



**CALIFORNIA
PUBLIC UTILITIES
COMMISSION**

California
Self-Generation
Incentive Program

External Financial
Examination
Program Years
2017 & 2018

Final Report

June 30, 2019

MACIAS
CONSULTING GROUP & CPAs

Table of Contents

Independent Accountant’s Report 1

Introduction and Executive Summary 2

Observations 2

Background 2

Objectives 6

Methodology 7

The SGIP Application Process 8

Reservation Request 9

Proof of Project Milestone 9

Incentive Claim Forms 10

Results of Testing 10

SGIP Database User Access and Controls 11

Measurement & Evaluation and Program Administration 11

Summary of Results 12

Results of Procedures and Recommendations 16

Pacific Gas & Electric Company 16

Southern California Edison Company 18

Southern California Gas Company 20

Center for Sustainable Energy 21

Status of Prior-Year Observations and Recommendations 23



914 Shore Breeze Drive
Sacramento, CA 95831

Independent Accountant's Report

California Public Utilities Commission
San Francisco, CA

We have examined the California Self-Generation Incentive Program for 2017 and 2018 program years for compliance with the requirements set by the California Public Utilities Commission in the California Self-Generation Incentive Program Handbook, dated December 18, 2017. The four Program Administrators - Pacific Gas & Electric Company, Southern California Edison Company, Southern California Gas Company, and the Center for Sustainable Energy - are responsible for compliance with those requirements. Our responsibility is to express an opinion on their compliance based on our examination.

Our examination was conducted in accordance with attestation standards established by the American Institute of Certified Public Accountants. Those standards require that we plan and perform the examination to obtain reasonable assurance about whether the Program Administrators complied, in all material respects, with the specified requirements referenced above. An examination involves performing procedures to obtain evidence about whether the Program Administrators complied with the specified requirements. The nature, timing, and extent of the procedures selected depend on our judgment, including an assessment of the risks of material noncompliance, whether due to fraud or error. We believe that the evidence we obtained is sufficient and appropriate to provide a reasonable basis for our opinion. Our examination does not provide a legal determination on the Program Administrators' compliance with specified requirements.

In our opinion, the Program Administrators complied, in all material respects, with the aforementioned requirements during the 2017 and 2018 program years.

This report is intended solely for the information and use of the California Public Utilities Commission and the four Program Administrators and is not intended to be and should not be used by anyone other than these specified parties.


Macias Consulting Group, Inc.
Sacramento, CA
September 11, 2019

Introduction and Executive Summary

This examination fulfills a requirement of Decision 16-06-055 (June 23, 2016) of the California Public Utilities Commission (CPUC). This decision requires biannual fiscal audits of the Self-Generation Incentive Program (SGIP). The examination is intended to determine whether Program Administrators (PAs) are complying with the administrative requirements set forth in the CPUC's SGIP Handbook, to evaluate how Program Administrators account for SGIP funds, and to assess that safeguards are in place to ensure SGIP funds are distributed in accordance with the CPUC's SGIP Handbook Guidelines.

This examination addresses the compliance of the PAs with applicable rules during program years 2017 and 2018. Our examination did not identify any material instances of noncompliance and found the expenditures were reasonable and in accordance with the program rules specified by the CPUC.

This report presents the results of the external financial examination performed by Macias Consulting Group, Inc. (MCG) and approved by the CPUC. This examination reviewed the California Self-Generation Incentive (SGIP) program, as administered by the PAs: Pacific Gas and Electric Company (PG&E), Southern California Edison Company (SCE), Southern California Gas Company (SCG), and the Center for Sustainable Energy (CSE) in the San Diego Gas & Electric Company (SDG&E) territory.

Observations

In general, MCG found that the four entities entrusted with the management of the SGIP program complied, in all material respects, as reflected in our Independent Accountant's Report on page 2. MCG's detailed observations are explained in a Summary of Results of Procedures and Recommendations on page 11 of this report and each PA's Results of Procedures and Recommendations section, starting on page 16 of this report.

Background

California's SGIP provides financial incentives to certain distributed generation and storage technologies located on the customer side of the electricity meter. The electricity produced by the system provides on-site power to help offset a customer's electric load. Funded by California ratepayers, the SGIP is managed by Program Administrators representing California's major investor-owned utilities (IOUs). Overseen by the CPUC, the SGIP program provides financial incentives for the installation of new qualifying technologies that are installed to meet all or a portion of the electric energy needs of a facility. The purpose of the SGIP is to contribute to Greenhouse Gas (GHG) emission reductions, demand reductions and reduced customer electricity purchases, resulting in the electric system reliability through improved transmission and distribution system utilization; as well as market transformation for distributed energy resource (DER) technologies.

The SGIP is one of the longest running distributed generation incentive programs in the country. The SGIP was initially conceived as a peak-load reduction program in response to the California energy crisis of 2000-2001, during which Californians experienced electrical outages

throughout the State. Through Assembly Bill 970, the legislature directed the CPUC to offer financial incentives to electric customers of the major investor-owned utilities to install on-site distributed generation (DG) technologies to offset all or a portion of their energy needs. In 2001, the SGIP was established to encourage the development and commercialization of renewable and nonrenewable DG technologies.

In 2011, California Senate Bill 412 modified the primary purpose of SGIP from peak load reduction to GHG emissions reductions and subsequently, the CPUC modified the program's incentive eligibility criteria to support technologies that achieve GHG emissions reductions. Eligible technologies include energy storage, wind turbines, pressure reduction turbines, fuel cells, waste heat capture, combined heat and power, internal combustion engines, microturbines, and gas turbines.

In 2014, California Senate Bill 861 extended administration of the SGIP through 2020. In 2016, in conjunction with this extension of the program, the CPUC implemented major program modifications, including a new program structure and incentive rates. The most significant of these changes was the allocation of 75% of the total incentive budget to energy storage technologies.

In 2016, California Assembly Bill 1637 gave the CPUC the authority to increase collections for SGIP and extended the net energy metering tariff for electric fuel cell systems. In 2017, CPUC Decision 17-04-017 authorized the increase of collections for SGIP, for 2017 through 2019, to the maximum amount allowed by Public Utilities Code §379.6(a)(2) – not more than double the amount authorized for the 2008 calendar year.

In 2018, Senate Bill 700 extended collections for the SGIP to December 31, 2024, and program administration to January 1, 2026. The bill would require the commission to adopt requirements for energy storage systems to ensure that eligible energy storage systems reduce the emissions of greenhouse gases. The bill would specify that generation technologies using nonrenewable fuels are not eligible for incentives under the program on and after January 1, 2020.

The CPUC authorized incentive collections for the period 2017 to 2019 to total \$501,735,000 as a result of SB 861, AB 1637 and subsequent CUPC budget decisions. Additional funds are made available through project cancelations, reallocations, and application fee forfeitures are added to Program Administrators budgets as they become available. The 2017 program year began on May 1, 2017. Authorized incentive collections through the end of 2019 total \$501,735,000.

The authorized incentive collections and allocated administrator budget for each Program Administrator through 2019 are as follows:

Table 1 - Statewide Authorized Incentive Collections and Administrator Allocations

Program Administrator	2017 to 2019
Pacific Gas & Electric	
Incentives	\$217,620,000
Administration	15,120,000
Southern California Edison Company	
Incentives	169,260,000
Administration	11,760,000
Southern California Gas Company	
Incentives	48,360,000
Administration	3,360,000
Center For Sustainable Energy (a)	
Incentives	66,495,000
Administration	4,620,000
Totals	
Incentives	\$501,735,000
Administration	\$34,860,000

(a) Funds collected by San Diego Gas & Electric.
Source: CPUC Handbook and D.14-12-033 and SB861

The Program Administrators administer the SGIP budget on a continuous basis and funding can change based on authorized incentive collections, funds collected from canceled projects and application fee forfeitures.

The statewide program budget is divided between generation and storage technologies, and now includes funds set aside in an equity budget for certain qualifying projects, such as those for single- and multi-family low income housing:

- Energy Storage Technologies: 80% of funds
 - 75% of these funds in steps 3-5 dedicated to the General Budget
 - 25% of these funds in steps 3-5 dedicated to the Equity Budget
- Generation Technologies: 20% of fund

Energy Storage General Budget

The incentive budget allocates 80% to energy storage technologies, with 13% of the energy storage category carved out for small residential projects less than or equal to 10 kW. The small residential storage carve-out is set per each PA step and operates independently of the large-scale carve-out.

Additionally, if a single PA territory allocates more than 13% of its total energy storage funds to small residential projects, the amount of funds that exceeds 13% will count toward the statewide minimum goal of 13%. Once the minimum 13% of energy storage funds are allocated to small residential projects statewide, PA territories that have not yet allocated all of their small residential funds may transfer the funds into the large-scale storage budget category. However, PAs must first file an advice letter before transferring funds from the small residential storage carve-out to the large-scale budget category.

Energy Storage Equity Budget

For energy storage incentive steps 3-5, each PA's energy storage general budget (large-scale and small residential) is reduced by 25% in Steps 3-5 to create an Energy Storage Equity Budget for eligible projects.

Additionally, within the Equity Budget, 10% is carved out for qualifying residential projects (single family and multi-family low-income housing) regardless of the size of the project. The Non-residential equity carve-out is set by each Program Administrator step and operates independently of the Equity Budget for nonresidential customers.

Generation Budget

The incentive budget allocates 20% to generation technologies, with a minimum of 40% of the generation category carved out for renewable generation projects. The minimum amount of incentives set aside for renewable generation technologies is set statewide, across all four Program Administrators.

As of May 1, 2017, the Program Administrators collectively determined that the SGIP Budget Allocations were as follows for the three Program Years 217 through 2019.

Table 2- SGIP 2017 Opening Budget¹ (As of May 1, 2017)

Budget/Step	PGE	SCE	SCG	CSE	Total
Generation ² (Steps 1-3)	\$ 49,970,926	\$ 40,159,457	\$ 11,323,243	\$ 17,062,451	\$ 118,516,077
Small Residential Storage (Steps 1-5)	24,244,617	19,438,856	5,486,059	8,215,178	57,384,710
Large Scale Energy Storage (Steps 1-5)	165,844,163	132,287,516	37,411,669	55,248,174	390,791,522
TOTAL INCENTIVES	\$240,059,706	\$ 191,885,829	\$54,220,971	\$ 80,525,803	\$566,692,309³
Administration plus Carryover	\$33,907,102	\$36,932,832	\$8,871,329	\$6,870,346	\$86,581,609

Source: selfgenca.com

Increased Volume In Incentive Applications Submitted

The PAs received and processed a significantly higher volume of incentive applications than in previous periods. In 2017-2018, SGIP experienced a significant increase in incentive applications submitted, with PG&E receiving 3,897, SCE receiving 3,363, SCG receiving 637, and CSE receiving 2,677 applications respectively, mainly as a result of large increases in small residential storage applications.

Objectives

The purpose of performing this external examination was to determine whether the SGIP program was administered and implemented in accordance with established guidelines, parameters, and CPUC directives. More specifically, our objectives were to:

- Determine if the SGIP program's administrative costs and expenditures were properly charged against program funds;
- Identify factors, if any, to ensure that ratepayer funds are being prudently managed; and
- Ensure transparency to enable the CPUC to meet its due diligence goals.

The scope of our review encompassed program years 2017 and 2018, as administered within the four IOUs' service territories: PG&E, SCE, SCG and SDG&E. CSE is the PA within SDG&E's territory.

MCG discussed the results of this external examination with PG&E, SCE, SCG and CSE, having provided each entity with their portion of the draft report. Each entity's comments, and in some cases MCG's response to those comments, are included within the body of this report.

¹ Before Implementation of Equity Storage Energy Budget

² As of 2017, there was no distinction between Renewable and Non-Renewable Generation for incentives budget purposes.

³ Budget numbers can change based on funds from project cancelations, reallocations, and application fee forfeitures. Current budget amounts can be seen at www.selfgenca.com.

Methodology

The central objective of the examination was to determine that incentive payments paid by the PAs were paid out in accordance with established SGIP Handbook requirements for the Program Years 2017 and 2018 and to determine that administrative costs and expenditures were properly charged against program funds.

MCG judgmentally (non-statically, based on knowledge and professional judgment) selected samples of 30 projects at PG&E, SCE, and CSE and selected a sample of 22 projects (due to smaller total of projects paid) at SCG to test for Program Years 2017 and 2018. The majority of 2017-18 SGIP incentives paid were for larger projects that had been approved during the 2015 through 2018 Program Years. There is typically a 12 to 18-month or more lag between a project's reservation approval and initial incentive payment. This is largely due to the implementation time necessary to complete SGIP projects. In addition, larger projects (those that are rated ≥ 30 kW) receive 50 percent of their incentive payment when the system has been installed and proven to be operating as designed; the remaining 50 percent of the incentive is paid over a 5-year period, based on the results of the system's electrical generation or discharge. While smaller (typically residential) projects receive their full incentive payment upon proof of operation, larger projects have a 5-year payment cycle that includes Performance-Based Incentive (PBI) payments. Since the population of large projects that were both submitted and paid in Program Years 2017 and 2018 were limited in number, MCG and the PAs agreed to broaden the population of projects to include testing a sample of projects that were paid in Program Years 2017 and 2018 (including PBI payments) even if they were submitted and reserved in previous program years. The SGIP Handbooks and requirements change annually and have changed over the years. As such, with concurrence from the PA's and the CPUC, MCG used the most current 2017 SGIP Handbook to use as the baseline for testing Program Administration requirements. We also reviewed the relevant year's SGIP Handbook to confirm the PA's compliance with the CPUC's requirements for when the projects were approved, not paid. Thus, each project tested was verified using the relevant year's CPUC Handbook.

The sampling was designed to reflect the universe of expenditures for each location. Since incentive payments on approved projects accounted for greater than 90 percent of the dollar value of total annual expenditures, MCG focused most of our testing of SGIP expenditures on the SGIP projects. Besides incentive payments, other types of expenditures such as Measurement & Evaluation (M&E), Marketing and Outreach (M&O), and administrative expenses, mostly labor charges, were also examined.

During the examination, MCG tested 112 projects valued at \$27,337,527 spread out over four entities as shown in Table 3 below.

TABLE 3 – SGIP PROJECT PAYMENTS TESTED BY LOCATION

Program Administrator	2017	2018
PG&E	\$6,011,426	\$3,399,084
SCE	3,867,060	7,096,605
SCG	50,808	3,208,309
CSE	2,687,501	1,016,734
Total Examined	\$12,616,795	\$14,720,732

The SGIP Application Process

All PA's use the Energy Solutions online application portal and database to track installations and electronically store the related SGIP-required documents.

All SGIP applications and required documents at all stages of the application process must be submitted via the SGIP online application database at www.selfgenca.com. Mailed, emailed, faxed or hand delivered applications are not accepted. In order to submit an application and/or project documentation, companies or individuals must create an account and register users at www.selfgenca.com. Once the account has been confirmed, registered Applicants may create and edit applications. Only complete applications may be assigned incentive funds or be placed into a lottery. Only complete applications may receive an approved reservation. Duplicate applications or multiple submissions for the same project will be rejected. Applicants must agree to the Terms of Use pertaining to the SGIP online application database in order to submit an application. The Terms of Use can be found at www.selfgenca.com.

Beginning 2017, the SGIP moved from a program that operated with an *annual* budget to a program that is based on a *step-down structure*, whereby the budget is divided not by program year, but rather by budget category and step. The budget was set in 2017 for the 2017-2019 program years.

Applications are subject to the incentive rates of the Program Administrator when the project is submitted. Generally, applications will be assigned an incentive rate and reviewed in the order in which they are received. However, in the event that application submissions on a single day exceed available funding in a given Program Administrator's territory for a given budget and step, a lottery will be initiated.

Once an application is entered into the SGIP database and submitted for consideration within a given step, it will be retained in the database. In the event a lottery is initiated, and the application is not selected for the current step, the Applicant must update relevant documentation and resubmit the application in order to be considered in the next incentive step

For detailed explanations of the lottery process, see the CPUC Handbook at www.selfgenca.com.

There are two application processes in the SGIP Program. The three-step process is applied for large ($\geq 10\text{kW}$) non-residential projects and the two-step process is applied for residential projects and small ($< 10\text{kW}$) non-residential projects.

The three-step process requires specific documentation of the Reservation Request, Proof of Project Milestones, and Incentive Payment Forms. The two-step requires specific documentation of the Reservation Request and Incentive Claim Forms. In general, the larger three-step process requires more documentation.

For incentive payments, MCG tested compliance with the guidelines set forth in the SGIP Handbook that included reviewing (if applicable) the following requirements:

Reservation Request

To reserve a specified incentive amount, a Reservation Request Form (RRF) must be submitted with certain required attachments, and the application fee must be mailed within 7 days. The incentive amount is not reserved until the PA receives and approves the RRF documents.

Required Reservation Request Materials:

- Completed and Signed reservation request form, Application Fee and Check Equal to 5% (1% prior to 2017) of the Requested Incentive Amount Equipment specifications
- Proof of Utility & Load Specifications Preliminary Monitoring Plan (All projects $\geq 30\text{kW}$ and/or 2017 and later projects paired with onsite renewable generation) Minimum Operating Efficiency Worksheet With Backup Documentation (Non-renewable fuel projects only)
- Proof of Adequate Fuel or Waste Energy Resource (Renewable Fuel, Waste Energy, Waste Gas Projects Only)
- Proof of Equity Budget Eligibility (Equity Projects Only)

Proof of Project Milestone

All applicants of large residential or non-residential projects greater than or equal to 10kW must complete and sign a Proof of Project Milestone form. Residential and non-residential projects less than 10kW must submit all applicable Proof of Milestone forms as part of the RRF Process.

Required Proof Of Project Milestone Materials:

- Completed and Signed Proof of Project Milestone Form
- Copy of RFP or equivalent within 90 calendar days of Conditional Reservation Letter (Public Entity Projects Only)
- Executed Contract or Agreement for System Installation (All Projects)

- Energy Efficiency Audit (All Projects)

Incentive Claim Forms

Once the project is completed, the applicant requests payment of the incentive amount by submitting a signed Incentive Claim Form and all applicable Incentive Claim documents to the PA. A project is considered complete when the system is completely installed, interconnected, and permitted. PAs disburse the payments upon verification (based on sampling) by a field inspector that the system meets all of the eligibility requirements of the SGIP.

Required Incentive Claim Form Materials:

- Completed and Signed Incentive Claim Form
- Proof of Authorization to Interconnect (Projects That Interconnect With The Grid)
- Project Cost Affidavit or Breakdown Worksheet (All Projects)
- Building Permit Inspection Report
- Substantiation for New or Expanded Load
- Final Monitoring Schematic (All projects $\geq 30\text{kW}$ and/or 2017 and later projects paired with onsite renewable generation)
- Planned Maintenance Coordination Letter (All Conventional Combined Heat & Power Projects $\geq 200\text{kW}$)
- Performance Based Incentive Setup Sheet (All projects $\geq 30\text{kW}$)

Results of Testing

MCG completed a review of 112 individual projects. MCG found that the PA's followed the guidelines and met the administrative requirements as set forth in the SGIP Handbook for the respective Program Year.

For the projects MCG judgmentally selected for testing, we received and reviewed scanned copies of the requisite documents that the PAs downloaded from the Energy Solutions database, except for PG&E. PG&E provided MCG with limited access to the Energy Solutions database to perform the testing of the projects that were selected.

All of the PAs use a project checklist to ensure that each phase of the SGIP process is followed according to SGIP Handbook. PAs use either a third party or in-house engineer as a technical reviewer to review and ensure that the proposed equipment specifications are in compliance with the respective year's SGIP Handbook's requirements.

In summary, MCG reviewed the selected projects and determined that the PAs:

- Completed the requirements of the review of the RRF process, and had either a third party or in-house engineer complete technical reviews of the RRF requirements,
- Completed the requirements of the review of the PPM process, and had either a third party or in-house engineer complete technical reviews of the PPM requirements,
- Received the ICF required documentation from the applicant, and
- Completed the requirements of the ICF process and had either a third party or in-house engineer conduct a field inspection to approve project completion and satisfy the ICF requirements to pay the incentive amount.

SGIP Database User Access and Controls

In 2011, the PAs and Cohen Ventures, Inc., dba Energy Solutions, formed an agreement for the purposes of developing www.selfgenca.com. The website was developed as an online platform to provide certain authorized and interested parties with access to current SGIP information, and specific documents for the SGIP.

The Center for Sustainable Energy is the contract administrator for the Energy Solutions database used by all of the PAs. MCG consultants received a demonstration of how the PA's use the database to comply with the SGIP Handbook requirements.

During the course of the examination, MCG requested copies of written policies related to information technology policies specific to SGIP. In addition, MCG requested a SGIP database user list from all of the PAs. The list included all current staff with authorized access to the database, and a list of employees who were terminated or transferred from the SGIP database group.

Measurement & Evaluation and Program Administration.

For non-incentive payments, MCG reviewed:

- Supporting invoice or receipt, verifying that the expense was related to the SGIP program
- Supporting accounting documents verifying payment amount and payee

For labor charges, we reviewed the description of the work being performed by the PA employees to determine the reasonableness of charges to the SGIP funds. In addition, for individual employees selected for testing we determined that the labor charges were based on input from timesheets and were approved by managers.

To obtain evidence of transparency and the prudent management of the SGIP funds, MCG (1) reviewed evidence that SGIP funds were not included (double counted) in General Rate Case calculations, if applicable; (2) ascertained that the PAs maintained SGIP funds in separate and distinct accounts; and (3) determined that internal controls were adequate to provide security around SGIP payments and use of internal checklists to track program compliance with incentive payment rules.

During the examination, MCG met with managers involved in operations, accounting, data management, and ratemaking to gain an understanding of their processes. We also obtained documentation that included organization charts, program information, flowcharts, and written documentation describing SGIP-related processes.

Summary of Results

Observations and Recommendations for all PA's

(See the respective PA sections for detailed observations and management responses.)

1. Expenditure Testing

We noted no compliance issues or errors in our sample of 112 individual projects, Administration, and Measurement & Evaluation (M&E) expenses reviewed. The items noted in the respective PA sections are not errors or items that did not comply with the CPUC Handbook. The observations were noted to help improve the timeliness of SGIP information on the selfgenca.com website and considerations to improve the SGIP program.

2. Total 2017 and 2018 Applications Submitted - Authorized Incentive Collections Paid and/or Reserved Compared to 2017-2019 Budget

Current authorized collections and the amounts disbursed and/or reserved for eligible projects:

Table 4 – Authorized Incentive Collections

Program Administrator	Authorized Incentive Collection Budget For 2017 to 2019	Total Incentive Amount for Applications Submitted in 2017 and 2018 ⁴	Total Incentive Amount Paid and Reserved for Applications Submitted in 2017 and 2018 as a Percentage of 2017-19 Authorized Incentive Collections
PG&E	\$217,620,000	\$79,623,471	37%
SCE	169,260,000	79,093,755	47%
SCG	48,360,000	24,235,317	50%
CSE	66,495,000	37,132,821	56%

⁴ Per SGIP Public Report as of 9/11/19. Includes cancelled 2017 and 2018 applications.

3. Total 2017 and 2018 Administrative Costs Paid Compared to 2017-2019 Budget

Table 5 - Authorized Administrative Costs

Program Administrator	Cost Allocations Budget For 2017 - 2019 Administrative Costs (Based on 7% of Authorized Incentive Budget) – M&E and Administration	Total Administrative Costs Expended in 2017 and 2018 ⁵	2 Year Combined Administrative Costs Expended As a Percentage of 2017-19 Administrative Budget
PG&E	\$15,120,000	\$ 6,390,933	42%
SCE	11,760,000	5,343,269	45%
SCG	3,360,000	1,297,706	39%
CSE	4,620,000	3,264,663	71%

4. Total 2017 and 2018 Administrative Plus Carryover Costs Paid Compared to 2017-2019 Budget

Table 6 - Authorized Administrative Plus Carryover Costs

Program Administrator	Cumulative Administrative Allocations (2017-19 Allocations plus Prior Year Carryover Amounts)– M&E and Administration	Total Administrative Costs Expended in 2017 and 2018	2017-18 Combined Administrative Costs Expended Compared to Total Cumulative Administrative Budget
PG&E	\$33,907,102	\$ 6,390,933	19%
SCE	36,932,832	5,343,269	14%
SCG	8,871,329	1,297,706	15%
CSE	6,870,346	3,264,663	48%

As depicted in the above Table 4, the total amounts paid and reserved by the PA's for 2017 and 2018 project applications were between 37% to 56% of the 2017-19 Authorized Incentive Collection Budget with 1 year remaining. Three out of the four PA's expended between 39% to 45% and CSE expended 71% on M&E and Administration costs of 2017-19 Authorized Collections Budget for Administrative Costs with 1 year remaining. Three out of the four PA's spent between 14 to 19%, and CSE spent 48% of the M&E and

⁵ Administrative costs expended include (not limited to) administrative costs associated with incentive application review and processing, statewide working group meetings policy, regulatory expenses, contractor costs associated with measurement and evaluation, database services and engineering, as well as marketing, education and outreach.

Administration costs of the Cumulative (includes carryover balances) Administrative Allocations Budget. Based on examining the results of incentives and administrative costs paid and reserved compared to budgeted allocations, the future budget allocations for Incentive Claims and Administrative Costs should factor markets for future projects and the carryover balances.

In examining projects in Program Years 2017-18, most of the projects with incentive payments were residential energy storage projects. Incentives for Generation in 2017-18 and Large-Scale Storage projects beginning in 2018 were significantly lower compared to prior years.

Recommendation

The CPUC should continue to evaluate the current SGIP authorized collection, payment incentive levels, types of projects to incentivize, and remaining SGIP carryover balances when authorizing future budgets for incentive collections and administration costs.

5. The Program Administrators Are Highly Reliant on Energy Solutions

In 2011, the PA's and Cohen Ventures, Inc., dba Energy Solutions, formed an agreement for the purposes of developing www.selfgenca.com (statewide website). The statewide website has developed into an important online platform to provide certain authorized and interested parties with access to specific documents for the SGIP. The online portal allows applicants to obtain program documents, upload applications, check application status, learn about program updates, and access calculation tools.

The statewide website is the central information source to the public for real-time SGIP budget information. With the collaboration and input of PA staff, Energy Solutions responsibilities are to update the software to comply with the current CPUC Handbook requirements. The PA's utilize the statewide website to inform all interested parties on the SGIP Handbook requirements.

The statewide portal serves the PA's to use technology to administer the program and to track the incentive payments paid to date. During our examination, we observed that the Energy Solutions database could be improved by considering the following recommendations.

a. The Energy Solutions Payment Ledger Report Does Not Retain Historical Transactions

In one of the projects that we tested, we noted that the Energy Solutions Payment Ledger Report allowed the PA to delete a project payment without retaining a detailed transactional log to reflect the history of a check issued and check canceled. The Energy Solutions Payment Ledger report does not maintain transparency of historical additions and deletions to the database.

Recommendation

It is important for the PA's to track the historical transactions and for the Energy Solutions database to maintain an audit trail of the inputs and deletions. Therefore, the PA's and Energy Solutions staff should research this problem and make the appropriate modifications to ensure historical additions and deletions of transactional data is retained.

b. Energy Solutions Is Not Required to Undergo an Information Technology Audit

The current Energy Solutions SGIP contract with the PA's do not require Energy Solutions to be audited or that the PA's have the ability to audit records.

Recommendation

With the observations that MCG noted during our examination, we recommend that the PA's consider instituting a requirement to have Energy Solutions undergo an annual information technology audit.

6. Reporting to the CPUC

The PA's are not required to submit any formal financial reports to the CPUC. The CPUC authorizes investor owned utilities to assess SGIP fees for incentive collections to pay for SGIP incentives. Currently, while the public can see the SGIP disbursements on the selfgenca.com website, they cannot see the accounting of balancing accounts maintained by the Investor Owned Utilities.

Recommendation

MCG recommends that the PA's and the CPUC formalize an agreement to have PA's report SGIP funds collected and expended for the Program years. The CPUC required submission of semi-annual reports for the California Solar Initiative Program. A similar reporting requirement for the SGIP would appear appropriate.

7. SGIP Database Management and User Access

The PA's do not have any administrative rights to add or delete PA staff in the SGIP database.

Recommendation

We suggest that PA Program Managers be given administrative rights to timely add or delete staff in the SGIP database.

Program Administrators Responses to Observations

The Program Administrators generally have no concerns related to the recommendations provided in the general section and have no further comments.

Results of Procedures and Recommendations

Pacific Gas & Electric Company

The following is a summary of results and recommendations based on the examination procedures we performed at PG&E:

TABLE 7 – TOTAL SGIP EXPENDITURES BY TYPE INCURRED: PG&E

Category	2017	2018
Administration	\$ 2,305,716	\$ 2,168,372
M&O	-	-
M&E	1,072,646	844,199
Incentives Paid	31,412,564	24,988,494
Total Expenditures	\$ 34,790,926	\$ 28,001,065
% of Administration, M&O, M&E to Total Expenditures	9.71%	10.76%
% of Incentive Payments to Total Expenditures	90.29%	89.24%

Source: Pacific Gas & Electric

General Observations**1. Issue With The Energy Solutions Database Report**

For one of the projects MCG tested (PGE 2018-5XX9), we noted that the Payment Report incorrectly included a 2019 payment in the 2018 report that PGE provided to MCG. The 2018 report included payments made on 12/13/18 and 3/11/19. We noted that the report accumulated multiple payment transactions into one row of payment. We believe that there is something systemically incorrect with the Energy Solutions report writing program.

Recommendation

PGE SGIP staff should work with Energy Solutions software programmers to fix the problem and work towards a solution to access a detailed history of all historical transactions and to enable a report writer to accurately reflect detailed financial records for a specified period of time.

PG&E Management Response

PG&E agrees with this recommendation.

2. Non -Timely Reconciliation of Internally Generated Payment Records to The Energy Solutions Database

For one of the projects that MCG tested (PGE 2018-3XX8), we noted that a customer was issued a check on 10/31/18, and this check was not cashed as of our testing date on 6/27/19. PGE subsequently issued a new check on 7/10/19 and the customer cashed the check on 7/22/19. Based on the date of original check issuance and the subsequent reissuance of the second check, PGE's reconciliation process to compare their internal payment records to the Energy Solutions database base is not being performed timely.

Recommendation

Although PGE has an internal policy of reconciling internal payment records to the Energy Solutions database every 2 months, it appears that the reconciliations are not being performed timely or are being performed incorrectly. PGE staff needs to perform reconciliations of financial payment transaction to the Energy Solutions database more accurately and at least monthly.

PG&E Management Response

Previously, PG&E reconciled incentive payments once every two months using our incentive payment reconciliation procedure. We are in the process of modifying that procedure to take into account this recommendation and do reconciliations once a month.

3. Questionable Administrative Cost

For one of the Administrative Costs that MCG tested, we noted that a total of \$50,000 was paid to the University of California Berkeley, Institute for Business Innovation, Haas School of Business. The description on the invoice stated that the invoice was for the Haas Student Program. Our responsibility is to test whether Administrative expenses that we examine are reasonable. Based on our review of the invoice, it is difficult to ascertain whether this large amount paid to the Haas School of Business is a reasonable cost to the SGIP

Recommendation

For SGIP Administrative expenditures that are over a certain dollar amount and is intended to benefit the statewide SGIP program, the Program Administrator should discuss such projects with the Statewide PA working group and require a request for proposals to seek the most qualified consultant and least cost for the project.

PG&E Management Response

The Haas School of Business and PG&E worked together to perform market research that would benefit PG&E's understanding of behind-the-meter energy storage technologies, industry leaders, business models and SGIP program risks. All research was tied specifically to SGIP-related critical issues, which would benefit SGIP. Student teams were brought in to provide this research at significant cost reduction than if PG&E contracted with a third party. Research and data provided by Haas was utilized by PG&E in a variety of ways, not least of which was to provide expert analysis and inform with fact-based commentary to benefit the SGIP program now and in the future.

4. Terminated PGE SGIP Employees Remain Listed As Active Users on Energy Solutions User List

MCG compared PGE's SGIP employee list of currently active, terminated, and transferred employees to Energy Solutions User List as of July 15, 2019. Five employees listed as PGE's list of terminated employees were listed were not deactivated users on Energy Solutions User's List.

Recommendation

MCG recommends PGE to deactivate the terminated SGIP employees as active Energy Solutions database users.

PG&E Management Response

PG&E has deleted all terminated SGIP employees and will work with Energy Solutions to deactivate them in a timelier manner in the future.

Results of Procedures and Recommendations

Southern California Edison Company

The following is a summary of results and recommendations based on the examination procedures we performed at SCE:

TABLE 8 – TOTAL SGIP EXPENDITURES BY TYPE INCURRED: SCE

Category	2017	2018
Administration	\$ 1,517,120	\$ 2,275,547
M&O	2,798	1,285
M&E	777,599	768,920
Incentives	21,585,987	33,303,084
Total Expenditures	\$ 23,883,504	\$ 36,348,836
% of Administration, M&O, M&E to Total Expenditures	9.62%	8.38%
% of Incentive Payments to Total Expenditures	90.38%	91.62%

Source: Southern California Edison

General Observations**1. Expenditure testing**

We noted no compliance issues or errors in our sample of 30 individual projects tested, Administration and Measurement & Evaluation items reviewed.

2. Incorrect Reconciliations of Internally Generated Payment Records to The Energy Solutions Database

MCG compares the total incentive payments paid from the Energy Solutions Payment Report to SCE's internal financial accounting report. For the combined 2017 and 2018 Program Years, the Energy Solutions report total of \$54,889,071 was higher than SCE's incentives paid total of \$49,053,946. As of July 17, 2019, SCE corrected the difference and cited several reasons for the difference. Mainly, the difference in totals was caused by human error.

Recommendation

Although SCE performs regular reconciliations of incentive payments between SCE SGIP staff needs to perform reconciliations of incentive payment transactions to the Energy Solutions database more accurately.

SCE Management Response

Updated procedures are being developed and will be put in place to enhance the reconciliation process between SCE's payment records to the Energy Solutions Database.

3. We Could Not Verify Whether Terminated or Transferred SGIP Employees Were Deactivated Timely From Accessing the Energy Solutions Database

MCG received the deactivation dates from Energy Solutions for SCE SGIP employees on August 12, 2019. We could not obtain termination or transferred dates from SCE prior to issuing our report to verify whether SGIP employees were deactivated timely from the Energy Solutions database.

SCE Management Response

SCE will continue to work with the other PAs and Energy Solutions to develop a more streamlined approach adding and deleting staff access to the SGIP database. This may include giving the Program Manager administrative rights to make these updates.

Results of Procedures and Recommendations***Southern California Gas Company***

The following is a summary of results and recommendations based on the examination procedures we performed at SCG:

TABLE 9 – TOTAL SGIP EXPENDITURES BY TYPE INCURRED: SCG

Category	2017	2018
Administration	\$ 342,322	\$ 355,785
M&O	-	-
M&E	192,611	406,988
Incentives	9,097,671	8,698,374
Total Expenditures	\$ 9,632,604	\$ 9,461,147
% of Administration, M&O, M&E to Total Expenditures	5.55%	8.06%
% of Incentive Payments to Total Expenditures	94.45%	91.94%

Source: Southern California Gas

General Observations**1. Expenditure testing**

We noted no compliance issues or errors in our sample of 22 individual projects tested, Administration and Measurement & Evaluation items reviewed.

Results of Procedures and Recommendations***Center for Sustainable Energy***

The following is a summary of results and recommendations based on the examination procedures performed at CSE and SDG&E:

TABLE 10 – TOTAL SGIP EXPENDITURES BY TYPE INCURRED: CSE

Category	2017	2018
Administration	\$ 1,290,015	\$ 1,386,188
M&O	51,194	21,114
M&E	224,763	291,389
Incentives	11,740,106	6,955,855
Total Expenditures	\$ 13,306,078	\$ 8,654,546
% of Administration, M&O, M&E to Total Expenditures	11.77%	19.63%
% of Incentive Payments to Total Expenditures	88.23%	80.37%

Source: Center for Sustainable Energy

General Observations**1. Expenditure testing**

We noted no compliance issues or errors in our sample of 30 individual projects tested, Administration and Measurement & Evaluation items reviewed.

2. CSE's Independent Auditors Cited a Significant Deficiency When Performing The 2017 Financial Statement Audit

MCG tested CSE's internal controls related to SGIP, and we noted that CSE's reconciliation processes for SGIP were being performed and we noted no questioned costs or deficiencies.

Since MCG performs a limited internal control review during our examination, we reviewed the independent auditor's report and internal control letters. West, Rhodes, & Roberts, CSE's independent auditors, noted a significant deficiency in CSE's internal controls. The independent auditors cited *"There is lack of documentation and narratives that can explain how the rebates program staff are verifying that accounting and program accounts*

reconcile to each other since no monthly reconciliations to the rebates program database are being done by either of the departments. There were no questioned costs.”

Recommendation

Although the independent auditors finding was specific to CSE's rebate program, we recommend that CSE's management address the significant deficiencies cited by their independent auditors.

CSE Management Response: CSE processes rebates and incentives for a number of different programs that leverage multiple program databases. CSE will continue to work on the documentation and standardization of its various rebate processes to ensure that all program-specific databases are routinely reconciled against the records maintained by CSE accounting staff.

3. Delay in Deactivating PA Staff From Energy Solutions Database

While testing the PAs timeliness in deactivating terminated or transferred SGIP employees, we noted that there was a delay in deactivating a terminated employee. In addition, there was another instance when a terminated employee was temporarily reestablished with access after the employee's termination.

Recommendation

MCG recommends that the PA Program Managers obtain the administrative ability from Energy Solutions to add and delete PA staff that are hired to, transferred, or terminated from the SGIP program. CSE should develop a formal written policy on the protocols to add and delete SGIP staff.

CSE Management Response: CSE acknowledges the delay in deactivating a terminated employee and has since incorporated deactivation procedures for the program's online platforms into the program manager's process manual for off-boarding employees from the SGIP. Additionally, CSE agrees with the recommendation that the PA Program Managers obtain the administrative ability to add or delete PA staff directly without needing to make the request to Energy Solutions.

Regarding the instance when a terminated employee was temporarily reestablished with access, Energy Solutions needed to perform a brief user permissions check in which it temporarily reactivated a former employee's account in order to access the production website from a PA user type. After the check was completed, the former employee's account was deactivated once again.

4. Administrative and M&E Expenditure Are High Compared to Incentives Paid

CSE's administrative expenses are high compared to incentives paid. In 2018, CSE disbursed \$6,955,855 in incentives and expended \$1,297,706 in administrative costs. In 2018, approximately 19.63% of the total SGIP expenditures paid were for administrative costs. This percentage is significantly higher than that of the other PAs. Although MCG did not note any issues with the M&E and Administrative costs tested, CSE administrative expenses to incentives paid ratio is higher than the other PAs.

CSE Management Response: Due to the multi-step nature of the SGIP application process, there is an inherent lag between when an application is submitted and processed by a PA and when the applicant is issued incentive payment. Thus, the total incentive amount that CSE paid in 2017-2018 is not an accurate or holistic reflection of CSE's administrative workload in 2017-2018.

In 2017-2018, CSE was allocated 13% of the statewide budget, yet received 25.3% of the total applications submitted statewide during this timeframe; a total of 2,677 new incentive applications. This figure represents more than double the number of applications than in all previous years of the program combined in CSE territory and reflects the largest PA percentage increase in applications statewide. Aside from contractor expenses, such as those for statewide M&E, CSE's administrative expenses in 2017-2018 were largely due to the greatly increased application volume and associated workload of receiving, reviewing, and processing new applications submitted in 2017-2018. Additionally, CSE lead the SGIP Technical Working Group which reviewed and vetted hundreds of new systems submitted statewide in 2017-2018.

Status of Prior-Year Observations and Recommendations

There were no findings in the prior-year report, only observations and recommendations. All observations and recommendations were made at the program level and copied, in most cases, to the individual section for each PA. Each of the PAs provided responses which were included in the report.

1. Expenditure Testing

Prior-year Report Observation

We noted no compliance issues or errors in our sample of 100 individual projects tested and other administration and Measurement & Evaluation items reviewed.

Current-year Status

No follow up required.

2. Administrative and M&E Expenditures

Prior-year Report Observation

We noted that SCG and CSE expended amounts over the allocated annual administrative and measurement & evaluation totals. All of the PAs believe that the CPUC issued Decisions that authorized carryover of administrative and measurement and evaluation funds to 2020. Based on our reading and interpretation of the Decision provided to us, we were not able to conclude that the CPUC authorized carryover of administrative and materials and evaluation funds. In addition, based on the administrative and materials & evaluations cumulative carryover balances as of the 2016 program year, the balances in the larger PAs suggest that allocations for administrative & materials and evaluation expenses can be suspended. See details of the observations and management comments from the SCG and CSE in the respective PA sections.

Current-year Status

1. No change since prior-year report was issued.
2. The primary element of this observation is that SCE and PG&E, in particular, have overly large balances, and that collections in support of Admin/M&E expenses can be suspended. However, in the final report this specific observation/recommendation did not roll down to the detailed sections for the two large PAs, and therefore has not yet happened.
3. At this time, all unspent funds are required to be returned to ratepayers when the program sunsets in 2026. No evidence has been provided related to any other disposition of unspent Admin/M&E funds, so MCG's concern regarding the large balance(s) of unspent Admin/M&E funds has not been addressed since the issuance of the prior 2015 to 2016 report.

Note: This observation might be impacted by the change in the program's budgeting approach. From 2001 through 2016, which included the review period of the prior 2015 to 2016 report, budgets were authorized on an annual basis. All of the PAs relied on the CPUC's authorization of reallocations and carry-over funds for Admin/M&E and provided support of such authorization. MCG's position was that unspent Admin/M&E collections had grown to the point that, particularly for the two large PAs, this represented an undue burden on ratepayers. Now, as of 2017, the program is working on an authorized budget covering the three years 2017-2019, with no breakdown by year. Authorized reallocations for Admin/M&E are included in this budget.

3. Reporting to the CPUCPrior-year Report Observation

The PAs are not required to submit any formal financial reports to the CPUC. We believe that the PAs and the CPUC can agree on what reports should be required to improve communications and accountability.

Current-year Status

No change since prior-year report was issued. All PAs have agreed that more formal financial reports would provide increased accountability for the program.

4. SGIP WebsitePrior-year Report Observation

The Self-Generation Incentive Program (SGIP) website, www.selfgenca.com, is a great resource for applicants, companies in the SGIP industry, and the PAs. We believe that the website can be more user friendly and provide information to the public and the rate paying community on how the SGIP is helping and benefitting their community.

Current-year Status

The SGIP website has not changed its format since the prior 2015 to 2016 report was issued.

5. SGIP Database Management and User AccessPrior-year Report Observation

The PAs do not have any administrative rights to add or delete staff in the SGIP database. We believe that it is important for a PA Program Manager to have the administrative rights to timely add or delete staff in the SGIP database.

Current-year Status

No change since the prior 2015 to 2016 report was issued. The PAs have informed us that this recommendation was noted and discussed with the CPUC and Energy Solutions. A proposal has been made to distribute a higher level of administrative rights to the PAs, but this has not yet been implemented.