

Internal Audit Report

**Comprehensive Operational Audit** 

**SeaTac Utilities** 

January 1, 2010 to December 31, 2010

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## **Transmittal Letter**

We have completed a comprehensive operational audit of the Sea-Tac Utilities. The purpose of the audit was to determine if management has adequate controls to assure effective operations in compliance with applicable rules and regulations. We reviewed information relating to calendar year 2010.

Management has the primary responsibility to establish and implement effective controls. Our role was to assess and test those controls in order to establish whether the controls were adequate and operating effectively.

We conducted the audit using due professional care. The audit was planned and performed to obtain reasonable assurance that department controls are adequate and operating effectively as intended in the aforementioned areas.

Sea-Tac Utilities has adequate and effective controls to ensure operations are effective and in compliance with applicable requirements.

We extend our appreciation to the management and staff of the Sea-Tac Utilities, Aviation Business Development, and Aviation Finance & Budget for their assistance and cooperation during the audit.

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Joyce Kirangi, CPA Internal Audit, Director



## Executive Summary

**Audit Scope and Objective** The purpose of the audit was to determine if management has implemented adequate controls to assure that:

- 1. Utility billing is complete, accurate and in accordance with the tariff.
- 2. Costs in the utility rate calculation are relevant, reasonable and complete.

We reviewed information relating to fiscal year 2010.

**Background** The Aviation Sea-Tac Utilities was created in 2001 and currently serves electric, water, natural gas, heating oil, sewer, and solid waste utilities. There are two classes of customers, namely internal (e.g., Port departments) and external (e.g., tenants) customers. The department generates approximately \$6 million in annual tenant direct billing revenues and incurs approximately \$14 million per year in operating expenses. Expenses not covered by direct billing are recovered through internal billings.

The Sea-Tac Utilities is responsible for establishing rates and paying bills. It develops short and long-term strategies for cost management in coordination with airport development plans. Rates for utilities are developed to recover operating, capital and cost of capital expenses. The department takes the lead role in the management and administration of utilities conservation projects in order to reduce energy and utility costs. It is also the responsibility of the department to ensure that utilities needs are fully integrated into all airport planning.

**Audit Result Summary** Based on the audit procedures performed, Sea-Tac Utilities has adequate and effective controls to ensure complete and accurate billings in compliance with the tariff. We found the costs in the tariff calculation to be relevant, reasonable and complete.



## Audit Report

## Background

The Aviation Sea-Tac Utilities was created in 2001. The department currently serves the following utilities to internal (e.g., Port departments) and external (e.g., tenants) customers:

- Electricity
- Sewer
- Natural Gas

- Water
- Solid Waste
- Heating Oil

The following departments provide support to Sea-Tac Utilities Department:

- Aviation Maintenance for meter installation, maintenance and readings
- Aviation Business Development for calculating billing amount
- Aviation Finance and Budget for allocations and cost of capital components of Utility rates

Sea-Tac Utilities department has over 100 customers and generates direct billing to tenants of approximately \$6 million in revenues annually while incurring approximately \$14 million in operating expenses. Operating expenses not directly billed are recovered through the Landing Fee and Terminal Fee charges. The department also has internal (indirect) billing to the Port departments for their own consumption.

Sea-Tac Utilities Department is responsible for establishing rates, paying bills, customer service and communication with tenants and utility providers. Developing short and long-term strategies for cost management and coordination with airport development plans is also part of its responsibility. Rates for utilities are developed by the department to recover operating, capital and cost of capital expenses. The department takes the lead role in the management and administration of utilities conservation projects in order to reduce energy and utility costs. The department is tasked to ensure that utilities needs are fully integrated into all airport planning.

## Audit Objective

The purpose of the audit was to determine if management has implemented adequate controls to assure that:

- 1. Utility billing is complete, accurate and in accordance with the tariff.
- 2. Costs in the utility rate calculation are relevant, reasonable and complete.



## **Department Highlights and Accomplishments**

Management has placed an emphasis on economic and environmental stewardship with efforts to reduce energy costs and increase energy efficiency.

• Energy Cost Reduction

The Port was paying retail prices for electricity until management secured an agreement with the Bonneville Power Administration (BPA). As a preferential customer, the department can acquire electricity at BPA's cost or in other words wholesale prices.

• Energy Efficiency

Management initiated a number of projects to enhance energy efficiency. Some examples include: new lighting technologies, upgrading mechanical systems for heating and cooling as well as installation of charging stations for electrical ground service equipment.

#### Audit Scope and Methodology

We utilized a risk-based audit approach from planning to test sampling. We performed a multitude of information gathering methods including research, interviews, observations, and analytical review in order to obtain a complete understanding of the Sea-Tac Utility operations. We conducted a risk assessment of the significant risks associated with SeaTac Utilities, and identified the controls that have been implemented to mitigate those risks. We also evaluated whether the established controls were carried out as intended. Based on this risk assessment, we determined the area of audit focus.

Our additional detailed audit procedures can be grouped and summarized into two categories as follows:

- 1) Direct & internal (indirect) billing
- 2) Tariff calculation.

We approached each audit area with the following methodology:

## 1.) Direct & Internal (indirect) Billing

The Aviation SeaTac Utility has two classes of customers:

- Tenants with meters or minimum monthly charges; these tenants are billed directly.
- Port departments for their own consumption, and tenant consumption of non-metered, common area utility usage (e.g., ticketing areas that are billed internally or indirectly).



## a. Direct Billing

- To determine the completeness of direct utility billing, we reviewed utility connections at the point of application for connection to the Port utility system. We selected a sample of 22 electrical, water, and gas meter applications at random and traced them to Maximo where a list of utility meters is maintained for monthly meter readings.
- For accuracy and tariff rate compliance, we selected a sample meter readings from electric and water utilities. The two utilities consist of approximately 68% of the total revenue from direct billings. The meter reading sample represented 17% and 12% of electric and water customers from the month of July 2010. We traced the sample through the following systems:
  - > PROPWorks--where meter reads are calculated into billing amounts.
  - > PeopleSoft--where billing and receivable transactions are recorded.

We recalculated billing amounts from sampled meter reads. The result was compared to billed amounts to ensure that billings were correct and in accordance with the Commission approved tariff.

## b. Internal Billing

Internal billings were reviewed for completeness and to ensure that the areas of nonmetered electric and water utilities were included.

Our objective was two-fold:

- To ensure that individual departments were properly charged for their own consumption.
- To ensure that costs associated with non-metered utility were ultimately recovered through secondary mechanisms (i.e., Landing Fees). We traced billed departments to the cost pools of the secondary cost recovery mechanisms.

## 2) Tariff Rate Calculation

A tariff is a Commission approved document that includes, but is not limited to, a schedule of utility rates and charges at the airport.

To determine the completeness, reasonableness, and relevancy of utility costs in the tariff calculation, we reviewed the following costs in 2011 tariff rate calculations:

 Direct charges from departments to the Sea-Tac Utilities (approximately 60% of the total utility costs)



Departments directly charging into the utility costs were reviewed to ensure that those charges were appropriate. We reviewed the departments who support the utilities to ensure that their related costs were included in the tariff rate calculations.

• Allocated costs (approximately 8% of the total utility costs)

We compared allocated costs in the tariff rate calculation to the same costs in the approved budget.

• Depreciation (approximately 20% of the total utility costs)

We conducted a two way match from the asset listing used in the tariff rate calculation to a separate download from PeopleSoft financial system. We also reviewed the asset listing for proper inclusion of utility assets and exclusion of non-utility assets. We also recalculated the deprecation based on the Cost of Capital and compared it to the deprecation in the tariff rate calculation.

• Cost of capital (approximately 10% of the total utility costs)

The cost of capital is based on an expected rate of return on the utility assets. It is derived from the net book value of the assets multiplied by the expected rate of return.

In addition to recalculating the depreciation, we also reviewed the Cost of Capital for the past five years to determine if the expected increase/decrease in the account correlated to the increase/decrease in assets acquired. We also compared the expected rate of return used by the Port to the utilities industry for reasonableness.

#### Conclusion

Based on the audit procedures performed, Sea-Tac Utilities department has adequate and effective controls to ensure complete and accurate billings in compliance with the tariff. We found the costs in the tariff rate calculation to be relevant, reasonable, and complete.