

RIVERSIDE PUBLIC UTILITIES

Board Memorandum

BOARD OF PUBLIC UTILITIES

DATE: NOVEMBER 28, 2016

ITEM NO: 7

SUBJECT: OPERATIONAL DATA MANAGEMENT SYSTEM (ODMS) PROJECT UPDATE AND SECOND AMENDMENT TO THE PROFESSIONAL VENDOR SERVICES AGREEMENT WITH OPEN SYSTEMS INTERNATIONAL, INC. IN THE AMOUNT OF \$61,750 FOR SOFTWARE AND PROFESSIONAL SERVICES.

ISSUES:

Receive an update on the Operational Data Management System (ODMS) Project and approve the Second Amendment to the Professional Vendor Services Agreement with Open Systems International, Inc., in the amount of \$61,750.

RECOMMENDATIONS:

That the Board of Public Utilities:

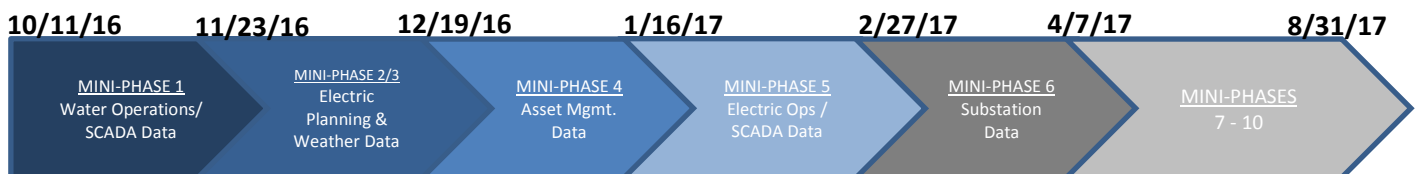
1. Receive an update on the Operational Data Management System Project; and
2. Approve the Second Amendment to the Professional Services Vendor Agreement with Open Systems International, Inc. in the amount of \$61,750.

BACKGROUND:

On May 9, 2016, the Board approved the Operational Data Management System (ODMS) project for the total amount of \$3,557,000 under Work Order No. 1619634. The project scope of work includes importing data sets from multiple systems into OSIsoft's PI system – a data hub or central repository – and displaying it in dashboards and reports to enhance operational efficiencies.

RPU is utilizing an agile project management approach to deploy the PI system, which calls for multiple 3 to 6 week “mini” phases within the 12-month project schedule. Each mini-phase includes integration of defined data sets and the development of dashboards, reports and tools needed for analytics.

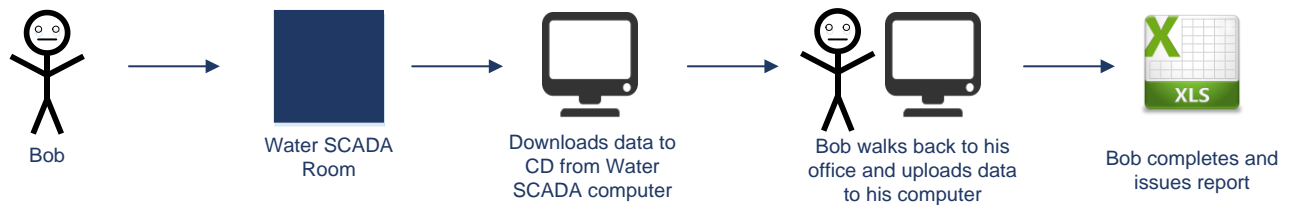
Figure 1: High-level Project Schedule



In the first 6 week mini-phase, which began on October 11th, the project team installed all hardware and software, configured the PI system on RPU's network, integrated data from 5 disparate sources, and developed 3 dashboards. Being presented before the Board today are two of the three dashboards that were developed, the Water Operations Dashboard and the Real-Time Blend Summary Dashboard.

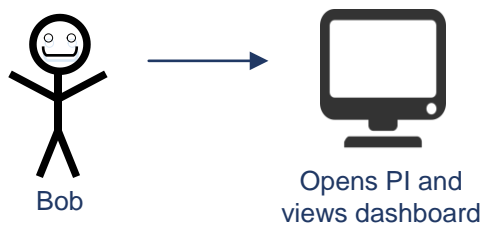
Prior to implementing PI, these types of reports were cumbersome and required significant staff time and efforts to complete. For example, the Water Operations Dashboard was prepared manually and required approximately 10 hours of staff time per week to produce. With PI, the data is now automatically populated and displays in real-time (every two minutes).

Prior to PI: To prepare the Water Operations Dashboard, staff would do the following:



Estimated staff time: 2 hours per day = 10 hours per week = 520 hours per year = 2,600 hours in 5 years

With PI: To prepare the Water Operations Dashboard, staff will now do the following:



Estimated staff time: 15 seconds

Estimated savings: \$52,000 per year = \$260,000 in 5 years

By automating just this one manual process, RPU will realize an estimated \$260,000 in savings from efficiency gains over a 5 year period. Additional value, although more difficult to measure, is gained through increased visibility into the system, enhanced monitoring and analytic capabilities, and ability to quickly identify and respond to system issues. In addition, PI's ability to send SMS text and email alerts enable real-time decision making and has been described as an invaluable tool by Water Operations staff. The project plan includes over 50 such conversions from manual to automated processes that will result in similar savings.

Software and Professional Services Agreement

In preparation for mini-phase 5, staff recommends approval of the Second Amendment to the Professional Vendor Services Agreement for the purchase and installation of software for a total of \$61,750. The purchase of this software will allow RPU to import Electric SCADA data into ODMS and display it in the form of dashboards and reports alongside the other datasets. The approval of this agreement does not result in an increase to the total project budget, as this amount was included in the total project costs approved on May 19, 2016.

Table 1 (below) outlines the new total contract value with Open Systems International, Inc. Only the \$61,750 is applicable to the ODMS project. The original Agreement and First Amendment are related to the SCADA System Upgrade Project originally approved in August 2013.

Table 1: Outline of Contract Changes on Original SCADA System Upgrade Project Agreement

Agreement / Date Approved	SCADA System Upgrade Project	Operational Data Management System (ODMS) Project
Professional Services Agreement (8/6/2013)	\$785,307.00	-
1 st Amendment (5/8/16)	\$101,500	-
2 nd Amendment (11/28/16)		\$61,750
Total Contract Value		\$948,557.00

FISCAL IMPACT:

Sufficient funds are available in Public Utilities' Energy Delivery Account No. 6130000-470822 and Public Utilities' Water Account No. 6230000-470822 in the amounts of \$40,137.50 (65%) and \$21,612.50 (35%), respectively.

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 Approved by: John A. Russo, City Manager
 Approved as to form: Gary G. Geuss, City Attorney

Certifies availability of funds: Laura Chavez-Nomura, Public Utilities Assistant General Manager/Finance

Attachments:

1. Amendment to Professional Vendor Services Agreement – Open Systems International, Inc.
2. Presentation