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

Application of Pacific Gas and Electric Company for Authority to Increase Electric Rates and Charges to Recover Costs Relating to California Solar Photovoltaic Manufacturing Development Facility

A.10-11-002 (filed November 1, 2010)

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### AMENDMENT TO APPLICATION OF PACIFIC GAS AND ELECTRIC COMPANY FOR SHARE OF COSTS OF CALIFORNIA SOLAR PHOTOVOLTAIC MANUFACTURING DEVELOPMENT FACILITY UNDER U.S. DEPARTMENT OF ENERGY PHOTOVOLTAIC MANUFACTURING INITIATIVE

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Dated: July 15, 2011

Attorneys for PACIFIC GAS AND ELECTRIC COMPANY

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#### I. INTRODUCTION

Pursuant to the April 6, 2011, email direction of the Administrative Law Judge, PG&E hereby files its amendment to Application (A.) 10-11-002. ("Amended Application"). The purpose of the Amended Application is to reflect the reduced scope and revenue requirements requested for the California Solar Photovoltaic Manufacturing Development Facility ("California Solar PV MDF") in light of the U.S. Department of Energy's ("DOE's") decision to fund the project at a level of \$30 million, instead of the \$98 million in federal funding originally requested and referenced in the original A.10-11-002.

The reduction in DOE funding means that PG&E's share of the costs of the project and investment in the project requested in the Application is reduced from \$19.8 million to \$9.9 million in after-tax support (from \$35.6 million to \$17.8 million in revenue requirements). The DOE funding reduction also means that the scope of the project is reduced from the original three phases proposed to DOE and described in the original Application, to one phase ("Phase 1a") focusing on silicon-only PV manufacturing development. PG&E's equity interest in the project will be increased commensurately to reflect the ratio of its reduced \$9.9 million

contribution to the project to the reduced pre-money valuation of the project of \$40.5 million, thereby enhancing the potential for reimbursement of customer costs.

As a result of this Amendment to the Application, PG&E is requesting \$12.6 million and \$5.2 million in revenue requirements for 2012 and 2013, respectively, as the pre-tax customer contribution toward the matching funds required for the DOE award for the California Solar PV MDF. PG&E's contribution remains contingent on CPUC approval of PG&E's requests in this application and on SVTC Solar receiving the DOE grant funds, an agreement for which is expected contemporaneous with this Amendment. Pursuant to CPUC Rule 3.2(a)(3), the percentage increase in rates would not be in excess of one percent.

The details of PG&E's reduced revenue requirements request and the reduced scope of the California Solar PV MDF project are discussed below. In all other material respects, the original Application in this proceeding remains unchanged and is incorporated into this Amendment to the Application in full.

#### II. PROCEDURAL UPDATE

Since the March 23, 2011, CPUC workshop on the original Application, the following events have occurred which necessitate the Amendment to the Application:

On April 5, 2011, the DOE announced that it had awarded SVTC Technologies \$25 million for the California Solar PV MDF project. According to the DOE, the California Solar PV MDF "will create a fee-for-service PV Manufacturing Development Facility (MDF) that will enable start-ups, materials suppliers, and other PV innovators to eliminate a major portion of their up-front capital and operating costs during product development and pilot production. This will potentially accelerate development and time to market by 12 to 15 months. The MDF will focus on the commercialization of silicon PV manufacturing processes and technologies, and aim to reduce the costs and development time for participating PV industry leaders to deliver innovative, emerging technologies from the laboratory to commercial manufacturing lines. The MDF will support [U.S. DOE] SunShot targets by strengthening and accelerating growth along the PV manufacturing industry's entire supply chain by reducing the cost, time, and risk associated with commercialization." (DOE Secretary Chu, DOE Press Release, April 5, 2011.) The DOE award subsequently was increased to \$30 million.

On April 6, 2011, as a result of the reduced DOE award for the project, the ALJ issued a ruling suspending the briefing schedule in this proceeding and directing PG&E to file an amended application that addresses the issues indicated by an examination of the terms of the DOE grant. The ALJ stated that, following receipt of the amended application, he would schedule a second pre-hearing conference to discuss how to proceed in the light of changed circumstances.

On June 20, 2011, the ALJ reaffirmed his procedural guidance by telephone with PG&E counsel, and subsequently PG&E determined that it would file this Amendment to the Application to reflect the reduced scope and reduced funding request for the project.

#### III. CHANGES TO SCOPE OF THE PROJECT

Pursuant to the direction of the ALJ as well as the questions by parties, including those provided by counsel for TURN and DRA in April 5 and 6, 2011 via emails, PG&E provides the following details on the revised proposed scope for the California Solar PV MDF project:

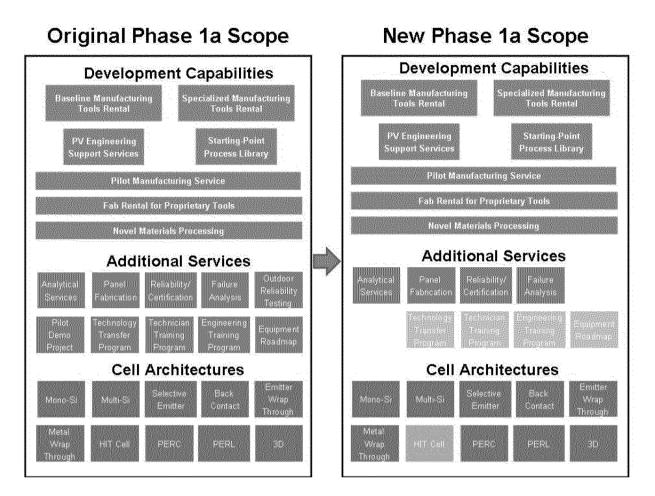
Based on DOE's guidance, SVTC has reduced the scope of work from its original three phase project (Phase 1a, Phase 1b, Phase 2 and Phase 3) to focus only on Phase 1a: Silicon PV Manufacturing Development. In addition to focusing its efforts on silicon only, SVTC also has optimized the budget for this program to maximize the services available to users of the MDF, while minimizing the need for Federal funding and PG&E customer funding.

Based on this new plan, which focuses on silicon only, SVTC will establish a complete Silicon MDF with the same general range of capabilities and services for the targeted customers as was envisioned in its original proposal to DOE and in PG&E's original Application in this proceeding. In addition, SVTC intends to still complete its Phase 1a plan, and reach a cash-flowbreak-even point, within a period of 3 years, consistent with its original plan. SVTC intends to accomplish this through the following changes in its program scope:

- 1) Significantly reduce the facility build-out for the MDF
  - a. Original: ~25,000 square feet of fabrication space (room for baseline/differentiation tools plus 20 customer tools); 20,000 square feet of facilitized lab space; plus office space
  - b. New: ~14,000 square feet of facilitized fabrication space (room for baseline/differentiation tools plus 8 customer tools); lab and office space to be builtout on a customer-by-customer basis, with costs included in User agreements.
- Reduce the initial toolset that will be installed, minimizing installation costs and reducing facilities systems requirement (i.e, reducing fab construction costs)
  - a. No duplicative tools
  - b. No thin-film tools (e.g., Indium Tin Oxide (ITO); Amorphous Silicon Plasma Enhanced Chemical Vapor Deposition (a-Si PECVD), etc); resulting impact: no Heterojunction with Intrinsic Thin Layer Cell (HIT cell) capability initially
  - c. All advanced cell architectures will still be supported (except HIT cell, which can be added in the future, based on demand and sufficient revenue to cover facilities expansion costs)
- Reduce expert staffing requirements by reducing the rate at which new advanced cell architectures will be made available
  - a. Original: Baselines for 7 advanced cell architectures available within 14 months of qualifying the primary line
  - b. New: 2 new advanced architectures available per year, selected based on User demand
- 4) Reduce the scope of workforce development efforts
  - a. Original: A funded "development" project (i.e., SVTC would actively create new workforce training curricula)
  - b. New: SVTC will play an unfunded "support" role (i.e., supporting future development of workforce training curricula that will be funded from other sources)

- Reduce the scope of SVTC's equipment road-mapping effort (from "development" to "support")
  - a. Some road-mapping will still be done for internal equipment planning purposes
- Reduce the scope of SVTC's relationship with National Renewable Energy Laboratory ("NREL")
  - a. Original: NREL was funded to work directly with SVTC to help bring up various advanced silicon device architectures at the MDF
  - New: NREL will play an unfunded "advisory" role (i.e., provide SVTC with guidance as SVTC develops these architectures)
- 7) Set a slightly more aggressive customer ramp in Year 2 to drive early customer revenues
- Eliminate SVTC's outdoor testing facility and panel demonstration program to reduce capital and operating expenditures (SVTC will seek to fund these programs separately, in the future)

Overall, according to SVTC, this plan results in minimal changes to the available services that will be offered through the MDF to targeted users as envisioned in the original application. The biggest impacts are on <u>timing</u> (e.g., slower introduction of new advanced cell architectures into the MDF) and <u>capacity</u> (e.g., less space for customer tools on-site initially; although the total number of customers that can be supported on-site over time should remain the same). Below is a diagram depicting the original scope of services envisioned under SVTC's Phase 1a project and the original Application in this proceeding, and the new revised scope of services under the Amendment to the Application. Faded blocks have been removed from the program. Partially faded blocks have been reduced in scope, as described above.



#### IV. CHANGES TO THE FUNDING OF THE PROJECT

Based on the reduced scope of the project discussed above, the funding sources and adequacy of the funding become more stable and predictable. In addition to the various capital equipment, materials, and labor that SVTC and its partners have already committed to this project under the original scope and Application, completion of the reduced scope described above will require \$44.73 million in funding over a period of 3 years. DOE has agreed to provide \$30 million. SVTC will be providing an additional \$4.83 million in funding. This leaves a funding gap of \$9.9 million, which PG&E is requesting in this Amendment over the first 2 years, 2012 and 2013. No other funding sources or in-kind contributions are required to meet the DOE cost sharing requirements for the project.

In addition, PG&E and SVTC intend to adjust PG&E's equity investment as proposed in the draft "term sheet" provided on the record of this proceeding, to reflect a linear increase in

PG&E's equity interest commensurate with the ratio of its contribution to the overall equity premoney valuation of the project. PG&E will provide a draft of the revised term sheet to interested parties and for the record of this proceeding shortly, and informally will solicit the comments and suggestions of parties on the draft term sheet prior to the next prehearing conference, so that any remaining issues associated with PG&E's proposed equity investment and the commensurate opportunity for ratepayer reimbursement under the investment are narrowed or resolved.

### V. STATEMENT OF RELIEF AND AUTHORITY SOUGHT

### A. Estimated Revenue Requirements

Table 1 sets forth PG&E's revised estimated revenue requirements each year associated with this request (in millions of dollars):

Table 1	2012	2013
Annual Revenue Requirement (\$ millions)	\$12.6	\$5.2

#### **B.** Cost Recovery

As previously proposed in the original Application, revenue requirements associated with PG&E's incremental costs plus an allowance for franchise fees and uncollectibles incurred on this project would be booked to the Distribution Revenue Adjustment Mechanism (DRAM) balancing account once the project is approved by this Commission and funding is approved by the DOE. PG&E has updated the revenue requirement to reflect the new electric franchise fee and uncollectible factor adopted in PG&E's 2011 General Rate Case (GRC).

# VI. SUMMARY OF REASONS FOR PG&E'S REQUEST AND SPECIFIC AREAS OF INCREASE

#### A. Reasons for Requested Relief

PG&E has provided detailed support for its request in the original Application and this Amendment to the Application, as well as the copy of the SVTC Technologies' application submitted to DOE which was incorporated into this proceeding by separate motion. In addition, PG&E's Amendment and Application are supported by the facts and policies included in the Commission's prior decisions and proceedings on greenhouse gas reduction, climate change, and renewable energy technologies and procurement. The key reasons for the requested increase in revenue requirements are:

- To expand the deployment of advanced solar PV domestic manufacturing technologies, in order to enhance the availability of cost-effective, efficient renewable solar PV electricity generation to replace fossil energy and reduce greenhouse gas emissions for customers;
- To obtain for the benefit of California consumers, businesses and government institutions a "fair share" of federal funds made available by the DOE to create jobs, foster economic recovery and stimulate technology innovation and competitiveness;
- To comply with the Commission's renewable energy and greenhouse gas reduction policies;
- To obtain for customers and California significant benefits of the solar PV renewable energy manufacturing projects in return for only being required to fund a small percentage of the costs of those projects in rates or through other nonfederal funds; and
- To foster and reinforce California's international leadership in technology innovation and entrepreneurship through utility/public/private partnerships in support of renewable energy projects and programs.

#### **B.** Summary Supporting Increase

This Amendment and Application for funding of the California Solar PV MDF provide a summary of the support for the increase in electric rates requested in this Application as amended.

#### VII. COST OF CAPITAL/AUTHORIZED RATE OF RETURN

The Rate Case Plan requires a utility to "use the most recently authorized rate of return in its calculations" supporting its results of operations presentation.<sup>1/</sup> Accordingly, PG&E has used the authorized cost of capital information set forth in Decisions 07-12-049 and 08-05-035.

# VIII. REVENUES AT PRESENT RATES IN THE RESULTS OF OPERATIONS REPORT

PG&E's rates and charges for electric service are set forth in PG&E's electric tariffs on file with this Commission. The Commission has approved these tariffs in decisions, orders, and resolutions. Exhibit B in the original Application set forth PG&E's present electric rates.

#### IX. EXHIBITS

PG&E is not including prepared testimony in support of this Amendment and the Application because it is requesting that the Application as amended be reviewed and approved based on the pleadings, affidavits and written record, without the need for evidentiary hearings.

#### A. Statutory Authority

PG&E files this Amendment Application pursuant to the direction of the ALJ and Sections 451, 454, 728, 729, 740.4, and 795 of the Public Utilities Code, the Commission's Rules of Practice and Procedure, and prior decisions, orders, and resolutions of this Commission.

#### B. Categorization - Rule 2.1.(c)

PG&E proposes that this Application remain categorized as a "ratesetting" proceeding.

#### C. Need for Hearing - Rule 2.1(c)

PG&E anticipates that evidentiary hearings will not be needed on the Application as amended. PG&E's proposed revised schedule is set forth in subsection E, below.

# D. Issues to be Considered - Rule 2.1(c)

The principal issues are whether:

1. The proposed revenue requirement to support the requested customer funding of the California Solar PV MDF is just and reasonable and the Commission should authorize PG&E to reflect the adopted revenue requirement in rates.

<sup>&</sup>lt;u>1/</u> D.89-01-040; 30 CPUC 2d 576, 606.

2. PG&E has demonstrated that its requested customer funding for a portion of the costs of the California Solar PV MDF is justified in light of the costs and benefits of the project to customers.

### E. Proposed Schedule – Rule 2.1(c)

PG&E understands from SVTC that SVTC and DOE have finalized their award agreement and seek to begin implementing the project as soon as possible. Therefore, Commission approval of this Application as amended as soon as possible is essential if the project is to move forward and begin delivering benefits to the California renewable energy industry and markets on schedule. In addition, because the amendment is solely a reduction in scope and funding for a project whose detailed activities and schedule are already well known to the parties, the schedule for consideration of the amended application should be able to be reasonably expedited. For these reasons, PG&E is recommending the following revised schedule for expedited decisionmaking, with an emphasis on written pleadings and comments in lieu of evidentiary hearings, and an expedited proposed decision. In addition, PG&E is open to additional discovery on the amendment to this Application on an ongoing basis immediately following the filing of this Amendment and continuing through the date at which the case is submitted.

File Amendment to Application	July 15, 2011
Protests and Opening Comments Due	August 15, 2011
Reply to Protests and Reply Comments Due	August 22, 2011
Prehearing Conference	August 24, 2011
Proposed Decision	September 20, 2011
Opening Comments on Proposed Decision	October 10, 2011
Reply Comments on Proposed Decision	October 17, 2011
Decision	October 20, 2011

# F. Legal Name and Principal Place of Business – Rule 2.1(a)

The legal name of the Applicant is Pacific Gas and Electric Company. PG&E's principal

place of business is San Francisco, California. Its post office address is Post Office Box 7442,

San Francisco, California 94120.

# G. Correspondence and Communication Regarding This Application - Rule 2.1.(b)

All correspondence and communications regarding this Application should be addressed

to Christopher J. Warner and Maggie Chan at the addresses listed below:

Christopher J. Warner Law Department Pacific Gas and Electric Company Post Office Box 7442 San Francisco, California 94120 Telephone: (415) 973-6695 Fax: (415) 973-5220 E-mail: cjw5@pge.com

Maggie Chan Energy Proceedings Department Pacific Gas and Electric Company 77 Beale Street, B9A San Francisco, California, 94105 Telephone: (415) 973-4732 Fax: (415) 973-0942 E-Mail: mmcl@pge.com Overnight hardcopy delivery:

Christopher J. Warner Law Department Pacific Gas and Electric Company 77 Beale Street, B30A San Francisco, California 94105

# H. Articles of Incorporation – 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.

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

PG&E's balance sheet and an income statement for the three months ending September

30, 2010, were provided in Exhibit A of the original Application.

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

The presently effective electric rates PG&E proposes to modify were set forth in Exhibit

B of the original Application.

### K. Statement of Proposed Changes and Results of Operations at Proposed Rates - Rule 3.2(a)(3)

The proposed changes in revenues are not in excess of one percent.

# L. General Description of PG&E's Electric and Gas Department Plant - Rule 3.2(a)(4)

Because this submittal is not a general rate application, this requirement is not applicable.

# M. Summary of Earnings - Rules 3.2(a)(5) and 3.2(a)(6)

Exhibit C of the original Application shows for the recorded year 2009 the revenues,

expenses, rate bases and rate of return for PG&E's Electric and Gas Departments.

# N. Statement of Election of Method of Computing Depreciation Deduction for Federal Income Tax - Rule 3.2(a)(7)

Because this submittal is not a general rate application, this requirement is not applicable.

# O. Most Recent Proxy Statement - Rule 3.2(a)(8)

Because this submittal is not a general rate application, this requirement is not applicable.

# P. Type of Rate Change Requested - Rule 3.2(a)(10)

This proposed change reflects changes in PG&E's base revenues to reflect the costs

PG&E incurs to own, operate and maintain its electric plant and to enable PG&E to provide

service to its customers.

# Q. Notice and Service of Application – Rule 3.2(b)-(d)

Within ten (10) days after filing the original Application, PG&E mailed a notice stating in general terms the proposed revenues, rate changes, and ratemaking mechanisms requested in this Application to the parties listed in Exhibit D of the original Application, including the State of California and cities and counties served by PG&E. A copy of the Amendment to the Application is being served on the parties of record in A.10-11-002.

PG&E previously published in newspapers of general circulation in each county in its service territory a notice of filing the original Application. PG&E also included notices with the regular bills mailed to all customers affected by the proposed changes.

#### **R.** Exhibit List and Statement of Readiness

PG&E is ready to proceed with this case based on the Application as amended and the facts and data contained in the accompanying exhibits in support of the revenue request set forth in this Application.

#### X. REQUEST FOR COMMISSION ORDERS

PG&E requests that the Commission issue appropriate orders:

1. Finding that the proposed revenue requirement for the electric distribution function requested in this Application as amended is just and reasonable and that PG&E may reflect the adopted electric distribution revenue requirement in rates;

2. Granting such additional relief as the Commission may deem proper.

Respectfully Submitted,

CHRISTOPHER J. WARNER

By: /s/ CHRISTOPHER J. WARNER

Pacific Gas and Electric Company 77 Beale Street San Francisco, CA 94105 Telephone: (415) 973-6695 Facsimile: (415) 973-0516 E-Mail: CJW5@pge.com

Dated: July 15, 2011

Attorney for PACIFIC GAS AND ELECTRIC COMPANY

#### VERIFICATION

I, the undersigned, say:

I am an officer of Pacific Gas and Electric Company, a corporation, and am authorized to make this verification on its behalf. The statements in the foregoing document are true of my own knowledge, except as to matters which are therein stated on information or belief, and as to those matters I believe them to be true.

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

Executed on July 15, 2011, at San Francisco, California.

/s/

Name: Brian K. Cherry Vice President, Regulatory Relations