



THE METROPOLITAN WATER DISTRICT
OF SOUTHERN CALIFORNIA

Report
Office of the General Auditor
December 31, 2012

Internal Audit Report for December 2012

Summary

Four reports were issued during the month:

- **Operating Revenue - Water Sales Audit Report**
- **Skinner Water Plant Improvements Program Audit Report**
- **Colorado River Aqueduct Reliability Program 15438 Audit Report**
- **Official Statement for the Water Revenue Refunding Bonds, 2012 Authorization, Series G**

Discussion Section

This report highlights the significant activities of the Internal Audit Department during December 2012. In addition to presenting background information and the opinion expressed in the audit reports, a discussion of findings noted during the examinations is also provided.

Operating Revenue Water Sales Audit Report

Background

Metropolitan's principal source of revenue is from water sales, which includes all revenues received from charges for the sale and availability of water. Water is delivered to the member agencies on demand, and revenue is recognized at the time of sale. Member agencies can request water at various delivery points within Metropolitan's service areas and pay at uniform rates established by the Board annually for each class of service.

The current rate structure includes base rates for untreated water: two-tier supply, system access, water stewardship and system power; and a surcharge for water treated at Metropolitan's treatment plants. Approximately 60 percent of water deliveries are treated water. For fiscal year 2011/12, water sales totaled \$1.16 billion or 87 percent of operating revenues. For the two-month period ended August 31, 2012, water sales totaled \$250 million.

The Water System Operations (WSO) Group is responsible for maintaining, testing and calibrating flow meters. They also provide meter reports, replenishment program certifications, and other water program certifications to the Controller's Office. The Water Resource Management Group is responsible for processing member agency rebate certifications, and applying conservation credits against water invoices. The Controller's Office Water Administrator is responsible for processing and issuing water invoices in accordance with the board-approved rates, program certifications, and contractual agreements with member agencies. Lastly, the Accounts Receivable Team within the Controller's Office processes cash receipts and monitors invoice payments for accuracy and timeliness.

Opinion

In our opinion, the accounting and administrative procedures over Operating Revenue - Water Sales include those practices usually necessary to provide for a generally satisfactory internal control structure. The degree of compliance with such policies and procedures provided effective control for the period July 2009 through August 2012.

Comments and Recommendations

CALIBRATION/INSPECTION OF FLOW METERS

Metropolitan owns and operates its distribution pipelines including the fittings that connect with the pipelines through which its member agencies receive water deliveries. The Water System Operations' Control Systems staff should perform routine maintenance and inspection of service connection, including testing and calibration of flow meters, and maintain up-to-date records of these maintenance and calibration activities. We reviewed the maintenance and calibration/inspection reports for 166 of 570 flow meters and noted:

1. Sixty-nine venturi flow meters were calibrated up to 173 days after their scheduled dates. Venturi meters use pressure sensing devices to calculate the flow of water. Metropolitan requires that these meters be calibrated on a semiannual basis to ensure accuracy of water deliveries billed to the member agencies.
2. Documentation in support of inspections of 16 non-venturi flow meters was incomplete. We noted that the Maximo work orders did not indicate whether the configuration parameters for these meters were set correctly, or whether the signal strengths were within an expected range. The work orders only indicate inspection date, meter location, and internal labor costs. The non-venturi meters consist of magnetic, ultrasonic, and propeller flow meters, which use water level detectors. We understand that management is in the process of developing new inspection documentation templates.

We recommend that management develop a maintenance plan and meter calibration/inspection schedules and complete the meter inspection documentation templates. We also recommend that management encourage staff to adhere to these schedules, and to adequately document their maintenance and calibration activities. We further recommend that management perform periodic reviews to ensure compliance.

PENALTIES FOR DELINQUENT PAYMENTS

Article B, Section 9 - Water Service Connections of the Chiriaco Summit Water District (Chiriaco) Agreement allows Metropolitan to bill this nonmember agency for all water delivered to the California Transportation Agency, including an additional charge for late payment. Metropolitan's Administrative Code Section 4508 requires that Metropolitan assess an additional charge of 1 percent, if the total period of delinquency does not exceed five business days. In addition, a 2 percent charge is assessed for each month or a portion thereof that such payment remains delinquent.

We reviewed the billing and payment reports for Chiriaco from contract inception August 2002 through September 2012, and noted that the customer has been paying up to 224 days after the invoice due date. Further review revealed that delinquent penalties of approximately \$5,600 have not been billed. In addition, we noted that the required minimum standby charge totaling \$750 had not been billed for the periods that service connection was not used by Chiriaco. We understand that the Controller's Office will not pursue collection of these charges, but will assess late fees and minimum standby charges going forward pursuant to the terms of the agreement.

We recommend that the Controller's Office remind staff to adhere to the billing and payment requirements of the Chiriaco agreement.

Skinner Water Treatment Plant Improvements Program Audit Report

Background

Our review was conducted on multiple levels, with tests performed on the program, project, and contract levels. We examined project tracking activities, compared budgeted-to-actual costs, and evaluated reporting practices for all projects approved under the Robert A. Skinner Treatment Plant (Skinner) Improvements Program (Program). We also evaluated the controls over the project authorization and closeout processes for selected projects within this Skinner Program. In addition, on the contract level, we selected the Griffith Company contract to test the reasonableness and validity of invoice payments.

The Skinner Program is part of the Capital Investment Program, which is a multiyear planning document that is based on a systematic evaluation of facilities, equipment, and systems. This plan serves as a guide to ensure the efficient and effective use of capital expenditures by outlining a timeline and financial schedule of future capital programs.

The Skinner Program was established to maintain infrastructure reliability and regulatory compliance at the Skinner plant, and was appropriated for \$145.2 million. The Skinner Program consists of nineteen projects and is scheduled to be completed in fiscal year 2014/15. As of June 30, 2012, fourteen of these projects have been completed, three were ongoing, and two were canceled; actual program expenditures were \$144.7 million.

In August 2009, as part of the Skinner Program, Metropolitan entered into a \$2.4-million contract with the Griffith Company for the chemical system and collection improvements construction. The work included replacing chemical feed piping and solids collection equipment, adding piping trenches and solids removal pump manifolds, relocating a generator, and installing a new potable water pump. Total payments made to the Griffith Company were \$2.2 million as of June 30, 2012.

Opinion

In our opinion, the administrative controls over the Skinner Program include those practices usually necessary to provide for a generally satisfactory internal control structure. The degree of compliance with such policies and procedures provided effective control for the period July 2009 through June 2012.

Comments and Recommendations

PROJECT STATUS AND CLOSEOUT

Project management entails planning, organizing, and managing resources to bring about the successful completion of specific goals and objectives. It involves monitoring and controlling activities from project initiation to project closeout. Projects should be closed after all contractual requirements have been met, all invoices have been accrued or paid, and Metropolitan has discharged all obligations. Our review revealed:

1. Project 103145 and Project 103171 remained open for 140 and 296 days respectively, after all the work had been completed and all expenses paid.
2. We could not locate the “Project Authorization/Change Order” forms that document the changes in completion dates for three of nine projects reviewed: Project 103926, Project 103855, and Project 104058.
3. The Skinner Program cost of \$144.7 million was understated by \$55,186, as of June 30, 2012 because one of the projects had an outstanding credit account balance. Further investigation revealed that when costs associated with Skinner Expansion No. 4 Project 102913 were transferred to Appropriation 15410, costs of \$55,186 were transferred in error.

We recommend that management remind the project managers to comply with project management procedures to ensure timely closeout of projects and updates of costs, and conduct periodic reviews to ensure compliance. Further, we recommend that management work with Accounting Operations to resolve the credit account balance.

SUBSTANTIALLY COMPLETE AND COMPLETED PROJECT PROCEDURES

Operating policies and procedures should be established and documented to provide a framework for achieving Metropolitan’s goals and objectives. Procedures assist management in training new employees or cross training of staff, provide guidance for consistent performance of daily responsibilities, and provide a source of reference for Metropolitan personnel. Our review revealed:

1. Project 103021 and Project 103777 totaling \$5.37 million were completed in fiscal year 2008/09, but remained in the Construction-In-Progress Account 12155 rather than in the Completed Features Account 12198, as of June 30, 2012.

Further review revealed that the Project Coordination Office did not notify the Controller's Office when these capital projects were substantially complete or administratively closed, in order to transfer them to the Completed Features Account and to start depreciation. We noted that the practice of informing the Controller's Office of these closeouts have not been "codified" into written procedures.

2. Two contract retentions tested totaling \$68,089 were deposited to the escrow company up to four days prior to actual invoice payment. We understand that the Controller's Office has revised their Contract Retention Procedures.

We recommend that the Project Coordinating Office, program management, and the Controller's Office work together to formalize procedures for substantially complete and completed capital projects, to ensure consistency and proper recording of projects and the related depreciation expense. We also recommend that the Controller's Office management remind the Accounting Operations and Accounts Payable staff to coordinate efforts when remitting retentions to the escrow company.

Colorado River Aqueduct Reliability Program 15438 Audit Report

Background

The Colorado River Aqueduct (CRA) is a 242-mile-long conveyance system which transports water from Lake Havasu to Lake Mathews. Major portions of the system were initially constructed in the 1940s and have been in continuous service ever since. In recent times, portions of the system have exhibited signs of wear and tear. Metropolitan commenced the CRA Pumping Plant Reliability Program (Program) in August 2001 to repair, refurbish, or replace worn system components.

Phase I of this Program refurbished the Whitsett Intake (Whitsett) Pumping Plant, Gene (Gene) Pumping Plant, Eagle Mountain (Eagle) Pumping Plant, Iron Mountain (Iron) Pumping Plant, and Julian Hinds (Hinds) Pumping Plant.

In September 2006, Phase II of the Program was approved to provide additional repairs and refurbishment of the CRA, and its related facilities and equipment. As of November 2012, the total spent on the Program is \$24.4 million and expected to be completed in fiscal year 2014/15. Phase II of the CRA Program consisted of 17 projects totaling \$31.6 million. Our test work consisted of a focused review of three contracts: Contracts 1694 and 1725 awarded to Southern Contracting Company, and Contract 1732 awarded to Abhe & Svoboda, Incorporated.

The first contract with the Southern Contracting Company (1694) was awarded in January 2010 for \$5.2 million to install fault current protection upgrades at Whitsett, Gene, Iron, Eagle, and Hinds switch houses. The work was completed in February 2011, with expenditures totaling \$5,266,600 that included \$107,051 in approved extra work orders.

The second Southern Contracting Company contract (1725) was awarded in August 2011 for \$4.8 million to replace the 230 kV disconnect switches at the Gene, Iron, Eagle, and Hinds pumping plants. As of October 2012, this project was 61 percent completed and expenditures totaling \$2.9 million have been paid to the contractor.

Finally, Metropolitan entered into Contract 1732 with Abhe & Svoboda, Incorporated in November 2011 for \$1.8 million to repair cracks along the CRA, and to install new internal seals at multiple locations along CRA's Freda, Perris Valley, and Mile Marker 19.58 siphons to prevent leakage. This project was completed in March 2012, with expenditures totaling \$1,778,500.

Opinion

In our opinion, the accounting and administrative procedures over the Program include those practices usually necessary to provide for a satisfactory internal control structure. The degree of compliance with such policies and procedures provided effective control for the period January 2010 through September 2012.

Comments and Recommendations

There were no material findings to report.

Official Statement for the Water Revenue Refunding Bonds, 2012 Authorization, Series G

The Audit Department has completed a review of the Official Statement for the Water Revenue Refunding Bonds, 2012 Authorization, Series G. We performed this review to provide the issuer of the Bonds "comfort" that the Official Statement for the Bonds is complete, consistent with supporting financial records, and accurate in all material respects. We completed our review in accordance with agreed upon procedures specified by the underwriter. We issued letters to the underwriter describing the agreed upon review procedures performed, and the results obtained.
