

A1803001

BEFORE THE PUBLIC UTILITIES COMMISSION OF THE STATE OF CALIFORNIA

Application of Pacific Gas and Electric Company (U 39-E) for Approval of its 2018 Energy Storage Procurement and Investment Plan

Application No. 18-03-____

(U39-E)

APPLICATION OF PACIFIC GAS AND ELECTRIC COMPANY (U 39-E) FOR APPROVAL OF ITS 2018 ENERGY STORAGE PROCUREMENT AND INVESTMENT PLAN

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I. INTRODUCTION AND SUMMARY

The purpose of this application is to seek California Public Utilities Commission (Commission) approval of Pacific Gas and Electric Company's (PG&E) 2018 Energy Storage Procurement and Investment Plan. That plan has two components. First, pursuant to the requirements of Decision (D.)13-10-040 (Energy Storage Decision) as well as subsequent Commission decisions, PG&E is seeking approval of its 2018 Assembly Bill (AB) 2514 Energy Storage Procurement Plan, covering the 2018-2019 biennial procurement period.

Second, pursuant to D.17-04-039, PG&E is seeking approval of its proposed 2018 AB 2868 Storage Investments and Programs.

II. PG&E'S 2018 AB 2514 ENERGY STORAGE PROCUREMENT PLAN

A. Summary Of Proposal

As was the case with the 2014 and 2016 Plans, the focal point of PG&E's 2018 AB 2514 Energy Storage Procurement Plan is an energy storage request for offers (Energy Storage RFO). PG&E seeks approval of the proposed RFO framework, and authority to move forward with its proposed 2018 Energy Storage RFO on December 1, 2018.

PG&E's proposed 2018 AB 2514 Energy Storage Procurement Plan is consistent with the Energy Storage Procurement Framework established in the Energy Storage Decision and refined in subsequent Commission decisions. Therefore, for the reasons set forth in PG&E's supporting testimony, PG&E requests that the Commission approve the 2018 AB 2514 Energy Storage Procurement Plan component of this application.

B. Background

In response to AB 2514, The Commission issued the Energy Storage Decision adopting the Commission's AB 2514 Energy Storage Procurement Framework. The Energy Storage Decision adopted biennial storage procurement targets for each of the three investor-owned utilities (IOUs), and required the IOUs to file applications, on a biennial basis, proposing two-year energy storage procurement plans. The first plan was to be filed by March 1, 2014, and subsequent biennial plans were to be filed every two years thereafter, through 2020. Subsequent to the Energy Storage Decision, the Commission has refined its AB 2514 Energy Storage Procurement Framework in subsequent decisions.

PG&E filed its first biennial storage procurement plan in Application (A.)14-02-007. PG&E was authorized to move forward with its 2014 Energy Storage RFO in D.14-12-004. PG&E filed its second biennial storage procurement plan in A.16-03-001, and PG&E was authorized to move forward with its 2016 Energy Storage RFO in D.16-09-007.

This application sets forth PG&E's third biennial storage procurement plan, covering 2018-2019, and requests the Commission to approve it.

PG&E presented the results of its 2014 Energy Storage RFO to the Commission for approval in two applications, A.15-12-004 and A.16-04-024. The Commission addressed those applications in D.16-16-09-004 and D.16-12-004, respectively, approving some but not all of the storage agreements and projects resulting from PG&E's 2014 Energy Storage RFO. PG&E

presented the results of its 2016 Energy Storage RFO to the Commission for approval in D.17-12-003. That application is pending before the Commission.

As PG&E describes in this application, assuming that the Commission approves the agreements in A.17-12-003, PG&E remains on track to meet its storage targets through 2016.

C. Relief Requested By This Application With Respect To PG&E's Proposed 2018 AB 2514 Energy Storage Procurement Plan

In this application PG&E requests the Commission to issue an order that:

- PG&E has complied with D.13-10-040, Ordering Paragraph 4 by filing this application;
- PG&E is authorized to issue its 2018 Energy Storage RFO on December 1, 2018;
- PG&E has correctly identified its existing eligible energy storage credits counting toward its storage targets adopted in D.13-10-040;
- The safety requirements in PG&E's 2018 Energy Storage RFO protocol for a project's RFO participation, evaluation methodology for shortlisting, and terms and conditions for the provision of energy storage services are reasonable;
- PG&E is authorized to recover the costs of its 2018 Energy Storage RFO procurement using the same ratemaking mechanisms that have been approved for its 2016 Energy Storage RFO;
- PG&E's deadline to request deferment of storage targets is postponed until PG&E files its application for approval of its 2018 Energy Storage RFO procurement; and
- Grants PG&E such additional relief as the Commission deems appropriate.

D. Description Of Supporting Materials

In support of this application, PG&E is submitting supporting testimony. In addition, this application contains the following additional information, required by the Commission's adopted Energy Storage Procurement Framework, which is not explicitly set forth in the supporting testimony:

- Reference to 1) needs study by the California Independent System Operator for PG&E's system, local, and flexible needs, and 2) upgrade needs identified in PG&E's transmission or distribution planning studies; and
- A list of all applicable rules and statutes impacting PG&E's procurement plan.

1. Supporting Testimony

PG&E is submitting supporting testimony consisting of six chapters, several attachments, and an appendix. Due to its size, one of the attachments, the 2018 Energy Storage RFO Protocol, which is Attachment A to Chapter 3, is separately bound.

Following is an overview of the supporting testimony.

Chapter 1 – Overview and Policy – Chapter 1 provides a brief overview of PG&E's proposed 2018 Energy Storage Procurement Plan, and a brief summary of the remaining chapters of testimony.

Chapter 2 – Report on Existing And Eligible Storage Resources – Chapter 2 contains a discussion of existing and eligible resources. It also outlines PG&E's offsets to apply to this year's and future years' procurement targets.

Attachment 2A – Storage Resources Procured to Date in All Commission Proceedings

Chapter 3 – Intended Procurement of Energy Storage Resources – Chapter 3 presents descriptions of the storage resources PG&E intends to procure. It also contains the potential procurement avenues permitted by the Energy Storage Program and the ownership options PG&E may pursue.

Attachment 3A – 2018 Energy Storage Request for Offers Solicitation Protocol (bound separately)

Chapter 4 – Operational Requirements for Energy Storage Resources – Chapter 4 contains a discussion of the operational requirements for an energy storage resource as defined by the products or uses that a resource may offer.

Chapter 5 – Evaluation Methodology – Chapter 5 provides detail on the evaluation methodology PG&E will use to select energy storage projects. This chapter also includes the Consistent Evaluation Protocol used for reporting and benchmarking purposes.

Attachment 5A – Consistent Evaluation Protocol Spreadsheet

Chapter 6 – Recovery of Energy Storage Costs – Chapter 6 presents the rate mechanisms PG&E will use to recover the costs of energy storage projects procured.

Appendix A – Statement of Qualifications

2. Additional Information Required By Decision 13-10-040

a. Reference To Needs Studies And Analysis

As noted above, the Commission's adopted Energy Storage Procurement Framework requires that PG&E's energy storage procurement plan make reference to 1) needs study by the California Independent System Operator for PG&E's system, local, and flexible needs, and 2) upgrade needs identified in PG&E's transmission or distribution planning studies.

In this application, PG&E has not proposed to solicit projects specifically aimed at addressing system, local, and flexible needs identified by the California Independent System Operator (CAISO). However, the resource adequacy (RA) value of the resources that PG&E procures will go toward meeting those identified needs.

PG&E may solicit projects specifically aimed at addressing transmission or distribution reliability needs identified in PG&E's transmission planning studies. Any such solicitation will be clearly identified in the solicitation materials the PG&E provides when it issues its 2018 Energy Storage RFO.

b. List Of Applicable Rules And Statutes

As noted above, the Commission's adopted Energy Storage Procurement Framework requires that PG&E provide a list of all applicable rules and statutes impacting PG&E's procurement plan. Appendix A to this application provides a list of Commission decisions and California legislation directly relating to PG&E's proposed 2018 Energy Storage Procurement Plan.

III. PG&E'S PROPOSED 2018 AB 2868 ENERGY STORAGE INVESTMENTS AND PROGRAMS

A. Summary Of Proposal

PG&E's proposed 2018 AB 2868 Storage Investments and Programs include four categories of distribution-connected storage investments. PG&E's proposal provides that as PG&E identifies any specific investment within a category, it will submit a Tier 3 advice letter to the Commission seeking approval to move forward with the identified investment, up to the 166.66 megawatt (MW) statutory cap. As one part of its AB 2868 efforts, PG&E has identified a near-term opportunity to improve resiliency with the North Bay Wildfire rebuilding efforts, and is exploring the role that distributed energy storage can play in wildfire safety and resiliency.

PG&E's proposed 2018 AB 2868 Storage Investments and Programs also include one behind-the-retail-meter (BTM) storage program, for up to five MW of BTM thermal storage. PG&E requests Commission authority to spend up to \$6.4 million in connection with this program during the period from 2019 through 2025. PG&E's proposal provides that prior to moving forward with the program, PG&E will submit a Tier 3 advice letter with the Commission providing additional program details, and seeking final approval to move forward with the program.

Finally, PG&E's proposed 2018 AB 2868 Storage Investments and Programs also requests that PG&E be authorized to move forward with additional investments, beyond the categories of investments identified in this application, by filing a subsequent application for approval of additional categories of investments and programs, subject to PG&E's overall AB 2868 limit of 166.66 MW

PG&E's proposed 2018 AB 2868 Storage Investments and Programs are consistent with AB 2868, and the Commission's directives in D.17-04-039. Therefore, for the reasons set forth in PG&E's supporting testimony, PG&E requests that the Commission approve the 2018 AB 2868 Storage Investments and Programs component of this application.

B. Background

AB 2868, signed into law on September 26, 2016, adds Sections 2838.2 and 2838.3 to the Public Utilities Code. It directs the Commission, in consultation with the California Air Resources Board and the Energy Commission, to direct the three IOUs to file applications for programs and investments to accelerate widespread deployment of distributed energy storage systems to achieve ratepayer benefits, reduce dependence on petroleum, meet air quality standards, and reduce emissions of greenhouse gases. The total capacity of the programs and investments in distributed energy storage systems approved by the Commission pursuant to AB 2868 is not to exceed 500 MW, divided equally among PG&E, Southern California Edison (SCE), and San Diego Gas & Electric (SDG&E).

In accordance with AB 2868, in D.17-04-039 the Commission directed the IOUs to file applications for programs and investments to accelerate widespread deployment of distributed energy storage systems, above and beyond the 1,325 MW AB 2514 target. The Commission directed PG&E, SCE, and SDG&E to each incorporate proposals for programs and investments for up to 166.66 MW of distributed energy storage systems into their 2018 energy storage procurement plans.

D.17-04-039 required the IOUs to hold at least two public workshops and a preview session in consultation with Commission staff to solicit feedback from stakeholders on definitions of terms, evaluating projects against the statutory criteria, and the IOUs' proposals for distributed energy storage systems. The two workshops and the preview session were held jointly between PG&E, SCE, and SDG&E at the Commission's San Francisco office on September 14, October 17, and December 15, 2017, respectively.

The IOUs were also required to file quarterly compliance reports to the Commission beginning August 1, 2017. PG&E provided quarterly compliance reports on August 1 and November 1, 2017, and February 1, 2018.

C. Relief Requested By This Application With Respect To PG&E's Proposed 2018 AB 2868 Energy Storage Investments and Programs

In this application PG&E requests the Commission to issue an order that:

- PG&E has complied with D.17-04-039, Ordering Paragraphs 1 through 4 by its previous activities outlined in the preceding section of this application, and by filing this application;
- PG&E is authorized to move forward with its AB 2868 Storage Investments and Programs by filing subsequent Tier 3 advice letters for approval of specific investments consistent with the categories of investments PG&E has identified, subject to PG&E's overall AB 2868 limit of 166.66 MW;
- PG&E is authorized to move forward with its AB 2868 Storage Investments and Programs by spending up to \$6.4 million in connection with PG&E's proposed behind-the-retail-meter thermal storage program during the period from 2019 to 2025, subject to filing a subsequent Tier 3 advice letter for final approval of PG&E's program, and subject to a program cap of 5 MW;
- PG&E is authorized to move forward with its AB 2868 Storage Investments and Programs by filing a subsequent application for approval of additional categories of investments and programs that PG&E identifies in the future, subject to PG&E's overall AB 2868 limit of 166.66 MW;
- PG&E is authorized to recover the costs of its proposed AB 2868 Storage Investments and Programs using the ratemaking mechanisms that PG&E proposes in this application for each category of investment, and for the behind-the-meter program; and
- Grants PG&E such additional relief as the Commission deems appropriate.

D. Description Of Supporting Materials

In this application, PG&E is submitting supporting testimony consisting of nine chapters and an appendix.

Following is an overview of the supporting testimony.

Chapter 1 – Overview – Chapter 1 provides a brief overview of AB 2868, D.17-04-039 as it relates to AB 2868, and of the remaining chapters of PG&E's testimony.

Chapter 2 – Policy – Chapter 2 provides an overview of PG&E's proposed AB 2868 investments and programs, including a summary of PG&E's proposed cost recovery for each of the investments and programs.

Chapter 3 – Investment in Energy Storage to Support Customer and Community

Resiliency – Chapter 3 contains a description of PG&E's proposed investments in energy storage to support customer and community resiliency.

Chapter 4 – Investment in Energy Storage to Meet Local Capacity Requirements – Chapter 4 contains a description of PG&E's proposed investments in energy storage at PG&E substations to serve peak load.

Chapter 5 – Investment in Energy Storage to Support and Improve System

Reliability – Chapter 5 contains a description of PG&E's proposed investments in energy storage to support distribution reliability.

Chapter 6 – Investment in Energy Storage to Support Transportation

Electrification – Chapter 6 contains a description of PG&E's proposed investments in energy storage to support electric vehicle charging infrastructure.

Chapter 7 – Behind the Meter Thermal Storage – Chapter 7 contains a description of PG&E's proposed program for BTM thermal storage via customer water heaters.

Chapter 8 – Evaluation Methodology – Chapter 8 provides an overview of the methodology that PG&E will use to evaluate third party offers for energy storage projects.

Chapter 9 – Recovery of Energy Storage Costs – Chapter 9 presents the rate mechanisms PG&E proposes to use to recover the costs of its proposed distributed energy storage project investments and programs.

Appendix A – Statement of Qualifications

IV. COMPLIANCE WITH THE COMMISSION'S RULES OF PRACTICE AND PROCEDURE

A. Legal Name and Principal Place of Business (Rule 2.1(a))

The Applicant's legal name is Pacific Gas and Electric Company. PG&E's principal place of business is 77 Beale Street, B30A, San Francisco, California. Its post office address is P.O. Box 7442, San Francisco, California, 94120-7422. PG&E is a corporation organized under the laws of the State of California.

B. Correspondence and Communication Regarding This Application (Rule 2.1(b))

Correspondence regarding this Application should be directed to the following PG&E representatives in this matter:

Jessica Tellez Mark R. Huffman Energy Supply Proceedings Law Department

Pacific Gas and Electric Company

Pacific Gas and Electric Company

P.O. Box 770000 P.O. Box 7442

San Francisco, CA 94177-0001 San Francisco, CA 94120-7442 Telephone: (415) 973-5457 Telephone: (415) 973-3842 Facsimile: (415) 973-3574 Facsimile: (415) 973-5520

E-Mail: <u>Jessica.Tellez@pge.com</u> E-Mail: <u>Mark.Huffman@pge.com</u>

C. Proposed Categorization (Rule 2.1(c))

PG&E proposes that this application be categorized as a ratesetting proceeding.

D. Need for Hearing (Rule 2.1(c))

PG&E does not anticipate the need for an evidentiary hearing.

E. Issues To Be Considered (Rule 2.1(c))

The following issues should be considered in the proceeding: Whether

- PG&E has complied with D.13-10-040, Ordering Paragraph 4 by filing this application?
- PG&E is authorized to issue its 2018 Energy Storage RFO on December 1, 2018?
- PG&E has correctly identified its existing eligible energy storage credits counting toward its storage targets adopted in D.13-10-040?

- The safety requirements in PG&E's 2018 Energy Storage RFO protocol for a project's RFO participation, evaluation methodology for shortlisting, and terms and conditions for the provision of energy storage services are reasonable?
- PG&E is authorized to recover the costs of its 2018 Energy Storage RFO procurement using the same ratemaking mechanisms that have been approved for its 2016 Energy Storage RFO?
- PG&E's deadline to request deferment of storage targets is postponed until PG&E files its application for approval of its 2018 Energy Storage RFO procurement?
- PG&E has complied with D.17-04-039, Ordering Paragraphs 1 through 4 by its previous activities outlined in the preceding section of this application, and by filing this Application?
- PG&E is authorized to move forward with its AB 2868 Storage Investments and Programs by filing subsequent Tier 3 advice letters for approval of specific investments consistent with the categories of investments PG&E has identified, subject to PG&E's overall AB 2868 limit of 166.66 MW?
- PG&E is authorized to move forward with its AB 2868 Storage Investments and Programs by spending up to \$6.4 million in connection with PG&E's proposed behind-the-retail-meter thermal storage program during the period from 2019 to 2025, subject to filing a subsequent Tier 3 advice letter for final approval of PG&E's program, and subject to a program cap of 5 MW?
- PG&E is authorized to move forward with its AB 2868 Storage Investments and Programs by filing a subsequent application for approval of additional categories of investments and programs that PG&E identifies in the future, subject to PG&E's overall AB 2868 limit of 166.66 MW?
- PG&E is authorized to recover the costs of its proposed AB 2868 Storage Investments and Programs using the ratemaking mechanisms that PG&E proposes in this application for each category of investment, and for the behind-the-meter program?

F. Proposed schedule (Rule 2.1(c))

PG&E respectfully requests that the Commission approve this Application as soon as practicable, but no later than September 27, 2018. This date is reasonable, given the limited scope of this Application, stakeholder familiarity with the Energy Storage RFO process, consideration of the time that may be needed for PG&E to conform its RFO materials to the Commission's decision, and the benefit of circulating the RFO materials to the public prior to formal issuance of the 2016 Energy Storage RFO on December 1, 2018.

Proposed Schedule

Activity	Date
Application Filed	March 1, 2018
Application Noticed	March 2, 2018
Responses Filed	April 2, 2018 (next business day after April 1, 2018)
PG&E's Reply to Responses	April 12, 2016
Pre-Hearing Conference	May 1, 2018
Scoping Memo	May 15, 2018
Evidentiary Hearing	None
Concurrent Opening Briefs Due	May 29, 2018
Concurrent Reply Briefs Due	June 12, 2018
ALJ Proposed Decision Issued	August 28, 2018
Commission Vote	September 27, 2018

G. Organization and Qualification to Transact Business (Rule 2.2)

PG&E is, and since October 10, 1905 has been, an operating public utility corporation organized under California law. It is engaged principally in the business of furnishing electric and gas services in California. A certified copy of PG&E's Restated Articles of Incorporation, effective April 12, 2004, is on record before the Commission in connection with PG&E's Application 04-05-005, filed with the Commission on May 3, 2004. These articles are incorporated herein by reference pursuant to Rule 2.2 of the Commission's Rules.

H. Authority to Increase Rates (Rule 3.2)

This application requests an increase in electric rates and is not a general rate increase application, so Rule 3.2 applies except for subsections (4), (6), (7), (8), and (9) of Rule 3.2(a).

I. Balance Sheet and Income Statement (Rule 3.2(a)(1))

PG&E's Balance Sheet and Income Statements for the period ending December 31, 2017 are attached as Exhibit B of this Application.

J. Statement of Presently Effective Rates (Rule 3.2(a)(2))

PG&E's presently effective electric rates are attached as Exhibit C to this Application.

K. Statement of Proposed Increases or Changes In Rates (Rule 3.2(a)(3))

Approval of this Application would increase electric rates for bundled service customers (those who receive electric generation as well as transmission and distribution service from PG&E) and for customers who purchase electricity from other suppliers (direct access and community choice aggregation) by less than one percent, therefore a statement setting forth PG&E's proposed increases or changes in electric rates is not required.

L. Summary of Earnings (Rule 3.2(a)(5) and (6))

The revenues, expenses, rate bases and rate of return for PG&E's Electric Department for the recorded year of 2016 are included in PG&E's Exhibit D, submitted in support of Application 17-09-006, and are incorporated herein by reference.

M. Type of Rate Change Requested (Rule 3.2(a)(3) and (10))

Results of Operations at proposed rates are not required since the proposed changes in revenues do not exceed one percent. This Application would result in a slight increase to system average bundled customer electric rates. The electric revenue requested increase over current electric revenue would result in a 0.008 percent increase in monthly electric bills for a typical residential non-CARE customer using 500 kilowatts per month, from \$111.33 to \$111.34. Individual customers' bills may differ. This Application would also minimally impact direct access and community choice aggregation customers.

N. Notice to Governmental Entities (Rule 3.2 (b))

Within twenty (20) days of filing this Application, PG&E will mail or send electronically a notice stating in general terms the proposed revenues, rate changes and ratemaking mechanisms requested in this Application to parties listed in Exhibit D of this Application, including the State of California and cities and counties served by PG&E.

O. Publication (Rule 3.2(c))

Within twenty (20) days of filing this Application, PG&E will publish in newspapers of general circulation in each county in its service territory a notice of filing.

P. Notice to Customers (Rule 3.2(d))

Within 45 days of filing this Application, PG&E will include notices with the regular bills mailed to all customers affected by the proposed changes, and within twenty days of completion of mailing PG&E will file proof of compliance with Rule 3.2(e).

PG&E has served this Application on the official service lists for R.15-03-011, A.16-03-001, and A.17-12-003.

V. CONCLUSION

PG&E respectfully requests the Commission to issue an order that:

- PG&E has complied with D.13-10-040, Ordering Paragraph 4 by filing this application;
- PG&E is authorized to issue its 2018 Energy Storage RFO on December 1, 2018;
- PG&E has correctly identified its existing eligible energy storage credits counting toward its storage targets adopted in D.13-10-040;
- The safety requirements in PG&E's 2018 Energy Storage RFO protocol for a project's RFO participation, evaluation methodology for shortlisting, and terms and conditions for the provision of energy storage services are reasonable;
- PG&E is authorized to recover the costs of its 2018 Energy Storage RFO procurement using the same ratemaking mechanisms that have been approved for its 2016 Energy Storage RFO;
- PG&E's deadline to request deferment of storage targets is postponed until PG&E files its application for approval of its 2018 Energy Storage RFO procurement;
- PG&E has complied with D.17-04-039, Ordering Paragraphs 1 through 4 by its previous activities outlined in the preceding section of this application, and by filing this Application;
- PG&E is authorized to move forward with its AB 2868 Storage Investments and Programs by filing subsequent Tier 3 advice letters for approval of specific investments consistent with the categories of investments PG&E has identified, subject to PG&E's overall AB 2868 limit of 166.66 MW;

- PG&E is authorized to move forward with its AB 2868 Storage Investments and Programs by spending up to \$6.4 million in connection with PG&E's proposed behind-the-retail-meter thermal storage program during the period from 2019 to 2025, subject to filing a subsequent Tier 3 advice letter for final approval of PG&E's program, and subject to a program cap of 5 MW;
- PG&E is authorized to move forward with its AB 2868 Storage Investments and Programs by filing a subsequent application for approval of additional categories of investments and programs that PG&E identifies in the future, subject to PG&E's overall AB 2868 limit of 166.66 MW;
- PG&E is authorized to recover the costs of its proposed AB 2868 Storage Investments and Programs using the ratemaking mechanisms that PG&E proposes in this application for each category of investment, and for the behind-the-meter program; and
- Grants PG&E such additional relief as the Commission deems appropriate.

Respectfully submitted,

ROY M. KUGA

By: /s/Roy M. Kuga

ROY M. KUGA

Vice President, Grid Innovation and Integration

MARK R. HUFFMAN

By: /s/ Mark R. Huffman

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Attorney for

PACIFIC GAS AND ELECTRIC COMPANY

Dated: March 1, 2018

VERIFICATION

I, the undersigned, say:

I am an officer of Pacific Gas And Electric Company, a corporation and am authorized to make this verification for and on behalf of said corporation, and I make this verification for that reason, I have read the foregoing Application and am informed and believe that the matters contained therein are true and on that ground I allege that the matters stated here are true.

I declare under penalty of perjury that the foregoing is true and correct.

Executed at San Francisco, California, the 1st day of March, 2018.

/s/ Roy M. Kuga

Roy M. Kuga

Vice President, Grid Integration and Innovation

Exhibit A Governing Statutes and Decisions

Exhibit A

Governing Statutes and Decisions

STATUTES

Assembly Bill 2868, 2016, Gatto

Assembly Bill 2514, 2010, Skinner

COMMISSION DECISIONS

Storage Rulemakings

R.15-03-011

D.18-01-003, Decision On Multiple-Use Application Issues

D.17-04-039, Decision On Track 2 Energy Storage Issues

D.16-01-032, Decision On Track 1 Issues

R.15-03-011, Order Instituting Rulemaking To Consider Policy And Implementation Refinements To The Energy Storage Procurement Framework And Design Program

R.10-12-007

- **D.13-10-040**, Decision Adopting Energy Storage Procurement Framework And Design Program
- **D.12-08-016**, Decision Adopting Proposed Framework For Analyzing Energy Storage Needs

R.10-12-007, Order Instituting Rulemaking Pursuant to Assembly Bill 2514

PG&E Applications

A.16-03-001

PG&E application for approval of 2016 Energy Storage Procurement Plans

D.16-09-007, Decision Approving Storage Procurement Framework For The 2016
Biennial Procurement Period

A.14-02-007

PG&E application for approval of 2014 Energy Storage Procurement Plans

D.14-10-045, Decision Approving San Diego Gas & Electric Company, Pacific Gas And Electric Company, And Southern California Edison Company's Storage Procurement Framework And Program Applications For The 2014 Biennial Procurement Period

A.16-04-024

Second PG&E application for approval of 2014 Energy Storage RFO results

D.16-12-004, Decision Rejecting Energy Storage Agreement

A.15-12-004

First PG&E application for approval of 2014 Energy Storage RFO results

D.16-09-004, Decision Approving Energy Storage Agreements And Providing Guidance On Calculating Above-Market Costs For Storage

Exhibit B

Balance Sheet and Income Statement

Pacific Gas and Electric Company CONSOLIDATED STATEMENTS OF INCOME (in millions)

	Year ended December 31,					
	-	2017		2016		2015
Operating Revenues						
Electric	\$	13,127	\$	13,865	\$	13,657
Natural gas		4,011		3,802		3,176
Total operating revenues		17,138		17,667	The	16,833
Operating Expenses						
Cost of electricity		4,309		4,765		5,099
Cost of natural gas		746		615		663
Operating and maintenance		6,329		7,352		6,949
Depreciation, amortization, and decommissioning		2,854		2,754		2,611
Total operating expenses		14,238		15,486		15,322
Operating Income		2,900		2,181		1,511
Interest income		30		22		8
Interest expense		(877)		(819)		(763)
Other income, net		65		88		87
Income Before Income Taxes		2,118		1,472		843
Income tax provision (benefit)		427		70		(19)
Net Income		1,691		1,402		862
Preferred stock dividend requirement		14		14		14
Income Available for Common Stock	\$	1,677	\$	1,388	\$	848

See accompanying Notes to the Consolidated Financial Statements.

Pacific Gas and Electric Company CONSOLIDATED BALANCE SHEETS (in millions)

* 9		Balance at December 31,		
		2017		2016
ASSETS				
Current Assets				
Cash and cash equivalents	\$	447	\$	71
Accounts receivable				
Customers (net of allowance for doubtful accounts of \$64 and \$58				
at respective dates)		1,243		1,252
Accrued unbilled revenue		946		1,098
Regulatory balancing accounts		1,222		1,500
Other		862		801
Regulatory assets		615		423
Inventories				
Gas stored underground and fuel oil		115		117
Materials and supplies		366		346
Income taxes receivable				159
Other		465		289
Total current assets		6,281		6,056
Property, Plant, and Equipment				
Electric		55,133		52,556
Gas		19,641		17,853
Construction work in progress		2,471		2,184
Total property, plant, and equipment		77,245		72,593
Accumulated depreciation		(23,456)		(22,012)
Net property, plant, and equipment		53,789		50,581
Other Noncurrent Assets				
Regulatory assets		3,793		7,951
Nuclear decommissioning trusts		2,863		2,606
Income taxes receivable		64		70
Other		1,094	17	1,110
Total other noncurrent assets	5	7,814		11,737
TOTAL ASSETS	S	67,884	\$	68,374

See accompanying Notes to the Consolidated Financial Statements.

Pacific Gas and Electric Company CONSOLIDATED BALANCE SHEETS (in millions, except share amounts)

	Balance at I	December 31,
	2017	2016
LIABILITIES AND SHAREHOLDERS' EQUITY		
Current Liabilities		
Short-term borrowings	\$ 799	\$ 1,516
Long-term debt, classified as current	445	700
Accounts payable		
Trade creditors	1,644	1,494
Regulatory balancing accounts	1,120	645
Other	538	453
Disputed claims and customer refunds	243	236
Interest payable	214	214
Other	2,018	2,072
Total current liabilities	7,021	7,330
Noncurrent Liabilities		
Long-term debt	17,403	15,872
Regulatory liabilities	8,679	6,805
Pension and other postretirement benefits	2,026	2,548
Asset retirement obligations	4,899	4,684
Deferred income taxes	5,963	10,510
Other	2,146	2,230
Total noncurrent liabilities	41,116	42,649
Commitments and Contingencies (Note 13)		
Shareholders' Equity		
Preferred stock	258	258
Common stock, \$5 par value, authorized 800,000,000 shares;		
264,374,809 shares outstanding at respective dates	1,322	1,322
Additional paid-in capital	8,505	8,050
Reinvested earnings	9,656	8,763
Accumulated other comprehensive income	6	2
Total shareholders' equity	19,747	18,395
TOTAL LIABILITIES AND SHAREHOLDERS' EQUITY	\$ 67,884	\$ 68,374

See accompanying Notes to the Consolidated Financial Statements.

Exhibit C

Presently Effective Electric Rates

RESIDENTIAL RATES

LINE NO.		1/1/18 RATES SUMMER	1/1/18 RATES WINTER	LINE NO.
1	SCHEDULE E-1			1
2	MINIMUM BILL (\$/MONTH)	\$10.00	\$10.00	2
3	ES UNIT DISCOUNT (\$/UNIT/MONTH)	\$1.76	\$1.76	3
4	ET UNIT DISCOUNT (\$/UNIT/MONTH)	\$6.06	\$6.06	4
5	ES/ET MINIMUM RATE LIMITER (\$/KWH)	\$0.04885	\$0.04885	5
6	ENERGY (\$/KWH)			6
7	TIER 1 (Baseline Quantity - BQ)	\$0.20078	\$0.20078	7
8	TIER 2 > 100% of BQ	\$0.27748	\$0.27748	8
10	High User Surcharge (HUS) > 400% of BQ	\$0.40337	\$0.40337	9
	***************************************	*******	******	*
12	SCHEDULE EL-1 (CARE)			10
13	MINIMUM BILL (\$/MONTH)	\$5.00	\$5.00	11
14	ENERGY (\$/KWH)			12
15	TIER 1 (Baseline Quantity - BQ)	\$0.12706	\$0.12706	13
16	TIER 2 > 100% of BQ	\$0.17346	\$0.17346	14
17	High User Surcharge (HUS) > 400% of BQ	\$0.24088	\$0.24088	15
	***************************************	*********	*******	*

RESIDENTIAL RATES

LINE NO.		1/1/18 RATES SUMMER	1/1/18 RATES WINTER	LINE NO.
1	SCHEDULE E-6 / EM-TOU			1
2	MINIMUM BILL (\$/MONTH)	\$10.00	\$10.00	2
3	E-6 METER CHARGE (\$/MONTH)	\$7.70	\$7.70	3
4	ON-PEAK ENERGY (\$/KWH)			4
5	TIER 1 (Baseline Quantity - BQ)	\$0.36032		5
6	TIER 2 > 100% of BQ	\$0.43702		6
7	PART-PEAK ENERGY (\$/KWH)			7
8	TIER 1 (Baseline Quantity - BQ)	\$0.24505	\$0.18944	8
9	TIER 2 > 100% of BQ	\$0.32175	\$0.26614	9
10	OFF-PEAK ENERGY (\$/KWH)			10
11	TIER 1 (Baseline Quantity - BQ)	\$0.16827	\$0.17261	11
12	TIER 2 > 100% of BQ	\$0.24498	\$0.24931	12
13 14	SCHEDULE EL-6 / EML-TOU MINIMUM BILL (\$/MONTH)	\$5.00	\$5.00	13 14
15	EL-6 METER CHARGE(\$/MONTH)	\$6.16	\$6.16	15
16	ON-PEAK ENERGY (\$/KWH)			16
17	TIER 1 (Baseline Quantity - BQ)	\$0.24386		17
18	TIER 2 > 100% of BQ	\$0.29134		18
19	PART-PEAK ENERGY (\$/KWH)			19
20	TIER 1 (Baseline Quantity - BQ)	\$0.15936	\$0.11860	20
21	TIER 2 > 100% of BQ	\$0.20684	\$0.16606	21
22	OFF-PEAK ENERGY (\$/KWH)			22
23	TIER 1 (Baseline Quantity - BQ)	\$0.10308	\$0.10625	23
24	TIER 2 > 100% of BQ	\$0.15056	\$0.15372	24

RESIDENTIAL RATES

LINE NO.				-
1	SCHEDULE EV: RATE A			1
2	MINIMUM BILL (\$/MONTH)	\$10.00	\$10.00	2
3	ON-PEAK ENERGY (\$/KWH)	\$0.45491	\$0.32119	3
4	PART-PEAK ENERGY (\$/KWH)	\$0.25089	\$0.19897	4
5	OFF-PEAK ENERGY (\$/KWH)	\$0.12330	\$0.12608	5
	***************************************	******	******	*
6	SCHEDULE EV: RATE B			6
7	EV-B METER CHARGE (\$/MONTH)	\$1.50	\$1.50	7
8	ON-PEAK ENERGY (\$/KWH)	\$0.44839	\$0.31425	8
9	PART-PEAK ENERGY (\$/KWH)	\$0.24763	\$0.19550	9
10	OFF-PEAK ENERGY (\$/KWH)	\$0.12283	\$0.12558	10
	***************************************	*********	*******	*

SMALL L&P RATES

LINE NO.		1/1/18 RATES SUMMER	1/1/18 RATES WINTER	LINE NO.
1	SCHEDULE A-1			1
2	CUSTOMER CHARGE: SINGLE-PHASE (\$/MO.)	\$10.00	\$10.00	2
3	CUSTOMER CHARGE: POLYPHASE (\$/MO.)	\$20.00	\$20.00	3
4	ENERGY (\$/KWH)	\$0.24813	\$0.19353	4
	***************************************	********	******	*
5	SCHEDULE A-1 TOU			5
6	CUSTOMER CHARGE: SINGLE-PHASE (\$/MO.)	\$10.00	\$10.00	6
7	CUSTOMER CHARGE: POLYPHASE (\$/MO.)	\$20.00	\$20.00	7
8	ENERGY (\$/KWH)			8
9	ON-PEAK	\$0.26381		9
10	PART-PEAK	\$0.24016	\$0.22130	10
11	OFF-PEAK ENERGY	\$0.21280	\$0.20039	11
	***************************************	*******	******	*
12	SCHEDULE A-6			12
13	CUSTOMER CHARGE: SINGLE-PHASE (\$/MO.)	\$10.00	\$10.00	13
	CUSTOMER CHARGE: POLYPHASE (\$/MO.)	\$20.00	\$20.00	14
15	METER CHARGE (\$/MONTH)	\$6.12	\$6.12	15
16	METER CHARGE - RATE W (\$/MONTH)	\$1.80	\$1.80	16
17	METER CHARGE - RATE X (\$/MONTH)	\$6.12	\$6.12	17
18	ENERGY (\$/KWH)			18
19	ON-PEAK	\$0.55561		19
20	PART-PEAK	\$0.25879	\$0.20525	20
21	OFF-PEAK ENERGY	\$0.18721	\$0.18701	21
	***************************************	********	*******	*
22	SCHEDULE A-15			22
23	CUSTOMER CHARGE (\$/MONTH)	\$10.00	\$10.00	23
	FACILITY CHARGE (\$/MONTH)	\$25.00	\$25.00	24
25	ENERGY (\$/KWH)	\$0.24813	\$0.19353	25
	***************************************	**********	******	*
26	SCHEDULE TC-1			26
27	CUSTOMER CHARGE (\$/MONTH)	\$10.00	\$10.00	27
28	ENERGY (\$/KWH)	\$0.18515	\$0.18515	28
	***************************************	********	******	*

MEDIUM L&P RATES

LINE NO.		1/1/18 RATES SUMMER	1/1/18 RATES WINTER	LINE NO.
	***************************************	************	*******	*
1	SCHEDULE A-10			1
2	CUSTOMER CHARGE (\$/MONTH)	\$140.00	\$140.00	2
3	MAXIMUM DEMAND CHARGE (\$/KW/MO)			3
4	SECONDARY VOLTAGE	\$18.28	\$10.95	4
5	PRIMARY VOLTAGE	\$17.39	\$11.25	5
6	TRANSMISSION VOLTAGE	\$11.70	\$8.33	6
7	ENERGY CHARGE (\$/KWH)			7
8	SECONDARY VOLTAGE	\$0.16353	\$0.12693	8
9	PRIMARY VOLTAGE	\$0.15383	\$0.12325	9
10	TRANSMISSION VOLTAGE	\$0.12083	\$0.10229	10
	***************************************	***********	*******	*
11	SCHEDULE A-10 TOU			11
12	CUSTOMER CHARGE (\$/MONTH)	\$140.00	\$140.00	12
13	MAXIMUM DEMAND CHARGE (\$/KW/MO)			13
14	SECONDARY VOLTAGE	\$18.28	\$10.95	14
15	PRIMARY VOLTAGE	\$17.39	\$11.25	15
16	TRANSMISSION VOLTAGE	\$11.70	\$8.33	16
17	ENERGY CHARGE (\$/KWH)			17
18	SECONDARY			18
19	ON PEAK	\$0.21833		19
20	PARTIAL PEAK	\$0.16320	\$0.13502	20
21	OFF-PEAK	\$0.18320 \$0.13513	***	21
22	PRIMARY	\$0.13513	\$0.11796	22
23		#0.0000		
	ON PEAK	\$0.20663	60 40000	23
24	PARTIAL PEAK	\$0.15607	\$0.13306	24
25	OFF-PEAK	\$0.12944	\$0.11718	25
26	TRANSMISSION	00.470:-		26
27	ON PEAK	\$0.17015		27
28	PARTIAL PEAK	\$0.12327	\$0.11148	28
29	OFF-PEAK	\$0.09797	\$0.09691	29
	***************************************	************	*******	*

E-19 FIRM RATES

LINE NO.		1/1/18 RATES SUMMER	1/1/18 RATES WINTER	LINE NO.
1	SCHEDULE E-19 T FIRM	************	*******	* 1
2	CUSTOMER CHARGE > 500 KW (\$/MONTH)	\$1,800.00	\$1,800.00	2
3	CUSTOMER CHARGE < 500 KW (\$/MONTH)	\$140.00	\$140.00	3
4	TOU METER CHARGE - RATES V & X (\$/MONTH)	\$140.00	\$140.00	4
5	TOU METER CHARGE - RATE W (\$/MONTH)	\$140.00	\$140.00	5
6	DEMAND CHARGE (\$/KW/MONTH)			6
7	ON-PEAK	\$12.42		7
8	PARTIAL PEAK	\$3.11	\$0.00	8
9	MAXIMUM	\$9.14	\$9.14	9
10	ENERGY CHARGE (\$/KWH)			10
11	ON-PEAK	\$0.10626		11
12	PARTIAL-PEAK	\$0.09365	\$0.09564	12
13	OFF-PEAK	\$0.07698	\$0.08283	13
	***************************************	*******	*******	*
14	SCHEDULE E-19 P FIRM			14
15	CUSTOMER CHARGE > 500 KW (\$/MONTH)	\$1,000.00	\$1,000.00	15
	CUSTOMER CHARGE < 500 KW (\$/MONTH)	\$140.00	\$140.00	16
	TOU METER CHARGE - RATES V & X (\$/MONTH)	\$140.00	\$140.00	17
18	TOU METER CHARGE - RATE W (\$/MONTH)	\$140.00	\$140.00	18
40	DEMAND OUR DOE (OUGHNAONTH)			40
	DEMAND CHARGE (\$/KW/MONTH)	040.00		19
20 21	ON-PEAK PARTIAL PEAK	\$16.60	¢0.15	20 21
22	MAXIMUM	\$4.53 \$14.41	\$0.15 \$14.41	22
		Ψ	4	
23	ENERGY CHARGE (\$/KWH)			23
24	ON-PEAK	\$0.14232		24
25	PARTIAL-PEAK	\$0.10394	\$0.09876	25
26	OFF-PEAK	\$0.07927	\$0.08536	26
07		******	********	*
21	SCHEDULE E-19 S FIRM			27
28	CUSTOMER CHARGE > 500 KW (\$/MONTH)	\$600.00	\$600.00	28
29	CUSTOMER CHARGE < 500 KW (\$/MONTH)	\$140.00	\$140.00	29
30	TOU METER CHARGE - RATES V & X (\$/MONTH)	\$140.00	\$140.00	30
31	TOU METER CHARGE - RATE W (\$/MONTH)	\$140.00	\$140.00	31
32	DEMAND CHARGE (\$/KW/MONTH)			32
33	ON-PEAK	\$18.64		33
34	PARTIAL PEAK	\$5.18	\$0.12	34
35	MAXIMUM	\$17.57	\$17.57	35
36	ENERGY CHARGE (\$/KWH)			36
37	ON-PEAK	\$0.15245		37
38	PARTIAL-PEAK	\$0.11194	\$0.10640	38
39	OFF-PEAK	\$0.08512	\$0.09178	39

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E-20 FIRM RATES

LINE NO.		1/1/18 RATES SUMMER	1/1/18 RATES WINTER	LINE NO.
1	SCHEDULE E-20 T FIRM	*******************************	**********	* 1
2	CUSTOMER CHARGE (\$/MONTH)-FIRM	\$2,000.00	\$2,000.00	2
	· · · ·			
3	DEMAND CHARGE (\$/KW/MONTH)			3
4	ON-PEAK	\$15.89		4
5 6	PARTIAL PEAK MAXIMUM	\$3.79 \$8.32	\$0.00 \$8.32	5 6
O	MAXIMOW	\$6.52	φ0.32	O
7	ENERGY CHARGE (\$/KWH)			7
8	ON-PEAK	\$0.10123		8
9	PARTIAL-PEAK	\$0.08900	\$0.09092	9
10	OFF-PEAK	\$0.07281	\$0.07849	10
	***************************************		******	
11	SCHEDULE E-20 P FIRM			11
12	CUSTOMER CHARGE (\$/MONTH)	\$1,500.00	\$1,500.00	12
13	DEMAND CHARGE (\$/KW/MONTH)			13
14	ON-PEAK	\$19.26		14
15	PARTIAL PEAK	\$5.13	\$0.12	15
16	MAXIMUM	\$15.10	\$15.10	16
17	ENERGY CHARGE (\$/KWH)			17
18	ON-PEAK	\$0.14436		18
19	PARTIAL-PEAK	\$0.10374	\$0.09839	19
20	OFF-PEAK	\$0.07876	\$0.08490	20
	***************************************	**********	*******	*
21	SCHEDULE E-20 S FIRM			21
22	CUSTOMER CHARGE (\$/MONTH)	\$1,200.00	\$1,200.00	22
23	DEMAND CHARGE (\$/KW/MONTH)			23
24	ON-PEAK	\$18.05		24
25	PARTIAL PEAK	\$5.01	\$0.05	25
26	MAXIMUM	\$17.45	\$17.45	26
27	ENERGY CHARGE (\$/KWH)			27
28	ON-PEAK	\$0.14287		28
29	PARTIAL-PEAK	\$0.10602	\$0.10067	29
30	OFF-PEAK	\$0.08072	\$0.08696	30

OIL AND GAS EXTRACTION RATES

		1/1/18	1/1/18	
LINE		RATES	RATES	LINE
NO.		SUMMER	WINTER	NO.
	***************************************	***********	******	*
1	SCHEDULE E-37			1
2	CUSTOMER CHARGE (\$/MONTH)	\$36.36	\$36.36	2
3	TOU METER CHARGE - RATE W (\$/MONTH)	\$1.20	\$1.20	3
4	TOU METER CHARGE - RATE X (\$/MONTH)	\$6.00	\$6.00	4
5	ON PEAK DEMAND CHARGE (\$/KW/MO)	\$9.85		5
6	MAXIMUM DEMAND CHARGE (\$/KW/MO)			6
7	SECONDARY VOLTAGE	\$15.37	\$5.95	7
8	PRIMARY VOLTAGE DISCOUNT	\$1.71	\$0.18	8
9	TRANSMISSION VOLTAGE DISCOUNT	\$11.49	\$5.12	9
10	ENERGY (\$/KWH)			10
11	ON-PEAK	\$0.21042		11
12	PART-PEAK		\$0.11251	12
13	OFF-PEAK	\$0.09241	\$0.08410	13

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STANDBY RATES

LINE NO.		1/1/18 RATES SUMMER	1/1/18 RATES WINTER	LINE NO.
1	SCHEDULE S - TRANSMISSION			1
2	CONTRACT CAPACITY CHARGE (\$/KW/MO.)	\$1.56	\$1.56	2
3	EFFECTIVE RESERVATION CHARGE (\$/KW/MO.)	\$1.33	\$1.33	3
4	ENERGY (\$/KWH)			4
5	ON-PEAK	\$0.12730		5
6	PART-PEAK	\$0.11412	\$0.11619	6
7	OFF-PEAK	\$0.09669	\$0.10281	7
	***************************************	**********	******	*
8	SCHEDULE S - PRIMARY			8
9	CONTRACT CAPACITY CHARGE (\$/KW/MO.)	\$7.25	\$7.25	9
10	EFFECTIVE RESERVATION CHARGE (\$/KW/MO.)	\$6.16	\$6.16	10
11	ENERGY (\$/KWH)			11
12	ON-PEAK	\$0.57747		12
13	PART-PEAK	\$0.26797	\$0.14040	13
14	OFF-PEAK	\$0.11208	\$0.11929	14
	***************************************	*********	******	*
15	SCHEDULE S - SECONDARY			15
16	CONTRACT CAPACITY CHARGE (\$/KW/MO.)	\$7.25	\$7.25	16
17	EFFECTIVE RESERVATION CHARGE (\$/KW/MO.)	\$6.16	\$6.16	17
18	ENERGY (\$/KWH)			18
19	ON-PEAK	\$0.57632		19
20	PART-PEAK	\$0.26682	\$0.13925	20
21	OFF-PEAK	\$0.11093	\$0.11814	21

STANDBY RATES

	STANDBY RATES			
LINE NO.		1/1/18 RATES SUMMER	1/1/18 RATES WINTER	LINE NO.
1	SCHEDULE S CUSTOMER AND METER CHARGES			1
2	RESIDENTIAL			2
3	CUSTOMER CHARGE (\$/MO)	\$5.00	\$5.00	3
4	TOU METER CHARGE (\$/MO)	\$3.90	\$3.90	4
5	AGRICULTURAL			5
6	CUSTOMER CHARGE (\$/MO)	\$27.60	\$27.60	6
7	TOU METER CHARGE (\$/MO)	\$6.00	\$6.00	7
8	SMALL LIGHT AND POWER (less than or equal to 50 kW)			8
9	SINGLE PHASE CUSTOMER CHARGE (\$/MO)	\$20.00	\$20.00	9
10	POLY PHASE CUSTOMER CHARGE (\$/MO)	\$30.00	\$30.00	10
11	METER CHARGE (\$/MO)	\$6.12	\$6.12	11
12	MEDIUM LIGHT AND POWER (>50 kW, <500 kW)			12
13	CUSTOMER CHARGE (\$/MO)	\$140.00	\$140.00	13
14	METER CHARGE (\$/MO)	\$5.40	\$5.40	14
15	MEDIUM LIQUIT AND DOWED (> 500MM)			15
15 16	MEDIUM LIGHT AND POWER (>500kW) TRANSMISSION CUSTOMER CHARGE (\$/MO)	\$1,800.00	\$1,800.00	16
17	PRIMARY CUSTOMER CHARGE (\$/MO)	\$1,000.00	\$1,000.00	17
18	SECONDARY CUSTOMER CHARGE (\$/MO)	\$600.00	\$600.00	18
10	OLOGNOMEN GIANGE (WING)	φοσο.σσ	ψοσο.σο	10
19	LARGE LIGHT AND POWER (> 1000 kW)			19
20	TRANSMISSION CUSTOMER CHARGE (\$/MO)	\$2,000.00	\$2,000.00	20
21	PRIMARY CUSTOMER CHARGE (\$/MO)	\$1,500.00	\$1,500.00	21
22	SECONDARY CUSTOMER CHARGE (\$/MO)	\$1,200.00	\$1,200.00	22
23	REDUCED CUSTOMER CHARGES (\$/MO)			23
24	SMALL LIGHT AND PWR (< 50 kW)	\$7.75	\$7.75	24
25	MED LIGHT AND PWR (Res Capacity >75 kW and <500 kW) S	\$52.00	\$52.00	25
26	MED LIGHT AND PWR (Res Capacity > 500 kW and < 1000 kW) S	\$177.39	\$177.39	26

AGRICULTURAL RATES

LINE NO.		1/1/18 RATES SUMMER	1/1/18 RATES WINTER	LINE NO.
1	SCHEDULE AG-1A	***********	******	1
2	CUSTOMER CHARGE (\$/MONTH)	\$17.47	\$17.47	2
3	CONNECTED LOAD CHARGE (\$/KW/MONTH)	\$7.96	\$1.52	3
4	ENERGY CHARGE (\$/KWH)	\$0.27991	\$0.21579	4
5	SCHEDULE AG-RA	*******	******	* 5
6	CUSTOMER CHARGE - RATES A & D (\$/MONTH)	\$17.47	\$17.47	6
7	METER CHARGE - RATE A (\$/MONTH)	\$6.80	\$6.80	7
8	METER CHARGE - RATE D (\$/MONTH)	\$2.00	\$2.00	8
9	CONNECTED LOAD CHARGE (\$/KW/MONTH)	\$7.08	\$1.16	9
10	ENERGY (\$/KWH)			10
11	ON-PEAK	\$0.52776		11
12	PART-PEAK		\$0.18920	12
13	OFF-PEAK	\$0.18560	\$0.15560	13
	***************************************	***************************************	*****	*
14	SCHEDULE AG-VA			14
	CUSTOMER CHARGE - RATES A & D (\$/MONTH)	\$17.47	\$17.47	15
	METER CHARGE - RATE A (\$/MONTH)	\$6.80	\$6.80	16
17	METER CHARGE - RATE D (\$/MONTH)	\$2.00	\$2.00	17
18	CONNECTED LOAD CHARGE (\$/KW/MONTH)	\$7.10	\$1.20	18
19	ENERGY (\$/KWH)			19
20	ON-PEAK	\$0.49313		20
21	PART-PEAK		\$0.19047	21
22	OFF-PEAK	\$0.18247	\$0.15615	22
	***************************************	*******	******	*
23	SCHEDULE AG-4A			23
	CUSTOMER CHARGE - RATES A & D (\$/MONTH)	\$17.47	\$17.47	24
25	METER CHARGE - RATE A (\$/MONTH)	\$6.80	\$6.80	25
26	METER CHARGE - RATE D (\$/MONTH)	\$2.00	\$2.00	26
27	CONNECTED LOAD CHARGE (\$/KW/MONTH)	\$8.12	\$1.23	27
28	ENERGY (\$/KWH)			28
29	ON-PEAK	\$0.44533		29
30	PART-PEAK	¢0 10555	\$0.20231	30
31	OFF-PEAK	\$0.19555	\$0.16408	31
	***************************************	***************************************	******	*
32	SCHEDULE AG-5A			32
33	CUSTOMER CHARGE - RATES A & D (\$/MONTH)	\$17.47	\$17.47	33
34 35	METER CHARGE - RATE A (\$/MONTH)	\$6.80 \$2.00	\$6.80 \$2.00	34 35
35	METER CHARGE - RATE D (\$/MONTH)	\$2.00	\$2.00	35
36	CONNECTED LOAD CHARGE (\$/KW/MONTH)	\$11.77	\$2.19	36
37	ENERGY (\$/KWH)			37
38	ON-PEAK	\$0.30796		38
39	PART-PEAK		\$0.16639	39
40	OFF-PEAK	\$0.15808	\$0.14100 ********	40 *

PACIFIC GAS AND ELECTRIC COMPANY

PRESENT ELECTRIC RATES as of

Monday, January 01, 2018 AGRICULTURAL RATES

LINE NO.		1/1/18 RATES SUMMER	1/1/18 RATES WINTER	LINE NO.
1	SCHEDULE AG-1B			1
2	CUSTOMER CHARGE (\$/MONTH)	\$23.23	\$23.23	2
3	MAXIMUM DEMAND CHARGE (\$/KW/MONTH)			3
4	SECONDARY VOLTAGE	\$11.63	\$2.34	4
5	PRIMARY VOLTAGE DISCOUNT	\$1.21	\$0.32	5
6	ENERGY CHARGE (\$/KWH)	\$0.23956	\$0.18655	6
	***************************************	***********	*******	*
7	SCHEDULE AG-RB			7
8	CUSTOMER CHARGE - RATES B & E (\$/MONTH)	\$23.23	\$23.23	8
9	METER CHARGE - RATE B (\$/MONTH)	\$6.00	\$6.00	9
10	METER CHARGE - RATE E (\$/MONTH)	\$1.20	\$1.20	10
11	ON-PEAK DEMAND CHARGE (\$/KW/MONTH)	\$3.69		11
12	MAXIMUM DEMAND CHARGE (\$/KW/MONTH)			12
13	SECONDARY VOLTAGE	\$9.59	\$1.93	13
14	PRIMARY VOLTAGE DISCOUNT	\$0.83	\$0.31	14
15	ENERGY CHARGE (\$/KWH)			15
16	ON-PEAK	\$0.47553		16
17	PART-PEAK		\$0.16474	17
18	OFF-PEAK	\$0.17544	\$0.13642	18
	***************************************	*****************************	*******	**
19	SCHEDULE AG-VB			19
20	CUSTOMER CHARGE - RATES B & E (\$/MONTH)	\$23.23	\$23.23	20
21	METER CHARGE - RATE B (\$/MONTH)	\$6.00	\$6.00	21
22	METER CHARGE - RATE E (\$/MONTH)	\$1.20	\$1.20	22
23	ON-PEAK DEMAND CHARGE (\$/KW/MONTH)	\$3.66		23
24	MAXIMUM DEMAND CHARGE (\$/KW/MONTH)			24
25	SECONDARY VOLTAGE	\$9.65	\$1.91	25
26	PRIMARY VOLTAGE DISCOUNT	\$0.88	\$0.30	26
27	ENERGY CHARGE (\$/KWH)			27
28	ON-PEAK	\$0.44084		28
29	PART-PEAK		\$0.16210	29
30	OFF-PEAK	\$0.17058	\$0.13473	30
	***************************************	*******************************	********	**

AGRICULTURAL RATES

		1/1/18	1/1/18	
LINE		RATES	RATES	LINE
NO.	***************************************	SUMMER	WINTER	NO.
1	SCHEDULE AG-4B			1
	CONEDUCE NO 4D			
2	CUSTOMER CHARGE - RATES B & E (\$/MONTH)	\$23.23	\$23.23	2
3	METER CHARGE - RATE B (\$/MONTH)	\$6.00	\$6.00	3
4	METER CHARGE - RATE E (\$/MONTH)	\$1.20	\$1.20	4
5	ON-PEAK DEMAND CHARGE (\$/KW/MONTH)	\$5.17		5
6	MAXIMUM DEMAND CHARGE (\$/KW/MONTH)			6
7	SECONDARY VOLTAGE	\$9.79	\$2.26	7
8	PRIMARY VOLTAGE DISCOUNT	\$1.03	\$0.35	8
9	ENERGY CHARGE (\$/KWH)			9
10	ON-PEAK	\$0,29202		10
11	PART-PEAK	***************************************	\$0.15835	11
12	OFF-PEAK	\$0.15798	\$0.13358	12
	***************************************	***********	*******	
13	SCHEDULE AG-4C			13
	CUSTOMER CHARGE - RATES C & F (\$/MONTH)	\$65.44	\$65.44	14
	METER CHARGE - RATE C (\$/MONTH)	\$6.00 \$1.20	\$6.00 \$1.20	15 16
16	METER CHARGE - RATE F (\$/MONTH)	\$1.20	\$1.20	10
17	DEMAND CHARGE (\$/KW/MONTH)			17
18	ON-PEAK	\$12.10		18
19	PART-PEAK	\$2.31	\$0.54	19
20	MAXIMUM	\$4.96	\$2.40	20
21	PRIMARY VOLTAGE DISCOUNT			21
22	ON-PEAK	\$1.33		22
23	MAXIMUM		\$0.31	23
24	TRANSMISSION VOLTAGE DISCOUNT			24
25	ON-PEAK	\$6.31		25
26	PART-PEAK	\$1.29	\$0.54	26
27	MAXIMUM	\$0.24	\$1.66	27
28	ENERGY CHARGE (\$/KWH)			28
29	ON-PEAK	\$0.26656		29
30	PART-PEAK	\$0.15728	\$0.13165	30
31	OFF-PEAK	\$0.11909	\$0.11463	31
	***************************************	*******	******	
32	SCHEDULE AG-5B			32
	CUSTOMER CHARGE - RATES B & E (\$/MONTH)	\$36.36	\$36.36	33
34	METER CHARGE - RATE B (\$/MONTH)	\$6.00	\$6.00	34
35	METER CHARGE - RATE E (\$/MONTH)	\$1.20	\$1.20	35
36	ON-PEAK DEMAND CHARGE (\$/KW/MONTH)	\$9.85		36
37	MAXIMUM DEMAND CHARGE (\$/KW/MONTH)	φ9.03		37
38	SECONDARY VOLTAGE	\$15.37	\$5.95	38
39	PRIMARY VOLTAGE DISCOUNT	\$1.71	\$0.18	39
40	TRANSMISSION VOLTAGE DISCOUNT	\$11.49	\$5.12	40
41	ENERGY CHARGE (\$/KWH)			41
42	ON-PEAK	\$0.21042		42
43	PART-PEAK		\$0.11251	43
44	OFF-PEAK	\$0.09241	\$0.08410	44

AGRICULTURAL RATES

NO. SUMMER WINTE 1 SCHEDULE AG-5C	1 2
	1
2 CUSTOMER CHARGE - RATES C & F (\$/MONTH) \$161.58 \$161.58	3
3 METER CHARGE - RATE C (\$/MONTH) \$6.00 \$6.0	
4 METER CHARGE - RATE F (\$/MONTH) \$1.20 \$1.20	4
5 DEMAND CHARGE (\$/KW/MONTH)	5
6 ON-PEAK \$16.62	6
7 PART-PEAK \$3.44 \$0.8	7
8 MAXIMUM \$5.95 \$3.7	
9 PRIMARY VOLTAGE DISCOUNT	9
10 ON-PEAK \$2.48	10
11 MAXIMUM \$0.2	
12 TRANSMISSION VOLTAGE DISCOUNT	12
13 ON-PEAK \$10.30	13
15 MAXIMUM \$3.38 \$2.4	15
16 ENERGY CHARGE (\$/KWH)	16
17 ON-PEAK \$0.16286	17
18 PART-PEAK \$0.11225 \$0.0990	18
19 OFF-PEAK \$0.09341 \$0.0904	

20 SCHEDULE AG-ICE	20
AL CUSTOMED CHARGE (AMACUTI)	0.4
21 CUSTOMER CHARGE (\$/MONTH) \$40.00 \$40.0	
22 METER CHARGE (\$/MONTH) \$6.00 \$6.0	22
23 ON-PEAK DEMAND CHARGE (\$/KW/MO) \$6.95	23
24 MAXIMUM DEMAND CHARGE (\$/KW/MO)	24
25 SECONDARY \$8.99 \$0.0	25
26 PRIMARY \$7.85 \$0.0	26
27 TRANSMISSION \$2.74 \$0.0	27
28 ENERGY CHARGE (\$/KWH)	28
29 ON-PEAK \$0.18415	29
30 PART-PEAK \$0.1473	
31 OFF-PEAK \$0.07366 \$0.0736	
31 OTT-FEAR \$0.07300 \$0.0730	

STREETLIGHTING RATES

LINE NO.		1/1/18 RATES SUMMER	1/1/18 RATES WINTER	LINE NO.
	***************************************	*******	******	
1	SCHEDULE LS-1			1
2	ENERGY CHARGE (\$/KWH)	\$0.15914	\$0.15914	2
	***************************************	******	******	
3	SCHEDULE LS-2			3
4	ENERGY CHARGE (\$/KWH)	\$0.15914	\$0.15914	4
		*********	******	
5	SCHEDULE LS-3			5
6	SERVICE CHARGE (\$/METER/MO.)	\$6.00	\$6.00	6
7	ENERGY CHARGE (\$/KWH)	\$0.15914	\$0.15914	7
		*********	******	
8	SCHEDULE OL-1			8
9	ENERGY CHARGE (\$/KWH)	\$0.16639	\$0.16639	9
	***************************************	********	*****	

					Docific	Gas & Electric	- 6						
				1/1/19 Pat	e Change - Trans.			17 Saloe Ecet					
				17 17 IV IV IV	e Change - Hans.	1/1/2018	Tee - Daseu on 20	Tr Jales I Cst					
				FL	ECTRIC RATES F		ES LS-1, LS-2 AND) OL-1					
NOM	NAL LAMP RAT	INGS											
	AVERAGE				ALL NIGHT RATES PER LAMP PER MONTH								ADJ.
LAMP	kWhr PER	INITIAL	SCHEDUI	LE LS-2			SCHED	ULE LS-1				LS-1 &	
WATTS	MONTH	LUMENS	Α	С	А	В	С	D	E	F	OL-1	LS-2	OL-1
ME	RCURY VAPOR	LAMPS											
40	18	1,300	\$3.072		_		-				_	\$0.130	
50	22	1,650	\$3.708		_		-				_	\$0.159	
100	40	3,500	\$6.573	\$10.360	\$12.880		\$13.148					\$0.289	
175	68	7,500	\$11.029	\$14.816	\$17.336	\$17.336	\$17.604		\$21.300	\$18.689	\$17.829	\$0.492	\$0.51
250	97	11,000	\$15.644	\$19.431	\$21.951	\$21.951	\$22.219					\$0.702	
400	152	21,000	\$24.396	\$28.183	\$30.703	\$30.703	\$30.971				\$31.805	\$1.100	\$1.15
700	266	37,000	\$42.538	\$46.325	\$48.845	\$48.845	\$49.113					\$1.924	
1,000	377	57,000	\$60.203	\$63.990								\$2.727	
IN ⁽	CANDESCENT	LAMPS											
58	20	600	\$3.390		\$9.697							\$0.145	
92	31	1,000	\$5.140	\$8.927	\$11.447							\$0.224	
189	65	2,500	\$10.551	\$14.338	\$16.858	\$16.858						\$0.470	
295	101	4,000	\$16.280	\$20.067	\$22.587	\$22.587						\$0.731	
405	139	6,000	\$22.327	\$26.114	\$28.634							\$1.005	
620	212	10,000	\$33.945	\$37.732								\$1.534	
860	294	15,000	\$46.994									\$2.127	
LO	W PRESSURE S												
	VAPOR LAM												
35	21	4,800	\$3.549									\$0.152	
55	29	8,000	\$4.822									\$0.210	
90	45	13,500	\$7.368									\$0.326	
135	62	21,500	\$10.074									\$0.449	
180	78	33,000	\$12.620									\$0.564	

						fic Gas & Electi			·	·			
				1/1/18	Rate Change - Tran		C Fee - Based on 20	117 Sales Fcst					
					ELECTRIC DATES	1/1/2018	LES LS-1. LS-2 AND) OL -1					
NOMI	INAL LAMP RAT	INGS			LLLOTRIC RATES	TOK SCHEDO	LL3 L3-1, L3-2 ANL	J OL-1					
	AVERAGE				ALL	NIGHT RATES	PER LAMP PER MO	NTH		II .		HALF-HOUR	ADJ.
LAMP	kWhr PER	INITIAL	SCH	IEDULE LS-2			SCHED	ULE LS-1				LS-1 &	
WATTS	MONTH	LUMENS	Α	С	А	В	С	D	E	F	OL-1	LS-2	OL-1
HIC	GH PRESSURE												
	VAPOR LAM												
35	AT 120 VOL	2,150	\$2.594									\$0.109	
50	21	3,800	\$3.549									\$0.152	
70	29	5,800	\$4.822	\$8.609	\$11.129		\$11.397	\$14.338	\$15.093	\$12.482	\$11.339	\$0.210	\$0.219
100	41	9,500	\$6.732	\$10.519	\$13.039	_	\$13.307	\$16.248	\$17.003	\$14.392	\$13.336	\$0.297	\$0.310
150	60	16,000	\$9.755	\$13.542	\$16.062	-	\$16.330	\$19.271	\$20.026	\$17.415		\$0.434	
200	80	22,000	\$12.938		\$19.245		\$19.513	\$22.454	\$23.209	\$20.598		\$0.579	
250 400	100 154	26,000 46,000	\$16.121 \$24.715		\$22.428 \$31.022		\$22.696 \$31.290	\$25.637 \$34.231	\$26.392 \$34.986	\$23.781 \$32.375		\$0.723	
400	AT 240 VOL		\$24.715		\$31.022	-	\$31.290	\$34.231	\$34.980	\$32.375		\$1.114	
50	24	3,800	\$4.026									\$0.174	
70	34	5,800	\$5.618	\$9.405	\$11.925			\$15.134				\$0.246	
100	47	9,500	\$7.687	\$11.474	\$13.994		\$14.262	\$17.203	\$17.958	\$15.347		\$0.340	
150	69	16,000	\$11.188	\$14.975	\$17.495		\$17.763	\$20.704	\$21.459	\$18.848		\$0.499	
200	81	22,000	\$13.097	\$16.884	\$19.404	-	\$19.672	\$22.613	\$23.368	\$20.757	\$19.992	\$0.586	\$0.613
250 310	100 119	25,500 37,000	\$16.121 \$19.145	\$19.908	\$22.428		\$22.696	\$25.637	\$26.392	\$23.781	\$23.153	\$0.723 \$0.861	\$0.756
360	144	45,000	\$19.145									\$1.042	
400	154	46,000	\$24.715	\$28.502	\$31.022	-	\$31.290	\$34.231	\$34.986	\$32.375	▶ \$32.138	\$1.114	\$1.165
<u> </u>	METAL HALIDE I												
70	30	5,500	\$4.981									\$0.217	
100 150	63	8,500 13,500	\$6.732 \$10.233									\$0.297 \$0.456	
175	72	14,000	\$10.233									\$0.521	
250	105	20,500	\$16.917									\$0.760	
400	162	30,000	\$25.988									\$1.172	
1,000	387	90,000	\$61.794									\$2.799	
	DUIGTION LANGE												
23	DUCTION LAME 9	1,840	\$1.639									\$0.065	
35	13	2,450	\$2.276									\$0.003	
40	14	2,200	\$2.435									\$0.101	
50	18	3,500	\$3.072			-						\$0.130	
55	19	3,000	\$3.231									\$0.137	
65	24	5,525	\$4.026									\$0.174	
70 80	27 28	6,500 4,500	\$4.504 \$4.663									\$0.195 \$0.203	
85	30	4,800	\$4.981									\$0.203	
100	36	8,000	\$5.936									\$0.260	
120	42	8,500	\$6.813							-		\$0.300	
135	48	9,450	\$7.846									\$0.347	
150	51	10,900	\$8.323									\$0.369	
165	58	12,000	\$9.437									\$0.420	
200	72	19,000	\$11.665							-		\$0.521	
All LEDs now	on separate tab												
	- Familio tab												

							Pacific	c Gas & Electr	ic Company								
					1/1/1	8 Rate	Change - Trans	. BA's & CPU	C Fee - Based on 2	017	Sales Fcst						
								1/1/2018	1								
						ELE	CTRIC RATES I	FOR SCHEDU	LES LS-1, LS-2 AN	D C	DL-1						
NOM	IINAL LAMP RA	TINGS															
	AVERAGE			ALL NIGHT RATES PER LAMP PER MONTH								HALF-HOUF	R ADJ.				
LAMP	kWhr PER	INITIAL	,	SCHEDULE L	S-2				SCHE	DUL	.E LS-1					LS-1 &	
WATTS	MONTH	LUMENS	Α		С		Α	В	С		D	E	F	0	L-1	LS-2	OL-1
·	* * *													·		-	
	Energy	y Rate @	\$0.15914	per kwh	LS-1 & LS-2												
	l i		\$0.16639	per kwh	OL-1			Po	le Painting Charge	@		Per Pole Per Mon	th				
		22-Jan-18															

Pacific Gas & Electric Company 1/1/18 Rate Change - Trans. BA's & CPUC Fee - Based on 2017 Sales Fcst

LIGHT EMITTING DIODE (LED) LAMPS

TOTAL RATES (FACILITY + ENERGY CHGS)

		Т	OTAL RATES (FAC	ITY + ENERGY	CHGS)							
	LAMP RATINGS	ALL NIGHT RATES										
ıp	Average kWh	PER LAMP	HALF-HOUR				L NIGHT RATES					
tts.	Per Month	PER MONTH	ADJUSTMENT			PER	LAMP PER MONT	H	1	ł		т
		LS-2A	LS-1A, C, E, F & LS-2A		S-1A	LS-1C	LS-1D	LS-1E	LS-1F		LS-1A	
		L3-2A	Q 20 27		3-1A	L3-10	L3-1D	LOTIL	LO-11		LOTA	_
-5.0	0.9	\$0.350	\$0.007	\$6	6.657	\$6.925	\$9.866	\$10.621	\$8.010		\$9.471	
-10.0	2.6	\$0.621	\$0.019	\$6	5.928	\$7.196	\$10.137	\$10.892	\$8.281		\$9.742	
1-15.0	4.3	\$0.891	\$0.031	\$7	'.198	\$7.466	\$10.407	\$11.162	\$8.551		\$10.012	
1-20.0	6.0	\$1.162	\$0.043	\$7	.469	\$7.737	\$10.678	\$11.433	\$8.822		\$10.283	
1-25.0	7.7	\$1.432	\$0.056	\$7	7.739	\$8.007	\$10.948	\$11.703	\$9.092		\$10.553	
1-30.0	9.4	\$1.703	\$0.068	\$8	3.010	\$8.278	\$11.219	\$11.974	\$9.363		\$10.824	
1-35.0	11.1	\$1.973	\$0.080	\$8	3.280	\$8.548	\$11.489	\$12.244	\$9.633		\$11.094	
140.0	12.8	\$2.244	\$0.093	\$8	3.551	\$8.819	\$11.760	\$12.515	\$9.904		\$11.365	
1-45.0	14.5	\$2.515	\$0.105	\$8	3.822	\$9.090	\$12.031	\$12.786	\$10.175		\$11.636	
1-50.0	16.2	\$2.785	\$0.117	\$9	0.092	\$9.360	\$12.301	\$13.056	\$10.445		\$11.906	
1-55.0	17.9	\$3.056	\$0.130	\$9	9.363	\$9.631	\$12.572	\$13.327	\$10.716		\$12.177	
1-60.0	19.6	\$3.326	\$0.142	\$9	9.633	\$9.901	\$12.842	\$13.597	\$10.986		\$12.447	
1-65.0	21.4	\$3.613	\$0.155	\$9	9.920	\$10.188	\$13.129	\$13.884	\$11.273		\$12.734	
1-70.0	23.1	\$3.883	\$0.167	\$10	0.190	\$10.458	\$13.399	\$14.154	\$11.543		\$13.004	
1-75.0	24.8	\$4.154	\$0.179	\$10	0.461	\$10.729	\$13.670	\$14.425	\$11.814		\$13.275	
1-80.0	26.5	\$4.424	\$0.192	\$10	0.731	\$10.999	\$13.940	\$14.695	\$12.084		\$13.545	
1-85.0	28.2	\$4.695	\$0.204	\$1	1.002	\$11.270	\$14.211	\$14.966	\$12.355		\$13.816	
1-90.0	29.9	\$4.965	\$0.216	\$1	1.272	\$11.540	\$14.481	\$15.236	\$12.625		\$14.086	
1-95.0	31.6	\$5.236	\$0.229	\$1	1.543	\$11.811	\$14.752	\$15.507	\$12.896		\$14.357	
1-100.0	33.3	\$5.506	\$0.241	\$1	1.813	\$12.081	\$15.022	\$15.777	\$13.166		\$14.627	
).1-105.1	35.0	\$5.777	\$0.253	\$1:	2.084	\$12.352	\$15.293	\$16.048	\$13.437		\$14.898	
5.1-110.0	36.7	\$6.047	\$0.265	\$1:	2.354	\$12.622	\$15.563	\$16.318	\$13.707		\$15.168	
).1-115.0	38.4	\$6.318	\$0.278	\$1:	2.625	\$12.893	\$15.834	\$16.589	\$13.978		\$15.439	
5.1-120.0	40.1	\$6.589	\$0.290	\$1:	2.896	\$13.164	\$16.105	\$16.860	\$14.249		\$15.710	
).1-125.0	41.9	\$6.875	\$0.303	\$1:	3.182	\$13.450	\$16.391	\$17.146	\$14.535		\$15.996	
5.1-130.0	43.6	\$7.146	\$0.315	\$1:	3.453	\$13.721	\$16.662	\$17.417	\$14.806		\$16.267	
).1-135.0	45.3	\$7.416	\$0.328	\$13	3.723	\$13.991	\$16.932	\$17.687	\$15.076		\$16.537	
5.1-140.0	47.0	\$7.687	\$0.340	\$1:	3.994	\$14.262	\$17.203	\$17.958	\$15.347		\$16.808	
).1-145.0	48.7	\$7.957	\$0.352	\$14	4.264	\$14.532	\$17.473	\$18.228	\$15.617		\$17.078	
5.1-150.0	50.4	\$8.228	\$0.365	\$14	4.535	\$14.803	\$17.744	\$18.499	\$15.888		\$17.349	
).1-155.0	52.1	\$8.498	\$0.377	\$14	4.805	\$15.073	\$18.014	\$18.769	\$16.158		\$17.619	
5.1-160.0	53.8	\$8.769	\$0.389	\$1	5.076	\$15.344	\$18.285	\$19.040	\$16.429		\$17.890	
.1-165.0	55.5	\$9.039	\$0.401	\$1	5.346	\$15.614	\$18.555	\$19.310	\$16.699		\$18.160	
5.1-170.0	57.2	\$9.310	\$0.414	\$1	5.617	\$15.885	\$18.826	\$19.581	\$16.970		\$18.431	
).1-175.0	58.9	\$9.580	\$0.426	\$15	5.887	\$16.155	\$19.096	\$19.851	\$17.240		\$18.701	
5.1-180.0	60.6	\$9.851	\$0.438	\$10	6.158	\$16.426	\$19.367	\$20.122	\$17.511		\$18.972	
.1-185.0	62.4	\$10.137	\$0.451	\$10	6.444	\$16.712	\$19.653	\$20.408	\$17.797		\$19.258	
5.1-190.0	64.1	\$10.408	\$0.464	\$16	6.715	\$16.983	\$19.924	\$20.679	\$18.068		\$19.529	
.1-195.0	65.8	\$10.678	\$0.476		6.985	\$17.253	\$20.194	\$20.949	\$18.338		\$19.799	
5.1-200.0	67.5	\$10.949	\$0.488		7.256	\$17.524	\$20.465	\$21.220	\$18.609		\$20.070	
.1-205.0	69.2	\$11.219	\$0.501		7.526	\$17.794	\$20.735	\$21.490	\$18.879		\$20.340	
5.1-210.0	70.9	\$11.490	\$0.513		7.797	\$18.065	\$21.006	\$21.761	\$19.150		\$20.611	
).1-215.0	72.6	\$11.761	\$0.525		8.068	\$18.336	\$21.277	\$22.032	\$19.421		\$20.882	
5.1-220.0	74.3	\$12.031	\$0.537		8.338	\$18.606	\$21.547	\$22.302	\$19.691		\$21.152	
.1-225.0	76.0	\$12.302	\$0.550		8.609	\$18.877	\$21.818	\$22.573	\$19.962		\$21.423	

LIGHT EMITTING DIODE (LED) LAMPS CONVERSION

(with LED Surcharge)

	Al	L NIGHT RATI	≣S		HALF-HOUR
	PER	LAMP PER MO	ONTH		ADJUSTMENT
					LS-1A, C, D, E
10.44	10.40	10.45	10.45	10.45	& F
LS-1A	LS-1C	LS-1D	LS-1E	LS-1F	
\$9.471	\$9.739	\$22.634	\$13.435	\$10.824	\$0.007
\$9.742	\$10.010	\$22.905	\$13.706	\$11.095	\$0.019
\$10.012	\$10.280	\$23.175	\$13.976	\$11.365	\$0.031
\$10.283	\$10.551	\$23.446	\$14.247	\$11.636	\$0.043
\$10.553	\$10.821	\$23.716	\$14.517	\$11.906	\$0.056
\$10.824	\$11.092	\$23.987	\$14.788	\$12.177	\$0.068
\$11.094	\$11.362	\$24.257	\$15.058	\$12.447	\$0.080
\$11.365	\$11.633	\$24.528	\$15.329	\$12.718	\$0.093
\$11.636	\$11.904	\$24.799	\$15.600	\$12.989	\$0.105
\$11.906	\$12,174	\$25.069	\$15.870	\$13,259	\$0.117
\$12.177	\$12.445	\$25.340	\$16.141	\$13.530	\$0.130
\$12.447	\$12.715	\$25.610	\$16.411	\$13.800	\$0.142
\$12.734	\$13.002	\$25.897	\$16.698	\$14.087	\$0.155
\$13.004	\$13.272	\$26.167	\$16.968	\$14.357	\$0.167
\$13.275	\$13.543	\$26.438	\$17.239	\$14.628	\$0.179
\$13.545	\$13.813	\$26.708	\$17.509	\$14.898	\$0.192
\$13.816	\$14.084	\$26,979	\$17.780	\$15.169	\$0.204
\$14.086	\$14.354	\$27.249	\$18.050	\$15.439	\$0.216
\$14.357	\$14.625	\$27.520	\$18.321	\$15.710	\$0.229
\$14.627	\$14.895	\$27.790	\$18.591	\$15.980	\$0.241
\$14.898	\$15.166	\$28.061	\$18.862	\$16.251	\$0.253
\$15.168	\$15.436	\$28.331	\$19.132	\$16.521	\$0.265
\$15.439	\$15.707	\$28.602	\$19.403	\$16.792	\$0.278
\$15.710	\$15.978	\$28.873	\$19.674	\$17.063	\$0.290
\$15.996	\$16.264	\$29.159	\$19.960	\$17.349	\$0.303
\$16.267	\$16.535	\$29.430	\$20.231	\$17.620	\$0.315
\$16.537	\$16.805	\$29.700	\$20.501	\$17.890	\$0.328
\$16.808	\$17.076	\$29.971	\$20.772	\$18.161	\$0.340
\$17.078	\$17.346	\$30.241	\$21.042	\$18,431	\$0.352
\$17.349	\$17.617	\$30.512	\$21.313	\$18.702	\$0.365
\$17.619	\$17.887	\$30.782	\$21.583	\$18.972	\$0.377
\$17.890	\$18.158	\$31.053	\$21.854	\$19.243	\$0.389
\$18.160	\$18.428	\$31.323	\$22.124	\$19.513	\$0.401
\$18.431	\$18.699	\$31.594	\$22.395	\$19.784	\$0.414
\$18.701	\$18.969	\$31.864	\$22.665	\$20.054	\$0.426
\$18.972	\$19.240	\$32.135	\$22.936	\$20.034	\$0.428
\$19.258	\$19.526	\$32.421	\$23.222	\$20.611	\$0.451
\$19.529	\$19.797	\$32.692	\$23.493	\$20.882	\$0.464
\$19.799	\$20.067	\$32.962	\$23.763	\$21.152	\$0.476
\$20.070	\$20.338	\$33.233	\$24.034	\$21.423	\$0.488
\$20.070	\$20.608	\$33.503	\$24.034	\$21.693	\$0.488
\$20.611	\$20.879	\$33.774	\$24.575	\$21.964	\$0.513
\$20.882	\$20.079	\$34.045	\$24.846	\$22,235	\$0.525
\$20.002	\$21.130	\$34.315	\$25.116	\$22.505	\$0.537
\$21.423	\$21.691	\$34.586	\$25.387	\$22.776	\$0.550
Ψ£ 1.423	ΨΔ1.031	ψυ τ .υου	Ψ20.301	ΨΖΖ.110	φυ.550

Pacific Gas & Electric Company 1/1/18 Rate Change - Trans. BA's & CPUC Fee - Based on 2017 Sales Fcst

1/1/18

LIGHT EMITTING DIODE (LED) LAMPS

TOTAL RATES (FACILITY + ENERGY CHGS)

		10	TAL KATES (FACI	٠
NOMINAL	LAMP RATINGS	ALL NIGHT RATES		
Lamp	Average kWh	PER LAMP	HALF-HOUR	
Watts	Per Month	PER MONTH	ADJUSTMENT	
			LS-1A, C, E, F	
		LS-2A	& LS-2A	
225.1-230.0	77.7	\$12.572	\$0.562	
230.1-235.0	79.4	\$12.843	\$0.574	
235.1-240.0	81.1	\$13.113	\$0.587	
240.1-245.0	82.9	\$13.400	\$0.600	
245.1-250.0	84.6	\$13.670	\$0.612	
250.1-255.0	86.3	\$13.941	\$0.624	
255.1-260.0	88.0	\$14.211	\$0.637	
260.1-265.0	89.7	\$14.482	\$0.649	
265.1-270.0	91.4	\$14.752	\$0.661	
270.1-275.0	93.1	\$15.023	\$0.673	
275.1-280.0	94.8	\$15.293	\$0.686	
280.1-285.0	96.5	\$15.564	\$0.698	
285.1-290.0	98.2	\$15.835	\$0.710	
290.1-295.0	99.9	\$16.105	\$0.723	
295.1-300.0	101.6	\$16.376	\$0.735	
300.1-305.0	103.4	\$16.662	\$0.748	
305.1-310.0	105.1	\$16.933	\$0.760	
310.1-315.0	106.8	\$17.203	\$0.773	
315.1-320.0	108.5	\$17.474	\$0.785	
320.1-325.0	110.2	\$17.744	\$0.797	
325.1-330.0	111.9	\$18.015	\$0.809	
330.1-335.0	113.6	\$18.285	\$0.822	
335.1-340.0	115.3	\$18.556	\$0.834	
340.1-345.0	117.0	\$18.826	\$0.846	
345.1-350.0	118.7	\$19.097	\$0.859	
350.1-355.0	120.4	\$19.367	\$0.871	
355.1-360.0	122.1	\$19.638	\$0.883	
360.1-365.0	123.9	\$19.924	\$0.896	
365.1-370.0	125.6	\$20.195	\$0.909	
370.1-375.0	127.3	\$20.466	\$0.921	
375.1-380.0	129.0	\$20.736	\$0.933	
380.1-385.0	130.7	\$21.007	\$0.945	
385.1-390.0	132.4	\$21.277	\$0.958	
390.1-395.0	134.1	\$21.548	\$0.970	
395.1-400.0	135.8	\$21.818	\$0.982	

	ALL NIGHT RATES							
	PER LAMP PER MONTH							
LS-1A	LS-1C	LS-1D	LS-1E	LS-1F				
\$18.879	\$19.147	\$22.088	\$22.843	\$20.232				
\$19.150	\$19.418	\$22.359	\$23.114	\$20.503				
\$19.420	\$19.688	\$22.629	\$23.384	\$20.773				
\$19.707	\$19.975	\$22.916	\$23.671	\$21.060				
\$19.977	\$20.245	\$23.186	\$23.941	\$21.330				
\$20.248	\$20.516	\$23.457	\$24.212	\$21.601				
\$20.518	\$20.786	\$23.727	\$24.482	\$21.871				
\$20.789	\$21.057	\$23.998	\$24.753	\$22.142				
\$21.059	\$21.327	\$24.268	\$25.023	\$22.412				
\$21.330	\$21.598	\$24.539	\$25.294	\$22.683				
\$21.600	\$21.868	\$24.809	\$25.564	\$22.953				
\$21.871	\$22.139	\$25.080	\$25.835	\$23.224				
\$22.142	\$22.410	\$25.351	\$26.106	\$23.495				
\$22.412	\$22.680	\$25.621	\$26.376	\$23.765				
\$22.683	\$22.951	\$25.892	\$26.647	\$24.036				
\$22.969	\$23.237	\$26.178	\$26.933	\$24.322				
\$23.240	\$23.508	\$26.449	\$27.204	\$24.593				
\$23.510	\$23.778	\$26.719	\$27.474	\$24.863				
\$23.781	\$24.049	\$26.990	\$27.745	\$25.134				
\$24.051	\$24.319	\$27.260	\$28.015	\$25.404				
\$24.322	\$24.590	\$27.531	\$28.286	\$25.675				
\$24.592	\$24.860	\$27.801	\$28.556	\$25.945				
\$24.863	\$25.131	\$28.072	\$28.827	\$26.216				
\$25.133	\$25.401	\$28.342	\$29.097	\$26.486				
\$25.404	\$25.672	\$28.613	\$29.368	\$26.757				
\$25.674	\$25.942	\$28.883	\$29.638	\$27.027				
\$25.945	\$26.213	\$29.154	\$29.909	\$27.298				
\$26.231	\$26.499	\$29.440	\$30.195	\$27.584				
\$26.502	\$26.770	\$29.711	\$30.466	\$27.855				
\$26.773	\$27.041	\$29.982	\$30.737	\$28.126				
\$27.043	\$27.311	\$30.252	\$31.007	\$28.396				
\$27.314	\$27.582	\$30.523	\$31.278	\$28.667				
\$27.584	\$27.852	\$30.793	\$31.548	\$28.937				
\$27.855	\$28.123	\$31.064	\$31.819	\$29.208				
\$28.125	\$28.393	\$31.334	\$32.089	\$29.478				
LED lights are	lights are only applicable to LS-1A, 1C, 1E and 1F							

LIGHT EMITTING DIODE (LED) LAMPS CONVERSION

(with LED Surcharge)

	AL	L NIGHT RATI	≣S		HALF-HOUR
	PER	ADJUSTMEN			
					LS-1A, C, D, I & F
LS-1A	LS-1C	LS-1D	LS-1E	LS-1F	αΓ
\$21.693	\$21.961	\$34.856	\$25.657	\$23.046	\$0.562
\$21.964	\$22.232	\$35.127	\$25.928	\$23.317	\$0.574
\$22.234	\$22.502	\$35.397	\$26.198	\$23.587	\$0.587
\$22.521	\$22.789	\$35.684	\$26.485	\$23.874	\$0.600
\$22.791	\$23.059	\$35.954	\$26.755	\$24,144	\$0.612
\$23.062	\$23.330	\$36.225	\$27.026	\$24.415	\$0.624
\$23.332	\$23,600	\$36,495	\$27.296	\$24.685	\$0.637
\$23.603	\$23.871	\$36,766	\$27.567	\$24.956	\$0.649
\$23.873	\$24,141	\$37.036	\$27.837	\$25,226	\$0.661
\$24.144	\$24.412	\$37.307	\$28.108	\$25.497	\$0.673
\$24.414	\$24.682	\$37.577	\$28.378	\$25.767	\$0.686
\$24.685	\$24.953	\$37.848	\$28.649	\$26.038	\$0.698
\$24.956	\$25.224	\$38.119	\$28.920	\$26.309	\$0.710
\$25.226	\$25.494	\$38.389	\$29.190	\$26.579	\$0.723
\$25.497	\$25.765	\$38.660	\$29.461	\$26.850	\$0.735
\$25.783	\$26.051	\$38.946	\$29.747	\$27.136	\$0.748
\$26.054	\$26.322	\$39.217	\$30.018	\$27.407	\$0.760
\$26.324	\$26.592	\$39.487	\$30.288	\$27.677	\$0.773
\$26.595	\$26.863	\$39.758	\$30.559	\$27.948	\$0.785
\$26.865	\$27.133	\$40.028	\$30.829	\$28.218	\$0.797
\$27.136	\$27.404	\$40.299	\$31.100	\$28.489	\$0.809
\$27.406	\$27.674	\$40.569	\$31.370	\$28.759	\$0.822
\$27.677	\$27.945	\$40.840	\$31.641	\$29.030	\$0.834
\$27.947	\$28.215	\$41.110	\$31.911	\$29.300	\$0.846
\$28.218	\$28.486	\$41.381	\$32.182	\$29.571	\$0.859
\$28.488	\$28.756	\$41.651	\$32.452	\$29.841	\$0.871
\$28.759	\$29.027	\$41.922	\$32.723	\$30.112	\$0.883
\$29.045	\$29.313	\$42.208	\$33.009	\$30.398	\$0.896
\$29.316	\$29.584	\$42.479	\$33.280	\$30.669	\$0.909
\$29.587	\$29.855	\$42.750	\$33.551	\$30.940	\$0.921
\$29.857	\$30.125	\$43.020	\$33.821	\$31.210	\$0.933
\$30.128	\$30.396	\$43.291	\$34.092	\$31.481	\$0.945
\$30.398	\$30.666	\$43.561	\$34.362	\$31.751	\$0.958
\$30.669	\$30.937	\$43.832	\$34.633	\$32.022	\$0.970
\$30.939	\$31.207	\$44.102	\$34.903	\$32.292	\$0.982
Decorative L	ED lights are	only applicabl	e to LS-1D		

Exhibit D

List of Cities and Counties

SERVICE OF NOTICE OF APPLICATION

In accordance with Rule 3.2(b), Applicant will mail a notice to the following, stating in general terms its proposed change in rates.

State of California

To the Attorney General and the Department of General Services.

State of California Office of Attorney General 1300 I St Ste 1101 Sacramento, CA 95814

and

Department of General Services Office of Buildings & Grounds 505 Van Ness Avenue, Room 2012 San Francisco, CA 94102

Counties

To the County Counsel or District Attorney and the County Clerk in the following

counties:

Alameda Mariposa Alpine Mendocino Amador Merced Butte Modoc Calaveras Monterey Colusa Napa Contra Costa Nevada El Dorado Placer Plumas Fresno Glenn Sacramento Humboldt San Benito Kern San Bernardino Kings San Francisco Lake San Joaquin San Luis Obispo Lassen San Mateo Madera Santa Barbara Marin

Santa Clara Santa Cruz Shasta Sierra Siskiyou Solano Sonoma Stanislaus Sutter Tehama Trinity Tulare Tuolumne Yolo Yuba

Municipal Corporations

To the City Attorney and the City Clerk of the following municipal corporations:

Alameda Colusa Hanford Albany Concord Hayward **Amador City** Corcoran Healdsburg American Canyon Corning Hercules Corte Madera Hillsborough Anderson Angels Camp Cotati Hollister Antioch Hughson Cupertino Daly City Huron Arcata Arroyo Grande Danville Ione **Davis** Arvin Isleton Del Rey Oakes Atascadero Jackson Atherton Dinuba Kerman Atwater Dixon King City Kingsburg Auburn Dos Palos Lafayette Avenal Dublin Bakersfield East Palo Alto Lakeport Larkspur **Barstow** El Cerrito Belmont Elk Grove Lathrop Belvedere Emeryville Lemoore Escalon Benicia Lincoln Berkeley Live Oak Eureka **Biggs** Fairfax Livermore Blue Lake Fairfield Livingston Brentwood Ferndale Lodi Brisbane Firebaugh Lompoc Loomis Buellton Folsom Los Altos Burlingame Fort Bragg Calistoga Fortuna Los Altos Hills Campbell Foster City Los Banos Capitola Fowler Los Gatos Carmel Fremont Madera Ceres Fresno Manteca Chico Maricopa Galt Chowchilla Gilrov Marina Citrus Heights Gonzales Mariposa Clayton Grass Valley Martinez Clearlake Marysville Greenfield McFarland Cloverdale Gridley Grover Beach Clovis Mendota Guadalupe Menlo Park Coalinga Colfax Gustine Merced Colma Half Moon Bay Mill Valley

Millbrae Ridgecrest Sunnyvale
Milpitas Rio Dell Sutter Creek
Madata

Modesto Rio Vista Taft Monte Sereno Ripon Tehama Riverbank Tiburon Monterey Moraga Rocklin Tracy Morgan Hill Rohnert Park Trinidad Morro Bay Roseville Turlock Mountain View Ukiah Ross Napa Sacramento Union City Vacaville Newark Saint Helena

Nevada City
Newman
Salinas
Vallejo
Newman
San Anselmo
Victorville
Novato
San Bruno
Walnut Creek
Oakdale
San Carlos
Wasco

Oakland San Francisco Waterford
Oakley San Joaquin Watsonville
Orange Cove San Jose West Sacramento

Yountville

Yuba City

Orinda San Juan Bautista Wheatland Orland San Leandro Williams Oroville San Luis Obispo Willits Pacific Grove San Mateo Willows **Pacifica** San Pablo Windsor Palo Alto Winters San Rafael Paradise Woodland San Ramon Parlier Sand City Woodside

Solvang

Sonoma

Sonora

Paso Robles Sanger Santa Clara Patterson Petaluma Santa Cruz Piedmont Santa Maria Pinole Santa Rosa Pismo Beach Saratoga Pittsburg Sausalito Placerville Scotts Valley Pleasant Hill Seaside Pleasanton Sebastopol Plymouth Selma Point Arena Shafter Shasta Lake Portola Portola Vallev Soledad

Redwood City South San Francisco

Reedley Stockton Richmond Suisun City

Rancho Cordova

Red Bluff

Redding