



INTERNAL AUDIT REPORT

OPERATIONAL AUDIT

SEA-TAC UTILITIES

JANUARY 2017 – OCTOBER 2018

ISSUE DATE: DECEMBER 4, 2018

REPORT NO. 2018-13

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EXECUTIVE SUMMARY

Internal Audit (IA) completed an audit of Sea-Tac Utilities for the period January 1, 2017 through October 31, 2018. The objective of the audit was to assess the accuracy, completeness, and timeliness of utility billing and supporting processes.

In 2001, the Port of Seattle established the Sea-Tac Utility. The utility provides water, natural gas, electricity, garbage and waste water service to Port tenants. Utility rates are established in Tariff No. 1 and are designed to recover the cost of the utility program. These costs include internal operating expenses and the price of the utility. The Port recovers the total utility costs through Port tenants and airlines.

Management has been transparent and forthcoming with known areas to improve. They have also been proactive and conducted meetings with key stakeholders to discuss the root cause of the breakdowns and to assign individuals responsible to remediate the issues captured in this report (reflected below).

1) Aviation Utilities is responsible for billing over 750 metered accounts. They are also responsible for billing utility usage for other utility use that is not captured using meters, such as Electric Ground Support Equipment Vehicles (eGSE) and Surface Water Management (SWM) fees. However, a process to validate the completeness of this list or the accuracy of the reads has not been established.

2) The Ports Aviation Utility department is not always provided with timely billing information. We identified instances when Aviation Utilities was not provided with lease notifications prior to the date the tenant terminated, adjusted, or entered into a new lease. We also identified instances when meter usage wasn't provided in time to bill by the end of the month.

These issues are discussed in more detail beginning on page six.

We extend our appreciation to Port management and staff for their assistance and cooperation during the audit.



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Responsible Management Team

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Lance Lyttle, Managing Director Aviation
Stuart Mathews, Director, Aviation Maintenance
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BACKGROUND

In 2001, the Port of Seattle established the Sea-Tac Utility. The utility includes water, natural gas, electricity, waste water (sanitary waste, storm water, and industrial process water), solid waste, and cable TV. Water is obtained from three sources: Highline Water District, Seattle Public Utilities, and King County Water District 125 and 49. Electricity is supplied by Bonneville Power Administration, Puget Sound Energy, and Seattle City Light while natural gas is provided from Cost Management Services and Puget Sound Energy. Waste Water is delivered to King County, Valley View Sewer District, and Midway Sewer District. Solid waste is handled by Recology. The Washington Administrative Code Title 480 (Utilities and Transportation Commission) provides guidelines for managing a utility.

Utility rates are established in Tariff No. 1 and are designed to recover the cost of the utility program. These costs include internal operating expenses and the price to obtain the utility. The Port recovers the total utility costs either through metered billing of Port tenants for actual consumption or internally from airlines and terminals.

Below reflects the utilities operating expenses for the four years ended 2017 (2014 - 2017), and for the six month period ended June 30, 2018.

	2014	2015	2016	2017	YTD 6/30/2018
Operating Expenses	\$13,861,000	\$13,682,000	\$14,690,000	\$16,374,000	\$9,589,000

Source: Quarterly Performance Reports

AUDIT SCOPE AND METHODOLOGY

We conducted this audit in accordance with Generally Accepted Government Auditing Standards and the International Standards for the Professional Practice of Internal Auditing. 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.

The period audited was January 2017 through October 2018 and included the following procedures:

Effectiveness of Meters

- Inquired with Engineers in Aviation Facilities and Infrastructure to understand how punch list walkthroughs are performed.

Meter Billing Analysis

- Analyzed billing by utility type and customer to determine whether customers were billed correctly.
- Agreed tenant billing from the Utility billing worksheets to tenant billing in PropWorks.
- Performed a two-way match from the Utility billing worksheets to those on the reading worksheets to verify that all billable meters had been billed.

Timeliness and Accuracy of Lease Notification Forms

- Compared lease effective dates (i.e. occupancy, update, and termination) to the dates the Aviation Utility Billing Analyst was notified.

Timeliness of Meter Reads

- Determined if electrical, water, and gas reading reports were provided to the Aviation Utility Billing Analyst for timely billing.

Completeness of Billing – Electric Ground Support Equipment Vehicles

- Obtained usage reports to determine the total amount of un-billed revenue.

Completeness of Billing – Surface Water Management

- Obtained the period and amount of un-billed revenue.

SCHEDULE OF FINDINGS AND RECOMMENDATIONS

1) RATING: MEDIUM

Aviation Utilities is responsible for billing over 750 metered accounts. They are also responsible for billing utility usage for other utility use that is not captured using meters, such as Electric Ground Support Equipment (eGSE) Vehicles and Surface Water Management (SWM) fees. However, a process to validate the completeness of this list or the accuracy of the reads has not been established.

During the audit, management was forthcoming and self-disclosed the following issues:

1) The connection between the battery and the charging station in some eGSE Vehicles has not been installed correctly. Therefore, Aviation Utilities is unable to determine which airlines to bill. As a result, approximately \$29,000 for the period January 2017 through June 2017 and November 2017 through September 2018 has not been billed. From July 2017 through October 2017, the data was not available and not included in the total amount un-billed.

2) Surface Water Management fees for seven Ground Lease Agreement tenants had not been billed in 2016, 2017, and 2018. The un-billed revenue was identified when Aviation Utilities performed a billing analysis. All tenants have been billed with the exception of the City of Sea-Tac. According to Aviation Utilities, they were not billed for a 21 year period (1995 – 2016). Management estimates the amount of un-billed revenue at approximately \$4,000.

3) A process has not been established to identify and repair broken meters. Management indicated that in some cases, meters were not installed or configured correctly or have not been replaced, when not working correctly.

Recommendations

Develop a geographical master list of meters to assist management in identifying the location of meters. We also recommend developing, a tool to identify and a process to escalate, when information used for billing is incomplete.

Management Response/Action

Regarding the overall recommendation, management agrees with the need to develop a geographical master list of meters. There is a Geographic Information Systems (GIS) project already underway within the Airport Dining and Retail (ADR) Program whose objective is to track open and closure dates for all the ADR units that are under construction. ADR staff will work with Information Technology staff to incorporate the inclusion of the meter locations as a layer of information into this GIS project.

Regarding item #1, management agrees with the need for accurate billing for eGSE customers. There are a few components that the Sea-Tac Utility will have to address in order to accomplish this.

A. There is currently not a hardware interlock on the charging infrastructure. As such, any vehicle can be pulled up to the charging infrastructure and receive a charge without the Port receiving proper billing data for that vehicle. The Sea-Tac Utility is coordinating with the charging equipment vendor to determine potential solutions.

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B. The Sea-Tac Utility, AV Facilities & Infrastructure and AV Maintenance staff and the airlines need to agree on an application for the connection process for each new vehicle to ensure the appropriate vehicle data is entered into the system in order to be billed correctly.

C. The Sea-Tac Utility and AV Facilities & Infrastructure staff needs to evaluate the charger efficiency to determine energy loss between the main meter and the equipment being charged as there is a quantifiable difference between the two. Then, there is a need to determine which party is responsible for this energy loss.

D. Regarding the \$29,000 in electricity charges that were not billed, it is important to note that this amount was recovered through rates and charges paid by the airlines as part of the normal cost-recovery basis for the aeronautical business.

Regarding item #2, management agrees with the finding regarding Surface Water Management (SWM) fees. Aviation Utilities staff identified the issue of inaccurate SWM fee billings in Q4 2017 and has worked diligently since that time to ensure that SWM fees were appropriately billed and collected. In the case of the Port's lease with the City of Sea-Tac for the North SeaTac Park, the lack of billing was an oversight. The lease is clear that the City of SeaTac is responsible for all utility payments and Port staff has communicated the intention to bill the City for these fees. In order to reduce the complexity of the SWM fee allocation process, Port staff will also explore development of a GIS overlay that would show lease boundaries across all airport property.

Regarding item #3, management agrees that a more formal process for identifying and correcting meter problems is needed. The informal process that exists today contains several gaps in information flow between departments. Aviation Utilities/Facilities & Infrastructure will coordinate with Aviation Maintenance to develop the formal process for dealing with broken meters. Aviation Utilities will also work with Airport Dining and Retail and Aviation Properties staff to modify contracts to allow a tariff rate to be billed during the period of unit construction and until the tenant can be formally billed by meter, based on when the tenant is open for business.

2) RATING: MEDIUM

The Ports Aviation Utility department is not always provided with timely billing information. We identified instances when Aviation Utilities was not provided with lease notifications prior to the date the tenant terminated, adjusted, or entered into a new lease. We also identified instances when meter usage wasn't provided in time to bill by the end of the month.

Lease Notification - Within a 22 month period (January 2017 – October 2018), Aviation Utility received 88 lease notifications. Of the 88 notifications, only 39 notices or 44% were received by the lease effective date. Lease notifications are obtained by Aviation Properties and Airport Dining and Retail. Table 1 reflects the number of days between the lease effective date and the date that the billing specialist was provided with the lease notification.

Table 1

Days Past Due	Lease Notification*	Percentage%
Over 60	15	17
30 - 60	15	17
1 - 30	19	22
Less than 0	39	44
Total	88	100%

*Includes terminations, changes, or commencements

Meter Usage - Electricity, Water, and Gas meter usage is obtained monthly by Aviation Maintenance personnel, captured in a worksheet, and is provided to Aviation Utilities for billing. For the 21 month period ended January 2017 through September 2018, the worksheet for electrical usage was received late for 14 of the months, with the number of days delinquent ranging between 2 and 24. The Water and Gas usage worksheet was received late for 16 of the months, with the number of days delinquent ranging between 2 and 19.

Table 2

Days Past Due	Electricity	Percentage	Water / Gas	Percentage
11 - 24	8	42	6	33
0 - 10	6	32	10	56
On Time*	5	26	2	11
Total	19	100%	18	100%

*Electricity excludes two months / Water Gas excludes three months – data not available

Recommendations

The Aviation Utility department relies on Aviation Maintenance to provide meter usage. If not provided timely, billing is delayed. Therefore, we recommend developing a process so that meter reads that are not received timely are identified and escalated to senior management. We also recommend engaging a lean team to identify opportunities to streamline and implement best practices.

Management Response/Action

Management agrees with the need for a better, more comprehensive method for delivering and tracking timely notification for new, changes to and termination dates for tenant utility services. Airport Dining and Retail staff has the lead for development of this notification system.

Given the complex nature of the Sea-Tac Utility and its billing processes, it has been nominated for inclusion within the 2019 work plan for the Continuous Process Improvement team.

Appendix

APPENDIX A: RISK RATINGS

Findings identified during the course of the audit are assigned a risk rating, as outlined in the table below. The risk rating is based on the financial, operational, compliance or reputational impact the issue identified has on the Port. Items deemed “Low Risk” will be considered “Exit Items” and will not be brought to the final report.

Rating	Financial	Internal Controls	Compliance	Public	Port Commission/ Management
HIGH	Large financial impact Remiss in responsibilities of being a custodian of public trust	Missing, or inadequate key internal controls	Noncompliance with applicable Federal, State, and Local Laws, or Port Policies	High probability for external audit issues and/or negative public perception	Important Requires immediate attention
MEDIUM	Moderate financial impact	Partial controls Not adequate to identify noncompliance or misappropriation timely	Inconsistent compliance with Federal, State, and Local Laws, or Port Policies	Potential for external audit issues and/or negative public perception	Relatively important May or may not require immediate attention
LOW/ Exit Items	Low financial impact	Internal controls in place but not consistently efficient or effective Implementing/enhancing controls could prevent future problems	Generally complies with Federal, State and Local Laws or Port Policies, but some minor discrepancies exist	Low probability for external audit issues and/or negative public perception	Lower significance May not require immediate attention
Efficiency Opportunity	An efficiency opportunity is where controls are functioning as intended; however, a modification would make the process more efficient				