

File No. 150272

Committee Item No. A  
Board Item No. \_\_\_\_\_

## COMMITTEE/BOARD OF SUPERVISORS

### AGENDA PACKET CONTENTS LIST

Committee: Budget & Finance Sub-Committee Date May 13, 2015

Board of Supervisors Meeting Date \_\_\_\_\_

#### Cmte Board

- |                                     |                          |  |
|-------------------------------------|--------------------------|--|
| <input type="checkbox"/>            | <input type="checkbox"/> | Motion                                       |
| <input checked="" type="checkbox"/> | <input type="checkbox"/> | Resolution                                   |
| <input type="checkbox"/>            | <input type="checkbox"/> | Ordinance                                    |
| <input type="checkbox"/>            | <input type="checkbox"/> | Legislative Digest                           |
| <input checked="" type="checkbox"/> | <input type="checkbox"/> | Budget and Legislative Analyst Report        |
| <input type="checkbox"/>            | <input type="checkbox"/> | Youth Commission Report                      |
| <input type="checkbox"/>            | <input type="checkbox"/> | Introduction Form                            |
| <input type="checkbox"/>            | <input type="checkbox"/> | Department/Agency Cover Letter and/or Report |
| <input type="checkbox"/>            | <input type="checkbox"/> | MOU  |
| <input checked="" type="checkbox"/> | <input type="checkbox"/> | Grant Information Form                       |
| <input checked="" type="checkbox"/> | <input type="checkbox"/> | Grant Budget                                 |
| <input type="checkbox"/>            | <input type="checkbox"/> | Subcontract Budget                           |
| <input type="checkbox"/>            | <input type="checkbox"/> | Contract/Agreement                           |
| <input type="checkbox"/>            | <input type="checkbox"/> | Form 126 – Ethics Commission                 |
| <input checked="" type="checkbox"/> | <input type="checkbox"/> | Award Letter                                 |
| <input type="checkbox"/>            | <input type="checkbox"/> | Application                                  |
| <input type="checkbox"/>            | <input type="checkbox"/> | Public Correspondence                        |

OTHER (Use back side if additional space is needed)

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Completed by: Linda Wong Date May 6, 2015  
Completed by: Linda Wong Date \_\_\_\_\_

1 [Accept and Expend Grant -Solar Energy with Energy Storage- \$1,286,200]

2

3 **Resolution retroactively authorizing the Department of the Environment to accept and**  
4 **expend a grant in the amount of \$1,286,200 from the U.S. Department of Energy to**  
5 **develop plans in multiple neighborhoods to develop Solar Energy with Energy Storage**  
6 **for Post-Disaster Preparedness for the term of December 15, 2014, through December**  
7 **31, 2016.**

8

9 WHEREAS, The City highly values disaster preparedness activities; and

10 WHEREAS, Solar power, in conjunction with energy storage can provide long term  
11 secure power for critical electric loads without the need for liquid fuels; and

12 WHEREAS, Multiple critical loads can be linked together to create a 'micro-grid' that  
13 improves stability and allows the loads to balance the use of available power; and

14 WHEREAS, The Department of Environment worked with Department of Emergency  
15 Management (DEM) to incorporate solar with energy storage and micro-grids into the City's  
16 Hazard Mitigation Plan and into the City's proposed Energy Assurance Plan; and

17 WHEREAS, With a previously approved grant from the California Energy Commission,  
18 the Department of the Environment has already completed a report on integrating renewable  
19 resources into neighborhood electric distribution systems; and

20 WHEREAS, The U.S. Department of Energy has granted the City, through the  
21 Department of Environment, \$1,286,200 to develop a plan for at least twelve solar powered  
22 micro-grids in the City along with other tools that will assist other local government across the  
23 United States; and

24 WHEREAS, The U.S. Department of Energy has also granted \$35,000 of assistance  
25 from two National Laboratories to assist in the project; and

1 WHEREAS, The Department of Environment has partnered with DEM, the San  
2 Francisco Public Utilities Commission, and Pacific Gas & Electric in this project; and

3 WHEREAS, The Department of the Environment will engage neighborhoods in this  
4 project; and

5 WHEREAS, The grant does not require an Annual Salary Ordinance (ASO)  
6 amendment and partially reimburses the Department of the Environment for one existing  
7 position; and

8 WHEREAS, The term of this grant is from December 15, 2014 to December 31, 2016;  
9 and

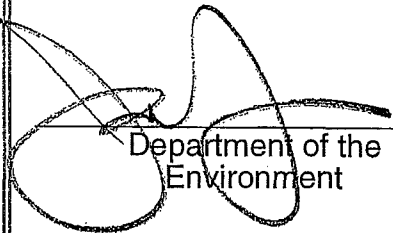
10 WHEREAS, A request for retroactive approval is being sought because the Department  
11 of the Environment needed time to process this Resolution; and

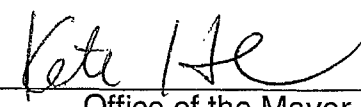
12 WHEREAS, The budget includes indirect costs of \$34,256; now, therefore, be it

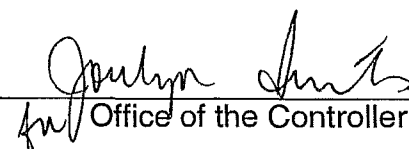
13 RESOLVED, That the Board of Supervisors authorizes the Department of the  
14 Environment to retroactively accept and expend a grant in the amount of up to \$1,286,200 for  
15 the development of plans for solar, energy storage, and micro-grids to improve disaster  
16 preparedness in the City and County of San Francisco.

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18 RECOMMENDED:

APPROVED:

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Department of the  
Environment

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Office of the Mayor

  
Office of the Controller

<p><b>Item 4</b> <b>File 15-0272</b></p>	<p><b>Department:</b> Department of Environment (DOE)</p>
<p><b>EXECUTIVE SUMMARY</b></p>	
<p style="text-align: center;"><b>Legislative Objectives</b></p>	
<p>The proposed resolution would retroactively authorize the San Francisco Department of the Environment to accept and expend a grant for \$1,286,200 from the US Department of Energy to create plans to develop solar energy with energy storage for post-disaster preparedness. The term of the grant is December 15, 2014 through December 31, 2016.</p>	
<p style="text-align: center;"><b>Key Points</b></p>	
<ul style="list-style-type: none"> <li>• In 2014, the City of San Francisco developed the Hazard Mitigation Plan (Plan) to assess risks to San Francisco by natural and human-caused hazards, and to develop mitigation strategies for reducing the impact of those risks. The Plan calls for the implementation and use of solar energy storage to power electrical backup systems for these assets.</li> <li>• In 2014, the US Department of Energy awarded a grant of \$1,286,200 to the San Francisco Department of the Environment to plan and design the Solar + Storage Resiliency Project in San Francisco.</li> </ul>	
<p style="text-align: center;"><b>Fiscal Impact</b></p>	
<ul style="list-style-type: none"> <li>• The total budget for the Solar + Storage Project is \$1,575,171, consisting of the subject grant funds of \$1,286,200 from the US Department of Energy , and \$288,971 in matching funds provided by the City of San Francisco.</li> <li>• Matching funds of \$288,971 is comprised of in-kind contributions from City departments and outside contractors performing work on the Project.</li> </ul>	
<p style="text-align: center;"><b>Recommendation</b></p>	
<ul style="list-style-type: none"> <li>• Approve the proposed resolution.</li> </ul>	

**MANDATE STATEMENT**

City Administrative Code Section 10.170-1 states that accepting Federal, State, or third-party grant funds in the amount of \$100,000 or more, including any City matching funds required by the grant, is subject to Board of Supervisors approval.

**BACKGROUND**

In 2014, the City of San Francisco developed the Hazard Mitigation Plan<sup>1</sup> (Plan) to assess risks to San Francisco by natural and human-caused hazards, and to develop mitigation strategies for reducing the impact of those risks. The Plan identified 20 such hazards, which included disruption of energy supplies in the event of emergency. In order to ensure continuance of energy supplies to critical City assets, the Plan calls for the implementation and use of solar energy storage to power electrical backup systems for these assets.

The US Department of Energy Solar Market Pathways Program supports projects that are advancing solar deployment across the United States. These projects develop strategic plans to expand solar electricity use for residential, community, and commercial properties. In 2014, the US Department of Energy awarded a grant of \$1,286,200 to the San Francisco Department of the Environment to plan and design the Solar + Storage Resiliency Project in San Francisco.

**DETAILS OF PROPOSED LEGISLATION**

The proposed resolution would retroactively authorize the San Francisco Department of the Environment to accept and expend a grant for \$1,286,200 from the US Department of Energy to create plans to develop solar energy with energy storage for post-disaster preparedness. The term of the grant is December 15, 2014 through December 31, 2016.

US Department of Energy Solar Market Pathways Grant

The Department of the Environment will use the \$1,286,200 grant to implement the Solar + Storage for Resiliency Project (Project). The Project will plan and design a solar storage system to maintain energy supply in San Francisco in the event of a natural disaster. Current liquid fuel generators that supply emergency power have a limited quantity of energy, which may not be sufficient in case of a prolonged outage. The Project would design a system in which solar energy is captured at multiple sites in a neighborhood and link them together in a micro-grid

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<sup>1</sup> The Hazard Mitigation Plan is required by the federal Robert T. Stafford Disaster Relief and Emergency Assistance Act of 1988.

that could increase the total capacity needed to operate those facilities. Twelve neighborhoods will be included in the Project<sup>2</sup>. The Project tasks are listed below.

- Researching existing projects that use similar micro-grid technology.
- Identifying disaster preparedness zones in San Francisco to detail which buildings have power needs and can be grouped together to form a micro-grid.
- Analyzing technical feasibility of solar + storage systems in San Francisco
- Studying technical and economic barriers to development of solar + storage solutions.
- Facilitating stakeholder engagement with groups such as public officials, utilities, first responders, relevant City departments, and business and community groups.
- Disseminating research and findings to regional, State and national networks.

### FISCAL IMPACT

As shown in Table 1 below, the total budget for the Solar + Storage Project is \$1,575,171, consisting of the subject grant funds of \$1,286,200 from the US Department of Energy, and \$288,971 in matching funds provided by the City of San Francisco.

**Table 1: Solar + Storage Project Budget**

Budget Category	Grant	City Match Share	Total
City of San Francisco Staff*			
Salaries	\$190,311	\$161,286	\$351,597
Fringe Benefits	150,853		150,853
Staff Costs Subtotal	\$341,164	\$161,286	\$502,450
Contract Costs			
Technical Analysis	\$795,402	\$101,185	\$896,587
Financial Modeling	19,999	20,400	40,399
Community Outreach	37,714		37,714
Contract Costs Subtotal	853,115	\$121,585	\$974,700
Other Costs			
In-Kind Tour Santa Rita Jail Micro Grid		\$3,600	\$3,600
In-Kind Meeting Space		2,500	2,500
Travel, Training, Miscellaneous	\$34,650		34,650
Materials & Supplies	23,015		23,015
Indirect Costs	34,256		34,256
Other Costs Subtotal	\$91,921	6,100	98,021
<b>Total</b>	<b>\$1,286,200</b>	<b>\$288,971</b>	<b>\$1,575,171</b>

\* City Match Share includes in-kind staff work performed by City departments including Emergency Management Department, Fire Department and Department of Building Inspection.

<sup>2</sup> Neighborhoods selected for participation in the Project will be chosen from each supervisorial district and two from District 10. District 10 will have two neighborhoods because preparatory work has already been performed by one of the contractors working on the Project.

Technical analysis and financial modeling work for the Project will be performed by outside firms specializing in engineering and finance of clean energy projects. Community Outreach work for the Project is required to meet with constituencies to identify power needs for disaster planning in the neighborhoods where the Project will be based. Each neighborhood is being allocated approximately \$3,000 for these services. Mr. Cal Broomhead, Climate and Energy Programs Manager of the Department of the Environment, states that these services will likely be provided by non-profit community-based organizations. Mr. Broomhead provided a budget totaling \$974,700 for the outside firms' and City staff costs, as shown in Table 2 below.

**Table 2: Contracts and City Staff for Solar + Storage Project**

<b>Contract/City Staff</b>	<b>Dept. of Energy Grant</b>	<b>In Kind Contribution</b>	<b>Total</b>
<b>Technical Analysis</b>			
Arup	\$773,163	\$0	\$773,163
Rocky Mountain Institute	9,999	30,355	40,354
Clean Coalition	7,410	66,000	73,410
San Francisco Public Utilities Commission	4,830	4,830	9,660
<b>Technical Analysis Subtotal</b>	<b>\$795,402</b>	<b>\$101,185</b>	<b>\$896,587</b>
<b>Financial Modeling</b>			
Renewable Funding	\$10,000	\$0	\$10,000
Cal-Charge	9,999	20,400	30,399
<b>Financial Modeling Subtotal</b>	<b>\$19,999</b>	<b>\$20,400</b>	<b>\$40,399</b>
<b>Community Outreach</b>			
TBD	\$37,714	\$0	\$37,714
<b>Community Outreach Subtotal</b>	<b>\$37,714</b>	<b>0</b>	<b>\$37,714</b>
<b>Total</b>	<b>853,115</b>	<b>121,585</b>	<b>974,700</b>

Mr. Broomhead states that the Department of the Environment has an existing contract with Arup to provide environmental services in an amount not-to-exceed \$3,000,000, which was awarded through a competitive process. Arup will perform the needed technical analysis for the Project under this existing contract.

According to Mr. Broomhead, the Department of the Environment has spent \$19,100 in grant funds prior to receiving Board of Supervisors authorization in order to remain on schedule for grant deliverables. This spending was related to: 1) travel to attend required Project meetings; and 2) consultant work.

## RECOMMENDATION

Approve the proposed resolution.

**TO:** Angela Calvillo, Clerk of the Board of Supervisors  
**FROM:** The Department of the Environment  
**DATE:** 3/05//2015  
**SUBJECT:** Accept and Expend Resolution for Local Grant  
**GRANT TITLE:** Solar for Resiliency

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Attached please find the original and 4 copies of each of the following:

- Proposed grant resolution, original signed by Department, Mayor, Controller,
- Grant information form, including disability checklist
- Grant budget
- Grant application
- Grant award letter from funding agency
- Form SFEC-126 – Notification of Contract Approval
- Other (Explain): Legislative Checklist

**Special Timeline Requirements:**

**Departmental representative to receive a copy of the adopted ordinance:**

Name: Rachel Buerkle

Phone: 415-355-3704

Interoffice Mail Address:

Certified copy required: Yes

No X

(Note: certified copies have the seal of the City/County affixed and are occasionally required by funding agencies. In most cases ordinary copies without the seal are sufficient).





**Grant Resolution Information Form**

(Effective July 2011)

Purpose: Accompanies proposed Board of Supervisors resolutions authorizing a Department to accept and expend grant funds.

The following describes the grant referred to in the accompanying resolution:

1. Grant Title: Solar for Resiliency

2. Department: Department of the Environment

3. Contact Person: Rachel Buerkle

Telephone: 415-355-3704

4. Grant Approval Status (check one):

Approved by funding agency

Not yet approved

5. Amount of Grant Funding Approved or Applied for:

Total Assistance	\$1,321,200
USDOE direct pay to National Laboratory partners	<u>-\$35,000</u>
Total Assistance USDOEE to pay to CCSF	<b>\$1,286,200</b>

6a. Matching Funds Required: \$ 288,971

b. Source(s) of matching funds (if applicable): SPUR, Rocky Mountain Institute, Cal-Charge, Alameda County; SFPUC (\$4,830); CCSF resiliency planning already being performed by City departments, including Department of Environment (\$260,000).

7a. Grant Source Agency: US Dept of Energy

b. Grant Pass-Through Agency (if applicable): N/A

8. Proposed Grant Project Summary:

Planning and designing at least eleven projects for independent electricity operation of critical loads in neighborhoods in San Francisco. A combination of City facilities and community serving facilities will be identified for their critical electric loads that must operate during an extended power outage such as those caused by a major disaster. Critical loads are those such as telecommunications, battery charging for cell phones and wheel chairs, medical equipment, and essential lighting. A community process will assist in the identification of facilities and their loads. The design phase will identify the quantity and location of solar photovoltaic panels and energy storage that will enable continuous operation of identified critical loads. A financial analysis will determine the funding requirements and sources to build, operate and maintain the systems. The project will provide a "roadmap" for future systems in San Francisco and in other U.S. cities.

9. Grant Project Schedule, as allowed in approval documents, or as proposed:

Start-Date: 12/15/2014

End-Date: 12/31/2016

10a. Amount budgeted for contractual services: \$853,115

b. Will contractual services be put out to bid?

The contractor, ARUP, had already been selected through a competitive process in 2010 (BPEV10000014-402-09/10) and the contract termination is beyond the end of the term of the grant. ARUP was selected by the Department for a previous study funded by the California Energy Commission of the integration of renewable energy into the electric grid, focusing on the South of Market area. This work will extend the lessons learned to at least ten other neighborhoods throughout the city and provide a detailed design of the solar plus energy storage solutions for the critical loads in each neighborhood.

c. If so, will contract services help to further the goals of the Department's Local Business Enterprise (LBE) requirements? Not substantially. There is \$5,000 for local organizations to perform community level marketing to bring residents to planning meetings. Other contractual work is highly specialized with cutting edge technologies.

d. Is this likely to be a one-time or ongoing request for contracting out?

ARUP will provide services that cannot be provided by City forces; however, SFPUC is a partner and it is expected that knowledge transfer will enable some of the future technical work to be performed by City forces. Otherwise, the Department will continue to use ARUP until the current contract terminates.

11a. Does the budget include indirect costs?  Yes  No

b1. If yes, how much? \$ 34,256

b2. How was the amount calculated? Based on Department of Environment overhead and indirect.

c1. If no, why are indirect costs not included?

Not allowed by granting agency  To maximize use of grant funds on direct services  
 Other (please explain):

c2. If no indirect costs are included, what would have been the indirect costs?

12. Any other significant grant requirements or comments:

Two National Laboratories, Lawrence Berkeley and Sandia are partners and will not receive their share through the Department, but directly from USDOE. Completion of this work will enable the Department to seek other Federal and State funds for the construction of the systems.

**\*\*Disability Access Checklist\*\*\*(Department must forward a copy of all completed Grant Information Forms to the Mayor's Office of Disability)**

13. This Grant is intended for activities at (check all that apply):

- |  |   |  |
|--|---|--|
| <input checked="" type="checkbox"/> Existing Site(s) | <input checked="" type="checkbox"/> Existing Structure(s) | <input type="checkbox"/> Existing Program(s) or Service(s) |
| <input type="checkbox"/> Rehabilitated Site(s)       | <input type="checkbox"/> Rehabilitated Structure(s)       | <input type="checkbox"/> New Program(s) or Service(s)      |
| <input type="checkbox"/> New Site(s)                 | <input type="checkbox"/> New Structure(s)                 |  |

14. The Departmental ADA Coordinator or the Mayor's Office on Disability have reviewed the proposal and concluded that the project as proposed will be in compliance with the Americans with Disabilities Act and all other Federal, State and local disability rights laws and regulations and will allow the full inclusion of persons with disabilities. These requirements include, but are not limited to:

1. Having staff trained in how to provide reasonable modifications in policies, practices and procedures;
2. Having auxiliary aids and services available in a timely manner in order to ensure communication access;
3. Ensuring that any service areas and related facilities open to the public are architecturally accessible and have been inspected and approved by the DPW Access Compliance Officer or the Mayor's Office on Disability Compliance Officers.

If such access would be technically infeasible, this is described in the comments section below:

Comments: All of the facilities are privately owned facilities of various types of buildings in both the residential and commercial sectors. Staff will make site visits to participate in site assessments only.

Departmental ADA Coordinator or Mayor's Office of Disability Reviewer:

Claudia Molina, Departmental ADA Coordinator, Payroll Personnel Clerk

Date Reviewed: \_\_\_\_\_

2/17/15

(Signature Required)

Claudia Molina

**Department Head or Designee Approval of Grant Information Form:**

Deborah Raphael, Director, Department of the Environment

Date Reviewed: \_\_\_\_\_

2/17/15

(Signature Required)

Deborah D. Raphael

**City and County of San Francisco - Department of the Environment**

**Solar Market Pathways: US Department of Energy**

			USDOE	Cost Share
<b>Personnel</b>				
	5644 Env. Unit Manager (.19 FTE); 5642 Sr. Env, Specialist (.42 FTE); 5640 Env. Specialist (.3 FTE); 5638 Env. Assistant (.05 FTE); 9922 Env. Intern (.45 FTE);	Administration, program management, strategic planning, meeting management, outreach, community meetings, document review, reporting, results dissemination.	\$190,311	
	Fringe		\$150,853	
		<b>Sub-total Personnell</b>	<b>\$341,164</b>	
<b>Contracts and Work Orders</b>				
	ARUP (already under City contract)	All design, almost all technical work, document preparation	\$773,163	
	Renewable Funding (already under City contract)	Technical financial modeling.	\$10,000	
	Cal-Charge	Technical review of financial modeling. In-Kind participation and review.	\$9,999	\$20,400
	SF Public Utilities Commission	Technical work related to municipal facilities. In-Kind participation in meetings and document review	\$4,830	\$4,830
	Rocky Mountain Instituite	In-Kind facilitation of a planning and design workshop	\$9,999	\$30,355
	City and County of San Francisco	In-Kind from various departments already performing related or preparatory work with non-federal funds		\$161,286
	Alameda County	In-Kind tour of microgrid at Santa Rita		\$3,600
	Clean Coalition	Performing distribution system analysis and development of solar + storage in Bayview Hunters Point	\$7,410	\$66,000
	SPUR	In-Kind meeting space		\$2,500
	TBD	Community Outreach contractors	\$37,714	
		<b>Sub-total Contractual</b>	<b>\$853,115</b>	<b>\$ 288,971</b>
<b>Other</b>	Travel, Training, Misc.		\$34,650	
	Materials & Supplies		\$23,015	
		<b>Sub-Total Other</b>	<b>\$57,665</b>	
		<b>Sub-total</b>	<b>\$1,251,944</b>	
Indirect			\$34,256	
<b>Grand Total</b>			<b>\$1,286,200</b>	

**ASSISTANCE AGREEMENT**

1. Award No. DE-EE0006906		2. Modification No.	3. Effective Date 12/15/2014	4. CFDA No. 81.087
5. Awarded To SAN FRANCISCO, CITY & COUNTY OF Attn: MELSON D MANGROBANG 1 DR. CARLTON B. GOODLETT PL ROOM 300 SAN FRANCISCO CA 941024694		6. Sponsoring Office Energy Efficcy & Renewable Energy		7. Period of Performance 12/15/2014 through 12/31/2015
8. Type of Agreement <input type="checkbox"/> Grant <input checked="" type="checkbox"/> Cooperative Agreement <input type="checkbox"/> Other	9. Authority 109-58 Energy Policy Act (2005)		10. Purchase Request or Funding Document No. 15EE000911	
11. Remittance Address SAN FRANCISCO, CITY & COUNTY OF Attn: MELSON D MANGROBANG 1 DR. CARLTON B. GOODLETT PL ROOM 300 SAN FRANCISCO CA 941024694		12. Total Amount Govt. Share: \$1,321,200.00  Cost Share : \$288,971.00  Total : \$1,610,171.00		13. Funds Obligated This action: \$1,321,200.00  Total : \$1,321,200.00
14. Principal Investigator Alison Healy Phone: 415-355-3715		15. Program Manager Rose Marie S. Holsing Phone: 202-287-1793		16. Administrator Golden Field Office U.S. Department of Energy Golden Field Office 15013 Denver West Parkway Golden CO 80401
17. Submit Payment Requests To		18. Paying Office		19. Submit Reports To
20. Accounting and Appropriation Data				
21. Research Title and/or Description of Project SOLAR + STORAGE FOR RESILIENCY				
For the Recipient			For the United States of America	
22. Signature of Person Authorized to Sign			25. Signature of Grants/Agreements Officer  Signature on File	
23. Name and Title		24. Date Signed	26. Name of Officer Jeannette L. Singsen	27. Date Signed 12/23/2014

**CONTINUATION SHEET**

REFERENCE NO. OF DOCUMENT BEING CONTINUED  
DE-EE0006906

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NAME OF OFFEROR OR CONTRACTOR  
SAN FRANCISCO, CITY & COUNTY OF

ITEM NO. (A)	SUPPLIES/SERVICES (B)	QUANTITY (C)	UNIT (D)	UNIT PRICE (E)	AMOUNT (F)
	<p>DUNS Number: 070384255</p> <p>This is a conditional award, comprised of this Assistance Agreement and the Special Terms and Conditions. Upon successful completion of negotiations, this award will be modified to lift its conditional status, to revise the Special Terms and Conditions, and to add additional attachments, such as Statement of Project Objectives (SOPO) and Milestone Summary Table, Federal Assistance Reporting Checklist and Instructions, Budget Information SF-424A, and Intellectual Property Provisions.</p> <p>This award was prepared using the proposed budget information in the Recipient's application. The Special Terms and Conditions, Term 1 of the award states DOE will not release the funding obligated by this award until successful completion of negotiations are reached to the satisfaction of the Contracting Officer. Performance against this award is, therefore, at the Recipient's own risk, and payments for costs incurred for the Recipient's project will not be made until completion of negotiations.</p> <p>The Project Period for this award is 12/15/2014 through 12/31/2017, consisting of the following Budget Periods:</p> <p>Budget Period 1: 12/15/2014 to 12/31/2015 Budget Period 2: 01/01/2016 to 12/31/2016 Budget Period 3: 01/01/2017 to 12/31/2017</p> <p>In Block 7 of the Assistance Agreement, the Period of Performance reflects the beginning of the Project Period through the end of the current Budget Period.</p> <p>Additional future DOE funding and additional budget periods are not contemplated under this award. Funding for all awards and future budget periods is contingent upon the availability of funds appropriated by Congress for the purpose of this program and the availability of future-year budget authority.</p> <p>DOE Award Administrator: Fania Kate Gordon E-mail: fania.gordon@ee.doe.gov Phone: 720-356-1546</p> <p>Continued ...</p>				

**CONTINUATION SHEET**

REFERENCE NO. OF DOCUMENT BEING CONTINUED  
DE-EE0006906

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NAME OF OFFEROR OR CONTRACTOR  
SAN FRANCISCO, CITY & COUNTY OF

ITEM NO. (A)	SUPPLIES/SERVICES (B)	QUANTITY (C)	UNIT (D)	UNIT PRICE (E)	AMOUNT (F)
	<p>DOE Project Officer: Rose Marie Holsing E-mail: rosemarie.holsing@ee.doe.gov Phone: 202-287-1793</p> <p>Recipient Business Officer: Joseph Salem E-mail: joseph.salem@sfgov.org Phone: 415-355-3721</p> <p>Recipient Principal Investigator: Alison Healy E-mail: alison.healy@sfgov.org Phone: 415-355-3715</p> <p>"Electronic signature or signatures as used in this document means a method of signing an electronic message that-- (A) Identifies and authenticates a particular person as the source of the electronic message; (B) Indicates such person's approval of the information contained in the electronic message; and, (C) Submission via FedConnect constitutes electronically signed documents." ASAP: YES Extent Competed: COMPETED Davis-Bacon Act: NO PI: Alison Healy Fund: 05450 Appr Year: 2014 Allottee: 31 Report Entity: 200835 Object Class: 41020 Program: 1005617 Project: 0000000 WFO: 0000000 Local Use: 0000000</p>				

## Statement of Work/Objectives (From Statement of Project Objectives)

City and County of San Francisco

Solar+Storage for Resiliency

DE-FOA-0001071

### Objectives

The primary goals of the project are to accelerate the deployment of PV nationwide and create a roadmap for using PV as a viable tool for energy security in the event of an emergency.

### Project Objectives:

- Initiate the project by conducting thorough research of synergistic projects, previous research, and candidate products and technology, resulting in a comprehensive research compendium. The research will look U.S. wide and will draw on work done to date, such as the Florida Solar Shelters. We will issue a report on the state of the current San Francisco disaster preparedness plans with respect to electricity needs of buildings.
- Facilitate stakeholder engagement through the formation and management of a working group to assist in preparing a solar+storage solution, integrated into a disaster preparedness plan. The stakeholder group will include utilities, first responders, emergency service providers, relevant City Departments, and other community and business stakeholders. We will produce presentations for each meeting along with detailed minutes and conclusions. The goal of the working group is to review and assess task work, specifically on disaster prep plan research, road map development, load sizing tool development and outreach/dissemination plans. Key stakeholders, including storage companies and utilities will also provide technical and regulatory review of proposed plans.
- Identify Disaster Preparedness Zones in San Francisco. These will be outlined in a series of GIS maps detailing where in San Francisco buildings are located that have power needs as part of their disaster preparedness plans and identify where buildings can be grouped to form a microgrid and share power in the event of an extended outage.
- Address technical and economic barriers to solar+storage and outline solutions. Team will produce a road map depicting how micro-grids, electrical storage, and islandable distributed solar systems can be implemented throughout the US and develop a peer reviewed report on financing mechanisms leveraging established models and programs. The road map will be posted to the CCSF website and shared at conferences.
- Explore technical feasibility of solar+storage systems in San Francisco. The team will present the technical feasibility to storage vendors such as STEM and the local San Francisco utilities to validate the technical feasibility. Team will identify and/or develop a tool for a non-technical audience in order to assess what electrical loads are required to be maintained in the event of an extended outage and gather stakeholders to understand what retrofit equipment may be required to allow existing buildings with solar+storage to operate in an extended outage. Tool will be available online.
- Team will package and disseminate the plan to regional, state and national networks using various outreach methods including a Best Practices Manual. The team will present at conferences and host workshops.



## Gomez, Juan (CON)

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**From:** Zheng, Suhan (CON)  
**Sent:** Monday, March 09, 2015 9:14 AM  
**To:** Gomez, Juan (CON); Gratuito, Maricar (CON)  
**Subject:** Fwd: RE: Solar Pathways Grant \$1,286,200 : New Documents

----- Forwarded message -----

From: "Gordon, Fania" <Fania.Gordon@ee.doe.gov>  
Date: Mar 9, 2015 8:14 AM  
Subject: RE: Solar Pathways Grant \$1,286,200 : New Documents  
To: "Zheng, Suhan (CON)" <suhan.zheng@sfgov.org>  
Cc: "Crooks, Angela (CONTR)" <Angela.Crooks@ee.doe.gov>, "Broomhead, Cal (ENV)" <cal.broomhead@sfgov.org>

Good morning,

Regarding the pending modification to lift conditions on DE-EE0006906, the DOE funding in the amount \$1,321,200 is for the entire two year project. When the conditions are lifted, the funding for Budget Period (BP) 1 will be available for reimbursements. The funding associated with BP2 will be restricted until the continuation application is submitted, reviewed, and a go decision is made. At that time a formal modification will be made and transmitted to your office via FedConnect.

Please let me know if you have any questions,  
Fania K. Gordon  
Grants Management Specialist  
Financial Assistance - Solar Energy Technologies  
U.S. Department of Energy - Energy Efficiency and Renewable Energy  
Email: [Fania.Gordon@ee.doe.gov](mailto:Fania.Gordon@ee.doe.gov)  
Phone: 720-356-1546

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**From:** Broomhead, Cal (ENV) [<mailto:cal.broomhead@sfgov.org>]  
**Sent:** Friday, March 06, 2015 5:17 PM  
**To:** Gordon, Fania; Crooks, Angela (CONTR)  
**Cc:** Zheng, Suhan (CON)  
**Subject:** FW: Solar Pathways Grant \$1,286,200 : New Documents

Please forgive the intrusion; however, when you sent your email confirming the project budget periods, it left unstated that the budget is for two years. Our Controller needs it clearly stated that your email meant that the Budget covers both Budget Periods. An affirmative email stating that clearly will suffice.

Thank you for your continued patience.

Cal Broomhead  
Climate and Energy Programs Manager  
Department of Environment  
City and County of San Francisco  
1455 Market Street, 12<sup>th</sup> Floor  
Desk: 415-355-3706  
Reception: 415-355-3700

What you can do, or dream you can do, begin it; Boldness has genius, power and magic in it - W.H. Murray

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**From:** Zheng, Suhan (CON)  
**Sent:** Friday, March 06, 2015 2:10 PM  
**To:** Broomhead, Cal (ENV)  
**Cc:** Gratuito, Maricar (CON); Buerkle, Rachel (ENV)  
**Subject:** RE: Solar Pathways Grant \$1,286,200 : New Documents

Yes yes! If you can get an email to verify that the \$1.3M funding is for two and not one! I can print and add to this package here.

Suhan Zheng  
[Suhan.Zheng@sfgov.org](mailto:Suhan.Zheng@sfgov.org)  
(415) 554-7414

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**From:** Broomhead, Cal (ENV)  
**Sent:** Friday, March 06, 2015 2:09 PM  
**To:** Zheng, Suhan (CON); Buerkle, Rachel (ENV)  
**Cc:** Gratuito, Maricar (CON)  
**Subject:** RE: Solar Pathways Grant \$1,286,200 : New Documents

Suhan, thank you for getting to this so quickly. Rachel is out today, but maybe I can get what you need. The funding is for two years, hence the two budget periods for the project. What do you need to show that? Would an email from US Dept of Energy suffice?

Cal Broomhead  
Climate and Energy Programs Manager  
Department of Environment  
City and County of San Francisco  
1455 Market Street, 12<sup>th</sup> Floor  
Desk: 415-355-3706  
Reception: 415-355-3700

What you can do, or dream you can do, begin it; Boldness has genius, power and magic in it - W.H. Murray

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**From:** Zheng, Suhan (CON)  
**Sent:** Friday, March 06, 2015 2:01 PM  
**To:** Buerkle, Rachel (ENV)  
**Cc:** Broomhead, Cal (ENV); Gratuito, Maricar (CON)  
**Subject:** RE: Solar Pathways Grant \$1,286,200 : New Documents  
**Importance:** High

Hi Rachel,

Sorry I couldn't review it until now (was in a meeting all morning), but regarding the issue of the grant award period: From reading the grant award, it seems like the \$1.3M is for the first budget year of 12/15/14-12/31/15 and does not include 1/1/16-12/31/16 (in which case the A&E should reflect the grant of period of 12/15/14-12/31/15 and not 12/15/14-12/31/16). Would that be correct?

I understand that you have a confirmation email from Fania, but it would seem that she's just confirmed the 2 separate budget periods and isn't indicating that the \$1.3M is for 2 years.

So, if the funding really is for one year, sorry, but I'll need new A&E sheets to reflect the new period..

Suhan Zheng  
[Suhan.Zheng@sfgov.org](mailto:Suhan.Zheng@sfgov.org)  
(415) 554-7414

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**From:** Buerkle, Rachel (ENV)  
**Sent:** Thursday, March 05, 2015 5:27 PM  
**To:** Zheng, Suhan (CON); Kirkpatrick, Kelly (MYR)  
**Cc:** Broomhead, Cal (ENV); Rodriguez, Guillermo (ENV); Gratuito, Maricar (CON); Gomez, Juan (CON)  
**Subject:** RE: Solar Pathways Grant \$1,286,200 : New Documents

Suhan:

Cal is going to bring these over to you tomorrow. It would be really terrific if this could move along to the Mayor's office in time to be introduced next week. Short notice, I know, but I thought I would ask.

Thanks to you both for anything you can do.

**Rachel C. Buerkle**  
**Sr. Administrative Analyst**  
San Francisco Department of the Environment  
1455 Market Street, Suite 1200, San Francisco, CA 94103  
[rachel.buerkle@sfgov.org](mailto:rachel.buerkle@sfgov.org) (415) 355-3704 [www.sfenvironment.org](http://www.sfenvironment.org)

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**From:** Zheng, Suhan (CON)  
**Sent:** Thursday, March 05, 2015 4:29 PM  
**To:** Buerkle, Rachel (ENV)  
**Cc:** Gratuito, Maricar (CON); Gomez, Juan (CON)  
**Subject:** RE: Solar Pathways Grant \$1,286,200 : New Documents

Thanks Rachel! Will be on the look out.

Suhan Zheng  
[Suhan.Zheng@sfgov.org](mailto:Suhan.Zheng@sfgov.org)  
(415) 554-7414

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**From:** Buerkle, Rachel (ENV)  
**Sent:** Thursday, March 05, 2015 2:50 PM  
**To:** Zheng, Suhan (CON); Kirkpatrick, Kelly (MYR)  
**Subject:** Solar Pathways Grant \$1,286,200 : New Documents  
**Importance:** High

Suhan and Kelly:

Attached are all the documents for this grant. The Resolution, GIF, and Budget have been revised to 1) reduce the amount of indirect and 2) modify the contributions from other departments and SFE's staff costs. The indirect was reduced because the funder disallowed part of our calculation (you will have to ask Joe Salem if you want more info on this).

This should really be coming around soon for signature. Let me know if you have questions, and thanks.

**Rachel C. Buerkle**

**Sr. Administrative Analyst**

San Francisco Department of the Environment  
1455 Market Street, Suite 1200, San Francisco, CA 94103  
[rachel.buerkle@sfgov.org](mailto:rachel.buerkle@sfgov.org) (415) 355-3704 [www.sfenvironment.org](http://www.sfenvironment.org)

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**From:** Buerkle, Rachel (ENV)  
**Sent:** Friday, February 13, 2015 4:03 PM  
**To:** Zheng, Suhan (CON)  
**Cc:** Kirkpatrick, Kelly (MYR); Rodriguez, Guillermo (ENV); Broomhead, Cal (ENV)  
**Subject:** Solar Pathways Grant \$1,286,200 : Grant period?  
**Importance:** High

Suhan:

See below for the correct grant period. Attached are a revised resolution and GIF. You should have the signed packet next week.

Thanks for your help.

**Rachel C. Buerkle**  
**Sr. Administrative Analyst**  
San Francisco Department of the Environment  
1455 Market Street, Suite 1200, San Francisco, CA 94103  
[rachel.buerkle@sfgov.org](mailto:rachel.buerkle@sfgov.org) (415) 355-3704 [www.sfenvironment.org](http://www.sfenvironment.org)

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**From:** Broomhead, Cal (ENV)  
**Sent:** Thursday, February 12, 2015 11:00 AM  
**To:** Buerkle, Rachel (ENV)  
**Subject:** FW: Solar Pathways Grant \$1,286,200 : Grant period?  
**Importance:** High

From the USDOE Grant Manager, Fania Gordon. I hope this clarifies.

Cal Broomhead  
Climate and Energy Programs Manager  
Department of Environment  
City and County of San Francisco  
1455 Market Street, 12<sup>th</sup> Floor  
Desk: 415-355-3706  
Reception: 415-355-3700

What you can do, or dream you can do, begin it; Boldness has genius, power and magic in it - W.H. Murray

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**From:** Gordon, Fania [<mailto:Fania.Gordon@ee.doe.gov>]  
**Sent:** Thursday, February 12, 2015 10:11 AM  
**To:** Broomhead, Cal (ENV)  
**Cc:** Holsing, RoseMarie; Cornish, Steven (CONTR); Bobo, Diana; Crooks, Angela (CONTR)  
**Subject:** RE: Solar Pathways Grant \$1,286,200 : Grant period?

Hi Cal,

The budget periods I have been given are as below. If you feel like these end dates need to be pushed a few months due to delays in negotiations, we should have that discussion.

Budget Period 1:	From: 12/15/2014	To: 12/31/2015
Budget Period 2:	From: 1/1/2016	To: 12/31/2016

Thank you,  
-Fania K. Gordon

Print Form

# Introduction Form

By a Member of the Board of Supervisors or the Mayor

Time stamp  
or meeting date \_\_\_\_\_

I hereby submit the following item for introduction (select only one):

- 1. For reference to Committee. (An Ordinance, Resolution, Motion, or Charter Amendment)
- 2. Request for next printed agenda Without Reference to Committee.
- 3. Request for hearing on a subject matter at Committee.
- 4. Request for letter beginning "Supervisor [ ] inquires"
- 5. City Attorney request.
- 6. Call File No. [ ] from Committee.
- 7. Budget Analyst request (attach written motion).
- 8. Substitute Legislation File No. [ ]
- 9. Reactivate File No. [ ]
- 10. Question(s) submitted for Mayoral Appearance before the BOS on [ ]

Please check the appropriate boxes. The proposed legislation should be forwarded to the following:

- Small Business Commission       Youth Commission       Ethics Commission
- Planning Commission       Building Inspection Commission

**Note: For the Imperative Agenda (a resolution not on the printed agenda), use a Imperative Form.**

**Sponsor(s):**

Supervisor Mark Farrell

**Subject:**

[Accept and Expend Grant – Energy Efficiency Program - \$1,286,200]

**The text is listed below or attached:**

See attached.

Signature of Sponsoring Supervisor: *Mark S. Farrell*

For Clerk's Use Only:

150272