



THE METROPOLITAN WATER DISTRICT  
OF SOUTHERN CALIFORNIA

## **Internal Audit Report for July 2011**

### **Summary**

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Three reports were issued during the month:

- **Energy Management – Hydroelectric Power Contracts Audit Report**
  - **Professional Consulting Agreements Less Than \$250,000 Audit Report**
  - **Remarketing Statement for the Water Revenue Refunding Bonds, 2009 Authorization, Series A-2**
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### **Discussion Section**

This report highlights the significant activities of the Internal Audit Department during July 2011. In addition to presenting background information and the opinion expressed in the audit reports, a discussion of findings noted during the examination is also provided.

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## **Energy Management – Hydroelectric Power Contracts Audit Report**

### **Background**

The Metropolitan Water District Act (Act), Section 139, allows Metropolitan to acquire, construct, operate, and maintain any and all works, facilities, improvements, and property to provide, generate, and deliver electric power necessary to carry out the objects or purposes of Metropolitan. The Act (Section 139.1) also allows Metropolitan to sell and deliver electric power to federal, state, or public agencies, private corporations, or persons engaged in the sale of electric power at retail, or use all or any part of such electric power directly or by exchange.

These powers expressly granted Metropolitan the means to obtain energy needed to complete its mission and, starting in the 1970s, Metropolitan began an extended capital improvement program to construct fourteen hydroelectric plants. Metropolitan constructed two additional hydroelectric plants (Etiwanda Hydroelectric Plant and Diamond Valley Lake – Hiram W. Wadsworth Pumping/Hydro-generating Facility) in 1994 and 2001, respectively. Each plant's capacity ranges between 1 and 29 megawatts (MW), with total installed capacity of 131 MW. Actual power generation at these plants, however, is dependent upon water deliveries through the water distribution system.

In conjunction with the operation of these power plants, Metropolitan entered into energy sale agreements with the California Department of Water Resources in 1978; Pacific Gas and Electric Company in 1994; Southern California Edison in 1982 (amended in 2003 and renewed in 2008); Automated Power Exchange in 2004; Los Angeles Department of Water and Power (2008); and Southern California Public Power Authority (2008). These agreements required that Metropolitan sell the electric energy produced by all sixteen power plants to respective energy buyers. The agreements were effective for fifteen to twenty years or set to expire ten years after termination notice.

Total power generation from the plants and corresponding sales in FY 2008/09 through FY 2010/11 (through April 2011) are:

Fiscal Year	Total Generation (Kilowatt Hour)	Power Sales (General Ledger)
2008/09	270,926,300	\$ 17,227,100
2009/10	261,295,300	18,213,700
2010/11 (April 2011 YTD)	252,889,000	18,850,900
Total	785,110,600	\$ 54,291,700

### **Opinion**

In our opinion, the accounting and administrative procedures over Energy Management - Hydroelectric Power Contracts 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 2008 through April 2011.

### **Comments and Recommendations**

#### PERIODIC REVIEW AND RECONCILIATION OF POWER REVENUE

Accounting control is achieved in part by performing periodic reviews and reconciliations of accounting records. These procedures provide assurance as to the propriety of the transactions affecting the accounts; they identify potential errors; and they describe follow-up procedures for exceptions. For the hydroelectric power generation process, Power Resources Unit management and Accounting Operations should perform periodic reviews and reconciliations of power revenue to validate the propriety of transactions and ensure all power revenue is accounted for. We reviewed the power revenue recorded in the general ledger for FY 2008/09, FY 2009/10, and FY 2010/11 through April 2011 and noted:

1. Documented reconciliations of power revenue between the general ledger and the Hydroelectric Plants Fiscal Year Energy and Revenue Account Report (H10 Report) were not performed. The H10 Report is used by the Power Team to account for energy sales (in kilowatt hour and dollars) earned each month through the end of the fiscal year. Discrepancies were noted between the recorded revenue in the general ledger vs. the reported amounts in the H10 Report, and are shown below:

Summary of Discrepancies on Power Revenue between General Ledger and H10 Report			
	FY 2008/09	FY 2009/10	FY 2010/11 (Apr 2011)
Per General Ledger (GL Sub Account 3130010)	\$17,227,146	\$18,213,690	\$18,850,886
Per H10 Report	\$17,428,710	\$19,070,766	\$18,662,897
Discrepancies – GL Over (Under)	\$ (201,564)	\$ (857,076)	\$ 187,989

2. Estimated power revenue reported in the H10 Report was not reconciled with the cash remittances/ payment advices from buyers.

We recommend that the Controller's Office and Power Resources Unit management resolve the noted discrepancies. We also recommend that the Controller's Office reconcile power revenue between the General Ledger and the H10 Report on a monthly basis to ensure the accuracy of revenue. Lastly, we recommend that the Power Resources Unit perform periodic reconciliations of estimated revenue reported in the H10 Report to cash remittances/payment advices to ensure that all amounts due to Metropolitan are collected from energy buyers.

#### COMPLIANCE WITH TERMS AND CONDITIONS OF THE AGREEMENTS

We reviewed fifteen Metropolitan invoices totaling \$4.7 million, and noted that four invoices were submitted up to thirteen days late, and that five invoices were collected up to 87 days late. We also noted that invoices submitted to the Los Angeles Department of Water and Power and the Southern California Public Power Authority did not contain the required statement of representation and warranty. These are all in contrast to the Billings and Payment Sections of the respective agreements that require Metropolitan to submit invoices containing a statement of representation and warranty within ten days of each calendar month end and for the energy buyer to remit payment within fifteen days of invoice receipt.

We recommend that Water System Operations Group planning management remind Power Resources Unit staff to ensure timely submission of monthly invoices and their prompt collections. We also recommend that the Power Resources Unit staff coordinate efforts with the Accounts Receivable Team to ensure that the required statement of representation and warranty is included on the invoices.

#### INSPECTION AND MAINTENANCE PLAN

Metropolitan's energy sale agreements with energy buyers require Metropolitan to operate and maintain the power plants in accordance with prudent utility practices. These agreements also require Metropolitan to implement an inspection and maintenance plan; test and calibrate power meters; and perform all scheduled maintenance. Within Water System Operations Group, the Power Support Unit of the Operations Support Services Section should provide routine maintenance; inspection, testing and calibration of power meters; and maintain records of these maintenance and calibration activities.

We could not locate the operation and maintenance plans for all of Metropolitan's sixteen hydroelectric plants. This is in contrast to the Operation and Maintenance Sections of the respective energy sale agreements that require Metropolitan to devise and implement a plan of inspection, maintenance and repair to the facility, and the components thereof to maintain such equipment in accordance with prudent utility practices. We learned that the power meters are inspected, calibrated, and tested under contract by a certified CALISO company annually. Power Support Unit staff coordinates testing dates and witnesses these tests.

We recommend that the Power Support Unit establish written maintenance procedures for power meters. We also recommend that management encourage staff to adhere to the maintenance schedule and to adequately document their maintenance activities.

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## **Professional Consulting Agreements Less Than \$250,000 Audit Report**

### **Background**

Engineering Services manages a complex and comprehensive capital improvements program that annually totals over \$350 million. These efforts require effective project management practices to ensure the successful completion of project plans. These practices involve the exercise of responsibility and decision-making about a project, the authority to execute within the boundaries of the project, and the accountability to deliver the results of a project in the context of agreed upon customer expectations, commitments, and constraints. These expectations often require the project manager to supplement existing construction or consulting contracts with additional support services to ensure that the project is completed on time and within budget.

Engineering Services prequalifies consultants through the Request for Qualifications (RFQ) process for consideration in those instances where the need for technical support is acute. Prequalification does not guarantee a consultant an agreement, and Metropolitan reserves the right to enter into agreements with one or more consultants based upon its project needs. As needs are identified, Metropolitan selects consultants from the list of prequalified consultants and executes roll-over agreements for up to five years, with a maximum amount payable per agreement year.

Administrative Code Section 8121(c) grants authority to the General Manager to execute professional and technical agreements without prior board approval provided that the amount payable during any one agreement year does not exceed \$250,000. As of March 31, 2011, there were 290 active professional agreements each with contract amounts less than \$250,000 per contract year or throughout the contract term. The maximum amount payable for these agreements totaled \$6.4 million through March 31, 2011. Three of these agreements were less than \$250,000 (Geopentech, AECOM and Brown and Caldwell) and covered under this review.

In May 2006, the Engineering Services Group issued RFQ 787 to provide for geotechnical, tunnel design engineering, fluvial geomorphology, and sediment transport consulting services. Metropolitan entered into a three-year agreement with Geopentech effective February 2007 with a maximum amount payable of \$244,000 per contract year. The scope of work required the consultant to provide on-call geotechnical consulting services in support of Metropolitan's projects throughout its distribution system and service area. This agreement was amended twice to revise the billings, payments and nondiscrimination practice articles, fee schedule, and to extend the contract duration for an additional two years to February 2012. Metropolitan has paid the consultant \$740,600 for the past four contract years through February 2011.

Engineering Services issued RFQ 833 in October 2007 to provide conceptual, preliminary, and final design services for new facilities and rehabilitation/expansion of existing facilities relating to the conveyance, storage, treatment, and distribution of water. Metropolitan entered into a one-year agreement with AECOM effective March 2009. This agreement had a maximum amount payable of \$244,000. The scope of services required the consultant to provide pipeline design and conveyance expertise, specifically on the preliminary design of the Etiwanda Pipeline Liner Repair.

This agreement was amended to extend contract duration to complete the rest of the study. The agreement terminated in December 2010, and Metropolitan has paid the consultant \$52,700 through March 31, 2011.

Lastly, Business and Technology Services issued RFP 840 in September 2007 to provide a Web based Operations and Maintenance Manual for Skinner Ozone Treatment operation. Brown and Caldwell was selected under this RFP and Metropolitan entered into a one-year agreement effective April 2008 with a maximum amount payable of \$232,000.

The agreement was amended several times to allow for payments based on completion of subtasks, and to extend contract duration to complete review and negotiation for software maintenance and licensing agreements. This agreement terminated on March 31, 2011 and Metropolitan has paid the consultant \$208,300 through that date.

### **Opinion**

In our opinion, the accounting and administrative procedures over Professional Consulting Agreements - Less than \$250,000 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 February 2007 through March 2011.

### **Comments and Recommendations**

#### **COMPLIANCE TO TERMS AND CONDITIONS OF THE AGREEMENTS**

Compliance with contractual requirements is necessary to ensure accurate accounting records, proper supporting detail, and adequate control over the administration of the agreements. Compliance with the contractual terms and conditions also ensures that parties fully discharge their duties and obligations, and exercise their legal rights associated with the agreements. Our review of twenty selected invoices totaling \$416,800 revealed:

1. Invoices were paid late up to 98 days in ten of twenty instances. The invoices involved Geopentech, AECOM, and Brown and Caldwell.
2. We could not validate the accuracy of Geopentech's subconsultant charges totaling \$5,138 as the supporting fee schedule could not be located.
3. The Business Outreach Program section of Brown and Caldwell agreement requires Small and/or Disabled Veteran Business Enterprise (SBE) participation of 18 percent. However, we noted 10.3 percent SBE participation through the agreement termination date of March 31, 2011.

We recommend that the agreement administrators resolve the noted differences. We also recommend that the agreement administrators remind the consultants to comply with the terms and conditions of the agreements and conduct periodic reviews to ensure compliance.

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## **Remarketing Statement for the Water Revenue Refunding Bonds, 2009 Authorization, Series A-2**

The Audit Department has completed a review of the Remarketing Statement for the Water Revenue Refunding Bonds, 2009 Authorization, Series A-2. This review was undertaken to provide the remarketers of the Bonds “comfort” that the Remarketing Statement for the Bonds is complete, consistent with supporting financial records, and accurate in all material respects. The review was completed and no exceptions were noted. We issued letters describing the agreed upon review procedures performed, and the results obtained to the remarketers of the Bonds.

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