



Ron van der Leeden
Rates, Revenues & Tariffs
8330 Century Park Court
San Diego, CA 92123-1548

Tel: 213-244-2009
Fax: 858.654.1788
RvanderLeeden@semprautilities.com

March 5, 2010

SDG&E ADVICE LETTER 2150-E
(U902-E)

PUBLIC UTILITIES COMMISSION OF THE STATE OF CALIFORNIA

SUBJECT: Request for approval to reallocate a portion of residual Self-Generation Incentive Program (SGIP) funds to serve as grant matching funds for the installation of a solar photovoltaic and Advanced Energy Storage system project in a fire-prone area

San Diego Gas & Electric Company ("SDG&E"), on behalf of the City of San Diego ("City"), and the California Center for Sustainable Energy ("CCSE"), (together, the "Partnership"), hereby submits this advice filing to request approval to reallocate \$345,000 of the remaining \$2,200,000 Self-Generation Incentive Program ("SGIP") funds previously allocated to the 2003 Rebuild a Greener San Diego Program ("Rebuild Program") to serve as grant matching funds for the installation of a solar photovoltaic ("PV") generation system with integrated Advanced Energy Storage ("AES") on a City-owned property in a fire-prone area.

PURPOSE

Resolution E-3860, adopted by the California Public Utilities Commission ("CPUC") on December 18, 2003, approved the reallocation of SGIP and energy efficiency program funds to provide victims of the October 2003 fires with educational guidance, technical assistance, as well as monetary incentives to design and incorporate energy efficiency measures and/or solar PV generation systems into their newly constructed homes. Initial funding for the Rebuild Program was approved at a level of \$6,570,000 and was derived from programs administered by CCSE (then known as "San Diego Regional Energy Office" or "SDREO"), SDG&E, and the City of San Diego. Of the total funding for the Rebuild Program, \$5,000,000 was derived from the SGIP, and of these SGIP funds, \$2,200,000 remains.

The Partnership hereby requests reallocation of \$345,000 of the remaining \$2,200,000 SGIP funds previously allocated to the Rebuild Program to serve as matching funds for a U.S. Department of Energy ("DOE") Solar America Initiative Special Project Grant to install a solar PV generation system with integrated AES on a City-owned property in a fire-prone area. The U.S. DOE Solar America Initiative Special Project Grant (awarded January 6, 2010) will provide \$400,000 to fund project-related labor, contracting costs, PV system costs, and a portion of AES system costs. The SGIP funds requested via this advice filing would be utilized for the net installation and warranty-related maintenance costs of the integrated AES system, as well as for necessary safety equipment to allow the facility to be completely isolated from SDG&E's transmission and distribution facilities (i.e., "islanded") during grid outages.

This request for reallocation of SGIP funds previously allocated to the Rebuild Program is consistent with the original intent of these funds in that this project will facilitate the installation of renewable generation and, through the integration of an AES system, provide fire and crisis related benefits by means of the system's standalone operating capability. In addition to providing the City of San Diego specific benefits, this project will also provide significant ratepayer benefits by supplying a unique opportunity for cutting-edge learning, as well as a wealth of measurement and evaluation (M&E) data. The City of San Diego has a strong interest in using the project as a learning platform for AES control and dispatch, system performance, and smart grid integration. As such, the City is willing to turn over control of the system on a limited basis to CPUC evaluation contractors for the purpose of M&E-related research.

BACKGROUND

In late October 2003, the Cedar, Otay, and Paradise wildfires burned across San Diego County. To help residential customers rebuild their homes after these disastrous fires, SDG&E, the City of San Diego, the County of San Diego and CCSE (then "SDREO") joined forces to develop the Rebuild Program, which offered fire victims educational guidance, technical assistance, as well as monetary incentives to design and incorporate energy efficiency measures and/or solar PV generation systems into the plans of their newly constructed homes. Resolution E-3860 approved the reallocation of \$6,570,000 for the Rebuild Program from two sources of funding: (1) Program Years (PY) 2002/3 Energy Efficiency funding; and (2) SGIP Level 2 funding. \$5,000,000 for the Rebuild Program was derived from SGIP funds, and, of this amount, \$2,200,000 remains.

Subsequently, in October 2007, the Witch Fire and the Harris Fire burned across San Diego County. Residents were subjected to a mix of mandatory and voluntary evacuations, displacing thousands of San Diego County residents into the urban core and presenting firefighters and other first responders with logistical and infrastructure challenges. During these crisis events, officials dealt with positioning response efforts close to the impacted areas, while at the same time ensuring availability of the basic electric service required to manage services provided by emergency workers and efforts to assist residents. Creating a fire-victim assistance center in or near a fire-prone area, and equipping this center with secure, solar PV generation and an integrated AES system would create a strategic full-service "island" where officials would have the ability to attend to impacted residents within their communities and assist fire, rescue and health responders in accessing and attending to those in need without fear of losing critical infrastructure.

The City of San Diego faces the formidable challenge of wildfire on a regular basis. The recent catastrophic fires have highlighted the need for reliable, secure, decentralized and resilient energy supply. The reallocation of \$345,000 of the \$2,200,000 remaining SGIP funds previously allocated to the Rebuild Program to help create an "islanded" resource center utilizing solar PV and AES is consistent with the original intent of these funds and will provide the City of San Diego with multiple opportunities for lasting community benefit.

PROJECT DESCRIPTION

The requested SGIP funds will serve as grant matching funds for the installation of a solar PV generation system with integrated AES on a City-owned property in a fire-prone area. A U.S.

DOE Solar America Initiative Special Project Grant will fund project-related labor, contracting costs, PV system costs, and a portion of AES system costs, while the requested SGIP funds would be utilized for the net installation and maintenance costs of the integrated AES system.

This project will be installed at a strategically located public facility in or near a fire-prone area within the City of San Diego. The solar PV system will generate electricity at the facility on an ongoing basis. The City-owned PV system, funded by DOE, will operate under a net energy metering agreement (Schedule NEM) with SDG&E, offsetting on-site usage. The AES system will be owned by the City and will be interconnected on the customer side of the meter. The AES system will allow the facility to be “islanded” during a grid outage caused by fire or other crisis; that is, they will be capable of standalone operation during a grid outage, providing critical electric service to displaced residents. Further, the AES system will also provide unique added value both to the customer, by optimizing consumption from the utility in response to tariff signals, as well as to the utility, by providing ancillary services to the distribution system. The innovative nature of this project and its ability to be replicated nationwide has prompted the DOE to highlight it as a “top priority” and make available technical assistance.

As a U.S. DOE Solar America Initiative Special Project, the City’s target facility is a City-owned community center or recreation facility. Six sites, meeting the space, load, and “proximity to fire-prone area” requirements, have already been identified by the City. Final site selection will be accomplished through an intentional process as part of the San Diego Solar Strategic Plan, currently in development as the final deliverable of the City’s efforts under Phase 1 of the Solar America Cities program.

The City currently receives power from 15 solar systems at distributed locations throughout the City with a total output of 2.1 Megawatts. Several pilot projects for monitoring these systems are ongoing, using internet technologies connected to the secondary pulse output of the generation meters. The City purchased and currently manages a software tool that provides real-time interval data for the largest City buildings and locations with PV installations. Several types of solar modules have been installed to allow ongoing performance comparisons between technologies. The City continues to refine the best practices related to solar and other renewable generation installations; the proposed U.S. DOE Solar America Initiative Special Project will provide the opportunity to evaluate AES benefits, including integration with PV systems.

The proposed system will be an important step in implementing and evaluating a smart grid monitoring system for the City; as such, the City is committed to operating and maintaining the complete system—PV and AES—for a minimum of ten years.

PROPOSED BUDGET AND FUNDING SOURCES

Resolution E-3860 approved the reallocation of \$6,570,000 for the Rebuild Program from two sources of funding: 1) PY2002/3 Energy Efficiency funding; and 2) SGIP Level 2 funding. Specifically, the \$6,570,000 in funding was derived from four programs implemented by CCSE (then “SDREO”), one program implemented by the City of San Diego, and two programs implemented by SDG&E:

Four programs implemented by SDREO (now “CCSE”):

- Self-Generation Incentive Program (SGIP): \$5,000,000

- PY2002/3 Energy Efficiency Programs (3): \$470,000
- City of San Diego:
- PY2002/3 Whole House Energy Efficiency Retrofit Incentive Program: \$600,000
- Two Programs Implemented by SDG&E:
- Express Efficiency and Savings by Design Programs: \$500,000

Only the remaining SGIP funds are the subject of this Advice Letter. Of the \$5,000,000 derived from SGIP funds, \$2,200,000 remains. Via this advice filing, the Partnership seeks reallocation of \$345,000 of the remaining \$2,200,000 SGIP funds to serve as matching funds for a U.S. DOE Solar America Initiative Special Project Grant to install a solar PV generation system with integrated AES on a City-owned property in a fire-prone area. If reallocation occurs, the project funding will be as follows;

Project Budget by Activity

City of San Diego – Labor (Site Selection, RFP Design, Project Management)

- DOE Solar America Cities Grant: \$73,700

CCSE – Labor (Site Characterization, RFP Design, Project Evaluation)

- DOE Solar America Cities Grant: \$71,300

Miscellaneous Costs – Non-Labor (Travel, Supplies, Outreach and Research)

- DOE Solar America Cities Grant: \$34,994

PV System Costs – Non-Labor (Modules, Inverter, Balance of System)

- DOE Solar America Cities Grant: \$154,500
- CSI EPBB Rebate: \$55,000

AES System Costs – Non-Labor (Design Consulting and System Components)

- DOE Solar America Cities Grant: \$65,500
- SGIP Funds: \$345,000

Project Budget by Funding Source

DOE Solar America Cities

- Labor: \$145,000
- Non-Labor: \$255,000

CSI Program

- Non-Labor: \$55,000

SGIP Program Reallocation

- Non-Labor: \$345,000

With the creation of the California Solar Initiative (CSI) in 2006, the CPUC, in Decision (D.) 06-01-024, redirected the portion of the SGIP budget supporting solar incentives to the CSI program, concluding “all solar elements of the existing SGIP should be incorporated into the CSI.”¹ Furthermore, the CPUC in D.09-01-013, ordered “that all pending applications for projects filed in 2006 or earlier must be completed and paid or rejected by December 31, 2009 [and that after this date,] pending applications for incomplete PV projects may reapply under CSI...”² To remain consistent with the CPUC’s intent to no longer utilize SGIP funds for solar

¹ D.06-01-024, *Interim Order Adopting Policies and Funding for the California Solar Initiative*, January 12, 2006, page 42, Conclusion of Law 2.

² D.09-01-013, *Decision Adopting Self-Generation Incentive Program Budget for 2009 and Other Operation Details for 2009 through 2011*, January 29, 2009, page 10.

PV projects, the funds requested via this advice filing will not be utilized for the solar PV generation system portion of this project. The requested SGIP funds will be used for the net installation and maintenance costs of the integrated AES system, as well as for necessary safety equipment to allow the facility to be completely isolated from SDG&E's transmission and distribution facilities (i.e., "islanded") during grid outages.

The SGIP, as per D.08-11-044, presently allows for payment of SGIP incentives for AES systems only when coupled with currently eligible SGIP technologies. At this time, the currently eligible technologies include only wind and fuel cell technologies; however, Senate Bill (SB) 412, effective January 1, 2010, modifies eligibility for incentives under the SGIP to include distributed energy resources that the CPUC, in consultation with the California Air Resources Board ("CARB"), determines will achieve reductions in greenhouse gas ("GHG") emissions pursuant to the California Global Warming Solutions Act of 2006.³ The SB 412 implementation process is underway, and while it remains unclear how the change in the program's primary purpose (from peak load reduction to GHG emissions reduction) will affect eligibility for incentives, the legislation provides a pathway for the inclusion of additional technologies under the SGIP. In discussions surrounding the implementation of SB 412, several Parties to Rulemaking 08-03-008 have proposed that AES systems be made eligible for incentives under the SGIP when coupled with renewable technologies other than those presently eligible for SGIP incentives. Moreover, Parties have additionally proposed that AES systems be made eligible for incentives under the SGIP on a stand-alone basis. Thus, it is feasible that in the near future, AES systems will be made eligible for SGIP incentives when coupled with solar PV generation or perhaps on a stand-alone basis. The projects for which the SGIP funds are sought via this advice filing will provide excellent case studies of solar PV generation systems with integrated AES. Furthermore, these projects will provide the SGIP with much needed M&E data regarding AES control and dispatch, system performance, and cost-effectiveness. Thus, the use of the requested SGIP funds is consistent with the intended purpose of the SGIP, at present and into the future.

EFFECTIVE DATE

SDG&E believes this filing is subject to Energy Division disposition and should be classified as Tier 2 (effective after staff approval) pursuant to GO 96-B. SDG&E respectfully requests that this filing be approved effective April 4, 2010, 30 days from the date filed.

PROTEST

Anyone may protest this Advice Letter to the California Public Utilities Commission. The protest must state the grounds upon which it is based, including such items as financial and service impact, and should be submitted expeditiously. The protest must be made in writing and must be received within 20 days of the date this Advice Letter was filed with the Commission. There is no restriction on who may file a protest. The address for mailing or delivering a protest to the Commission is:

CPUC Energy Division
Attention: Tariff Unit
505 Van Ness Avenue

³ Chapter 182, Statutes of 2009.

San Francisco, CA 94102

Copies of the protest should also be sent via e-mail to the attention of both Honesto Gatchalian (inj@cpuc.ca.gov) and Maria Salinas (mas@cpuc.ca.gov) of the Energy Division. A copy of the protest should also be sent via both e-mail and facsimile to the address shown below on the same date it is mailed or delivered to the Commission.

Attn: Megan Caulson
Regulatory Tariff Manager
8330 Century Park Court, Room 32C
San Diego, CA 92123-1548
Facsimile No. (858) 654-1788
E-mail: mcaulson@semprautilities.com

NOTICE

A copy of this filing has been served on the utilities and interested parties shown on the attached list, including R.08-03-008, by either providing them a copy electronically or by mailing them a copy hereof, properly stamped and addressed.

Address changes should be directed to SDG&E Tariffs by facsimile at (858) 654-1788 or by e-mail at SDG&ETariffs@semprautilities.com.

RON VAN DER LEEDEN
Director – Rates, Revenues & Tariffs

Attachments

CALIFORNIA PUBLIC UTILITIES COMMISSION

ADVICE LETTER FILING SUMMARY ENERGY UTILITY

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

Company name/CPUC Utility No. **SAN DIEGO GAS & ELECTRIC (U 902)**

Utility type:

ELC

GAS

PLC

HEAT

WATER

Contact Person: Megan Caulson

Phone #: (858) 654-1748

E-mail: mcaulson@semprautilities.com

EXPLANATION OF UTILITY TYPE

ELC = Electric

GAS = Gas

PLC = Pipeline

HEAT = Heat

WATER = Water

(Date Filed/ Received Stamp by CPUC)

Advice Letter (AL) #: 2150-E

Subject of AL: Request for approval to reallocate a portion of residential Self-Generation Incentive Program (SGIP) funds to serve as grant matching funds for the installation of a solar photovoltaic advanced energy storage system project in fire prone area

Keywords (choose from CPUC listing): Energy Efficiency, Compliance

AL filing type: Monthly Quarterly Annual One-Time Other

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

D.09-09-047

Does AL replace a withdrawn or rejected AL? If so, identify the prior AL N/A

Summarize differences between the AL and the prior withdrawn or rejected AL¹: N/A

Does AL request confidential treatment? If so, provide explanation:

Resolution Required? Yes No

Tier Designation: 1 2 3

Requested effective date: 4/04/2010

No. of tariff sheets: 0

Estimated system annual revenue effect (%):

Estimated system average rate effect (%):

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

Tariff schedules affected: NA

Service affected and changes proposed¹: N/A

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

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

CPUC, Energy Division

Attention: Tariff Unit

505 Van Ness Ave.,

San Francisco, CA 94102

mas@cpuc.ca.gov and jnj@cpuc.ca.gov

San Diego Gas & Electric

Attention: Megan Caulson

8330 Century Park Ct, Room 32C

San Diego, CA 92123

mcaulson@semprautilities.com

¹ Discuss in AL if more space is needed.

General Order No. 96-B
ADVICE LETTER FILING MAILING LIST

cc: (w/enclosures)

Public Utilities Commission

DRA

D. Appling
S. Cauchois
J. Greig
R. Pocta
W. Scott

Energy Division

P. Clanon
S. Gallagher
H. Gatchalian
D. Lafrenz
M. Salinas

CA. Energy Commission

F. DeLeon
R. Tavares

Alcantar & Kahl LLP

K. Harteloo

American Energy Institute

C. King

APS Energy Services

J. Schenk

BP Energy Company

J. Zaiontz

Barkovich & Yap, Inc.

B. Barkovich

Bartle Wells Associates

R. Schmidt

Braun & Blaising, P.C.

S. Blaising

California Energy Markets

S. O'Donnell
C. Sweet

California Farm Bureau Federation

K. Mills

California Wind Energy

N. Rader

CCSE

S. Freedman
J. Porter

Children's Hospital & Health Center

T. Jacoby

City of Chula Vista

M. Meacham
E. Hull

City of Poway

R. Willcox

City of San Diego

J. Cervantes
G. Lonergan
M. Valerio

Commerce Energy Group

V. Gan

Constellation New Energy

W. Chen

CP Kelco

A. Friedl

Davis Wright Tremaine, LLP

E. O'Neill
J. Pau

Dept. of General Services

H. Nanjo
M. Clark

Douglass & Liddell

D. Douglass
D. Liddell
G. Klatt

Duke Energy North America

M. Gillette

Dynegy, Inc.

J. Paul

Ellison Schneider & Harris LLP

E. Janssen

Energy Policy Initiatives Center (USD)

S. Anders

Energy Price Solutions

A. Scott

Energy Strategies, Inc.

K. Campbell
M. Scanlan

Goodin, MacBride, Squeri, Ritchie & Day

B. Cragg
J. Heather Patrick
J. Squeri

Goodrich Aerostructures Group

M. Harrington

Hanna and Morton LLP

N. Pedersen

Itsa-North America

L. Belew

J.B.S. Energy

J. Nahigian

Luce, Forward, Hamilton & Scripps LLP

J. Leslie

Manatt, Phelps & Phillips LLP

D. Huard
R. Keen

Matthew V. Brady & Associates

M. Brady

Modesto Irrigation District

C. Mayer

Morrison & Foerster LLP

P. Hanschen

MRW & Associates

D. Richardson

OnGrid Solar

Andy Black

Pacific Gas & Electric Co.

J. Clark
M. Huffman
S. Lawrie
E. Lucha

Pacific Utility Audit, Inc.

E. Kelly

R. W. Beck, Inc.

C. Elder

School Project for Utility Rate
Reduction

M. Rochman
Shute, Mihaly & Weinberger LLP

O. Armi

Solar Turbines

F. Chiang

Sutherland Asbill & Brennan LLP

K. McCrea

Southern California Edison Co.

M. Alexander
K. Cini

K. Gansecki

H. Romero

TransCanada

R. Hunter

D. White

TURN

M. Florio
M. Hawiger

UCAN

M. Shames

U.S. Dept. of the Navy

K. Davoodi

N. Furuta

L. DeLacruz

Utility Specialists, Southwest, Inc.

D. Koser

Western Manufactured Housing

Communities Association

S. Dey

White & Case LLP

L. Cottle

Interested Parties in:

R.10-02-005