City and County of San Francisco

Office of the Controller – City Services Auditor

SAN FRANCISCO PUBLIC UTILITIES COMMISSION:

Most GoSolarSF Incentives Were Paid Correctly, but the Environment Code and Some Program Controls Should Be Improved

January 18, 2017

OFFICE OF THE CONTROLLER
CITY SERVICES AUDITOR

The City Services Auditor Division (CSA) was created in the Office of the Controller through an amendment to the Charter of the City and County of San Francisco (City) that was approved by voters in November 2003. Charter Appendix F grants CSA broad authority to:

- Report on the level and effectiveness of San Francisco's public services and benchmark the City to other public agencies and jurisdictions.
- Conduct financial and performance audits of city departments, contractors, and functions to assess efficiency and effectiveness of processes and services.
- Operate a whistleblower hotline and website and investigate reports of waste, fraud, and abuse of city resources.
- Ensure the financial integrity and improve the overall performance and efficiency of city government.

CSA may conduct financial audits, attestation engagements, and performance audits. Financial audits address the financial integrity of both city departments and contractors and provide reasonable assurance about whether financial statements are presented fairly in all material aspects in conformity with generally accepted accounting principles. Attestation engagements examine, review, or perform procedures on a broad range of subjects such as internal controls; compliance with requirements of specified laws, regulations, rules, contracts, or grants; and the reliability of performance measures. Performance audits focus primarily on assessment of city services and processes, providing recommendations to improve department operations.

CSA conducts audits in accordance with the Government Auditing Standards published by the U.S. Government Accountability Office. These standards require:

- Independence of audit staff and the audit organization.
- Objectivity of the auditors performing the work.
- Competent staff, including continuing professional education.
- Quality control procedures to provide reasonable assurance of compliance with the auditing standards.

For questions regarding the report, please contact Director of City Audits Tonia Lediju at Tonia.Lediju@sfgov.org or 415-554-5393 or CSA at 415-554-7469.

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City and County of San Francisco

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San Francisco Public Utilities Commission:
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January 18, 2017

Why We Conducted the Audit

The eligibility audit evaluated the administration, monitoring, and application and renewal processes of the Solar Energy Incentive Program (GoSolarSF) of the San Francisco Public Utilities Commission (SFPUC). The audit was performed at the request of SFPUC.

What We Found

GoSolarSF provides one-time incentive payments to reduce project costs for solar system installation in the City and County of San Francisco (City). The program paid nearly $2 million in incentives to 599 residential, business, and nonprofit participants in fiscal year 2014-15. The program provides supplemental incentives to residential participants for being a low-income household and for those using a local installer.

The audit found that:

- The provision of the San Francisco Environment Code that exempts installers with three or fewer employees from the certification requirements is impractical. All four GoSolarSF installers contacted, including three exempt installers, reported having more than three employees.
- SFPUC needs more comprehensive procedures to verify the eligibility of GoSolarSF installers, who are allowed to self-certify as exempt. (Exempt installers need not comply with the requirement to employ graduates of the City's Workforce Development Program.)
- The Environment Code does not provide an equal opportunity to all low-income GoSolarSF applicants to receive a program incentive aimed at the lowest-income households. At least 24 such households missed out on at least $2,400 in incentives because the code prohibits receiving this incentive unless participants are enrolled in the Pacific Gas and Electric Company program that gives discounted utility rates to low-income households.
- SFPUC designates some areas of San Francisco as "environmental justice" zip codes and refers to GoSolarSF's expanded basic incentive as the Environmental Justice Incentive. This name is misleading because residing in an environmental justice zip code is only one of the three ways applicants can qualify for the incentive. The name may discourage eligible applicants from applying.
- SFPUC awarded $19,500 under the program's low-income incentive to applicants who were ineligible for it.
- Five SFPUC employees have inappropriate user access rights to PowerClerk, SFPUC's GoSolarSF application management system.

What We Recommend

The report includes 14 recommendations for SFPUC to improve the program's application and renewal process, requirements, guidelines, and overall monitoring. Specifically, SFPUC should work with the Board of Supervisors to:

- Review the intent of the exempt installer provision and consider revising the Environment Code.
- Ensure that all income-eligible participants can receive all low-income targeted incentives.

SFPUC should:

- Create procedures for verifying that exempt installers meet requirements.
- Communicate to stakeholders the three ways applicants can receive the Environmental Justice Incentive.
- Ensure that it uses current income and residency of all household members in determining eligibility for low-income incentives.
- Better control user access rights in PowerClerk.

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CITY AND COUNTY OF SAN FRANCISCO
OFFICE OF THE CONTROLLER

Ben Rosenfield
Controller

Todd Rydstrom
Deputy Controller

January 18, 2017

San Francisco Public Utilities Commission
525 Golden Gate Avenue
San Francisco, CA 94102

Mr. Harlan Kelly, Jr.
General Manager
San Francisco Public Utilities Commission
525 Golden Gate Avenue
San Francisco, CA 94102

Dear Commission President and Members, and Mr. Kelly:

The Office of the Controller's City Services Auditor Division (CSA) presents its eligibility audit report of the San Francisco Public Utilities Commission (SFPUC) GoSolarSF program. The audit, conducted at the request of the department, had as its objectives to determine whether internal controls effectively ensure that SFPUC administers operational processes properly and in compliance with relevant policies and procedures and to assess SFPUC's ability to screen applicants' eligibility to receive incentives.

The audit concluded that the San Francisco Environment Code provision that exempts installers with three or fewer employees from the program's certification requirements is impractical and SFPUC does not enforce it. Also, the Environment Code does not provide an equal opportunity to all low-income GoSolarSF applicants to receive a program incentive aimed at the lowest-income households. The audit also found that SFPUC awarded $19,500 under the program's low-income incentive to applicants who were ineligible for it. Further, at least 24 lowest-income participants missed out on $100 per household in program incentives in 2013 through 2016.

The report includes 2 recommendations for SFPUC to work with the Board of Supervisors to consider revising the Environment Code to ensure that all income-eligible participants can receive all low-income targeted incentives and that the exempt installer provision meets its intention. The report also includes 12 recommendations for SFPUC to improve controls over its eligibility screening. The SFPUC's response to the report is attached as Appendix B. CSA will work with SFPUC to follow up on the status of the recommendations made in this report.

CSA appreciates the assistance and cooperation of SFPUC staff during the audit. For questions about the report, please contact me at Tonia.Lediju@sfgov.org or 415-554-5393 or CSA at 415-554-7469.

Respectfully,

Tonia Lediju
Director of City Audits

cc: Board of Supervisors
Budget Analyst
Citizens Audit Review Board
City Attorney
Civil Grand Jury
Mayor
Public Library

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GLOSSARY OF TERMS

CARE	California Alternate Rates for Energy, a program Pacific Gas and Electric Company offers to low-income households for discounted utility rates
Controller	Office of the Controller
CSA	City Services Auditor Division of the Office of the Controller
City	City and County of San Francisco
Environment Code	The San Francisco Environment Code
GoSolarSF	Solar Energy Incentive Program
OEWD	The Office of Economic and Workforce Development
PG&E	Pacific Gas and Electric Company
SFPUC	The San Francisco Public Utilities Commission

INTRODUCTION

Audit Authority

The City Services Auditor (CSA) of the Office of the Controller (Controller) conducted this audit under the authority of the Charter of the City and County of San Francisco (City), Section 3.105 and Appendix F, which requires that CSA conduct periodic, comprehensive financial and performance audits of city departments, services, and activities.

Background

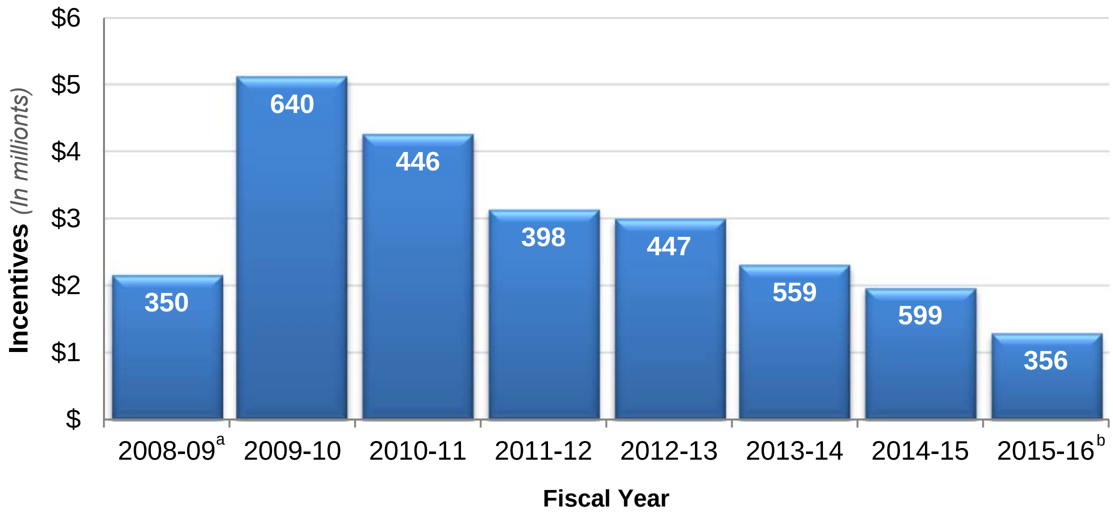
In 2008 the City, through its Public Utilities Commission (SFPUC), implemented a Solar Energy Incentive Program (GoSolarSF), which provides one-time financial incentives to residents, businesses, and nonprofit organizations for installing solar power systems.

GoSolarSF has provided residents, businesses, and nonprofit organizations $23 million in solar incentives since its inception in fiscal year 2008-09.

In fiscal year 2014-15 GoSolarSF provided nearly $2 million in incentives to 599 San Francisco residents, nonprofit organizations, and businesses. Participation in GoSolarSF has decreased slightly since its high in fiscal year 2009-10, but it has had an average of 514 participants per fiscal year. According to SFPUC, this is partly due to the decreasing incentive amounts offered due to the lower cost of solar panels, the total value of incentives provided decreased from more than $5 million in fiscal year 2009-10 to less than $2 million in 2014-15.

Exhibit 1 shows, by fiscal year, the number of participants and value of incentives GoSolarSF provided from October 2008 through April 11, 2016.

EXHIBIT 1 GoSolarSF Provided $23 Million in Incentives to 3,795 Participants Through April 11, 2016



Notes: GoSolarSF states that it reduced incentive amounts to reflect decreasing costs of solar panels.
[a] Fiscal Year 2008-09 is a partial year. Incentive payments began in October 2008.
[b] Fiscal Year 2015-16 data is through April 11, 2016.

Source: CSA analysis of SFPUC data

The San Francisco Environment Code created and governs the GoSolarSF program.

The San Francisco Environment Code (Environment Code), Chapter 18, created and governs GoSolarSF, charging SFPUC with administering the incentives. SFPUC administers the program by establishing eligibility criteria, screening applications, and paying incentives on the basis of the code.

Incentive amounts depend on the amount of power the installed systems should produce.

GoSolarSF bases incentives for businesses and nonprofit organizations entirely on the amount of power the installed solar systems should produce. However, the program offers incentive amounts to residential applicants that depend on:

- The size of the solar panel(s).
- The location of the residence.
- The applicant's household income.
- Whether the installer is a locally-based business.
- Whether the applicant participates in the CalHome loan program.[1]
- Whether the applicant participates in the California

[1] The CalHome program provides grants to local governments to assist in housing development. As part of this program local governments can offer deferred payment loans to individuals.

Alternate Rates for Energy program (CARE)[2] of Pacific Gas and Electric Company (PG&E).

Applicants can qualify for the basic or expanded basic incentive.

To determine the incentives a residential applicant qualifies for, SFPUC first establishes which base incentive applies:

- Basic – Base incentive available to residents installing solar systems on their property in San Francisco.
- Expanded Basic[3] – An increased base incentive amount for applicants installing systems in SFPUC-designated environmental justice zip codes,[4] enrolled in the CalHome loan program, or participating in PG&E's CARE discount rate program.

Additional incentives for residential applicants can be stacked.

After assigning applicants a base incentive, SFPUC determines their eligibility for one or both of two additional incentives, which can be combined or "stacked" with the other incentive(s):

- City Installer Supplemental Incentive (installer incentive) – An incentive to have a San Francisco-based business install systems.
- Low-Income Supplemental Incentive (low-income incentive) - An incentive to further subsidize installation for households below the City's median income.

Exhibit 2 summarizes the incentives available through GoSolarSF. As the exhibit shows, the low-income supplemental incentive is the largest available to residents. However, only 16 percent of fiscal year 2014-15 residential applicants qualified as low-income.

See Appendix A for more details on incentive amounts.

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[2] CARE offers low-income households discounted utility rates.

[3] SFPUC refers to the expanded basic incentive as the Environmental Justice Incentive. However, residing in an environmental justice zip code is only one of three ways applicants can qualify for the expanded basic incentive, so the name is not precisely descriptive (see Finding 1.3). Throughout this report, CSA refers to this incentive as expanded basic.

[4] SFPUC currently designates 94107 and 94124 as environmental justice zones because, according to SFPUC, they bear a disproportionate share of negative environmental consequences resulting from SFPUC's operations, programs, and/or policies.

EXHIBIT 2 **GoSolarSF Applicants Can Qualify for $2,850 to $50,000 Toward the Cost of Installing Solar Power Systems**

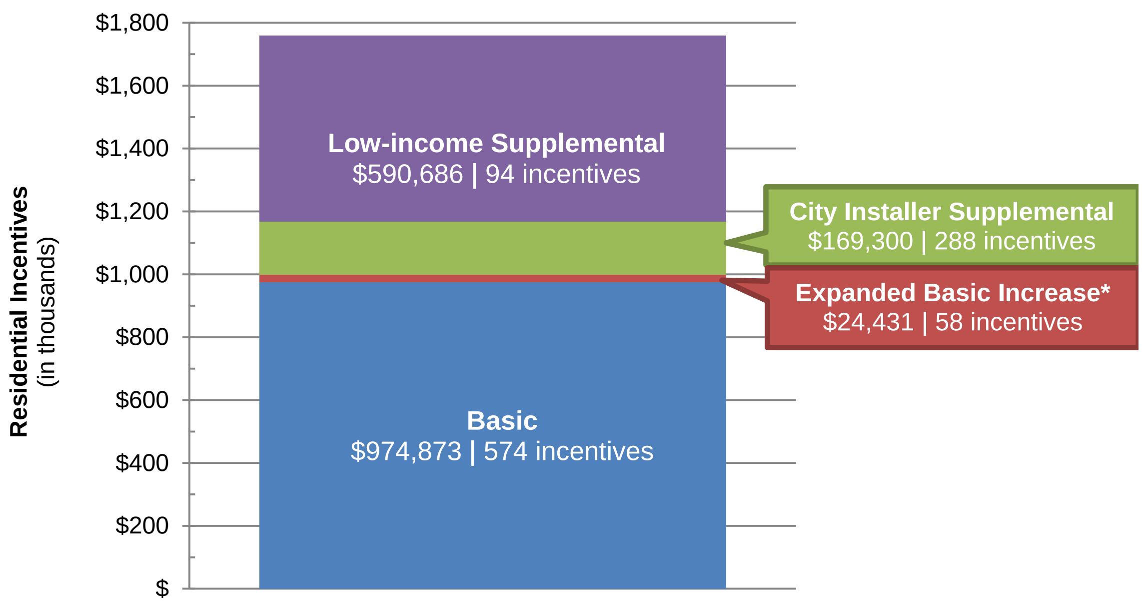
Residential Applicants			
Output of installed systems* (kW = kilowatt)	1-1.24 kW (smallest)	3-3.49 kW (Fiscal year 2014-15 average)	3.5 kW+ (largest)
Basic	$500	$2,000	$2,000
Expanded Basic Increase	100	500	800
City Installer Supplemental	250	650	700
Low-Income Supplemental	2,000	7,000	7,000
Total possible incentive	**$2,850**	**$10,150**	**$10,500**
Nonresidential Applicants			
Nonprofit	$1,000/kW up to $50,000 per service site		
Business	$500/kW up to $50,000 per service site		

Note: * Incentive levels are set for each 0.25 kW range, from the smallest at 1-1.24 kW through 3.5 kW and larger. Applicants must install systems expected to produce at least 1 kW of power to qualify.

Source: 2014-15 GoSolarSF handbook.

Exhibit 3 shows the breakdown of residential incentives for fiscal year 2014-15.

EXHIBIT 3 **GoSolarSF Provided $1,759,290 in Incentives to 574 Residential Applicants in Fiscal Year 2014-15**



Note: * CSA refers to the base incentive SFPUC calls Environmental Justice as Expanded Basic because it includes an increased amount not just for installing solar panels in an environmental justice zip code, but for participation in a CalHome loan program or PG&E's CARE program.

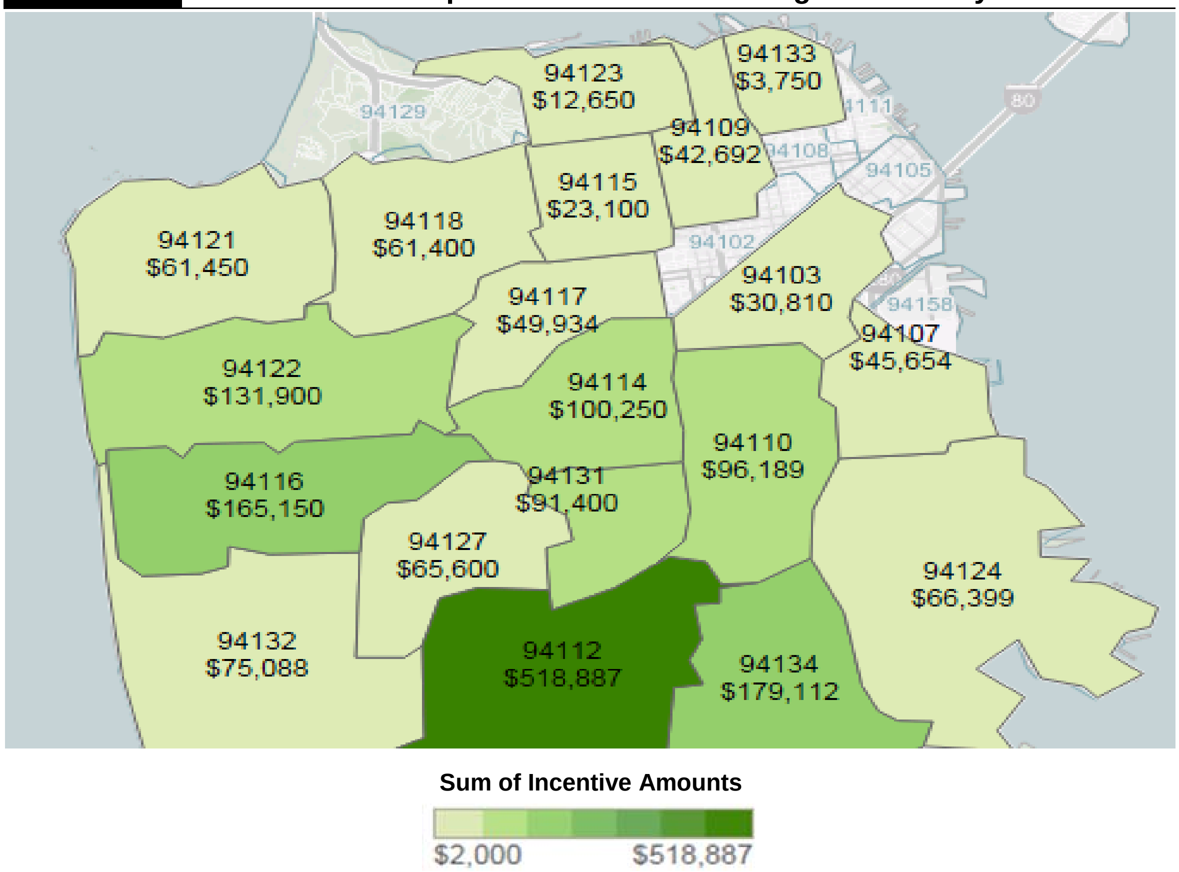
Source: Auditor analysis of SFPUC incentive payment data and applicable incentive rates.

GoSolarSF provided incentives throughout the City in 2014-15

GoSolarSF paid incentives for installing systems on properties in nearly every zip code in the City in fiscal year 2014-15. However, applicants in zip code 94112, which covers mainly the Balboa Park, Crocker-Amazon, Oceanview, Ingleside, Outer Mission, and Excelsior neighborhoods, made up 18 percent of applicants and 26 percent of the incentive dollars paid in fiscal year 2014-15. The zip code's larger share of the incentives' value is because it includes nearly half of the low-income applicants.

Exhibit 4 shows GoSolarSF's fiscal year 2014-15 incentives by zip code.

EXHIBIT 4 GoSolarSF Participants Are Located Throughout the City



Source: CSA analysis of Fiscal Year 2014-15 incentive data from SFPUC.

Obtaining a GoSolarSF incentive is a two-step process.

The GoSolarSF application process has two phases: first reserving and then claiming the incentive. Once an applicant has obtained an energy audit and signed an agreement with a qualified installer, the applicant must reserve an incentive by completeing the application process. After the new solar system is connected to the local grid, the applicant then claims the reserved incentive by submitting the Incentive Claim Form to SFPUC. According to SFPUC, in most instances the installer completes and submits the incentive application process on behalf of the applicant.

To reserve an incentive, applicants apply through SFPUC's online system, PowerClerk. To complete the process, the applicant must upload the required signatures (those of the applicant and installer), which indicate that the parties agree to the terms and conditions and confirm the accuracy of the information provided. Also, low-income residential applicants may need to provide the:

- Household's most recent PG&E bill for the address.
- Two most recent paystubs for each household member age 18 or older or a statement that this person(s) is unemployed.
- Most recent federal income tax return for each household member age 18 or older.

To qualify for the low-income incentive, the applicant's household income cannot exceed a limit, which is based on household size.[5]

Installers are either certified or exempt.

To receive the GoSolarSF incentive, property owners are required to use a contractor that is certified for the GoSolarSF program or qualify as exempt. Installers are either:

- Certified – Must employ graduates of the City's Workforce Development Program.
- Exempt – Must be headquartered in San Francisco and have three or fewer employees or be a nonprofit organization.

GoSolarSF collaborates with the Office of Economic and Workforce Development (OEWD) on the workforce development aspect of the GoSolarSF program. OEWD

[5] The maximum is $54,350 for a household size of one up to $102,500 for a household size of eight. See Appendix A for the full income guidelines.

administers the workforce development program, including implementing the First Source Hiring law, which connects jobseekers with employment opportunities in growing industries by providing industry-aligned job training and access to job search assistance at community-based neighborhood access points throughout the City.

Objectives

The primary objectives of the audit were to:

- Determine whether internal controls effectively ensure that SFPUC administers operational processes properly and in compliance with relevant policies and procedures.
- Assess SFPUC's ability to screen applicants' eligibility to receive incentives.

Scope and Methodology

The audit focused on the eligibility screening process of the GoSolarSF program and testing of fiscal year 2014-15 records of installers and participants.

To conduct the assessment, CSA:

- Reviewed GoSolarSF policies and procedures, the San Francisco Environment Code's Chapter 18, and key system-generated reports.
- Interviewed SFPUC staff to understand GoSolarSF's application and renewal processes.
- Observed GoSolarSF's application approval process in PowerClerk.
- Selected and tested a sample of 46 GoSolarSF incentive application files to verify eligibility for each incentive awarded. The sample was chosen as follows:
    - 32 applications selected randomly.
    - 8 applications for participants that received a low-income incentive whose addresses matched the address of a city employee.
    - 5 applications that received the environmental justice (base) incentive although the addresses are not in an SFPUC-designated environmental justice zip code.
    - 1 application from a nonprofit organization.
- Contacted seven (five exempt, two certified) GoSolarSF installers regarding their number of employees to determine the average number of

employees reasonably required to operate as an exempt installer. CSA received responses from three exempt installers and one certified installer.

- Recalculated incentive amounts to assess accuracy of incentive calculations.
- Assessed the reliability of PowerClerk applicant data.
- Evaluated access controls over the PowerClerk system.

Statement of Auditing Standards

This performance audit was conducted in accordance with generally accepted government auditing standards. These standards require planning and performing the audit to obtain sufficient, appropriate evidence to provide a reasonable basis for the findings and conclusions based on the audit objectives. CSA believes that the evidence obtained provides a reasonable basis for the findings and conclusions based on the audit objectives.

CHAPTER 1 – The City Should Revise the Exempt Installer and CARE Incentive Provisions of the Environment Code Governing Solar Incentives

Summary

Ambiguity and certain restrictions in the San Francisco's Environment Code hinder the goals of the GoSolarSF program. The program seeks to add jobs by requiring applicants to use solar system installers that are certified as employing workforce development employees. Installers can be exempted from this requirement if they are very small, local businesses. However, the code defines a small business for this purpose at what appears to be an impractical low threshold: three or fewer employees. Three exempt and one certified installer surveyed reported having more than three employees. The three employee restriction does not appear to reflect the minimum number of staff required for an installation business and may prohibit small, local installers from qualifying as exempt.

Also, the code's installer exemption requirements are very difficult for SFPUC to verify. Although the code provision could be improved, SFPUC could do more to decrease the risk that ineligible installers receive exempt status.

The code allows for an increased incentive amount, beyond the supplemental low-income incentive, to households with the lowest incomes. However, the code impedes the purpose of the incentive by restricting this assistance to applicants that participate in PG&E's CARE program rather than offering them to all households that meet the PG&E CARE income requirement, but that may not be enrolled in the program.

The SFPUC should work with the San Francisco Board of Supervisors to revise the Environment Code Chapter 18 to ensure that GoSolarSF can efficiently and effectively achieve job creation goals and the offering of income-based incentives to those eligible.

Finding 1.1 **The Environment Code's exempt installer provision lacks clarity making it difficult for small, local businesses to qualify for the incentive and difficult for SFPUC to enforce.**

Some GoSolarSF installers that certify themselves as exempt installers may not qualify.

The Environment Code's exempt installer provision, which allows businesses to qualify to install solar systems for GoSolarSF participants based on the installer's small size and place of business, is nearly impossible for SFPUC to enforce because the Environment Code does not clearly define *employee*. As a result, a business may (either purposely or inadvertently) falsely certify that it meets the criteria for SFPUC to consider it a small local business, which would allow an ineligible business to obtain the exemption unfairly.

According to GoSolarSF guidelines, installations receiving GoSolarSF incentives must be completed by installers that are "workforce development certified" or installers that are exempt from the workforce development program. The Environment Code, Section 18.2, outlines the exemption, stating that the workforce development requirements do not apply to an installer that either is a nonprofit installer of solar generation systems or employs three employees or less, is a state-licensed contractor, and has its principal office(s) in San Francisco.

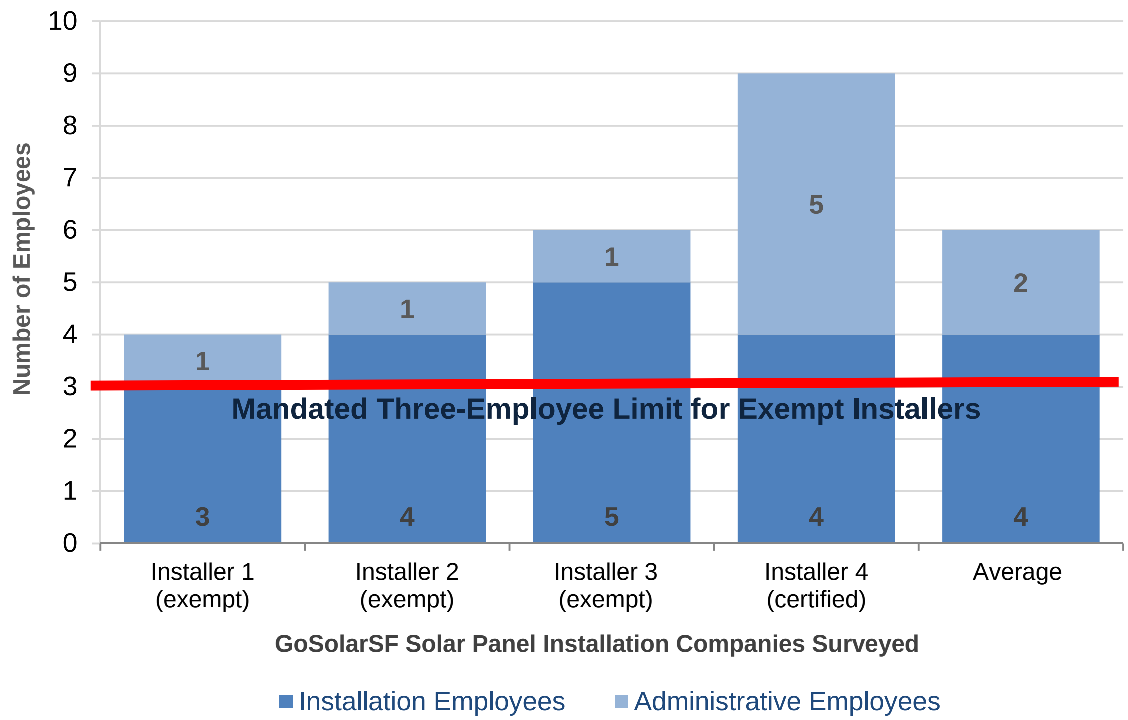
The GoSolarSF handbook does not define employee*.*

Neither the Environment Code provision nor the GoSolarSF handbook defines who should be considered an employee for the purpose of the installer exemption. SFPUC considers an employee to be any wage earner hired by a company.[6] This definition includes part-time employees and day laborers. However, SFPUC has not clearly communicated this definition to installers self-certifying as exempt. Not specifying who is considered an employee results in ambiguity and reduces the likelihood that all installers will have the same understanding of who qualifies as an employee.

[6] SFPUC attributed this definition to the California Labor Code, Section 3357, which states that, "any person rendering service for another, other than as an independent contractor, or unless expressly excluded herein, is presumed to be an employee."

Further, the section of the exempt installer provision that requires installers to have no more than three employees appears to be impractical. CSA contacted seven GoSolarSF installers to determine whether it was reasonable to expect an organization with three or fewer employees to function effectively as a solar system installer. Of the seven installers contacted, four responded. CSA asked each installer to state the number of employees it typically uses to install systems on the average-sized house in San Francisco and how many, if any, administrative employees (who do not do installations) they have. Exhibit 5 summarizes the results of CSA's inquiry.

EXHIBIT 5 No GoSolarSF Installers Contacted Have Three or Fewer Employees



Source: Interviews with business that installed solar systems for applicants that received GoSolarSF incentives in fiscal year 2014-15.

GoSolarSF exempt installers stated that they have four or more employees.

Installers contacted stated that they used an average of four employees to install solar systems on the average-sized, San Francisco home and all stated that they employed at least one administrative employee who was not involved with installations. As shown in Exhibit 5, each of the three exempt installers reported having four, five, or six employees. The benchmarking results indicate that the requirement for three or fewer employees may be impractical because no organization sampled, including those that self-certified as exempt, stated that they employ three or fewer employees.

CSA interprets the installer exemption provision of the Environment Code, Section 18.2, to be aimed at helping small, local businesses. However, the code may be inadvertently hurting small, local businesses with unreasonably restrictive requirements to certify as exempt. Further, SFPUC cannot easily verify or disprove the number of employee an installer has.

Recommendation

1. The San Francisco Public Utilities Commission should work with the Board of Supervisors to review the intent of the exempt installer provision in the San Francisco Environment Code, Chapter 18, and consider revising it—especially the requirement that exempt installers may have no more than three employees—to ensure that it meets the Board's intent and is reasonably enforceable.

Finding 1.2

SFPUC lacks an adequate process to verify that self-certified installers qualify as exempt.

As mentioned in Finding 1.1, the exempt installer requirements in the Environment Code may not be reasonable and are difficult to enforce. However, according to SFPUC, it has no process—and does not attempt—to verify the eligibility of installers who it allows to self-certify as exempt. As a result, it is highly likely that SFPUC does not detect installers that incorrectly self-certify as exempt.

Exempt installers account for 20 percent of incentives paid.

A sample of five exempt installers performed 11 percent of the GoSolarSF installations in fiscal year 2014-15, which accounted for $393,606, or 20 percent of the almost $2 million of incentives participants received that year.

Because exempt installers have been responsible for a significant portion of the incentives GoSolarSF participants received, SFPUC should monitor their exempt status. According to SFPUC, it has no way to verify that companies comply with the exempt installer provision and relies on them to self-certify that they meet the criteria for exemption.

SFPUC's lack of verification and decision not to require or maintain documentation greatly increases the risk that unqualified installers can self-certify as exempt. When participants use exempt installers that should not be exempt, it costs the City money because each installation by an exempt installer qualifies the participant to receive an additional $250-700 in incentives from the program.

Recommendation

2. The San Francisco Public Utilities Commission should create a control to verify that exempt installers meet requirements. For example, SFPUC could require installers to submit their most recent California Quarterly State Filing Report (DE-6), which lists the installer's employees.

Finding 1.3

The Environment Code reserves incentives designed for households with the lowest incomes for PG&E CARE customers rather than offering them to all households meeting the lower-income requirements.

24 lowest-income households did receive $2,400 in incentives due the Environment Code's unfair requirements.

The Environment Code does not provide an equal opportunity to all low-income GoSolarSF applicants to receive the program's expanded basic incentive for the lowest-income households. Per the code, this incentive, which ranges from $100-800, is only available to low-income applicants that participate in PG&E's CARE program. As a result, at least 24 of GoSolarSF's lowest-income participants missed out on at least $100 per household in incentives from 2013 to 2016.

As discussed in the Introduction, GoSolarSF assigns each residential applicant one of two base incentives: basic or expanded basic.[7] There are three ways to qualify for the expanded basic incentive, one of which is participation in PG&E's discounted utility rate program

[7] SFPUC refers to the expanded basic incentive as the Environmental Justice incentive. However, because residing in an environmental justice zip code is only one of three ways applicants can qualify, CSA refers to this incentive as *expanded basic*.

for low-income households, also known as CARE. The income requirements for CARE are more stringent than those for GoSolarSF, so the applicants who participate in CARE are those with the lowest incomes, as shown in Exhibit 6.

EXHIBIT 6 **PG&E CARE Gross Income Limits Were Significantly Less Than GoSolarSF's Limits in 2015[a]**

Household Size	GoSolarSF	PG&E CARE[b]	Difference
1	$54,350	$31,460	$22,890
2	62,150	31,460	30,690
3	69,900	39,580	30,320
4	77,700	47,700	30,000
5	83,900	55,820	28,080
6	90,100	63,940	26,160
7	96,300	72,060	24,240
8	102,500	80,180	22,320

Note:
[a] Income limits are as of January 2015.
[b] PG&E CARE thresholds increase by $8,120 for every household member after eight, while GoSolarSF thresholds do not.

Source: SFPUC's GoSolarSF Program Handbook and PG&E CARE website.

The Environment Code restricts the incentive for lowest-income households to PG&E customers enrolled in CARE.

However, some low-income households may be unaware of or choose not to participate in CARE, which makes them ineligible for this expanded basic GoSolarSF incentive. Program participants who report qualifying income levels would benefit from GoSolarSF program staff informing them of their potential eligibility for CARE. However, some participants may still choose not to apply for PG&E's program.

From September 2013 to December 2015, 34 low-income GoSolarSF participants whose incomes met the requirements for CARE were not CARE participants, so did not receive the additional amount for GoSolarSF's expanded basic incentive. The additional amount from the expanded basic ranges from $100 to $800, which could be the equivalent of more than a week's income for some of these households. By not basing eligibility for the expanded basic incentive on income level rather than PG&E CARE participation, the Environment Code provides preferential treatment to PG&E CARE customers and does not provide all lower income households with an equal opportunity to receive the incentive.

The GoSolarSF low-income eligibility screening log shows that SFPUC already documents GoSolarSF applicants' incomes and applicable PG&E CARE limits. Consequently, it would be easy for GoSolarSF to shift from CARE participation to adherence to CARE's lower income limits as the basis for qualifying for the expanded basic incentive. However, SFPUC cannot make that shift without an amendment to the Environment Code.

Applicants may not know whether they would qualify for the expanded basic incentive.

SFPUC should better communicate the requirements for the expanded basic incentive, which it calls the "Environmental Justice Incentive." However, that name is misleading because, according to SFPUC, applicants can qualify in three ways for the expanded basic incentive. They may either:

- Have a solar system installed at an address in one of SFPUC's two designated environmental justice zip codes.
- Be a PG&E CARE program participant.
- Be a participant in a CalHome loan program.

SFPUC's Environmental Justice Policy intends to help areas that may bear a disproportionate share of negative environmental consequences resulting from the department's operations. CalHome and PG&E CARE target low-income households. The goals of the programs differ, so grouping them under the name "Environmental Justice" is misleading. In fiscal year 2014-15 GoSolarSF provided 58 participants the expanded basic incentive based on:

- 38 (66 percent) – residing in an environmental justice zip code.
- 20 (34 percent) – being enrolled in PG&E CARE.
- 0 – participating in CalHome program.

Besides the name of the incentive being misleading, eligibility through PG&E CARE participation was, according to SFPUC, inadvertently omitted from the

2014-15 GoSolarSF handbook.[8]

Recommendations

The San Francisco Public Utilities Commission should:

3. Work with the Board of Supervisors to revise the Environment Code, Chapter 18, to ensure that low-income incentives are available based on applicants' income and does not require participation in Pacific Gas and Electric Company's California Alternate Rates for Energy program.

4. Communicate to stakeholders, including prospective applicants, the three incentives, and their eligibility requirements, which are available under the Environmental Justice Incentive.

5. Ensure that its handbook includes all eligibility requirements.

6. Implement formal procedures to inform all GoSolarSF applicants with qualifying income levels that they may be eligible for discounts under Pacific Gas and Electric Company's California Alternate Rates for Energy program.

[8] The requirement for PG&E CARE participation to qualify for the incentive was stated in prior handbooks.

CHAPTER 2 – SFPUC Needs to Improve GoSolarSF Policies and Procedures So Incentives Are Not Inappropriately Awarded

Summary

GoSolarSF policies and procedures are intended to ensure that applicants qualify for specific incentives and that SFPUC properly screen applications. However, weaknesses in the program's procedures allow some applicants to receive incentives for which they do not qualify. Also, five employees have greater-than-needed access to the GoSolarSF application processing system, which increases the risk of error and abuse.

Finding 2.1

SFPUC inappropriately awarded $19,500 in low-income incentives to applicants that did not meet the program's low-income requirements.

Three participants incorrectly received low-income incentives.

Of a sample of 19 low-income applicants, which received a total of $135,208 in incentives, SFPUC incorrectly gave 3 (16 percent) low-income incentives totaling $19,500.

Although GoSolarSF does some verification of applicants' incomes, it does not have adequate controls to ensure that applicants truly qualify as low-income.

According to GoSolarSF staff, each household member of an applicant applying for the low-income incentive must submit two paystubs and the prior year's federal income tax return, including all schedules and W2s, for income verification purposes or self-certify that they have no income. SFPUC reviews the provided paystubs, calculates an annual income, and compares it and the stated number of persons in the household to the GoSolarSF limits. However, SFPUC has no verification process for those claiming to have no income.

Because SFPUC does not verify the information they report, applicants can easily falsify total household income or the number of household members to meet the income guidelines and qualify for the incentive. Verifying customer information and requiring that all household members must either provide proof of income or be listed as a dependent on another household member's tax return will reduce the opportunity for customers to overstate the number of household members or understate their total household income to qualify for the program.

Leveraging access to city employee data, CSA identified one low-income applicant with household members earning more than the GoSolarSF limits.

Using city employee payment records, the audit identified one applicant that incorrectly received low-income incentives totaling $7,000. CSA confirmed that one low-income applicant, with a reported two-person household, incorrectly reported that they had no household income. Review of city employment payment records showed that two employees were associated with the address at the time of the application and had a combined annual income of about $129,000, which is nearly $67,000 more than the GoSolarSF income limit for the corresponding household size.

In one instance, SFPUC accepted unclear paystub support and had to rely on past income.

In another instance, SFPUC stated that it incorrectly estimated the participant's income based on the applicant's previous year's wages rather than on their current pay stubs. As a result, the applicant incorrectly qualified for and received a low-income incentive of $6,000. According SPFUC, it estimated the applicant's income based on prior year tax documents because the current pay stubs provided were blurred. Although the paystubs are difficult to read, CSA was able to estimate the applicant's income based on the legible portion. Recalculation of the applicant's paystubs found that the applicant's salary exceeded the low-income threshold by nearly $3,000 for the reported household size.

One application included two household members who reported no income, but own another home and indicated employment on their LinkedIn profile.

According to SFPUC, it does not require household members who are not claimed on the applicant's tax returns to provide proof of residency. As a result, one applicant incorrectly received $6,500 in low-income incentives although two people listed as household members with no income owned a different house in the area valued at more than $900,000. Also, the LinkedIn profile of one household member listed as having no income indicated he was employed. Excluding this person from the household size would cause the applicant to no longer qualify for the low-income incentive.

SFPUC should improve its internal controls over GoSolarSF's application process to ensure that applicants receive only incentives for which they are eligible. According to the United States Government

Accountability Office's *Standards for Internal Control in the Federal Government*, internal control serves as the first line of defense in safeguarding assets. It helps managers achieve desired results through effective stewardship of public resources.

Recommendations

The San Francisco Public Utilities Commission should:

7. Ensure that all documents applicants submit are legible before approving applications.

8. Ensure that it uses current income information to recalculate applicant income.

9. Require proof of residency for all adult household members on applications for low-income incentives.

10. Implement procedures to verify or disprove reported lack of income for household members who do not report income. Verification could be achieved by documentation that the household member is listed as a dependent on another person's tax return. Assertions of no income could be disproved by using technologies to look for household members' current employment.

11. Refer the instance the audit identified where the home address in two city employees' payroll records matched the address of a low-income incentive recipient to the Department of Human Resources for further investigation into potential misconduct by the city employees.

Finding 2.2

Five SFPUC employees have inappropriate user access rights to PowerClerk.

Five SFPUC employees have an inappropriately high level of access to PowerClerk.

All 12 SFPUC employees who have access to PowerClerk, SFPUC's application processing system, have full administrator access. According to SFPUC's PowerClerk administrator, this allows all employees with access to approve incentive applications and edit applicant-provided data. However, only 7 of these employees should have this level of access.

According to SFPUC's PowerClerk administrator, the system has three levels of access rights:

- Demo – Read-only access that scrambles applicant data and is used for training purposes.
- Manager – Read-only access that allows a high-level review of the application page, but does not allow users to open applicant submittals or revise applicant data.
- Administrator – Full access that enables users to edit participant data and approve applications.

Thus, each employee with access to PowerClerk can both approve incentive payments and modify participant data. Of the 12 employees with administrator access, 5 (42 percent) were found to have job responsibilities that did not require them to have payment approval authority. Not ensuring that only necessary staff has payment approval rights increases the risk that approvals are made by employees who should not have payment approval authority.

Further, of the 12 SFPUC employees with access to PowerClerk, 5 (42 percent) were found to be inactive users, meaning they had not logged on to PowerClerk in more than 90 days. In fact, the inactive users had not logged into the system for an average of 408 days, possibly indicating that these employees may no longer need access to PowerClerk. SFPUC should review each of these employees' job responsibilities and determine if they should have their access removed.

SFPUC's PowerClerk administrator stated that SFPUC can modify employee access by contacting PowerClerk via e-mail, but that it would be unlikely PowerClerk would create a revised access profile because SFPUC plans to move toward a new version of PowerClerk.

According to the Information Systems Audit and Control Association *IT Standards, Guidelines, and Tools and Techniques for Audit and Assurance and Control Professionals,* access to critical accounts, log files, data files and databases should be monitored. Also, controls over user activities include inactive user monitoring. Corrective action should be taken depending on the period; this includes the blocking of 60-day inactive users and the deletion of 90-day inactive users. Not ensuring that inactive PowerClerk users have their access removed increases the likelihood that participant data will be inappropriately altered or applicants inappropriately approved.

Recommendations

The San Francisco Public Utilities Commission should:

12. Work with the PowerClerk administrator to modify user access rights in the system so that only the employees who need approval and edit access get it.

13. Create procedures for monitoring and removing PowerClerk access from inactive users within three months of their becoming inactive.

14. Remove access to PowerClerk for inactive users who do not require access to the system within 60 days of their becoming inactive.

APPENDIX A: GOSOLARSF INCENTIVE DETAILS

INCENTIVE CATEGORIES:

Residential Incentives Select one base incentive and then add on supplemental incentives if applicable.	
Base Incentives — select one	
Basic	Available to any resident installing solar generation on his/her own property located within San Francisco.
Environmental Justice	Available to residential installations located in San Francisco's environmental justice zip codes, 94107 and 94124. Also available to San Francisco property owners enrolled in the CalHome loan program under the California Department of Housing and Community Development.
City Installer Supplemental Incentive If applicable, this incentive is added to one of the base incentives above.	
City Installer	Available to San Francisco residents who contract with an installer holding a current San Francisco business registration certificate showing a San Francisco address as the principal place of business. To establish a principal place of business in San Francisco, as distinct from an office, a business must demonstrate that: (1) the majority of its principals are based in the San Francisco office, and (2) **either** (a) it pays San Francisco payroll taxes on at least 51% of its total payroll or, (b) (i) has a Certificate of Eligibility that makes it an exempt Clean Energy Technology business (SF Business and Tax Regulation Code section 906.2), and (ii) it would pay San Francisco payroll taxes on at least 51% of its total payroll absent operation of the Clean Energy Technology tax exemption.
Low-Income Supplemental Incentive If applicable, a low-income incentive is added to one of the base incentives above.	
Low-Income SASH (Single-Family Affordable Solar Homes Program)	Available to SASH applicants. The SASH program is a low-income program of the State's California Solar Initiative, administered by GRID Alternatives. GRID is the only organization that may install SASH projects. Applicants may be eligible for a free system or a highly subsidized system. Households that qualify for the SASH program **must apply for the Low-Income SASH Incentive and may not apply for the GoSolarSF Low-Income Non-SASH incentive**. To qualify, the household must be below median income and the home must be located in the San Francisco Enterprise Zone or in a Neighborhood Revitalization Area, including Bayview Hunters Point, Visitacion Valley, South of Market or the Mission. For more information, visit ***gridalternatives.org*** or call **510-731-1334**.
Low-Income Non-SASH	Available to applicants who do not qualify for SASH and who are PG&E CARE ratepayers, CalHome loan participants or City residents who are certified by the SFPUC as earning at or below the City's median income.
Business Incentive	Available to for-profit and nonprofit entities operating in San Francisco. Nonprofits may apply for a higher incentive through the nonprofit program below.
Nonprofit Incentive	Available for installations on non-residential buildings owned by nonprofits or government entities, and operated by nonprofits.
Nonprofit Residential Incentive	Available for installations on multi-unit residential buildings owned and operated by nonprofit organizations. For-profit building owners are eligible if 75% of the units are designated as affordable housing for a period of no less than 30 years.
Multi-Unit Residential Virtual Net Metering	Available for multi-unit residential buildings using virtual net metering.

APPENDIX B: DEPARTMENT RESPONSE

San Francisco
Water Power Sewer
Services of the San Francisco Public Utilities Commission

Assurance and Internal Controls Bureau
525 Golden Gate Avenue, 13th Floor
San Francisco, CA 94102
T 415.554.3155
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December 16, 2016

Tonia Lediju, Director of City Audits
Office of the Controller, City Services Auditor Division
City Hall, Room 476
One Dr. Carlton B. Goodlett Place
San Francisco, CA 94102

Subject: Management's Response to CSA Audit Report
San Francisco Public Utilities Commission: Most GoSolarSF Incentives Were Paid Correctly, but the Environment Code and Some Program Controls Should Be Improved

Dear Ms. Lediju,

Thank you for the opportunity to review and provide responses to your assessment of eligibility and incentives related to the SFPUC's solar incentives program, GoSolarSF.

Of fourteen recommendations attributed to our department, we concurred with twelve. Two recommendations no longer apply to the GoSolarSF program, as administrative changes enacted in April 2016 require contractors to report to the City's First Source Hiring Program, overseen by the Office of Economic and Workforce Development.

We appreciate the time and effort your staff dedicated to this audit – specifically additional focus related to the San Francisco Environmental Code and eligibility for the Environmental Justice Incentive. The report will help the SFPUC continue improvements in program design and administration.

If you have any questions or need additional information, please do not hesitate to contact me at (415) 554-1600.

Sincerely,

Harlan L. Kelly, Jr.
General Manager

cc: Michael Carlin, Deputy General Manager
Eric L. Sandler, AGM Business Services & Chief Financial Officer
Barbara Hale, AGM Power Enterprise
Nancy L. Hom, Director, Assurance & Internal Controls

For each recommendation, the responsible agency should indicate whether it concurs, does not concur, or partially concurs. If it concurs with the recommendation, it should indicate the expected implementation date and implementation plan. If the responsible agency does not concur or partially concurs, it should provide an explanation and an alternate plan of action to address the identified issue.

RECOMMENDATIONS AND RESPONSES

Recommendation	Response
The San Francisco Public Utilities Commission should:	
1. Work with the Board of Supervisors to review the intent of the exempt installer provision in the San Francisco Environment Code, Chapter 18, and consider revising it—especially the requirement that exempt installers may have no more than three employees—to ensure that it meets the Board's intent and is reasonably enforceable.	☐ Concur ☑ Do Not Concur ☐ Partially Concur The designation of "exempt installer" is no longer applicable to the GoSolarSF (GSSF) program: Since April 2016, all GoSolarSF Certified Contractors must now work with the City's First Source Hiring Program, which is overseen by the Office of Economic and Workforce Development. This program requires that contractors work in good faith with OEWD to employ San Francisco residents in 50% of all new hiring opportunities in order to be considered a GSSF Certified Contractor. The First Source Hiring Program requires all contractors to provide CityBuild with a list of Core Employees and notify CityBuild of all new hiring opportunities.
2. Create a control to verify that exempt installers meet requirements. For example, SFPUC could require installers to submit their most recent California Quarterly State Filing Report (DE-6), which lists the installer's employees.	☐ Concur ☑ Do Not Concur ☐ Partially Concur No longer relevant. See #1 response.

Recommendation	Response
3. Work with the Board of Supervisors to revise the Environment Code, Chapter 18, to ensure that low-income incentives are available based on applicants' income and does not require participation in Pacific Gas and Electric Company's California Alternate Rates for Energy program.	☑ Concur ☐ Do Not Concur ☐ Partially Concur SFPUC will work with BOS to determine if the SF Admin Code 18.4 (iii) and (iv) should be revised since GSSF no longer bases an applicant's low-income eligibility on participation in the PG&E Care program. Low-income eligibility for GSSF is based solely on income.
4. Communicate to stakeholders, including prospective applicants, the three incentives, and their eligibility requirements, which are available under the Environmental Justice Incentive.	☑ Concur ☐ Do Not Concur ☐ Partially Concur Since PG&E CARE/CalHome Loan programs focus more on an economic rather than an environmental impact, SFPUC will determine if the "Environmental Justice Incentive" for the GSSF program should be renamed. During the interim, GSSF staff and program literature will clarify the differences in the incentives, i.e. that applicants do not have to live in an EJ zip code to qualify for low-income incentives (and conversely, that living in an EJ zip code does not automatically qualify an applicant for a low-income incentive).
5. Ensure that its handbook includes all eligibility requirements.	☑ Concur ☐ Do Not Concur ☐ Partially Concur GSSF staff is in the process of updating the GSSF Handbook to ensure all current eligibility requirements are included. This procedure is performed at the end of each fiscal year and as-needed.
6. Implement formal procedures to inform all GoSolarSF applicants with qualifying income levels that they may be eligible for discounts under Pacific Gas and Electric Company's California Alternate Rates for Energy program.	☑ Concur ☐ Do Not Concur ☐ Partially Concur GSSF is in the process of amending the SF Environment Code, Sec. 18.4 (2), (3), and (4), to revise certain program requirements. Consequently, the proposed revisions will remove the requirement that applicants must participate in the PG&E CARE Program for low-income eligibility.

Recommendation	Response
7. Ensure that all documents applicants submit are legible before approving applications.	☑ Concur ☐ Do Not Concur ☐ Partially Concur GSSF staff will confirm the legibility of submitted documents before approval of each application.
8. Ensure that it uses current income information to recalculate applicant income.	☑ Concur ☐ Do Not Concur ☐ Partially Concur GSSF staff will verify that income information is current when determining applicant eligibility for income-based incentives.
9. Require proof of residency for all adult household members on applications for low-income incentives.	☑ Concur ☐ Do Not Concur ☐ Partially Concur SFPUC will research various options to establish the best methods for determining/confirming San Francisco residency for GSSF applicants. Once approved by senior management, these new procedures will be applied.
10. Implement procedures to verify or disprove reported lack of income for household members who do not report income. Verification could be achieved by documentation that the household member is listed as a dependent on another person's tax return. Assertions of no income could be disproved by using technologies to look for household members' current employment.	☑ Concur ☐ Do Not Concur ☐ Partially Concur SFPUC will research which technologies and resources are best-suited to verify and/or disprove lack of income for household members who are listed on applications to the GSSF program. SFPUC will also determine the best methods for implementation of these procedures.
11. Refer the instance the audit identified where the home address in two city employees' payroll records matched the address of a low-income incentive recipient to the Department of Human Resources for further investigation into potential misconduct by the city employees.	☑ Concur ☐ Do Not Concur ☐ Partially Concur SFPUC will refer the matter to DHR and the SFPUC's Employee Relations team, who will work with DHR and the individual's employers to provide the relevant documentation.

Recommendation	Response
12. Work with the PowerClerk administrator to modify user access rights in the system so that only the employees who need approval and edit access get it.	☑ Concur ☐ Do Not Concur ☐ Partially Concur GSSF staff is currently in discussions with Clean Power Research (developer of PowerClerk software) to implement this change.
13. Create procedures for monitoring and removing PowerClerk access from inactive users within three months of their becoming inactive.	☑ Concur ☐ Do Not Concur ☐ Partially Concur Procedure is now in place to remove PowerClerk access from users who have been inactive (in use of the software) for over two (2) months.
14. Remove access to PowerClerk for inactive users who do not require access to the system within 60 days of their becoming inactive.	☑ Concur ☐ Do Not Concur ☐ Partially Concur PowerClerk users who have been inactive (in use of the software) for 60 days or more will be removed from access to the system.