

PUBLIC UTILITIES COMMISSION  
505 Van Ness Avenue  
San Francisco CA 94102-3298



**Pacific Gas & Electric Company**  
**ELC (Corp ID 39)**  
**Status of Advice Letter 6914E**  
**As of November 22, 2023**

Subject: Contract Term Amendments to Hummingbird Energy Storage Agreement

Division Assigned: Energy

Date Filed: 04-11-2023

Date to Calendar: 04-17-2023

Authorizing Documents: None

**Disposition:**

**Signed**

**Effective Date:**

**09-21-2023**

Resolution Required: Yes

**Resolution Number: E-5273**

Commission Meeting Date: 9-21-2023

CPUC Contact Information:

[edtariffunit@cpuc.ca.gov](mailto:edtariffunit@cpuc.ca.gov)

AL Certificate Contact Information:

Stuart Rubio

415-973-4587

[PGETariffs@pge.com](mailto:PGETariffs@pge.com)

**PUBLIC UTILITIES COMMISSION**  
505 Van Ness Avenue  
San Francisco CA 94102-3298



To: Energy Company Filing Advice Letter

From: Energy Division PAL Coordinator

Subject: Your Advice Letter Filing

The Energy Division of the California Public Utilities Commission has processed your recent Advice Letter (AL) filing and is returning an AL status certificate for your records.

The AL status certificate indicates:

- Advice Letter Number
- Name of Filer
- CPUC Corporate ID number of Filer
- Subject of Filing
- Date Filed
- Disposition of Filing (Accepted, Rejected, Withdrawn, etc.)
- Effective Date of Filing
- Other Miscellaneous Information (e.g., Resolution, if applicable, etc.)

The Energy Division has made no changes to your copy of the Advice Letter Filing; please review your Advice Letter Filing with the information contained in the AL status certificate, and update your Advice Letter and tariff records accordingly.

All inquiries to the California Public Utilities Commission on the status of your Advice Letter Filing will be answered by Energy Division staff based on the information contained in the Energy Division's PAL database from which the AL status certificate is generated. If you have any questions on this matter please contact the:

Energy Division's Tariff Unit by e-mail to  
**[edtariffunit@cpuc.ca.gov](mailto:edtariffunit@cpuc.ca.gov)**

April 11, 2023

**Advice 6914-E**

(Pacific Gas and Electric Company ID U 39 E)

Public Utilities Commission of the State of California

**Subject: Contract Term Amendments to Hummingbird Energy Storage Agreement****I. Purpose**

Pacific Gas and Electric Company (PG&E or Utility) respectfully submits this advice letter seeking California Public Utilities Commission (CPUC or Commission) approval of an Amendment to a contract in PG&E's existing energy supply portfolio. The Amendment is to an energy storage capacity Agreement with an energy storage provider arising out of PG&E's Local Sub-Area Energy Storage Request for Offers (LSA ES RFO). The storage agreement is with Hummingbird Energy Storage, LLC (Hummingbird). This Advice Letter refers to the original Energy Storage Resource Adequacy Agreement and the amendments together as the "Agreement" and to the Amendment to the Agreement as the "Amendment". In the Amendment, PG&E agrees, subject to Commission approval, to amend the Agreement to allow for a new Initial Delivery Date of September 1, 2024 for delivery to begin under the Agreement, an increase in price, and an extension of the contract term, by six months, to sixteen and one half years. PG&E also makes modifications to project development security and "holdback" language consist with its updated contracts in the Mid-Term Reliability (MTR) proceeding. For the reasons described in this Advice Letter, the Amendment is reasonable and in the interest of customers, and thus should be approved. PG&E respectfully requests that the Commission issue a Final Resolution on this Advice Letter by no later than August 8, 2023, which is 120 days from the submittal date of this advice letter, in order to provide certainty to the parties going forward as to whether the Amendment is effective and to allow the development of the project to continue.

**II. Background**

PG&E issued its LSA ES RFO in February 2018 in compliance with Commission Resolution E-4909. That Resolution had directed PG&E to procure energy storage and/or preferred resources in certain local sub-areas. PG&E executed the Energy Storage Resource Adequacy Agreement with Hummingbird as a result of the LSA ES RFO. PG&E submitted Advice Letter 5322-E on June 29, 2018 seeking approval of the Agreement and three other energy storage agreements resulting from the LSA ES RFO. The Commission issued Resolution E-4949 on October 25, 2018 approving each of the LSA

ES RFO contracts. The Hummingbird Agreement was amended in July 2019 and the amendment was approved by Commission Resolution E-5027 on November 7, 2019. That amendment reduced the price and delayed the online date from December 2020 to December 2021. The contract was further amended in 2021, which further amendment was to delay the online date from 2021 to 2023, and to extend the term by 6 months. That second amendment was approved by Resolution E-5178 on December 16, 2021.

esVolta informed PG&E in May 2022 that the Hummingbird Energy Storage, LLC project was at risk of default due to expected transmission and permitting delays, as well as the unprecedented increase in battery costs and other factors. esVolta approached PG&E with a request to amend the Agreement in order to avoid a default under the Agreement and maintain the commercial viability of the project.

### **A. Negotiation Background**

Since the last amendment to the Agreement was executed with esVolta in 2021, there have been unprecedented industry-wide market changes and inflationary pressure on project costs. esVolta requested an amendment to the Agreement and a price increase in order for Hummingbird to remain commercially viable. The main drivers cited for the increased costs include:

- Battery prices have risen significantly due to dramatic increases in commodity prices for lithium carbonate and metals used in manufacturing lithium-ion batteries, impacting both initial construction cost and ongoing augmentation costs to maintain capacity;
- Continued supply chain constraints;
- Balance of systems costs have been increasing due to high inflation affecting materials and labor costs;
- Cost of capital has been increasing as the Federal Reserve has been raising interest rates to combat inflation;
- Insurance costs have risen dramatically.

esVolta argues that the same industry-wide supply chain pressures necessitating a price increase also resulted in project delays—particularly the availability of major procurement items including the batteries, transformer, and switchgear. As a result of these market changes, esVolta states that it has successfully restructured and executed all major procurement contracts. Second, the City of San Jose building permitting process was slowed significantly after the overheating and shutdown of the nearby Moss Landing battery project. As a result, the City required additional layers of review including the addition of new third-party consultants to assist in that review as well as additional detail on system safety, all of which esVolta states has now been provided by esVolta to the City. Finally, transmission upgrades necessary to interconnect the project are now expected to be complete in February 2024.

Absent the price changes and extension in delivery date, esVolta has expressed that it would not be able to build the project, and it would likely default under the contract.

## B. SUMMARY OF AMENDED CONTRACT

The main terms of the Agreement, as amended by the Amendment, are as follows:

	Technology	Initial Delivery Date	Term (Years)	Nameplate Size (MW)
Hummingbird Energy Storage, LLC	Lithium Ion Batteries	9/1/2024	16.5	75

The new Initial Delivery Date represents a delay of 14 months from the prior Initial Delivery Date of July 1, 2023. See confidential Attachment A for a description of the Amendment.

### III. Procurement Review Group/Cost Allocation Mechanism

PG&E notified the Procurement Review/CAM Group about the Amendments on March 17, 2023, and no comments on the proposed amendments were received.

### IV. Impact of Amendment on Cost Recovery

The costs incurred by PG&E pursuant to the Agreement have been approved for recovery from bundled customers and through applicable non-bypassable charges from departed load customers. This section of the Advice Letter summarizes the cost recovery mechanisms already approved. In the absence of explicit findings or orders in the Commission's Resolution of this Advice Letter to the contrary, PG&E will deem approval of this Advice Letter to authorize the continued recovery of costs incurred under the amended Agreement as authorized by the Commission in the past and as summarized in this section. This is appropriate because the Amendment supporting the continued development of the underlying resource will benefit all customers, both bundled and departed load.

#### A. Energy Storage Agreement Recovery through the Cost Allocation Mechanism (CAM)

In approving the energy storage Agreement at issue in this Advice Letter, the Commission found: "Ongoing and future local reliability concerns warrant CAM treatment of this storage procurement."<sup>1</sup> On that basis, the Commission approved PG&E's proposal to recover the net capacity costs of the storage Agreement through CAM,<sup>2</sup> which includes allocating the costs to all benefitting load-serving entities on a load-share basis. The amended energy storage Agreement will continue to address

<sup>1</sup> Resolution E-4949, p.42 (Finding 16)

<sup>2</sup> See *id.*, pp.3, (Order 5)

local reliability concerns in the South Bay-Moss Landing (SBML) sub-area and will provide system benefits as well, and therefore should continue to be recovered through CAM. As was true when Resolutions E-4909, E-4949, E-5027, and E-5178 were adopted, these long-term contracts are intended to obviate the need for additional backstop procurement and prevent the possible exercise of market power. In the event that one or more of the existing local generating stations in the South Bay Moss Landing sub-area were to become unavailable in the future, the Hummingbird energy storage contract will reduce or eliminate the need for backstop procurement in the SBML sub-area. The benefit of the Hummingbird energy storage contract originally identified in Advice Letter 5322-E, and reiterated in Advice Letters 5607-E and 5178-E, will remain intact following the requested extension of the on-line date. The later online date will increase the projects' likelihood of achieving successful completion and realizing the intended benefits. The additional time and costs are necessary and reasonable in light of recent market developments.

## **V. 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 Decision (D.) 08-04-023 establishing 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. The Declaration of Don Howerton seeking confidential treatment of confidential materials provided herein is being submitted concurrently with this advice letter.

## **VI. Request for Commission Approval (Copied from the other)**

PG&E requests that the Commission issue a Final Resolution no later than August 8, 2023, which is 120 days from the submittal date of this advice letter, that:

1. Approves the Amendment in its entirety, including payments to be made by PG&E pursuant to the Agreement as amended by the Amendment, subject to the Commission's review of PG&E's administration of the Amendment.
2. Finds that all procurement and administrative costs, as provided by Public Utilities Code section 399.13(g), associated with the Agreement as amended by the Amendment shall be recovered in rates.
3. Adopts the following finding of fact and conclusion of law in support of CPUC Approval:
  - a. The terms of the Amendment are reasonable.
4. Adopts the following findings of fact and conclusions of law in support of cost recovery for the energy storage Agreement as amended by the Amendment:
  - a. The Utility's payments under the amended Hummingbird energy storage Agreement shall continue to be recovered through the CAM in PG&E's Energy Resource Recovery Account.

**Confidential Appendices**

- Appendix A: Detailed Summary of Amended Terms and Conditions and Negotiation Process
- Appendix B: Executed Amendment

**VII. Protests**

Anyone wishing to protest this submittal may do so by letter sent electronically via E-mail, no later than May 1, 2023, which is 20 days after the date of this submittal. Protests must be submitted to:

CPUC Energy Division  
ED Tariff Unit  
E-mail: EDTariffUnit@cpuc.ca.gov

The protest shall also be electronically sent to PG&E via E-mail at the address shown below on the same date it is electronically delivered to the Commission:

Sidney Bob Dietz II  
Director, Regulatory Relations  
c/o Megan Lawson  
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 and 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 General Order (GO) 96-B, Rule 5.3, this advice letter is submitted with a Tier 3 designation. PG&E requests that this advice letter become effective upon Commission approval.

**IX. Notice**

In accordance with General Order 96-B, Section IV, a copy of this advice letter is being sent electronically to parties shown on the attached list and the parties on the service list for 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





# ADVICE LETTER SUMMARY

## ENERGY UTILITY



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

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

Utility type:

- ELC       GAS       WATER  
 PLC       HEAT

Contact Person: Stuart Rubio

Phone #: 415-973-4587

E-mail: PGETariffs@pge.com

E-mail Disposition Notice to: stuart.rubio@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) #: 6914-E

Tier Designation: 3

Subject of AL: Contract Term Amendments to Hummingbird Energy Storage Agreement

Keywords (choose from CPUC listing): Compliance

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: N/A

Confidential treatment requested?  Yes  No

If yes, specification of confidential information: see confidential declaration and matrix  
 Confidential information will be made available to appropriate parties who execute a  
 nondisclosure agreement. Name and contact information to request nondisclosure agreement/  
 access to confidential information: Mark Muranishi, Mark.Muranishi@pge.com

Resolution required?  Yes  No

Requested effective date:

No. of tariff sheets: 0

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

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

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

Tariff schedules affected: N/A

Service affected and changes proposed<sup>1</sup>: N/A

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

<sup>1</sup>Discuss in AL if more space is needed.

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

California Public Utilities Commission  
Energy Division Tariff Unit Email:  
[EDTariffUnit@cpuc.ca.gov](mailto:EDTariffUnit@cpuc.ca.gov)

Contact Name: Sidnev Bob Dietz II. c/o Megan Lawson  
Title: Director, Regulatory Relations  
Utility/Entity Name: Pacific Gas and Electric Company  
  
Telephone (xxx) xxx-xxxx: (415)973-2093  
Facsimile (xxx) xxx-xxxx:  
Email: PGETariffs@pge.com

Contact Name:  
Title:  
Utility/Entity Name:  
  
Telephone (xxx) xxx-xxxx:  
Facsimile (xxx) xxx-xxxx:  
Email:

CPUC  
Energy Division Tariff Unit  
505 Van Ness Avenue  
San Francisco, CA 94102

Clear Form

**BEFORE THE PUBLIC UTILITIES COMMISSION  
OF THE STATE OF CALIFORNIA**

**PACIFIC GAS AND ELECTRIC COMPANY  
ADVICE LETTER FOR APPROVAL OF CONTRACT  
TERM AMENDMENTS TO HUMMINGBIRD ENERGY  
STORAGE AGREEMENT**

**DECLARATION OF MARK MURANISHI  
SEEKING CONFIDENTIAL TREATMENT  
FOR CERTAIN DATA AND INFORMATION  
CONTAINED IN PG&E'S ADVICE LETTER**

I, Mark Muranishi, declare:

1. I am a Director in the Structed Energy Transactions Department 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 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 data and information contained in PG&E's Advice Letter for approval of contract term amendments to Hummingbird Energy Storage Agreement.

3. Attached to this declaration is a matrix identifying the data and information for which PG&E is seeking confidential treatment. The matrix specifies that the material PG&E is seeking to protect constitutes confidential market sensitive data and information covered by D.06-06-066, Appendix 1, and Public Utilities Code §454.5(G). 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 April 11, 2023 at Oakland, California.

/s/

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Mark Muranishi

**PACIFIC GAS AND ELECTRIC COMPANY (U 39 E)**

**ADVICE LETTER FOR APPROVAL OF CONTRACT TERM AMENDMENTS TO  
HUMMINGBIRD ENERGY STORAGE AGREEMENT**

April 11, 2023

**IDENTIFICATION OF CONFIDENTIAL INFORMATION**

<b>Redaction Reference</b>	<b>Category from D.06-06-066, Appendix 1, or Separate Confidentiality Order That Data Corresponds To</b>	<b>PG&amp;E's Justification for Confidential Treatment</b>	<b>Length of Time</b>
<b>Confidential Appendices</b>			
Appendix A: Detailed Summary of Amended Terms and Conditions and Negotiation Process	Item VII.B (Contracts and Power Purchase Agreements between utilities and non-Affiliated Third Parties (except RPS)), VIII.B (Competitive Solicitation (Bidding) Information – Electric)	The terms of the Long-Term Resource Adequacy Agreement presented in this appendix are generally confidential.	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: Executed Amendment	Item VII.B (Contracts and Power Purchase Agreements between utilities and non-Affiliated Third Parties (except RPS)), VIII.B (Competitive Solicitation (Bidding) Information – Electric).	The terms of the Long-Term Resource Adequacy Agreement presented in this appendix are generally confidential.	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 A**

Detailed Summary of Amended Terms and Conditions and  
Negotiation Process

(Confidential)

# **Appendix B**

Executed Amendment

(Confidential)

**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.  
Braun Blaising Smith Wynne, P.C.  
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  
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  
Downey Brand LLP  
Dish Wireless L.L.C.

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

GenOn Energy, Inc.  
Green Power Institute  
Hanna & Morton  
ICF

iCommLaw  
International Power Technology  
Intertie

Intestate Gas Services, Inc.

Johnston, Kevin  
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  
McClintock IP  
McKenzie & Associates

Modesto Irrigation District  
NLine Energy, Inc.  
NRG Solar

OnGrid Solar  
Pacific Gas and Electric Company  
Peninsula Clean Energy

Pioneer Community Energy

Public Advocates Office

Redwood Coast Energy Authority  
Regulatory & Cogeneration Service, Inc.

Resource Innovations

SCD Energy Solutions  
San Diego Gas & Electric Company

SPURR  
San Francisco Water Power and Sewer  
Sempra Utilities

Sierra Telephone Company, Inc.  
Southern California Edison Company  
Southern California Gas Company  
Spark Energy  
Sun Light & Power  
Sunshine Design  
Stoel Rives LLP

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