City of Phoenix

Mission Statement

To improve the quality of life in Phoenix through efficient delivery of outstanding public services.

Office of Sustainability
Utility Billing

June 28, 2024

Report Highlights

Reconciliation

Overall, the City's utility monitoring system, EnergyCAP, reconciled with the City's utility billing invoices. We noted exceptions with APS data.

Account Monitoring

Monitoring controls can be strengthened to ensure that City departments are monitoring their accounts, as required by City policy.

Utility Rates

APS charged the City correctly, based on the published rate schedules for each account type. We identified exceptions with SRP charges.

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This report can be made available in alternate format upon request.

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Executive Summary

Purpose

Our purpose was to evaluate the effectiveness of new controls with the EnergyCAP system that was implemented by the Public Works Department (Public Works) and Office of Sustainability (Sustainability). Specifically, we wanted to determine:

- If the EnergyCAP system reconciled with the City's utility billing data.
- If electric utility companies were charging the correct rates to the City.
- If the City's utility invoices were accurately calculated.
- If City departments had procedures in place to monitor electric account activity, including inactive accounts.

Background

The City relies on external utility service providers to deliver electricity and gas to its buildings and other infrastructure areas requiring utility power. Currently, the City obtains these services through Arizona Public Service (APS), Salt River Project (SRP), and Southwest Gas.

Sustainability currently monitors the utility management system, EnergyCAP. This program was implemented as a method for departments to monitor their own energy consumption and costs. EnergyCAP provides a centralized resource for tracking the City's energy consumption and targeted reductions, and helps track utility costs for each facility.

In 2014, the City implemented *Administrative Regulation 3.97 – Utility Account Policies and Procedures* (A.R. 3.97) to ensure that departments have a process for monitoring utility accounts and invoices.

A prior audit from our department, *Office of Sustainability – Green/Renewable Energy* (1230006), found that the City had hundreds of active electric meters with no energy usage. The City continued to pay taxes and fees on these accounts despite requests from City personnel to close the accounts. The overpayment was later credited back to the City.

The scope of this audit focused on the electric utility accounts with APS and SRP. During the six-month review period in FY23, the City paid $28.5M for electric utility services.

Results in Brief

Overall, EnergyCAP data reconciled with Finance's SRP billing data. Controls can be strengthened to ensure that EnergyCAP reconciles with APS billing data maintained by Finance.

This audit included a review of EnergyCAP data to determine if the system data reconciled with the utility billings processed by Finance. All SRP transactions reconciled between both sources. We identified inconsistencies with APS data, that was attributed to a delay and challenges with obtaining current electric data.

City departments did not implement all the required procedures for monitoring utility account activity, as required by City A.R. 3.97.

We identified 16 departments with utility accounts and conducted a survey to identify the established monitoring controls. Of the 12 departments that responded to the survey, 10 departments had staff that performed at least one duty required of the department's utility liaison. At least two departments did not have staff to complete any of the utility monitoring duties required in City policy, and an additional four departments were missing part of the utility monitoring requirements.

15% of meters designated as "active" in EnergyCAP had no energy consumption, and all "inactive" meters were designated correctly.

We reconciled meters in EnergyCAP with billing data to determine if meters were correctly categorized as either "active" or "inactive" in the system. We identified 4,540 meters in EnergyCAP during the review period, including 3,836 active meters and 704 inactive meters. All "inactive" meters were correctly designated as inactive. We identified 573 of the "active" meters that had no energy consumption, some of which were invoiced to the City.

The City was billed correctly according to the rate plan for each APS invoice that we reviewed. We identified some exceptions with SRP invoices when compared to published rate plans.

In our sample of 24 APS transactions, we were able to reconcile all transactions, all of which were billed according to the correct rate plan, and the charges were calculated correctly. We sampled 22 SRP transactions and were able to reconcile eight transactions. The identified exceptions were provided to Sustainability for further review.

Department Responses to Recommendations

NOTE: This table will be completed after department responses are received. The completed table will appear in the final audit report.

Rec. #1.1: Implement controls to ensure that EnergyCAP's APS data is current and only includes the necessary data needed for EnergyCAP.	
Response: The Office of Sustainability will ensure the energy data from APS is complete and accurate for EnergyCAP.	***Target Date:*** 9/27/2024
Rec. #1.2: Work with City leadership to update A.R. 3.97 as needed, and implement controls to ensure ongoing coordination with and monitoring by City departments, as required by A.R. 3.97.	
Response: The Office of Sustainability will work with City leadership to update A.R. 3.97 to implement better controls for monitoring energy data with City departments.	***Target Date:*** 6/30/2025
Explanation, Target Date > 90 Days: Coordination with all departments and modifying an A.R. will take longer than 90 days.	
Rec. #1.3: Review accounts with active meters that were identified as exceptions, and implement controls to resolve discrepancies. Recover any overpayment resulting from the resolved discrepancies.	
Response: The Office of Sustainability will work with associated departments to resolve the exceptions found and implement controls to prevent further discrepancies.	***Target Date:*** 9/27/2024
Rec. #2.1: Review the exceptions identified for SRP accounts that did not reconcile with the associated rate plan. Determine if accounts need to be settled for the correct billing amount.	
Response: The Office of Sustainability will work with SRP to resolve the exceptions found with rate schedules.	***Target Date:*** 9/27/2024
Rec. #2.2: Implement monitoring procedures to document the assessment of rate plans performed by utility providers for all accounts.	
Response: The Office of Sustainability will implement monitoring procedures to assess rate schedules.	***Target Date:*** 1/1/2025
Explanation, Target Date > 90 Days: The utilities can be difficult to get data and documentation from.	

Rec. #2.3: Implement monitoring procedures or contract with a third-party to ensure that utility accounts are assigned to appropriate rate plans and that the invoiced charges align with the correct rates.	
Response: The Office of Sustainability will either create a monitoring procedure or contract with a third-party to ensure utility rate schedules are correct and ideal.	***Target Date:*** 6/30/2026
Explanation, Target Date > 90 Days: Creating a model will be labor intensive and the RFP process, selection, and contracting of a third-party can take 2 years.	

1 – Account Monitoring

Background

A.R. 3.97 is the citywide policy related to the monitoring of utility accounts, and requires the following:

- Department Liaisons – departments must designate a liaison to act as representative for managing utility accounts.
- Energy Monitoring – the City's Energy Manager shall coordinate all energy monitoring functions, maintain a central database, and perform various reviews of utility data.
- Invoice Processing – department liaisons will verify and process utility account invoices as prescribed by Finance.

Prior to July 2015, Public Works was responsible for coordinating all City energy monitoring functions. Sustainability has since been assigned the energy monitoring functions by ensuring the accuracy of utility accounts and facilities in EnergyCAP.

Sustainability's energy monitoring procedures include:

- Coordination – communicating with Finance and other City departments to obtain current list of facilities, utility accounts, and cost centers.
- Energy Tracking – obtaining energy data from the utility providers and entering it into EnergyCAP.
- Auditing – running reports in EnergyCAP to identify gaps and anomalies in utility billing data.

This audit included a review of monitoring procedures to determine if Sustainability and other departments followed City policy. We performed testing to determine if monitoring controls were effective to ensure utility data and expenditures were accurate. Testing methods included interviews with City staff, surveys of City staff across multiple departments, and data analysis of the utility billing data between July and December 2023.

Results

Overall, EnergyCAP data reconciled with Finance's SRP billing data. Controls can be strengthened to ensure that EnergyCAP data reconciles with APS billing data maintained by Finance.

Each month, Finance receives invoices from APS and SRP. Sustainability also receives monthly data files of the invoiced billing data directly from APS and SRP, which is uploaded into EnergyCAP for tracking and monitoring.

This audit included a review of EnergyCAP data to determine if the system data reconciled with the utility billings processed by Finance. We performed testing by matching account numbers, meter numbers, billing periods, energy consumption (kWh), and cost for each transaction.

SRP:

In our review, there were 6,313 transactions for SRP, totaling $13.7M, including 1,057 different accounts and 852 meters included in the billing data. All transactions from Finance reconciled accurately with EnergyCAP. No exceptions noted.

APS:

We were unable to perform a full reconciliation of APS accounts. Finance does not receive a data file of the utility billing from APS, only PDF invoices that must be downloaded from the provider's customer portal. This limited our ability to test the full set of data. We performed a manual review on a sample of 45 APS transactions from EnergyCAP, totaling $868.7K. In our review, we found that only 24 transactions reconciled. The remaining 21 transactions did not have corresponding invoices processed by Finance, meaning no payment data was recorded in the City's accounting system for these transactions.

During this audit, we contacted APS numerous times to request the City's utility data, but APS did not provide the data. Sustainability staff reported the same concerns with APS, noting that data is often received much later than the billing date or that requests from the City are not followed up within a timely manner.

The lack of data impacts the City's ability to report accurately on the City's energy consumption.

City departments did not implement the required procedures for monitoring utility account activity, as required by City A.R. 3.97.

To determine if sufficient controls were in place to monitor account activity, as required by A.R. 3.97, we reviewed documented procedures from Sustainability and other City departments that manage facilities. We identified 16 departments with utility accounts and conducted a survey to identify the established monitoring controls.

Survey results indicated that most departments did not have controls in place to meet the requirements set in City policy. Of the 12 departments that responded to the survey:

- Overall, ten departments had staff that performed at least one duty required of the department's utility liaison. Important functions are consistently not performed by departments.
    - Only six departments had staff that monitored the opening and closing of accounts.
    - Only four departments had staff that monitored energy consumption.

- Only six departments had staff that monitored utility invoices.

In this review, we noted that A.R. 3.97 contains outdated information regarding the assignment of the primary energy monitoring function. When the Office of Sustainability was created, the energy management role moved from Public Works to Sustainability. Additionally, staff from many of the surveyed departments were unaware of the requirements set in City policy, which may contribute to the exceptions we identified in the audit. Improving citywide coordination and communication would help ensure that accounts are monitored regularly, and billing is accurate.

Despite A.R. 3.97 being outdated and not implemented Citywide as intended, Sustainability staff have implemented their own monitoring procedures in an attempt to ensure EnergyCAP has the most current energy data for City facilities, including the use of a report in EnergyCAP that identifies anomalies in billing data. With the Office of Sustainability being relatively new to the City, developing formal documented procedures will support with the coordination and monitoring of Citywide utility accounts.

Most meters were categorized correctly in EnergyCAP.

As departments identify the need for new utility accounts or accounts that are no longer needed they are to contact the utility providers directly to update the meter status and communicate the change with Sustainability and Finance. However, only six of the departments identified this as the current practice.

We reconciled meters in EnergyCAP with billing data to determine if meters were correctly categorized as either “active” or “inactive” in the system. We identified 4,540 meters in EnergyCAP during the review period, including 3,836 active meters and 704 inactive meters.

- 703 of 704 inactive meters did not have any associated billing charges, and one meter had billing charges for four of the six months in the review period. This meter was deactivated after the last billed month. All meters were correctly designated as inactive.
- 281 of 3,836 active meters did not have any energy consumption noted in EnergyCAP, but were invoiced to the City for $401,939. Sustainability staff are investigating these exceptions.
- 292 of 3,836 active meters did not have any associated billing charges. Sustainability staff are investigating to determine if these should be deactivated.

Sustainability staff noted many reasons that may have contributed to these exceptions, including the lack of communication with City departments, temporarily pausing service due to construction, and meters not being deactivated with the utility providers. These deficiencies impact the accuracy of the City’s internal and external reporting of the amount of utility meters, accounts, and energy consumption. This also impacts the accuracy of the City’s utility billing, including potential continued overpayment to the utility providers.

Recommendations

1.1 Implement controls to ensure that EnergyCAP's APS data is current and only includes the necessary data needed for EnergyCAP.

1.2 Work with City leadership to update A.R. 3.97 as needed, and implement controls to ensure ongoing coordination with and monitoring by City departments, as required by A.R. 3.97.

1.3 Review accounts with active meters that were identified as exceptions, and implement controls to resolve discrepancies. Recover any overpayment resulting from the resolved discrepancies.

2 – Utility Rates

Background

A.R. 3.97 allows for routine audits to be performed of utility accounts to ensure that controls are implemented effectively, that the utility providers are charging the appropriate rate plan for each account, and that the invoiced charges are accurate.

This audit included a review of the City's electric utility rates to determine that:

- The applicable rate schedules charged to the City were documented by the utility providers.
- The invoiced charges for City utility accounts were consistent with the assigned rate schedule.

We also reviewed controls in place for evaluating electric rate plans to determine that the City is receiving the best pricing for each account.

Results

The City was billed correctly for accounts associated with each APS rate plan that we reviewed, and all charges were calculated correctly. We identified some exceptions with SRP accounts.

The rate schedules charged by utility companies is determined by a variety of factors, including account type and anticipated kilowatt usage. As of May 2024, the City had approximately 34 different account types between APS and SRP. We reviewed a sample of transactions to determine if the City's accounts were priced correctly, according to the published rates for each account type. We selected two transactions per account type, 67 total, including 45 from APS and 22 from SRP, totaling $1,691,727 between July and December 2023.

As noted in Observation 1, there were challenges with obtaining data and documentation from APS. In our sample of transactions, we were able to reconcile 24 transactions, all of which were billed according to the correct rate schedule, and the charges were calculated correctly. The remaining 21 transactions were inconclusive. The transactions were listed in EnergyCAP; however, the invoices were not located in Finance's records. Without the invoices, we could not perform a recalculation or verify the rate plans for these transactions.

Eight of 22 transactions from SRP were billed according to the correct rate schedule, and the charges were accurately calculated. The 14 transactions that were identified as exceptions were forwarded to Sustainability for review.

We were unable to determine if all rate plans were assessed for the best pricing for the City. Controls can be strengthened by obtaining assurance from utility

providers and performing an internal review of accounts for rate plans that are not assessed annually by the providers.

Previous to 2020, the City hired a consultant, Troy & Banks, to perform a review of the City's APS utility rates to determine if utility accounts were assigned to the rate schedule that is best suited for the energy usage and cost. The consultant's review identified $30K in potential savings. Sustainability staff noted that around 2019, APS and SRP started reviewing rates automatically. Since this change, the City no longer uses a consultant for this process. However, Sustainability has not implemented procedures to ensure APS and SRP are performing the rate reviews or to evaluate if the reviews performed were appropriate. Without a review of the rates by the City or an independent third-party, the City is unable to ensure they are being charged a rate that is best suited for each account.

Recommendations

2.1 Review the exceptions identified for SRP accounts that did not reconcile with the associated rate plan. Determine if accounts need to be settled for the correct billing amount.

2.2 Implement monitoring procedures to document the assessment of rate plans performed by utility providers for all accounts.

2.3 Implement monitoring procedures or contract with a third-party to ensure that utility accounts are assigned to appropriate rate plan and that the invoiced charges align with the correct rates.

Scope, Methods, and Standards

Scope

This audit included a review of the City's electric utility and cost data between July and December of 2023, including data from SAP and EnergyCAP systems.

The internal control components and underlying principles that are significant to the audit objectives are:

- Control Environment
    - Management should establish an organizational structure, assign responsibility, and delegate authority to achieve the entity's objective.
    - Management should evaluate performance and hold individuals accountable for their internal control responsibilities.
- Control Activities
    - Management should design control activities to achieve objectives and respond to risks.
    - Management should implement control activities through policies.
- Monitoring Activities
    - Management should establish and operation monitoring activities to monitor the internal control system and evaluate the results.

Methods

We used the following methods to complete this audit:

- Interviewed City employees
- Interviewed APS and SRP representatives
- Conducted City-wide survey of department procedures
- Performed analysis of the City's utility data
- Reconciled utility invoices with the published rate schedules

Unless otherwise stated in the report, all sampling in this audit was conducted using a judgmental methodology to maximize efficiency based on auditor knowledge of the population being tested. As such, sample results cannot be extrapolated to the entire population and are limited to a discussion of only those items reviewed.

Data Reliability

We assessed the reliability of EnergyCAP data by (1) performing electronic testing, (2) reviewing existing information about the data and the system that produced them, and

(3) interviewing agency officials knowledgeable about the data. We determined that this data was sufficiently reliable for the purposes of this audit.

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. Any deficiencies in internal controls deemed to be insignificant to the audit objectives but that warranted the attention of those charged with governance were delivered in a separate memo. We are independent per the generally accepted government auditing requirements for internal auditors.