

August 6, 2021

Advice 6289-E

Pacific Gas and Electric Company (U 39 E)

Public Utilities Commission of the State of California

Subject: Procurement for Summer 2022 Under Decision 21-02-028 and Decision 21-03-056

I. Purpose

Consistent with the guidance provided in Decision (D.) 21-02-028 and pursuant to D.21-03-056 Ordering Paragraph (OP) 14, dated March 26, 2021, Pacific Gas and Electric Company (PG&E) respectfully submits this Tier 1 advice letter seeking the California Public Utilities Commission's (Commission or CPUC) approval of four (4) agreements to procure incremental capacity to serve load at peak and net peak to prepare for potential extreme weather events in the summer of 2022 (2022 Summer Procurement). These agreements are summarized in detail in Section IV of this advice letter.

II. Background

On December 28, 2020, an Assigned Commissioner's Ruling (ACR) was issued that directed the large investor-owned utilities (IOUs) to immediately seek contracts for incremental capacity, available for peak and net peak in the summers of 2021 and 2022. On February 11, 2021, the Commission subsequently issued D.21-02-028 directing the IOUs to seek contracts for additional power capacity for summer 2021 reliability and submit those contracts for consideration before the Commission via advice letters of various tiers. On March 26, 2021, the Commission issued D.21-03-056 directing the IOUs to take action to prepare for potential extreme weather events in the summers of 2021 and 2022.

OP 14 in D.21-03-056 authorizes the IOUs to continue their procurement efforts and endeavor to meet and exceed their respective incremental procurement targets to achieve an effective 17.5 percent planning reserve margin (PRM) for the months of system reliability concern. OP 14 states that all procurement contracts shall be submitted to Energy Division via a Tier 1 advice letter on a continuing basis, except for contracts for incremental gas generation of five years or more, which require a Tier 3 advice letter, and incremental imports.

Increasing the PRM from 15 percent to an effective 17.5 percent results in a minimum incremental procurement target of 450 megawatts (MW) for PG&E.¹

On June 24, 2021, the Commission issued D.21-06-035, *Decision Requiring Procurement to Address Mid-Term Reliability (2023-2026)*, in Rulemaking 20-05-003. D.21-06-035 ordered the procurement of 11,500 MW of incremental capacity to meet the mid-term reliability needs from 2023-2026 and clarified that capacity procured after June 30, 2020, including that which was procured for emergency reliability purposes in Rulemaking 20-11-003 is eligible to count towards the procurement requirements under D.21-06-035.² D.21-06-035 also clarified that any resources procured in response to the order are subject to the power charge indifference adjustment (PCIA), with the date of the resource vintaged by the date of the procurement order.³

III. Overview of Procurement for Summer 2022

A. Procurement for Summer 2022 - Structure and Process

Following the December 28, 2020 ACR, PG&E issued the first of several market notices⁴ on December 29, 2020, and ultimately submitted the results of a resulting first phase of procurement on February 16, 2021, in Advice Letters 6088-E and 6089-E. PG&E then issued a market notice on February 16, 2021, following guidance in D.21-02-028, asking Market Participants to provide offers by February 23, 2021, for incremental capacity consistent with the parameters in D.21-02-028.

On February 24, 2021, PG&E began evaluating submitted offers for execution according to its offer selection process and consistent with the parameters in D.21-02-028, including the procurement of additional capacity and/or energy through: (1) short-term agreements for energy; (2) incremental capacity from existing (utility-owned) power plants through efficiency upgrades; (3) firm import energy agreements; (4) existing portfolio capacity in excess of bundled service needs and net of sales; and (5) demand-side solutions.

In accordance with D.21-03-056, PG&E considered deferring long-term options to the expected mid-term reliability procurement mandate, favoring shorter-term deals that are better aligned with the seven-month compliance window for the 2022 Summer Procurement. However, on May 21, 2021, the Commission issued a Proposed Decision indicating that capacity procured after June 30, 2020, is eligible to count towards both the new mid-term reliability procurement targets and summer 2022 reliability procurement targets. Given this updated guidance, PG&E refined its procurement strategy to meet the two objectives of (1) contributing to reliability in the summer of 2022 on behalf of all customers as authorized in D.21-03-056, and (2) meeting the mid-term reliability needs

¹ D.21-03-056, p. 43.

² D.21-06-035, p. 80.

³ *Id.*, p. 97.

⁴ Additional market notices were issued on January 5 and 11, 2021.

on behalf of bundled service customers as authorized in D.21-06-035. PG&E quickly reinitiated discussions for favorably valued, long-term offers, and advanced negotiations for the projects still available.

B. Offers Received

In response to the February 16, 2021 market notice, PG&E received offers from multiple counterparties for over 1,500 MW of capacity that indicated they could meet the requirements of D.21-03-056 for summer 2022.

C. 2022 Summer Procurement Evaluation Framework

PG&E prepared a framework based on procurement requirements identified in D.21-03-056 and D.21-06-035.

The evaluation framework used to select offers is described in Appendix F.

D. Negotiations

PG&E initiated negotiations with each participant that indicated they could deliver incremental energy and/or capacity during the summer of 2022. Shortly thereafter, the Proposed Decision issued in R.20-11-003 on March 5, 2021 prioritized a narrowed scope of resources and regulatory approval paths which caused PG&E to pause these negotiations.

However, following the May 21, 2021 issuance of the Proposed Decision and Alternate Proposed Decision for Procurement to Address Mid-Term Reliability (R.20-05-003), PG&E renewed contact with those counterparties that had presented offers meeting the evaluation criteria as described in the Evaluation Framework in Appendix F, and negotiations continued in earnest with projects that confirmed their ability to meet summer 2022 online dates, with the dual objectives of meeting near-term and mid-term reliability needs.

Additionally, PG&E initiated bilateral negotiations with owners of existing resources already in its portfolio that could potentially provide incremental energy supply during peak and net peak periods; PG&E has not yet executed any transactions for summer 2022 as a result of this effort.

E. Cost Allocation Mechanism Group and Procurement Review Group

On July 2, 2021, PG&E presented an overview and proposed execution list at a joint meeting of PG&E's Cost Allocation Mechanism (CAM) Group and the Procurement Review Group (PRG). The materials included: the 2022 Summer Procurement requirements, offers that were not selected, and PG&E's proposed execution list. This

timing was to ensure that PG&E could incorporate any CAM group and PRG feedback before agreements were to be executed.

F. Independent Evaluator

PG&E engaged an Independent Evaluator (IE) from the Commission's approved list of IEs for the 2022 Summer Procurement. The IE for this solicitation was Merrimack Energy, represented by Wayne Oliver and Keith Oliver.

The IE's involvement is outlined below:

- Reviewed and evaluated offers received.
- Discussed with PG&E the reasons the offers were considered non-conforming.
- Participated in contract negotiations that were held for each participant.

The confidential version of the IE Report is provided in Appendix G1, and the public version of the IE Report is provided in Appendix G2.

IV. Selected Projects

PG&E is requesting the approval of four (4) agreements resulting from PG&E's 2022 Summer Procurement as described below. The final executed agreements can be found in Confidential Appendices A – D and additional contract terms can be found in Confidential Appendices E1 – E2. The four (4) agreements total 270 MWs of incremental system resource adequacy (RA) capacity.

A. Sonoran West Solar Holdings 2, LLC – Crimson 2 Energy Storage

PG&E executed a long-term RA agreement (LT RAA) for the Crimson Energy Storage project. The project will be owned by Sonoran West Solar Holdings 2, LLC. Sonoran West Solar Holdings 2, LLC is a wholly owned subsidiary of Recurrent Energy Development Holdings, LLC.

The project is a 150 MW, four-hour duration, transmission-connected, stand-alone lithium ion battery energy storage resource located in Riverside County. The Crimson Energy Storage project has a Large Generator Interconnection Agreement (LGIA) executed with Southern California Edison Company (SCE) and the California Independent System Operator Corporation (CAISO). Appendix E1 provides additional project and LT RAA details.

Term	Provision
Counterparty and Project	Sonoran West Solar Holdings 2, LLC, Crimson 2

Technology	Lithium Ion Battery
Location	Blythe, CA
Type of Interconnection	Transmission
Term	15 years
Commercial Operation Date	August 2, 2022
Initial Delivery Date for Resource Adequacy	October 1, 2022
Capacity	150 MW
Discharge Duration	4 hours

B. Arlington Energy Center III, LLC – Arlington Energy Center III Energy Storage (LT RAA and LT RAA with Energy Settlement)

PG&E executed a 47 MW LT RAA and a 63 MW LT RAA with Energy Settlement (ES) for the Arlington Energy Center III project. Arlington Energy Center III, LLC is a wholly owned subsidiary of NextEra Energy, Inc.

The projects are a 47 MW, four-hour duration, transmission-connected, stand-alone lithium ion battery energy storage resource with which PG&E has executed a LT RAA and a 63 MW four-hour duration, transmission-connected, stand-alone lithium ion battery energy storage resource with which PG&E has executed a LT RAA with ES agreement, both located in Riverside County. The Arlington Energy Center III project has a LGIA executed with SCE and CAISO. Appendix E1 provides additional project and LT RAA details. Appendix E2 provides additional LT RAA with ES details.

Term	Provision
Counterparty and Project	Arlington Energy Center III, LLC, Arlington Energy Center III
Technology	Lithium Ion Battery
Location	Blythe, CA
Type of Interconnection	Transmission
Term	15 years
Commercial Operation Date	August 2, 2022
Initial Delivery Date for Resource Adequacy	October 1, 2022
Capacity	47 MW (LT RAA) and 63 MW (LT RAA with ES)
Discharge Duration	4 hours

C. Pomona Energy Storage 2, LLC – Pomona Energy Storage 2

PG&E executed a LT RAA for the Pomona Energy Storage 2 project. The project will be owned by Pomona Energy Storage 2, LLC. Pomona Energy Storage 2, LLC is a wholly owned subsidiary of Viridity Energy Solutions.

The project is a 10 MW, four-hour duration, distribution-connected, stand-alone lithium ion battery energy storage resource located in Los Angeles County. The Pomona Energy Storage 2 project has a Generator Interconnection Agreement (GIA) executed with SCE. Appendix E1 provides additional project and LT RAA details.

Term	Provision
Counterparty and Project	Pomona Energy Storage 2 LLC, Pomona Energy Storage 2
Technology	Lithium Ion Battery
Location	Pomona, CA
Type of Interconnection	Distribution
Term	10 years
Commercial Operation Date	August 2, 2022
Initial Delivery Date for Resource Adequacy	October 1, 2022
Capacity	10 MW
Discharge Duration	4 hours

V. Cost Recovery

As described above, the procurement of the four (4) agreements is to: (1) meet the near-term reliability needs for the summer of 2022 on behalf of all customers in the PG&E distribution service territory, as authorized in D.21-03-056; and (2) to meet the mid-term reliability needs for 2023-2026 on behalf of PG&E's bundled service customers, as authorized in D.21-06-035. The contracts and associated costs for incremental capacity presented in this Tier 1 advice letter are eligible for cost recovery under both the existing CAM and PCIA. Accordingly, for the months of August 2022 through July 2023, PG&E proposes the four (4) agreements be eligible for the CAM cost recovery mechanism and count towards PG&E's procurement target of 450 MW as established in D.21-03-056.⁵ Eligible procurement pursuant to D.21-03-056 shall be recovered from all benefiting customers through the New System Generation Charge (NSGC), net of revenues and

⁵ On August 2, 2021, Administrative Law Judge Stevens issued an email ruling in R.20-11-003 seeking responses regarding a proposed amended scope and schedule to address reliability issues in 2022 and 2023. Should the Commission direct the IOUs to seek contracts for additional capacity for the summer of 2023 on behalf of all customers, PG&E may seek cost recovery through CAM in accordance with the parameters as authorized in D.21-02-028 and D.21-03-056 or other Commission decisions.

costs received in the CAISO energy and ancillary services market or net revenues and costs for energy and ancillary services' payments/charges received by the buyer from the seller as defined in the contract terms and conditions associated with the LT RAA with ES.

After July 2023, PG&E would apply the incremental capacity towards its procurement requirements established for bundled service customers in D.21-06-035 and will be requesting that the contracts be deemed a PCIA-eligible resource for the remaining duration of the contract term where recovery of the contract costs, net of any CAISO charges and market revenues, and net of any retained RA capacity value for bundled service customers, would be recovered through the vintaged PCIA.⁶

VI. Confidentiality Treatment

In support of this advice letter, PG&E has provided the confidential information listed below. This information is being submitted in the manner directed by D.08-04-023 and the August 22, 2006, Administrative Law Judge's Ruling Clarifying Interim Procedures for Complying with D.06-06-066 to demonstrate the confidentiality of the material and to invoke the protection of confidential utility information provided under Public Utilities Code section 454.5(g) or the Investor Owned Utility Matrix, Appendix 1 of D.06-06-066 and Appendix C of D.08-04-023. A separate Declaration Seeking Confidential Treatment is being submitted concurrently with this advice letter.

Confidential Appendices

Appendix A: Sonoran West Solar Holdings 2, LLC – Crimson 2 (LT RAA) Agreement

Appendix B: Arlington Energy Center III, LLC – Arlington Energy Center III (LT RAA) Agreement

Appendix C: Arlington Energy Center III, LLC – Arlington Energy Center III (LT RAA with ES) Agreement

Appendix D: Pomona Energy Storage 2, LLC – Pomona Energy Storage 2 (LT RAA) Agreement

Appendix E1: Summary of Key Long-Term Resource Adequacy Agreement Terms

Appendix E2: Summary of Key Long-Term Resource Adequacy Agreement with Energy Settlement Terms

Appendix F: Evaluation Framework

Appendix G1: Independent Evaluator (IE) Report (Confidential)

Public Appendices

Appendix G2: Independent Evaluator (IE) Report (Public)

⁶ See PG&E's Advice Letter 6222-E, p. 5.

VII. 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*****

Pursuant to D.21-02-028, the protest period for Tier 1 advice letters is 10 days after submission. Anyone wishing to protest this submittal may do so by letter sent via U.S. mail, facsimile, or E-mail, no later than August 16, 2021. 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 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).

VIII. Effective Date

Pursuant to D.21-02-028, this advice letter is submitted with a Tier 1 designation and will be effective no sooner than 5 days after submission. PG&E requests that this advice letter be effective on August 11, 2021.

IX. 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 lists R.20-11-003, R.19-11-009, and R.20-05-003. 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

cc: Service Lists R.20-11-003, R.19-11-009, and R.20-05-003

Attachments



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 (ID U39 E)

Utility type:

☒ ELC ☐ GAS ☐ WATER
☐ PLC ☐ HEAT

Contact Person: Annie Ho

Phone #: (415) 973-8794

E-mail: PGETariffs@pge.com

E-mail Disposition Notice to: AMHP@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) #: 6289-E

Tier Designation: 1

Subject of AL: Procurement for Summer 2022 Under Decision 21-02-028 and Decision 21-03-056

Keywords (choose from CPUC listing): Procurement

AL Type: ☐ Monthly ☐ Quarterly ☐ Annual ☒ One-Time ☐ Other:

If AL submitted in compliance with a Commission order, indicate relevant Decision/Resolution #:

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:

Confidential treatment requested? ☒ Yes ☐ No

If yes, specification of confidential information: See Confidentiality Declaration and Matrix Attachment
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: Don Howerton, (415) 973-7276

Resolution required? ☐ Yes ☒ No

Requested effective date: 8/11/21

No. of tariff sheets: N/A

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 proposed¹: N/A

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

¹Discuss in AL if more space is needed.

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
RULEMAKING 20-11-003**

**DECLARATION OF DON HOWERTON SEEKING CONFIDENTIAL TREATMENT
FOR CERTAIN DATA AND INFORMATION CONTAINED IN PG&E'S ADVICE
LETTER FOR PROCUREMENT FOR SUMMER 2022 UNDER DECISION 21-02-028
AND DECISION 21-03-056**

I, Don Howerton, declare:

1. I am a Director in the Energy Procurement and Policy Organization at Pacific Gas and Electric Company (PG&E). In this position, I am responsible for procurement of various electric resources and products including energy storage and renewable energy. This declaration is based on my personal knowledge of PG&E's practices and my understanding of the Commission's decisions protecting the confidentiality of market-sensitive procurement and bid-related information.

2. Based on my knowledge and experience, and in accordance with the Decisions 06-06-066, 08-04-023, and relevant Commission rules, I make this declaration seeking confidential treatment for certain procurement and bid-related data and information contained in PG&E's Advice Letter for Procurement for Summer 2022 Under Decision 21-02-028 and Decision 21-03-056.

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 procurement and bid-related data and information covered by D.06-06-066. 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 August 6, 2021 at San Francisco, California.

/s/

Don Howerton
Director, Structured Energy Transactions
Pacific Gas and Electric Company

PACIFIC GAS AND ELECTRIC COMPANY (U 39 E)

**ADVICE LETTER FOR PROCUREMENT FOR SUMMER 2022
UNDER DECISION 21-02-028 AND DECISION 21-03-056
AUGUST 6, 2021**

IDENTIFICATION OF CONFIDENTIAL INFORMATION

Redaction Reference	Category from D.06-06-066, Appendix 1, or Separate Confidentiality Order That Data Corresponds To	PG&E's Justification for Confidential Treatment	Length of Time
Confidential Appendices			
Appendix A: Sonoran West Solar Holdings 2, LLC – Crimson 2 (LT RAA) Agreement	Item VII.B (Contracts and Power Purchase Agreements between utilities and non-Affiliated Third Parties (except RPS)).	The terms of the Letter Agreement presented in this appendix are generally confidential. The terms of this contract that are public pursuant to Item VII. B. are publicly disclosed in Section IV. Selected Projects.	Contract documents and terms of contracts are confidential for three years from the date that the contract states that deliveries are to begin, or until one year following expiration, whichever comes first.
Appendix B: Arlington Energy Center III, LLC – Arlington Energy Center III (LT RAA) Agreement	Item VII.B (Contracts and Power Purchase Agreements between utilities and non-Affiliated Third Parties (except RPS)).	The terms of the Letter Agreement presented in this appendix are generally confidential. The terms of this contract that are public pursuant to Item VII. B. are publicly disclosed in Section IV. Selected Projects.	Contract documents and terms of contracts are confidential for three years from the date that the contract states that deliveries are to begin, or until one year following expiration, whichever comes first.
Appendix C: Arlington Energy Center III, LLC – Arlington Energy Center III (LT RAA with ES) Agreement	Item VII.B (Contracts and Power Purchase Agreements between utilities and non-Affiliated Third Parties (except RPS)).	The terms of the Letter Agreement presented in this appendix are generally confidential. The terms of this contract that are public pursuant to Item VII. B. are publicly disclosed in Section IV. Selected Projects.	Contract documents and terms of contracts are confidential for three years from the date that the contract states that deliveries are to begin, or until one year following expiration, whichever comes first.

PACIFIC GAS AND ELECTRIC COMPANY (U 39 E)

**ADVICE LETTER FOR PROCUREMENT FOR SUMMER 2022
UNDER DECISION 21-02-028 AND DECISION 21-03-056
AUGUST 6, 2021**

IDENTIFICATION OF CONFIDENTIAL INFORMATION

Redaction Reference	Category from D.06-06-066, Appendix 1, or Separate Confidentiality Order That Data Corresponds To	PG&E's Justification for Confidential Treatment	Length of Time
Appendix D: Pomona Energy Storage 2, LLC – Pomona Energy Storage 2 (LT RAA) Agreement	Item VII.B (Contracts and Power Purchase Agreements between utilities and non-Affiliated Third Parties (except RPS)).	The terms of the Letter Agreement presented in this appendix are generally confidential. The terms of this contract that are public pursuant to Item VII. B. are publicly disclosed in Section IV. Selected Projects.	Contract documents and terms of contracts are confidential for three years from the date that the contract states that deliveries are to begin, or until one year following expiration, whichever comes first.
Appendix E1: Summary of Key Long-Term Resource Adequacy Agreement Terms	Item VII.B (Contracts and Power Purchase Agreements between utilities and non-Affiliated Third Parties (except RPS)).	Contract specific terms between PG&E and the counterparty and between the counterparty and suppliers are confidential terms as they are not identified as public by Matrix term VII.B.	Contract documents and terms of contracts are confidential for three years from the date that the contract states that deliveries are to begin, or until one year following expiration, whichever comes first.
Appendix E2: Summary of Key Long-Term Resource Adequacy Agreement with Energy Settlement Terms	Item VII.B (Contracts and Power Purchase Agreements between utilities and non-Affiliated Third Parties (except RPS)).	Contract specific terms between PG&E and the counterparty and between the counterparty and suppliers are confidential terms as they are not identified as public by Matrix term VII.B.	Contract documents and terms of contracts are confidential for three years from the date that the contract states that deliveries are to begin, or until one year following expiration, whichever comes first.

PACIFIC GAS AND ELECTRIC COMPANY (U 39 E)

**ADVICE LETTER FOR PROCUREMENT FOR SUMMER 2022
UNDER DECISION 21-02-028 AND DECISION 21-03-056
AUGUST 6, 2021**

IDENTIFICATION OF CONFIDENTIAL INFORMATION

Redaction Reference	Category from D.06-06-066, Appendix 1, or Separate Confidentiality Order That Data Corresponds To	PG&E's Justification for Confidential Treatment	Length of Time
Appendix F: Evaluation Framework	Item VIII. B) Specific quantitative analysis involved in scoring and evaluation of participating bids.	The appendix contains information on the evaluation methodology and price caps, which constitutes the confidential results of bid scoring and evaluation.	Information under Item VIII. B is confidential for three years from the date winning contracts are submitted for CPUC approval.
Appendix G1: Independent Evaluator (IE) Report (Confidential)	Item VII.B (Contracts and Power Purchase Agreements between utilities and non-Affiliated Third Parties (except RPS)); Item VIII. B) Specific quantitative analysis involved in scoring and evaluation of participating bids.	The IE Report contains extensive discussion of the specific terms of the letter agreements and discussions with counterparties. The IE Report also contains information on the evaluation framework and price caps, which constitutes the confidential results of bid scoring and evaluation.	Contract documents and terms of contracts are confidential for three years from the date that the contract states that deliveries are to begin, or until one year following expiration, whichever comes first. Information under Item VIII. B is confidential for three years from the date winning contracts are submitted for CPUC approval.

Appendix A

**Sonoran West Solar Holdings 2, LLC – Crimson 2 (LT
RAA) Agreement**

(Confidential)

Appendix B

Arlington Energy Center III, LLC – Arlington Energy Center III (LT RAA) Agreement

(Confidential)

Appendix C

**Arlington Energy Center III, LLC – Arlington Energy
Center III (LT RAA with ES) Agreement**

(Confidential)

Appendix D

**Pomona Energy Storage 2, LLC – Pomona Energy
Storage 2 (LT RAA) Agreement**

(Confidential)

Appendix E1

Summary of Key Long-Term Resource Adequacy Agreement Terms

(Confidential)

Appendix E2

Summary of Key Long-Term Resource Adequacy Agreement with Energy Settlement Terms

(Confidential)

Appendix F
Evaluation Framework
(Confidential)

Appendix G1

Independent Evaluator (IE) Report

(Confidential)

Appendix G2

Independent Evaluator (IE) Report

(Public)

***Pacific Gas and Electric Company
Summer 2021-2022 Capacity Procurement Process
Confidential Version***

***Independent Evaluator Report on
PG&E's Summer 2021-2022 Capacity Procurement***

July, 2021

***Prepared by
Merrimack Energy Group, Inc.
26 Shipway Place
Charlestown, Mass. 02129***



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Appendix

Appendix A: Summary of Offers Submitted

I. Introduction

A. Overview of the Summer 2021-2022 Capacity Procurement Process

On February 16, 2021, Pacific Gas & Electric Company (“PG&E” or “Company”) issued a Notification to prospective market Participants notifying Participants that PG&E has now shifted its efforts toward contracting for incremental capacity to meet the Summer 2022 peak and net peak demand and invited market Participants to submit bids for resources meeting that need. PG&E asked Participants to submit their offers by February 23, 2021. PG&E also stated in its Notification that PG&E was expecting that a final Decision for this directive would be issued in the near future and that PG&E would issue a revised market notice if there was new information in that Decision. PG&E also noted that offer forms and form agreements were located on the PowerAdvocate Platform and Participants were required to submit their proposals through PowerAdvocate.¹ Through its initial procurement Notification issued on December 29, 2020, PG&E executed contracts for 385.3 MW of capacity and firm energy for the summer of 2021. This procurement, which is the subject of this report, was designed to procure resources for the Summer 2022 timeframe (“Summer 2022 Capacity Procurement”) and possibly beyond.

Through the Summer 2022 Capacity Procurement, PG&E has executed four contracts with three counterparties for energy storage resources under long-term contracts for a total of 270 MW, all with Commercial Operation Dates (“COD”) of 8/1/2022 and Expected Initial Delivery Dates (IDD) of October 1, 2022, for which PG&E is seeking CPUC approval.

As background, a Rulemaking² instituted by the California Public Utilities Commission (“CPUC”) on November 19, 2020 initially resulted in an Assigned Commissioner Ruling (“ACR”) on December 28, 2020 directing the large electric IOUs to seek contracts for capacity available for the peak and net peak demand in summer 2021 or summer 2022, set parameters for that procurement, and provided guidance for submitting the resulting contracts to the Commission for approval.

On January 8, 2021, a Proposed Decision of ALJ Stevens was issued in Rulemaking 20-11-003 which included revisions to the December 28, 2020 Ruling of the Assigned Commissioner. The Proposed Decision of January 8, 2021 directed and authorized PG&E, Southern California Edison (“SCE”), and San Diego Gas & Electric Company (“SDG&E”)

¹ PG&E included five form contracts on the PowerAdvocate Platform for this event for Participant review including: (1) Long-Term Resource Adequacy Agreement (“LTRA”); (2) LTRA with Energy Settlement; (3) Behind-the-Meter (“BTM”) RAA agreement; (4) Import Energy Confirm; and (5) RA Confirm. PG&E also included an Offer Form and a Supplemental Project Information document that Participants were required to complete and submit as part of their offers.

² The impetus for the Rulemaking (20-11-003) was the summer 2020 rolling outages brought on by the prolonged extreme heat event, which required the CAISO to initiate rotating outages in its balancing authority area to prevent wide-spread service interruptions. The rolling outages spotlighted reliability deficiencies in California’s electricity system.

to contract for capacity that was available to serve peak and net peak demand in the summer of 2021 and to seek approval for cost recovery in rates.³

The Proposed Decision of January 8, 2021 noted that there was little disagreement that a problem existed and there was a risk that outages could occur again in the summer of 2021. The Commission found there was a practical need for action to be taken now to ensure resources would be available by summer 2021. The Proposed Decision therefore ordered the State's large electric IOUs to pursue contracts for additional incremental capacity and/or energy procurement on an accelerated timeframe.

The Proposed Decision identified the parameters for the procurement to include:

- Resources must be deliverable during both the peak and net peak demand periods;
- For Commission consideration through a Tier 1 Advice Letter, a COD by June 1, 2021 is preferred but COD by September 1, 2021 would be considered for summer 2021;
- Potential resources may include utility-owned generation, with Commission consideration for utility owned generation projects with a COD in 2021 through a Tier 2 Advice Letter;
- Resource types⁴ that may be considered for procurement included:
 - Incremental capacity from existing power plants through efficiency upgrades, revised power purchase agreements, etc.;
 - Contracting for generation that is at-risk of retirement;
 - Incremental energy storage capacity;
 - Resource Adequacy only contracts or contracts that include tolling agreements may be proposed;
- The large electric IOUs should initiate new bilateral negotiations and revisit offers from recent IRP Request for Offers bid stacks;
- Consistent with current procurement requirements, an independent evaluator ("IE") and the Procurement Review Group ("PRG")/CAM-PRG should be actively engaged in these procurement efforts;
- To the extent that comparable data exist, the procurement should be cost competitive with recently procured resources;
- The large electric IOUs shall procure on behalf of all customers in their service territories with the costs and benefits allocated to all benefitting customers through the CAM.

The Proposed Decision also described the required process for Commission Review. The Proposed Decision stated that the large electric IOUs should submit the contracts that conform with this decision for consideration as advice letter submittals no later than

³ The Proposed Decision of ALJ Stevens made two significant changes to the Assigned Commissioner Ruling including focusing solely on procurement of resources that can come on-line in 2021 and deferring consideration of Firm Forward Imported Energy contracts as eligible resources to a subsequent decision in this proceeding.

⁴The December 28, 2020 Ruling had allowed Firm Forward Imported Energy contracts to be an eligible resource type.

February 15, 2021. Along with the contracts, the advice letter submittals shall include the following additional summarized information to assist with the evaluation:

- A summary of the resources being selected and a brief discussion of the procurement and selection method and criteria;
- Operational information of the resource contracted and a demonstration that the resource would be available during the peak and net peak demand hours in summer 2021;
- Pricing and net market value analysis along with a summary of the key contract terms;
- A completed analysis by the Independent Evaluator;
- A demonstration of cost competitiveness;
- A demonstration that the resource is incremental;
- A demonstration that the resource has a path to deliver its online date in summer 2021.

The ALJ issued a Proposed Revised Decision on February 8, 2021 which contained the following revisions to the Proposed Decision:

- Asked the IOUs to continue to engage with market participants regarding potential summer 2022 resources;
- Noted that incremental capacity was being procured to provide additional capacity to serve CAISO load. The Revised Decision encouraged CAISO to ensure that these resources did not support exports even if they were not designated as resource adequacy resources;
- Added back Firm Forward Imported Energy to the types of resources that would be considered for procurement;
- Clarified the Commission's preference for storage resources, shorter duration contracts, and efficiency upgrades.

On February 17, 2021, the CPUC issued final Decision 21-02-028⁵ that directed and authorized PG&E and the other Investor-owned utilities in California to contract for capacity that was available to serve peak and net peak demand in the summer of 2021 and seek approval for cost recovery in rates. While the focus of the final Decision was on summer of 2021 procurement, the Decision provided guidance to the utilities regarding procurement of summer 2022 capacity. As noted on page 4 of the Decision "While we believe swift action is needed to ensure intended benefits are provided for summer of 2022, we believe this can be reasonably realized through consideration in a subsequent decision in this proceeding. In the meantime, IOUs should continue to engage with market participants regarding potential summer 2022 resources".

On March 5, 2021 the CPUC issued the Proposed Decision of ALJ Stevens in Rulemaking 20-11-003.⁶ The Proposed Decision included Attachment 1, Rulemaking 20-11-003 Guidance which described modifications to a number of peak demand and other related programs. The Decision addressed two main issues: how to decrease energy demand and

⁵ The Commission adopted Decision (D.) 21-02-028 on February 11, 2021.

⁶ The Proposed Decision was scheduled to be on the Commission's March 25, 2021 agenda.

increase energy supply during peak demand and net demand peak hours in the event that an extreme heat event similar to the August 2020 event occurs in the summer of 2021 or 2022.

With regard to additional capacity procurement, the IOUs were directed to continue their procurement efforts and endeavor to meet and exceed their respective incremental procurement targets to achieve the effective 17.5% Planning Reserve Margin (“PRM”) for the months of concern.⁷ The Proposed Decision further stated that “Consistent with the guidance provided in D.21-02-28 and consistent with the resources that have been contracted by IOUs in response to that decision IOUs should give preference to storage contracts and upgrades in the efficiency of existing generation resources, and for contract terms that are shorter in duration. All procurement contracts should be submitted to Energy Division via a Tier 1 AL on a continuing basis, except for contracts for incremental gas generation of five years or more and incremental imports. Contracts of five years or more for incremental generation at existing gas power plants should be submitted to Energy Division via a Tier 3 AL. Contracts for fossil-fuel development at new sites will not be considered. However, contracts for redevelopment or repowering at existing generation sites would be considered and should be submitted via Application, regardless of the contract length. Tier 1 ALs are not required, but may be submitted, for incremental imports, provided the IOUs remain within the “hard cap” procurement limits for supply-side generation and storage resources.”

On March 26, 2021, the CPUC issued Decision 21-03-056. The Decision directed the IOUs to take action to prepare for potential extreme weather in the summer of 2021 and 2022 to decrease peak and net peak demand and increase peak and net peak supply to avert the potential need for rotating outages. Specific actions required were outlined in detail in Attachment 1 to the Decision. The Decision focused on proposing a range of demand-side strategies through the roll out of new load reduction programs and modified current demand response and other programs designed to reduce/manage demand to ensure reliability of the electrical grid.

The Decision also addressed capacity procurement. The Decision ordered the utilities to continue their procurement efforts and endeavor to meet and exceed their respective incremental procurement targets to achieve the effective 17.5% PRM for the months of concern.⁸ The Decision stated that consistent with the guidance provided in D.21-11-003 and consistent with the resources that have been contracted by the IOUs in response to that decision, the IOUs should give preference to storage contracts and upgrades in efficiency of existing generation resources, and for contract terms that are shorter in duration.

In response to Decision 21-03-056, PG&E focused on shorter duration options for meeting summer 2022 procurement requirements. While PG&E received a robust response to its 2022 Notification, evaluated the offers received in response to the 2022 Notification and communicated with several counterparties regarding the status of their projects, no

⁷ For PG&E, this results in a minimum target of 450 MW for 2021.

⁸PG&E’s procurement target was a minimum of 450 MWs of incremental resources.

agreements were executed initially from the 2022 Notification in the months following receipt of offers.

The May 21, 2021 Proposed Decision in Rulemaking 20-05-003 Requiring Procurement to Address Mid-Term Reliability (2023-2026) indicated that capacity procured after June 30, 2020, including capacity procured pursuant to the Emergency Reliability Directive, was eligible to count toward the above-mentioned targets. This led PG&E to conduct further scrutiny of the longer-term energy storage offers with 2022 in-service dates that could meet both short-term 2022 as well as long-term systems requirements.

Through this process, PG&E reassessed the offers submitted in February, 2021 focusing on those offers which had a high probability of coming on-line during the summer of 2022 and engaged with the sponsors of those projects. As a result, PG&E has executed four contracts for energy storage capacity expected to be available by summer 2022. PG&E is requesting CPUC approval of the resources procured through its Summer 2022 Procurement process comprised of four long-term energy storage resources with a total of 270 MWs of capacity, including three contracts under Long-Term Resource Adequacy agreements (“LTRAAs”) and one contract under a Long-Term Resource Adequacy agreement with Energy Settlement Agreement (“LTRAAs w/Energy Settlement”). These contracts were executed in tranches on July 16, and July 30, 2021.

B. Issues Addressed in This Report

This report addresses Merrimack Energy’s assessment and conclusions regarding the following issues identified in the CPUC’s IE Report Template:

1. Describe the role of the IE throughout the procurement process;
2. How did the IOU conduct outreach to bidders? Was the procurement process robust?
3. Evaluate the administration of the procurement process including the fairness of the investor-owned utility’s (“IOU’s”) bid evaluation and selection process (i.e., quantitative and qualitative methodology used to evaluate and select offers, and consistency of evaluation and selection methods with criteria specified in bid documents, etc.);
4. Describe PG&E’s Least Cost Best Fit (“LCBF”) methodology for evaluating offers. Was the LCBF process fairly administered? Evaluate the strengths and weaknesses of the IOU’s methodology;
5. Describe the applicable project specific negotiations. Highlight any areas of concern including unique terms and conditions;
6. If applicable, describe safeguards, code of conduct and methodologies employed by the IOU to compare affiliate bids or utility-owned generation

ownership offers. If a utility selected an offer from an affiliate or an offer that would result in utility asset ownership, explain whether the IOU's selection of such offer was appropriate;

7. Do the contract(s) merit CPUC approval? Is the contract reasonably priced and does it reflect a functioning market?
8. Based on the complete bid process, was the RFO acceptable?

II. Description of the Role of the Independent Evaluator (“IE”)

A. Regulatory Requirements For the IE

While Merrimack Energy typically includes a history of CPUC decisions that have required investor-owned utilities in California to use an IE in resource solicitations, we are not providing the details associated with CPUC decisions that have required IE involvement. Instead, both the Assigned Commissioner Ruling, and the Proposed Decision of the ALJ recommend that an Independent Evaluator should be actively engaged in the procurement efforts consistent with current procurement requirements.

B. Description of Key IE Roles

In compliance with the above requirements, PG&E selected Merrimack Energy Group, Inc. (“Merrimack Energy”) to serve as IE for the Summer 2021-2022 Capacity Procurement process in December 2020.⁹ The overall objective of the role of the IE is to ensure that the solicitation process is undertaken in a fair, consistent, unbiased, and objective manner and that the best resources are selected and acquired for the benefit of customers consistent with the solicitation requirements. This role generally involves a detailed review and assessment of the evaluation process and the results of the quantitative and qualitative analysis.

In addition to the requirements identified in CPUC Orders, the Scope of Work included in the Contract Work Authorization (“CWA”) between Merrimack Energy and PG&E clearly identifies the tasks to be performed by the IE. These include the following tasks:

- Advise on the consistency of solicitation activities with the CPUC's procurement-related rules and procedures and PG&E's Commission-approved procurement authority;
- Assist in the development, design, and review of the solicitation/procurement process, as applicable. Promptly submit any recommendations to PG&E and/or CPUC, consistent with the objective of ensuring a competitive, open and

⁹ Merrimack Energy was retained to initially serve as IE for PG&E's 2019 System Reliability Request for Offers – Distributed Generation Enabled Microgrid Services (DGEMS) Phase, which was initiated in November 2019 and suspended in February, 2020. Merrimack Energy also served as IE for PG&E's System Reliability RFOs Phase 1 and 2 processes undertaken in 2020.

- transparent process, and to ensure that the overall scope of the solicitation process is not unnecessarily broad or too narrow;
- Monitor all communications and/or negotiations between PG&E and counterparties, as required by the solicitation's objectives as outlined;
 - Provide recommendations and reports, if required by PG&E and/or the CPUC, concerning the definition of products sought and price and non-price evaluation criteria; so that all aspects of the products are clearly understood, and all bidders may effectively respond to the solicitation, as applicable;
 - Review the comprehensive quantitative and qualitative bid evaluation criteria and methodologies applied to any Summer 2021/2022 Capacity Procurement and assess whether these are applied to all bids in a fair and non-discriminatory manner. The Consultant will be provided access to PG&E's personnel, modeling tools, and meeting documentation in order to credibly evaluate the bid evaluation and selection processes;
 - Report on the outcome of a solicitation using the appropriate CPUC-approved Independent Evaluator Report Template, which may be amended from time to time, for inclusion in any Advice Letter, Application, and/or Quarterly Compliance Report filings;
 - Monitor the solicitation, bilateral negotiation and/or contract amendment processes and promptly submit recommendations to PG&E's management to ensure that no bidder has an information advantage and that all bidders or counterparties, if applicable, receive access to relevant communications in a non-discriminatory manner. This task may include monitoring contract negotiations and/or keeping apprised of negotiation status and major issues;
 - Provide presentations to PG&E's management, the Procurement Review Group (PRG), and the CPUC Energy Division (ED), if requested, regarding the Consultant's findings or status. Communicate periodically with the Energy Division ("ED") as a check on the solicitation process;
 - Provide a written assessment as to whether the solicitation process, bilateral negotiations and contract amendment processes were open, transparent and fair, and whether any bidder received material information that gave them a competitive advantage or disadvantage relative to other bidders;
 - Provide a final written assessment as to whether or not PG&E's evaluation criteria and methodologies were reasonable and appropriate and were applied in a fair and non-discriminatory manner for all offers received;
 - Prepare or assist in the preparation of direct and/or rebuttal testimony, and participate as a witness or in an advisory capacity during administrative hearings, as required, before the CPUC and/or FERC in any associated proceedings;
 - Perform other duties as may be further defined in subsequent relevant regulatory proceedings or required by PG&E's senior management.

C. Description of IE Oversight Activities

As noted, Merrimack Energy was retained as the IE by PG&E in December 2020. In performing its oversight and evaluation role, the IE participated in and undertook a number of activities in connection with the procurement process including reviewing notices to

bidders, monitoring communications between PG&E and the Participants, reviewing and commenting on the internal procurement protocol documents, organizing and summarizing the offers received, reviewing the evaluation results and resources considered for initial consideration and final selection, participating in meetings with Participants after receipt of offers and during project discussions, communicating with PG&E's Project Manager, project team, and transactors on a regular basis to discuss procurement and contract issues, participating in meetings with the PRG, PG&E's Evaluation Committee and PG&E's Advisory Committee, as held and as required, and monitoring the contract negotiation process with shortlisted or considered Participants.

Merrimack Energy submitted a detailed IE report on the first phase of PG&E's Summer 2021-2022 Capacity Procurement Process, focused on PG&E procurement of resources to meet summer 2021 RA requirements. This report provides an assessment and review of the results of PG&E's "Phase 2" process initiated by issuance of the Notification to Market Participants on February 16, 2021 to meet summer 2022 capacity and net peak demand and resource needs.

III. Did PG&E Do Adequate Outreach to Bidders and Was the Procurement Process Robust?

This section of the Report focuses on the adequacy of outreach activities of PG&E and the robustness of the response of bidders with regard to the procurement process.

A. Describe the IOU outreach to potential bidders (e.g., sufficient publicity, emails to expected interested firms)

Outreach activities are important to the success of any competitive procurement process. PG&E's outreach efforts targeted a large number of potential Participants based on PG&E's contact lists of energy companies and individuals, including Participants who submitted offers into the 2020 System Reliability RFOs for both the Phase 1 and Phase 2 processes and the Notification for summer 2021 – 2022 capacity procurement. These efforts likely played a role in the robust response to the procurement process in terms of the number of Participants and specific offers or projects.

PG&E maintains a detailed list of potential Participants with approximately 2,700 contacts that serves as the database for Seller contact and outreach. PG&E sent emails to all potential Participants on this list informing them of the Summer 2021-2022 Capacity Procurement process. The list includes Diverse Suppliers.

PG&E sent its first Notification to the potential Participant list on December 29, 2020. The Notification informed prospective Participants of the December 28, 2020 Assigned Commissioner Ruling ("ACR") calling for the utilities to seek contracts for additional power capacity to be available by the summer of 2021 or 2022. The Notification provided a link to the ruling, identified the eligible resource types included in the ruling, requested that prospective Participants provide an indication of interest to PG&E by January 8, 2020,

asked Participants to indicate the year (i.e., 2021 or 2022) for which the Participant intended to provide additional capacity, and identified the resource type the Participant intended to provide.

On January 5, 2021, PG&E sent a follow-up Notification to prospective Participants stating that PG&E had uploaded an Offer Form to the PowerAdvocate Platform along with a link to PowerAdvocate. Participants that wished to offer additional power capacity by the summer of 2021 or 2022 must fill out the Offer Form and Supplemental Project Information document and submit both to the PowerAdvocate Platform Event for this procurement process. All documents must be submitted via the PowerAdvocate Platform by Friday, January 8, 2021 by 5:00 pm (PPT).

On January 11, 2021, PG&E sent out a third Notification to prospective Participants, notifying the Participants that the CPUC had issued a Proposed Decision in R.20-11-003 directing IOUs to seek contracts for additional power capacity for summer 2021 Reliability. This Proposed Decision replaced the ACR issued on December 28, 2020. PG&E provided a link to the Proposed Decision and noted two key changes listed in the ACR: (1) IOUs are to procure solely for 2021 capacity at this time; and (2) Firm Forward Imported Energy contracts are no longer one of the Resource Types that can be considered. Per the Proposed Decision, PG&E noted that it would prioritize resources for summer 2021 and that Firm Forward Imported Energy contracts and procurement for summer 2022 would be considered in a subsequent decision.

On February 16, 2021 PG&E issued another Notification to its Participants list thanking Participants for participating in PG&E's effort to contract for incremental capacity to meet the peak and net peak summer 2021 demand. PG&E also notified Participants that PG&E had now shifted its efforts toward contracting for incremental capacity to meet the summer 2022 peak and net peak demand and invited the market to submit bids for resources meeting that need. PG&E noted that offers were required by February 23, 2021, including those offers that were submitted previously. PG&E noted that the required offer form and form agreements were located on Power Advocate. PG&E also informed Participants that it was expecting that a final Decision for this directive would be issued in the near future. If there was new information in that Decision, PG&E would issue a revised market notice accordingly.

PG&E initiated a comprehensive process for communicating with bidders for the Summer 2021 – 2022 Capacity Procurement process. PG&E utilized the PowerAdvocate Platform as the means for Participants to submit their offers. In addition, the PowerAdvocate Platform contained the Offer Form, Supplemental Project Information document, and available contracts and confirms for Participants to access. Communications with Participants would be conducted via PG&E's System Reliability RFO messaging.

PG&E did not initiate a public website for the Summer 2021 or Summer 2022 Capacity Procurement process since the PowerAdvocate Platform was developed to provide all information Participants required. The following documents and information were included on the PowerAdvocate Platform for Participant review and utilization:

- Summer 2022 Expedited Procurement Offer Form;
- Supplemental Project Information;
- RA Confirm;
- Behind the Meter Resource Adequacy Agreement (“BTM RAA”);
- Long-Term Resource Adequacy Agreement (“LTRAA”);
- Long-Term Resource Adequacy Agreement with Energy Settlement (“LTRAA w/ES”);
- Import Energy Confirm.¹⁰

B. Identify Principles Used to Determine Adequate Robustness of a Procurement Process (e.g., number of proposals submitted, number of MWhs associated with submitted proposals).

With regard to assessing whether the response to the procurement process was adequately robust, there are several criteria to consider:

- Was the response to the procurement process commensurate with the level of outreach?
- Did the procurement process encourage a diverse response from Participants in terms of products requested, project structure, pricing options, etc.?
- Was the response large with respect to the number of proposals and megawatts (“MW”) offered relative to the amount requested?
- Was the process a competitive process based on the amount of MW submitted by Bidders relative to the number of MW requested?
- Were the procurement process documents clear and concise such that Participants could clearly assess how to structure a competitive offer?

C. Did the IOU Do Adequate Outreach? If Not, Explain in What Ways it Was Deficient

There are several criteria generally applied for assessing the performance of the utility in its outreach and marketing activities:

- Did the utility contact a large number of prospective Participants?

¹⁰ As noted, Firm Forward Imported Energy Contracts were not initially eligible for this procurement process. However, on February 8, 2021, the Commission issued a revision to the Proposed Decision stating that Firm Forward Imported Energy would be an eligible resource type for the 2021 solicitation and would now be considered as part of the 2021 procurement as well as Summer 2022 expedited procurement process.

- Were the utility’s outreach efforts active or passive?
- Did the utility adequately market the procurement process?
- Could prospective bidders easily access information about the procurement process?
- Did any prospective bidders complain about the process or access to information?

As noted above, PG&E contacted a large number of prospective Participants to inform them of the issuance of the Summer 2021-2022 Capacity Procurement Process. The outreach activities of PG&E can be classified as “active” given that emails about the Summer 2021-2022 Capacity Procurement Process were directly sent to PG&E’s substantial list of prospective Participants. PG&E also used the PowerAdvocate Platform both as a means of providing information to prospective Participants, including Offer Form, proforma contracts and the Supplemental Project Information form, as well as a repository for Participants to submit their offers.

D. Was the Solicitation Adequately Robust

The overall result of this outreach activity was a significant level of interest from the market and a robust response from Participants, particularly given the short turn-around time for submitting offers to this procurement. Offers were also received from a range of eligible Participants who offered proposals for most of the products requested. In addition, several projects which were submitted to the System Reliability RFOs Phase 1 and 2 were also submitted into this procurement process.

PG&E initially received offers on January 8, 2021 for a total of 52 unique projects from 33 counterparties. Based generally on the largest eligible offer submitted¹¹, a total of 5,460¹² MW of capacity was submitted. The IE found the response from the market to be significant, [REDACTED] for a short duration proposal, which conformed to PG&E’s preferences.

For the Summer 2022 procurement, PG&E received fifty-seven (57) offer variants from 27 projects and 17 counterparties, many of whom had submitted the same offers into the initial 2021 – 2022 procurement process in January 2021. Twenty-one of the twenty-seven projects submitted were also submitted into the initial 2021 – 2022 procurement notification.

¹¹ While Merrimack Energy focused on including the largest single offer in the totals, there were a few cases where Merrimack opted to include the lower MW option because of the likelihood that the larger option may not be viable.

¹² The information provided in this section refers to all offers submitted in response to the Procurement Notification and therefore includes offers for 2021 and 2022.

In conclusion, the response of the market to PG&E's emergency procurement process provides evidence that the outreach and Participant engagement activities of PG&E were effective, and Participants felt they had an adequate opportunity to receive a contract from the process.

E. Did the IOUs Seek Adequate Feedback About the Bidding/Bid Evaluation Process From All Bidders After the Solicitation Was Complete?

Given the short turn-around time for this procurement process, and the initial focus on summer 2021 and 2022 capacity procurement, PG&E did not seek feedback from Participants about the process.

F. Was the Outreach Sufficient and Materials Clear Such That the Bids Received Meet the Needs the Procurement Was Intending to Fill?

The outreach effort appeared to be more than sufficient based on the number of offers and projects submitted given the short turn-around time.

G. Any Other Relevant Information or Observations

No

IV. Framework for Emergency Procurement and Bid Evaluation and Selection Methodology and Design

A. Procurement Framework for Emergency System Reliability Procurement

Based on the unique procurement requirements identified in the Proposed ALJ Decision, PG&E prepared a framework to guide its decision-making associated with the emergency procurement process and provided the framework to the IE for review and comment. PG&E identified its guiding principles to be (1) improve system reliability for Summer 2021 and 2022 and (2) customer affordability (as measured by total net customer cost).¹³

PG&E relied upon the Proposed March 5, 2021 Decision of ALJ Stevens initially for direction in its summer 2022 procurement activity, which directed the IOUs to continue their procurement efforts and endeavor to meet and exceed their respective incremental procurement targets to achieve a 17.5% PRM for the months of concern. The Proposed Decision noted that the IOUs shall target their incremental procurement (450 MW minimum for PG&E) during the months of most concern, including May through October but most importantly should endeavor to meet and exceed their respective minimum MW

¹³ In its initial evaluation associated with procurement of 2021 capacity PG&E identified its order of preference for resources based on the CPUCs ordered procurement types. These include: (1) revised power purchase agreements; (2) contracting for generation that is at risk of retirement; (3) resource adequacy only contracts or contracts that include tolling agreements; (4) incremental capacity from existing power plants through efficiency upgrades; (5) Incremental energy storage capacity; (6) Firm Imported Energy.

targets in July, August, and September. The Proposed Decision also required the IOUs to give preference to storage contracts and upgrades in the efficiency of existing generation resources, and for contract terms that are shorter in duration.

However, the ALJ's Final Decision issued on March 25, 2021 led PG&E to focus on shorter-term contracts only. The Proposed Decision of May 21, 2021 regarding the Mid-Term IRP encouraged PG&E to reconsider longer-term resource options for new energy storage resources that could be on-line by summer 2022 to both address summer 2022 requirements as well as mid-term requirements identified in the CPUC's Proposed Decision regarding the Mid-Term IRP.

B. Identification of Principles for Evaluating PG&E's Bid Evaluation Methodology

This section of the report addresses the principles and framework underlying the IE's review of PG&E's evaluation and ranking methodology for the Summer 2021 – 2022 Capacity Procurement processes. One of the important questions in this regard is whether the bid evaluation and ranking methodology was fair and appropriate for this type of “all source” procurement process.

Unlike typical solicitation processes, for the Summer 2021-2022 Capacity Procurement processes, PG&E did not include any Protocol documents to provide guidance to Participants and did not hold a Bidders Webinar. Instead, given the accelerated nature of the procurement processes for both summer 2021 and summer 2022, PG&E requested information from Participants without going through the typical longer duration solicitation process. The information provided to Participants was limited to: (1) the Ruling of the Assigned Commissioner on December 28, 2020; (2) Proposed Decision of ALJ Stevens on January 8, 2021; (3) ALJ Proposed Revise Decision of February 8, 2021; (4) CPUC Final Decision in D.21-02-028, issued on February 17, 2021; (5) Proposed Decision of ALJ Stevens in Rulemaking 20-11-003 on March 5, 2021; and (6) market notifications sent by PG&E to its list of potential Participants. PG&E also posted documents for Participants on the PowerAdvocate event for each Notification with a list of the eligible contracts as well as the Offer Form for Participants and Supplemental Project Information to submit with their offers.

PG&E did generally follow the procurement framework in combination with the general quantitative evaluation criteria and methodology utilized for the System Reliability RFOs. Furthermore, the methodologies applied to the different types of products were fair and reasonable and did not unduly bias any technologies or products. Also, PG&E did apply consistent evaluation methodologies and models to the various proposals or project structures sought. The methodologies applied were consistent with the project structure evaluated.

To address the other issues identified, the IE will first present a detailed description of the bid evaluation methodology and process implemented by PG&E to undertake the procurement process and evaluation. This includes the criteria used in the evaluation.

Subsequently, the IE then discusses the strengths and weaknesses of the methodology relative to the issues identified above.

C. Overview Description of PG&E's Least Cost Best Fit ("LCBF") Evaluation Methodology

This section of the report provides an overall description of those components of PG&E's bid evaluation methodology, procedures, and criteria utilized in the 2020 System Reliability RFO – Phase 2 process which are applicable to the Summer 2021-2022 Capacity Procurement process. The methodology selected is designed to generally conform to the Least Cost Best Fit ("LCBF") procedures applied in other solicitations.¹⁴ For this report, the IE is providing a general summary of the overall methodology used in the evaluation in this section of the report.

From a quantitative perspective, an evaluation would be performed on all offers by first calculating each project's Net Market Value ("NMV"). Net Market Value will be measured in levelized present value [REDACTED] and then projects will be ranked from highest to lowest (i.e., highest net benefits).

D. Detailed Description of the Evaluation Process

The following section of the report provides a more in-depth discussion of the components of the quantitative evaluation methodology and process used by PG&E and describes in general how the various types of offers would be evaluated. In addition, this section includes a description of the input assumptions utilized for evaluation purposes.

Valuation Components Overview

In the procurement process, a Participant submits an offer detailing the costs and operational characteristics of the generation facility. For each Offer, the NMV is calculated based on the summation of several components as follows:

Net Market Value: $NMV = E + C - (V + F + T)$ where

C = Capacity Value (if applicable)

E = Energy Value

V = Variable Cost

F = Fixed Cost

T = Transmission Network Upgrade Cost (if applicable)¹⁵

¹⁴ One difference associated with the traditional LCBF methodology typically applied by PG&E is that the qualitative evaluation process is not as detailed as applied in more traditional procurement processes. Instead, the focus is more on the ability of the project sponsor to complete its project on time to meet capacity requirements for summer 2021 or 2022, in this case.

¹⁵ The value for transmission network upgrade cost was derived from the information provided by the Participant in its offer form.

[REDACTED]

Valuation Summary by Resource Type

PG&E prepared its evaluation methodologies to be consistent with the products and contract types requested. There are four product types which bidders may offer:

- Resource Adequacy (RA) Confirm;
- Long-Term Resource Adequacy (LTRAA) – System and Local (Existing Resources or In-Front-of-the-Meter Resources from new projects);
- Long-term Resource Adequacy (System and Local) with Energy Settlement (LTRAA w/ES) - In-front-of-the-meter Long-Term RA (new projects) with Energy Settlement; and
- Behind the Meter Resource Adequacy Agreement (BTM RAA)

Table 1 below provides a summary of the NMV components for each agreement type along with a description of how the various components are applied.

Table 1: Valuation Summary by Agreement Type

Resource/Contract Type	Components	Explanation
Resource Adequacy (Long-term RA Agreement and RA Confirm)	The NMV includes the components: $NMV = C - (F + T)$	[REDACTED]
Resource Adequacy with Energy Settlement and BTM RAA	$NMV = E + C - (F + T + V)$	[REDACTED]

Valuation Components

The following sections describe in more detail how the costs and benefit values of each component are included for each Agreement type.

Energy Value

As noted above, the Energy Value component applies to several Agreement options including Behind-the-Meter and In-Front-of-the-Meter Long-Term RA agreement with Energy Settlement.

For Long-Term RA Agreements with Energy Settlement, [REDACTED]

For BTM options, [REDACTED]

Capacity Value

The Capacity Value component is applicable for all Product types listed in Table 1.¹⁶ Capacity value is the net present value of monthly capacity values across all months during the delivery period. [REDACTED]

The amount of NQC and EFC are determined by the particular asset operating characteristics as specified in its Offer. NQC for Energy Storage offers is, in general, based on the maximum discharge power that ES can continuously sustain for 4 hours in 3 consecutive days. EFC for Dispatchable Energy Storage offers will be determined based on Appendix B of CPUC Decision 14-06-050 dated June 26, 2014. The calculations are implemented in the Offer Form.

Fixed Cost

Fixed Cost is applicable for all product types. [REDACTED]

Input Assumptions

An important aspect of the offer evaluation process is the development of input assumptions to use in the evaluation of the Participant's pricing formulas and other evaluation parameters. The key input prices for the evaluation include RA price curves and hourly energy prices prepared on April 15, 2021. This includes the following components:

¹⁶ Note that Firm Forward Imported Energy offers did not have a capacity value.



E. Evaluation of the Strengths and Weaknesses of PG&E's Methodology in This Procurement Process

PG&E implemented a methodology for evaluating the eligible offers received in response to the 2020 System Reliability RFO – Phase 2 that included all eligible resource options included in the Summer 2021-2022 Capacity Procurement process. PG&E used a modified version of the existing methodologies used in previous System Reliability RFO solicitations to address the requirements of this procurement. Since the Summer 2021 – 2022 procurement processes are seeking incremental energy and Resource Adequacy capacity, the focus of the evaluation methodology is designed to assess the cost and benefits of each offer.

Strengths of Evaluation and Ranking Methodology

The following represents the IEs perspective regarding the strengths associated with the evaluation and ranking methodology implemented by PG&E for the Summer 2021-2022 Capacity Procurement process which is primarily seeking RA capacity. These include:

- The methodology used by PG&E takes into consideration all reasonable costs and benefits associated with the various types of offers, project structures, and contract structures eligible;
- The overall evaluation methodology is capable of effectively and consistently evaluating a range of different types of resources, project structures with different terms, product sizes, and operating parameters. The IE does not view the methodology as having a bias toward any product submitted into this procurement process;
- PG&E uses consistent input assumptions for undertaking the evaluation of all offers;
- PG&E's Offer Forms were generally transparent and interactive with drop down menus for a number of fields.

Weaknesses of the Evaluation and Ranking Methodology

Based on the proposed evaluation methodology for this procurement process, Merrimack Energy has not identified any obvious weaknesses in the methodology that could bias the results of the evaluation and ranking. Based on evaluation of summer 2021 offers, it was obvious that other methodologies may be necessary (either in conjunction with described methodology or separately) to evaluate firm imported energy, or complex transactions. One weakness with this methodology is listed below.

■ [REDACTED]

F. Future LCBF Improvements

Given the unique nature of this procurement process, Merrimack Energy has no additional recommendations for future improvements in the evaluation and ranking process.

G. Revisions to Bid Evaluation Criteria

The CPUC IE Report Template requests the IE to address whether the bid evaluation criteria changed after the bids were received and to explain the rationale for the changes. For this procurement process, PG&E utilized a modified evaluation methodology that was consistent with the quantitative evaluation methodology used for the System Reliability RFO - Phase 1 and 2 processes. PG&E did not apply the qualitative criteria in the same manner as the Phase 1 and Phase 2 processes, which included a project viability assessment and a [REDACTED] ranking process, although a screening for the ability for a project to make a 2021 or 2022 on-line date was conducted.

H. Additional Information or Observations Regarding PG&E's Evaluation Methodology

No additional information or observations are provided.

V. Administration of the Summer 2022 Capacity Procurement Solicitation Process

In performing its oversight role, the IE participated in and undertook a number of activities in connection with the Summer 2022¹⁷ Capacity Procurement process, participating in conference calls with the PG&E project teams given the expedited nature of the solicitation, participating in discussions on the offer evaluation methodology and selection process, organizing and summarizing the offers received, reviewing and commenting on the evaluation and selection process and results, and participating in some calls with Participants throughout the evaluation, selection and negotiation processes.

¹⁷ Merrimack Energy submitted an IE Report associated with the first phase of this procurement process focused on procurement of capacity with a summer 2021 COD date.

A list of the key milestone events which occurred during the procurement process as well as the activities of the IE during the procurement process consistent with the important activities and milestones for the process are described below.

A. Notification to Prospective Participants

As noted, on February 16, 2021, PG&E notified prospective Participants that PG&E had now shifted its efforts toward contracting for incremental capacity to meet the summer of 2022 peak and net peak demand and invited the market to bid resources meeting that need. PG&E requested that Participants submit their offers by February 23, 2021. PG&E also noted in the Notification that PG&E was expecting that a final Decision for this directive would be issued in the near future. If there was new information in that Decision, PG&E would issue a revised market notice accordingly.

As noted, PG&E utilized the PowerAdvocate Platform, which was used as a repository for the Participants to submit their Offer Forms and supporting documentation.

B. Submission of Offers – February 23, 2021

In its February 16, 2021 Notification, PG&E stated that the requested date for PG&E to receive responses from Participants was February 23, 2021. Participants were requested to submit an Offer Form and Supplemental Project Information to the PowerAdvocate Platform.¹⁸ Upon submission of the offer forms to the PowerAdvocate Platform, the IE reviewed the submissions and prepared a summary table which contained pricing, operational information, commercial and other pertinent information associated with each offer variant. Based on the IE's assessment, PG&E received offers from a total of 27 unique projects from 17 counterparties, representing approximately 57 offer variants and nearly 2,500 MWs of capacity based on the largest project size for each option. PG&E received offers for most of the originally eligible products identified in footnote 13 of this report. In addition, Participants offered a range of contract structure options as well, including LTRAA Agreements, LTRAA Agreements with Energy Settlement, RA Confirm, and Import Energy Confirm.

Appendix A to this report provides a list of all offers submitted by Participants, in response to PG&E's Notification, including the Participant name, project name, Resource proposed, pricing offers, number of variants offered for each project, COD date and MWs offered.

A large portion¹⁹ of the eligible offers submitted were for battery energy storage options via an LTRAA Agreement or LTRAA plus Energy Settlement Agreement. Many of these projects also submitted offers in response to the January 2021 Notification.

C. Communications with Bidders

¹⁸ While most Participants did submit the required Offer Form, not all Participants also included Supplemental Project Information document. In addition, one Participant submitted offers over two weeks after the identified offer submission date of February 23, 2021.

¹⁹ Twenty of the twenty-seven projects submitted were energy storage resources.

Since a Final Decision of the ALJ was not expected until March 25, 2021, PG&E initiated calls with Participants who were proposing new projects for summer 2022 to discuss and clarify their offers and provide an update on the status of the procurement process. PG&E informed the Participants that once the Final Decision was issued it intended to move quickly to execute contracts shortly thereafter. The IE was copied on all emails between PG&E and the counterparties and participated in the calls with the counterparties to discuss the status of their projects. A number of the counterparties for long-term resources such as new storage projects stated that time was of the essence for the counterparty to be able to complete their projects by the summer of 2022. Several counterparties discussed their concern regarding their ability to secure the necessary equipment such as transformers and battery systems in a timely manner. Counterparties also noted that raw material prices were increasing which could lead to higher prices for battery energy storage projects.

D. Evaluation of the Offers Submitted

Subsequent to the initial review, PG&E began to evaluate the offers from a quantitative perspective, prepared evaluation files with the offer evaluation results, and provided the files to the IE for review and assessment. PG&E submitted a few rounds of evaluation output files to the IE beginning in early March 2021. PG&E updated its evaluation files as Participants clarified their pricing or provided either updated or additional offer pricing.

PG&E's evaluation files, which were provided to the IE and served as the basis for the evaluation results, included the following tabs:

- [REDACTED]
- [REDACTED]
- [REDACTED]
- [REDACTED]
 - [REDACTED]
- [REDACTED]
- [REDACTED]
- [REDACTED]
- [REDACTED]
- [REDACTED]

Similar to the integration model prepared by PG&E at Merrimack Energy's request for previous Energy Storage Solicitations, [REDACTED]

[REDACTED]
[REDACTED]
[REDACTED]
[REDACTED]

E. Process Delays

[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]	[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]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]

G. Factors Affecting Consideration/Selection of Options

While the majority of the offers submitted were long-term offers for energy storage resources, consistent with CPUC Orders as noted above, PG&E initially focused on short-term offers that could provide capacity or firm energy during summer 2022. However, based on the final CPUC Decision Requiring Procurement to Address Mid-Term Reliability (2023-2026) which was issued on June 24, 2021, PG&E focused on beginning contract negotiations with projects energy storage projects who submitted offers in response to the 2022 Notification. PG&E contacted the IE in mid-June to inform the IE that it had initiated discussions with counterparties that PG&E deemed to be further ahead in the project development process such that the project would have a high probability of being in-service in summer 2022. In addition, PG&E targeted [REDACTED]

[REDACTED] As a result of those discussions, PG&E initiated negotiations with three counterparties for four storage capacity contracts. The IE then began to monitor contract negotiations with these counterparties.

H. PRG/Cam Meeting- July 2, 2021

[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]	[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]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]

I. IE Comments on Executed Offers

[REDACTED]

[REDACTED]

[REDACTED]

- [REDACTED]

- [REDACTED]

- [REDACTED]

[REDACTED]

J. Final Agreements

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

The following sections of the report focus on contractual issues and project-specific negotiations - does the contract merit CPUC approval? Is the contract reasonably priced and does it reflect a functioning market?

VI. Contract Negotiations

For reviewing and evaluating the performance of the utility with regard to specific contract negotiations, the IE has addressed the issues raised in the CPUC Independent Evaluator Report Template. These include:

1. Identify the principles the IE used to evaluate negotiations;
2. Using the above principles, evaluate the project specific negotiations. Highlight any issues of interest/concern including unique terms and conditions;
3. Was similar information/options made available to other bidders when appropriate (i.e., if a bidder was told to reduce its price, was the same information made available to others?);
4. Describe and explain any differences of opinion between the IE and utility. If resolved, describe the reasonableness of the outcome;
5. Any other information relevant to negotiations not asked above but important to understanding the IOU's process.

Principles Used to Evaluate Negotiations

The general principles followed by the IE in evaluating contract negotiations include assurance that the risk allocation provisions in the contract are reasonably balanced between the counterparties and that the utility customers are not placed at undue risk as a result of the contracting process. The IE generally “monitors” but does not actively participate in the contract negotiation process but will identify issues to the utility transactors if negotiations are moving off track or there are potential biases or inconsistencies in the process. The IE also attempts to ensure that similarly situated counterparties are treated the same or similarly and that all counterparties are provided with the same message. For example, PG&E has generally provided a clear message to counterparties in other solicitations (in addition to the 2020 System Reliability RFO – solicitations) that the process is a very competitive process with more projects shortlisted than PG&E intends to execute contracts for. As a result, counterparties should sharpen their pencils and price as competitively as possible.

Consistent with other recent RFPs and given the short lead times associated with completion of Summer 2021 – 2022 Notifications, PG&E has [REDACTED]

[REDACTED]²⁴ [REDACTED]
 [REDACTED]
 [REDACTED]
 [REDACTED]
 [REDACTED]
 [REDACTED]
 [REDACTED]
 [REDACTED]
 [REDACTED]
 [REDACTED]

Table 4: Summary of Contract Provisions for Each Agreement

[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]	[REDACTED] [REDACTED]
[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]

²⁴ PG&E typically reviews comments of Participants to contract provisions and may accept consistent comments or make adjustments to the contract provisions in all similar contracts being negotiated. Once the adjustments are accepted, PG&E’s objective is to develop a “standard contract structure” that all counterparties are encouraged to execute.

[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] [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] 	[REDACTED] 	[REDACTED] 	[REDACTED]

The key provisions of the proforma LTRAA are summarized in Table 5 below.

Table 5: Final Contract Key Provisions

Contract Provisions	Inclusion in Final Contract
[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]
	[REDACTED]
	[REDACTED]
[REDACTED]	[REDACTED]
	[REDACTED]
	[REDACTED]
	[REDACTED]
	[REDACTED]
	[REDACTED]

<p>[REDACTED]</p> <p>[REDACTED]</p>	<p>[REDACTED]</p> <p>[REDACTED]</p> <p>[REDACTED]</p> <p>[REDACTED]</p> <p>[REDACTED]</p> <p>[REDACTED]</p> <p>[REDACTED]</p>
<p>[REDACTED] [REDACTED] [REDACTED]</p> <p>[REDACTED]</p> <p>[REDACTED]</p>	<p>[REDACTED]</p> <p>[REDACTED]</p> <p>[REDACTED]</p> <p>[REDACTED]</p> <p>[REDACTED]</p> <p>[REDACTED]</p> <p>[REDACTED]</p> <p>[REDACTED]</p> <p>[REDACTED]</p> <p>[REDACTED]</p> <p>[REDACTED]</p> <p>[REDACTED]</p>
<p>[REDACTED] [REDACTED] [REDACTED]</p> <p>[REDACTED]</p> <p>[REDACTED]</p>	<p>[REDACTED] [REDACTED] [REDACTED] [REDACTED] [REDACTED] [REDACTED] [REDACTED] [REDACTED]</p> <p>[REDACTED]</p> <p>[REDACTED]</p> <p>[REDACTED]</p> <p>[REDACTED]</p> <p>[REDACTED]</p> <p>[REDACTED]</p> <p>[REDACTED]</p> <p>[REDACTED]</p> <p>[REDACTED]</p>
<p>[REDACTED]</p> <p>[REDACTED]</p> <p>[REDACTED]</p>	<p>[REDACTED]</p> <p>[REDACTED]</p> <p>[REDACTED]</p> <p>[REDACTED]</p> <p>[REDACTED]</p>
<p>[REDACTED]</p> <p>[REDACTED] [REDACTED] [REDACTED] [REDACTED]</p> <p>[REDACTED]</p>	<p>[REDACTED]</p> <p>[REDACTED]</p> <p>[REDACTED]</p> <p>[REDACTED]</p> <p>[REDACTED]</p> <p>[REDACTED]</p> <p>[REDACTED]</p> <p>[REDACTED]</p> <p>[REDACTED]</p> <p>[REDACTED]</p> <p>[REDACTED]</p> <p>[REDACTED]</p>
<p>[REDACTED]</p> <p>[REDACTED]</p>	<p>[REDACTED]</p> <p>[REDACTED]</p> <p>[REDACTED]</p> <p>[REDACTED]</p> <p>[REDACTED]</p> <p>[REDACTED]</p> <p>[REDACTED]</p>

[illegible]

<p>[REDACTED]</p>	<p>[REDACTED]</p>
<p>[REDACTED]</p>	<p>[REDACTED]</p>
<p>[REDACTED]</p>	<p>[REDACTED]</p>
<p>[REDACTED]</p>	<p>[REDACTED]</p>

	<p>[REDACTED]</p> <p>[REDACTED]</p> <p>[REDACTED]</p> <p>[REDACTED]</p> <p>[REDACTED]</p> <p>[REDACTED]</p>
<p>[REDACTED] [REDACTED]</p> <p>[REDACTED]</p>	<p>[REDACTED]</p> <p>[REDACTED]</p> <p>[REDACTED]</p> <p>[REDACTED]</p> <p>[REDACTED]</p>
<p>[REDACTED] [REDACTED]</p> <p>[REDACTED]</p>	<p>[REDACTED]</p> <p>[REDACTED]</p> <p>[REDACTED]</p> <p>[REDACTED]</p> <p>[REDACTED]</p> <p>[REDACTED]</p> <p>[REDACTED]</p>
<p>[REDACTED]</p> <p>[REDACTED]</p>	<p>[REDACTED]</p> <ul style="list-style-type: none"> ■ [REDACTED] ■ [REDACTED] ■ [REDACTED] ■ [REDACTED] ■ [REDACTED] ■ [REDACTED] [REDACTED] [REDACTED] [REDACTED] [REDACTED] [REDACTED]
<p>[REDACTED] [REDACTED]</p> <p>[REDACTED] [REDACTED]</p> <p>[REDACTED]</p>	<p>[REDACTED]</p> <p>[REDACTED]</p> <p>[REDACTED]</p> <p>[REDACTED]</p> <p>[REDACTED]</p> <p>[REDACTED]</p>

²⁵ For LTRAA with Energy Settlement contracts, Section 6.2 Energy Settlement Provisions are included in the contract that illustrates the energy settlement mechanism in the contract.

1. Provide a discussion and observation for each category and describe the project's ranking relative to other bids from the solicitation; and from an overall market perspective;
 - a. Contract price, including cost adders (transmission, credit, etc.)
 - b. Portfolio fit
 - c. Project viability
 - i. Technology
 - ii. Bidder experience (financing, construction, operation)
 - iii. Credit and collateral
 - iv. Permitting, site control and other site-related matters
 - v. Fuel status
 - vi. Transmission upgrades
 - d. Any other relevant factors
2. Based on the complete bid process:
 - a. Does the IOU contract reflect a functioning market?
 - b. Is the IOU contract the best overall offer received by the IOU?
3. Is the contract a reasonable method of achieving the need identified in the RFO?
4. If the contract does not directly reflect a product solicited and bid in an RFO, is the contract superior to the bids received or the products solicited in the RFO?
5. Based on your analysis of the RFO bids and the bid process, does the contract merit Commission approval? Explain

B. Need for Procurement

Through the Summer 2022 Notification process, PG&E is seeking offers for the purchase of incremental capacity to meet the peak and net peak summer 2022 demand. PG&E's procurement target based on the Proposed Decision in Rulemaking 20-11-003 was a minimum of 450 MWs of incremental resources.

Through this 2022 Notification, PG&E has procured 270 MW of long-term energy storage agreements under four contracts with three counterparties with all contracts expected to reach COD by August 1, 2022.

Chapter V of this Report on the Summer 2022 Market Notification provides evidence that the response to the Notification was robust. As illustrated in this section of the IE report, PG&E received [REDACTED] offer variations from [REDACTED] unique projects and [REDACTED] counterparties. [REDACTED]

[REDACTED] The detailed evaluation conducted by PG&E is described primarily in Chapter IV and V of this IE Report. The reasonableness of each of the agreements executed from the viewpoint of its cost competitiveness, as well as project viability and other evaluation criteria, is set forth in the next section of this Report.

C. Contract Pricing and Portfolio Fit

[REDACTED]

[REDACTED]

██████████

[REDACTED]



VIII. Did PG&E Fairly Administer the Evaluation Process?

A. Principles and Guidelines Used to Determine Fairness of Process

In evaluating PG&E's performance in implementing the Summer 2022 Capacity Procurement process, the IE has applied a number of principles and factors, which incorporate those suggested by the Commission's Energy Division in previous Templates as well as additional principles that the IE has used in its oversight of other competitive bidding processes. These include:

- What quantitative factors were used to evaluate offers?
- If applicable, were affiliate offers treated the same as non-affiliate offers?
- Were economic evaluations consistent across offers?
- Was there a reasonable justification for any fixed parameters that enter into the methodology?
- Were all Participants treated the same regardless of the identity of the Participants?
- Were Participants questions answered fairly and consistently and the answers made available to all?
- Did the utility ask for "clarifications" from Participants, and what was the effect, if any, of these clarifications?

In the opinion of the IE, PG&E assessed all offers in a similar manner although the components of the evaluation methodology and elements of the contract negotiation process varied appropriately by resource type. As previously noted, PG&E used reasonable methodologies for assessing each type of offer.

The IE felt that the economic evaluations were consistent across all types of offers, with the objective of the evaluation to assess the benefits and costs of each offer based on Net Market Value.

All offers and Participants were treated fairly and consistently within PG&E's procurement framework. PG&E did use judgement regarding the viability of Participants to be able to deliver the product during the Summer of 2022.

IX. Treatment of Affiliate Bids and UOG Ownership Proposals

For this solicitation, third-party only agreements were expected. PG&E did not include any contract options that envisioned utility ownership possibilities.

X. Conclusions and Observations

Merrimack Energy has the following observations regarding the Summer 2022 Capacity Procurement process based on its role of IE in this process:

1. PG&E implemented the Summer 2022 Capacity Procurement process consistent with Commission Decisions issued in February 2021. PG&E also relied upon the Proposed March 5, 2021 Decision of ALJ Stevens for direction in its Summer 2022 procurement activity, which directed the IOUs to continue their procurement efforts and endeavor to meet and exceed their incremental procurement targets²⁶ to achieve a 17.5% PRM for the summer months. The ALJ's March 25, 2021 Proposed Decision led PG&E to focus on shorter term contracts only. The Proposed Decision of May 21, 2021 regarding the Mid-Term IRP encouraged PG&E to consider longer-term options for new energy storage resources that could be on-line by summer 2022 to both address summer 2022 requirements as well as mid-term requirements identified in the CPUC's Proposed Decision regarding the Mid-Term IRP. The resources executed from the Summer 2022 procurement process reflect this change in procurement strategy by PG&E in response to CPUC decisions;
2. Based on the May 21, 2021 Proposed Decision, PG&E began to engage with long-term storage options which PG&E felt [REDACTED]
[REDACTED]
- 3 [REDACTED]
PG&E did not identify any other offers which it felt met both criteria, with several offers deemed to be possible to meet [REDACTED]
[REDACTED]
[REDACTED]
4. PG&E's Procurement Notification for Summer 2022 capacity resulted in a robust response from the market, particularly given the short lead-time. PG&E received [REDACTED] offer variations, which represented [REDACTED] unique projects from [REDACTED] counterparties

²⁶ As noted, for PG&E this was a 450 MW minimum during the May through October timeframe.

for a total of approximately [REDACTED] MW. Most of the projects submitted were for incremental stand-alone energy storage capacity;

5. PG&E's Notification regarding the procurement process was sent to PG&E's list of potential Participants of over [REDACTED] contacts, including all companies who participated in the System Reliability RFO – Phase 1 and Phase 2 processes;
6. PG&E undertook a quantitative evaluation of the offers submitted consistent with the evaluation process used and identified in the 2020 System Reliability RFO – Phase 1 and 2 Solicitation Protocol. The quantitative evaluation provided a rank order of offers based on [REDACTED]
[REDACTED]
[REDACTED]
[REDACTED]
7. The IE concludes that the process was undertaken in a fair and equitable manner and all Participants were treated equally under the unique nature of the emergency procurement solicitations.²⁷ The IE received no complaints or criticisms about the process;
8. PG&E's process resulted in executing agreements for up to [REDACTED]
[REDACTED] from new incremental resources. As a result, PG&E's procurement is consistent with the dual objectives of improving system reliability for summer 2022 while meeting the longer-term procurement requirements mandated in the Mid-Term IRP process;

[REDACTED] Based on the foregoing, it appears to the IE [REDACTED]
[REDACTED]
[REDACTED]
[REDACTED]
[REDACTED]
[REDACTED]

[REDACTED] Given the unique requirements of this solicitation, the IE recommends approval of
[REDACTED]
[REDACTED]
[REDACTED]
[REDACTED]
[REDACTED]
[REDACTED]
[REDACTED]
[REDACTED]

²⁷ Given the unique nature of this solicitation, PG&E did accept offers that were submitted after the established offer due date. However, both PG&E and the IE felt that for this solicitation all options should be considered and not eliminated if submitted after the due date.

[REDACTED]

[illegible]

**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
Semptra 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