



**Date:** February 28<sup>th</sup>, 2023

**To:** Commissioner Newsha Ajami, President  
 Commissioner Sophie Maxwell Vice President  
 Commissioner Tim Paulson  
 Commissioner Tony Rivera  
 Commissioner Kate Stacy

**Through:** Dennis J. Herrera, General Manager

**From:** Irella Blackwood, Audit Bureau Director

**Subject:** FY 2022-23 Q2 Audit and Performance Review Report

---

This memorandum summarizes the San Francisco Public Utilities Commission (SFPUC) Quarterly Audit and Performance Review (QAPR) report, as of FY 2022-23 Q2.

**I. Completed Audits**

There were three completed audits since the last quarterly report:

1. Calendar Year 2019-20 Franchise Fee Audit: PG&E | November 16, 2022  
 Report Link: <https://tinyurl.com/ye23ympn>

**Report Summary:** The Controller’s City Services Auditor engaged Sjoberg Evashenk Consulting, Inc., to audit the payment of franchise fees and surcharge fees by PG&E to the City and County of San Francisco (City) for 2019 and 2020. PG&E pays the City franchise fees to use city streets to transmit, distribute, and supply electricity and natural gas.

**Audit Findings Summary:** The audit found that PG&E complied with its obligations under the gas and electric franchise ordinances and the relevant provisions of the San Francisco Administrative Code, and that the SFPUC and the Controller’s Budget and Analysis Division also fulfilled their obligations in administering and monitoring the franchise.

2. Trade Year 2020-22 CA Independent System Operator (CAISO) Scheduling Coordinators Self-Audit | October 17, 2022  
 Report Link: <https://tinyurl.com/2s439ufu>

**Report Summary:** Hutchinson and Bloodgood, LLP (engaged by APX, LLC) performed an agreed-upon procedures engagement to assist SFPUC with respect to complying with the “Audit and Testing” requirements of Metering for Scheduling Coordinator Metered Entities as defined by CAISO.

**London N. Breed**  
 Mayor

**Newsha K. Ajami**  
 President

**Sophie Maxwell**  
 Vice President

**Tim Paulson**  
 Commissioner

**Anthony Rivera**  
 Commissioner

**Kate H. Stacy**  
 Commissioner

**Dennis J. Herrera**  
 General Manager



**Audit Findings Summary:** The review of the Settlement Quality Meter Data Processing Level controls at SFPUC indicated that the process controls are adequate and functioning as documented. There was one minor finding noted for the period related to late uploading of meter data which has been addressed through APX process improvement.

3. Internal Network Penetration Test and Vulnerability Assessment | October 12, 2022

**Report Summary:** An Internal Network Penetration Test and Vulnerability Assessment of the San Francisco Public Utilities Commission (SFPUC) was performed. The objective of this testing was to evaluate the current security posture of the SFPUC internal network.

**Audit Findings Summary:** Due to the sensitive nature of cybersecurity, this report is confidential.

## II. Audit Recommendation Status

As of 12/31/22, 4 audit recommendations remained open for two audits: the SFPUC Revenue Bond Programs Audit: Phase I and the Social Impact Partnership (SIP) Program Audit. [Note: All recommendations have since been implemented and closed as of 1/26/23.]

If you have questions, please contact me at [iblackwood@sfgwater.org](mailto:iblackwood@sfgwater.org).

Attachment: FY 2022-23 Audit Plan, By Status

CC: Ronald P. Flynn, Deputy General Manager  
Nancy L. Hom, Chief Financial Officer & AGM Business Services

**Quarterly Audit & Performance Review Report**  
**FY 2022-23 Audit Plan, By Status**  
**As of December 31, 2022**

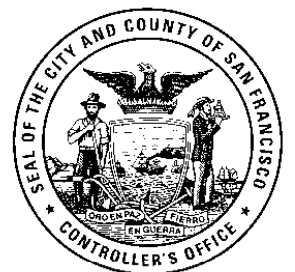
Status	
Completed:	7
In Progress:	12
Upcoming:	10
Total:	29

#	Quarter Status	Audit Type	Enterprise / Bureau	Audit Name	Oversight Body
1	[Updated] In Progress	Financial	Water	Audited Financial Statements, FY 2021-22	Controller
2	[Updated] In Progress	Financial	Wastewater		
3	[Updated] In Progress	Financial	Hetch Hetchy Water & Power and CleanPowerSF		
4	[Updated] In Progress	Financial	Business Services, Finance	Annual Comprehensive Financial Report, FY 2021-22	SFPUC
5	[Updated] In Progress	Financial	Business Services, Finance	Popular Annual Financial Report, FY 2021-22	SFPUC
6	[Updated] In Progress	Financial	Power	Franchise Fee Audit: Energy Center SF LLC	Controller
7	[Updated] In Progress	Financial	Business Services, Finance	Wholesale Revenue Requirement: Statement of Changes in Balancing Account, FY 2020-21	BAWSCA
8	[Updated] Completed	Financial	Power	Franchise Fee Audit: Pacific Gas & Electric Company	Controller
9	Completed	Financial	Water	Annual Physical Inventory Count, FY 2021-22	SFPUC, Finance
10	Completed	Financial	Wastewater		
11	Completed	Financial	Hetch Hetchy Water & Power		
12	Completed	Financial	Business Services, Finance	Post Audit, CY 2021	Controller
13	Upcoming	Financial	Power	2022 Green-e Verification Audit, SuperGreen	Center for Resource Solutions
14	Upcoming	Financial	Power	2022 Green-e Verification Audit, SuperGreen Saver	Center for Resource Solutions
15	[Updated] Upcoming	Financial	Business Services, Finance	Post Audit, CY 2022	Controller
16	[Updated] Upcoming	Financial	Business Services, Finance	Wholesale Revenue Requirement: Statement of Changes in Balancing Account, FY 2021-22	BAWSCA
17	[Updated] In Progress	Performance	Infrastructure	Public Integrity Assessment: SOLIS Procurement	CSA, Controller
18	[Updated] In Progress	Performance	Infrastructure	SSIP CS-165 Program Management Contract Audit	CSA, Controller

19	In Progress	Performance	Hetch Hetchy Water & Power	Reliability Standards Compliance Audit	WECC / NERC
20	<b>[Updated]</b> Completed	Performance	Business Services, ITS	IT / OT Network Audit	CSA, Controller
21	<b>[Updated]</b> Completed	Performance	Power	CA Independent System Operator (CAISO) Scheduling Coordinators Self-Audit, 2020-22	CAISO
22	<b>[Updated]</b> Upcoming	Performance	Business Services, ITS	Interconnection Security Agreement, FY 2022-23	CSA, Controller
23	<b>[Updated]</b> Upcoming	Performance	Business Services, ITS	Cybersecurity Maturity Assessment, FY 2022-23	CSA, Controller
24	<b>[Updated]</b> Upcoming	Performance	Business Services, ITS	Enterprise Risk Management: Cyber Risk Assessment	SFPUC
25	<b>[Updated]</b> Upcoming	Performance	All SFPUC	SFPUC Chapter 6 Delegated Authority Audit	BOS
26	<b>[Updated]</b> In Progress	Concessions, Lease Revenue	Real Estate Services	Revenue Lease Audit: Crystal Springs Golf Partners LP	CSA, Controller
27	<b>[Updated]</b> Upcoming	Concessions, Lease Revenue	Real Estate Services	Revenue Lease Audit: Mission Valley Rock	CSA, Controller
28	<b>[Updated]</b> In Progress	Revenue Bond Oversight Committee	RBOC	SFPUC Revenue Bond Programs Audit: Phase II	RBOC
29	<b>[Updated]</b> Upcoming	Revenue Bond Oversight Committee	RBOC	SFPUC Revenue Bond Programs Audit: Phase III	RBOC

# Pacific Gas and Electric Company Properly Paid Its Franchise Fees and Surcharges for 2019 and 2020

Board of Supervisors



November 16, 2022

City & County of San Francisco  
Office of the Controller  
City Services Auditor

## About the Audits Division

The City Services Auditor (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. Within CSA, the Audits Division ensures the City's financial integrity and promotes efficient, effective, and accountable government by:

- Conducting performance audits of city departments, contractors, and functions to assess efficiency and effectiveness of service delivery and business processes.
- Investigating reports received through its whistleblower hotline of fraud, waste, and abuse of city resources.
- Providing actionable recommendations to city leaders to promote and enhance accountability and improve the overall performance and efficiency of city government.

### Team:

Winnie Woo, *Audit Manager*

Mark de la Rosa  
Director of Audits  
Office of the Controller  
City and County of San Francisco  
(415) 554-7574

### Consultant:

Sjoberg Evashenk Consulting, Inc.

For media inquiries, please contact  
[con.media@sfgov.org](mailto:con.media@sfgov.org).

 <http://www.sfcontroller.org>

 @sfcontroller

 LinkedIn Office of the Controller

## Audit Authority

CSA conducted this audit under the authority of the San Francisco Charter, Section 3.105 and Appendix F, which requires that CSA conduct periodic, comprehensive financial and performance audits of city departments, services, and activities.



**OFFICE OF THE CONTROLLER**  
CITY AND COUNTY OF SAN FRANCISCO

Ben Rosenfield  
Controller

Todd Rydstrom  
Deputy Controller

November 16, 2022

Board of Supervisors  
City and County of San Francisco  
City Hall, Room 244  
1 Dr. Carlton B. Goodlett Place  
San Francisco, CA 94102

Dear President Walton and Members:

The City Services Auditor (CSA) of the Office of the Controller (Controller) engaged Sjoberg Evashenk Consulting, Inc., (SEC) to audit the payment of franchise fees and surcharge fees by Pacific Gas and Electric Company (PG&E) to the City and County of San Francisco (City) for 2019 and 2020. PG&E pays the City franchise fees to use city streets to transmit, distribute, and supply electricity and natural gas (gas). PG&E is required to report its gross receipts and pay each year franchise fees of 0.5 percent of its gross receipts on the sales of electricity and 1 percent of its gross receipts on the sales of gas. Also, pursuant to the California Public Utilities Code, PG&E must remit to the City surcharge fees PG&E collects from customers who purchase electricity and gas from a third party.

January 2019 Through December 2020	Fees Paid
Franchise Fees	\$11,279,077
Surcharge Fees	4,306,043
<b>Total</b>	<b>\$15,585,120</b>

PG&E correctly reported \$1,745,261,923 in gross receipts subject to the franchise fee and correctly calculated and paid the City the proper franchise and surcharge fees according to the terms and deadlines specified in the franchise agreements. Also, the Controller's Budget and Analysis Division and San Francisco Public Utilities Commission (SFPUC) complied with the requirements in administering and monitoring the franchise agreement. The responses of PG&E, SFPUC, and the Controller's Budget and Analysis Division are attached to this report.

CSA and SEC appreciate the assistance and cooperation of PG&E, SFPUC, and Controller's Budget and Analysis Division staff during the audit. For questions about the report, please contact me at [mark.p.delarosa@sfgov.org](mailto:mark.p.delarosa@sfgov.org) or 415-554-5393 or CSA at 415-554-7469.

Respectfully,

Mark de la Rosa  
Director of Audits

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



Board of Supervisors:

Pacific Gas and Electric Company Properly Paid Its  
Gas and Electric Franchise Fees for 2019 and 2020

November 2022



# EXECUTIVE SUMMARY

---

## **Purpose of the Audit**

As required by the San Francisco Administrative Code, Chapter 11 – *Franchises*, the Office of the Controller (Controller) is required to assess (1) whether Pacific Gas & Electric Company (PG&E) complied with the reporting requirements and payment obligations contained in the chapter and in San Francisco Gas Franchise Fee Ordinance 413 and Electric Franchise Fee Ordinance 414 and (2) whether City and County of San Francisco (City) departments complied with the relevant requirements for administering and monitoring the Gas and Electric Franchise Ordinances.

## **Highlights**

The San Francisco Board of Supervisors may grant a franchise by ordinance to another entity to construct, install, and/or operate facilities in public rights-of-way within the City.

In 1939, PG&E was granted gas and electric franchises authorizing it to use City streets to transmit, distribute, and supply electricity and gas. In consideration for the franchise, PG&E must annually submit statements of gross receipts and gas and electric franchise fee payments to the City.

The Controller's Budget and Analysis Division (Division) is responsible for receiving and reviewing the statements and payments, while the San Francisco Public Utilities Commission (SFPUC) is responsible for administering and reporting on non-financial aspects of the franchise.

The audit found that PG&E complied with its obligations under the gas and electric franchise ordinances and the relevant provisions of the San Francisco Administrative Code, and that the SFPUC and the Division also fulfilled their obligations in administering and monitoring the franchise.

# INTRODUCTION

---

## **Audit Authority**

The Office of the Controller (Controller) is required under the San Francisco Administrative Code (Administrative Code), Chapter 11, Section 11.44(a) to file a report no less than every two years with the Board of Supervisors analyzing whether each franchisee is complying with the reporting and payment obligations in the chapter and the relevant franchise ordinance.

The City and County of San Francisco (City) also has the right under the Administrative Code, Chapter 11, Section 11.38 to access the books and records of a franchisee to monitor compliance with the chapter, the franchise ordinance, or other applicable law.

Further, the San Francisco Charter provides the Controller's City Services Auditor Division (CSA) with broad authority to conduct audits. Sjoberg Evashenk Consulting, Inc. (SEC) conducted this audit on behalf of CSA under these authorities.

## **Background**

In 1939, the San Francisco Board of Supervisors granted Pacific Gas and Electric Company (PG&E) and its successors two franchises to use City streets to transmit, distribute, and supply electricity and gas. In consideration for the two franchises, PG&E agreed to pay the City annually a percentage of its gross receipts from the sales of electricity and gas in the City.

The electricity and gas franchise ordinances require PG&E to remit to the City, by April 15 of each year, a total of 0.5 percent of PG&E's gross receipts on the sales of electricity and 1 percent of PG&E's gross receipts on the sales of gas. PG&E reports and remits gas and electric franchise fees to the City based on gross revenues that have been reduced by uncollectible accounts and interdepartmental sales. Uncollectible accounts are amounts billed to customers, but not received by PG&E. Interdepartmental sales are PG&E's costs to supply electricity and gas to other PG&E properties it owns in the City. Since PG&E is not compensated for internal use of gas and electricity, no gross receipts are generated by these interdepartmental sales.

PG&E collects electricity and gas surcharge fees pursuant to requirements in the California Public Utilities Code and remits those amounts to the City when it pays its franchise fees. PG&E collects the surcharge fee, which is a municipal surcharge for the use of public lands, from customers who purchase electricity and gas from a third party. The surcharge fee is to replace, but not to increase, franchise fees that would have been collected if not for changes in the regulatory environment.

PG&E also has an Interconnection Agreement with the City to transmit electricity generated by the Hetch Hetchy Project (Hetch Hetchy) inside and outside the City, distribute the electricity within the City, and sell supplemental power to the City. PG&E bills the City for Hetch Hetchy-related services, including transmission and distribution charges, supplemental power charges, demand charges, and other special charges. PG&E includes the transactions for services it provides to the City as part of PG&E's gross receipts from the sales of electricity reported to the City.

However, because the Interconnection Agreement expired in July 2015, the City and PG&E began using PG&E's Wholesale Distribution Tariff (WDT) agreement on July 1, 2015 for the City's Points of Delivery<sup>1</sup> for which the City also requires interconnection to PG&E's Distribution System. The new agreement was filed as "unexecuted" with the Federal Energy Regulatory Commission (FERC) because both parties could not agree on terms, rates, and conditions. FERC has accepted the agreement, though it remains unexecuted. PG&E continues to bill the City for services provided, and includes the revenue as part of its gross receipts.

The San Francisco Public Utilities Commission (SFPUC) is responsible for administering the Interconnection Agreement, WDT agreement, and franchise agreement with PG&E. Administration includes verifying the accuracy of PG&E's monthly billings to the City prior to payment.

The Administrative Code, Chapter 11, designates the SFPUC as the entity responsible for administering and reporting on the City's gas and electric franchises, except

---

<sup>1</sup> The physical locations where the City provides utility service delivery.

for certain financial aspects which are administered by the Office of the Controller. The Controller's Budget and Analysis Division (Division) is responsible for receiving PG&E's annual statement and collecting franchise fee payment.

## **Objectives and Scope**

The objective of the audit was to determine whether PG&E complied with the reporting requirements and payment obligations contained in Administrative Code Chapter 11 – *Franchises*, Gas Franchise Ordinance 413-39, and Electric Franchise Ordinance 414-39 (collectively referred to as the franchise agreements), as well as whether City departments complied with the relevant requirements for administering and monitoring the franchise for the audit period of calendar years 2019 and 2020.

Specifically, the audit determined whether:

1. PG&E correctly reported all revenues from the sale of electric and gas sales within City limits, including Hetch Hetchy, under the terms of San Francisco Electric Franchise Ordinance 414-39 and Gas Franchise Ordinance 413-39;
2. PG&E properly calculated and supported any adjustments from gross receipts;
3. PG&E correctly calculated and paid the City the proper franchise fees under the terms and deadlines specified in the franchise agreements; and
4. The SFPUC and the Division complied with applicable requirements in administering and monitoring the franchise agreements such as the San Francisco City Charter of 1996 and Chapter 11 of the Administrative Code.

## **Methodology**

To conduct the audit, the audit team reviewed the applicable provisions of Chapter 11 of the Administrative Code and the franchise agreement as well as conducted interviews of PG&E, SFPUC, and Division management and staff.

Additionally, to understand the environment, the audit team reviewed the applicable provisions of the franchise ordinances and tested, on a sample basis, selected PG&E revenue components with amounts that materially impact the franchise fees payable to the City.

To determine whether PG&E correctly reported its annual gross receipts, the audit team:

- Compared the amounts PG&E reported to the City to the amounts PG&E recorded in its monthly summary reports, financial systems, and monthly detailed reports, including, but not limited to, underlying reports of gas and electric sales from its customer billing system, uncollectable accounts, and revenue derived from natural gas vehicle sales, Hetch Hetchy Wheeling, and Hetch Hetchy streetlights.
- Compared PG&E's system-wide uncollectable rate to the uncollectable rate for the City to determine whether a large variance between the rates existed.
- Reviewed the reasonableness of PG&E's collection and write-off processes.
- Analyzed historical franchise fees and surcharges over a five-year period to identify variances and reasons for any variances identified.
- Reviewed the reasonableness of electricity and gas surcharge fees collected by PG&E.
- Tested a sample of PG&E Customer Invoices from several gas and electric rate categories to ensure amounts were included in total revenue receipts.
- Assessed PG&E's internal controls over franchise requirements and systems used to calculate franchise fees.
- Performed high level tests of the completeness of PG&E's customer data set.
- Verified PG&E's internal reconciliation between its financial system and customer billing system.

The audit team's review of the Hetch Hetchy invoices consisted of verifying the amounts reported by PG&E to supporting monthly billing reports. The audit team did not test the accuracy of the detailed billings to the City because SFPUC staff is responsible for reviewing the billings to ensure they are accurate before paying PG&E; however, the audit team compared actual invoices to monthly system billing reports.

To assess whether PG&E correctly calculated and paid the City the proper franchise fee under the terms and deadlines specified in the franchise agreement, the audit team reviewed Division date stamps on PG&E's annual statements of gross receipts and franchise fee payments; confirmed that the statements of gross receipts were duly verified (i.e., signed and dated); and checked each calculation in PG&E's computation of its franchise fee to ensure mathematical accuracy.

To evaluate SFPUC's and Division's compliance with all applicable requirements and practices in administering and monitoring the franchise agreement, the audit team reviewed the most recent compliance report that SFPUC submitted to the Board of Supervisors and the tools used by the Division to track and review franchise fee reports and payments.

**Statement of Auditing Standards**

We conducted this performance audit in accordance with generally accepted government auditing standards. Those standards require that we plan and perform the audit to obtain sufficient, appropriate evidence to provide a reasonable basis for our findings and conclusions based on our audit objectives. We believe that the evidence obtained provides a reasonable basis for our findings and conclusions based on our audit objectives.

# AUDIT RESULTS

## Summary

For the period of January 1, 2019, through December 31, 2020, PG&E accurately reported its gas and electric gross receipts subject to the franchise fees according to the terms and deadlines specified in the franchise agreements.

Both the Controller's Budget and Analysis Division and SFPUC complied with their requirements for administering and monitoring the franchise agreements.

## PG&E Met Deadlines for Submitting Statements and Paying Franchise Fees

For the period January 1, 2019 through December 31, 2020, PG&E accurately reported \$1,745,261,923 in total gross electricity and gas sales receipts to the City by the due dates as stipulated by the franchise agreement. As shown in Exhibit 1 below, PG&E also correctly calculated and paid \$11,279,077 in franchise fees by the annual April 15<sup>th</sup> deadline specified in the franchise agreements. PG&E also correctly collected and remitted to the City electricity and gas surcharge fees of \$4,306,043 for the period under review.

### EXHIBIT 1: Gross Receipts Reported and Franchise Fees and Surcharge Fees Paid January 1, 2019, Through December 31, 2020

Year	Type	Gross Receipts <sup>1</sup>	Franchise Fees <sup>2</sup>	Surcharge Fees <sup>3</sup>	Over/(Under) Paid
<u>2019</u>	Electricity	\$644,896,260	\$3,224,481	\$1,972,547	\$0
	Gas	\$253,539,403	\$2,535,394	\$132,807	\$0
	<i>Subtotal</i>	<i>\$898,435,663</i>	<i>\$5,759,875</i>	<i>\$2,105,354</i>	<i>\$0</i>
<u>2020</u>	Electricity	\$589,812,057	\$2,949,060	\$2,099,937	\$0
	Gas	\$257,014,203	\$2,570,142	\$100,752	\$0
	<i>Subtotal</i>	<i>\$846,826,260</i>	<i>\$5,519,202</i>	<i>\$2,200,689</i>	<i>\$0</i>
<b>Total</b>		<b>\$1,745,261,923</b>	<b>\$11,279,077</b>	<b>\$4,306,043</b>	<b>\$0</b>

Notes:

<sup>1</sup> Gross receipts reported by PG&E are net of uncollectable accounts, interdepartmental sales, and reflect updated customer information adjustments.

<sup>2</sup> Franchise fee rates are 0.5 percent of electricity receipts and 1 percent of gas receipts.

<sup>3</sup> PG&E billed and collected electricity and gas franchise surcharge fees based on the formula specified in state law from its customers who purchased electricity and gas from a third party.

Source: PG&E Certification of Gross Receipts

## SFPUC Issued Its Statutorily Required

SFPUC is required by the Administrative Code, Chapter 11, Article 5, Section 11.44(b), to file a report with the Board of



**Franchise  
Compliance Report**

Supervisors, no less than every two years, analyzing whether each franchise grantee is complying with all provisions of the chapter and its franchise, except for those addressed by the Controller’s Report.<sup>2</sup> SFPUC issued a compliance report to the Board of Supervisors dated August 26, 2022. In its compliance report, SFPUC indicated that no formal complaints were filed and no new concerns raised by the City that PG&E was not meeting its obligations under Section 7 of its franchise agreements during January 1, 2019 to December 31, 2020.<sup>3</sup>

**The Division  
Generally Fulfilled Its  
Administrative  
Requirements**

The Division generally fulfilled its administrative requirements and generally followed its internal procedures with some minor adjustments as a result of the unprecedented global pandemic outbreak that began in early 2020 and continued into 2021, referred to as the coronavirus (COVID-19) pandemic, and California’s governor issued Executive Order N-33-20 2020, that included requirements for non-essential workers to stay home due to the pandemic, referred to as the Shelter-in-Place Order.

The Division is responsible for ensuring PG&E complies with the following agreement obligations:

- Franchise fee is correctly calculated;
- Franchise fee payment submitted by due date; and
- Annual statement submitted by due date and duly verified.

For the 2019 and 2020 statements and fee payments, the Division generally adhered to its written process for reviewing the annual statements and payments. Specifically, the Division reviewed franchise fee statements and payments by continuing to use a spreadsheet to track key dates and payments, completed data analyses to identify variances greater than 10 percent between expected franchise fee and surcharge revenue receipts and actual revenue receipts, and conducted follow-up with PG&E where variances were identified. Additionally, the Division added additional tracking fields to its spreadsheet to document its review of statements and

---

<sup>2</sup> Controller’s Report refers to the report requirement under the Administrative Code, Chapter 11, Article 5, Section 11.44(a), analyzing whether each person owing a franchise fee is complying with the audit, reporting requirements, and payment obligations contained in the Chapter.

<sup>3</sup> Section 7 of the gas and electric franchise agreements requires that the franchise grantee pay the City on demand the cost of all repairs to public property made necessary by the grantee’s operations and remove or relocate any facilities installed, used, and maintained under the franchise, without expense to the City.

payments. However, because no staff were physically present, the Division deviated from its written procedures and did not date stamp the physical copies of the statements sent by PG&E as they also received electronic copies of the statements that were used for the Division's internal review—a reasonable deviation in light of the COVID-19 pandemic and ensuing Shelter-in-Place order.

**The Division  
Implemented Prior  
Audit  
Recommendations**

The prior audit of PG&E gas and electric franchise fees and surcharges, for the period of January 1, 2017 through December 31, 2018, identified three recommendations for corrective action to be taken by the Controller's Budget and Analysis Division. Specifically, auditors recommended that the Controller's Budget and Analysis Division should:

1. Bill and collect from PG&E for the underpayment of \$3,283 in electric franchise fees owed to the City.
2. Formalize and document its policies and procedures to ensure consistent procedures are followed each year, including verifying the accuracy of the franchise fee due calculation.
3. Update its variance analysis review of franchise fees and surcharges to include an assessment of actual receipts against multi-year trends to better identify any unusual fluctuations.

All recommendations were implemented by the Division at the time of this audit.

# ATTACHMENT A: DEPARTMENTS' RESPONSES

San Francisco Public Utilities Commission



525 Golden Gate Avenue, 13th Floor  
San Francisco, CA 94102  
T 415.554.3155  
F 415.554.3161  
TTY 415.554.3488

November 4, 2022

Mark de la Rosa  
Director of Audits  
City Hall, Room 476  
1 Dr. Carlton B. Goodlett Place  
San Francisco, CA 94102

Subject: Pacific Gas and Electric Company Properly Paid Its Franchise Fees and Surcharges for 2019 and 2020

Dear Mr. Mark delaRosa,

Thank you for providing us the opportunity to review the audit report, *Pacific Gas and Electronic Company Properly Paid Its Franchise Fees and Surcharges for 2019 and 2020*, prepared by the Controller's Office City Services Auditor.

We appreciate the time your staff dedicated to this audit and are satisfied that there are no findings.

If there are any questions or additional information is needed, please do not hesitate to contact me at 415-554-1600.

Sincerely,

A handwritten signature in blue ink that reads "Dh J. Herrera".

Dennis J. Herrera  
General Manager

**London N. Breed**  
Mayor

**Newsha Ajami**  
President

**Sophie Maxwell**  
Vice President

**Tim Paulson**  
Commissioner

**Tony Rivera**  
Commissioner

**Kate Stacy**  
Commissioner

**Dennis J. Herrera**  
General Manager

**OUR MISSION:** To provide our customers with high-quality, efficient and reliable water, power and sewer services in a manner that values environmental and community interests and sustains the resources entrusted to our care.



Office of the Controller



**OFFICE OF THE CONTROLLER**  
CITY AND COUNTY OF SAN FRANCISCO

Ben Rosenfield  
Controller

Todd Rydstrom  
Deputy Controller

November 3, 2022

Mr. Mark de la Rosa  
Director of Audits  
City Hall, Room 476  
1 Dr. Carlton B. Goodlett Place  
San Francisco, CA 94102

RE: Pacific Gas and Electric Company Franchise Fees and Surcharges for 2019 and 2020

Dear Mr. de la Rosa,

Thank you for the opportunity to review the audit of franchise fees and surcharges remitted to the City by Pacific Gas and Electric Company for 2019 and 2020. We agree with the findings and do not note any errors or omissions.

Sincerely,

*Michelle Allersma*

Michelle Allersma  
Director, Budget & Analysis Division

CITY HALL • 1 DR. CARLTON B. GOODLETT PLACE • ROOM 316 • SAN FRANCISCO, CA 94102-4694  
PHONE 415-554-7500 • FAX 415-554-7466

# ATTACHMENT B: PG&E'S RESPONSE

---



Customer Care & Enablement  
Revenue & Statistics  
77 Beale Street  
San Francisco, CA 94105

November 10, 2022

Mark de la Rosa  
Director of Audits  
1 Dr. Carlton B. Goodlett Place, Room 316  
San Francisco, CA 94102-4694

RE: Response to the Audit Report of franchise fees and franchise fee surcharges for 2019 and 2020

Dear Mark de la Rosa,

Thank you for providing Pacific Gas and Electric Company (PG&E) with an opportunity to comment on your draft report on the audit of PG&E's franchise fees and surcharges for 2019 and 2020. We find the report comprehensive and acceptable in form. We are pleased that you have concluded that PG&E has properly reported and calculated the 2019 and 2020 franchise fees and surcharges.

We appreciate working with the professionals at Sjoberg Evashenk Consulting in performing this audit.

Sincerely,

A handwritten signature in cursive script, appearing to read 'Cecilia Guiman'.

Cecilia Guiman  
Pacific Gas and Electric Company



**SAN FRANCISCO PUBLIC UTILITIES COMMISSION  
CITY AND COUNTY OF SAN FRANCISCO**

**AGREED-UPON PROCEDURES REPORT  
FOR SETTLEMENT QUALITY METER DATA PROCESSING**

**2020 - 2022 TRADE YEARS**

**SAN FRANCISCO PUBLIC UTILITIES COMMISSION  
CITY AND COUNTY OF SAN FRANCISCO**

Contents

2020 - 2022 Trade Years

	<b>Page</b>
<b>Independent Accountant’s Report on Applying Agreed-Upon Procedures</b>	1
<b>Agreed-Upon Procedures Report for Settlement Quality Meter Data Processing</b>	
Section I - Management’s Executive Summary	2-3
Section II - Summary of Findings	4
Section III - Independent Accountant’s Qualifications Summary	5
Section IV - Description of Controls at SFPUC, Procedures Performed, and Results of Procedures	6-18



## **INDEPENDENT ACCOUNTANT'S REPORT ON APPLYING AGREED-UPON PROCEDURES**

Daniel Heffernan  
Manager-Retail Services, Power Enterprise  
San Francisco Public Utilities Commission  
City and County of San Francisco

APX, Inc.  
San Jose, California

California Independent System Operator  
Folsom, California

We have performed the procedures enumerated in Section IV of this report, which were agreed to by the management of San Francisco Public Utilities Commission ("SFPUC"), APX, Inc. ("APX"), and the California Independent System Operator ("CAISO" or "ISO") (the specified parties), solely to assist SFPUC with respect to complying with the "Audit and Testing" requirements of Metering for Scheduling Coordinator Metered Entities as defined in CAISO Tariff section 10.3.10, for the period August 1, 2020 through July 31, 2022 ("Trade Years"). SFPUC's management is responsible for SFPUC's compliance with those requirements. The sufficiency of these procedures is solely the responsibility of the specified parties. Consequently, we make no representation regarding the sufficiency of the procedures detailed in Section IV, either for the purpose for which this report has been requested or for any other purpose.

The procedures and associated findings are presented in Section IV of this report.

We were engaged by APX, Inc. to perform this agreed-upon procedures engagement and conducted our engagement in accordance with attestation standards established by the American Institute of Certified Public Accountants. We were not engaged to and did not conduct an examination or review, the objective of which would be the expression of an opinion or conclusion, respectively, on SFPUC's compliance with the "Audit and Testing" requirements of Metering for Scheduling Coordinator Metered Entities as defined in CAISO Tariff section 10.3.10, for the period August 1, 2020 through July 31, 2022. Accordingly, we do not express such an opinion or conclusion. Had we performed additional procedures, other matters might have come to our attention that would have been reported to you.

We are required to be independent of SFPUC, APC, and CAISO and to meet our other ethical responsibilities, in accordance with the relevant ethical requirements related to our agreed-upon procedures engagement.

This report is intended solely for the information and use of SFPUC, APX and CAISO, and is not intended to be and should not be used by anyone other than these specified parties.

*Hutchinson and Bloodgood LLP*

Glendale, California  
October 17, 2022



# SAN FRANCISCO PUBLIC UTILITIES COMMISSION CITY AND COUNTY OF SAN FRANCISCO

Agreed-Upon Procedures Report for Settlement Quality Meter Data Processing

2020 - 2022 Trade Years

## Section I - Management's Executive Summary

### Background

The San Francisco Public Utilities Commission ("SFPUC") has engaged APX, Inc. ("APX") to provide Scheduling Coordinator services. APX is responsible for obtaining, processing, and submitting generation and load meter data to the California Independent System Operator ("CAISO") for settlement purposes. This data is comprised of interval generation and station load data, interval load data, usage load data, and calculated data for streetlights, traffic signals, and other non-metered load collected from various sources. SFPUC, as a certified Meter Data Management Agent ("MDMA"), self-provides this service by obtaining and processing the meter data and providing it to APX for submission to CAISO.

SFPUC's electric load is metered by a combination of interval load meters and monthly usage, Customer Information System ("CIS") meters. Over 97% of the total SFPUC load is recorded by approximately 229 interval load recorders, all of them currently read and reported by SFPUC, and 1,722 meters which are read and processed by Pacific Gas and Electric Company ("PG&E"; these are PG&E's "Smart Meters"), then provided daily to SFPUC in 15-minute or 60-minute intervals via flat file. Less than 1% of the total SFPUC load is measured by the CIS meters, which are owned by PG&E and read on a monthly cycle as part of PG&E's normal meter reading process. Of these services, ~52 have simple kilowatt hour ("kWh") or kWh-demand combined meters, and the other 2 have time-of-use ("TOU") meters that report reads by PG&E designated periods (on, partial, and off peak). SFPUC receives a daily CIS data feed containing the latest read information available from the PG&E systems. The remaining SFPUC load is "non-metered," and SFPUC has approximately 1673 service points that are metered based on elapsed usage (not including streetlight or traffic signal totals). Most of the non-metered load is calculated from inventories of devices attached to the Streetlight and Traffic Signal circuits (streetlights, traffic signals, bus shelters, etc.) with an additional 141 specific non-metered service points, for which PG&E has established an average monthly use value.

### Load Data Processing

CIS meter read data provided by PG&E is received into SFPUC's Meter Data Management System ("MDMS"), which exports the data into a file format consumable by Honeywell's EIServer MDM platform ("EIServer"), subjecting it to an automated Validating, Editing, and Estimating ("VEE") process. This is followed by manual staff review of any reads that failed validation. Reads from interval load meters are either read directly by EIServer, or, in the case of PG&E's "Smart Meters," are first imported into MDMS and then 1) transformed into a file format consumable by EIServer, 2) exported to EIServer, and 3) subjected to EIServer's VEE process. As described in the documentation provided, PG&E's "Smart Meters" are provided following PG&E's own VEE process, which follows CPUC guidelines, and are thus subjected to only a limited set of SFPUC validation rules compared to other interval data. Processed interval read data is exported from EIServer via CMEP file format and loaded into MDMS. Processed CIS meter read data is pulled directly from the EIServer database into MDMS, which then i) profiles the CIS metered usage, ii) calculates interval load for streetlights, traffic signals and other non-metered load, iii) aggregates both based on load distribution factors, iv) applies loss factors as specified in the PG&E Wholesale Distribution Tariff, FERC Electric Tariff Volume No. 4, v) consolidates the metered load by scheduling point and vi) creates 60-minute interval Operational Meter Analysis and Reporting ("OMAR") formatted files, which are

# **SAN FRANCISCO PUBLIC UTILITIES COMMISSION CITY AND COUNTY OF SAN FRANCISCO**

Agreed-Upon Procedures Report for Settlement Quality Meter Data Processing  
2020 - 2022 Trade Years

## **Section I - Management's Executive Summary (Continued)**

### **Load Data Processing (continued)**

submitted to APX for reporting to the CAISO. EIServer also reads and performs the VEE process on all interval meters that record generation and station load for the Hetch Hetchy Water and Power ("HHWP") hydro generation facilities. This data is aggregated by MDMS at 5-minute intervals and submitted to APX for reporting to the CAISO. SFPUC has an exclusive power purchase agreement for the Sunset photovoltaic generation plant located on SFPUC property; however, this is a CAISO metered facility and SFPUC is not required to submit generation data.

File transfer of metered data to APX is via a SFPUC FTP server. The files are loaded to one high availability server in San Francisco to ensure that APX will always be able to retrieve the files when required. In addition, the metered data files are prepared and exported over 3 consecutive days for each required submission; this ensures that metered data will be available for reporting to the CAISO even if SFPUC systems should be disabled for up to 48 hours. In the remote event that files fail posting, there are enough buffer days to manually send the files to APX.

### **Scope of Procedures**

The objective of the engagement was to perform an agreed-upon procedures engagement of SFPUC's procedures to comply with the CAISO requirements. This report includes the results of procedures performed by the independent accountant on the process controls at the Settlement Quality Meter Data Processing Level during the period of August 1, 2020 through July 31, 2022.

### **Summary of Results**

Our review of the Settlement Quality Meter Data Processing Level controls at SFPUC indicated that the process controls are adequate and functioning as documented.

**SAN FRANCISCO PUBLIC UTILITIES COMMISSION  
CITY AND COUNTY OF SAN FRANCISCO**

Agreed-Upon Procedures Report for Settlement Quality Meter Data Processing  
2020 - 2022 Trade Years

**Section II - Summary of Findings**

There was one finding noted for the period of August 1, 2020 through July 31, 2022. (See Section IV – Root Cause Analysis on Page 18).

**SAN FRANCISCO PUBLIC UTILITIES COMMISSION  
CITY AND COUNTY OF SAN FRANCISCO**

Agreed-Upon Procedures Report for Settlement Quality Meter Data Processing

2020 - 2022 Trade Years

**Section III - Independent Accountant's Qualifications Summary**

**Luba Kvitchko, CPA - Partner**

Ms. Kvitchko is a Partner at Hutchinson and Bloodgood LLP's Audit and Assurance Group. She has supervised this agreed-upon procedures engagement for SFPUC.

Ms. Kvitchko has over 18 years of experience in the field of public accounting. Her areas of expertise are in auditing, and review and evaluations of internal control engagements.

Since 1922, Hutchinson and Bloodgood LLP has been providing assurance, attestation, tax, consulting, and management advisory services to businesses located throughout California. Hutchinson and Bloodgood LLP has the qualifications and experience required to perform engagements of this nature.

**SAN FRANCISCO PUBLIC UTILITIES COMMISSION  
CITY AND COUNTY OF SAN FRANCISCO**

Agreed-Upon Procedures Report for Settlement Quality Meter Data Processing

2020 - 2022 Trade Years

**Section IV - Description of Controls at SFPUC, Procedures Performed, and Results of Procedures**

We randomly selected the following sample days from which to perform tests:

- October 11, 2020
- March 5, 2021
- July 25, 2022
- December 28, 2020
- September 16, 2021

**PROCESS CONTROLS**

No.	CAISO requirement	Description of controls	Procedures performed	Results
1	Verify documented procedures for meter data processing are up to date and are being followed.	<p>SFPUC has the following formally documented procedures which detail out the following:</p> <p><b>Monitoring Customer Information System ("CIS") Meter Reads</b></p> <ol style="list-style-type: none"> <li>1. (Daily) Task Checklist</li> <li>2. Retrieving and uploading PG&amp;E Daily Meter Read Files</li> <li>3. Reviewing Suspect Usage Meter Reads in EIServer (VEE)               <ol style="list-style-type: none"> <li>a. Researching and confirming validation failures</li> <li>b. Modifying and Estimating - scenarios and methods</li> </ol> </li> <li>4. Prepping VEE reads for export to MDMS</li> <li>5. Reviewing final data imported to MDMS</li> </ol>	<p>We read the documented meter processing procedures found in the following documents ("Procedural Documents"):</p> <ul style="list-style-type: none"> <li>- SFPUC – CIS Meter Read Processing document</li> <li>- EIServer Procedures for Interval Meter Data</li> </ul> <p>Procedural Documents describe processes and list procedures that are being performed in connection with the meter data processing.</p> <p>We interviewed the Utility Specialist and Manager of the Energy Data Systems (EDS) group to ascertain that meter data processing procedures listed in the Procedural Documents are being followed.</p> <p>We observed performance of the meter data processing, and ascertained that procedures are performed as documented.</p>	<p>Meter data processing procedures and processes are documented.</p> <p>Meter data processing procedures are being followed as documented.</p>

**SAN FRANCISCO PUBLIC UTILITIES COMMISSION  
CITY AND COUNTY OF SAN FRANCISCO**

Agreed-Upon Procedures Report for Settlement Quality Meter Data Processing

2020 - 2022 Trade Years

**Section IV - Description of Controls at SFPUC, Procedures Performed, and Results of Procedures (Continued)**

**PROCESS CONTROLS**

No	CAISO requirement	Description of controls	Procedures performed	Results
1 (cont)	Verify documented procedures for meter data processing are up to date and are being followed.	<p><b>SFPUC–CIS Meter Read Processing in MDMS</b></p> <ol style="list-style-type: none"> <li>1. Overview               <ol style="list-style-type: none"> <li>a. Background---CIS Meters</li> </ol> </li> <li>2. CIS Meter Reads and VEE               <ol style="list-style-type: none"> <li>b. Identification of New Meter Reads</li> <li>c. System VEE Processing (MDMS provides raw reads received from PG&amp;E to EIServer, wherein automated and staff VEE is conducted. Final VEE reads are imported back to MDMS)</li> <li>d. SFPUC Staff VEE Review</li> </ol> </li> </ol> <p><b>EIServer Procedures for Interval Meter Data</b></p> <ol style="list-style-type: none"> <li>1. Daily Checklist</li> <li>2. Device Communications Review – re-interrogation and/or troubleshooting</li> <li>3. Confirming success of Daily Smart Meter Data Imports</li> <li>4. Reviewing intervals failing validation rules               <ol style="list-style-type: none"> <li>a. Researching and Confirming Validation Failures</li> <li>b. Editing and Estimating Missing Reads</li> </ol> </li> <li>5. Importing meter data – eMons, hhf files and mdef files</li> <li>6. Confirming CMEP Export success               <ol style="list-style-type: none"> <li>a. Manually exporting/re-exporting CMEP data</li> </ol> </li> <li>7. Logging communication issues and VEE</li> </ol>		

**SAN FRANCISCO PUBLIC UTILITIES COMMISSION  
CITY AND COUNTY OF SAN FRANCISCO**

Agreed-Upon Procedures Report for Settlement Quality Meter Data Processing

2020 - 2022 Trade Years

**Section IV - Description of Controls at SFPUC, Procedures Performed, and Results of Procedures (Continued)**

**PROCESS CONTROLS**

No.	CAISO requirement	Description of controls	Procedures performed	Results
1 (cont)	Verify documented procedures for meter data processing are up to date and are being followed.	<p><b>EIServer Procedures for Interval Meter Data (continued)</b></p> <p>8. Weekly Processes 9. Monthly Processes 10. Ad-hoc Processes</p> <p><b>High-Low Check Procedures</b></p> <p>This check is part of the monthly billing determinant process conducted by MDMS, and is more broadly monitored on a daily basis in a report comparing daily OMAR submittals, as described in Interval Meter/EIServer Register VEE Documentation for Monthly Processes and Procedures.</p>		

**SAN FRANCISCO PUBLIC UTILITIES COMMISSION  
CITY AND COUNTY OF SAN FRANCISCO**

Agreed-Upon Procedures Report for Settlement Quality Meter Data Processing

2020 - 2022 Trade Years

**Section IV - Description of Controls at SFPUC, Procedures Performed, and Results of Procedures (Continued)**

**PROCESS CONTROLS**

No.	CAISO requirement	Description of controls	Procedures performed	Results
2	Verify load profiles, if applicable, are applied properly. Also verify and document the process for handling missing or incomplete load profiles.	<p><b>SFPUC – CIS Meter Read Processing</b></p> <p>1. Reporting CIS Metered Load</p> <ul style="list-style-type: none"> <li>• Profile Factors</li> <li>• Profiling Logic – KWH Meter Read</li> <li>• Profiling Logic – TOU KWH Meter Read</li> <li>• Aggregation of Profiled Meter Data</li> </ul> <p>For reporting CIS metered load to the Meter Data Management Agent (“MDMA”), SFPUC applies a profile to each meter’s reported usage, allocating the metered monthly usage to hour intervals based on the profile of the aggregate interval load data.</p> <p><b>EIServer Procedures for periodic read data</b> The processes of applying loss factors are detailed in ISO Meter Data Submission Overview document.</p>	<p>We read load profiling documentation as included in the SFPUC - CIS Meter Read Processing document. We ascertained that the documentation addresses profile factors, profiling logic, as well as aggregation of profiled meter data.</p> <p>We observed performance of the procedures, and ascertained that procedures are performed as documented.</p> <p>We observed that profiles were automatically applied to each meter’s reported usage.</p> <p>We ascertained that the procedures are being followed by interviewing the Utility Specialists and manager of EDS group.</p>	<p>No exceptions were noted.</p> <p>Load profiles were applied properly.</p>



**SAN FRANCISCO PUBLIC UTILITIES COMMISSION  
CITY AND COUNTY OF SAN FRANCISCO**

Agreed-Upon Procedures Report for Settlement Quality Meter Data Processing

2020 - 2022 Trade Years

**Section IV - Description of Controls at SFPUC, Procedures Performed, and Results of Procedures (Continued)**

**PROCESS CONTROLS**

No.	CAISO requirement	Description of controls	Procedures performed	Results
3	Verify Distribution Loss Factors (“DLF”) are applied properly. Also verify and document the process for handling missing or incomplete DLFs.	<p>All interval reads, calculated loads, and profiled usage are associated with a PG&amp;E grid code as follows:</p> <ul style="list-style-type: none"> <li>• P – Primary</li> <li>• S – Secondary</li> <li>• T – Transmission</li> </ul> <p>The loss factors are specified in the Wholesale Distribution Tariffs. Transmission-level facilities (including the Airport) have no distribution loss factors.</p> <p>During the data preparation process for submitting metered data, the DLF value is applied to the metered load. In other words, metered load multiplied by DLF results in reportable load. Please see the ISO Meter Data Submission Overview for a description of how DLFs are applied. There are no instances of missing or incomplete DLFs.</p>	<p>We identified and documented the procedures used to apply the DLF value to the metered load.</p> <p>We ascertained that these procedures are being followed by interviewing the Utility Specialists and manager of EDS group. We observed that the procedures are applied as documented.</p>	<p>No exceptions were noted.</p> <p>DLFs were applied properly.</p>

**SAN FRANCISCO PUBLIC UTILITIES COMMISSION  
CITY AND COUNTY OF SAN FRANCISCO**

Agreed-Upon Procedures Report for Settlement Quality Meter Data Processing

2020 - 2022 Trade Years

**Section IV - Description of Controls at SFPUC, Procedures Performed, and Results of Procedures (Continued)**

**PROCESS CONTROLS**

No.	CAISO requirement	Description of controls	Procedures performed	Results
4	Verify that estimation performed is controlled and documented.	<p><b>EIServer Procedures for interval meter data</b></p> <ol style="list-style-type: none"> <li>1. Researching and Resolving Validation Errors               <ol style="list-style-type: none"> <li>a. Reviewing Channels with Suspect Reads in "Validation Overview"</li> <li>b. Validation Errors</li> </ol> </li> <li>2. Editing/Estimation               <ol style="list-style-type: none"> <li>c. Data Estimation in EIServer                   <ol style="list-style-type: none"> <li>i. Using SFPUC Estimation task</li> <li>ii. Using Substitution method</li> </ol> </li> <li>d. Data Interpolation</li> <li>e. Copy &amp; paste data from historical actuals</li> <li>f. Zero fill</li> </ol> </li> </ol> <p><b>EIServer Register VEE</b></p> <ol style="list-style-type: none"> <li>1. Review (suspect reads) and modifying/editing</li> <li>2. Review and Estimate               <ol style="list-style-type: none"> <li>a. Demand methods</li> <li>b. Usage Methods</li> <li>c. Running the system estimator and reviewing results</li> <li>d. Using the VEE Calculator Excel File</li> </ol> </li> </ol>	<p>We identified and documented the procedures used to estimate meter data, as described in the following documentation:</p> <ul style="list-style-type: none"> <li>- EIServer Procedures for interval meter data</li> <li>- EIServer Register VEE</li> </ul> <p>We ascertained that these procedures are being followed by interviewing the Utility Specialists and manager of EDS group. We observed that the procedures are being performed as documented.</p> <p>The sample data was tested to ascertain that estimation performed is controlled and documented.</p>	<p>No exceptions were noted.</p> <p>The estimation process was functioning as required.</p>

**SAN FRANCISCO PUBLIC UTILITIES COMMISSION  
CITY AND COUNTY OF SAN FRANCISCO**

Agreed-Upon Procedures Report for Settlement Quality Meter Data Processing

2020 - 2022 Trade Years

**Section IV - Description of Controls at SFPUC, Procedures Performed, and Results of Procedures (Continued)**

**PROCESS CONTROLS**

No.	CAISO requirement	Description of controls	Procedures performed	Results
4 (cont)	Verify that estimation performed is controlled and documented.	<p><b>Interval Meter Data Estimation in MDMS (where actuals have not been received by EIServer)</b></p> <p>The MDMS prepares estimated interval reads for all interval load meters based on a 3-day average interval value for 12-month prior reads for comparable days. For work days, the average uses the work day 365 days prior (shifts if the day happens to be a holiday), the year-ago prior work day, and the year-ago next work day. For Saturday, it uses the year-ago Saturday, the year-ago prior Saturday, and the year-ago next Saturday. For Sunday or a holiday, it uses the year-ago Sunday or holiday, the year-ago prior Sunday, and the year-ago next Sunday or holiday.</p> <p>Estimated reads are developed prior to the beginning of each month for the full month. Thereafter, as reported read data are processed, any missing intervals for unreported meters are populated with the estimated interval values for the meter, and identified as missing (VEE code 'M'). If no estimated interval reads are available for a meter, the interval values are set to zero and identified as missing.</p>		No exceptions were noted.

**SAN FRANCISCO PUBLIC UTILITIES COMMISSION  
CITY AND COUNTY OF SAN FRANCISCO**

Agreed-Upon Procedures Report for Settlement Quality Meter Data Processing

2020 - 2022 Trade Years

**Section IV - Description of Controls at SFPUC, Procedures Performed, and Results of Procedures (Continued)**

**PROCESS CONTROLS**

No.	CAISO requirement	Description of controls	Procedures performed	Results
4 (cont)	Verify that estimation performed is controlled and documented.	<p><b>Interval Meter Data Estimation in MDMS (where actuals have not been received by EIServer) (continued)</b></p> <p>The MDMS interval estimated values are interim values pending final VEE by EIServer. When EIServer reports out actual reads, or at the point they determine that the read data are unrecoverable and report estimated reads, the EIServer reads replace the MDMS entries.</p>		

**SAN FRANCISCO PUBLIC UTILITIES COMMISSION  
CITY AND COUNTY OF SAN FRANCISCO**

Agreed-Upon Procedures Report for Settlement Quality Meter Data Processing

2020 - 2022 Trade Years

**Section IV - Description of Controls at SFPUC, Procedures Performed, and Results of Procedures (Continued)**

**PROCESS CONTROLS**

No.	CAISO requirement	Description of controls	Procedures performed	Results
5	Verify that any SQMD submitted after T+52B days is documented and controlled to assure accurate and correct meter data is submitted to APX prior to resubmittal deadline.	<p>SFPUC has no automatic re-submission process. In any case where SFPUC determines that previously reported read data was incorrect (for example, PG&amp;E determines that they programmed a meter incorrectly, and it should have been reporting 10 times the load), after the corrected reads are posted to the MDMS, SFPUC would (1) add SC export schedule entries for the dates that need to be resubmitted, which would trigger new exports for the dates, and (2) notify APX that new file(s) had been generated for re-submission.</p> <p>See ISO Meter Data Submission Overview for a description of how submissions of SQMD are performed.</p>	<p>We ascertained that these procedures are documented.</p> <p>Per our inquiry with the manager of EDS group, there were no late data submission instances (submission after T+52B days) during the 2020-2022 trade years, other than late meter data for three trade dates between January 1, 2021 and January 3, 2021.</p>	<p>Overall, the submission process functioned as described.</p> <p>See Page 18 for Finding.</p>

**SAN FRANCISCO PUBLIC UTILITIES COMMISSION  
CITY AND COUNTY OF SAN FRANCISCO**

Agreed-Upon Procedures Report for Settlement Quality Meter Data Processing

2020 - 2022 Trade Years

**Section IV - Description of Controls at SFPUC, Procedures Performed, and Results of Procedures (Continued)**

**PROCESS CONTROLS**

No.	CAISO requirement	Description of controls	Procedures performed	Results
6	Verify that contingency plans are in place to ensure that if systems go down, data can still be submitted to APX in a timely manner.	<p><b>EIServer Technical Support Document</b></p> <ol style="list-style-type: none"> <li>1. Energy Data Systems Support</li> <li>2. Honeywell EIServer Support Information Technology Services Support               <ol style="list-style-type: none"> <li>a. Backup</li> <li>b. Server Updates</li> <li>c. IT Staff</li> </ol> </li> <li>3. Software</li> </ol> <p><b>ISO Meter Data Submission Overview</b></p> <ol style="list-style-type: none"> <li>1. Process for Metered Data Submittal to the ISO</li> </ol>	<p>We interviewed the Utility Specialists and manager of EDS group responsible for system contingency plans. Per our inquiries, procedures are in place to ensure regular backup, as well as safeguarding the data.</p> <p>Per inquiry with the manager of EDS, there were no significant system downtimes during the 2020-2022.</p> <p>We identified and documented the contingency procedures used to determine that the meter data is submitted to APX timely.</p>	<p>No exceptions were noted.</p> <p>Contingency plans and data recovery procedures were in place to ensure that data can be submitted to APX in a timely manner.</p>

**SAN FRANCISCO PUBLIC UTILITIES COMMISSION  
CITY AND COUNTY OF SAN FRANCISCO**

Agreed-Upon Procedures Report for Settlement Quality Meter Data Processing

2020 - 2022 Trade Years

**Section IV - Description of Controls at SFPUC, Procedures Performed, and Results of Procedures (Continued)**

**VERIFICATION TESTING**

No	CAISO requirement	Description of controls	Procedures performed	Results
1	When reporting SQMD during Daylight Savings Time (“DST”), verify the data submitted to APX is in GMT and is correctly converted from local time.	<p>The MDMS does not store any interval read data as local time. All interval read data sourced into the MDMS is assigned interval IDs during load processing; the interval IDs are unique keys to time dimension tables, which contain the corresponding times for UTC, PST, and PDT.</p> <p>All reads from EIServer are exported in CMEP interval data format, where the end time for the first interval of each row is in UTC; the MDMS attaches the corresponding interval ID for each imported UTC time. CIS meter reads are in local time, but when profiled to intervals, the interval time is identified by the interval ID. The only point an error could be introduced would be if a meter was read during the duplicate hour in the 2 a.m. fall back period in November, since there is no indication in the data source from PG&amp;E whether the reported date/time is PST or PDT. However, this does not happen since the PG&amp;E reads are taken during normal business hours. Even if it did occur, the maximum error would be 1 hour over an approximately 30 day period. Since most systems use only read dates and not times, SFPUC still has a greater degree of accuracy.</p> <p>The use of time dimension interval IDs facilitates all data preparation and reporting, since data can be selected by trade date (based on local time) or metered data submission date (based on PST time).</p>	<p>We identified and documented procedures that are in place to ensure that all data is submitted to APX in GMT (based on PST conversion).</p> <p>The sample data was tested to verify that data submitted to APX was in GMT (based on PST conversion).</p>	<p>No exceptions were noted.</p> <p>No exceptions were noted.</p> <p>Sample testing results indicate that all data submitted to APX was in GMT (based on PST conversion).</p>

**SAN FRANCISCO PUBLIC UTILITIES COMMISSION  
CITY AND COUNTY OF SAN FRANCISCO**

Agreed-Upon Procedures Report for Settlement Quality Meter Data Processing

2020 - 2022 Trade Years

**Section IV - Description of Controls at SFPUC, Procedures Performed, and Results of Procedures (Continued)**

**VERIFICATION TESTING**

No.	CAISO requirement	Description of controls	Procedures performed	Results
2	<p>Verify system testing is completed prior to implementation of any meter data processing system change or modification. Validate appropriate documentation supporting the change has been created and that a comparative review was conducted prior to and after the system changes occurred.</p>	<p>For any meter data processing system change or modification, SFPUC is required to test the system before and after implementation to verify that MDMS behaves in the new environment in the same manner as it did in the current production environment. Proper proof of testing is required by CAISO for all software changes that affect SQM data processing.</p>	<p>We interviewed the Utility Specialists and manager of EDS group and noted that the procedures are in place for system testing prior to implementation of data processing system changes or modifications.</p> <p>There were no major meter data processing system changes or major modifications during 2020-2022.</p> <p>However, per inquiries with manager of EDS group, to comply with CAISO requirement related to submission of Excess Behind the Meter Production (EBTMP), SFPUC moved from OMAR data transmission format, which does not support EBTMP data, to submission of Load and Generation data in MRI-S format. This requirement became effective starting January 1, 2021.</p> <p>To respond to CAISO specifications, SFPUC modified the computer code for the submission format and added the EBTMP data calculation. Per further inquiries with manager of EDS group, code changes were developed in the test environment and tested prior to the implementation.</p> <p>We ascertained that:</p> <ul style="list-style-type: none"> <li>- test results showing the comparison between new and old formats were documented,</li> <li>- both the evidence of testing as well as review of the test results were documented, and</li> <li>- only after successful testing in test environment, code changes went live.</li> </ul>	<p>No exceptions were noted.</p> <p>Processes were adequately documented and procedures were in place to test system changes or modifications prior to implementation.</p>



**SAN FRANCISCO PUBLIC UTILITIES COMMISSION  
CITY AND COUNTY OF SAN FRANCISCO**

Agreed-Upon Procedures Report for Settlement Quality Meter Data Processing

2020 - 2022 Trade Years

**Section IV - Description of Controls at SFPUC, Procedures Performed, and Results of Procedures (Continued)**

**ROOT CAUSE ANALYSIS**

Summary of Results			
	Finding	Identification of the finding	Corrective actions
1	<p>Document the audit finding, how it was identified, the cause for the finding, what effects the finding had on meter data submitted to APX, and the corrective actions taken to prevent recurrence.</p> <p><b>Process Controls #5 -</b> SFPUC is required to submit accurate and timely actual SQMD per ISO Tariff Section 10.3.6.</p> <p>SFPUC was penalized under RoC ID LMD_887_CCSF Description of Penalty for Late Meter Data for Resource ID DLAP_PGAE_CCSF for three trade dates between January 1, 2021 and January 3, 2021.</p> <p>As part of the implementation of CAISO initiative EBTMP<sup>1</sup>, SFPUC and APX had been working since late 2020 on switching to sending EBTMP, and change to MRI-S format. For three trade dates as described above, while MRI-S load data was sent timely, the EBPTM portion of the data was not provided timely by SFPUC, and was not uploaded timely to CAISO by APX. The EBTMP data became available one day after the deadline. SFPUC was not alerted by APX that “zero” data was not uploaded to CAISO while the EBPTM data was not available.</p>	<p>This finding was determined as a result of inquiries and discussions with manager of EDS group regarding timeliness of data submission during 2020-2022.</p>	<p>APX has since built a process to alert their team and SFPUC if a meter data file is not received.</p>

<sup>1</sup> Values for EBTMP are extremely low and are typically zero.