of PRG Recommendations for EE RFAs to the RFA documents, finding that PG&E either met or partially met more than 93 percent of the items. The items not met were mostly deferred to the RFP stage. PG&E also accepted or partially accepted approximately 96 percent of the 107 recommendations IEs, the PRG and other IOUs provided. There were no major items of disagreement.

The high-level Scorecard aligned well with the information requested of bidders; however, the more detailed scorecard (expanded criteria) was not provided to IEs until after the RFA launch, and included some provisions (Assessment of Support for Future Codes and Standards) that did not align well with the RFA contents. Although this version of the scorecard was not deliberately withheld (IEs' understanding was that this was a resource issue) and this did not demonstrably affect the scoring process, IOUs should endeavor to produce a final scorecard before release of its solicitation.

The RFA solicitation package included the following documents:

- **RFA General Instructions** – a Microsoft Word document providing the regulatory context, submission requirements, and the instructions for all bidders to follow in preparing their proposals.
- **RFA Narrative Response Form** – a Microsoft Word document with questions for each bidder to answer. Additional guidance for specific questions in the form is also given. Word limits were given for each response.
- **Data Response Form** – a Microsoft Excel Workbook designed to capture program financial and energy related data (savings) for the proposed program. There were also worksheet tabs for bidders to depict the proposed program's logic model, describe the program schedule and key deliverables, present the proposed payment structure and KPIs, and provide details regarding the bidders' prior experience.

The team of IEs and PG&E worked well together as processes were established, despite tight timelines.

3.2 RFA Outreach

PG&E's outreach strategy focuses on two primary methods of informing and educating bidders about the solicitation opportunity.

- **Web-Based**: PG&E set-up a dedicated Third-Party Energy Efficiency Solicitations web site, https://www.pge.com/eesolicitations, which includes a solicitation schedule, specific pages for general solicitation resources, training, registration information for PG&E's online procurement tool (PowerAdvocate®), and frequently asked questions. The site also provides RFA/RFP content for any interested party to review/download without a requirement to register in PowerAdvocate. Solicitation information is also posted to the California Energy Efficiency Coordinating Committee (CAEECC)'s web site at -

https://www.caeecc.org/third-party-solicitation-process. CAEECC is an organization that "provides a venue for stakeholders to discuss energy efficiency matters while ensuring transparent access to information and opportunities to get involved."

- **Email**: PG&E also sent emails to organizations and individuals on CPUC service lists for R.13-11-005, A.17-01-013, and A.17-01-012, registered in the Proposal Evaluation & Proposal Management Application (PEPMA), and registered with its sourcing department.[12]

3.3 RFA Bidder Conference and Q&A

PG&E held its SWNC RFA Bidder Conference on June 6, 2019. The Bidder Conference was conducted using WebEx. Participants could ask questions through the WebEx chat function. Bidders posed five questions during the webinar. PG&E posted a recording of the conference in PowerAdvocate.

Bidders submitted an additional nine questions in response to the solicitation's designated question and answer portion. Questions related to the program's budget, program length, number of bids, and Narrative Response form content. Of note, in response to bidder questions about the long lead time for new construction projects, PG&E adjusted the maximum contract term from three years to five. IEs supported the change. Table 6 provides a summary of RFA Bidder Conference attendance and Q&A.

Table 6: RFA Bidder Conference and Q&A	
RFP Bidder Conference	June 6, 2019
Number of Attendees	78 online
Number of Questions Received	14

3.4 Bidder Response to RFA

The IEs were not involved in the solicitation outreach but tracked the progress of the outreach efforts to assess whether they were sufficient. The key indicator to determine the success of outreach efforts is bidder response to the solicitation. PG&E indicated that they expected to receive between 10 and 20 abstracts and, in fact, received 13. IEs considered this a good response to the solicitation, indicating that outreach efforts were appropriate. Although there were not a large number of abstracts submitted, given the knowledge and experience required to implement a statewide new construction program, the response was consistent with expectations.

The 13 abstracts were submitted by 11 bidders. None of the bids were screened out for non-conformance with RFA requirements. All 13 abstracts were mixed-fuel programs. None were all-electric.

A summary of the abstracts received is shown in Table 7.

[12] PEPMA (https://pepma-ca.com/Public/Default.aspx) is an informational website for energy efficiency solicitations supported by California's IOUs.

Table 7: RFA Response			
Customer Sector	Abstracts Received	Non-Conforming	Abstracts Reviewed
Residential Only	3	0	3
Non-Residential Only	7	0	7
Both (Residential and Non-Residential)	3	0	3
Total	**13**	**0**	**13**

3.5 RFA Selection Process

a. Bid Screening Process and Management of Deficient Bids

PG&E used its bid screening process to review bids for consistency with the RFA instructions and whether bids were submitted on time. The process was appropriate and did not screen out any bids as deficient or non-conforming.

b. Evaluation Team Profile

PG&E's evaluation team drew from different parts of the Company and afforded review of abstracts from a variety of perspectives. The evaluation team included the following representatives.

Table 8: RFA Evaluation Team Profile		
Position Title	Position Role	Area Scored
[redacted]	[redacted]	[redacted]
[redacted]	[redacted]	[redacted]
[redacted]	[redacted]	[redacted]
[redacted]	[redacted]	[redacted]
[redacted]	[redacted]	[redacted]
[redacted]	[redacted]	[redacted]

c. Scoring Rubric Design

The RFA scoring criteria are shown below in Table 9. The criteria categories of Program Concept, Company Experience, and Qualifications are shown with their corresponding weightings. An additional pass/fail criterion was used to assessed whether bidders complied with the RFA instructions provided in the bid materials. The criteria were further defined in the detailed scorecards used by PG&E's scoring team when evaluating and scoring each proposal. The detailed scorecard includes the definitions that guide selection of scores.

Table 9: Statewide New Construction RFA Scoring Criteria	
Criteria	**Weighting**
Program Concept	[redacted]
Assessment of Program Design and Benefits	[redacted]
Assessment of Support for Future Codes and Standards	[redacted]
Program Feasibility	[redacted]
Innovative Program Design Features	[redacted]
Company Experience and Qualifications	[redacted]
Team Composition and Qualifications	[redacted]
Prior Program Implementation Experience	[redacted]
Conformance to Format	[redacted]
RFA Format and Submission Rules	[redacted]
TOTAL SCORE	[redacted]

d. Evaluation Processes and Scoring Calibration

For the RFA stage, PG&E's approach to scoring involved having scorers complete their assigned reviews, pose any questions about scoring items to the solicitation team lead, and meet to "calibrate" scoring differences. The IEs also "shadow scored" each of the abstracts and proposals and participated in calibration meetings. During calibration meetings, PG&E presented the IE scores alongside PG&E scores, although the IE scores were not included in the overall bidder scores.

PG&E also held a scoring training session for evaluators to orient them to the scoring process. During the session, PG&E explained to the scoring team ground rules, set timing expectations, provided guidance on the best ways to score proposals, walked the evaluation team through the scorecard, and conducted a mock scoring exercise. As part of training, PG&E provided evaluators an "Evaluator Code of Conduct" which requires that evaluators not share any bid information outside of the evaluation team, not communicate with bidders, and reveal any conflicts of interest. In the mock scoring exercise, PG&E requested that team members evaluate a specific section of a "mock" abstract to better understand the process. PG&E communicated to the evaluation team that they could ask clarifying questions of the solicitation team lead. One lesson learned from the scoring process was that more frequent "check ins" among scorers allows individuals to ask questions about the scoring criteria (but not to discuss specific bids).

For the RFA, multiple individuals reviewed and scored the same sections. Each member of the review team scored all parts of bidders' abstracts, rather than focusing on specific sections. This is an effective practice, versus assigning evaluators to review specific sections of the RFA based on their expertise, because it allows evaluators to review the abstracts end-to-end. IEs observed that PG&E scorers demonstrated diligence and care in scoring abstracts and contributing to discussions during calibration meetings.

Prior to the calibration sessions, the PG&E solicitation team identified areas of significant difference among scorers and then discussed these differences during calibration sessions, providing the opportunity for individual reviewers to change their scores based on the discussions. [redacted] e considered this an appropriate way to ensure that bids were thoroughly, completely, and fairly scored.

e. *Abstract Selections*

PG&E selected six bidders (seven bids) listed in Table 10 to move to the RFP stage. IEs and the PRG concurred with the selections as they were consistent with final scores. PG&E used a "natural break" approach to selecting those to advance as the selected group had markedly higher scores than the non-selected. [redacted] IEs recommended that PG&E pay more attention in the RFP to articulating expectations to bidders regarding Support for Future Codes and Standards and Program Benefits. In addition, in developing the scorecard, additional attention should be paid to developing criteria that accurately and fairly assesses responses in these areas.

Table 10: Bids Selected to Move to RFP Stage

Bidder	Program	Sector(s)
[redacted]	[redacted]	Non-Residential
[redacted]	[redacted]	Non-Residential, Residential
[redacted]	[redacted]	Non-Residential, Residential
[redacted]	[redacted]	Non-Residential
[redacted]	[redacted]	Non-Residential
[redacted]	[redacted]	Residential
[redacted]	[redacted]	Non-Residential, Residential

3.6 PRG and IE Feedback to RFA Process and Selections

a. *Adherence to PRG Guidance and Feedback*

PG&E was very responsive to the PRG's checklist, with only 5 items of 82 considered "no's". All five of the items were considered more appropriate for the RFP stage (budget guidance, if applicable bidders must have valid contractor's license, workforce standards requirements). In addition, PG&E maintained a feedback tracker to ensure that IE, PRG, and non-lead PA comments were catalogued and directly addressed. The tracker includes more than 100 comments, all of which were addressed. The PRG supported PG&E's decisions and did not raise any concerns.

[redacted]. This did not affect the outcome of the scoring process, but IEs suggested that this area should be improved at the RFP stage.

b. *Response to IE Feedback*

PG&E adhered to PRG guidance in first presenting its recommended shortlist to IEs and providing an opportunity for feedback. IEs supported PG&E's selections as they were consistent with final scores and aligned well with IEs' own shadow scores.

4. RFP Development and Selections

4.1 RFP Development

PG&E made substantial changes to the design of the Statewide New Construction solicitation at the RFP stage. This caused a considerable delay in developing the RFP documents. PG&E strongly felt that, in response to the changing California policy landscape and the role that new construction plays in transforming the building market, the Solicitation should encourage bidders to incorporate into their programs features that promoted the state's increasing focus on decarbonization. Although bidders were requested to generally retain the program designs embodied in their abstracts, PG&E asked shortlisted bidders to further refine their proposed program to consider projects served by both electricity and natural gas (Mixed-Fuel), or projects that were electric only (All-Electric). Bidders were also asked to submit separate Residential and Non-Residential proposals, although bidders could only bid those sectors that were included in their RFA responses. (They were permitted to drop sectors but not to add sectors.) At a maximum, bidders could submit four proposals, assuming they had submitted abstracts for both Residential and Non-Residential sectors.

In addition to expanding the program to request that bidders break proposals into Residential and Non-Residential and All-Electric and Mixed-Fuel offerings, PG&E also:

- Incorporated into the RFP a cost effectiveness (CE) calculator that combined CET information with Avoided Gas Infrastructure Costs (AGIC) to produce CE calculations for All-Electric offerings;
- Included a revision definition of the type of alterations that were in scope based on inputs from bidders at the RFA stage,
- Emphasizing the importance that alterations play in collecting data to inform new codes and standards, and
- For the residential sector, defining the request to bidders to serve Hard-to-Reach (HTR) customers in terms of designated low-income housing.

In developing the RFP, PG&E actively involved its IEs, the PRG and the other IOUs. PG&E shared drafts of the RFP with other IOUs and tracked input from all involved parties. [redacted] This issue was resolved in the RFP by more clearly stating that the significant policy changes in California related to the focus on decarbonizing buildings necessitated the changes.

IEs requested additional information about AGIC and whether CPUC policy supported including it. AGIC estimated the cost changes related to foregone natural gas infrastructure required for All-Electric buildings. PG&E believed that current CPUC policy supported including AGIC in CE estimates for All-Electric programs and ultimately, in May 2020, obtained a letter from the CPUC's Energy Division indicating its support for including AGIC.

IEs also expressed concerns about the role the expanded definition of alterations would play in the program. PG&E clearly included its revised definition in the RFP. [redacted] Other IOUs provided substantial input on the drafts with some expressing concerns about the alterations portion of the program.
Southern California Edison provided most of the requested changes. PG&E adopted most all (96 percent) of the suggestions from other IOUs. Overall, PG&E accepted or partially accepted more than 91 percent of the 150 recommendations from the IOUs, PRG and IEs.

PG&E very thoughtfully considered input from all relevant stakeholders and did a very good job of putting together an RFP package that addressed concerns.

4.2 RFP Bidder Conference

The bidder conference was held on March 26, 2020 via WebEx. At peak, there were approximately 71 attendees including IEs, PG&E staff, PRG members, and bidders. Prior to the conference, the IEs reviewed and provided feedback on the presentation and mainly focused on providing more time to explain the RFP and for bidders to ask questions. The meeting lasted two hours. Bidders submitted nine questions during the meeting with four questions focused on issues related to the CET. Bidders posed another 30 written questions prior to the April 3, 2020 deadline. Most of the questions related to the mixed-fuel aspect of the RFP, CET technical inputs, and the CET Summary (All-Electric CET tool). The questions related to the mixed-fuel aspect of the program, how bidders should handle their different possible submissions and how the different program aspects (All-Electric Non-Res, All-Electric Res, Mixed-Fuel Non-Res, Mixed-Fuel Res) will be implemented.

During the interval between the Bidder Conference and the RFP submission due date, PG&E had limited communications with IEs. PG&E developed its responses to questions from bidders as part of the RFP's Q&A process without input from the IEs. Although IOUs are not required to provide draft responses to IEs, IEs consider this a prudent step to help ensure that responses fairly reflect the contents of the RFP and do not advantage any individual bidders. IEs did not have any specific concerns about PG&E's responses to bidder questions.

Due to requests from some bidders and California's Covid-19 shelter-in-place order, PG&E conducted a survey to gauge interest in extending the deadline. Out of four bidders responding to the survey (two did not respond), two requested an extension. PG&E extended the deadline by two weeks to May 11, 2021.

Table 11: RFP Bidder Conference	
Bidder Conference Date	March 26, 2020
No. of Attendees	Approximately 71
No. of Questions Received and Answered	39 (9 from bidder conference, 30 following the bidder conference via PowerAdvocate)

4.3 RFP Bidders' Response

As shown in Table 12, Bidders submitted 13 proposals. Ten of the bids focused on the Non-Residential Sector, while the remaining three bids focused on the Residential Sector. Additionally, of the 13 proposals, 7 bids addressed Mixed-Fuel new construction projects and 6 addressed All-Electric projects. [redacted]

Table 12: RFP Proposals Submitted

Bidder	Non-Residential		Residential	
	All-Electric	Mixed	All-Electric	Mixed
[redacted]		x		
[redacted]	x	x		
[redacted]	x	x	x	
[redacted]		x		
[redacted]	x	x	x	x
[redacted]	x	x		
		Total All-Electric	6	
		Total Mixed-Fuel	7	
		Total Non-Res	10	
		Total Res	3	
Total Proposals received in RFP stage			13	

4.4 RFP Selection Process

a. Bid Screening Process and Management of Deficient Bids

PG&E's process and checklist for screening bids was fair and the information was clearly presented in the RFP. There were no bids disqualified based on deficiencies. Further, no Affiliate Bids or Conflicts of Interest were identified. The scoring rubric shown in Table 13, with more detailed guidelines and criteria, was used for the scoring of the Statewide New Construction proposals.

Table 13: RFP Scoring Criteria

Criteria	Weighting
Program Design	[redacted]
Program Design and Logic Model	[redacted]
Program Innovation	[redacted]
IDSM Program Features	[redacted]

Table 13: RFP Scoring Criteria	
Criteria	Weighting
Program Benefits	[redacted]
Cost and Energy Savings	[redacted]
TRC Net Benefits / TRC Ratio	[redacted]
PAC Net Benefits / PAC Ratio	[redacted]
C&S Support	[redacted]
Program Feasibility	[redacted]
End-to-End Implementation	[redacted]
Risk Management Implementation	[redacted]
Payment Structure and Performance	[redacted]
Company Qualifications	[redacted]
Company Qualifications and Prior Experience	[redacted]
Supply Chain Responsibility	[redacted]
Diverse Business Enterprise	[redacted]
TOTAL SCORE	[redacted]

[redacted] This makes sense in that the RFP stage more carefully examines the proposed program's details, including how specifically the program will deliver energy savings and how risk and reward will be managed.

The scoring rubric and weightings struck an appropriate balance between the elements related to program design, feasibility, team and company experience, innovation, and support for Future Codes and Standards. Support for Future Codes and Standards was a unique feature associated with this solicitation, premised on the PG&E team's interest in connecting the new construction program with assistance for development and implementation of new and revised codes and standards. The IEs and PRG supported this connection and were comfortable with the assigned weighting for this element.

b. Evaluation Team Profile

PG&E held a scoring team training session prior to evaluating the Statewide New Construction proposals. The training included an overview of the solicitation materials, a mock scoring exercise, discussion of the requirement that scorers comply with the Company's code of conduct including the Conflict of Interest policies, and reviews of scoring criteria and the scorecard. The mock scoring exercise intended to inform score team members on how to apply the scorecard in the evaluation of the proposals. There were no identified conflicts of interest among PG&E scoring team members.

PG&E also held check-ins with the scoring team to address any questions that arose as they reviewed proposals. These meetings were useful to scoring team members and the IEs in ensuring consistency in scoring. The following table shows the members of the scoring team.

Table 14: RFP Evaluation Team		
Position Title	**Position Role**	**Area Scored**
[redacted]	[redacted]	[redacted]
[redacted]	[redacted]	[redacted]
[redacted]	[redacted]	[redacted]
[redacted]	[redacted]	[redacted]
[redacted]	[redacted]	[redacted]
[redacted]	[redacted]	[redacted]
[redacted]	[redacted]	[redacted]
[redacted]	[redacted]	[redacted]
[redacted]	[redacted]	[redacted]
[redacted]	[redacted]	[redacted]
[redacted]	[redacted]	[redacted]

c. *Evaluation Processes and Scoring Calibration*

The IEs reviewed and scored the SWNC proposals per the following assignments:

- EAJ Energy Advisors, LLC – all Non-Residential proposals,
- The Mendota Group – all Residential proposals.

After bidders submitted their proposals on May 11, 2020 PG&E's CET review team determined that virtually all bidders had made a number of errors in their submitted CETs. After conferring with IEs, PG&E re-opened the solicitation and -electric submissions. The errors related to:

- bidder incorporation of Avoided Gas Infrastructure Costs into their CE estimates,
- NTG ratios for all-electric,
- gas to electric fuel substitution measures (only can be in mixed-fuel, not all-electric), and
- measures exceeding incremental measure cost.

PG&E let bidders revise their CETs (if they chose), offered bidders another round of Q&A, and held one-on-one discussions with each bidder about their CETs. Bidders were not permitted to revise their program narratives, only the data forms and CETs. PG&E allowed bidders to explain in writing the rationale behind the measures and calculations in their CETs. The IEs participated in all CET meetings with bidders and believe that the process was successful in clarifying bidder proposals and establishing the appropriate groundwork for both final scoring and contracts for those selected to advance to contract negotiations.

Proposals were evaluated based on criteria developed by PG&E and reviewed with the assigned IEs. Completed IE scoresheets for the Residential and Non-Residential proposals were submitted by IEs to PG&E's solicitation team on July 6, 2020.

d. Calibration

PG&E held a calibration meeting with all PG&E proposal evaluators and the assigned IEs. There was excellent discussion regarding each proposal. Where scores for individual evaluators differed, evaluators shared their rationale for their assigned scores. In most cases, the evaluators were able to reach agreement regarding a final score. In a minority of cases, evaluators maintained their original scores.

Following the calibration meeting, PG&E compared the proposal rankings before and after calibration. Rankings based on overall score did not change after the calibration meeting for those selected to advance to contract negotiations.

e. Shortlist and Final Selections

The IEs believe that PG&E reviewers very thoroughly reviewed bidder proposals and were fair in their implementation of scorecard elements. PG&E presented the results of the RFP scoring and calibration of the SWNC proposals, and then ranked the bids according to their final scores. PG&E divided the bids into three tiers: top tier, mid-tier and bottom tier. PG&E dismissed the proposals in the bottom tier and notified those bidders that they were not advancing to contract negotiations. PG&E recommended to the PRG that they advance the top and mid-tier bids to contract negotiations. PG&E conducts a competitive contract negotiation process where multiple bidders have an opportunity to improve their offerings and the PG&E contracts team can learn more about the proposed programs.

Based on the evaluation and calibration process, PG&E presented its list of proposals to be considered.

Table 15: Statewide New Construction RFP Shortlist

Company Name	Proposal Type
[redacted]	[redacted]
[redacted]	[redacted]
[redacted]	[redacted]
[redacted]	[redacted]
[redacted]	[redacted]
[redacted]	[redacted]
[redacted]	[redacted]
[redacted]	[redacted]

4.5 PRG and IE Feedback to RFP Process and Selections

a. Adherence to PRG Guidance and Feedback

During the July 2020 PRG meeting, members of the PRG expressed some concern about including the non-residential mid-tier proposals in contract negotiations because these bidders' scores were meaningfully different from the highest scoring bidders (below the "natural break" - see discussion in report section 3.5(e) regarding PG&E's use of natural break). PRG members recommended that the mid-tier bids be dismissed (so as not to waste their time if they didn't have a chance of winning a contract) rather than considering these proposals as potential alternates to the top tier. In particular, the Public Advocates Office and the Energy Division expressed these concerns in writing to PG&E and the rest of the PRG. For the Residential sector, one bidder (TRC) was advanced to contracting. There were no mid-tier residential proposals.

In response, PG&E maintained that the process it was applying was identical to the process used in with other solicitations. From PG&E's perspective, including mid-tier bidders in negotiations allows the potential for these bidders to improve their offerings while ensuring that the top-tier bidders present their best proposals and terms. However, PG&E modified their approach slightly by first engaging the top-tier bidders to assess whether it made sense (based on these bidders' responses) to negotiate with the next tier.

b. Response to IE Feedback

[redacted]

5. Contracting Process

5.1 Contract Negotiations

PG&E started negotiations with the top tier bidder (TRC Solutions for its Residential Mixed-Fuel and All-Electric proposals) on August 28, 2020.

For the Statewide Residential New Construction sector, PG&E executed contracts for the following:

- **TRC Solutions (All-Electric)** – Contract was executed on July 2, 2021.
- **TRC Solutions (Mixed-Fuel)** – Contract was executed on July 6, 2021.

For reference, PG&E had also earlier executed contracts for the Statewide Non-Residential New Construction sector:[13]

- **Willdan Energy Solution (All-Electric)** – Contract was executed on December 1, 2020.

[13] The CPUC's Energy Division issued Dispositions approving Advice Letters (4386-G/6094-E and 4387-G/6095-E) for the Non-Residential programs on April 28, 2021.

- **Willdan Energy Solution (Mixed-Fuel)** – Contract was executed on December 1, 2020.

5.2 Collaboration on Final Program Design and Scope

The program design underwent several changes during the contract negotiation, though we did not feel that those contract changes violated the CPUC's definition of a third party as a program "proposed, designed, implemented, and delivered by non-utility personnel" per the CPUC's D. 16-08-019 (OP10). D. 16-08-019 allows utilities during contract negotiations to "consult and collaborate, using their expertise, on the ultimate program design implemented by the third party." (CoL 57) The Decision's definition of a third party seeks to ensure that third parties (not IOUs) are primarily designing and implementing these programs and attempts to guard against utilities directing program design, exerting undue influence in shaping the final program during contract negotiations, or controlling the program's implementation. PG&E's contract negotiations with TRC were marked by active consultation and collaboration between the parties to develop a program that would achieve the solicitation's objectives.

[redacted]

Figure 1 - Percentage of Savings on BTU Basis for All-Electric + Mixed-Fuel Final Contract

[redacted]

Figure 2 shows the measure mix for the All-Electric and Mixed-Fuel programs.

Figure 2 - Contract Percentage of Savings on BTU Basis for All-Electric and Mixed-Fuel Programs

[redacted]

The contracts are heavily focused on electrification. The All-Electric program encourages high-efficiency all-electric new construction projects (both greenfield and infill) while the Mixed-Fuel program primarily promotes high-efficiency fuel substitution code-enhancing alterations.

The Mixed-Fuel program, though, may not create much overlap with other programs. The main programs with which the fuel substitution measures could overlap would seem to be SDG&E's Statewide Plug Load and Appliance (PLA) and Statewide Upstream/Midstream HVAC programs. However, since both of SDG&E programs are upstream/midstream program delivery methods, these programs may face challenges in offering fuel substitution measures because of the need to confirm that they are replacing gas measures.

The SWNC program uses a downstream delivery model and may be better suited to offering these measures. In addition, with a clear dedication to electrification, the program is seeking to transform the market for the relevant measures. As discussed elsewhere, the contracts seek to address these potential overlap issues by requiring that TRC coordinate with other providers. Section 2.4 of the contract narrative requires that TRC develop a coordination plan that details how the program will work with other programs, and provides the steps TRC will take to reduce conflicts and reduce chances for double dipping. We believe this will help to reduce potential conflicts and incentive double dipping.

a. Key Discussion Points Between PG&E and TRC

The TRC contract negotiation process began in August 2020 and ended in April 2021. Key discussion points included:

- Refining KPIs and Risk Management portions to reflect program priorities and potential risks the program will face,
- Clarifying project data requirements to ensure proper collection of installed measure data (to help inform codes and standards updates, pipeline and achievement tracking, cost effectiveness results, and M&V),
- Ensuring accurate technical assumptions for both programs,

- Clarifying program durations (and periods of ramp up, implementation and ramp down),
- Clarifying how data will be obtained from other Program Administrators (PAs),
- Revising the compensation structure to include acceptable amounts of Performance Reserve while allowing TRC to receive some compensation based on (non-energy savings) deliverables,
- Updating and incorporating building details into the number of units served for AGIC calculations,
- Shifting program activities away from code-enhancing alterations, clarifying the definition of code-enhancing alterations, and clearly explaining with which other programs the alterations portion of the program may overlap and requiring active coordination with these other programs and their PAs,
- Increasing the size of the All-Electric offering and reducing the size of the Mixed-Fuel offering,
- Removing the NMEC-based post-occupancy alterations component from the program due to small contribution to overall savings,
- Requiring that the implementer bear the cost of correcting errors/bugs in proprietary software tools for estimating savings, fully disclose errors/bugs in non-proprietary software tools and actively work to correct any identified errors/bugs in a timely fashion,
- Ensuring that the program will collect data to inform updates to and new codes and standards, and
- Clarifying that although no IDSM funds will apply to the program, the program will work with contractors to ensure that new buildings are demand response and EV-ready, and encourage solar.

b. Major Outcomes

Major program outcomes included:

Mixed-Fuel and All-Electric

- Core pathway that will encourage efficiency improvements over code-built homes and provide escalating incentives based on improvement over code,
- (IDSM) Requiring that builders install IDSM-enabling technologies (the program does not pay for these measures):
    - smart thermostats,
    - pre-wiring for electric vehicle charging infrastructure, and
    - prep for battery storage.
- For code-enhancing alterations, primarily implementing fuel substitution measures - heat pumps and heat pump water heaters,
- HTR/DAC portion of the program will be [redacted] of total savings,
- Code-enhancing alterations data collection to support codes such as specification sheets, equipment costs, infrastructure upgrade cost (if applicable), and installation costs for each installed piece of equipment,
- Use of "TRC Captures", detailed project tracking and program management tool to securely track and manage CESHP data,
- Use of National Energy Infrastructure Fund (NEIF) financing that provides customers insights to identify the best lender, and

- A coordination plan to navigate potential overlaps with the TECH, BUILD, Statewide HVAC program, REN offerings, the Energy Savings Assistance program, and other programs identified that could overlap,
- Compensation that is mostly performance-based, and
- Identification of programs that may create double dip issues.

[redacted]

- [redacted]

[redacted]

- [redacted]

The program defines code-enhancing alterations as:

- changes to or replacements of the existing building's lighting system resulting in complete rewiring, re-lamping more than 80% of the fixtures, or increasing the lighting load to serve a new function;
- changes to or replacement of the existing building's HVAC, service water heating, process, or plumbing system resulting in an increase in capacity, changes in design or technology, or a complete replacement of the thermal components plus at least 75% of the distribution system;
- changes to or replacement of the existing building's envelope as the result of adding newly conditioned space, or modification of the architectural design or purpose of the original installation.

Repair or replacement of system components are not considered alterations.

5.3 Fairness of Negotiations

Negotiations with TRC for the two Residential New Construction programs were protracted and complex, but generally fair and transparent. Both PG&E and TRC engaged in an honest dialogue over program features, individual party concerns, and ways to resolve disagreements. PG&E provided TRC its standard "Negotiation Support Document" which outlines key policy issues (cost category definitions, PG&E's preferred approach to compensation, and data requirements associated with [redacted] We consider this an effective contracting process that all IOUs should adopt. The final contract was a balanced product that reflected the significant amount of attention and due diligence both parties applied to the process.

5.4 Changes to Contract Terms & Conditions

There were limited changes (other than adapting elements to the specific program requirements) to the modifiable contract terms and conditions and no changes to the CPUC's standard (non-modifiable) terms and conditions.

5.5 Conformance with CPUC Policies and Objectives

The following table provides a summary of the way elements of the program align with CPUC Policies and Objectives. The contract elements were largely identical and, therefore, the table only notes where there were differences between Mixed-Fuel and All-Electric. Some information may duplicate other parts of this report.

Table 16: Contract Alignment with CPUC Policies and Objectives		
Item	**Covered / Location**	**Program**
Requires Advice Letter filing – check.	Yes.	Budgets both exceed $5 million and 3 years.
Noted no changes to CPUC Standard Contract Ts&Cs. (PIA)	Program Implementation Agreement (PIA).	No changes to CPUC Standard Contract Ts&Cs.
Noted the changes to CPUC Modifiable Contract Ts&Cs	Yes. PIA, Att. 1, Att. 2	TRC and PG&E modified the modifiable terms and conditions to match the program's requirements. Changes were reasonable.
Noted the changes to IOU Ts&Cs	Yes. PIA.	Few changes. Most changes had been previously negotiated for TRC's Multifamily Energy Savings program.
Contract is consistent with CPUC incentive guidelines	Yes.	Incorporates: • Incentives should generally be tiered to promote increasing degrees of efficiency above code, particularly when an existing conditions baseline is used and when the direct install delivery channel is used. • Incentives should generally be strategically targeted at commercially available products that offer higher and highest degrees of efficiency and quality, not at all above-code high efficiency products. • Incentive structure should take into consideration the variation in barriers to efficiency upgrades faced by different customer segments, instead of being set • uniformly for a measure class.
Contract is consistent with M&V Plan with NMEC guidelines	N/A	NMEC portion of program (post-occupancy behavioral intervention) removed from program.
Reasonable number of KPIs	Yes. In Att. 2 - Data Form, Tab H.	Has [redacted], which we view to be a reasonable number.
KPIs make sense in terms of what they are measuring, the scale applied to them, and the timeframe on which they are monitored	Yes.	KPIs align with program priorities in terms of ensuring accurate, reliable and consistent delivery of savings and customer satisfaction. Tab H provides significant detail regarding how and when KPIs are measured, ties to

Table 16: Contract Alignment with CPUC Policies and Objectives		
Item	**Covered / Location**	**Program**
		compensation, and remedies.
Contract includes appropriate Performance Issue Remedies	Yes.	Contract includes mechanisms for PG&E and TRC to revisit issues that may arise during program delivery (in KPIs) along with an annual review of contract terms.
Savings and Cost Effectiveness are similar to proposal and appear reasonable	See comment.	Savings and cost effectiveness values dropped relative to the proposal. However, we consider the reductions to be reasonable, particularly due to the reduction in the proportion of the savings the program derives from code-enhancing alterations and the shift in budget from Mixed-Fuel to All-Electric projects.
[redacted]		We believe the compensation structure improved ratepayer protection by increasing the payments tied to performance from: [redacted]
Compensation structure is clear	Yes.	Compensation structure is fairly complex with inclusion of performance reserves; however, the lengthy contracting process allowed the contractor to become familiar with PG&E's approach to compensation and negotiate reasonable changes.
Relevant elements of Implementation Plan clearly documented in contract	Yes, in Att. 1, specifically Section 4.1.3.	Are well highlighted and PG&E and TRC had direct discussions about IP requirements. Contracts clearly note elements that will be part of IP.
Innovative aspects of program are retained	Yes.	Innovative components such use of TRC Captures (system to track project details) and use of NEIF financing were retained.

Table 16: Contract Alignment with CPUC Policies and Objectives		
Item	**Covered / Location**	**Program**
If applicable, IDSM components incorporated and are consistent with Proposal	Yes.	IDSM is built into the program, mainly in terms of the program working with contractors / designers / builders to ensure that new buildings and major additions are DR, EV, and battery storage "ready". There are no allocated IDSM funds.
If applicable from Proposal, program considerations for HTR customers are incorporated and are consistent with Proposal	Yes.	The RFP defined program consideration of Hard- to-Reach customers and those in Disadvantaged Communities in terms of low-income designated new construction properties since the program target builders and developers versus individual customers. The program commits to a goal (KPI) of [redacted] of overall program participation.
Contract clearly addresses Disadvantaged Worker Requirements	Yes, in Att. 2, Section 2.3.	Program commits to facilitate job support for disadvantaged workers by partnering with industry associations to bring the workforce training and skill development necessary to support the program.
Contractor is Diversified Business Enterprise (DBE) or identifies committed DBE spend.	Yes.	TRC is not a DBE. [redacted]
Changes made due to Covid-19	No.	Contract includes standard language related to Covid-19. There was not any specific discussion about how the program will be affected by Covid- 19.
Changes proposed by IOU or Contractor were reasonable and fair	Yes.	As discussed in this report, we believe the changes from both parties resulted in a fair contract.

5.6 *Uniformity of Contract Changes*

PG&E negotiated with one contractor to implement both the Mixed-Fuel and All-Electric Residential Statewide New Construction programs. There were no issues related to consistency between the two.

5.7 Final Selection

We supported PG&E's final selection of TRC to run the All-Electric and Mixed-Fuel Residential New Construction programs as they differentiated themselves as the bidder most capable of running the residential portion of the program.

5.8 Contract Execution

Table 17: Bids Selected for Contract Execution		
Bidder	**Program**	**Date Executed**
TRC Solutions Inc.	California Energy-Smart Homes Program (CESHP) –All-Electric	July 2, 2021
TRC Solutions Inc.	California Energy-Smart Homes Program (CESHP) – Mixed-Fuel	July 6, 2021

5.9 PRG and IE Feedback to Contracting

We participated in all meetings with the contractor, including actively monitoring document exchanges through PowerAdvocate and listening in on the 19 virtual meetings between the two parties. PG&E engaged us in discussions about key issues when we raised them, but did not set regularly scheduled meetings with the IEs and members of the contracts team. We recommend that IOUs set regularly scheduled meetings that include the IOU team involved in contract negotiations and the IE. This helps ensure that IEs are aware of any issues that arise during negotiations and can also provide input on any issues of concern.

When reviewing the final contract at the April 27, 2021 PRG meeting, PRG members observed that it would be important for PG&E to ensure that there was a diversity of builders participating in the program. Based on this observation, PG&E re-engaged TRC and the parties agreed to add a KPI that promoted diversity of builder participation by limiting the proportion of the program's total building units for any single builder.

6. Assessment of Final Contract

6.1 Bid Selections Respond to Portfolio Needs

PG&E administers this program on behalf of the State's IOUs. The programs selected will serve each of the IOUs' portfolio needs related to advancing efficiency in new buildings, both mixed-fuel and all-electric.

6.2 Bid Selections Provide the Best Overall Value to Ratepayers

a. Introduction

Assessing best overall value to ratepayers is challenging for Independent Evaluators because our primary roles, as defined by the California Public Utilities Commission, are to "monitor the entire process from RFA design to contract execution", "serve as a consultant to the PRGs", "provide assessments of the overall third party solicitation process and progress", and "lend arms-length expertise evaluating the fairness of the conduct and results of the solicitation process by the IOUs."[14] During the solicitation process, the IEs' roles expanded to include providing IOUs and the PRG advice and feedback on ways to improve the efficiency and effectiveness of the solicitation process.

As such, beyond reporting about the details of selected bids and the process that produced the final

[14] D.18-01-004, pages 37-38

contracts, from our perspective, an IE would not evaluate whether the selections were the "best" options available to the IOU.

A critical component of the solicitation process is the scorecard that is used to assess bids and, in turn, the way the IOU uses the scorecard to make its selections. IOUs design scorecards to balance the IOU's many priorities and, if implemented correctly, produce outcomes consistent with those priorities. Therefore, it is important that IEs and the PRG thoroughly review the scorecards and that IEs actively monitor the scoring process to ensure that the scorecard is applied in a fair and unbiased manner. If an IOU includes other stages beyond the RFA and RFP during which final contract selections are made, it is important that the IOU is transparent about the way it plans to make final selections and that IEs are able to observe IOU conversations during which decisions are made. PG&E's approach to its competitive contract negotiations process is discussed in Section 5.1.

The analysis that follows does not attempt to directly compare the selected program with other proposals in the bid pool. In our view, if the solicitation process was conducted fairly and consistent with the scorecard and other selection criteria, the resulting programs represent the best from the pool. By extension, they would also provide the best overall value to ratepayers.

In the interest of providing context for the selected bids, we compare quantitative aspects of the selected program to the IOUs' existing portfolio of Residential New Construction programs to understand whether, if successfully implemented according to plan, the program will improve the portfolio metrics and help enable the IOUs to meet their overall goals with respect to New Construction programs. We also discuss the program's compensation structure, how the program aligns with or diverges from reasonable EE planning principles, and whether the program is consistent with CPUC policies and objectives.

b. Brief Program Description

TRC's two programs are the California Energy-Smart Homes Program – Mixed-Fuel and the California Energy-Smart Homes Program – All-Electric. According to the contracts, TRC developed both the CESHP programs "based on our extensive experience and success in the California residential new construction (RNC) market. CESHP emphasizes installation of advanced energy efficiency measures and facilitates future opportunities through non-incentivized, pre-requisite measures that position homes to install demand response technologies more easily in the future."

The Mixed-Fuel program will serve three of the residential subsectors: single family (SF), duplexes, and multifamily low-rise (MFLR) (with three or fewer stories). It will also implement alteration projects. The All-Electric program will serve all five subsectors: SF, duplexes, MFLR, manufactured housing (MH), and accessory dwelling unit (ADUs). It will also implement additions/alterations (A&A, additions greater than 700 square feet).

c. Quantitative Program Information

The following table shows a summary of the quantitative information extracted from the California Energy-Smart Homes Program contracts. We have also provided for comparison ex-ante metric information from 2019 end-of-year claims from CEDARS.[15] We used the 2019 end-of-year claims because this year appeared to provide the most recent "normal" year of results because a number of

[15] "2019 Energy Efficiency Annual Report of Pacific Gas and Electric Company (U 39 M)", May 15, 2020. The Report can be accessed at: https://www.caeecc.org/annual-reports.

IOUs were winding down their new construction programs in 2020. Important to note is that, in splitting the programs into All-Electric and Mixed-Fuel offerings, the new programs will be quite different from existing. The comparison is only intended to provide context for the selected program relative to the IOUs' previous new construction programs and is not intended to imply that the new programs will necessarily improve or reduce IOUs' achievements for the sector.

Table 18: TRC CESHP Contracts' Attributes

Item	TRC CESHP Mixed-Fuel	TRC CESHP All-Electric	Combined Mixed-Fuel + All-Electric	IOUs' 2019 Residential New Construction[16]
Summary Data				
Budget (Contract Average Annual)	[redacted]	[redacted]	[redacted]	$14,549,242
IDSM Budget	[redacted]	[redacted]	[redacted]	N/A
Electric Savings (Ave. Annual - Net first-year kWh)	[redacted]	[redacted]	[redacted]	1,521,217
Electric Savings (Average Annual - Net lifecycle kWh)	[redacted]	[redacted]	[redacted]	21,162,205
Gas Savings (Average Annual - Net first-year therms)	[redacted]	[redacted]	[redacted]	454,312
NPV of Net Lifecycle Benefits[17]	[redacted]	[redacted]	[redacted]	$(7,817,116)
Metrics				
Total Resource Cost (TRC) Test	[redacted]	[redacted]	[redacted]	0.52
Program Administrator Cost (PAC) Test	[redacted]	[redacted]	[redacted]	0.61
Simple Acquisition Cost ($/kWh)[18]	[redacted]	[redacted]	[redacted]	$9.56
Simple Acquisition Cost ($/therm)	[redacted]	[redacted]	[redacted]	$32.02
Simple Acquisition Cost ($/lifecycle mmBTU)[19]	[redacted]	[redacted]	[redacted]	$16.44

The CESHP programs align with California energy policies in helping achieve energy savings and other benefits in the Residential Sector. Specifically, the program aligns with Senate Bill 350's pursuit of doubling statewide energy efficiency savings by 2030 and seeking to overcome barriers to

[16] Includes SCE's Residential New Construction, SoCalGas' Residential New Construction, SDG&E's California Advanced Homes, PG&E's Residential New Construction and PG&E's California New Homes Multifamily.
[17] Net supply and other costs avoided minus participant and program costs.
[18] Program budget divided by total (first year) program savings.
[19] Simple acquisition cost per lifecycle mmBTU provides a better way to show total savings relative to cost since a BTU calculation captures both electric and gas savings. For programs that only generate gas (or electric) savings, the mmBTUs are based on the single fuel.

disadvantaged communities participating in energy efficiency programs.[20] Both programs, in their heavy focus on electrification, will also help the utilities meet Senate Bill 32's requirement that California reduce statewide greenhouse gas emissions (GHG) to a level 40 percent below 1990 levels by 2030.

Evidenced by Table 18, the selected programs' goals are more cost effective than the IOUs' previous Residential New Construction programs. If the programs are successful in achieving their contracted achievements they will increase the IOUs' overall portfolio TRCs for Residential New Construction programs.

The combined programs' total (not annualized as shown in Table 18) energy savings goals are 62,312,418 net kWh and 2,090,939 net therms. Using 2019's single-year results as a guide, the combined programs would fall a bit short of gas achievements but contribute significantly to electric savings achievements. This is due to the way the Cost Effectiveness Tool (per CPUC D. 19-08-009) calculates fuel substitution measures. For fuel substitution measures, which constitute a large part of the Mixed-Fuel program, the tool converts therms savings into kWh savings and adds this value to the measure's negative kWh savings (are negative because fuel substitution generally increases electricity usage). This results in positive kWh savings for these measures.

d. *Measurement and Verification (M&V)*

The Mixed-Fuel program derives more than [redacted] of its electric savings from Deemed measures and [redacted] of its gas savings from Custom measures. The All-Electric program derives approximately [redacted] of its electric savings from Deemed measures and [redacted] of its gas savings from Deemed measures. The Deemed portions of both programs are associated with the code-enhancing alterations fuel substitution measures. The Custom portions are primarily new construction measures and are based on "whole building" calculations.

Neither program has Normalized Metered Energy Consumption (NMEC) measures. TRC's proposal included in its Mixed-Fuel program a small amount of post-occupancy behavioral interventions that would have relied on NMEC savings estimates. However, this element was dropped during contract negotiations because of concerns about the NMEC Rulebook v.2's prohibition on using NMEC to calculate savings for new construction projects. [21] Although the post-occupancy behavioral interventions would have been part of the code-enhancing alterations portion of the program, PG&E decided that this could complicate program implementation.

Section 2.10 of the contract's Attachment 1 requires that implementers comply with the CPUC's rules related to Deemed, Custom and Meter-Based savings measures. Section 3.10 obligates implementers to identify quality assurance procedures to ensure that the program projects and measures that are installed perform to minimum standards appropriate to the program. The procedures must be sufficiently robust to confirm that each Program Project, each Measure, and the Program complies with Applicable Law, CPUC requirements, and PG&E's Resource Saving Rulebook.

Section 1.10 of the contract's Attachment 2 describes the manner in which TRC will calculate and track savings and document program influence. Section 5.5 describes in detail how the program's

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[20] SB 350 is the Clean Energy and Pollution Reduction Act of 2015. https://leginfo.legislature.ca.gov/faces/billNavClient.xhtml?bill_id=201520160SB350.

[21] "Rulebook for Programs and Projects Based on Normalized Metered Energy Consumption – v2.0," CPUC Energy Division, January 7, 2020, p. 8

quality assurance procedures will apply to Deemed and Custom measures. The program will establish a specific QA/QC Plan during program implementation that, for Deemed projects, incorporates pre-implementation activities (such as trade ally training), installation verifications, and installation documentation. For Custom projects, most calculations are done by TRC's in-house engineers, and TRC's process incorporates continual training for staff and trade allies, checklists to ensure all projects obtain appropriate data and meet qualifications, site inspections to document eligibility and influence, and data collection to support savings claims. We consider TRC's approach to M&V, as described in the contract, to be sufficient.

e. Compensation

[redacted] We use "performance-based" to distinguish from "pay-for-performance", a term that the CPUC per D. 18-01-004 has associated specifically with programs using meter-based savings methodologies (measured and verified savings). Performance-based refers to compensation that is associated with deemed or non-meter based custom measures in which savings are not verified during the program term. Whether one uses the term pay-for-performance or performance-based, the CPUC and the California Legislature have stated a clear preference for contracts that "tie payment for services more directly to energy savings delivered, as much as possible." As the CPUC emphasizes, "This requirement is directly applicable to the third-party solicitations."[22]

PG&E's preferred compensation structure is a fairly complex performance-based compensation approach that involves paying contractors based on four primary factors: confirmed energy savings (kWh and therms), a savings goal attainment payment (SGAP), a cost effectiveness performance payment (CEPP), and a key performance indicator payment (KPIP). As discussed below, the SGAP, CEPP and KPIP constitute the "Performance Reserve" portion of compensation. PG&E believes its approach fairly compensates contractors for delivered savings and other metrics that it provides timely and actionable feedback to continually align program activities with the Company's and IOUs' portfolio needs.

This approach may pose challenges during contract implementation in that it requires detailed tracking and frequent updates from a reliable data stream. We are confident that the Company will be able to configure its systems to facilitate implementation, but PG&E may need to periodically revisit its approach to ensure it is working as planned.

The Company's approach to compensation is a departure from how TRC proposed to be compensated; however, we consider this acceptable given that the CPUC's Modifiable Contract Terms and Conditions (Attachment B of D.18-10-008) include payment terms that contemplate use of a "Performance Security" component.[23] Performance Security is an amount of the contracted budget that is held back and released based on contractor performance. Contractors receive payments for achieving SGAP, CEPP, or KPIP goals, with results measured quarterly or annually. Payments for metrics may be all or nothing or graduated (receive percentage of payment based on portion of goal achieved). As this is a negotiable term, contractors are encouraged to propose alternative values for the various components. Although PG&E discourages contractor deviations

[22] D.18-01-004, p. 42. See also COL 22 of the same Decision and D.16-08-019 COL 59.

[23] D.18-10-008, Attachment B, page B-9. PG&E uses the term "Performance Reserve" in its contracts

from the general compensation structure, in each negotiation the Company takes unique program characteristics into account.

[redacted]

Figures 3 and 4 how the breakdown of the elements of each contract's compensation structure.

Figure 3 - TRC CESH All-Electric Compensation Structure

[redacted]

Figure 4 - TRC CESH Mixed-Fuel Compensation Structure

[redacted]

The agreed-upon approach to compensation shifts risk to the implementer in that their programs must both produce verifiable energy savings and collect holdback amounts, meet savings, cost effectiveness, and KPI goals. However, we believe this approach strikes a reasonable balance between utility and the third-party's interests in that ratepayers will not pay if the program does not achieve savings and achieve other contract objectives. It should be noted that, even if the program does not reach its SGAP, CEPP, and KPIP goals, the contractor will receive payments for every BTU the program generates. [redacted]

As discussed earlier, although we consider the approach permissible per D. 18-10-008, it remains unclear how it will manifest in practice. If contractors are unable to meet their goals for whatever reason, they will likely seek redress from PG&E. The contract does contemplate this possibility by allowing either party to request to revisit terms and incorporates an annual review during which time the parties may realign program goals and budgets.

f. Supports portfolio and applicable sector metrics achievements

The Program's Key Performance Indicators (KPIs) support PG&E's portfolio and sector metrics. Per CPUC Decision 18-05-041, all utilities are required to track and report portfolio and sector-level metrics to help ensure programs are meeting Business Plan objectives. Decision 18-10-008 required that third-party contracts include KPIs that assess third-party program performance on an ongoing basis. Since, by the end of 2022, third party programs budgets will be, at a minimum, 60 percent of total IOU budgets, it is important that third-party contracts and associated KPIs support utility Business Plan metrics.

Table 19 below shows each contract's KPIs. We believe the contract's KPIs align with program priorities in terms of ensuring accurate, reliable and consistent delivery of savings and customer satisfaction. Tab H of the contract's Data Form provides significant detail regarding how and when

KPIs are measured, ties to compensation, and remedies.

Table 19: Contract KPIs		
KPI Category	**All-Electric KPI**	**Mixed-Fuel KPI**
[redacted]	[redacted]	[redacted]
[redacted]	[redacted]	[redacted]
[redacted]	[redacted]	[redacted]
[redacted]	[redacted]	[redacted]
[redacted]	[redacted]	[redacted]
[redacted]	[redacted]	[redacted]

7. Overall Assessment of Solicitation

Overall, we believe that PG&E's Statewide New Construction solicitation was fair, transparent, unbiased, and consistent with CPUC policy. The solicitation resulted in the selection of two implementers (TRC Solutions, Inc. and Willdan Energy Solutions) to implement four programs (two Non-Residential and two Residential) that will seek to both increase the energy efficiency of new buildings and alterations to buildings and help transform the buildings market to achieve the State's objectives with respect to decarbonization. The programs that are the subject of this report, TRC Solutions, Inc.'s California Energy-Smart Homes All-Electric Residential and Mixed-Fuel Residential, were the highest scoring Residential programs and their selections were consistent with the goals the solicitation sought to achieve.

7.1 Effective Solicitation Practices

PG&E utilized a number of "Effective Solicitation Practices", a term that the California EE IEs use to describe solicitation practices that helped make the process more efficient, fair, and transparent. In some cases, these observed practices can benefit all California IOU third-party solicitations. In most cases though, listed practices were effective in context: given the specific circumstances associated with the solicitation.

- *Keeping Current* - The policy context in which a solicitation is operating can change between RFA and RFP. This solicitation sought to adapt the solicitation's focus from RFA to RFP to ensure the selected program aligned with California's EE goals and objectives.

- *Scoring* - PG&E held scoring training sessions for evaluators to orient them to the scoring process and establish ground rules. In addition, for both the RFA and the RFP, multiple individuals reviewed and scored the same sections.

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[24] As discussed in Section 5.9, PG&E engaged TRC to modify this KPI to help ensure diversity in builder participation in the program.

- *CET* – PG&E requested that bidders provide narratives to support their technical assumptions, and approach to the CET. This additional information helped PG&E evaluators understand what bidders were proposing from a technical standpoint and to help ensure that it aligned with the program's design. PG&E also incorporated a CET feedback stage into the RFP so that CETs more accurately reflected each program's objectives and were consistent with CPUC policy.

- *Contract negotiations* – PG&E provided bidders with a negotiation support document that outlines the Company's approach to contracting, including a detailed description of its preferred approach to compensation as well as clarifications regarding CPUC cost categories.

7.2 Lessons Learned

As discussed in this report, the solicitation experience some issues, most notably its very long duration, but PG&E successfully surmounted these obstacles to complete the process and, ultimately, establish a strong foundation for the state's new construction programs moving forward. Lessons learned from the solicitation include:

Significant Policy Issues

- **Observation**: Solicitation sought to push policy issues that served to delay the process and create uncertainty. Key issues included – shifting program at RFP stage, incorporating electrification with AGIC, including alterations.
- **Recommendation**: With future solicitations that seek to tackle large policy issues, to the extent possible, these issues be identified at the beginning of the process along with strategies about how the program will deal with them.

Contract Negotiations and IEs

- **Observation**: During contract negotiations, it can be difficult for the IE to be sure they are keeping up with relevant discussions within the IOU (or with other IOUs) that bear on the contract negotiation process.
- **Recommendation**: IOU establish regular check-ins with IEs during contracting process.

Contract Negotiations and IEs

- **Observation**: With its multi-sector solicitation, PG&E effectively engaged IEs and its PMO team in a discussion after the close of solicitation stages about what worked well with the solicitation and what could be improved. However, we have not seen this approach replicated with other solicitations.
- **Recommendation**: PG&E should establish a standard "continuous improvement process" to receive input/feedback from IEs, the PMO team and scoring team participants after each stage of the solicitation process to help improve future stages/solicitations. Standardizing this process would help reduce the time commitment associated with the effort and ensure that lessons learned are captured and applied to future solicitations.

8. Conclusion

PG&E's Statewide New Construction solicitation was a complex undertaking in that it sought, while the solicitation was in process, to adapt to California's increasingly aggressive stance towards reducing GHGs, particularly in buildings. It is challenging to adjust a solicitation that is already in progress as it can raise issues related to whether the solicitation was fair to bidders in the first-stage who didn't have an opportunity to bid on the revised program and because uncertain policy issues (in the case of the Statewide New Construction solicitation, related to use of avoided gas infrastructure costs [AGIC] for an all-electric program, incorporating AGIC into a customized CET, including code-enhancing alterations into the program scope, and navigating how the program will interface with other local and statewide programs with which it may overlap) raise uncertainty about how the programs will be implemented.

PG&E's solicitations team and program staff successfully met the challenges posed by this ambitious undertaking. Their success stemmed from a willingness to openly address issues that arose, their creativity in seeking solutions, and staff's strong commitment to doing everything necessary to complete the solicitation process.

For the Residential Sector, the New Construction solicitation produced two programs that should enable PG&E and the state's IOUs to effectively deliver on the State's ambitious goals related to new construction and help set it on a path to a carbon free economy.

Public Attachment B

Energy Efficiency Third-Party Solicitation Advice Letter

Program-Level Measurement & Verification Plan

Attachment B: Program-Level & Measurement & Verification Plan

There are no contracted programs calling for an exception to Normalized Metered Energy Consumption (NMEC) rules.

Public Attachment C

Energy Efficiency Third-Party Solicitation Advice Letter

PG&E Letter and Email Response from Energy Division

(Redacted)

July 12, 2021

[redacted]
Subject: Re: AGIC: Question about statewide values

Hello [redacted],

Please proceed with negotiation of the new construction contracts. PG&E can use its AGIC values in the Advice Letter for contract approval of the statewide all-electric new construction contracts.
Please confirm you've received this and are moving again on the process to bring these contracts to execution and submit to CPUC via Advice Letter.

Sincerest
[redacted]

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-----Original Appointment-----
[redacted]

[redacted]

PG&E would appreciate Energy Division guidance regarding the preferred regulatory path for adoption of ex-ante Avoided Gas Infrastructure Costs (AGIC) and modification of Energy Division's CEDARS reporting system and CET models to accommodate AGIC. This meeting is to discuss this topic with you and get your input on how to proceed, particularly with regards to the Statewide New Construction (SWNC) program solicitation.

Please see the attached documents for some background of this discussion:

1. Background document further explaining our request and recommended approach to this issue
2. Response to PG&E from Energy Division on some initial policy-related questions regarding inclusion of AGIC in the SWNC program

3. Memo that PG&E submitted to the CEC in December 2019 with estimated gas infrastructure costs for PG&E

Thank you.

Regards,
[redacted]

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December 4, 2020

Subject: ***PG&E request for Energy Division guidance regarding the preferred regulatory path for adoption of ex-ante Avoided Gas Infrastructure Costs (AGIC) and modification of Energy Division's CEDARS reporting system and CET models to accommodate AGIC.***

Dear [redacted],

Background

PG&E is the Statewide New Construction Programs administrator. Over the past year we have conducted a solicitation for vendors to implement both residential and non-residential statewide new construction programs. This process was overseen by the Commission's independent evaluators and the four selected contracts, two non-residential and two residential, were presented to the PRG. [redacted]

The proposed all-electric programs will generate significant avoided gas infrastructure cost (AGIC) benefits to ratepayers since gas lines will not be extended to new all electric home participants, gas meters will not be required, and gas piping on the customer side of the meter will not be needed. PG&E has estimated AGIC benefits for both residential and non-residential customers using historical construction and equipment costs[1]. We have discussed the inclusion of AGIC benefits with Energy Division and have received informal support for the concept through the attached May 13, 2020 memo.

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[1] We have not been successful in obtaining methodologically similar cost estimates from the Sempra utilities at this time.

Issues for consideration

We are now seeking advice on the proper regulatory path to follow in order to ensure: 1) formal approval of AGIC benefits and 2) an ability to report program-specific AGIC values that can be included in required Commission cost-effectiveness calculations.

What ex-ante AGIC values would be filed?

PG&E proposes to resubmit AGIC values previously submitted to the CEC (December 5, 2019).

What regulatory vehicle should be used to file the ex-ante AGIC values?

PG&E suggests that the AGIC values be included with our Tier 2 Advice Letters seeking approval of the statewide new construction contracts.

How would ED approve the ex-ante AGIC values?

PG&E suggests that interim approval come with approval of the aforementioned Tier 2 Advice Letters, but that the AGIC values would be publicly reviewed as part of Rulemaking 14-10-003 which updates the avoided cost calculator every two years. The avoided cost proceeding begins again with an ED workshop on August 1, 2021[2] and will result in Commission adoption of updated avoided costs in April/May of 2022. PG&E requires interim approval of AGIC in order to include accurate prospective cost effectiveness values for the Statewide New Construction program in its Advice letter filing [3] for approval of the program and in the September 2021 ABAL filing. Inclusion of AGIC values for program accomplishments would not occur until the second half of 2022 (owing to ramp-up time for new construction program efforts), hence program accomplishments reporting would use the Commission-approved values from the 2022 avoided cost proceeding.

How would ED affirm that CEDARS and the CET would be modified to accept AGIC values?

PG&E believes that it is fully within the purview of Energy Division to modify its energy efficiency reporting system (CEDARS) and the associated energy efficiency cost effectiveness calculator (CET).[4] Furthermore, we believe that the latitude provided by D. 12-05-015 allows for ED to adopt PG&E's filed AGIC values on an interim basis until AGIC values are more formally adopted as part of the next avoided cost proceeding, thereby allowing for inclusion of AGIC benefits in its 2021 ABAL filing. PG&E is prepared to provide funding support for Commission consultants to make appropriate modifications to the CEDARS data structure and CET calculator.

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[2] D. 20-04-010, p.74

[3] The advice letter would show all-electric program cost effectiveness based on a manual calculation. AGIC benefits would be added to those from the CET output and be divided by the CET costs in order to capture the accurate net benefits and cost effectiveness ratios.

[4] D. 12-05-015 Conclusion of Law 79 *The Commission Staff should perform the review and make recommendations as to the ex ante values we should adopt.* and Conclusion of Law 80. *Our Staff should have significant latitude in performing DEER and other policy oversight functions and, absent specific directives to the contrary, should not be required to consult with or otherwise utilize any other groups to perform this work.*

We appreciate your attention to and consideration of these matters as they are essential to ensuring broad IOU support for the all-electric components of the Statewide New Construction programs. At your convenience we would be happy to discuss these issues and proposed solutions further with you.

Regards,

Public Attachment D

Energy Efficiency Third-Party Solicitation Advice Letter

PG&E Letter to the CEC Regarding Gas Extension Cost

July 12, 2021

Pacific Gas and Electric Company

Janice Berman
Director – Grid Edge
Pacific Gas and Electric Company
Mail Code B9F
P.O. Box 770000
San Francisco, CA 94177-00001

December 5, 2019

Energy Commission Staff:

On March 2, 2018, PG&E provided gas extension cost estimates for residential existing and new subdivisions (see attached memo). We have recently updated our estimates and are therefore providing an updated memo.

In addition to mainline and service extension costs, we are also providing estimates of the cost of gas meters for different building types including both residential and commercial customers. These estimates are based on PG&E historical jobs.

Developing gas extension cost estimates is complex and the actual costs are project dependent. Costs vary widely with location, terrain, distance to the nearest main, joint trenching, materials, number of dwellings per development, and several other site and job-specific conditions. For these reasons, it is not practical to come up with estimates that represent every case. Instead we are including estimates based on historical averages taken from projects within PG&E's territory. It is not recommended to compare specific project costs to these estimates as any number of factors could lead to higher or lower costs than these averages are representing.

We are also including estimates for in-house gas infrastructure costs and specific plan review costs. These estimates are from external sources, and are not based on PG&E data, but have been provided for the sake of completeness and for use in energy efficiency analysis.

To further anchor the estimates, several assumptions have been made:

1. It is assumed that during new construction, gas infrastructure will likely be joint trenched with electric infrastructure. As a result, the incremental cost of trenching associated with the gas infrastructure alone is minimal. Therefore, all mainline cost estimates exclude trench costs. Service extension cost estimates include both estimates with and without trench costs. In the case where new construction would require overhead electric and underground gas infrastructure, the estimates with trench costs included for service extensions should be utilized.

2. It is assumed that new construction in an existing subdivision would not generally require a mainline extension. In cases where a mainline extension would be required to an existing subdivision, the costs are highly dependent on the location, terrain, and distance to the nearest main.

Pacific Gas and Electric Company

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3. These estimates are for total costs. The cost estimates have not been reduced to account for the portion of the costs paid by all customers due to application of Rule 15[1] and Rule 16[2] allowances. Hence, costs to the specific customer may be lower than the estimates below, as the specific customer benefits from the Rule 15 and Rule 16 allowances.

Table 1: PG&E Gas Infrastructure Cost Estimates

	Existing Subdivision/Development	New Greenfield Subdivision/Development
Mainline Extension	N/A[3]	Single-Family $17/ft[4] Multi-Family $11/ft[4]
Service Extension (Typically 1" pipe from mainline to the meter)	$6750 per service/building[4] (excludes trench costs) $9200 per service/building[4] (includes trench costs)	$1300 per service/building[4] (includes mainline extension costs within the subdivision; excludes trench costs) $1850 per service/building[4] (includes mainline extension costs within the subdivision; includes trench costs)
Meter	Residential Single Family $300 per meter[5] Residential Multi-Family $300 per meter + $300 per meter manifold outlet[5] Small/Medium Commercial $3600 per meter[6]	Residential Single Family $300 per meter[5] Residential Multi-Family $300 per meter + $300 per meter manifold outlet[5] Small/Medium Commercial $3600 per meter[6]

[1] https://www.pge.com/tariffs/tm2/pdf/ELEC_RULES_15.pdf
[2] https://www.pge.com/tariffs/tm2/pdf/ELEC_RULES_16.pdf
[3] It is assumed that new construction in an existing subdivision would not require a main extension.
[4] Estimates based on PG&E jobs from Jan 2016 - Dec 2017 from PG&E's Service Planning team.
[5] Estimates from PG&E's Dedicated Estimating Team. For Multi-Family units, the costs of $300 per meter and $300 per meter manifold outlet should be combined for a total of $600 per meter.
[6] PG&E Marginal Customer Access Cost Estimates presented in the 2018 Gas Cost Allocation Proceedings (GCAP), A.17-09-006, Exhibit PG&E-2, Appendix A, Section A, Table A-1. The Average Connection Cost per Customer values were included in the MCAC workpaper that accompanied the GCAP testimony

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	Large Commercial $32,000 per meter[6]	Large Commercial $32,000 per meter[6]

Note: Service extension cost estimates for New Greenfield Subdivisions include mainline extension costs as well. Therefore, mainline cost estimates can be ignored for the purpose of estimating total project costs.

Table 2: Gas Infrastructure Cost Estimates from Other Sources

	Existing Subdivision/Development	New Greenfield Subdivision/Development
In-House Infrastructure	Single-Family $800[7] Multi-Family $600 per unit[7] Medium Office $600-4500[7,8] Medium Retail $10,000[8]	Single-Family $800[7] Multi-Family $600 per unit[7] Medium Office $600-4500[7,8] Medium Retail $10,000[8]
Plan Review (Will vary by city and often not a fixed fee)	Residential Palo Alto - $850[9] Nonresidential Palo Alto - $2316[9]	Residential Palo Alto - $850[9] Nonresidential Palo Alto - $2316[9]

Please let us know if there are any follow-up questions or clarifications.

Best regards,

Janice Berman

[7] Frontier Energy, Inc., Misti Bruceri & Associates, LLC. 2019. "2019 Cost-effectiveness Study: Low Rise Residential New Construction." Available at: https://localenergycodes.com/content/performance-ordinances

[8] TRC, EnergySoft. 2019. "2019 Nonresidential New Construction Reach Code Cost Effectiveness Study." Available at: https://localenergycodes.com/content/performance-ordinances

[9] TRC. 2018. "City of Palo Alto 2019 Title 24 Energy Reach Code Cost Effectiveness Analysis Draft." Available at: http://cityofpaloalto.org/civicax/filebank/documents/66742

March 2, 2018

Energy Commission staff,

PG&E appreciates the opportunity to provide input to be considered as part of the 2019 Building Energy Efficiency Standards rulemaking process. On January 22, 2018, PG&E provided some information on four questions regarding the electric baseline rate, the definition of "natural gas available", and gas extension costs. PG&E's original response is included as Attachment A.

As a follow-up to our discussion on Monday, January 22nd, 2018 the Energy Commission asked PG&E to provide further clarification on the gas extension cost estimates. In particular, Staff thought the cost estimate provided for mainline extension seemed high.

The table below provides a summary of the cost estimates and what is included or not included in each.

	Existing Subdivision	**New Greenfield Subdivision**
Mainline Extension	**$568/foot** <u>Includes:</u> • Materials and Labor • Trenching through paved, developed area • Service line extension <u>Does Not Include:</u> • Allowances credited to Developer	**$11/foot (Multi-Family)** **$17/foot (Single-Family)** <u>Includes:</u> • Materials and Labor • Allowances credited to Developer <u>Does Not Include:</u> • Trenching (sharing joint trench)
Service Extension (< 1" line from main to building)	**$10,000 - $16,000 per service*** <u>Includes:</u> • Materials and Labor • Trenching through paved, developed area • Inspection <u>Does Not Include:</u> • Allowances credited to Customer	**$533 - $625 per service** <u>Includes:</u> • Materials and Labor • Trenching greenfield, undeveloped land <u>Does Not Include:</u> • Allowances credited to Developer

* Historical data review indicated this may approach $18,000 in some scenarios.

The table highlights that it is significantly more expensive to extend either distribution mainline or service through existing, developed subdivisions with paving, structures, and other underground installations.

Please let us know if we can be of further assistance,

Janice Berman
Director, Grid Innovation
PG&E

Question #3: *Can we provide a pricing range to extend gas service for a typical new subdivision in PG&E's territory per dwelling (prioritizing single family homes, then multi-family complexes, and pursuing data on existing subdivision single and multi-family as possible)?*

The table below provides estimates of the cost to extend a gas service line from the gas distribution pipe to a single location where PG&E's provides natural gas. A single location may include one or more dwellings or buildings served from the single service line. The table provides historic data from PG&E's 2017 GRC.

Table 1: Shows the $/service to install service lines in new construction on undeveloped land

	2010	**2011**	**2012**	**2013**	**2014**
Cost per service ($/service)	$625	$586	$534	$533	$552

Table 1 is an average of many projects and individual project costs can vary significantly due to the specific conditions and complexities at each site.

Costs to install in developed areas are higher due to additional construction considerations not required in undeveloped areas, such as paving, permitting, traffic control, landscaping, protection of underground infrastructure, etc. PG&E estimates costs for new service extensions in existing subdivision at $10,000 - $16,000/service line, on average, but is still tracking down the historical costs.

The estimate we have provided for the cost of gas service is to be used as an approximation to inform Energy Commission decisions on how, and when, natural gas availability and cost-effectiveness options are presented to the user of the Title 24, Part 6 compliance software.

Question #4: *What is the average cost of extending a main, per 100 feet, to a new subdivision in PG&E territory?*

The price to extend a main to a new subdivision is approximately $568 per foot. [1] The costs can vary significantly due to digging and trenching to install the pipe, paving, easement, permit, and inspection costs. Furthermore, costs to extend gas service can be used to support extending underground electric service.

The estimate we have provided for the cost of extending a main is to be used as an approximation to inform Energy Commission decisions on how, and when, natural gas availability and cost-effectiveness options are presented to the user of the Title 24, Part 6 compliance software.

We look forward to our discussion this morning.

Thank you,
Kelly

[1] This estimate was provided in a recently published data response in the Santa Rosa post-fire recovery efforts.

Confidential Market Sensitive Information
Protected Under Public Utilities Code Section
454.5(g) and/or D. 06-06-066.

PACIFIC GAS AND ELECTRIC COMPANY

PART 2 CONFIDENTIAL VERSION

July 12, 2021

Confidential Market Sensitive Information
Protected Under Public Utilities Code Section
454.5(g) and/or D. 06-06-066.

Appendix A

Energy Efficiency Third-Party Solicitation Advice Letter

Independent Evaluator's Final Report

(Confidential)

July 12, 2021

Attachment C

Energy Efficiency Third-Party Solicitation Advice Letter

PG&E Letter and Email Response from Energy Division

(Confidential)

July 12, 2021

Appendix B

Energy Efficiency Third-Party Solicitation Advice Letter

Solicitation Process Overview

(Confidential)

July 12, 2021

Appendix C

Energy Efficiency Third-Party Solicitation Advice Letter

Selection Spreadsheet

(Confidential)

July 12, 2021

Confidential Market Sensitive Information
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454.5(g) and/or D. 06-06-066.

Appendix D

Energy Efficiency Third-Party Solicitation Advice Letter

Third Party Contract Summary

(Confidential)

July 12, 2021

Confidential Market Sensitive Information
Protected Under Public Utilities Code Section
454.5(g) and/or D. 06-06-066.

Appendix E

Energy Efficiency Third-Party Solicitation Advice Letter

Third-Party Contracts

(Confidential)

July 12, 2021

PG&E Gas and Electric
Advice Submittal List
General Order 96-B, Section IV

AT&T
Albion Power Company

Alta Power Group, LLC
Anderson & Poole

Atlas ReFuel
BART

Barkovich & Yap, Inc.
California Cotton Ginners & Growers Assn
California Energy Commission

California Hub for Energy Efficiency Financing

California Alternative Energy and Advanced Transportation Financing Authority
California Public Utilities Commission
Calpine

Cameron-Daniel, P.C.
Casner, Steve
Cenergy Power
Center for Biological Diversity

Chevron Pipeline and Power
City of Palo Alto

City of San Jose
Clean Power Research
Coast Economic Consulting
Commercial Energy
Crossborder Energy
Crown Road Energy, LLC
Davis Wright Tremaine LLP
Day Carter Murphy

Dept of General Services
Don Pickett & Associates, Inc.
Douglass & Liddell

East Bay Community Energy Ellison Schneider & Harris LLP Energy Management Service
Engineers and Scientists of California

GenOn Energy, Inc.
Goodin, MacBride, Squeri, Schlotz & Ritchie
Green Power Institute
Hanna & Morton
ICF
IGS Energy
International Power Technology
Intestate Gas Services, Inc.
Kelly Group
Ken Bohn Consulting
Keyes & Fox LLP
Leviton Manufacturing Co., Inc.

Los Angeles County Integrated Waste Management Task Force
MRW & Associates
Manatt Phelps Phillips
Marin Energy Authority
McKenzie & Associates

Modesto Irrigation District
NLine Energy, Inc.
NRG Solar

Office of Ratepayer Advocates
OnGrid Solar
Pacific Gas and Electric Company
Peninsula Clean Energy

Pioneer Community Energy

Redwood Coast Energy Authority
Regulatory & Cogeneration Service, Inc.
SCD Energy Solutions
San Diego Gas & Electric Company

SPURR
San Francisco Water Power and Sewer
Sempra Utilities

Sierra Telephone Company, Inc.
Southern California Edison Company
Southern California Gas Company
Spark Energy
Sun Light & Power
Sunshine Design
Tecogen, Inc.
TerraVerde Renewable Partners
Tiger Natural Gas, Inc.

TransCanada
Utility Cost Management
Utility Power Solutions
Water and Energy Consulting Wellhead Electric Company
Western Manufactured Housing Communities Association (WMA)
Yep Energy