THE CITY OF SAN DIEGO

REPORT TO THE CITY COUNCIL

DATE ISSUED: November 30, 2010

REPORT NO: 10-160

ATTENTION: The Natural Resources and Culture Committee

SUBJECT: Department of Energy's Solar America Cities Special Projects Grant, Installation of Advanced Energy Storage System at Scripps Ranch Recreation Center

REFERENCE: Committee on Natural Resources and Culture – Report No. 09-172
City Council– Resolution R-305566
Public Utilities Commission of the State of California – Reso. E-4351

REQUESTED ACTIONS:

- Authorize the Mayor or his representative to accept and comply with requirements of the $345,000 California Public Utilities Commission Self Generation Incentive Program grant funds (CPUC Resolution E-4351) for the purpose of installation of Advanced Energy storage system (Battery) as part of the Solar Photovoltaic system installation.

- Authorize the Chief Financial Officer to amend the Fiscal Year 2011 Capital Improvement Program budget to increase CIP A-BT.00003 by the amount of $545,001.34 with $345,000 of said amount to be from the CPUC grant and $200,001.34 from Fund No. 600000, Solar America Cities Grant 1000060-2009.

- Authorize the City Comptroller to transfer the CPUC grant funds in the amount of $345,000 and $200,001.34 from AC1000060-09, Fund 600000 Solar America Cities Grant 1000060-2009 to A-BT.00003 City wide Energy Improvement Projects for the installation of a Solar Photovoltaic generation system with integrated Advanced Energy storage (Battery) system at Scripps Ranch Recreation Center.

- Authorize the Chief Financial Officer to accept, appropriate and expend CPUC grant leverage funds not to exceed $345,000 for Installation of Scripps Ranch Recreation Center Advanced Energy Storage system.

- Authorize Mayor or Mayor's designee to develop, advertise, accept bids and award design build contracts for Scripps Ranch Recreation Center Solar system and Installation of Advanced Energy Storage system.

PREVIOUS COUNCIL and/or COMMITTEE ACTION:

Resolution No. 305566 adopted January 26, 2010 Authorizing the mayor or his representative to accept for and on behalf of the City, a Solar America Cities special Project award in the amount of $500,000 from DOE and further authorized to negotiate, execute and comply with all documents in connection with this grant award; Authorizing the City Comptroller to accumulate and expend funds received from the U.S. Department of Energy in conjunction with this grant activity.

Council Resolution R-302906, August 3, 2007, "A Resolution of the City of San Diego Authorizing a Grant Application and Related Actions for Solar Technology Funds under the Solar America Cities Grant".

EQUAL OPPORTUNITY CONTRACTING:

Agreements associated with this project will be subject to the City's Equal Opportunity Contracting (San Diego Ordinance No. O-18173, Sections 22.2701 through 22.2708 and Non-Discrimination in Contracting Ordinance (San Diego Municipal Code Sections 22.3501 through 22.3517).

COMMUNITY PARTICIPATION AND PUBLIC OUTREACH EFFORTS:

The 2007-2009 Solar America Cities Award has funded a number of focus group meetings, public surveys and public forums with an overarching goal of understanding the public's experience and interest in advancing solar installations in the region.

KEY STAKEHOLDERS AND PROJECTED IMPACTS:

The City of San Diego, and its residents will benefit from having a secure location for emergency responders to coordinate and organize in the event of a wildfire or other emergency. The solar installation will also increase renewable energy.

Chris Gonaver
Environmental Services Director

David Jarrell
Deputy Chief/Public Works

Solar America Cities Grant

THE CITY OF SAN DIEGO

REPORT TO THE CITY COUNCIL

DATE ISSUED: December 3, 2009 REPORT NO: 09-172

ATTENTION: Natural Resources and Culture Committee

SUBJECT: Acceptance and Execution for the Department of Energy's Solar America Cities Special Project Award

REFERENCE: Council Resolution 302906, August 3, 2007 "A Resolution of the City of San Diego Authorizing a Grant Application and Related Actions for Solar Technology Funds under the Solar America Cities Grant"

REQUESTED ACTION:

- Council authorization to accept the Solar America Cities Special Project Award, and designation for the Mayor or his designee to negotiate, execute and comply with the agreement from the United States Department of Energy.
- Council authorization for the ~~Auditor~~ [Comptroller] to accumulate and expend the funds received from the Department of Energy in conjunction with this grant activity.

STAFF RECOMMENDATION:

- Adopt the Resolution

SUMMARY:

In June 2007, the City of San Diego was selected as one of the first 13 cities in the United States to receive the Solar America Cities grant from the Department of Energy. The three-year award was for a total of $200,000. In June 2009, the selected solar cities were asked to apply for a second tier of three-year funding that would begin in January 2010. The City of San Diego will receive an award of approximately $500,000 for a proposal entitled "The Fire Safe & Energy Independent Communities Project".

Background

On October 5, 2009, the San Diego City Council approved the report entitled "*A Comprehensive Approach to a Sustainable Future- An Energy Efficiency and Conservation Strategy for the City*

of San Diego". The report was the product of an Ad Hoc Committee appointed by the Mayor and Council to develop project options for the Energy Efficiency and Conservation Block Grant. Two of the goals listed in the report were to reduce the consumption of natural resources and fossil fuels and to reduce the emission of greenhouse gases. To reach those goals, the report stated that the City was to continue to support programs and policies that increase the amount of renewable electricity generated by the City and by facilities located within the City of San Diego.

Goal	2015	2020
Increase Distributed Photovoltaics (MW)	500	1200
Increase Renewable Energy (MW))	50	n/a

In June 2007, the City of San Diego was selected as one of thirteen cities in the United States to receive the Solar America Cities grant from the Department of Energy. The three-year award was for a total of $200,000. In June 2009, the selected solar cities were asked to apply for a second tier of three-year funding that would begin in January 2010.

Discussion

The City of San Diego will receive an award of approximately $500,000 for a proposal entitled "The Fire Safe & Energy Independent Communities Project". The award has two primary components:

> **Activity One** seeks to achieve two critical objectives for the City of San Diego and the region. The first objective is to complete a demonstration project at a City Park and Recreation facility that could serve as a coordination center during wildfires. This would improve the community crisis-response capability and enhance energy security at strategic facilities by integrating distributed generation into the region's emergency response infrastructure. The second objective is to identify key lessons — technical, economic and contractual — that will increase deployment of integrated solar photovoltaic and advanced energy storage projects in support of a Smart Grid.
>
> **Activity Two** seeks to address some of the key challenges that currently hinder the installation of photovoltaic systems on multifamily affordable housing. The project will produce and disseminate Virtual Net Metering (VNM) data that will help developers make informed decisions on the cost vs. benefit for solar installations. Additionally, the characteristics of VNM will be highlighted and can inform future changes to the utility tariffs. This has the potential to increase the economic advantage of solar power generation.

Environmental Services Department staff will be responsible for grant compliance and the overall administration of the City's Solar America Cities Special Projects. The California Center for Sustainable Energy is the City's partner, as they were in the first Solar America Cities grant.

FISCAL CONSIDERATIONS:

There is no impact to the City's General Fund from this action. Funding for each project described in this report is available from the Solar America Cities Special Project award.

PREVIOUS COUNCIL AND/OR COMMITTEE ACTION:

Council Resolution 302906, August 3, 2007 "A Resolution of the City of San Diego Authorizing a Grant Application and Related Actions for Solar Technology Funds under the Solar America Cities Grant"

COMMUNITY PARTICIPATION AND PUBLIC OUTREACH EFFORTS:

The 2007-2009 Solar America Cities Award has funded a number of focus group meetings, public surveys and public forums with an overarching goal of understanding the public's experience and interest in advancing solar installations in the region.

KEY STAKEHOLDERS AND PROJECTED IMPACTS:

Ultimately, successful program implementation will provide an increase in renewable energy generation, and reduce greenhouse gas emissions. This is a benefit for all residents in the City of San Diego.

Chris Gonaver
Environmental Services Director

Dave Jarrell
Deputy Chief of Public Works

Attachment: Draft Agreement

1/26/2010

TODAY'S ACTION IS:

Adopt the following resolution:

(R-2010-480) ADOPTED AS RESOLUTION R-305566

Authorizing the Mayor, or his designee, to accept, for and on behalf of the City, a Solar America Cities Special Project Award in the amount of $500,000 from the U.S. Department of Energy, and is further authorized to negotiate, execute, and comply with all documents in connection with this grant award;

Authorizing the City Comptroller to accumulate and expend funds received from the U.S. Department of Energy in conjunction with this grant activity.

NATURAL RESOURCES AND CULTURE COMMITTEE'S RECOMMENDATION:

On 12/9/2009, NR&C voted 3 to 0 to have staff update its report to reflect that the Comptroller, instead of the Auditor, shall authorize funding for this project. (Councilmembers Lightner, DeMaio, and Frye voted yea. Councilmember Emerald not present.)

SUPPORTING INFORMATION:

In June 2009, the City of San Diego was invited to apply for a second tier of three-year funding that would begin in January 2010. The proposal was successful, and the City will receive an award of approximately $500,000 for "The Fire Safe & Energy Independent Communities Project". On December 9, 2009, the Natural Resources and Culture Committee approved forwarding it to the full City Council. Implementation of the projects will result in a grant-funded contract with the California Center for Sustainable Energy not to exceed $203,000.

Background:
On October 5, 2009, the San Diego City Council approved the report entitled "A Comprehensive Approach to a Sustainable Future - An Energy Efficiency and Conservation Strategy for the City of San Diego". The report was the product of an Ad Hoc Committee appointed by the Mayor and Council to develop project options for the Energy Efficiency and Conservation Block Grant. Two of the goals listed in the report were to reduce the consumption of natural resources and fossil fuels and to reduce the emission of greenhouse gases. To reach those goals, the report stated that the City was to continue to support programs and policies that increase the amount of renewable electricity generated by the City and by facilities located within the City of San Diego.

Goal:	2015	2020
Increase Distributed Photovoltaics (MW)	500	1200
Increase Renewable Energy (MW)	50	N/A

In June 2007, the City of San Diego was selected as one of thirteen cities in the United States to receive the Solar America Cities grant from the Department of Energy. The three-year award was

for a total of $200,000. In June 2009, the selected solar cities were asked to apply for a second tier of three-year funding that would begin in January 2010.

Discussion:
The City of San Diego will receive an award of approximately $500,000 for a proposal entitled "The Fire Safe & Energy Independent Communities Project". The award has two primary components:

Activity One seeks to achieve two critical objectives for the City of San Diego and the region. The first objective is to complete a demonstration project at a City Park and Recreation facility that could serve as a coordination center during wildfires. This would improve the community crisis-response capability and enhance energy security at strategic facilities by integrating distributed generation into the region's emergency response infrastructure. The second objective is to identify key lessons - technical, economic and contractual - that will increase deployment of integrated solar photovoltaic and advanced energy storage projects in support of a Smart Grid.

Activity Two seeks to address some of the key challenges that currently hinder the installation of photovoltaic systems on multifamily affordable housing. The project will produce and disseminate Virtual Net Metering (VNM) data that will help developers make informed decisions on the cost vs. benefit for solar installations. Additionally, the characteristics of VNM will be highlighted and can inform future changes to the utility tariffs. This has the potential to increase the economic advantage of solar power generation.

Environmental Services Department staff will be responsible for grant compliance and the overall administration of the City's Solar America Cities Special Projects. The California Center for Sustainable Energy (CCSE) is the City's partner, as they were in the first Solar America Cities grant, 2007-2009. Implementation of the projects will result in a grant-funded contract with CCSE not to exceed $203,000.

FISCAL CONSIDERATIONS:
The federal government allocated $500,000 as part of the Solar America Cities Grant (SAC) funds to the City of San Diego. The Environmental Services Department, Energy Sustainability and Environmental Protection Division is matching these funds with $10,000 from the Energy fund. This match will minimally impact the General Fund by an amount of approximately $3,000.

EQUAL OPPORTUNITY CONTRACTING INFORMATION (IF APPLICABLE):
This Agreement is subject to the City's Equal Opportunity Contracting (San Diego Ordinance No. O-18173, Sections 22.2701 through 22.2708) and Non-Discrimination in Contracting Ordinance (San Diego Municipal Code Sections 22.3501 through 22.3517).

PREVIOUS COUNCIL AND/OR COMMITTEE ACTION:
This item was presented to the Natural Resources and Culture Committee on December 9, 2009. The staff report has been corrected, per the Committee request, to reflect Comptroller versus Auditor authorization to expend funds. Council Resolution R-302906, August 3, 2007, "A Resolution of the City of San Diego Authorizing a Grant Application and Related Actions for

Solar Technology Funds under the Solar America Cities Grant".

COMMUNITY PARTICIPATION AND PUBLIC OUTREACH EFFORTS:
The 2007-2009 Solar America Cities Award has funded a number of focus group meetings, public surveys and public forums with an overarching goal of understanding the public's experience and interest in advancing solar installations in the region.

KEY STAKEHOLDERS AND PROJECTED IMPACTS:
Ultimately, successful program implementation will provide an increase in renewable energy generation, and reduce greenhouse gas emissions. This is a benefit for all residents in the City of San Diego.

Gonaver/Jarrell

Staff: Linda Pratt - (858) 492-5088
Frederick M. Ortlieb - Deputy City Attorney

FILE LOCATION: MEET

COUNCIL ACTION: Start Time: 6:31 PM

CONSENT MOTION BY TODD GLORIA TO ADOPT. Second by Ben Hueso.

Passed by the following vote:
Yea: Sherri Lightner, Kevin Faulconer, Todd Gloria, Tony Young, Carl DeMaio, Donna Frye, Marti Emerald, Ben Hueso;
Nay: None;
Recused: None;
Not Present: None.

(R-2010-480)

RESOLUTION NUMBER R-_____

DATE OF FINAL PASSAGE _____

A RESOLUTION OF THE CITY COUNCIL AUTHORIZING ACCEPTANCE OF A GRANT AND RELATED ACTIONS IN CONNECTION WITH THE SOLAR AMERICA CITIES PROGRAM.

WHEREAS, the City is eligible for a grant from the U.S. Department of Energy under its Solar America Cities Program; and

WHEREAS, by Resolution No. R-302906 on August 3, 2007, the City has previously applied for and received Solar America Cities grant funding for a first phase of the program during 2007-1010; and

WHEREAS, the U.S. Department of Energy has invited the City to apply for funding in a second phase of the program beginning in 2010; NOW, THEREFORE,

BE IT RESOLVED, by the Council of the City of San Diego, that the Mayor or his designee is authorized to accept, for and on behalf of the City, a Solar America Cities Special Project Award in the amount of $500,000 from the U.S. Department of Energy, and is further authorized to negotiate, execute, and comply with all documents in connection with this grant award.

BE IT FURTHER RESOLVED, that the City Comptroller is authorized to accumulate and expend funds received from the U.S. Department of Energy in conjunction with this grant activity.

APPROVED: JAN I. GOLDSMITH, City Attorney

By _____
Frederick M. Ortlieb
Deputy City Attorney

FMO:mb
01/12/10
Or.Dept:ESD
R-2010-480

I hereby certify that the foregoing Resolution was passed by the Council of the City of San Diego, at its meeting of _____.

ELIZABETH S. MALAND, City Clerk

By _____
Deputy City Clerk

Approved: _____ _____
(date) JERRY SANDERS, Mayor

Vetoed: _____ _____
(date) JERRY SANDERS, Mayor

DRAFT

PUBLIC UTILITIES COMMISSION OF THE STATE OF CALIFORNIA

ENERGY DIVISION

I.D. # 9788
RESOLUTION E-4351
October 14, 2010

RESOLUTION

Resolution E-4351. San Diego Gas & Electric (SDG&E) requests approval to use $345,000 of funds previously allocated from the Self Generation Incentive Program (SGIP) to the 2003 Rebuild a Greener San Diego Program to serve as matching funds for the installation of an advanced energy storage (AES) system to be coupled with a photovoltaic (PV) system that will be installed at a public safety center.

Proposed Outcome: San Diego Gas & Electric (SDG&E) is authorized to use the $345,000 from SGIP as requested in Advice Letter (AL) 2150-E. The remaining $1,855,000 previously allocated to Rebuild a Greener San Diego Program (Rebuild Program) will be transferred back to the SGIP balancing account within 7 days of this Resolution.

Estimated Cost: $0. Fund collection previously authorized.

By SDG&E Advice Letter 2150-E, submitted March 5th, 2010.

SUMMARY

SDG&E AL 2150-E requests approval to reallocate $345,000 of residual SGIP monies from the 2003 Rebuild a Greener San Diego Program for use as matching funds for an innovative solar PV and AES project that received $400,000 from a U.S. Department of Energy (DOE) Solar America Initiative grant awarded to the City of San Diego under the American Resource and Recovery Act (ARRA). The requested SGIP funds would be used to support the installation of the AES portion of the project, which will be installed along with a solar PV system. This project would be sited on a City-owned community center in a fire-prone area of San Diego. The project's host facility would serve as a fire-victim assistance center, which would provide fire-assistance and emergency support to San Diego residents, in the event of a fire or other emergency. The project will include the cost of safety equipment to allow the facility to be "islanded" during grid

outages (thus ensuring power would remain available to the community center during an electricity outage).

The City of San Diego will provide system performance information to the SGIP Program for evaluation purposes under the SGIP's measurement and evaluation (M&E) activities. The City is also committed to operating and maintaining the combined PV and AES systems for a minimum of ten years.

BACKGROUND

In December of 2003, Resolution E-3860 approved, with modifications, SDG&E's AL 1540-E which requested the reallocation of a combined $6.57 million of SGIP and energy efficiency program funds to the Rebuild Program.

The objective of the Rebuild Program was to promote energy efficiency and solar energy among residents of San Diego City and County who lost their homes in the Otay, Cedar, and Paradise fires in 2003. The program provided three types of assistance to fire victims: technical information, financial incentives for photovoltaic self-generation systems, and financial incentives for the incorporation of energy efficiency measures or design principles.

The Commission approved this Resolution with the following stipulations:

- Rebuild Program needed to be presented and reported upon as a single program;
- Eligibility requirements were the same for all participants, and the program was too close to homeowners in November of 2005;
- The incentive level for PV systems was capped at $4/watt;
- Per customer incentive for energy efficiency measures was capped at $2000; and
- The Rebuild Program was required to submit a Program Implementation Plan to Energy Division.

Of the total $6.57 million in funds allocated, $5 million originally came from the SGIP and $1.57 million funds came from energy efficiency programs. After spending a total of $2.8 million from the SGIP funds, the Rebuild Program has no further homes that can qualify for the funding. Thus, $2.2 million of SGIP monies earmarked for the program remain unspent. All of the energy efficiency monies were fully spent.

NOTICE

Notice of SDG&E's AL 2150-E was made by publication in the Commission's Daily Calendar. SDG&E states that a copy of their Advice Letter was mailed and distributed in accordance with Section 3.14 of General Order 96-B.

PROTESTS

The SDG&E AL was protested in a timely manner by The California Clean Distributed Generation Coalition (CCDC) and the Division of Ratepayer Advocates (DRA) on March 25th, 2010.

Summary of the Protests

The following summarizes the major issues raised in the protests. Since some issues are raised repeatedly, each issue is identified by a unique number.

The California Clean DG Coalition

Issue 1. AES coupled with solar PV is not eligible for SGIP incentives

The CCDC argues that the project SDG&E seeks to fund would not be eligible for SGIP incentives under normal circumstances. AES is only eligible for SGIP funding when coupled with a generating technology which is eligible under SGIP – currently limited to fuel cells and wind turbines. The Commission may modify SGIP eligibility requirements per SB 412 (Kehoe, 2009), but has not yet done so.

Issue 2. The request is inconsistent with the purpose of the Rebuild Program

CCDC notes that the Rebuild Program was established to provide education, technical assistance, and financial incentives to design energy efficiency and solar PV measures into homes rebuilt after the 2003 fires. The Commission noted that the approval of funds for this program was due to the "extraordinary circumstances faced by the community of San Diego and its fire victims." CCDC states that using these funds for City-owned generation projects was not ever discussed as a possibility in this original Commission approval.

CCDC notes that the Commission recently reiterated that it does not intend to allow departures from authorized uses of SGIP funds. On March 2, 2010, the Commission issued an alternate proposed decision[1] approving applications from Pacific Gas and Electric Company (PG&E) and Southern California Edison Company (SCE) for utility-owned fuel cells. The decision rejected SCE's request to use $10.8 million in SGIP funds to finance a portion of the fuel cell project. Because SGIP funds were not allowed to be used for utility-owned generation in this case, CCDC argues that AL 2150-E should be rejected.

Issue 3. Incorrectly designated as Tier 2 Advice Letter

Finally, CCDC refers to General Order 96-B, Section 7.6.1 which states that an AL of this tier is for cases when "the proposed action is within the scope of what has already been authorized by statutes or Commission orders." CCDC notes that this request for reallocation of funds is not within this scope, and is in fact contrary to current Commission decisions. CCDC argues that SDG&E should be required to re-file the AL as a Tier 3.

The Division of Ratepayer Advocates (DRA)

Issue 1. AES coupled with solar PV is not eligible for SGIP incentives

DRA also argues that AES systems are only eligible for SGIP incentives when coupled with fuel cells or wind turbines, and not when coupled with a PV system. Therefore, DRA argues, this AL should be rejected.

Issue 2. Request is inconsistent with the purpose of the Rebuild Program

DRA argues that this AL is inconsistent with the original objectives of the Rebuild Program, which was passed due to the "dire circumstances" of the time. Now that this crisis has passed, there is no need for extraordinary support.

[1] The proposed decision was approved subsequently by the Commission on April 8, 2010, (Decision (D.)10-04-028).

Issue 4. Advice Letter lacks essential details

DRA argues the AL should be denied because it is lacking critical details. No work papers, technical or financial details are provided. In fact, the AL does not even describe the size of the project, nor does it specify which safety equipment would be installed. The AL states that the DOE will supply $400,000, while the DOE Assistance Agreement states that it will provide $500,000. Finally, the AL also assumes that $55,000 will come from the California Solar Initiative, which seems unreasonably high given the planned project capacity of 30 kW.

Issue 5. Project is expensive

DRA states that the project requests funding which exceeds the existing incentive levels for AES systems when coupled with SGIP-eligible technologies. Assuming this system is 30kW, the combined AES and PV components will cost over $26 per watt. However, the Rebuild Program team submitted a proposal to the DOE which estimated a system cost of only $14 per watt: $9/watt for PV and $5/watt for AES. The additional $12/watt is significantly higher than the earlier cost estimate. Finally, a 30kW AES system would receive $2/watt or $60,000 under SGIP, much less than the $345,000 requested by SDG&E.

Responses to the Protests

<u>SDG&E Response to CCDC and DRA</u>

Issue 1. AES coupled with solar PV is not eligible for SGIP incentives

SDG&E agrees that presently, AES systems are only eligible for incentives when coupled with wind turbines or fuel cells. However, SDG&E argues that AES itself is an SGIP-eligible technology, regardless of whether or not this project meets the requirements for incentives under the program.

Issue 2. Request is inconsistent with the purpose of the Rebuild Program

SDG&E notes that the requested funds may not be used for a purpose identical to that of the Rebuild Program, but the funds will be used for a project that is keeping with the spirit of the original program. Fire is an imminent threat in San

Diego County, and this project would establish a vital resource for first responders and would address a documented deficiency in public safety. Additionally, this would serve as an education and demonstration resource on the subject of distributed generation as over $40,000 is allocated to onsite education and outreach material. Because the candidate host sites are community-based recreation centers, this project has the potential to expose a large number of residents to PV and AES technologies. Thus, the proposed installation is a valuable continuation of the educational guidance and technical assistance goals of the original Rebuild Program.

Issue 3. Incorrectly designated as Tier 2 Advice Letter

SDG&E argues that the requested transfer of funds is consistent with Commission Decision (D.) 06-01-024, which redirected portions of the SGIP budget to the CSI program, and D. 09-01-013 which ordered pending applications for incomplete PV projects to reapply under CSI. SDG&E also notes that in the past they have filed similar Tier 2 ALs which transferred funds from one regulatory account to another. Finally, SDG&E states that practically speaking, a Tier 2 AL provides the expedited review needed to ensure funds are transferred in time to accept final award of the DOE grant.

Issue 4. Advice Letter lacks essential details

SDG&E provides the following details: the proposed project will consist of a 30kW PV system and companion AES system to meet the needs of emergency managers for up to 24 hours. The 30kW PV system is expected to cost $210,000 ($7/watt). The AES will likely be 60kW in maximum discharge power and 200 kWh of energy storage at a cost of approximately $390,000 ($6.50/watt). Together, the total system will cost approximately $600,000. SDG&E offers to supply a supplemental Advice Letter if requested by the Commission.

Issue 5. Project is expensive

SDG&E argues that a higher level of funding is warranted due to the project's SGIP M&E value for a new technology. By demonstrating the merits of this combined PV and AES project with a public partner (the City of San Diego), this project will address one of the primary goals of the SGIP: market transformation. SDG&E also notes that this is not intended to be precedent-setting, but that the requests are solely to obtain matching funds for the DOE Solar American

Initiative grant. Remaining funds in the Rebuild Program will be transferred back to SGIP after this allocation.

DISCUSSION

SDG&E requests approval to reallocate $345,000 of residual SGIP monies from the Rebuild a Greener San Diego Program for use as matching funds for a U.S. Department of Energy (DOE) Solar American Initiative grant awarded to the City of San Diego. SDG&E notes that this would be a "one off" reallocation to facilitate the DOE award to the City of San Diego. This system would be sited on a City-owned community center in a fire-prone area of San Diego.

These funds would also cover the cost of safety equipment to allow the facility to be "islanded" during grid outages (thus ensuring power remains available to the community center), and warranty-related maintenance costs of the AES system. Additionally, this facility would serve as a fire-victim assistance center, which would provide fire-assistance and emergency support to San Diego residents. Finally, this project would serve as an education and demonstration resource on the subject of distributed generation as over $40,000 is allocated to onsite education and outreach material. As the candidate sites are community-based recreation center, this project has the potential to expose large number of residents to PV and AES technologies.

Energy Division examined the issues raised by party protests.

The requested SGIP program funds would be used to support the installation of an AES, which will be installed along with a solar PV system.

The two components of the project are projected to cost $600,000, consisting of a PV system, an AES system, and the related design, engineering, and installation of both systems.

- The 30kW PV system is expected to cost $210,000 ($7/watt).
- The AES system will likely be 60kW in maximum discharge power and 200 kWh of energy storage and is expected to cost $390,000 ($6.50/ watt). Included in the AES system costs are basic equipment and installation, as well as advanced monitoring and control systems.
- Together, the two components of the project are expected to cost a total of $600,000.
- There are additional unspecified project development costs of $200,000.

The total project funding will come from three sources, each allocated to a specific portion of the project.

- U.S. DOE funding via a Solar America Initiative Special Project Grant under the American Resource and Recovery Act (ARRA) was awarded January 6, 2010 for $400,000. This ARRA-funded grant is allocated between labor ($255,000) and non-labor ($145,000) costs.
- Incentives from the California Solar Initiative (CSI) program will cover up to $55,000 in costs of the PV system.
- Incentives from the SGIP Program, as requested in via SDG&E AL 2150-E, will cover $345,000 of the costs of the AES system.
- In addition, as a recipient of the U.S. DOE Solar American Initiative Special Project Grant, the City of San Diego and CCSE were eligible to apply for an additional $75,000 in technical support. The outcome of this additional technical support funding grant application is unknown.

Issue 1. AES coupled with solar PV is not eligible for SGIP incentives

The San Diego Rebuild funding explicitly authorized funds to support installation of solar PV in San Diego's fire area. At the time of authorization in 2003 SGIP included solar PV technologies. SDG&E AL 2150-E requests funding for the AES portion of the project. AES is currently eligible for SGIP funds only when coupled with eligible distributed generation technologies (wind and fuel cells). The Commission restricted SGIP to AES only when combined with wind and fuel cells per statute. However, since the passage of SB 412, this statutory restriction no longer exists. Per SB 412, the Commission may modify the SGIP program to allow AES (or other technologies) into the SGIP program so long as the technologies reduce greenhouse gas emissions. A PV and AES system will reduce greenhouse gas emissions, especially compared to any natural gas fuel cell (or other technology) that may be considered in the SGIP program. Given the evolution of self generation programs and supported technologies that has occurred since 2003, the proposed project is generally consistent with the Commission's programmatic intentions and the pending expansion of eligible self generation technologies.

Conclusion: AES coupled with clean distributed generation is an acceptable use of SGIP incentives for this one-time project.

Issue 2. Request is inconsistent with the purpose of the Rebuild Program

The purposes of the Rebuild Program, besides offering financial support, are education guidance and technical assistance. Both the education and technical assistance goals of the program are being addressed by this project. Further to this end, the project promises to provide valuable data from system performance monitoring to aid the SGIP M&E program. This project would raise awareness of distributed generation solutions among San Diego residents who might otherwise not be exposed to such technologies.

Conclusion: The proposed project is a valuable continuation of education guidance and technical assistance goals of the original Rebuild Program.

Issue 3. Incorrectly designated as Tier 2 Advice Letter

Per General Order 96-B, a Tier 2 Advice Letter is appropriate when the matter is effective after staff approval. A Tier 3 Advice Letter is appropriate when the matter is effective after Commission approval. A Tier 2 Advice Letter is appropriate if the matter is making a change that is consistent with authority the Commission previously granted to the utility submitting the advice letter. As the utility has been granted transfer of funds between SGIP and the Rebuild Program accounts in the past via Commission authority, a Tier 2 AL is appropriate for the action requested.

Conclusion: This Advice Letter is appropriately designated as a Tier 2 Advice Letter.

Issue 4. Advice Letter lacks essential details

Staff has obtained additional information from SDG&E and the City of San Diego regarding technical and financial details of this project through e-mails and Responses to protests. That information was summarized in the beginning of the Discussion section above. It would be useful for SDG&E and the City of San Diego to provide additional details of the project to interested parties to this proceeding at the CPUC.

Conclusion: SDG&E should report to the Energy Division the status and time frame for completion of the project within 30 days of the adoption of this Resolution. The status report should include a final status on the end of the

Rebuild Program, including the final amount of money transferred back to the SGIP program from the Rebuild Program.

Issue 5. Project is expensive

As detailed in the Discussion section, the AES portion of this project is projected to cost $6.50/watt. The SGIP database has limited cost information to compare this figure with, especially given that it is a much smaller project (60 kW) than typical SGIP applications which range from 500kW - 3000 kW. That being said, the average un-weighted cost of the six AES systems in SGIP is slightly less than $3/watt. However, the SDG&E project's AES cost includes safety equipment to allow for "islanding", as well as warranty-related maintenance equipment and monitoring and evaluation costs.

The PV and AES project represents a fleeting opportunity for California to leverage an ARRA related grant for funding one-half of an innovative and ground breaking demonstration of solar PV and AES. The use of the two technologies in combination, especially in situations that allow for islanding during grid emergencies, represents a ground-breaking project installation.

Conclusion: This project's costs are higher than the SGIP average, but given the small size of this installation, additional safety equipment for islanding, and additional equipment for maintenance, the Commission cannot conclude that the project's cost warrants rejection of the project. Furthermore, the unique opportunity to take advantage of ARRA related funding offers ratepayers a significant leverage of matching funding from a federal funding source.

Notice

PU Code section 311(g)(1) provides that this Resolution must be served on all parties and subject to at least 30 days public review and comment prior to a vote of the Commission. Section 311(g)(2) provides that this 30-day period may be reduced or waived upon the stipulation of all parties in the proceeding.

The 30-day comment period for the draft of this Resolution was neither waived nor reduced. Accordingly, this draft resolution was mailed to parties for comments, and will be placed on the Commission's agenda no earlier than 30 days from today.

FINDINGS

1. Resolution E-3860 approved the reallocation of $6.57 million of combined SGIP and energy efficiency program funds to the Rebuild Program to assist victims affected by fires in both the City of San Diego City and the County of San Diego, of which $5 million came from the SGIP.
2. A total of $2.8 million of SGIP funds was spent through the Rebuild Program.
3. The Rebuild Program has no further homes that can qualify for funding, which leaves $2.2 million of SGIP funds that remain unspent.
4. SDG&E AL 2150 is accepted as a Tier 2 Advice Letter as SDG&E has transferred funds between SGIP, CSI Program, and Rebuild Program accounts in the past.
5. This project funding request is unique, especially given the public safety and educational benefits, and ability to utilize matching DOE ARRA funds.
6. This case shall be considered a "one-off" project based on these special circumstances, and not a precedent setting Resolution.
7. This project will generate data for the SGIP M&E program which will be valuable to the CPUC.

THEREFORE IT IS ORDERED THAT:

The request by SDG&E to approve AL 2150-E, which requests use of $345,000 of SGIP funds previously allocated to the Rebuild Program to serve as matching funds for the installation of an AES system in association with a PV system funded by the DOE and other sources, along with associated monitoring, training, and public education services, is granted with the following clarifications:

1. SDG&E's AL 2150-E is approved, but will not be interpreted as a precedent-setting case.
2. Remaining funds shall be transferred from the Rebuild Program to the SGIP account within 7 days of this Resolution.
3. SDG&E shall provide Energy Division with a status report on the project, including all available technical and financial details of the project within 30 days of this Resolution. SDG&E shall provide Energy Division a status report on the final disposition of the Rebuild Program.

4. SDG&E and the City of San Diego will stipulate, in writing, that the Commission and/or the Commission's evaluation contractors will have access to M&E data generated by this project.

This Resolution is effective today.

I certify that the foregoing resolution was duly introduced, passed and adopted at a conference of the Public Utilities Commission of the State of California held on October 14, 2010 the following Commissioners voting favorably thereon:

_____
Paul Clanon
Executive Director

STATE OF CALIFORNIA

ARNOLD SCHWARZENEGGER, *Governor*

PUBLIC UTILITIES COMMISSION
505 VAN NESS AVENUE
SAN FRANCISCO, CA 94102-3298

September 14, 2010

I.D.# 9788
Resolution **E-4351**

Commission Meeting Date: October 14, 2010

TO: PARTIES TO DRAFT RESOLUTION E-4351

Enclosed is draft Resolution E-4351 from the Energy Division. It will be on the agenda at the October 14, 2010 Commission meeting. The Commission may then vote on this Resolution or it may postpone a vote until later.

When the Commission votes on a draft Resolution, it may adopt all or part of it as written, amend, modify or set it aside and prepare a different Resolution. Only when the Commission acts does the Resolution become binding on the parties.

Parties may submit comments on the draft Resolution no later than Monday, October 4, 2010.

Comments should be submitted to:

Honesto Gatchalian and Maria Salinas
Energy Division
California Public Utilities Commission
505 Van Ness Avenue
San Francisco, CA 94102
jnj@cpuc.ca.gov; mas@cpuc.ca.gov

A copy of the comments should also be submitted to:

Neal Reardon, Melicia Charles, and Molly Sterkel
Energy Division
California Public Utilities Commission
505 Van Ness Avenue
San Francisco, CA 94102
Fax: 415-703-5621
Email: nmr@cpuc.ca.gov; mvc@cpuc.ca.gov; mts@cpuc.ca.gov

Comments may be served by email. Any comments on the draft Resolution must be received by the Energy Division by October 4, 2010.

Those submitting comments must serve a copy of their comments on 1) the entire service list attached to the draft Resolution, 2) all Commissioners, and 3) the Director of the Energy Division, the Chief Administrative Law Judge and the General Counsel, on the same date that the comments are submitted to the Energy Division.

Comments shall be limited to fifteen pages in length plus a subject index listing the recommended changes to the draft Resolution, a table of authorities and an appendix setting forth the proposed findings and ordering paragraphs.

Comments shall focus on factual, legal or technical errors in the proposed draft Resolution. Comments that merely reargue positions taken in the advice letter or protests will be accorded no weight and are not to be submitted.

Late submitted comments will not be considered.

/s/ Molly Sterkel
Molly Sterkel
Program and Project Supervisor
Energy Division

Enclosure: Service List, R.10-05-004

Certificate of Service

CERTIFICATE OF SERVICE

I certify that I have by mail this day served a true copy of Draft Resolution E-4351 on all parties in these filings or their attorneys as shown on the attached list.

Dated September 14, 2010 at San Francisco, California.

/s/ Honesto Gatchalian
Honesto Gatchalian

NOTICE

Parties should notify the Energy Division, Public Utilities Commission, 505 Van Ness Avenue, Room 4002 San Francisco, CA 94102, of any change of address to ensure that they continue to receive documents. You must indicate the Resolution number on the service list on which your name appears.

Service List
Resolution E-4351

Rulemaking.10-05-004
http://docs.cpuc.ca.gov/published/service_lists/R1005004_79118.htm