



City of Seattle
Office of City Auditor

Date: March 29, 2019
To: Seattle Public Utilities Executive Management
From: David G. Jones, City Auditor
Re: New Taps Billing and Controls Review

This report describes the results of our audit of Seattle Public Utilities' (SPU) recalculations of new taps charges billed by SPU between January 1, 2015 and April 5, 2018. SPU recalculated new taps billings for this period after discovering that some customers had been overcharged for new taps installations. Our audit objectives were to determine if (1) SPU's recalculations of new taps installation, connection, and retirement charges were performed in accordance with applicable policies and procedures, (2) SPU had adequate controls in place to help ensure the recalculations were accurate and complete, and (3) SPU has adequate controls to help ensure *future* new taps billing calculations are accurate and complete. Details about our audit's objectives, scope, and methodology are included in Appendix A in this report.

SPU's management responded to our recommendations and are committed to implementing them.

RESULTS IN BRIEF

We found that SPU developed and implemented a comprehensive approach to auditing new taps billing calculations. We tested a sample of 45 of SPU's recalculations and found one error, which SPU addressed and corrected. At the time of this report, SPU had completed their audit test work on 1,822 projects and was in the process of revising policies and procedures, including updates to internal controls. According to the SPU Director of Risk and Quality Assurance, SPU expects to complete all revisions to policies and procedures and updates to internal controls by the end of 1st quarter 2019. We recommend that SPU complete these revisions and updates, implement key internal controls, and provide training to all relevant personnel.

BACKGROUND

New taps are newly installed water services for residential, commercial, and industrial customers. Separate services are installed as needed for potable water, fire suppression, and irrigation. All customer billing is generated using SPU's Development Services System (DSS). SPU's Development Services Office (DSO) works with customers and coordinates all necessary planning, engineering, and crew activities for the installation of water services. Property owners are responsible for the cost of new water services, with certain exceptions, and are billed either at *standard cost* for services up to 2 inches in diameter, or at *site specific cost* (actual cost) for larger services. Full payment is generally due in advance of performing the work.

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In February 2018, a former employee of SPU's Development Services Office informed the Seattle Ethics and Elections Commission (SEEC) about his concern that SPU had been overcharging new taps customers by omitting a credit for existing taps when calculating new taps connection charges. The SEEC asked our office to follow-up. We contacted the former employee to obtain additional details and then shared this information with SPU executive management. SPU performed an investigation and validated the former employee's concern. As a result, SPU executive management decided to conduct an internal audit to recalculate every new taps billing issued from January 1, 2015 through April 5, 2018 and generate refund payments to customers who were overcharged. SPU chose the 3+ year time frame to align with their practices for other forms of billing adjustments. During this period, there were 1,822 new taps projects with 2,051 individual billings that totaled \$38,826,125.

Our office agreed to assess SPU's audit work by evaluating their audit methodology, monitoring the progress of their audit, and independently recalculating a sample of billings that were recalculated by SPU's audit team.

SPU'S AUDIT PROCESS

SPU assembled an audit team comprised of three staff members, two from their Finance business unit and the internal auditor from their Risk and Quality Assurance team. The Director of Risk and Quality Assurance was responsible for oversight of the audit process, which included key controls to help ensure the accuracy of the audit team's recalculations. Controls included (1) a second review of recalculations by another audit team member; (2) weekly meetings between the SPU audit team and the Director of Risk and Quality Assurance to resolve recalculations in question; (3) the involvement of SPU's executive team to make policy decisions as needed; and (4) the approval of each refund by both the Director of Risk and Quality Assurance and the Director representing the Project Delivery and Engineering Branch. Before processing refund payments, SPU also verified that the original customer invoice was paid in full and there was no previous refund issued.

We note in some cases that SPU team auditors were required to use their judgment when recalculating new taps charges. For example, some documents reviewed to support the recalculation of connection charges were not sufficiently detailed or were not consistent with other supporting documents (e.g., site plans often omitted existing services that appeared in scope of work documents). In these cases, audit team members had to rely on the extent and weight of documentary evidence available.

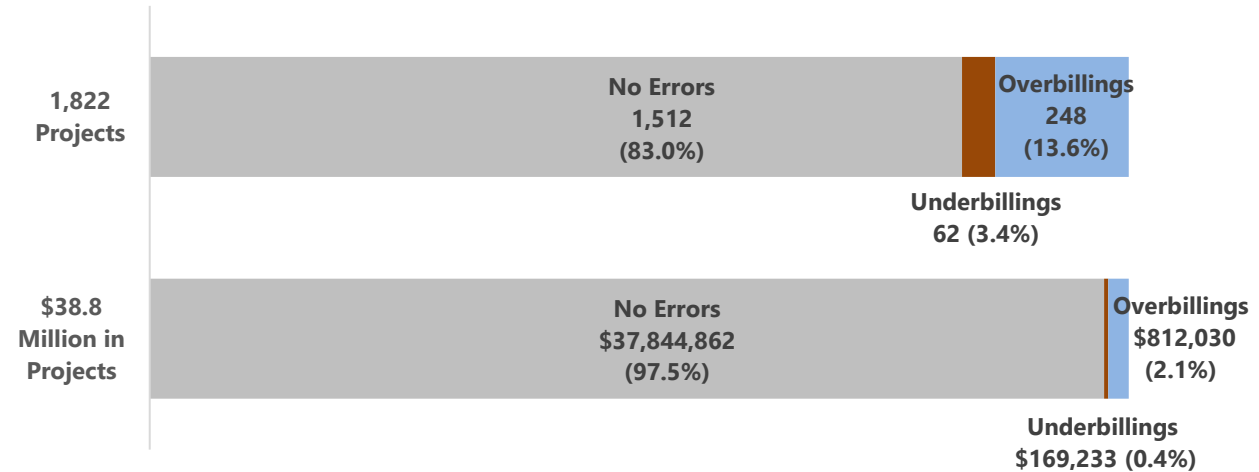
We reviewed SPU's audit work plan and concluded that it was a comprehensive approach to auditing new taps billing calculations and would accomplish SPU's objectives. See SPU's audit report below in Appendix 2 for a description of their audit process.

RESULTS OF SPU'S AUDIT

The total amount billed to customers from January 1, 2015 through April 5, 2018 for new taps projects was \$38.8 million. Errors identified by the SPU audit team totaled approximately \$981,000, or 2.5 percent of the total amount billed, which included both over- and under billings. SPU's audit team reviewed 1,822 new taps projects and found errors in 310, or 17 percent of the projects

reviewed (see Exhibit 1 below). SPU is working on refunding all overbilled amounts and billing customers who were found to have been under billed by \$200 or more.

Exhibit 1. Number and Value of Projects Audited by SPU and Results of SPU’s Audit



Source: Office of City Auditor analysis of SPU data

RESULTS OF OFFICE OF CITY AUDITOR REVIEW

We tested a sample of 45 new taps billings that totaled about \$1.96 million, representing approximately 5% of the total population of billing dollars during the audit period. We found one error in the SPU audit team’s recalculation of connection charges, the correction of which resulted in an \$8,398 refund to a customer. The SPU audit team agreed with our recalculation and is processing the refund.

SPU has revised some of its policies and procedures and internal controls relating to the new taps billing process, including the implementation of a key control using their billing software that requires the finance group to approve all new taps calculations before issuing a billing (see Appendix B, Attachment 2). We will follow up with SPU to ensure that remaining management-approved policies and procedures and internal controls have been implemented (see Recommendation 1).

We wish to thank SPU management and the audit team for their cooperation with our office. We would also like to recognize that SPU management prioritized, under constrained staffing resources, their investigation and internal audit activities to address the errors in the calculation of new taps billings.

AUDIT RECOMMENDATIONS

- 1. SPU management should ensure that all policies and procedures relating to new taps billing processes, including internal controls, are updated as appropriate.**

SPU Management Response:

SPU agrees with this recommendation.

Internal controls procedures were tested throughout the audit process. Controls were built into the DSS system that now require a QA/QC person indicate that they have reviewed a project before it can be invoiced. The person conducting the QA/QC work is not currently, and is not intended to be, within the same work group as those working with developers or generating the invoices. A new internal control procedure was finalized in January 2019 and became effective February 1, 2019.

Other policies that dictate how connection charges are to be applied (DR 02-03) have been approved for revision by the Executive Team and are being drafted for final review, we anticipate it will be finalized by the end of the 1st quarter of 2019.

- 2. SPU's Development Services Office (DSO) Director should ensure that periodic training is provided to the appropriate DSO personnel on the content of the revised policies and procedures.**

SPU Management Response:

SPU concurs with this recommendation and conducted several trainings this past summer with DSO staff. Tip sheets were generated for them to refer to based on the identification of more complex issues and those likely to generate errors. The training is planned to be ongoing, based on circumstances and new hires (see SPU's audit report for more detail).

APPENDIX A

Office of City Auditor Audit Objectives, Scope, and Methodology

Our audit objectives were to determine if (1) SPU's recalculations of new taps installation, connection, and retirement charges were performed in accordance with applicable policies and procedures, (2) SPU had adequate controls in place to help ensure their audit recalculations were accurate and complete, and (3) SPU has adequate controls to help ensure future new taps billing calculations are accurate and complete.

Our audit scope included the recalculation of a *sample* of new taps charges from the population identified by SPU's audit team, which included all new taps billings issued between January 1, 2015 and April 5, 2018. We tested a sample of 45 billings selected judgmentally to ensure we included (1) recalculations that resulted in refunds and those that did not, (2) recalculations made by each member of the audit team, and (3) samples from each calendar year included in SPU's audit scope. We did not include in our sample recalculations that identified customer undercharges, as SPU management was unsure during our field work whether they would back bill for undercharges. After our field work was completed, SPU decided to back bill customers if the amount owed was greater than \$200. Because our sample was judgmentally selected, our results cannot be projected to the entire population of billings audited by SPU.

We included the testing of key SPU audit controls, including the review of all refund calculations by a second SPU audit team member and the review and approval of the calculated refund by the Director of Risk and Quality Assurance. In contrast to the SPU audit team's recalculation of *all* charges on the original customer invoice, we limited our recalculation of charges to installations, connections, and retirements on high dollar invoices. We incorporated most of the same steps used by the SPU audit team in their recalculation of new taps charges, which included our review of documents for each project selected as shown in the table below.

Documents Reviewed by Office of City Auditor

SPU Document Name	Purpose	OCA Audit Activity
Water Service Application (WSA)	Document completed by the customer to request a new service installation or changes to an existing service.	We compared the requested new services shown on this document to the other documents, such as the scope of work, for consistency.
Water Availability Certificate (WAC)	Certificate issued by SPU to confirm there is adequate domestic water flow, fire flow, and water pressure to accommodate or supply new development. This document generally shows existing services.	We used this document to help verify the number and size of service retirements, if any, and to ensure the existing services to be retired or re-used were included in the calculation of connection charges in accordance with policy.
Site Plan	Customer provided plans (blue prints) showing the number, size, and location of new services.	We compared the new services, and in some cases where shown, existing services to be retired, to other documents for consistency.

Scope of Work	Excel document created by the DSO Project Lead and sent to Planning and Scheduling with new taps specifications and other information (results in work order creation).	We compared the new and retired services shown on this document to other documents for consistency.
Connection Fee Calculation Worksheet	An Excel document that calculates the connection fee after it is populated by the number and size of services added, as well as existing services that are retired, left in place, or removed. It was created in 2016 to ensure that credit for existing services, if any, was included in the calculation of the connection fee and is considered a key control.	We used this document to recalculate the connection fees for comparison to the same on the original invoice. We also tested this spreadsheet to be sure it was designed to calculate the connection fee in accordance with SPU Policy SPU-DR-02-03.
Site Specific Cost Worksheet	An itemization of actual costs to be billed to the customer based on site conditions. It includes labor, materials, equipment, and any other costs applicable to installing water services at a particular site. It applies to services greater than 2 inches.	We used this worksheet to compare the total cost shown for site specific work to the charges for the same on the original invoice.
Utiliview (map)	A custom software program that visually shows the location and sizes of all services installed for each parcel. It is updated after completion of the project.	We compared the new and, when shown, the retired services on this map to other documents for consistency.
King County Parcel Viewer (map)	An online Seattle Department of Transportation map showing whether a parcel is located on an arterial, which is a factor in determining the installation charge for new services.	We used this map to determine whether the customer was appropriately charged a higher fee for service installation if the parcel was located on an arterial.
SPU Policy FIN 210.2 "Standard, Connection, and Administrative Charges-Water"	Management approved policy that specifies standard installation charges, connection fees, and retirement fees for each service size for domestic, combination, and fire only services. It also specifies other standard charges that may apply, such as street restoration and permit/inspection fees.	We compared the charges as shown on this policy to the installation and retirement charges on the original customer invoice.
Invoice Template	An Excel spreadsheet prepared by each member of the SPU audit team that calculates the amount to be refunded to the customer based on the audit team's recalculated billing. It is reviewed by another audit team member for accuracy and signed by the Director of Risk and Quality Assurance as evidence of management approval. We considered both the review and sign-off as key controls.	We compared all amounts inserted in the spreadsheet to source documents and mathematically recalculated the refund for accuracy.
Original Customer Invoice	Invoice that shows the installation, retirement, connection fees, and other charges originally billed to the customer.	We used this document to compare the number, type, and size of services to other documents for consistency. We also

		verified the accuracy of the invoice total used in the calculation of a refund.
DSS System Report	A report generated by the DSS system showing the billing and payment history for a customer.	We used this report when recalculations resulted in customer refunds to verify there were no prior refunds issued to the SPU customer and whether the original invoice was paid in full, a requirement for issuing a refund.
Project Audit Document	A document completed by SPU audit team members for each billing reviewed to summarize the results of their review. It includes documents reviewed, not found, or that were not in agreement with each other. It also included notes made by the audit team member regarding discrepancies.	We scanned this document for notes regarding discrepancies between documents and audit team conclusions where we also found discrepancies in our testing.
Proof of Payment Documents	Documents that verify the original invoice was paid in full, which included either copies of customer checks or other documents provided by SPU Accounts Receivable.	In the case of refunds due, we agreed the proof of payment amount to the original invoice total to verify the original invoice was paid in full.

For [some](#) projects, not all documents were complete or consistent, requiring judgment on the part of the SPU auditors. After testing the same projects, we concurred with the SPU auditors’ recalculations in all cases.

Other audit activities we performed included the following:

- The review of SPU’s work plan for their audit of previous new taps billings;
- Meetings with the DSO Director, the Director of Risk and Quality Assurance, the Director of Water Planning and Program Management, and a Senior Developer Analyst who created the DSS program used for new taps billing;
- The review of SPU’s refund process flow diagram to gain understanding of the process and to identify control activities;
- The review of currently documented SPU policies and procedures related to new taps work to learn about the components used in computing new taps charges, including circumstances in which certain components are not part of the calculation;
- The recalculation of total dollars and number of projects audited by SPU; and
- The review of SPU’s weekly reports to monitor the progress of SPU’s audit work.

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.

APPENDIX B

Seattle Public Utilities Audit Report



**Audit Report
Water Connection Charges
December 2018**

This report summarizes the audit SPU undertook to review calculations of Water Connection Charges levied by the Development Services Office (DSO). This audit was conducted in cooperation and with the oversight of the Office of City Auditor.

1. Background

In March of 2018, concerns over the possible mis-application of connection charges were raised by a past SPU employee to the City's Ethics Department (Ethics). Ethics notified the Office of City Auditor (OCA) who in turn informed SPU's Risk and Quality Assurance division (RQA). SPU agreed to undertake a preliminary investigation to determine the validity of the concern.

SPU assigned a team to conduct a review of a sample of the water connection charges made over a 3-year period. The team found that there were numerous discrepancies on how the charges were calculated.

After reporting the results of the preliminary review, the OCA agreed that SPU should conduct a full audit of connection charges and they would monitor and validate the work. SPU would also review policies, procedures, and internal controls to ensure that errors of this sort did not re-occur.

The DSO is the office where developers can apply for new water connections, among other work. Water connection fees are one of many charges that developers may incur because of a development project and the DSO staff work with them to determine what the overall project will include. The water connection charge is a fee that is intended to reflect the draw on the water system at each connection. The draw is determined by the size of the meter installed and whether the purpose of the meter is for domestic or fire purposes. The primary errors we found were the result of improperly calculating the connection charges.

2. Roles and decision making

a) Roles and responsibilities

This audit (aka the project) touched on the work and interests of several SPU divisions as well as the interests of the Office of City Auditor requiring a clear delineation of responsibilities and authority. The following outlines the roles that were established and agreed to by all parties:

- The project was led by the RQA division who oversaw various teams and work product. RQA was also the liaison with the Executive Team (E-Team) and the Office of City Auditor (OCA).
- The audit team consisted of one staff member from the RQA division and two from the Financial Internal Controls team. This team was responsible for auditing all invoices selected for review and identifying and documenting any errors.
- Decisions regarding intent of existing Policies and Rules, billing, refunds and other issues that arose during the project were brought to the E-Team for review and approval.
- The OCA validated SPU's work on audit methodology, testing, and results.

b) Communications

Because this audit was done in cooperation with the Office of the City Auditor, there were initial and routine meetings with their staff. Decisions regarding actions taken were made by SPU's Executive Team with input and analysis from SPU staff. Regular updates were provided to SPU's Executive team, the Mayor's Office, and the CRUEDA Council Committee Chair. Contact was made with the Master Builders' Association to inform them about the potential impact on their members. The OCA also kept their City Council Finance Committee chair apprised of the audit status.

c) Decisions made

- Director's Rule DR 02-03 required clarification to ensure that the rule was applied consistently during audit testing. Questions were initially raised at E-Team meetings for resolution. Subsequently decision-making authority was delegated to the interim deputy director of PDEB and division directors from the Water LOB and the DSO. An issue paper was drafted to outline any policy intent or other issue that came up in the audit that needed addressing.
- The time span chosen for projects to be audited was January 2015 to April 2018. The 3+ year time frame aligns with SPU's practice of addressing other forms of billing errors. It also roughly approximates the time frame used in the Lane vs. Seattle fire hydrant lawsuit, which retroactively refunded utility customers the cost of fire hydrants during a 2 year 9-month period.

3. Audit methodology

To develop the audit universe, the audit team selected all DSO invoices for projects where the first tap was sold between January 1st, 2015 and April 5th, 2018. They did not include other invoices that were not directly related to water service installations.

The team used the following approach to test the accuracy of the invoice charges:

- Each audit team member selected a year to audit
- They reviewed the following records, stored in the DSS project files, to determine the developer requested scope of the project:
 - Water Service Application – Services requested by customer at time of application
 - Water Availability Certificate – List currently available water services
 - Developer Provided Plans – Marks the location of the taps to be installed and/or retired
 - Scope of Work – List of all work being done at the project site
 - Connection Charge Calculator:
 - Auditor reviewed existing connection fee to determine what was used in the calculation
 - Auditor then recalculated the connection fee based on their understanding of the project and current interpretation of the Connection Charge Policy

- Other relevant documentation – Work orders, site specific costs, etc
- They then compared what was installed to what was requested. If there was a discrepancy, the team followed up with Planning & Scheduling (PAS), the DSO and/or the broader Audit Team to confirm the appropriate charges that should be have been applied. They confirmed:
 - installation dates and location in GIS Utiliview
 - parcel boundaries in King County Parcel Viewer
 - work orders and site-specific costs with PAS
- For each project, the auditor documented their results in the Project Audit Document which is saved in the Connection Charge folders.
- For each invoice with a noted discrepancy, a second member of the audit team reviewed the project to confirm the accuracy of the recalculated amount.
- The team produced weekly batches of their work, and tracked all invoices reviewed in spreadsheets.
- Refunds due to customers were tracked in a separate spreadsheet, which was then used by the audit team lead to track the refund process (described in section 5).
- The OCA was granted access to all the audit documents and the DSS system. They selected projects to review and validate for completeness and accuracy. Refunds were not issued to customers until after the OCA review was completed and signed off on.
- Once all audit work was finished, a separate completeness review was performed to confirm all in scope invoices in the DSO were reviewed and that all total dollars reported were correct.

4. Policy, procedure, Director’s Rule reviews

A separate team was assigned to review the DSO’s policies, procedures, rules, and business practices for gaps and opportunities for improvement.

The review included the following documents:

- a) Director’s Rule 02-03 – Water Connection Charges. This rule was deemed to be confusing and a cause for many of the errors that were found. A proposed revision has been submitted to the E-Team to clarify the connection charge application. It is anticipated to be finalized in early 2019.
- b) Fin 210.1 – Standard Rates and Charges, which has been replaced since by FIN 220.2 Development Charges.

5. Refunds and Re-billings

- A. The process to issue refunds had numerous checks and balances to ensure accuracy and good internal controls (see Flow Chart Attachment 1).
 - 1) Upon identification of a refund eligible project, the Audit team added the project to a spreadsheet.
 - 2) The audit team developed an Invoice Template to identify the corrected charges.

- 3) A DSO staff member created the refund invoice in the DSS based on the Invoice Template.
 - 4) Proof of initial payment for the project was provided by Accounts Receivable staff.
 - 5) All documentation was reviewed by the RQA lead and signed off as reviewed and approved.
 - 6) Documents were further forwarded to the interim Deputy Director of the Project Delivery and Engineering Branch (and subsequent delegate of the new PDEB Deputy Director) for additional review and approval of the refund request.
 - 7) Documents were then sent to Accounts Payable where they were reviewed for accuracy and forwarded to the City's Accounts Payable department who reviewed the customer information before checks were issued to customers.
 - 8) If checks came back as undeliverable, research was conducted one more time to determine where the customer may have moved before sending the funds to the State's Unclaimed Property department.
- B. Customers who were found to be have not been fully charged for the services received will be billed if the amount owed to SPU is greater than \$200. The \$200 cut off is based on estimated that it would cost SPU more to bill the customer than what is owed.

6. Findings

The audit found an overall error rate of 17%. Most of the errors (13.6%), were overbilling customers for a total of \$812,030. A smaller percentage of errors, 3.4%, was for underbilling customers for a total of \$169,233.

A. *Lack of a QA/QC process*

When the DSO was initially established, there was an intention to establish internal controls procedures around the billing process. One of the new positions was designated as having that responsibility. While efforts were made to begin those process developments, they were never completed and the employee left SPU. The lack of independent invoice review led to significant deviation among project leads in the application of charges and a high rate of errors.

Recommendation: *Create and formally adopt a segregated invoice verification process for all billed transactions in the DSO.*

Action Taken: At the time the invoice discrepancies were identified in April 2018, Financial Internal Controls staff began conducting a QAQC of all invoices before there were issued from the DSO. The QA process required the DSO project leads to notify Internal Controls that an invoice was ready for processing and wait for approval before sending it to the customer. In July 2018 a system change was implemented in the DSS which prevents a project lead from issuing an invoice until it is reviewed by someone with QAQC system rights.

The Internal Controls staff will continue to perform this function for all invoices, until such a time that the work is assumed by a permanent position dedicated to this task. The procedures for the QAQC process are documented in SPU's Quality Control Procedure QC-DSO-01 (Attachment 2).

B. Inconsistent application of the Connection Charge Director's Rule, DR 02-03

The governing Director's Rule for Connection charges was interpreted in several different ways by employees. A review of the Rule by SPU senior management and the audit team found that it was confusing and could not be consistently applied in all circumstances. For the purposes of the audit, all questionable interpretations of how the Rule should be applied were discussed at weekly meetings and decisions made by Directors from the DSO, Project Delivery Branch, and Water line of business; the RQA division weighed in on decisions but deferred the final decision to others.

Recommendation: *Revise the Director's Rule, DR 02-03 to clarify and simplify how connection charges should be applied to developer projects.*

Action taken: SPU's Executive Team approved revising DR 02-03 at their December 12th Policy Board meeting. The Rule is being revised and should be ready for signature by the first quarter of 2019.

C. Omission of existing services when calculating the connection fee

We found that customers were not given credits appropriately for existing water services. The connection charge due from the customer is the difference between the total draw on the system at the end of the project and the initial draw before the project began. Existing services at the parcel are either reused (no change to the service occurs – the customer continues to use the service in its current state) or retired (service is taken out of the system by SPU). Prior to mid-2015, the calculated connection fee was not applied (a calculator spreadsheet was developed in 2016), and the existing services were not always correctly accounted for.

D. Discounts for use of manifolds, common trench, or contractor assist were not always given

We found several instances where discounts were not applied correctly when calculating developer charges. In accordance with Director's Rule FIN 210.1, customers are entitled to a discount for certain types of transactions. Examples include the installation of multiple services in a common trench - either on a manifold or tapped separately, and if the customer provided shoring and trenching (a pilot program only available in 2016).

E. Charging more than once for saw cuts, street use permits, or traffic control plans

We found that customers were charged inconsistently for additional items related to water service installation including: saw cuts, traffic control plans, street use permits, and arterial vs non-arterial work.

Recommendation for items C, D, and E: *Provide training for employees regarding how connection charges are calculated and what charges and discounts apply to projects. Conduct periodic reminders regarding all these points.*

Action Taken: A Connection Charge FAQ was distributed to all DSO staff on 6/5/2018 and training was given at a DSO team meeting the following day. New Director's Rules (FIN 220.1 and FIN 220.2) were implemented on October 1st, 2018 to update the standard charges for development related work, including the items above. The following trainings on how to apply the charges were provided by Internal Controls staff to the DSO; recurring training will be

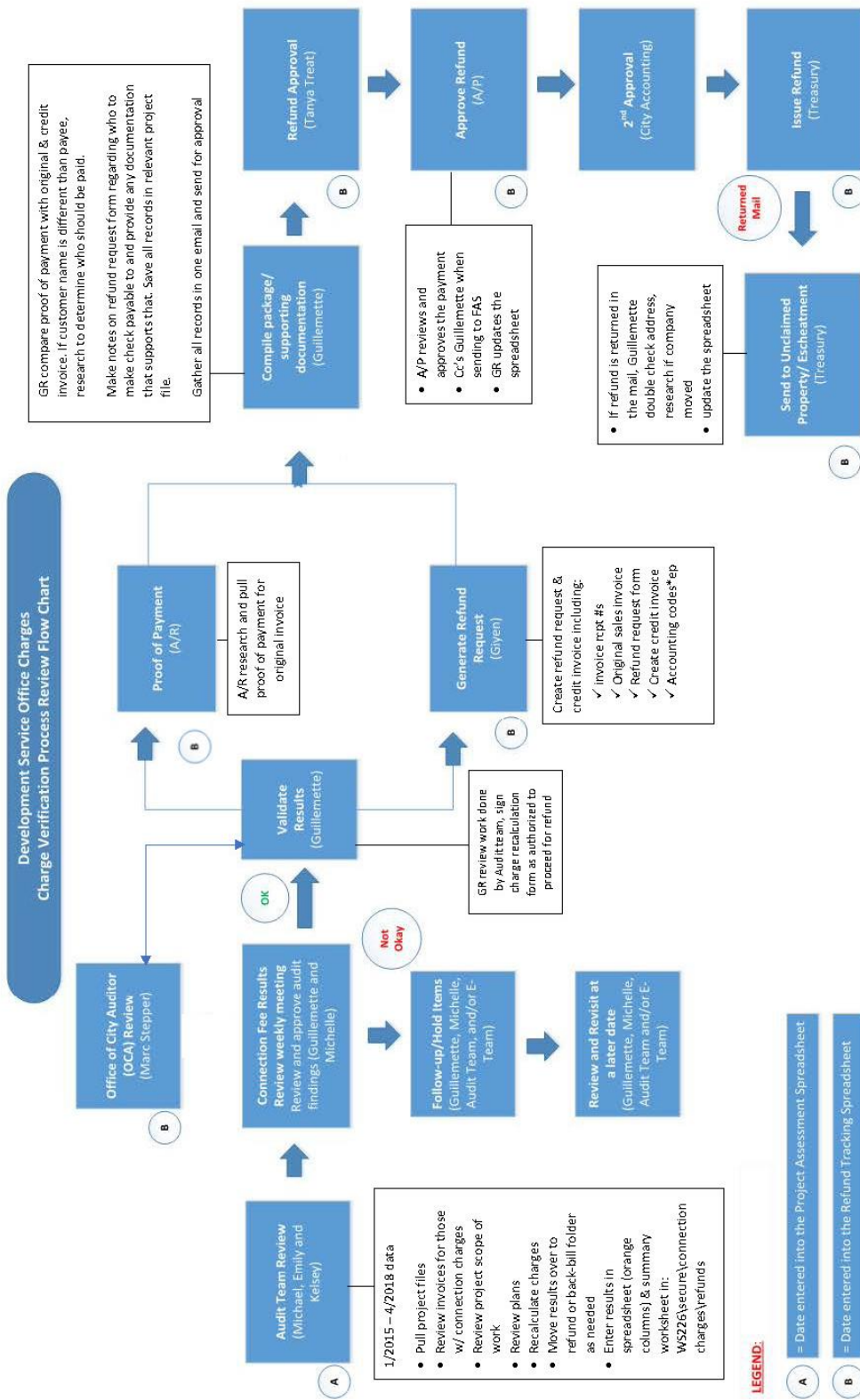
provided when any policy changes are made, when new staff are hired, or when separate charges are updated.

Topic	Main Points	Time
Taps	General - methodology 2" high flow Discounts Small combos Saw cuts (unit/application) Traffic control for small services Trolley permits Retirements – not on same day AMR Ring and covers Permits Distance for moving meters Work SPU deems unusual Nonstandard for installation (SSC) Meter removals and resets	1.5 hours 9/5/18
Connection charge	How and when to apply charges correctly	45 mins 10/3/18
Service Changes	Definitions – plus process for determining whether service is viable	2 hours 9/19/18
Charge matrix (new) Coding matrix (revised) DSS changes DSO menu (revised)	Application tool	1 hour 9/27/18

7. Summary

This was a comprehensive and thorough audit, which took SPU staff about 8 months to complete. We worked closely with the City Auditor's Office to provide transparency to our process and show objectivity in our work and appreciate their help and guidance. We have taken steps in all the areas of deficiency to prevent these types of errors from occurring again in the future.

Seattle Public Utilities Audit Report - Attachment 1



Seattle Public Utilities Audit Report - Attachment 2



QA/QC Procedure

Title Development Services Invoice QA/QC Review Process		Number ENG-QC-260.1	Rev. no. 0
Responsibility Development Services Office		Supersedes N/A	Pages 4
Division Director /s/ Jeff Bingaman	Approved February 1, 2019	Effective February 1, 2019	

1. PURPOSE

This QA/QC procedure ensures that invoices for purchasing water services and system improvements from the Development Services Office are accurate before they are issued to customers.

2. PROCEDURE

A. Review Process

The Development Services System (DSS) requires invoices to be routed through a QA/QC process before issuance. The QA/QC reviewer ("reviewer") is in a separate work group than staff preparing the invoices. This procedure describes the steps of the process to be taken by the reviewer.

B. Procedure

When reviewing invoices, the reviewer must determine if the invoiced charges are accurate given the project's scope of work and SPU's policies and procedures. This requires reviewing the appropriate source documentation saved in the DSS files, the charges as documented in Director's Rule FIN-220.2 – Development Charges, other Director's Rules regarding water connection charges, and any other relevant project information.

1. Water Services Invoices

When reviewing water service ("taps") sales, the reviewer will examine the following documentation:

Supporting documentation	Description	When it is required
Water Service Application (WSA)	Signed customer agreement requesting new service installation or changes to existing service	All water services sales
Water Availability Certificate (WAC)	DSO-developed document outlining required water service improvements and existing water services	All water services sales

Official copy of signed original

Supporting documentation	Description	When it is required
Site Plan	Customer-provided plans showing the number, size and location of proposed new services, existing services, proposed retirements of services and any additional requested work	All water services sales
Scope of Work	Spreadsheet created by DSO Project Lead (PL) and sent to Planning and Scheduling listing required work at the project (results in work order creation)	All water services sales
Calculated Connection Fee Worksheet	Worksheet created by DSO PL that calculates connection fee	All water services sales,
Site-Specific Cost Worksheet	Developed by Planning and Scheduling or Water Operations crew chiefs/managers; provides itemized and total cost for large services (greater than 2 inches) or other site-specific charges	Any item defined in FIN-220.2 as having a site-specific cost or a time and materials cost requiring a deposit
Project ID and Activity Setup Request	Spreadsheet provided by Cost Accounting with project coding	See DSO Charge Matrix
E-mails	Any relevant external or internal communications	As needed
Utiliview (GIS), King County Parcel Viewer, SDOT ROW map	Internal and external websites	As needed to help in determining existing service sizes and locations, parcel boundaries and arterial street classification

Using the above documentation, the reviewer will check the invoice for the following items:

- a) Is the quantity, size, water service type, and street type for each new or changed tap correct?
- b) Are the charge amounts and pricing methodology for each service correct?
- c) Are the correct charges selected for any service retirements or other water service changes?
- d) Is the calculated connection fee amount correct?
- e) Are the following appropriate ancillary charges, as outlined in FIN-220.2, included on the invoice, where required?
 - Saw Cut
 - Automated Meter Reading (AMR) Equipment

- Ring and Cover
 - Permits and Traffic Control Plan (TCP)
- f) Are any of the following required discounts, as outlined in FIN-220.2, appropriately charged in the correct quantity?
- Common Trench Discount
 - Manifold Discount
 - Installation with Water Main Extension
- g) Is the Project ID and Activity correct for each line item?
- h) Are any clarifying notes correctly documented on the invoice?
- i) Are the charges supported by complete and matching documentation?

2. Water System Improvements Invoices

For water main improvements, valve installations, and new hydrant installations, the reviewer will examine the following documentation:

Supporting documentation	Description	When it is required
Contract signed by DSO	Appropriate system improvement contract developed by the DSO, with all appropriate appendices. Completed and signed by the DSO director	All system improvements impacting SPU water infrastructure.
Water Availability Certificate	DSO-developed document outlining required water service improvements and existing water services	All system improvement projects
Site-Specific Cost Worksheet	Developed by Planning and Scheduling or Water Operations crew chiefs/managers; provides itemized and total cost for site specific charges	Any item defined in FIN-220.2 as having a site-specific cost or a time and materials cost requiring a deposit
Project ID and Activity Setup Request	Spreadsheet provided by Cost Accounting with new project coding	See DSO Charge Matrix
Opportunity Work Form (if applicable)	Documentation of scope of work the line of business has added to property owner's project and SPU activity number that will pay for the improvement(s)	When opportunity work has been identified in addition to the property owner's requirements

Using the above documentation, the reviewer will check the invoice for the following items:

- a) Are the contract and charges correct for the type of infrastructure project being invoiced?

- b) Is the contract signed by the Division Director?
- c) Are the invoiced amounts correct?
- d) Is the Project ID and Activity correct for each line item?

3. Other Invoice Types

Other invoice types include Hydrant Permits, Easements and Buildovers, Latecomers, Meter Resets, Automatic Meter Readers (AMRs), and other miscellaneous charges.

For these invoice types, the reviewer will check the following:

- a) Is there support in the project file for assessing the customer this charge?
- b) Are the correct charges, as outlined in FIN-220.2, being used appropriately?
- c) Are the invoiced amounts correct?
- d) Is the Project ID and Activity correct for each line item?

APPENDIX C

Seattle Office of City Auditor Mission, Background, and Quality Assurance

Our Mission:

To help the City of Seattle achieve honest, efficient management and full accountability throughout City government. We serve the public interest by providing the City Council, Mayor and City department heads with accurate information, unbiased analysis, and objective recommendations on how best to use public resources in support of the well-being of Seattle residents.

Background:

Seattle voters established our office by a 1991 amendment to the City Charter. The office is an independent department within the legislative branch of City government. The City Auditor reports to the City Council and has a four-year term to ensure her/his independence in deciding what work the office should perform and reporting the results of this work. The Office of City Auditor conducts performance audits and non-audit projects covering City of Seattle programs, departments, grants, and contracts. The City Auditor's goal is to ensure that the City of Seattle is run as effectively, efficiently, and equitably as possible in compliance with applicable laws and regulations.

How We Ensure Quality:

The office's work is performed in accordance with the Government Auditing Standards issued by the Comptroller General of the United States. These standards provide guidelines for audit planning, fieldwork, quality control systems, staff training, and reporting of results. In addition, the standards require that external auditors periodically review our office's policies, procedures, and activities to ensure that we adhere to these professional standards.