



Agenda Report

June 3, 2019

TO: Honorable Mayor and City Council
FROM: Water and Power Department
SUBJECT: AUTHORIZATION TO ENTER INTO A CONTRACT WITH ORACLE AMERICA, INC. TO FURNISH AND DELIVER SOFTWARE LICENSES AND SUPPORT SERVICES ASSOCIATED WITH THE CUSTOMER-TO-METER CUSTOMER INFORMATION SYSTEM AND THE ORACLE FIELD SERVICE CLOUD PRODUCT

RECOMMENDATION:

It is recommended that the City Council:

1. Find that the proposed action is not a project subject to the California Environmental Quality Act (CEQA) pursuant to Section 21065 of CEQA and Sections 15060 (c)(2), 15060 (c)(3), and 15378 of the State CEQA Guidelines and, as such, no environmental document pursuant to CEQA is required; and
2. Authorize the City Manager to enter into a contract, as the result of a competitive selection process, as specified by Section 4.08.047 of the Pasadena Municipal Code, with Oracle America, Inc. ("Oracle") to furnish and deliver software licenses and support services for a cloud-based Customer Information System and Oracle Field Service Cloud, in an amount not to exceed \$2,500,000. Competitive price bidding is not required pursuant to City Charter Section 1002(F) (contracts for professional or unique services).

EXECUTIVE SUMMARY:

In July 2017, the Water and Power Department ("PWP") initiated a multi-year, multi-million dollar project to replace its aging Customer Information System ("CIS") by conducting a Needs Assessment and requirements analysis, defining the current and future business billing needs for the City of Pasadena ("City"). The associated analysis and findings determined that automation and operational technology are key initiatives for both the City's continued success and the future vitality of its municipal utility. Therefore, the resulting project will be a full replacement of the existing CIS, including the addition of customer-facing web services and portals for the billing of electricity, water, sewer, and refuse services, as well as several key utility-related taxes.

A Request for Proposals ("RFP") was issued in May 2018 for a new CIS, System Integrator, Customer Self-Service ("CSS") portal, and Electronic Bill Presentment and Payment ("EBPP") services. The RFP provided responders to the CIS section with the option to provide software that is hosted on premise (using hardware that is City-owned and maintained) and/or as a cloud-based solution (hardware is owned and maintained by the vendor). A Selection Team comprised of staff from the Departments of Finance, Information Technology ("DoIT"), Public Works, and Water and Power reviewed and evaluated the written proposals; coordinated and engaged stakeholders in vendor technology demonstrations; conducted reference checks and site visits; and negotiated statements of work and final cost proposals to determine the best-fit solution for the City. Based on a thorough assessment as defined in the RFP, the Selection Team recommends awarding a contract to Oracle America, Inc. to furnish and deliver the Customer to Meter ("C2M") CIS in a Platform as a Service ("PaaS"), also known as a cloud-based format. Separate contracts will be awarded for System Integrator, CSS and EBPP products and services when the selection process is completed over the next several months. Additional appropriations will be requested in the proposed FY2020 Capital Improvement Program budget, and the estimated total project cost is \$20-25 million, as previously represented to the City Council.

BACKGROUND:

PWP provides utility billing and bill processing services for electric, water, sewer, refuse, and utility-related taxes on behalf of the City using a Vertex (previously Orcom) CIS. The current CIS was implemented in 2001 using an IBM AS400 platform. PWP is currently operating the latest version of ECIS software offered by Vertex on the existing platform, which was implemented in 2007. The software is supported on a time-and-materials basis through an agreement with Vertex. The AS400 has been upgraded several times through the years and is now considered outdated technology with minimal support services offered by IBM.

The CIS provides data to various business critical systems for PWP and other City departments, including:

- Geographical Information System
- Outage Management System
- OPower Conservation Program
- WaterSmart Conservation Program
- Field Meter Reading
- Large Commercial Metering
- Oracle Data Warehouse Web Reports Portal

As business requirements have grown and evolved over time, several system enhancements and internally developed peripheral applications were added to the existing CIS functionality to provide workaround solutions. All the resulting interfaces, paired with the aging technology have added complexity and significant risk to the maintenance of the system and daily operations.

During fiscal year 2017, staff completed a preliminary evaluation of the available options to upgrade or replace the existing CIS, including the risks, benefits, timeline and resources required for each option. This process concluded that a comprehensive

requirements definition was needed to fully evaluate the technical and business requirements for all functions provided by the CIS.

On July 24, 2017, following a formal Request for Proposals (“RFP”) process, the City Council authorized the City Manager to enter into a contract with TMG Utility Advisory Services (“TMG”) to conduct a complete needs analysis as the first phase of a CIS Replacement Project. TMG moderated twenty-six (26) intensive workshops with staff from the Departments of PWP, Finance, Public Works, and Information Technology to identify the functions and features required to meet current and future business and functional needs. Assessing these requirements resulted in a “blueprint” report that determined that a new CIS solution is required to address hardware and software enhancements; meet ever-changing utility market requirements, regulations, and modern customer needs including distribution systems automation, sophisticated metering, complex rate structures, accessible billing, and new communication technologies. A new solution is also required to support evolving technologies such as solar, battery storage, and Electric Vehicles (“EV”), all of which align with the City’s technology and automation initiatives to promote future growth.

Figure 1: Needs Assessment Findings

Business Objectives	
1.	<p>Improve System Agility and Access Support the ability to implement change quickly, delivery reliably, and keep pace with customer expectations and business initiatives in a cost-effective manner; Improve the ability of the system to integrate with other systems and provide better access to data for reporting and analytics.</p>
2.	<p>Provide Greater Financial Control Support the ability to examine and implement tighter controls, security, and improved auditing of system transactions to prevent (or quickly identify) issues.</p>
3.	<p>Improve Customer Experience Provide more and better channels of communication and opportunities for self-service.</p>
4.	<p>Modernize Hardware and Software Platform Move to a supported CIS solution on a non-proprietary hardware platform that facilitates ease of integration and supports key business initiatives.</p>
5.	<p>Support Business Initiatives Provide flexibility to introduce new and non-traditional forms of business through automated systems. Provide systems that support electrification, co-generation, and smart grid/smart metering technologies.</p>

In February 2018, staff presented the needs analysis findings in Figure 1 to the Municipal Services Committee (“MSC”) and City Council. Committee members and City Council supported next steps to procure a new CIS solution, including the addition of five new staff positions, and authorized staff to proceed with the procurement process to purchase and implement a new CIS. With support from TMG, an RFP was issued on May 24, 2018 to select a replacement solution. Proposers were required to provide a self-assessment of their product’s ability to satisfy over 4,000 functional and technical

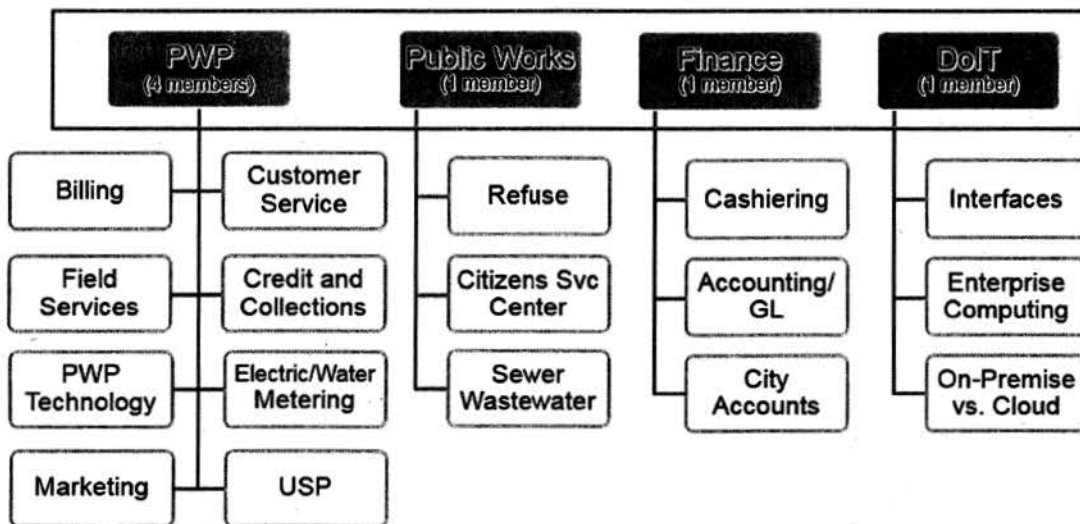
requirements, implementation methodology, proposed project resources, and submit a project schedule. In response to the RFP, sixteen proposals were received on July 23, 2018 for eight unique CIS software products. No submissions were received from local Pasadena vendors, and no additional outreach was performed.

Vendor proposals offered a mix of proposed service and software offerings -- system integrator services, CIS software solutions, cloud solutions, CSS web portals and mobile apps, and various payment and bill print channels. Each product/solution offering was evaluated independent of other components, and the City reserved the option to award multiple contracts to the highest scoring proposal for each solution, or to award a single "Prime" contract, should a single vendor satisfy all customer billing business needs.

Evaluation was completed in three phases to assess: (1) the written content and address of RFP criteria; (2) onsite product demonstrations and reference checks; and (3) total cost of ownership and proposed statement of work. A complete list of CIS proposals and scoring is provided in Attachment A.

The proposals were evaluated by a seven member Selection Team representing City departments that interact with, support, and are the business users of CIS. Subject Matter Experts ("SME") were also included to provide expertise and aid in the evaluation and scoring process.

Figure 2: Selection Team and Associated SMEs



At this time, based on the established independent scoring criteria, staff is recommending authorization for the City Manager to enter into a five-year contract with Oracle America, Inc. for CIS software and services. In a separate future action, staff will seek City Council approval for the award of a master service agreement with a Systems Integrator consultant and contracts for CSS and EBPP software licenses and services for the complete CIS solution.

Oracle Customer to Meter

The expectations of modern utility customers are evolving quickly as available technology drives utility trends such as solar energy systems, electric vehicles, battery storage, and smart bill pay (Alexa Voice, Apple Pay). Industry concepts that were once innovative ideas are now commonplace and require utilities to respond more quickly to customer service requests – smart meters/grid, distributed generation, pre-paid billing. PWP is exploring new revenue sources and assessing new business models, but the outdated technology and limited functionality of the current CIS significantly limits the innovation and modernization that is necessary for the utility to adapt and succeed.

Oracle’s thirty-plus years of technology and systems expertise in the utilities industry has proven to support municipal electric and water departments in successfully navigating a wide range of mission-critical business challenges. Site visits to Burbank Water and Power, the City of Long Beach, and Louisville Water Company provided opportunities to see the Oracle CIS in production and discuss business process best practices that were implemented with project and operations staff. Oracle’s proposed C2M solution will help the City achieve the business objectives identified in the Needs Assessment, as well as provide a solution for long-term goals and future technology advancements.

As PWP prepares for Advanced Metering Infrastructure (“AMI”), the Oracle C2M Meter Data Management (“MDM”) and Smart Grid Integration components offer the opportunity to reduce the AMI program timeline and minimize the amount of software required to support and utilize meter data management. In addition, advanced rate design and billing capabilities to support Time of Use (“TOU”) and real-time billing will already be in place.

Figure 3: Business Objectives and C2M Solution

Business Objectives		Oracle C2M Solution	
1.	Improve System Agility and Access	Highly configurable. - Ability to match current business processes - Adaptable for future business changes - Architected for easy upgrades - Requires minimal modifications to base software	
2.	Provide Greater Financial Control	- Customer management - Payment processing - Credit and collections - Rates - Billing	- Connections - Meter reading - Meter data management - Field service - Meter device management
3.	Improve Customer Experience	Provides a 360 ^o view of the customer to help address questions and issues faster, and offer targeted, value adding programs and services based on usage patterns.	

Figure 3: Business Objectives and C2M Solution (continued)

	Business Objectives	Oracle C2M Solution
4.	Modernize Hardware and Software Platform	<p>Oracle Cloud is an integrated stack of platform, infrastructure, and application services. With advanced scalability and security, the cloud enables technical agility.</p> <p>Provides premier security and failover for hosted services</p>
5.	Support Business Initiatives	<p>A fully integrated, single solution, on a single technology stack; pre-built integrations with head-end and AMI systems; consolidated interface for data management</p> <p>Oracle Customer Care and Billing CIS <u>+ Meter Data Management ("MDM") tool</u> 1 Oracle C2M solution. No integration.</p> <p>Additionally, Oracle C2M provides the baseline technology platform to launch forward-looking operational technologies.</p> <ul style="list-style-type: none"> - Interactive smart meters - Early water leak detection - Remote power turn on/off - Transactive-grid (accurate electricity flow tracking)

Key Contract Conditions

There are certain key conditions included in the recommended contract with Oracle:

- The software license is perpetual and Pasadena assumes ownership effective June 15, 2019
- The City will pay \$659,715 for licensing costs to Oracle in quarterly installments beginning September 14, 2019
- Software support services from Oracle will become effective June 15, 2019 and the City will be billed \$36,284 quarterly, in arrears, beginning September 14, 2019
- Cloud hosting services will commence September 1, 2019 and the City will be billed an estimated \$36,000 quarterly, in arrears, beginning December 1, 2019
- The City retains ownership of all customer and billing data

Proposed Contract Amount and Fee Basis

In response to the RFP, Oracle proposed a contract amount of \$2,238,320, which includes license, support, and hosting costs, and a five-year cost of ownership.

Figure 4: License Costs

License	Year 1	Year 2	Year 3	Year 4	Year 5	5-Year Total
C2M Base	\$646k	\$13k	\$13k	\$13k	\$14k	\$699k
C2M Advanced Meter Solution	\$6k	-	-	-	-	\$6k
Oracle Business Intelligence	\$8k	-	-	-	-	\$8k
License Total	\$660k*	\$13k	\$13k	\$13k	\$14k	\$713k

* Payable quarterly, beginning September 2019

Figure 5: Support Costs

Support	Year 1	Year 2	Year 3	Year 4	Year 5	5-Year Total
C2M Base	\$142k	\$149k	\$157k	\$164k	\$172k	\$784k
C2M Advanced Meter Solution	\$1k	\$1k	\$1k	\$1k	\$2k	\$6k
Oracle Business Intelligence	\$2k	\$2k	\$2k	\$2k	\$2k	\$10k
Support Total	\$145k*	\$152k	\$160k	\$167k	\$176k	\$800k

* Payable quarterly, in arrears, beginning September 2019

Figure 6: Hosting Costs

Hosting	Year 1	Year 2	Year 3	Year 4	Year 5	5-Year Total
Oracle Field Service Cloud	\$21k	\$21k	\$21k	\$21k	\$21k	\$105k
Platform as a Service (PaaS)	\$124k	\$124k	\$124k	\$124k	\$124k	\$620k
Hosting Total	\$145k*	\$145k	\$145k	\$145k	\$145k	\$725k

* Payable quarterly, in arrears, beginning December 2019

COUNCIL POLICY CONSIDERATION:

This contract with Oracle America, Inc. supports the City Council's goals to maintain fiscal responsibility and stability, and PWP's Strategic Initiatives to enhance customer satisfaction and confidence, improve efficiency and business continuity and maintain PWP's fiscal health and stability. The contract also supports the City Council goal to maintain and enhance public facilities infrastructure, and promote the quality of life in the City and increase its attractiveness through more efficient management of resources.

ENVIRONMENTAL ANALYSIS:

The proposed contract for the installation of software is an administrative action that would not cause either a direct physical change in the environment or a reasonably foreseeable indirect physical change in the environment. The subject software would be used in existing facilities and not result in any new development or physical changes. Therefore, the proposed action is not a "project" subject to CEQA, as defined in Section 21065 of CEQA and Section 15378 of the State CEQA Guidelines. Since the action is not a project subject to CEQA, no environmental document is required.

FISCAL IMPACT:

The recommended cost of this action is \$2,500,000, which includes \$261,680 for potential growth in customer accounts and users during the five-year contract term. Funding for this action will be addressed by the utilization of existing budgeted appropriations in the Power Fund Capital Improvement Project ("CIP") Customer Information System #3022 and the Water Fund CIP Customer Information System #1012. Additional appropriations will be required for each year of the agreement, and will be recommended to the City Council for approval beginning with the FY 2020 – 2024 capital budget. There is no anticipated spending in the current fiscal year and the contract costs will be spent over the next 5 fiscal years. Figure 7 shows a summary of contract costs and sources of funding that will be used.

Figure 7: Summary Fiscal Impact

CIP Budget Funding Source	FY 2020 Cost	FY 2021 Cost	FY 2022 Cost	FY 2023 Cost	FY 2024 Cost
CIP 3022 – CIS Project	\$617,393	\$201,655	\$206,679	\$211,888	\$217,292
CIP 1011 – CIS Project	\$332,443	\$108,584	\$111,289	\$114,094	\$117,003
Total Annual Cost	\$949,836	\$310,239	\$317,968	\$325,982	\$334,295

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