Date: November 19, 2018

To: The Honorable Civil Service Commission

Through: Micki Callahan
Human Resources Director

Subject: Personal Services Contracts Approval Request

This report contains nine (9) personal services contracts (PSCs) in accordance with the revised Civil Service Commission (CSC) procedures for processing PSCs that became effective on November 5, 2014.

The services proposed by these contracts have been reviewed by Department of Human Resources (DHR) staff to evaluate whether the requesting departments have complied with City policy and procedures regarding PSCs. The proposed PSCs have been posted on the DHR website for seven (7) calendar days. CSC procedures for processing PSCs require that any appeal of these contracts be filed in the office of the CSC, Executive Officer during the posting period.

No timely appeals have been filed regarding the PSCs contained in this report. These proposed PSCs are being submitted to the CSC for ratification/approval.

DHR has prepared the following cost summary for personal services contracts that have been processed through the Department of Human Resources to date:

<table>
<thead>
<tr>
<th>Total of this Report</th>
<th>YTD Expedited Approvals FY2018-2019</th>
<th>Total for FY2018-2019</th>
</tr>
</thead>
<tbody>
<tr>
<td>$36,174,527</td>
<td>$190,062,939</td>
<td>$725,386,408</td>
</tr>
</tbody>
</table>
Cynthia Avakian  
Airport Commission  
Contracts Administration Unit  
POB 8097  
San Francisco, CA 94128  
(650) 821-2014

Joan Lubamersky  
City Admin  
1 Dr. Carlton B. Goodlett Pl., Rm. 362  
San Francisco, CA 94102  
(415) 554-4859

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Public Utilities Commission  
525 Golden Gate Ave., 5th Floor  
San Francisco, CA 94102  
(415) 551-4377

Shamica Jackson  
Bill Irwin  
Public Utilities Commission  
525 Golden Gate Ave., 8th Floor  
San Francisco, CA 94102  
SJ: (415) 554-0727  
BI: (415) 934-3975

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Department of Technology  
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San Francisco, CA 94103  
(628) 652-5074

Jacquie Hale  
Public Health  
101 Grove Street Rm 307  
San Francisco, CA 94102  
(415) 554-2609

Elena Baranoff  
Juvenile Probation  
375 Woodside Ave, Rm 206  
San Francisco, CA 94127  
(415) 753-7560
<table>
<thead>
<tr>
<th>Regular PSCs</th>
<th>Department</th>
<th>Page</th>
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</thead>
<tbody>
<tr>
<td>47881-18/19</td>
<td>Airport Commission</td>
<td>1</td>
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<tr>
<td>40890-18/19</td>
<td>City Admin</td>
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<tr>
<td>41932-18/19</td>
<td>Public Utilities Commission</td>
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<td>44148-18/19</td>
<td>Public Utilities Commission</td>
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<tr>
<td>49913-18/19</td>
<td>Public Utilities Commission</td>
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<tr>
<td>44536-18/19</td>
<td>Department of Technology</td>
<td>176</td>
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<tr>
<td>42035-18/19</td>
<td>Public Health</td>
<td>181</td>
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<tr>
<td>49336-18/19</td>
<td>Airport Commission</td>
<td>189</td>
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<tr>
<th>Modification PSCs</th>
<th>Department</th>
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</thead>
<tbody>
<tr>
<td>42264-13/14</td>
<td>Juvenile Probation</td>
<td>197</td>
</tr>
</tbody>
</table>
# POSTING FOR

**November 19, 2018**

**PROPOSED PERSONAL SERVICES CONTRACTS – REGULAR**

<table>
<thead>
<tr>
<th>PSC No</th>
<th>Dept Designation</th>
<th>PSC Amount</th>
<th>Description of Work</th>
<th>PSC Estimated Start Date</th>
<th>PSC Estimated End Date</th>
<th>Type of Approval</th>
</tr>
</thead>
<tbody>
<tr>
<td>47881 - 18/19</td>
<td>AIRPORT COMMISSION</td>
<td>$3,000,000.00</td>
<td>Provide maintenance, support, and upgrades to the San Francisco International Airport (Airport) Ground Transportation Management System (GTMS). This includes hardware repair and replacement for GTMS subsystem components, such as Automated Vehicle Identification (AVI) readers, license plate recognition (LPR) cameras, and taxi Card Interface Devices (CID) for access control. This also includes software support and enhancements for the GTMS operator database, financial management system, vehicle tracking system and system interfaces.</td>
<td>November 5, 2018</td>
<td>June 30, 2024</td>
<td>REGULAR</td>
</tr>
<tr>
<td>40890 - 18/19</td>
<td>GENERAL SERVICES AGENCY - CITY ADMIN</td>
<td>$1,500,000.00</td>
<td>Treasure Island holdings include a number of historic structures which may be impacted by redevelopment activities and require upgrades occurring on the islands. Vendor will provide specialized services on how to preserve or renovate these structures as well as to evaluate what auxiliary and access improvements may be necessary.</td>
<td>April 1, 2019</td>
<td>June 30, 2025</td>
<td>REGULAR</td>
</tr>
<tr>
<td>41932 - 18/19</td>
<td>PUBLIC UTILITIES COMMISSION</td>
<td>$4,374,527.00</td>
<td>The San Francisco Public Utilities Commission (SFPUC) provides retail water and sewer services to San Francisco, wholesale water to three Bay Area Counties, and power to customers in San Francisco. SFPUC’s Power Enterprise currently services approximately 3,500 electric customers throughout San Francisco and Mccoskin, as well 270 water, wastewater and gas customers located at Treasure Island using Aible-Soft Utility Star Enterprise. On 5/28/2018, SFPUC issued a Request for Proposal (RFP PUC.PRO.0113) to replace SFPUC Power Enterprise’s current electric billing system with a turn-key billing system. The selected proposer was Enterprise Solutions Consulting LLC (ESC), who will design, code, and implement a new hosted electric billing system. The Project will consist of five major phases, summarized below. Phase 1 - Project Initiation and Planning During this phase, ESC will ensure guidelines, tasks, and activities are defined and completed before involving the full resources of the teams of ESC and SFPUC. Preparation will also involves the development of the project management plan. Phase 2 - Analysis and Design During this phase, each current business process will be analyzed and processed through design sessions commonly known as &quot;Fit/Gap&quot;. Based on the &quot;Fit&quot; and &quot;Gap&quot; results, a series of actions will be performed (i.e., configuration, business process change, design development etc.). The tasks identified in this phase are the joint responsibilities of the members of the ESC and SFPUC teams who will need to provide access to their staff with support from various Subject Matter Experts (SMES). The tasks for this phase include: Configuration; Business Process Documentation; Master Development List Preparation; and Data Conversion and IT Environment Strategizing. Phase 3 – Build Development and Testing This phase represents the most extensive time and effort portion of the project. It is during this phase that the project team performs the detail design, build, test, and rollout of the new system. As part of the Systems Development Life Cycle (SDLC), the phases of development are repeated iteratively. Using this approach, the teams start mapping the business</td>
<td>February 1, 2019</td>
<td>January 31, 2026</td>
<td>REGULAR</td>
</tr>
</tbody>
</table>
requirements implemented to the proposed product modules and build small pieces of the system repeatedly until the system is integrated. Using this approach, errors are caught swiftly, quick wins are realized, and system integration is controlled and accurate.

ESC's technical resources will validate and gather respective information related to interfaces, conversions, reports, and other technical aspects of project scope. The tasks for this phase include: Data Conversion; Interfaces; Configuration Tools, Algorithms, User Exit and Extensions (Modifications) Training; and System Delivery.

Phase 4 – Migration
After the completion of all successful testing, the system will be ready for Go-Live. ESC will perform a readiness assessment that validates that the necessary components for Go-Live are complete and correct. The final Go-Live decision is made by the SFPUC based on the documented criteria developed in the Go-Live plan and accepted by SFPUC. Also during this phase, end-user training will be completed, with training validation performed during, up to, and after Go-Live.

Phase 5 – Post Implementation Support
This phase consists of the major technical and functional activities in which SFPUC and the Implementation team will engage after "Go-Live." Typical post Go-Live issues that may arise after cutover to new systems will be addressed in this phase. Tasks include the following: routine maintenance and support, assistance with resolution of issues and problems as detected, revision and communication of procedures to the user community, and establishment of a help line support and workshops (as needed) for users in the field.

The consulting team will provide the professional engineering services for the Yosemite Creek Daylighting Project, a Phase 1 Sewer System Improvement Program (SSIP) Green Infrastructure Early Implementation Project. The Yosemite Creek Daylighting Project consists of daylighting approximately 1,700 feet of Yosemite Creek between Bacon/Oxford streets and Wayland/University Streets to convey stormwater adjacent to, or within, the right of way and through McLaren Park. The scope of work will include professional engineering services to support project design and construction, including civil, geotechnical, structural, hydrologic/hydraulic modeling, engineering analysis, and landscape architectural services. The consultant will also provide geomorphology services related to creek channel design. In addition, the consultant will provide expertise on the design and construction of specialized green infrastructure technologies such as sub-surface capillary rise irrigation systems and alternative storage system.

Provide a large variety of specialized health, safety and regulatory training by trainers with many years of experience who are licensed by the State and/or certified as appropriate. The San Francisco Public Utilities Commission (SFPUC) does not have the resources or expertise to provide such trainings of various topics to employees in various geographic areas at various timeframes.

The Department of Technology has projects underway in the areas of: upgrading Wide and Local Area Networks, migrating Telephony systems to the City's new Cisco Call Manager, and moving Departments to new office spaces. The Department of Technology will also begin a project to migrate approximately 15 separate Contact Centers to a unified Enterprise Contact Center system. The awarded Supplier will provide project services for the upgrade, move, and migration project areas utilizing following phased structure: 1) Discovery and Analysis, 2) Planning, 3) Upgrade/Migration, 4) Post Go-Live support and training for handoff to City staff. Supplemental services include reviewing current systems and environments, designing new networks and systems, developing migration plans, configuring, installing, and testing new systems, moving and installing networks in new
<table>
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<tr>
<th>PSC No</th>
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<th>PSC Estimated End Date</th>
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<tbody>
<tr>
<td>42035 - 18/19 PUBLIC HEALTH</td>
<td>$2,000,000.00</td>
<td>Contractor(s) will provide studies to comply with the requirements of City Planning and the Joint Commission, and other regulatory agencies, which will include: assessment and feasibility studies of future uses for DPH buildings after the San Francisco General Hospital re-build; future bond measures; Institutional Master Plan and Zuckerberg San Francisco General (ZSFQ) Campus Master Plan updates; code advisory services related to regulatory compliance issues.</td>
<td>October 1, 2018</td>
<td>September 30, 2021</td>
<td>REGULAR</td>
<td></td>
</tr>
<tr>
<td>49336 - 18/19 AIRPORT COMMISSION</td>
<td>$260,000.00</td>
<td>The contractor will provide training to the San Francisco Police Department - Airport Bureau (SFPD-MB) police service canines (K-9 unit) and their handlers on explosives detection in accordance with Transportation Security Administration (TSA) standards.</td>
<td>November 5, 2018</td>
<td>June 30, 2023</td>
<td>REGULAR</td>
<td></td>
</tr>
</tbody>
</table>

TOTAL AMOUNT $36,134,527
### Posting For November 19, 2018

**Proposed Modifications to Personal Services Contracts**

<table>
<thead>
<tr>
<th>PSC Number</th>
<th>Commission Hearing Date</th>
<th>Department</th>
<th>Additional Amount</th>
<th>Cumulative Total</th>
<th>Description</th>
<th>Start Date</th>
<th>End Date</th>
<th>Approval Type</th>
</tr>
</thead>
<tbody>
<tr>
<td>42264-13/14 - MODIFICATIONS</td>
<td>November 19, 2018</td>
<td>JUVENILE PROBATION</td>
<td>$40,000</td>
<td>$300,000</td>
<td>The Ombudsperson is responsible for resolving grievances submitted by detained youth at Juvenile Probation Department (JPD) detention facilities. Contractor will serve as a neutral and independent agent who is a liaison between detainees, their parents/guardians and Department staff. When a youth files a grievance, contractor shall investigate and resolve through appropriate means including mediation between the youth and the Department and where appropriate shall recommend procedural changes as part of the recommended resolution of a grievance.</td>
<td>10/01/2018</td>
<td>09/30/2020</td>
<td>REGULAR</td>
</tr>
</tbody>
</table>

**TOTAL AMOUNT $40,000**
Regular/Continuing/Annual
Personal Services Contracts
PERSONAL SERVICES CONTRACT SUMMARY ("PSC FORM 1")

Department: AIRPORT COMMISSION – AIR
Dept. Code: AIR

Type of Request: ☑ Initial ☐ Modification of an existing PSC (PSC # ____________)

Type of Approval: ☐ Expedited ☑ Regular ☐ Annual ☐ Continuing ☐ (Omit Posting)

Type of Service: Maintenance for ground transportation integrated solution

Funding Source: Airport Operating Funds
PSC Amount: $3,000,000
PSC Est. Start Date: 11/05/2018
PSC Est. End Date: 06/30/2024

1. Description of Work
A. Scope of Work/Services to be Contracted Out:
   Provide maintenance, support, and upgrades to the San Francisco International Airport (Airport) Ground Transportation Management System (GTMS). This includes hardware repair and replacement for GTMS subsystem components, such as Automated Vehicle Identification (AVI) readers, license plate recognition (LPR) cameras, and taxi Card Interface Devices (CIDs) for access control. This also includes software support and enhancements for the GTMS operator database, financial management system, vehicle tracking system and system interfaces.

B. Explain why this service is necessary and the consequence of denial:
   GTMS is the system of record for ground transportation revenue at the Airport, totaling over $13M annually. The system tracks and generates revenue from permitted ground transportation vehicles in real time, so system outages will have direct consequences of revenue loss. Outages will also lead to disruption in taxi operations, as GTMS serves as the access control system for the Airport’s taxi staging lots. In addition, continued support and enhancement of the system is needed to allow the Airport to accommodate and collect revenue from new ground transportation operations during the lifetime of the system.

C. Has this service been provided in the past? If so, how? If the service was provided under a previous PSC, attach copy of the most recently approved PSC.
   Through PSC 4099-10/11 for the design, development, installation, and implementation of an integrated solution for ground transportation. This request is for the maintenance of that system.

D. Will the contract(s) be renewed?
   Yes, if the services is needed in the future.

E. If this is a request for a new PSC in excess of five years, or if your request is to extend (modify) an existing PSC by another five years, please explain why.
   This PSC is to align with the anticipated maintenance contract.

2. Reason(s) for the Request
A. Indicate all that apply (be specific and attach any relevant supporting documents):
   ☑ Short-term or capital projects requiring diverse skills, expertise and/or knowledge.

B. Explain the qualifying circumstances:
   City staff is not able to provide the software maintenance for the GTMS/TMS system.

3. Description of Required Skills/Expertise
A. Specify required skills and/or expertise: Knowledge of Radio-frequency identification (RFID) and smart-card technology; software code to integrate information from the RFID and smart-card technology into business processes, which include billing, reporting, and asset/inventory management; and ways to integrate commercial vehicle information into business databases. Ability to develop or create software code and ability to work with RFID and smart-card technology.

B. Which, if any, civil service class(es) normally perform(s) this work? 1033, IS Trainer-Senior; 1044, IS Engineer-Principal; 1054, IS Business Analyst-Principal; 7318, Electronic Maintenance Tech;

C. Will contractor provide facilities and/or equipment not currently possessed by the City? If so, explain: No

4. If applicable, what efforts has the department made to obtain these services through available resources within the City?
   None at this time.

5. Why Civil Service Employees Cannot Perform the Services to be Contracted Out
   A. Explain why civil service classes are not applicable.
      Civil service classifications are not applicable because RFID or smart-card technology is not commonly used, and knowledge of RFID or smart-card technology is not part of the requirements in current civil service classifications.

   B. If there is no civil service class that could perform the work, would it be practical and/or feasible to adopt a new civil service class to perform this work? Explain. No, not at this time.

6. Additional Information
   A. Will the contractor directly supervise City and County employee? If so, please include an explanation.
      No.

   B. Will the contractor train City and County employees and/or is there a transfer of knowledge component that will be included in the contract? If so, please explain what that will entail; if not, explain why not.
      No. No training will be provided.

   C. Are there legal mandates requiring the use of contractual services?
      No.

   D. Are there federal or state grant requirements regarding the use of contractual services? If so, please explain and include an excerpt or copy of any such applicable requirement.
      No.

   E. Has a board or commission determined that contracting is the most effective way to provide this service? If so, please explain and include a copy of the board or commission action.
      No.

   F. Will the proposed work be completed by a contractor that has a current PSC contract with your department? If so, please explain.
      No.

7. Union Notification: On 09/04/2018, the Department notified the following employee organizations of this PSC/RFP request:
   Electrical Workers, Local 6; Professional & Tech Engrs, Local 21

☐ I CERTIFY ON BEHALF OF THE DEPARTMENT THAT THE INFORMATION CONTAINED IN AND ATTACHED TO THIS FORM IS COMPLETE AND ACCURATE:

Name: Cynthia Avakian  Phone: 650-821-2014  Email: cynthia.avakian@flysfo.com
Address: P.O. Box 8097 San Francisco, CA 94128

FOR DEPARTMENT OF HUMAN RESOURCES USE

PSC# 47881 - 18/19
DHR Analysis/Recommendation: Commission Approval Required
DHR Approved for 11/19/2018

Civil Service Commission Action:
Receipt of Union Notification(s)
RECEIPT for Union Notification for PSC 47881 - 18/19 more than $100k

The AIRPORT COMMISSION -- AIR has submitted a request for a Personal Services Contract (PSC) 47881 - 18/19 for $3,000,000 for initial Request services for the period 11/05/2018 – 06/30/2024. Notification of 30 days (60 days for SEIU) is required.

After logging into the system please select link below, view the information and verify receipt:

http://apps.sfgov.org/dhrrupal/node/11929 For union notification, please see the TO: field of the email to verify receipt. If you do not see all the unions you intended to contact, the PSC Coordinator must change the state back to NOT READY, make sure the classes and unions you want to notify are selected and SAVE. Then VIEW the record and verify the list of unions and emails. EDIT the document again, change the state back START UNION NOTIFICATION and SAVE. You should receive the email with all unions to the TO: field as intended
Additional Attachment(s)
PERSONAL SERVICES CONTRACT SUMMARY ("PSC FORM 1")

Department: AIRPORT COMMISSION
Dept. Code: AiR

Type of Request: 
☑ Modification of an existing PSC (PSC # 4099 10/11)
☐ Initial

Type of Approval: 
☐ Expedited
☐ Regular
☐ Annual
☐ Continuing
☐ (Omit Posting)

Type of Service: Design, develop, install and implement an integrated solution for ground transportation
Funding Source: Airport Capital Funds

PSC Original Approved Amount: $8,500,000
PSC Original Approved Duration: 04/20/11 - 04/19/14 (3 years)

PSC Mod#1 Amount: $1,500,000
PSC Mod#1 Duration: 04/20/14-10/15/15 (1 year 25 weeks)

PSC Mod#2 Amount: $2,000,000
PSC Mod#2 Duration: no duration added

PSC Mod#3 Amount: no amount added
PSC Mod#3 Duration: 10/16/15-06/30/17 (1 year 37 weeks)

PSC Mod#4 Amount: $1,000,000
PSC Mod#4 Duration: 07/01/17-06/30/20 (3 years 1 day)

PSC Cumulative Amount Proposed: $13,000,000
PSC Cumulative Duration Proposed: 9 years 10 weeks

1. Description of Work
A. Scope of Work/Services to be Contracted Out:
Design, develop, install and implement an integrated solution for managing ground transportation information from radio frequency identification (RFID) transponders and smart-card taxi revenue collection system at the Airport. Work includes software development, integration of current RFID readers and taxi smart-card system into new system, testing and integration of hand-held RFID readers, training for staff and ongoing maintenance.

B. Explain why this service is necessary and the consequence of denial:
The current system was designed more than 10 years ago. This outdated system needs to be replaced to enhance business processes, integrate several old systems into one system, and improve the accuracy of the data for billing / reporting purposes. This new Comprehensive Ground Transportation and Taxi Management System will replace the aging Automated Vehicle Identification (AVI) and Taxi Revenue System (TRS) that are in urgent need of upgrade. Denial of these services will jeopardize the Airport's ability to track and monitor commercial vehicle activity, provide reliable data for billing / reporting purposes, and utilize new hand-held RFID readers.

C. Has this service been provided in the past? If so, how? If the service was provided under a previous PSC, attach copy of the most recently approved PSC.
Yes, PSC 4099-10/11
D. Will the contract(s) be renewed?
   Yes, if there continues to be a need at the Airport.

E. If this is a request for a new PSC in excess of five years, or if your request is to extend (modify) an existing PSC by another five years, please explain why:
   We need to extend the term to align with the expected contract end date.

2. Reason(s) for the Request
   A. Display all that apply
      ☑ Services required on an as-needed, intermittent, or periodic basis (e.g., peaks in workload).

      Explain the qualifying circumstances:
      This is a one-time project that does not support new classifications or staff.

   B. Reason for the request for modification:
      Add money and extend time.

3. Description of Required Skills/Expertise
   A. Specify required skills and/or expertise: Knowledge of RFID and smart-card technology; software code to integrate information from RFID and smart-card technology into business processes, which include billing, reporting, and asset/asset management; and ways to integrate commercial vehicle information into business databases. Ability to develop or create software code and ability to work with RFID and smart-card technology.

   B. Which, if any, civil service class(es) normally perform(s) this work? 1033, IS Trainer-Senior; 1044, IS Engineer-Principal; 1054, IS Business Analyst-Principal;

   C. Will contractor provide facilities and/or equipment not currently possessed by the City? If so, explain: No.

4. If applicable, what efforts has the department made to obtain these services through available resources within the City?
   Not Applicable

5. Why Civil Service Employees Cannot Perform the Services to be Contracted Out
   A. Explain why civil service classes are not applicable.
      Civil service classifications are not applicable because RFID or smart-card technology is not commonly used, and knowledge of RFID or smart-card technology is not part of the requirements in current civil service classifications.

   B. If there is no civil service class that could perform the work, would it be practical and/or feasible to adopt a new civil service class to perform this work? Explain: No, the proposed work is of a limited duration involving specialized knowledge.

6. Additional Information
   A. Will the contractor directly supervise City and County employee? If so, please include an explanation.
      No.
B. Will the contractor train City and County employees and/or is there a transfer of knowledge component that will be included in the contact? If so, please explain what that will entail; if not, explain why not.
User Training – 80 hours of training, for IS Business Analyst, Clerk

C. Are there legal mandates requiring the use of contractual services?
No.

D. Are there federal or state grant requirements regarding the use of contractual services? If so, please explain and include an excerpt or copy of any such applicable requirement.
No.

E. Has a board or commission determined that contracting is the most effective way to provide this service? If so, please explain and include a copy of the board or commission action.
No.

F. Will the proposed work be completed by a contractor that has a current PSC contract with your department? If so, please explain.
Yes, TransCore LP

7. **Union Notification:** On 08/31/16, the Department notified the following employee organizations of this PSC/RFP request:
  Professional & Tech Engrs. Local 21;

☑ I CERTIFY ON BEHALF OF THE DEPARTMENT THAT THE INFORMATION CONTAINED IN AND ATTACHED TO THIS FORM IS COMPLETE AND ACCURATE:

Name: Cynthia Avakian     Phone: 650-821-2014     Email: cynthia.avakian@flysfo.com

Address: P. O. Box 8097, San Francisco, CA 94128

--------------------------------------------------------------------------------
FOR DEPARTMENT OF HUMAN RESOURCES USE

PSC# 4099 10/11
DHR Analysis/Recommendation:
Commission Approval Not Required
Approved by DHR on 09/13/2016
NOTICE OF CIVIL SERVICE COMMISSION ACTION

March 9, 2016

SUBJECT: REVIEW OF REQUEST FOR APPROVAL OF PROPOSED PERSONAL SERVICES CONTRACTS NUMBERS 49939-15/16; 45291-15/16; 46201-15/16; 41026-15/16; 47894-15/16; 48148-15/16; 46637-15/16; 47343-15/16; 47733-15/16; 48798-15/16; 45984-15/16; 41779-15/16; 41969-15/16; 45761-15/16; 48678-15/16; 4050-10/11; 4099-10/11; 4939-13/14; 36583-15/16; 48218-14/15; 4032-13/14; 39481-13/14; 4091-12/13; 4132-08/09; AND 39475-14/15.

At its meeting of March 7, 2016 at 2:00 p.m., the Civil Service Commission had for its consideration the above matter.

The Commission:

1) Approved PSC #46201-15/16 with the condition to include the following sentence: “For each contract, the Department of Public Works (DPW) will be contacted first as to their availability to perform the services required.”

2) Adopted the report. Approved the request for proposed Personal Services Contracts; Notify the Office of the Controller and the Office of Contract Administration.

If this matter is subject to Code of Civil Procedure (CCP) Section 1094.5, the time within which judicial review must be sought is set forth in CCP Section 1094.6.

PLEASE NOTE: It is important that a copy of this action be kept in the department files as you will need it in the future as proof of Civil Service Commission approval. Please share it with everyone responsible for follow-up.

CIVIL SERVICE COMMISSION

MICHAEL L. BROWN
Executive Officer

Attachment

Cc: Cynthia Ankvian, Airport Commission
Rachel Buehler, Department of the Environment
Stacey Camilo, Department of Public Works
Susanne Choi, Department of Human Resources
Kris Damalas, Economic and Workforce Development
Jacque Hale, Department of Public Health
Cynthia Hamada, Municipal Transportation Agency
Lavona Holmes, Port
Shanica Jackson, Public Utilities Commission
Diane Lin, Adult Probation
Brett Lewis, Department of Human Resources
Stacey Lo, Public Utilities Commission
Joan Lubansky, General Services Agency
Sean McFadden, Recreation and Park Commission
Genie Wong, Police
Commission File
Chron
# Posting For March 07, 2016

## Proposed Modifications to Personal Services Contracts

<table>
<thead>
<tr>
<th>PSC Number</th>
<th>Modification</th>
<th>Department</th>
<th>Additional Amount</th>
<th>Cumulative Total</th>
<th>Description</th>
<th>Start Date</th>
<th>End Date</th>
<th>Approval Type</th>
</tr>
</thead>
<tbody>
<tr>
<td>4050 10/11 - MODIFICATIONS</td>
<td>Adult Probation</td>
<td>AOP</td>
<td>$0</td>
<td>$999,300</td>
<td>The San Francisco Adult Probation Department (APD) will procure the Correctional Offender Management Profiling for Alternative Sanctions (COMPAS) copyrighted software program from Northpointe Institute for Public Management, Inc. for implementing a risk/needs assessment and case management consolidated software business solution that meets APD’s workflow and data information needs which includes a Justice Tracking Information System (JUSTIS) Interface and Supervisor Released File Functionality.</td>
<td>07/01/2016</td>
<td>06/30/2021</td>
<td>REGULAR</td>
</tr>
<tr>
<td>4099 10/11 - MODIFICATIONS</td>
<td>Airport Commission</td>
<td>AIR</td>
<td>$0</td>
<td>$12,000,000</td>
<td>Design, develop, install and implement an integrated solution for managing ground transportation information from radio frequency identification (RFID) transponders and smart-card taxi revenue collection system at the Airport. Work includes software development, integration of current RFID readers and taxi smart-card system into new system, testing and integration of hand-held RFID readers, training for staff and ongoing maintenance.</td>
<td>10/16/2015</td>
<td>06/30/2017</td>
<td>REGULAR</td>
</tr>
<tr>
<td>4099-13/14 - MODIFICATIONS</td>
<td>General Services</td>
<td>AGENCY - PUBLIC WORKS - DPW</td>
<td>$1,000,000</td>
<td>$3,600,000</td>
<td>Provide specialized services in Elevator Design to support Department of Public Works (DPW) design staff on an as-needed basis. The Consultants will provide expert elevator design consultation services to ensure that our projects achieve the highest quality in elevator design. The City intends to award two (2) contracts for $500,000 each.</td>
<td>01/01/2019</td>
<td>03/31/2021</td>
<td>REGULAR</td>
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<tr>
<td>36583 - 15/16 - MODIFICATIONS</td>
<td>Economic and Workforce Development</td>
<td>ECON</td>
<td>$475,000</td>
<td>$575,000</td>
<td>The consultant will assist the Office of Economic and Workforce Development (OEWD) with designing, implementing, and transitioning the existing online Workforce Central (WFC) client tracking and performance management platform to integrate new federal Workforce Innovation and Opportunities Act (WIOA) provisions. <strong>Scope Change:</strong> The OEWD was awarded a $2.9 million dollar grant to expand its TechSF Initiative under the Department of Labor’s American Apprenticeship program. In addition to</td>
<td>02/15/2016</td>
<td>06/30/2020</td>
<td>REGULAR</td>
</tr>
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</table>
PERSONAL SERVICES CONTRACT SUMMARY ("PSC FORM 1")

Department: GENERAL SERVICES AGENCY - CITY ADMIN -- ADM  Dept. Code: ADM
Type of Request: ☑ Initial  ☐ Modification of an existing PSC (PSC #__________)
Type of Approval: ☐ Expedited  ☑ Regular  ☐ Annual  ☐ Continuing  ☐ (Omit Posting)
Type of Service: Historic Structures As-Needed Multi-Disciplinary Engineering Services
Funding Source: Interdepartmental work orders
PSC Amount: $1,500,000  PSC Est. Start Date: 04/01/2019  PSC Est. End Date: 06/30/2025

1. Description of Work
   A. Scope of Work/Services to be Contracted Out:
      Treasure Island holdings include a number of historic structures which may be impacted by redevelopment activities and require upgrades occurring on the islands. Vendor will provide specialized services on how to preserve or renovate these structures as well as to evaluate what auxiliary and access improvements may be necessary.

   B. Explain why this service is necessary and the consequence of denial:
      This contract will provide important support for TIDA. TIDA has multiple responsibilities for maintaining its historic building portfolio, and intends to pursue several major upgrades to its holdings. Additionally, TIDA may require review of impacts on its historic holdings triggered by redevelopment activities in surrounding areas. Without this contract, TIDA will not be able to complete the work properly or in a timely manner, delaying improvements. If this work is not performed, the City may lose some of the architectural heritage structures on Treasure Island.

   C. Has this service been provided in the past? If so, how? If the service was provided under a previous PSC, attach copy of the most recently approved PSC.

   D. Will the contract(s) be renewed?
      No.

   E. If this is a request for a new PSC in excess of five years, or if your request is to extend (modify) an existing PSC by another five years, please explain why.
      not applicable

2. Reason(s) for the Request
   A. Indicate all that apply (be specific and attach any relevant supporting documents):

      ☑ Services required on an as-needed, intermittent, or periodic basis (e.g., peaks in workload).

   B. Explain the qualifying circumstances:
      Services are needed for upcoming and ongoing historic building improvements as well as review of development-related impacts to TIDA’s historic holdings, including services not currently available within Public Works or Planning. Planning uses a prequalified list of consultants for historic resources support, and TIDA has a focused plan of improvements in addition to ongoing impacts from surrounding redevelopment work that requires access to a dedicated TIDA historic resources consultant.

3. Description of Required Skills/Expertise
A. Specify required skills and/or expertise: Engineering consultants must be licensed as a Professional Engineer, Architects must be licensed by AIA, and Historic Architects must be listed on the Planning Department's approved roster called, “San Francisco Environmental Planning Historic Resources Consultant Pool.” Other specialists shall have the equivalent professional licenses to perform their respective expert services.

B. Which, if any, civil service class(es) normally perform(s) this work? 5201, Junior Engineer; 5203, Asst Engr; 5207, Assoc Engineer; 5211, Eng/Arch/Landscape Arch Sr; 5212, Engineer/Architect Principal; 5215, Fire Protection Engineer; 5218, Structural Engineer; 5241, Engineer; 5262, Landscape Architect Assoc 1; 5265, Architectural Associate 1; 5266, Architectural Associate 2; 5268, Architect; 5277, Planner 1; 5278, Planner 2;

C. Will contractor provide facilities and/or equipment not currently possessed by the City? If so, explain: No.

4. If applicable, what efforts has the department made to obtain these services through available resources within the City?
The Department of Public Works has utilized internal staff and Planning Department staff for historic structures in the past, but the anticipated workload requires additional personnel to support all of the review needed for TIDA planned improvements to historic holdings and as-needed reviews triggered by redevelopment.

5. Why Civil Service Employees Cannot Perform the Services to be Contracted Out
A. Explain why civil service classes are not applicable.
   There are specialized services required that are not currently core functions of a Civil Service classification, such as historic resource engineering review.

B. If there is no civil service class that could perform the work, would it be practical and/or feasible to adopt a new civil service class to perform this work? Explain. No. Work is currently required for specifics related to TIDA’s historic holdings, and are not anticipated to be needed otherwise.

6. Additional Information
A. Will the contractor directly supervise City and County employee? If so, please include an explanation.
   No.

B. Will the contractor train City and County employees and/or is there a transfer of knowledge component that will be included in the contact? If so, please explain what that will entail; if not, explain why not.
   No. No training will be provided.

C. Are there legal mandates requiring the use of contractual services?
   No.

D. Are there federal or state grant requirements regarding the use of contractual services? If so, please explain and include an excerpt or copy of any such applicable requirement.
   No.

E. Has a board or commission determined that contracting is the most effective way to provide this service? If so, please explain and include a copy of the board or commission action.
   No.

F. Will the proposed work be completed by a contractor that has a current PSC contract with your department? If so, please explain.
   No.

7. Union Notification: On 09/18/2018, the Department notified the following employee organizations of this PSC/RFP request:
Architect & Engineers, Local 21
☐ I CERTIFY ON BEHALF OF THE DEPARTMENT THAT THE INFORMATION CONTAINED IN AND ATTACHED TO THIS FORM IS COMPLETE AND ACCURATE:

Name: Joan Lubamersky  Phone: 4155544859  Email: joan.lubamersky@sfgov.org

Address: One Carlton B. Goodlett Place Room 362 San Francisco, CA 94102

FOR DEPARTMENT OF HUMAN RESOURCES USE

PSC# 40690 – 18/19
DHR Analysis/Recommendation: Commission Approval Required
DHR Approved for 11/19/2018

Civil Service Commission Action:
Receipt of Union Notification(s)
RECEIPT for Union Notification for PSC 40890 - 18/19 more than $100k

The GENERAL SERVICES AGENCY - CITY ADMIN -- ADM has submitted a request for a Personal Services Contract (PSC) 40890 - 18/19 for $1,500,000 for Initial Request services for the period 04/01/2019 – 06/30/2025. Notification of 30 days (60 days for SEIU) is required.

After logging into the system please select link below, view the information and verify receipt:

http://apps.sfgov.org/dhrdrupal/node/11967 For union notification, please see the TO: field of the email to verify receipt. If you do not see all the unions you intended to contact, the PSC Coordinator must change the state back to NOT READY, make sure the classes and unions you want to notify are selected and SAVE. Then VIEW the record and verify the list of unions and emails. EDIT the document again, change the state back START UNION NOTIFICATION and SAVE. You should receive the email with all unions to the TO: field as intended
Hi Liz,

The Union, IFPTE Local 21, agrees to waive the 30 day notice for PSC 40890 18.19. Thank you.

Paul Kim
IFPTE Local 21

Hi Paul,

Thanks again for meeting with me on the TIDA RFP for Historic Resources Support. Our next step is to go to the Civil Service Commission (CSC) with the PSC. If Local 21 waives the 30 day notice, it can be on the Nov 5 CSC calendar.

Would you please ask that one of the individuals listed on the attached Notice send me an email saying they agree to waive the 30 day notice.

Let me know if you have any concerns or wish to discuss.

Thanks in advance for your cooperation.

Liz

Elizabeth A. (Liz) Hirschhorn, P.E.
Assistant Development Program Manager
Treasure Island Development Authority
One Avenue of the Palms, Suite 241
San Francisco, CA 94130
Office phone: 415-274-0315
Mobile: 415-810-1714
liz.hirschhorn@sfgov.org
Additional Attachment(s)
September 17, 2018

MEMORANDUM

TO: Honorable Civil Service Commission

FROM: Joan Lubamersky, Contract Coordinator

SUBJ: Treasure Island Development Authority (TIDA) PSC 40890 18.19 Duration More Than Five Years

We are requesting authority to contract for more than five years because the anticipated technical support tasks will require at least five years to complete. This is a long and complicated project.

The Treasure Island Development Authority (TIDA) owns multiple historic buildings on lands that were transferred from the U.S. Navy as part of the closure and reuse of the former Naval Station Treasure Island. The redevelopment of the property is ongoing and will be implemented in multiple phases over the next twenty years with Treasure Island Community Development, LLC (TICD), and the master developer. TIDA will oversee the redevelopment and anticipates performing needed upgrades to its historic holdings and code required auxiliary structural and access improvements triggered by improvements.

In all, there will be up to 8,000 residential units; approximately 140,000 square feet (sq. ft.) of new commercial and retail space; approximately 100,000 sq. ft. of new office space; up to 500 hotel rooms; approximately 300 acres of parks and open space; bicycle, transit, and pedestrian facilities; a ferry terminal and intermodal transit hub; and new and/or upgraded public services and utilities, including a new or upgraded wastewater treatment facility and a new recycled water plant. Historic structures will be repurposed to provide additional retail, commercial and office space. Additional detail on the development program, additional project background documents, and development agreement documents are available on TIDA’s website: sftreasureisland.org.

The Historic Structures As-Needed Multi-Disciplinary Engineering Services contract is intended to provide a consultant team specialized in historic resources to support TIDA on an as-needed basis to plan, budget, and pursue improvements to historic structures and respond to potential impacts on historic structures triggered by redevelopment activities. These services will be needed over the long process of implementing the Project as land is conveyed from the Navy to TIDA and redeveloped by a Master Developer in keeping with the approved Master Plan (Design for Development) document that outlines how parts of the island will be converted to new uses and existing uses are relocated.
TIDA has leaned upon Public Works and Planning staff in the past for support and consultation on projects of limited scope, but now requires the support of consultants with specialized expertise in the comprehensive preservation, improvement and repurposing of more than 400,000 square feet of space in more than a dozen historic structures. This contract will provide specialized services to assist TIDA in planning for and proceeding with needed improvements and responding to time-sensitive potential impacts to its historic holdings that are triggered by redevelopment activities.

Examples of work to be performed include assessing building conditions and determining the improvements necessary to bring the facility to a state of “good repair”, meet current access standards, or required structural/seismic improvements; reviewing proposed improvements around buildings for impacts on building systems and the relationship of the buildings to the site; and reviewing proposed uses or programs for specific buildings and assessing the modifications needed to support those uses. For all of these tasks, the consultant will need to provide estimates of projected costs and to advise TIDA on how to achieve these changes/improvements/upgrades in a manner that respects the architectural and historic integrity of the structure.

Services are expected to be intermittent and subject to starts and stops depending on the developer’s plans and economic conditions affecting development, as well as the pace of TIDA’s primary work tasks for improvements to its historic holdings. The need for specialized expertise and supplemental staff not currently available within the City is expected to be a short-term condition and not anticipated to last beyond the initial phases of redevelopment (approximately 3-5 years). Therefore, we do not believe additional hiring is warranted as the work requiring historic resources technical support will be as-needed and finite in duration.

Thank you for your consideration.

Copy to: Bob Beck, Director, Treasure Island
PERSONAL SERVICES CONTRACT SUMMARY ("PSC FORM 1")

Department: PUBLIC UTILITIES COMMISSION — PUC      Dept. Code: PUC

Type of Request:  ☑ Initial    □ Modification of an existing PSC (PSC #___________)

Type of Approval:    □ Expedited  ☑ Regular    □ Annual    □ Continuing    □ (Omit Posting)

Type of Service: Hosted Billing Services for SFPUC Electric Customers

Funding Source: Electric Load Meter Project Funds      PSC Duration: 7 years 1 day

PSC Amount: $4,374,527

1. Description of Work

   A. Scope of Work/Services to be Contracted Out:

   The San Francisco Public Utilities Commission (SFPUC) provides retail water and sewer services to San Francisco, wholesale water to three Bay Area Counties, and power to customers in San Francisco. SFPUC’s Power Enterprise currently services approximately 3,500 electric customers throughout San Francisco and Moccasin, as well 270 water, wastewater and gas customers located at Treasure Island using Able-Soft Utility Star Enterprise. On 5/28/2018, SFPUC issued a Request for Proposal (RFP PUC.PRO.0113) to replace SFPUC Power Enterprise’s current electric billing system with a turn-key billing system. The selected proposer was Enterprise Solutions Consulting LLC (ESC), who will design, code, and implement a new hosted electric billing system. The Project will consist of five major phases, summarized below.

   Phase 1 – Project Initiation and Planning

   During this phase, ESC will ensure guidelines, tasks, and activities are defined and completed before involving the full resources of the teams of ESC and SFPUC. Preparation will also involves the development of the project management plan.

   Phase 2 – Analysis and Design

   During this phase, each current business process will be analyzed and processed through design sessions commonly known as "Fit/Gap". Based on the "Fit" and "Gap" results, a series of actions will be performed (i.e., configuration, business process change, design development etc.). The tasks identified in this phase are the joint responsibilities of the members of the ESC and SFPUC teams who will need to provide access to their staff with support from various Subject Matter Experts (SMEs). The tasks for this phase include: Configuration; Business Process Documentation; Master Development List Preparation; and Data Conversion and IT Environment Strategizing.

   Phase 3 – Build Development and Testing

   This phase represents the most extensive time and effort portion of the project. It is during this phase that the project team performs the detail design, build, test, and rollout of the new system. As part of the Systems Development Life Cycle (SDLC), the phases of development are repeated iteratively. Using this approach, the teams start mapping the business requirements implemented to the proposed product modules and build small pieces of the system repeatedly until the system is integrated. Using this approach, errors are caught swiftly, quick wins are realized, and system integration is controlled and accurate.
ESC’s technical resources will validate and gather respective information related to interfaces, conversions, reports, and other technical aspects of project scope. The tasks for this phase include: Data Conversion; Interfaces; Configuration Tools, Algorithms, User Exits and Extensions (Modifications) Training; and System Delivery.

Phase 4 – Migration

After the completion of all successful testing, the system will be ready for Go-Live. ESC will perform a readiness assessment that validates that the necessary components for Go-Live are complete and correct. The final Go-Live decision is made by the SFPUC based on the documented criteria developed in the Go-Live plan and accepted by SFPUC. Also during this phase, end-user training will be completed, with training validation performed during, up to, and after Go-Live.

Phase 5 – Post Implementation Support

This phase consists of the major technical and functional activities in which SFPUC and the Implementation team will engage after “Go-Live.” Typical post Go-Live issues that may arise after cutover to new systems will be addressed in this phase. Tasks include the following: routine maintenance and support, assistance with resolution of issues and problems as detected, revision and communication of procedures to the user community, and establishment of a help line support and workshops (as needed) for users in the field.

B. Explain why this service is necessary and the consequence of denial:
The SFPUC Hetch Hetchy Power Enterprise (HHP) has 3,500 electric customers, approximately 270 water, wastewater and gas customers located at Treasure Island, and approximately 100 electric customers in the Moccasin, CA area. The number of electric customer accounts may grow to up to 25,000 within 10 years because the SFPUC will provide power to planned new developments at Candlestick Point, Hunters Point, Treasure Island and Yerba Buena Island. HHP also performs pass-through billing for approximately 350 gas and 15 steam customers. HHP electric customer charges are based on various rate schedules, including rate schedules that mirror Pacific Gas and Electric Company’s (PG&E’s) commercial, residential, industrial, and flat rates, as well as additional commercial and residential rate schedules developed by HHP. As shown in the following table, electric meter data is received from a variety of sources. SFPUC estimates that customer growth will increase the number of meters and accounts to roughly 25,000 units by 2030. While the existing customer base is primarily municipal, the majority of account growth will occur in the residential sector. Currently, SFPUC’s Customer Services Bureau (CSB) performs HHP’s billing operations using Able-Soft Utility Star Enterprise (Utility Star), a browser-based Customer Information System (CIS) software application. The Utility Star CIS platform is a heavily-modified platform that does not have the core functionality essential to SFPUC for its billing and meter management operations. As a result, many billing operation tasks must be performed manually. Furthermore, the Utility Star system cannot be upgraded to either perform or automate these manual tasks without significant coding. Given these limitations of the Utility Star CIS system, it cannot support a significant increase in HHP’s customer base and, for this reason, must be replaced by this new system to ensure HHP can continue to bill its customers.
C. Has this service been provided in the past? If so, how? If the service was provided under a previous PSC, attach copy of the most recently approved PSC. This service has not been provided in the past.

D. Will the contract(s) be renewed?
If we determine that we must remain with the same system, we will extend those services rendered during the last five years of the contract related to data hosting, licenses and system support.

E. If this is a request for a new PSC in excess of five years, or if your request is to extend (modify) an existing PSC by another five years, please explain why.
This project is expected to take seven years. The first 18-24 months relate to implementation and integration of the new system at a cost of $1,549,527. Thereafter, for the remaining five years of the project, Enterprise Solutions Consulting LLC will provide managed services with respect to the new system, which will include data hosting services, all required licensing for up 25,000 accounts, and system support to keep the system operational. The cost associated with Years 3, 4, 5, 6 and 7 will range from $1,575,000 to $2,825,000. Given that an investment of $1,549,527 must be made in the first two years of the project, it would cost prohibitive to make this kind of investment for a system that we cannot then use for at least five years. For this reason, the contract will exceed five years.

2. Reason(s) for the Request
   A. Indicate all that apply (be specific and attach any relevant supporting documents):

   ☑ Short-term or capital projects requiring diverse skills, expertise and/or knowledge.

   B. Explain the qualifying circumstances:
   The need for technical services for this project is limited primarily to the first 12-18 months of the project which pertains to system implementation services. Thereafter, Years 3-7 of the project pertain primarily to data hosting, licensing and system support, all of which the hosted provider must provide to ensure continuity of operations. Further, we do not currently have internal expertise with an electric billing system by which to staff the software implementation portion of this project. In fact, the required Oracle Customer Care & Billing Application expertise required for this project is highly technical and very difficult to find. Even if we were able to find and develop such internal expertise, it would require significant time and delays to this project. In contrast, by allowing ESC to perform the implementation of this project, we will instead be able to hire and assign one to two 1044 IS Engineer-Principals to oversee the project, while also receiving training on use of the application for future application support.

3. Description of Required Skills/Expertise
   A. Specify required skills and/or expertise:
      • Five years of demonstrated experience maintaining, upgrading and enhancing the proposed billing system at electric utilities similar to SFPPC Power Enterprise;
      • At least two currently active managed services agreements with utilities in North America that provide electric, gas, and/or water services with a minimum of 1,000 customer accounts. Entities must be of similar or greater size and complexity as SFPPC;
      • Five years of experience incorporating Simple, Complex, TOU, and NEM Electric rates into a billing system that utilizes the proposed billing system;
      • Five years of testing experience, preferably with testing tools that ensure bill accuracy for an Electric billing system that utilize the proposed billing system; and
      • Five years of experience performing data conversion for the proposed billing system.

   B. Which, if any, civil service class(es) normally perform(s) this work? 1042, IS Engineer-Journey; 1043, IS Engineer-Senior; 1044, IS Engineer-Principal; 1053, IS Business Analyst-Senior; 1054, IS Business
Analyst-Principal; 1063, IS Programmer Analyst-Senior;

C. Will contractor provide facilities and/or equipment not currently possessed by the City? If so, explain:
Yes. All services will be rendered on ESC’s own premises, accessibly by SFPUC through the internet ("cloud").

4. **If applicable, what efforts has the department made to obtain these services through available resources within the City?**
   - The need for technical services for this project is limited primarily to the first 18-24 months of the project which pertains to system implementation services. Thereafter, Years 3-7 of the project pertain primarily to data hosting services, all required licensing for up 25,000 accounts, and ongoing system support to keep the system operational. The services performed during the latter five years of this seven year contract must be performed by ESC, the hosting system provider. Further, we do not currently have internal expertise with an electric billing system by which to staff the software implementation portion of this project. In fact, the required Oracle Customer Care & Billing Application expertise required for this project is highly technical and very difficult to find. Even if we were able to find and develop such internal expertise, it would require significant time and delays to this project. In contrast, by allowing ESC to perform the implementation of this project, we will instead be able to hire and assign one to two 1044 IS Engineer-Principals to oversee the project, while also receiving training on use of the application for future application support.

5. **Why Civil Service Employees Cannot Perform the Services to be Contracted Out**
   A. Explain why civil service classes are not applicable.
      Civil service classes listed above are applicable. However, we are seeking these technical services for the reasons stated below. First, the need for technical services is limited primarily to the first 18-24 months of the project which pertains to system implementation services. Thereafter, Years 3-7 of the project pertain primarily to data hosting services, all required licensing for up 25,000 accounts, and ongoing system support to keep the system operational. The services performed during the latter five years of this seven year contract must be performed by ESC, the hosting system provider. Further, hiring staff to cover the initial 18-24 month implementation period of this project is not cost-effective. Nor will it ensure we can even find staff with the necessary expertise to do such work. Second, we do not currently have internal expertise with an electric billing system by which to staff the software implementation portion of this project. In fact, the required Oracle Customer Care & Billing Application expertise required for this project is highly technical and very difficult to find. Even if we were able to find and develop such internal expertise, it would require significant time and delays to this project. In contrast, by allowing ESC to perform the implementation of this project, we will instead be able to hire and assign one to two 1044 IS Engineer-Principals to oversee the project, while also receiving training on use of the application for future application support.

   B. If there is no civil service class that could perform the work, would it be practical and/or feasible to adopt a new civil service class to perform this work? Explain. No, existing Civil Service classes already exist. However, we are seeking these technical services for the reasons provided above.

6. **Additional Information**
   A. Will the contractor directly supervise City and County employee? If so, please include an explanation.
      No.

   B. Will the contractor train City and County employees and/or is there a transfer of knowledge component that will be included in the contract? If so, please explain what that will entail; if not, explain why not.
      Yes. Prior to cutover, ESC will develop a project closing summary that lists outstanding activities of both parties that must be completed to close the project component. This summary will include additional report development, performance tuning, and end-user training.
C. Are there legal mandates requiring the use of contractual services?
   No.

D. Are there federal or state grant requirements regarding the use of contractual services? If so, please explain and include an excerpt or copy of any such applicable requirement.
   No.

E. Has a board or commission determined that contracting is the most effective way to provide this service? If so, please explain and include a copy of the board or commission action.
   No.

F. Will the proposed work be completed by a contractor that has a current PSC contract with your department? If so, please explain.
   No.

7. **Union Notification**: On 09/21/2018, the Department notified the following employee organizations of this PSC/RFP request:
   Architect & Engineers, Local 21

☐ I CERTIFY ON BEHALF OF THE DEPARTMENT THAT THE INFORMATION CONTAINED IN AND ATTACHED TO THIS FORM IS COMPLETE AND ACCURATE:

Name: Taraneh Moayed   Phone: 415-551-4377   Email: tmoayed@sewater.org

Address: 525 Golden Gate Avenue, 5th Floor San Francisco, CA 94102

******************************************************************************
FOR DEPARTMENT OF HUMAN RESOURCES USE

PSC# 41932 - 18/19
DHR Analysis/Recommendation: Civil Service Commission Action:
Commission Approval Required
DHR Approved for 11/19/2018
Receipt of Union Notification(s)
From: dhr-psccordinator@sfgov.org
To: Moayed, Taraneh; annie.wanless@sfgov.org; acassidy@lftpe21.org; WendyWong26@yahoo.com; wendywong26@yahoo.com; tmateyeva@lftpe21.org; kcubamaders@lftpe21.org; kpage@lftpe21.org; reich@lftpe21.org; phil@lftpe21.org; l2IPSCReview@lftpe21.org; Moayed, Taraneh; DHR-PSCCoordinator, DHR (HRD)
Subject: Receipt of Notice for new PCS over $100K PSC # 41932 - 18/19
Date: Friday, September 21, 2018 4:07:57 PM

RECEIPT for Union Notification for PSC 41932 - 18/19 more than $100k

The PUBLIC UTILITIES COMMISSION -- PUC has submitted a request for a Personal Services Contract (PSC) 41932 - 18/19 for $4,374,527 for Initial Request services for the period 02/01/2019 – 01/31/2026. Notification of 30 days (60 days for SEIU) is required.

After logging into the system please select link below, view the information and verify receipt:

http://apps.sfgov.org/dhrinupal/node/11985 For union notification, please see the TO: field of the email to verify receipt. If you do not see all the unions you intended to contact, the PSC Coordinator must change the state back to NOT READY, make sure the classes and unions you want to notify are selected and SAVE. Then VIEW the record and verify the list of unions and emails. EDIT the document again, change the state back START UNION NOTIFICATION and SAVE. You should receive the email with all unions to the TO: field as intended
Additional Attachment(s)
7 Year Pricing Structure
San Francisco Power Water Sewer
Services of the San Francisco Public Utility Commissioners

Summary Cost Worksheet for Hetch Hetchy Power Electric Billing System Replacement
Provided by Enterprise Solutions Consulting

Cost Summary

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<th>Cost Item</th>
<th>Cost</th>
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<td>C2M Implementation and Integration Cost</td>
<td>$1,649,627</td>
<td>Fixed fee for implementation, integration services, training and travel costs.</td>
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<td>C2M Managed Services Cost</td>
<td>$1,670,000</td>
<td>Fixed fee for five years of managed services, including all fees related to the hosting and training (up to 25,000 accounts).</td>
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<td>As-Needed Technical Services</td>
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<td>Time and materials (T&amp;M) for hardware and software.</td>
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Oracle C2M Implementation Cost

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<td>Installation Services (including Hosting)</td>
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<td>Travel</td>
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<td>Total Implementation Cost</td>
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Oracle C2M Managed Services Cost

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<td>Total Managed Services Cost</td>
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As-Needed Customization Work Hourly Rates

<table>
<thead>
<tr>
<th>Task Description</th>
<th>Percentage</th>
</tr>
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<tbody>
<tr>
<td>Business &amp; Functional Requirements Analysis</td>
<td>20%</td>
</tr>
<tr>
<td>Solution Design</td>
<td>20%</td>
</tr>
<tr>
<td>Solution Development</td>
<td>10%</td>
</tr>
<tr>
<td>System Integration Testing</td>
<td>10%</td>
</tr>
<tr>
<td>User Acceptance Testing</td>
<td>10%</td>
</tr>
<tr>
<td>Solution Deployment</td>
<td>10%</td>
</tr>
<tr>
<td>Knowledge Transfer &amp; Training</td>
<td>10%</td>
</tr>
<tr>
<td>Post Implementation Support</td>
<td>10%</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Activity Percentage</th>
<th>PM</th>
<th>BA</th>
<th>Tester</th>
<th>Trainer</th>
<th>Sol Arch</th>
<th>Data Conv</th>
<th>Dev</th>
<th>Total</th>
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<tbody>
<tr>
<td>1. Business &amp; Functional Requirements Analysis</td>
<td>20%</td>
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<tr>
<td>2. Solution Design</td>
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<tr>
<td>5. User Acceptance Testing</td>
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<td>6. Solution Deployment</td>
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<td>8. Post Implementation Support</td>
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</table>

<table>
<thead>
<tr>
<th>Work Hours</th>
<th>PM</th>
<th>BA</th>
<th>Tester</th>
<th>Trainer</th>
<th>Sol Arch</th>
<th>Data Conv</th>
<th>Dev</th>
<th>Weighted Avg Hourly Rate, Per Task</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Business &amp; Functional Requirements Analysis</td>
<td>20%</td>
<td></td>
<td></td>
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<td>$240.00 $230.00 $215.00 $200.00 $190.00 $170.00 $150.00 $130.00 $120.00 $100.00 $80.00 $60.00 $40.00 $20.00 $10.00 $7.20 $6.00 $30.00 $20.00 $10.00 $5.00 $3.00 $2.00 $1.00 $0.50</td>
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<td>2. Solution Design</td>
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<td>$240.00 $230.00 $215.00 $200.00 $190.00 $170.00 $150.00 $130.00 $120.00 $100.00 $80.00 $60.00 $40.00 $20.00 $10.00 $7.20 $6.00 $30.00 $20.00 $10.00 $5.00 $3.00 $2.00 $1.00 $0.50</td>
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<td>$240.00 $230.00 $215.00 $200.00 $190.00 $170.00 $150.00 $130.00 $120.00 $100.00 $80.00 $60.00 $40.00 $20.00 $10.00 $7.20 $6.00 $30.00 $20.00 $10.00 $5.00 $3.00 $2.00 $1.00 $0.50</td>
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<td>4. System Integration Testing</td>
<td>10%</td>
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<tr>
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<td></td>
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</tr>
</tbody>
</table>

| Avg Hourly Rate (All Tasks) | $198.50 |
| Score | 8 |
Proposed Billing System and Scope of Work
IV. PROPOSED BILLING SYSTEM AND ARCHITECTURE

PART 1: System Architecture Overview

(1) UNDERLYING TECHNICAL ARCHITECTURE

The ESC team has performed a careful evaluation of the SFPUC three phase transition approach to merging Water/Wastewater and Electric into single Software as a Service (SaaS) Oracle Utilities Cloud solution. After further reviewing the business requirements, technical requirements, and discovery session (pre-submittal conference) conducted on June 12th, ESC is proposing Oracle Utilities Customer to Meter (C2M) "Turn Key" Platform as a Service (PaaS) solution for proposed billing system replacement. Our solution provides the industry leading platform hosted on optimized high performance infrastructure at world-class data center facilities designed to be secure, stable, scalable, and maintainable.

INDUSTRY LEADING PLATFORM: ORACLE UTILITIES CUSTOMER TO METER (C2M)

Oracle Utilities offers a complete platform designed to optimize even the most complex meter-to-cash processes, as well as address lexibility as customer expectations, smart device technology, and regulatory requirements, continue to transform the market.

Our team is proposing Oracle Utilities Customer to Meter (C2M) which comprises market leading Oracle Utilities Customer Care & Billing (CC&B) and Oracle Utilities Meter Data Management (MDM) in one platform and one technology stack. C2M packs all of the benefits of a complete meter solution into our modern customer platform. Oracle Utilities C2M offers a complete set of functions that address the actions utility companies and service organizations take with regard to their customers. These functions are created in a modular fashion, so the modules can be used in various combinations to address objectives. These modules include:

Oracle Utilities C2M Base, which focuses on customer and financial data management, practical CRM functionality, and field operations capabilities; all of which contribute to the foundation of a CIS.

Oracle Utilities C2M Base consists of:

Customer and Account Management, which provides the utility the ability to view and manage all aspects of the customer's account. This includes a full online real-time view of a customer's financial history, with all billing and payment transactions and adjustments.

Premise Management, which provides a complete history of premises, services, and rates for each customer is also maintained and available to online viewing. Oracle Utilities C2M provides the ability to maintain an unlimited number of communication channels for each customer along with their preferences of which channels to receive specific notification and communication types.

Rating and Billing, which provides powerful engines that can perform complex calculations to produce bills with various sets of charges (for example, internally-rated charges, pass-through charges, etc.). Multiple product definitions and pricing options make this a very powerful offering.

Credit and Collections, which addresses collection activity by helping to properly segment the customer base and respond appropriately when payment is not forthcoming. This includes the Oracle Utilities C2M Overdue Processing functionality that is lexible enough to independently collect on virtually any individual item.
**Cashiering**, which offers advanced online payment features to streamline the process of accepting different types of payments—from CIS to non-CIS payments, including payments in alternate or multiple currencies.

**Customer Program Management**, which provides the ability to implement a variety of initiatives to encourage targeted customers to participate in a specific program or programs. It allows a structured marketing effort for each initiative to be configured, an initiative's individual leads to be assigned and managed by a dedicated group of specialized users, and specific business processing to be applied based on the customer's specific response to an initiative.

**Task Optimization Tools**, which is a set of browser-based tools used to create custom user interfaces as well as extend the application without the need for database changes or heavy-duty programming. Task Optimization Tools allow for configurable approaches to optimize business processes. Users work with Oracle Utilities C2M via a standard web browser—Microsoft Internet Explorer and Mozilla Firefox. This makes the application easy to use as well as reduces the training time necessary to learn a new type of user interface. Many familiar browser concepts—such as favorites, drill-down hyperlinks, back/forward, pop-up windows, and history buttons—are maintained within Oracle Utilities C2M.

**Advanced Meter Solution**, which provides full meter-to-cash capabilities, usage management, and device management for utilities with interval/daily scalar meters

Along with comprehensive customer operations capabilities, C2M delivers a world-class meter repository and robust usage management capabilities, allows utilities to optimize meter-to-cash business processes and data management across all scalar and interval meters. This complete solution allows seamless, cost-effective growth of smart meter programs.

While SFPUC would be utilizing C2M's CC&B capabilities with this proposal, C2M also includes advanced metering capabilities.

Below are the key features of C2M:

- Market-leading CIS and market leading MDMS in one solution
- Pre-built integration with head-end and AMI systems
- Consolidated interface for data management
- Data capture from multiple sources
- Automated VEE processes
- 360 degree view of the customer
- Intuitive user-interface
- Robust rating and billing engine
- Multi-channel communication and customer communication preference management
- Customer Program Management for value add programs and services
- Online account management and service requests
- Supports utilities of any smart meter program maturity

MORE ABOUT CC&B

As mentioned above, CC&B provides the CIS functionality in the C2M platform. CC&B handles every aspect of the customer lifecycle – from service connection, meter reading, rating, billing, payments processing, collections to field work. It incorporates customer relationship features such as comprehensive contact center capability, order entry, conservation program management, contract management and affinity programs. CC&B also facilitates the management of new products and services that a utility may wish to market and sell to all or a defined segment of their customer base.

Also, CC&B includes a portal that provides a 360-degree view of the customer. This provides a firm foundation for the customer service as it displays a variety of customer/account information of most concern to customer service staff. The portal improves productivity by providing access to commonly needed information and thus reduces clicks and needless navigation to view customer/account details. For more information on CC&B, please visit https://www.oracle.com/industries/utilities/products/billing-solutions/index.html.

Customer To Meter (C2M Application Architecture)

The component of the C2M architecture is as follows:

- **Browser client**: The client component is a browser-based interface that is light and only requires the Microsoft Internet Explorer or Mozilla Firefox browser to operate.
Client Desktop: Software and Hardware Requirements

<table>
<thead>
<tr>
<th>Configuration</th>
<th>Processor</th>
<th>Memory (RAM)</th>
<th>Monitor Display</th>
</tr>
</thead>
<tbody>
<tr>
<td>Minimum</td>
<td>Pentium IV - 2.0 GHz</td>
<td>1024 MB</td>
<td>1024X768**</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>16-bit Color</td>
</tr>
<tr>
<td>Recommended*</td>
<td>Pentium IV - 3.0+ GHz or any Core 2 Duo or any Athlon X2</td>
<td>2048 MB</td>
<td>1280X1024*</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>32-bit Color</td>
</tr>
</tbody>
</table>

* The recommended configuration improves client performance.

** To reduce the amount of scrolling required for pages that are longer than 768 or 1024 pixels, consider placing a monitor in vertical position (with narrow side on the bottom).

The client component is a browser-based interface that is light/thin and only requires the Microsoft Internet Explorer browser or Mozilla Firefox browser to operate.

<table>
<thead>
<tr>
<th>Browser</th>
<th>Windows Operating System</th>
</tr>
</thead>
<tbody>
<tr>
<td>Internet Explorer 11</td>
<td>Microsoft Windows 7, 8.1, 10 (64-bit)</td>
</tr>
<tr>
<td>Firefox ESR 52</td>
<td>Microsoft Windows 7, 8.1, 10 (64-bit)</td>
</tr>
</tbody>
</table>

Users work with C2M via a standard web browser, such as Microsoft Internet Explorer or Mozilla Firefox, so a minimal amount of disk space on the client is required. This also makes the application easy to use and reduces the training time necessary to learn a new type of user interface. Many familiar browser concepts—such as favorites, drill-down hyperlinks, back/forward, pop-up windows, and history buttons—are maintained within C2M.

- Communication between the client and server uses the HTTPS protocol across a TCP/IP network. Non-communications (HTTP) is also supported. The user simply uses a URL containing the product hostname and allocated port number in the address bar of Microsoft Internet Explorer to access the application.

Notes

- It is possible to use proxies to hide or translate the hostname and port numbers. Refer to the documentation provided with your JEE web application server documentation for proxy support instructions.

- By default SSL is enabled with minimal facilities, by default for all new installations. Refer to the SSL documentation provided with your JEE Server to enable SSL to your individual needs.

- The default SSL certificate provided by Oracle is recommended for demonstration and development purposes only. It is highly recommended that customers purchase their own certificates for use for SSL.

- **Mobile device terminal/mobile interface**: In some products, the mobile framework is deployed to allow mobile devices to interact with server processes. Refer to the product guides for applicability of the mobile framework to your product.

- **Web application server**: The product web application is housed in a JEE-compliant web application server. This server can be run on a variety of supported Windows, Linux, and Unix platforms.
• **Within the Web application server**, the pages for the product are rendered using a combination of metadata and formatting rules for a consistent look and feel. These pages are written using a combination of JEE Java script and Java. These pages are cached on the web server and served to the client upon request. If the page requires business rules to be invoked then business objects are called from this server.

• **Business application server**: The business component of the architecture can be installed as part of the web application server (default) or as a separate component. This means the business application server is also housed in a JEE-compliant web application server. This server can be run on a variety of supported Windows, Linux, and Unix platforms (refer to the Supported Platforms diagram provided below). Within the business application server, the following components are implemented:

• **Business objects**: The business logic for each object in the system is expressed as a Java object. It contains all the SQL, programmatic rules, and structures to manage the data for the transactions.

• **Database connection pool**: If any database access is required, we use an industry component, called Universal Connection Pool, to manage and pool the connections to the database for the batch component and use the web server's own native JDBC connection pooling for the online and web services component. This reserves connections and allows for efficient use of connections to the database. To access the database product uses the networking client provided by the DBMS vendors to ensure correct connection. These clients are multi-protocol for maximum flexibility.

• **Database server**: The RDBMS used for the implementation is implemented in the database server. The product supports a number of databases. The database server only stores and retrieves the data for the product as all the business logic is in the business objects.

• **Batch server**: In some cases, processes need to be processed in bulk and in the background. The batch server is a set of Java virtual machines clustered using Oracle Coherence. This feature supports multi-threaded background processes processing records in bulk across a cluster.

### Supported Platforms

The installation has been tested to operate on many operating system, application server, and database server combinations. For the software requirements for each of these combinations, see Chapter 5: Installing Application Server Prerequisite Software for more information.

### Operating Systems and Application Servers

The table below details the MINIMUM operating system and application server combinations on which this version of Oracle Utilities Customer Care and Billing is supported.

<table>
<thead>
<tr>
<th>Operating System (and Web Browser)</th>
<th>Operating System (and Application Server)</th>
<th>Database</th>
</tr>
</thead>
<tbody>
<tr>
<td>Windows 7, 8, 10 with Internet Explorer 11, Firefox 55-60</td>
<td>Windows 7, 8, 10</td>
<td>Oracle 11.2.0.3+</td>
</tr>
<tr>
<td>Oracle Linux 6.0+, 7.x, or Red Hat Enterprise Linux 7</td>
<td>WebLogic 12.2.1.3+</td>
<td>Oracle 11.2.0.3+</td>
</tr>
<tr>
<td>Oracle Solaris 11, or AIX 7.1, 8.1</td>
<td>WebLogic 12.2.1.3+</td>
<td>Oracle 11.2.0.3+</td>
</tr>
<tr>
<td>Windows Server 2012 R2</td>
<td>WebLogic 12.2.1.3+</td>
<td>Oracle 11.2.0.3+</td>
</tr>
<tr>
<td>Not supported in production</td>
<td>WebLogic 12.2.1.3+</td>
<td>Oracle 11.2.0.3+</td>
</tr>
</tbody>
</table>
Network Protocol

Communication between the client and server uses the HyperText Transfer Protocol (HTTPS) protocol across a TCP/IP network. Non-communications (HTTP) is also supported. The user simply uses a URL containing the product hostname and allocated port number in the address bar of Microsoft Internet Explorer to access the application.

The application is entirely web-based, and can be accessed remotely over a private line or the internet. If accessed over the internet, traffic can be protected using VPN, HTTPS, or both.

Speed/Bandwidth

We recommend a gigabit Ethernet (or higher) for bandwidth requirements.

Other Software

No other software is required.

Always-Available Dashboard

The dashboard is a "common" area of the screen populated with basic customer information. It can be minimized to increase the working pane, but always remains available while the user is navigating through related pages. It can contain such content zones as:

- User-defined favorites (navigation links).
- Basic account information (name, account, address).
- An open customer-contact area that facilitates note taking and storage.
- A financial summary for the current account.
- Context-sensitive content zones

Deployment Options: Distributed Processing Client/Server

As described in the above section, C2M is an "N-tier" client server application with the following tiers:

- **Client** – A web browser based "thin" client that contains the user interface to the product.
- **Web Server** – A Web Server provides the pages that are displayed on the client web browser and act as a conduit to the business objects.
- **Business Application Server** – A Business Application Server provides processing of business functions like validating measurements and creating bill determinants.
- **Database Server** – A database management system is responsible for retrieval and storage of product data.

There are several possible hardware deployment options with the product:

- All tiers can be on a single machine, shared machines, or on separate machines. (Proposed separate machines)
- All tiers can exist on single or multiple machines for clustering support.
- Load balancing solutions can be used at the hardware and/or software level.
Remote Assistance

![Diagram of Platform Deployment Options]

The application is entirely web-based, and can be accessed remotely over a private line or the internet. If accessed over the internet, traffic can be protected using VPN, HTTPS, or both.

PROPOSED PLATFORM AS A SERVICE (PAAS HOSTED SOLUTION)

Our team is proposing Oracle C2M solution as Platform as a Service (PaaS) hosted at our data centers, as depicted in the diagram below. The diagram shows the secure connectivity and infrastructure for high availability of the C2M platform to authorized SFPUC users. SFPUC customers shall have access to view and manage their bills, similar to water customers, from the SFPUC portal.
The proposed PaaS solution will provide SFPUC the foundation to support Oracle C2M production and non-production application and databases in fail-over architecture. Our data centers are compliant and audited frequently to maintain the high standards we aspire for.
Our world-class data center facilities are designed to be secure, stable, scalable, and maintainable. One key attribute that sets us apart from other hosting companies is that we operate and manage all aspects of the facilities where equipment and business applications are housed. This puts us in a position to effectively manage and respond to evolving customer needs and to deliver all aspects of our client’s Service Level Agreements. Some key features of our data centers are as follows:

1. **Security** - We restrict access only to authorized personnel. Access is permitted with different levels of entrance security. On-site security personnel monitor all perimeter doors, security alarms, and digital surveillance video cameras monitor and record entry and exit to prevent unauthorized activity. Clients have direct access into the facility 24 hours a day, 365 days a year.

2. **Power Protection** - Our data centers deliver continuous power 24 hours a day, 7 days a week. Power protection is provided through multiple uninterruptible power supplies with battery backup to ensure a clean and stable supply of power. Emergency diesel power generators are automatically activated in the event of a power disruption.

3. **Environment Control** - The facilities are designed to keep all customer equipment operating at optimum efficiency, and they are equipped with redundant, independent cooling units. Temperature and humidity are electronically controlled through sensitive moisture sensors.

4. **Fire detection and suppression** - Fire suppression is provided through systems on the floor and ceiling, and monitored by a multi-zone smoke and fire detection system.

5. **Raised floor** - Our facilities have been constructed using 18-inch raised loors to accommodate cabling and cooling.

6. **Cabling** - We use Category 5e & 6 or optical fiber cabling with Gigabit Ethernet capabilities. Cables are routed under the raised floor in protective cable trays to ensure a traceable, secure cable route.

Our solution provides hosting at two sites as the primary and secondary:

**Primary Data Center: Rochester, NY**

![Primary Data Center Image]

Key Features:
- 22,000 Square feet total
- 99.999%
- 4 levels of physical security
- 4 UPS modules
- 2.0MW backup generator
- N+1 redundancy
- Fire detection & suppression
- Temperature & humidity control
- Customer staging, meeting, & office facilities

**Secondary Data Center: Buffalo, NY**

![Secondary Data Center Image]

Key Features:
- 23,000 Square feet total
- Telecom HUB site
- 24/7/365 security & multi-level access control
- Power protection provided by UPS & 2MW backup generator
- N+1 redundant independent temperature & humidity control
- HVAC, dedicated dry cooler plant
- VESDA fire detection & suppression
Network Connectivity Between SFPUC and Hosted Data Centers

We propose to connect the SFPUC location to the hosted data centers, with a seamless VPN connection to the environment's utilizing a static IP-SEC tunnel. This requires SFPUC to provide a firewall and Internet connection connected to the hosted data center multi-homed (BGP) Internet connections. A second tunnel will be pre-configured to provide access to the secondary Data Center in case of a declared disaster. For end user access to the Oracle C2M, no additional network tools or connections are required.

Hardware and Deployment

Our team proposed PaaS solution considers deployment of application and database on separate physical servers. The PaaS solution includes four physical dedicated servers with Oracle Linux 7 installations. Two of the physical servers will perform the duties around production services – one for the application front end server and one will be the back-end Oracle database server. Local storage will be implemented in each server and replicated to the secondary data center environment. Additionally, the non-production environment will be hosted in a VMware vSphere environment. The secondary data center will host two identical server hardware devices for a failed site recovery.

Below is the hardware specification for both Production and Disaster Recovery site:

<table>
<thead>
<tr>
<th>SFPUC Server Specifications (Production &amp; Disaster Recovery)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Application Server- Production</strong></td>
</tr>
<tr>
<td>1 Server Chassis</td>
</tr>
<tr>
<td>1 Intel® Xeon® Gold 5122 3.6G, 4C/8T, 10.4GT/s, 16.5M Cache, Turbo, HT (105W)</td>
</tr>
<tr>
<td>4 16GB RDIMM, 2666MT/s, Dual Rank</td>
</tr>
<tr>
<td>6 800GB SSD SATA (2.4 TB with a RAID 1+0 configuration)</td>
</tr>
<tr>
<td><strong>Database Server- Production</strong></td>
</tr>
<tr>
<td>1 Server Chassis</td>
</tr>
<tr>
<td>1 Intel® Xeon® Gold 5122 3.6G, 4C/8T, 10.4GT/s, 16.5M Cache, Turbo, HT (105W)</td>
</tr>
<tr>
<td>4 16GB RDIMM, 2666MT/s, Dual Rank</td>
</tr>
<tr>
<td>6 800GB SSD SATA (2.4 TB with a RAID 1+0 configuration)</td>
</tr>
<tr>
<td><strong>Application Server- Secondary Site</strong></td>
</tr>
<tr>
<td>1 Server Chassis</td>
</tr>
<tr>
<td>1 Intel® Xeon® Gold 5122 3.6G, 4C/8T, 10.4GT/s, 16.5M Cache, Turbo, HT (105W)</td>
</tr>
<tr>
<td>4 16GB RDIMM, 2666MT/s, Dual Rank</td>
</tr>
<tr>
<td>6 800GB SSD SATA (2.4 TB with a RAID 1+0 configuration)</td>
</tr>
<tr>
<td><strong>Database Server- Secondary Site</strong></td>
</tr>
<tr>
<td>1 Server Chassis</td>
</tr>
<tr>
<td>1 Intel® Xeon® Gold 5122 3.6G, 4C/8T, 10.4GT/s, 16.5M Cache, Turbo, HT (105W)</td>
</tr>
<tr>
<td>4 16GB RDIMM, 2666MT/s, Dual Rank</td>
</tr>
<tr>
<td>6 800GB SSD SATA (2.4 TB with a RAID 1+0 configuration)</td>
</tr>
</tbody>
</table>
**Backup and Recovery**

Backups of the production servers will occur every four hours, retained for 30 days and stored locally at the primary data center on a separate managed storage device. These images will be used to recover servers if any issues occur. The backup images will periodically be replicated throughout the day to the secondary staged server environment for the purposes of site recovery. This replication will occur on a private protected fiber ring connecting the two data centers. In the event of a site disaster, a request can be made to the support desk and the most current server image set can be brought up as the production environment.

(2) SYSTEM CONFIGURATION/COMPONENTS/ OPTIONS AND (3) TESTING/DEVELOPMENT/PRODUCTION

Software system configuration and components are provided in section above. The table below identifies the minimum set of C2M environments proposed to be used during implementation and our managed services. Each of these environments is discussed in further detail below.

<table>
<thead>
<tr>
<th>Seq</th>
<th>Environment</th>
<th>Purpose</th>
<th>Team</th>
<th>Phase(s)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>C2MDEMO Demo</td>
<td>This is the initial CC&amp;B installation environment containing demonstration data. This environment will be maintained in its original state and used only for reference.</td>
<td>All</td>
<td>Initial to Production</td>
</tr>
<tr>
<td>2</td>
<td>C2MMST</td>
<td>This is the environment containing the master configuration specific to SFPUC. This environment will be the sole source for configuration promotions to all other CC&amp;B environments. This environment will not contain transactional data.</td>
<td>System Administration</td>
<td>Analysis &amp; Design thru Managed Services</td>
</tr>
<tr>
<td>3</td>
<td>C2MDEV</td>
<td>This environment is used for the initial develop and unit testing of SFPUC developed customization and interfaces. This environment will be built out such that it can support integration and interface development.</td>
<td>Technical</td>
<td>Analysis &amp; Design thru Managed Services</td>
</tr>
<tr>
<td>4</td>
<td>C2MDROP</td>
<td>This environment is used for testing code drops. All custom code will be installed in this environment for verification (&quot;smoke testing&quot;) to ensure the delivery is complete and compatible with the C2MMST configuration.</td>
<td>ESC</td>
<td>Analysis &amp; Design thru Managed Services</td>
</tr>
<tr>
<td>5</td>
<td>C2MFUNC</td>
<td>This environment is used for the initial configuration and business process development. This environment is used to verify C2M configuration before the configuration is promoted to C2MMST. This environment is maintained as a ‘play plan’ for continued knowledge transfer for the project team.</td>
<td>Functional</td>
<td>Analysis &amp; Design thru Production Go-Live</td>
</tr>
<tr>
<td>6</td>
<td>C2MCONV</td>
<td>This environment is used for running the data conversion process.</td>
<td>Conversion</td>
<td>Analysis &amp; Design thru Production Go-Live</td>
</tr>
<tr>
<td>Seq</td>
<td>Environment</td>
<td>Purpose</td>
<td>Team</td>
<td>Phase(s)</td>
</tr>
<tr>
<td>-----</td>
<td>-------------</td>
<td>---------</td>
<td>------</td>
<td>----------</td>
</tr>
<tr>
<td>7</td>
<td>C2MSIT</td>
<td>This environment is used for QA integration testing. This environment will contain the master configuration and SFPUC code from C2MMST and the converted data from C2MCONV.</td>
<td>Testing</td>
<td>Analysis &amp; Design thru Production Go-Live</td>
</tr>
<tr>
<td>8</td>
<td>C2MUAT</td>
<td>This environment is used for user acceptance testing C2M and the associated SFPUC business processes. This environment will contain the master configuration and SFPUC code from C2MMST and the converted TA data from C2MCONV.</td>
<td>Testing</td>
<td>Analysis &amp; Design thru Production Go-Live</td>
</tr>
<tr>
<td>9</td>
<td>C2MTRNRM</td>
<td>This environment is the master data set used for end-user training.</td>
<td>Training</td>
<td>Analysis &amp; Design thru Managed Services</td>
</tr>
<tr>
<td>10</td>
<td>C2MPROD</td>
<td>This is the go-live production environment.</td>
<td>All</td>
<td>Go-Live Thru Managed Services</td>
</tr>
</tbody>
</table>

(4) PROPOSED RDBMS MOULES

ESC’s solution is proposing the following version of Oracle RDBMS.

<table>
<thead>
<tr>
<th>RDBMS</th>
<th>Current Version</th>
</tr>
</thead>
<tbody>
<tr>
<td>Oracle Database Enterprise Edition</td>
<td>12.2.0.1 +</td>
</tr>
</tbody>
</table>

*Note: Latest compatible/certified version of the RDBMS will be utilized at the time of installation*

(5) NETWORK CONNECTIVITY AND APPLICATION SOFTWARE

**Oracle C2M Application Connectivity**

Oracle Utilities C2M is entirely web-based and can be accessed remotely over a private line or the internet. If accessed over the internet, traffic can be protected using VPN, HTTPS, or both. TCP/IP is used exclusively as the network transport protocol between the web browser and the web/application server, and between the web/application server and the database server. Oracle Utilities C2M supports SSL encryption (HTTPS protocol) between the browser and the web server.

**Network Connectivity Between SFPUC and Hosted Sites**

We propose to connect the SFPUC location to the hosted data centers, with a seamless VPN connection to the environment's utilizing a static IP-SEC tunnel. This requires SFPUC to provide a firewall and Internet connection connected to the hosted data center multi-homed (BGP) Internet connections. A second tunnel will be pre-configured...
to provide access to the secondary Data Center in case of a declared disaster. For end user access to the Oracle C2M, no additional network tools or connections are required.

(6) SYSTEM SOFTWARE ENVIRONMENT

Operating System Software

Please refer to the image below for supported platforms:

Supported Platforms

The installation has been tested to operate on many operating system, application server, and database server combinations. For the software requirements for each of these combinations, see Chapter 5: Building Application Server, Integration Server, and E-Business Suite for more information.

Operating Systems and Application Servers

The table below details the MENDITM operating system and application server combinations on which this version of Oracle Utilities Customer Care and Billing is supported.

<table>
<thead>
<tr>
<th>Operating System and Web Browser</th>
<th>Operating System (Server)</th>
<th>Client</th>
<th>Application Server</th>
<th>Database</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>AXI 5.1/11.01</td>
<td>POWER</td>
<td>WebLogic 12.1.5/0</td>
<td>Oracle 12.1.0/1</td>
</tr>
<tr>
<td></td>
<td>AXI 12.1/11.01</td>
<td>POWER</td>
<td>WebLogic 12.2.1/0</td>
<td>Oracle 12.1.0/1</td>
</tr>
<tr>
<td>Windows 7, 8, 10</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(Support: Internet Explorer 11, Firefox ESR 64)</td>
<td>Oracle Linux 6.5, 7.0, (based on Red Hat Enterprise Linux 6)</td>
<td>46.6, 64</td>
<td>WebLogic 12.1.5/0</td>
<td>Oracle 12.1.0/1</td>
</tr>
<tr>
<td></td>
<td>Oracle Solaris 10</td>
<td>SPARC</td>
<td>WebLogic 12.3.1/0</td>
<td>Oracle 12.1.0/1</td>
</tr>
<tr>
<td></td>
<td>(Not supported in production)</td>
<td>16.6, 64</td>
<td>WebLogic 12.1.3/0</td>
<td>Oracle 12.1.0/1</td>
</tr>
</tbody>
</table>

Our proposal includes the use of Oracle Red Hat Enterprise Linux 7.

Application Development Tools

Oracle Utilities C2M Base contains a number of development tools and features to assist with implementations and extending the product. Oracle Utilities C2M performs many functions using user-defined algorithms, also known as plug-ins. For example, when a CSR requests a customer's proposed deposit amount, the application calls the deposit recommendation plug-in. This plug-in routine or scripted logic calculates the estimated deposit amount and returns it to the caller.

The definition of which plug-in to use for each algorithm-based function is specified during configuration of the control tables. Oracle Utilities C2M provides, in most cases, at least one plug-in for every function to allow for commonly needed business logic. New plug-ins may be written in scripted logic or custom code to introduce implementation-specific logic as necessary. The SDK provides standards and instructions for developing new plug-in algorithms.

The standard tool recommended for Java development with the product is Eclipse, which is open source. Using Eclipse, it is possible to create Java algorithms, class extensions, and batch processes. To assist, Eclipse plug-ins are provided, which are not available for other IDEs at this time. Oracle JDeveloper is also a free, integrated development environment with end-to-end support for modeling, creating, debugging, optimizing, and deploying Java. As the Oracle Utilities applications are 64-bit, the development tools run on 64-bit as well.
Performance Tools

The Oracle Utilities C2M Task Optimization Tools is a set of browser-based tools used to create custom user interfaces and extend the application without the need for database changes or heavy-duty programming. The Oracle Utilities C2M Task Optimization Tools allow for configurable applications to be implemented, which enables the optimizing of business processes for utilities or service organizations.

Other Optional Add-ons:

Oracle Diagnostic and Tuning Pack

Oracle Diagnostics Pack offers a comprehensive set of automatic performance diagnostics and monitoring functionality built into core database engine and Oracle Enterprise Manager. Whether you are managing one or many databases, Oracle Diagnostic Pack offers a complete, cost-effective, and easy-to-use approach for managing the Oracle Database environment. When used as part of Oracle Enterprise Manager Grid Control, Diagnostic Pack additionally provides enterprise-wide performance and availability reporting, a centralized performance repository, and valuable cross-platform performance aggregation, significantly simplifying the task of managing large sets of databases.

Oracle Tuning Pack offers a cost-effective and easy-to-use approach that automates the entire application tuning process. Enhancement of SQL performance is achieved through real-time monitoring and SQL Advisors that are seamlessly integrated with Oracle Enterprise Manager, and together provide a comprehensive approach for automating the complex and time-consuming task of application tuning.

Education Tools

Oracle Utilities applications contain a module called the application viewer, which is an online, interactive tool that shows the internals of the application. It is the central repository for all technical application details, including the data dictionary, XML services, algorithm documentation, To-Do type documentation, batch program documentation, etc.

The data dictionary describes the database schema and graphically illustrates relationships among tables. The data dictionary lists every table in the application. For each table, the fields are shown, along with a visual representation of the foreign key relationships for the table being displayed. A user may follow a foreign key link by clicking on a child or parent table. Clicking on a field displays the field's attributes, including description, data type, and size. The data dictionary is also linked to the online help documentation, allowing for dynamic reference of a field.

Other Tools:

Oracle offers customers an on-demand repository of answers to questions and approaches to complex technical problems. Oracle's knowledgebase of over 1 million answers for more than 3,000 products, enables users to leverage the knowledge captured from technical support engineers and empower customers with immediate on demand, web-based support. The knowledgebase is accessible 24/7 through the support portal and provides hints, tips, techniques, recommended practices, and answers to frequently asked questions.

My Oracle Support, Oracle's unified online support application, provides a single source of support resources and software updates. Now Oracle's unique "Get Proactive!" initiative helps your organization understand and implement recommended practices based on the available tools. Recommendations are available for all major Oracle products to aid in prevention, resolution, and upgrading.
In addition to product support, consulting services, managed cloud services, and education services, Oracle offers an array of resources to help customers manage their information systems. Available resources include the following:

- **Oracle Technology Network (OTN)** – Millions of members strong, OTN is the world's largest interactive community of Oracle developers, administrators, and architects. Members can download free software and code, read technical articles and documentation, share with peers, and get up to speed on Oracle technology.

- **Oracle C-Central** – C-Central is focused on the interests of Chief Information Officers (CIOs) and Chief Financial Officers (CFOs). C-Central provides in-depth leadership discussions with peer executives, analyst and research reports, resources, and information about upcoming executive events.

- **Oracle Blogs** – Oracle's unique blogging community enables executives, employees, and nonemployees alike to exchange views about customer requirements and best practices, helping Oracle. Stay in touch with the needs of the overall community.

- **Oracle Discussion Forums** – Millions of technical implementers share best practices and technical tips on Oracle products and industry-standard technologies like Linux, Java, and PHP in a wide range of lively forums on Oracle applications and technology.

- **Oracle Wiki** – The forum where Oracle customers speak for themselves about their experiences using Oracle products and the benefits of simplification, standardization, automation, and innovation.

- **Oracle ACE Program** – To foster the growing Oracle community, Oracle has launched the Oracle ACE program, which formally recognizes Oracle advocates with strong credentials as evangelists and educators in their communities.

- **Oracle User Groups** – Oracle is committed to fostering strong and independent user group communities around the world. Members make their voices heard by talking to Oracle management about customer concerns and offering input for future products and practices.

- **Oracle Mix** – Enables customers to mix it up with other customers and users. Oracle Mix gives everyone a voice and provides an opportunity to share ideas, ask questions, challenge, share, and learn. Customers can network and join groups or start a new one.

- **My Oracle Support** – A dedicated place for Oracle Support customers and partners to address product related questions and share best practices ranging from setup to ongoing maintenance. Join the only Oracle community staffed and moderated by Oracle Support experts.


*Further information is provided at: http://www.oracle.com/us/community/index.htm.*

**System Management Tools**

Oracle Enterprise Manager Cloud Control (aka Oracle Enterprise Manager) is a system management software that delivers centralized monitoring, administration, and lifecycle management functionality for the complete IT infrastructure, including systems running Oracle and non-Oracle technologies.

The infrastructure may comprise multiple Oracle Databases, Oracle WebLogic Servers, web applications deployed on these servers, hosts running these targets, and so on. Users can, of course, use the individual product consoles to monitor the status of each of these targets, but it becomes cumbersome to shuttle between multiple console windows and track the performance of each of these targets using so many windows.
Oracle Enterprise Manager Cloud Control offers an approach that allows users to monitor and manage the complete Oracle IT infrastructure from a single console. In addition, Oracle Enterprise Manager Cloud Control provides assistance for business-driven IT management and business-centric top-down application management to manage business services, user experience, and infrastructure.

Oracle Enterprise Manager Cloud Control also offers assistance for monitoring certain non-Oracle products, for example, IBM WebSphere Application Server, Microsoft SQL Server, and so on.

With a broad set of end-to-end monitoring, administration, configuration management, provisioning, and security capabilities, Oracle Enterprise Manager Cloud Control reduces the cost and complexity of managing such grid computing environments. Robust service-level management functionality within Oracle Enterprise Manager Cloud Control dramatically strengthens service levels through robust transaction and end-user performance monitoring and deep diagnostics for multi-tier Internet applications. In conjunction with Oracle Enterprise Manager Cloud Control, the Oracle Utilities Application Management Pack adapters are licensed separately.

Oracle Application Management Pack for Oracle Utilities provides application lifecycle services for the Oracle Utilities suite of applications. By combining Oracle Enterprise Manager's enterprise management solution with Oracle Utilities applications, IT organizations can significantly reduce the cost and complexity to manage an Oracle Utilities product environment.

One Solution, One View

The Application Management Pack for Oracle Utilities provides a top-down application management framework. This framework automates mundane operational tasks of application lifecycle management. These tasks are routinely performed by IT administrators to operationally manage a deployed production instance of Oracle Utilities products. The management pack leverages the power of the OUAF to provide a single approach that is based upon Oracle Enterprise Manager 12c and extends it by providing a single view and console to manage Oracle Utilities products.

Centralized Solution Management

Typically, multiple instances of multiple Oracle Utilities products are implemented at a site. A centralized framework is needed to manage and operate these multiple instances of multiple products to reduce total cost of operations. The Application Management Pack for Oracle Utilities provides a centralized management framework and allows IT administrators to centrally manage instances of Oracle Utilities environments using a browser-based console.

System Security Tools

Authentication is provided by the web application server software (Oracle WebLogic, Oracle WebSphere, etc.). It integrates with external security realms (LDAP, DBMS, UNIX, etc.) and can use digital certificates (one-way or two-way). Password rules are basic in the web application server, so heavily set rules rely on external security realms. IWS includes an LDAP import to synchronize authentication authorization information. An authorization is based on users, roles, and permissions that provide account level security. Each account is assigned to a general ledger, and each account is secured and assigned to a role. Every page within the application has a corresponding application service. When linking a user group to an application service, all users in the group are granted access to the application service's page.

If a user does not have access to a page, the user does not see the option to navigate to that page. The client tier provides log-on prompt and keeps a session cookie that holds the authentication certificate. SSL encryption can be used if desired; managed by the web server. The web server provides authentication, allows the use of your operating system authentication: NT, UNIX, etc.
The database sees limited users, which are controlled by the application server. Session expiration occurs with web server timeouts or when the browser is closed. The browser also caches the user's application security values.

**Utility Tools**

**Configuration Migration Assistant**

The Configuration Migration Assistant provides functionality to safely move data between various Oracle Utilities C2M environments. One valuable use of Configuration Migration Assistant is to experiment with changes to control tables. Configuration Migration Assistant allows users to add/update values in control tables, check that the application behaves appropriately, and then move the new values into a production or system-test environment.

**Job Scheduling Tools**

Oracle C2M batch process submission tools are best suited for ad-hoc batch runs. Batch processes can run concurrently with any other process or real-time update requests. When Oracle Utilities C2M deals with batch processes that have high volumes of data, it runs them in parallel to reduce processing time. This is also known as multi-threading.

The online batch submission page enables running a request for a specific background process. When submitting a background process online, standard parameters may be overridden, and additional parameters may be specified for the selected background process. After submitting the background process, this page displays the status of the submission.

The batch process pages show the execution status of batch processes. For a specified batch control ID and run ID, the tree shows each thread, the run-instances of each thread, and any messages (informational, warnings, and errors) that occurred during the run.

Oracle Utilities C2M batch processes are restartable. If the process is interrupted unexpectedly, the database is not corrupted and the job restarts itself when it is re-executed. Batch processes are also reproducible. Even when data is "interfaced out" of the application, it is possible to reproduce the interface data so it can be sent again or used for audit purposes.

While Oracle Utilities applications are delivered with rudimentary batch scheduling capabilities, it is recommended (and is the choice of most of our customers) to leverage an existing or procured third-party batch scheduler.

**Report Distribution/Archive Tools**

**Oracle Business Intelligence Publisher** is used to create ad-hoc reports. It allows SQL ad-hoc queries to pull any data out of Oracle Utility applications. These reports can all be exported to PDF, Microsoft Excel, Microsoft PowerPoint, web archive, and data delimited formats.

Oracle Business Intelligence Publisher catalog enables bundling and downloading of multi-component objects in an archive file. Users can then use the upload feature to unarchive the data to another location in the catalog. This process enables you to transfer objects across environments. For example, you can use this feature to transfer Oracle Business Intelligence Publisher objects from a development environment to a production environment.

**Tape Management/System Tools**

There is no tape devices in the proposed, so tape management software is not applicable. The proposed solution utilizes disk to disk images and site to site replication.
Disk Management Tools
ESC will deploy system management tools using the OEM's software suites for Physical Servers and Storage Area Networks where appropriate. V-Sphere is used to manage all virtual private server in the non-production environment. CommVault with its integrated e-Vault capabilities will be utilized for data management, backups and data replication.

(7) STANDARD RESPONSE TIMES FOR ONLINE TRANSACTIONS
The following summarizes the response times:

- The proposed system will provide an average response time of less than 1.5 seconds for all customer service related screens during business hours. All other screens will require a two second (or less) response time.
- The critical batch jobs required generating charges, payments, delinquency, bill output, data archives, and any other critical job required to maintain efficient operations shall be completed within four (4) hours.
- Daily reports not required for time-sensitive critical utility operations shall be able to run during the day while users are accessing the on-line system (while meeting the response times identified earlier). If the Vendor will require a mirror database to accomplish this requirement, the process of refreshing this database shall be automated by the product application or a component of the technology proposed. The processing time to create this mirror database will be included in the four (4) hour batch window.
(1) USAGE OF BILLING SOFTWARE IN UTILITY INDUSTRY

Oracle is the pre-eminent CIS provider with a rich history of providing market-leading software and services to utilities around the world. As a unit of Oracle Corporation, Oracle Utilities delivers unparalleled utility specific applications to clients, who range in size from 1000 customers to over 1 million customers, across North America and around the globe.

The proposed solution has been in the market since early 1992. The following chart shows the history of this product suite:

Oracle Utilities C2M delivers the robust, flexible capabilities to address SFPUC's most complex needs as well as the agility to adapt as the utility industry continues to transform. Oracle Utilities C2M delivers a market-leading CIS with robust usage management capabilities. Oracle technology platform is built to enable SFPUC to address rapidly changing market trends while lowering total cost of ownership.

With Oracle Utilities C2M, SFPUC gets not only a powerful CIS but a completely integrated customer suite than can be utilized modularly. This provides CSRs with the tools and information they need to address customer questions quickly, engage customers through multiple channels, and strengthen customer experience. The platform provides the ability to easily manage multiple customer communication channels and notification preferences, automatically communicating to customers the information they need and want to know.

The Rating and Billing module is designed to be used by business users to configure, test, and implement new rates and programs, giving SFPUC greater flexibility to accommodate future industry trends and customer demands.

Oracle Utilities C2M positions SFPUC to adapt as the industry continues to change, proactively leveraging innovative business models to promote growth and longevity, while lowering the costs typically associated with large-scale system modernization.
Oracle maintains contractual confidentiality and/or "no publicity" standards with all of their customers that may prohibit disclosing customer information.

We hope this sampling provides you with a global view of Oracle CiS clients.

<table>
<thead>
<tr>
<th>Project</th>
<th>For More Information</th>
</tr>
</thead>
<tbody>
<tr>
<td>Albuquerque Bernalillo County Water Authority</td>
<td><a href="http://www.oracle.com/us/corporate/press/018638">www.oracle.com/us/corporate/press/018638</a></td>
</tr>
<tr>
<td>Hillsborough County</td>
<td><a href="http://www.oracle.com/us/corporate/press/015743_EN">www.oracle.com/us/corporate/press/015743_EN</a></td>
</tr>
<tr>
<td>Las Vegas Valley Water District</td>
<td><a href="http://www.oracle.com/us/corporate/press/015945_EN">www.oracle.com/us/corporate/press/015945_EN</a></td>
</tr>
<tr>
<td>Orange County</td>
<td><a href="http://www.oracle.com/us/corporate/press/2526430?rssid=rss_ocom_pr">www.oracle.com/us/corporate/press/2526430?rssid=rss_ocom_pr</a></td>
</tr>
<tr>
<td>San Jose Water Company</td>
<td><a href="http://www.oracle.com/us/corporate/press/1505304">www.oracle.com/us/corporate/press/1505304</a></td>
</tr>
<tr>
<td>Santee Cooper</td>
<td><a href="http://www.oracle.com/us/corporate/press/1940445">www.oracle.com/us/corporate/press/1940445</a></td>
</tr>
<tr>
<td>Seattle City Light</td>
<td><a href="http://www.oracle.com/us/corporate/press/2115748?rssid=rss_ocom_pr">www.oracle.com/us/corporate/press/2115748?rssid=rss_ocom_pr</a></td>
</tr>
<tr>
<td>City of Winnipeg</td>
<td><a href="http://www.oracle.com/us/corporate/press/030247">www.oracle.com/us/corporate/press/030247</a></td>
</tr>
</tbody>
</table>
(2) TECHNOLOGY STACK SUPPORTING THE BILLING SYSTEM

Customer To Meter (C2M Application Architecture)

The product is a multi-layered product with distinct tiers. The figure below illustrates the architecture of the product:

The components of the C2M architecture are as follows:

- **Browser client:** The client component is a browser-based interface that is light and only requires the Microsoft Internet Explorer or Mozilla Firefox browser browser to operate.

**Client Desktop: Software and Hardware Requirements**

<table>
<thead>
<tr>
<th>Configuration</th>
<th>Processor</th>
<th>Memory (RAM)</th>
<th>Monitor Display</th>
</tr>
</thead>
<tbody>
<tr>
<td>Minimum</td>
<td>Pentium IV - 2.0 GHz</td>
<td>1024 MB</td>
<td>1024X768** 16-bit Color</td>
</tr>
<tr>
<td>Recommended*</td>
<td>Pentium IV - 3.0+ GHz or any Core 2 Duo or any Athlon X2</td>
<td>2048 MB</td>
<td>1280X1024 32-bit Color</td>
</tr>
</tbody>
</table>

* The recommended configuration improves client performance.

** To reduce the amount of scrolling required for pages that are longer than 768 or 1024 pixels, consider placing a monitor in vertical position (with narrow side on the bottom).

The client component is a browser-based interface that is light/thin and only requires the Microsoft Internet Explorer browser or Mozilla Firefox browser to operate.

<table>
<thead>
<tr>
<th>Browser</th>
<th>Windows Operating System</th>
</tr>
</thead>
<tbody>
<tr>
<td>Internet Explorer 11</td>
<td>Microsoft Windows 7, 8.1, 10 (64-bit)</td>
</tr>
<tr>
<td>Firefox ESR 52</td>
<td>Microsoft Windows 7, 8.1, 10 (64-bit)</td>
</tr>
</tbody>
</table>
Users work with C2M via a standard web browser, such as Microsoft Internet Explorer or Mozilla Firefox, so a minimal amount of disk space on the client is required. This also makes the application easy to use and reduces the training time necessary to learn a new type of user interface. Many familiar browser concepts—such as favorites, drill-down hyperlinks, back/forward, pop-up windows, and history buttons—are maintained within C2M.

- Communication between the client and server uses the HTTPS protocol across a TCP/IP network. Non-communications (HTTP) is also supported. The user simply uses a URL containing the product hostname and allocated port number in the address bar of Microsoft Internet Explorer to access the application.

Notes:

- It is possible to use proxies to hide or translate the hostname and port numbers. Refer to the documentation provided with your JEE web application server documentation for proxy support instructions.
- By default SSL is enabled with minimal facilities, by default for all new installations. Refer to the SSL documentation provided with your JEE Server to enable SSL to your individual needs.
- The default SSL certificate provided by Oracle is recommended for demonstration and development purposes only. It is highly recommended that customers purchase their own certificates for use for SSL.

- Mobile device terminal/mobile interface: In some products, the mobile framework is deployed to allow mobile devices to interact with server processes. Refer to the product guides for applicability of the mobile framework to your product.
- Web application server: The product web application is housed in a JEE-compliant web application server. This server can be run on a variety of supported Windows, Linux, and Unix platforms.
- Within the Web application server, the pages for the product are rendered using a combination of metadata and formatting rules for a consistent look and feel. These pages are written using a combination of JEE Java script and Java. These pages are cached on the web server and served to the client upon request. If the page requires business rules to be invoked then business objects are called from this server.
- Business application server: The business component of the architecture can be installed as part of the web application server (default) or as a separate component. This means the business application server is also housed in a JEE-compliant web application server. This server can be run on a variety of supported Windows, Linux, and Unix platforms (refer to the Supported Platforms diagram provided below). Within the business application server, the following components are implemented:
- Business objects: The business logic for each object in the system is expressed as a Java object. It contains all the SQL, programmatic rules, and structures to manage the data for the transactions.
- Database connection pool: If any database access is required, we use an industry component, called Universal Connection Pool, to manage and pool the connections to the database for the batch component and use the web server's own native JDBC connection pooling for the online and web services component. This reserves connections and allows for efficient use of connections to the database. To access the database product uses the networking client provided by the DBMS vendors to ensure correct connection. These clients are multi-protocol for maximum flexibility.
- Database server: The RDBMS used for the implementation is implemented in the database server. The product supports a number of databases. The database server only stores and retrieves the data for the product as all the business logic is in the business objects.
- Batch server: In some cases, processes need to be processed in bulk and in the background. The batch server is a set of Java virtual machines clustered using Oracle Coherence. This feature supports multi-threaded background processes processing records in bulk across a cluster.
Supported Platforms

The installation has been tested to operate on many operating system, application server, and database server combinations. For the software requirements for each of these combinations, see Chapter 21: Installing Application Server Prerequisite Software for more information.

Operating Systems and Application Servers

The table below details the minimum operating system and application server combinations on which this version of Oracle Utilities Customer Care and Billing is supported.

<table>
<thead>
<tr>
<th>Operating System and Web Browser (Client)</th>
<th>Operating System (Server)</th>
<th>Chipset</th>
<th>Application Server</th>
<th>Database</th>
</tr>
</thead>
<tbody>
<tr>
<td>AIX 7.1 TL04+</td>
<td>POWER</td>
<td>Weblogic 12.2.1.1+</td>
<td>Oracle 12.1.0.2+</td>
<td></td>
</tr>
<tr>
<td>AIX 7.2 TL04+</td>
<td></td>
<td></td>
<td>12.1.0.2+</td>
<td></td>
</tr>
<tr>
<td>Windows 7, 8, 10 (Internet Explorer 11, Firefox ESR 45)</td>
<td></td>
<td></td>
<td>12.1.0.2+</td>
<td></td>
</tr>
<tr>
<td>Oracle Linux 6.3+, 7.a (based on Red Hat Enterprise Linux)*</td>
<td>x86_64</td>
<td>Weblogic 12.2.1.1+</td>
<td>Oracle 12.1.0.2+</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Weblogic 12.2.1.1+</td>
<td>12.1.0.2+</td>
<td></td>
</tr>
<tr>
<td>Oracle Solaris 11F</td>
<td>SPARC</td>
<td>Weblogic 12.2.1.1+</td>
<td>Oracle 12.1.0.2+</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Weblogic 12.2.1.1+</td>
<td>12.1.0.2+</td>
<td></td>
</tr>
<tr>
<td>Windows Server 2012 R2 (Not supported in production)</td>
<td>x86_64</td>
<td>Weblogic 12.2.1.1+</td>
<td>Oracle 12.1.0.2+</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Weblogic 12.2.1.1+</td>
<td>12.1.0.2+</td>
<td></td>
</tr>
</tbody>
</table>

Network Protocol

Communication between the client and server uses the HyperText Transfer Protocol (HTTPS) protocol across a TCP/IP network. Non-communications (HTTP) is also supported. The user simply uses a URL containing the product hostname and allocated port number in the address bar of Microsoft Internet Explorer to access the application.

The application is entirely web-based, and can be accessed remotely over a private line or the internet. If accessed over the internet, traffic can be protected using VPN, HTTPS, or both.

Speed/Bandwidth

We recommend a gigabit Ethernet (or higher) for bandwidth requirements.

Other Software

No other software is required.

Always-Available Dashboard

The dashboard is a "common" area of the screen populated with basic customer information. It can be minimized to increase the working pane, but always remains available while the user is navigating through related pages. It can contain such content zones as:

- User-defined favorites (navigation links).
- Basic account information (name, account, address).
- An open customer-contact area that facilitates note taking and storage.
- A financial summary for the current account.
- Context-sensitive content zones.
Deployment Options: Distributed Processing Client/Server

As described in the above section, C2M is an "N-tier" client server application with the following tiers:

- **Client** – A web browser based "thin" client that contains the user interface to the product.
- **Web Server** – A Web Server provides the pages that are displayed on the client web browser and act as a conduit to the business objects.
- **Business Application Server** – A Business Application Server provides processing of business functions like validating measurements and creating bill determinants.
- **Database Server** – A database management system is responsible for retrieval and storage of product data.

There are several possible hardware deployment options with the product:

- All tiers can be on a single machine, shared machines, or on separate machines. (Proposed separate machines)
- All tiers can exist on single or multiple machines for clustering support.
- Load balancing solutions can be used at the hardware and/or software level.

**Remote Assistance**

The application is entirely web-based, and can be accessed remotely over a private line or the internet. If accessed over the internet, traffic can be protected using VPN, HTTPS, or both.
(3) BILLING SYSTEM’S MATCH WITH HHP’S REQUIRED FUNCTIONS AND FEATURES

Attachment 1 – CIS Functions and Features Assessment is attached to this proposal response.

Out of the box COTS solution - Our Solution Team sees a significant “out of the box” match to SFPUC’s business needs through configuration of the standard offering. This high match to your requirements will reduce customization, integration, testing, ongoing support costs and risks relating to ongoing application upgrades and patches. In the end, you avoid higher costs of customizations while receiving proven software that works the way you require.

(4) SYSTEM’S ABILITY TO MIGRATE TO SHARED SYSTEM WITH SFPUC WATER ENTERPRISE

Begin with end in mind!

ESC is proposing Oracle Utilities Customer to Meter (C2M) which is the latest version of Oracle Utilities Customer Care and Billing product being used by SFPUC Water. Use of the same product, same data structure etc clearly enables SFPUC to migrate/merge both billing systems into single platform.

Our proposed approach, design and architecture is aligned to SFPUC’s stated three phase transition plan to merge HHP Billing system with SFPUC Water Enterprise billing system (Oracle Utilities CC&B). Its also further designed to enable SFPUC a smooth transition into Oracle Utilities SaaS offering as and when that solution gets matured and ready.

Below are the key points which will enable SFPUC a smooth transition:

- Analysis and configuration of Electric customers in C2M will be done with due diligence on end state architecture
- Combined Water/Waste Water and Electric
- All customizations and Interfaces will be build using SaaS / Cloud ready technology (Groovy) ensuring smooth technical transition
- Data conversion from legacy to C2M will consider future merge with Water/Waste Water ensuring data is setup correctly from the get-go
- Leveraging existing investment – Oracle C2M integration, reports etc will utilize SFPUC Water file format’s and existing SFPUC Water CC&B code repository as reference while rebuilding/rewriting them using cloud supported technologies allowing for standardization across the enterprise.
(5) BILLING SYSTEM'S USE OF SFPUC RESOURCES

As stated above, ESC is proposing Oracle Utilities Customer to Meter (C2M) which is the latest version of Oracle Utilities Customer Care and Billing product being used by SFPUC Water. With the similarities with User interface (modern), back-end database, business logic etc existing SFPUC staff, process and tools can be utilized to minimize time and to mitigate risk. The benefits of the proposed solution with respect to People, Process and Tools are described below:

People (SFPUC Resources/Staff, Call Center Operations)
SFPUC Water team is already well verse with Oracle Utilities Customer Care and Billing allowing a quick transition into Oracle C2M. This well aligns with the stated objective from the RFP:

- Operating a single call center that can serve customers of both SFPUC Water and HHP

Training for the staff is much easier with the in-house knowledge which SFPUC team already has with the Oracle framework.

Process
Analysis and configuration of Electric customers in Oracle C2M will be done with due diligence on end state architecture
- Combined Water/Waste Water and Electric.

Tools
As stated in the RFP, SFPUC Water existing interfaces and technology investment will be reused/modernized during this implementation. Leveraging existing investment – Oracle C2M integration, reports etc will utilize SFPUC Water file formats and existing SFPUC Water CC&B code repository as reference while rebuilding/rewriting them using cloud supported technologies allowing for standardization across the enterprise.
V. SCOPE OF WORK

PROJECT APPROACH

As a responsible CIS implementation systems integrator, the ESC team has closely reviewed the scope of this project and developed our proposal to take full advantage of the Oracle Utilities C2M applications' flexibility and functionality designed specifically for the utility industry.

Our team's goal is to develop a strong partnership with SFPUC during the project, to assist your organization in re-evaluating its current business processes, and to enable SFPUC to take advantage of the rich functionality and configurability of the Oracle applications. We will approach this project with the end in mind: Upon completion of an SFPUC customer-focused SFPUC Hetch Hetchy Power Electric Billing System Replacement project, we shall strive to provide best-in-class managed services of the SFPUC system.

The ESC team proposes to provide project support to SFPUC in two stages - Stage 1: C2M Implementation and Stage 2: Application Management Services (Managed Services):

Our team has reviewed all expected deliverables from the RFP and mapped them to the tasks outlined in our response. We have included this deliverables summary in Appendix C.
The goal of Stage 1 is to implement a fully integrated CIS solution that supports SFPUC and incorporates best-in-class business processes to support Hetch Hetchy Power Electric customers. The implemented technical solution shall have all modules communicate with each other, and third-party applications planned for the future that can be easily configured when SFPUC is ready to implement new systems. The implementation stage is organized into five well-defined phases, with each phase designed to provide client-specific value that is clearly identified at the beginning of the project.

The following diagram is an overview of the five-phase methodology and the 22 major implementation tasks which make up the project schedule that will be executed during each phase of the project.

---

Our approach utilizes industry standards with a focus on collaborative implementation with transparency of the process.
This five-phase methodology will serve as the roadmap for the overall implementation of C2M. It is a deliverable-based approach and applies across business processes and technologies. The overall process is supported by a set of standard templates, techniques, and deliverables necessary to effectively implement a best-in-class C2M solution.

This approach is recognized to be a differentiator in the market. By overlapping the start of key activities and involving resources from SFPUC’s core team and application support services team at the start of the effort, we can accelerate the project schedule and facilitate knowledge exchange early on.

Each phase of the implementation work breakdown comprises key tasks that shall be performed for successful implementation. Details of each phase are provided in the following section.

**Phase 1 – Project Initiation and Planning**

**APPROACH AND OBJECTIVES**

We will perform tasks in the Project Initiation and Planning phase to ensure guidelines, tasks, and activities are defined and completed before involving the full resources of ESC’s team and SFPUC’s team.

Preparation also involves the development of the project management plan (described further in Task 1.1 by the project team and the approval of the project management plan components. In conjunction with ESC’s team, SFPUC will prepare and schedule a project kickoff meeting prior to the start of project development.). Upfront planning and involvement of SFPUC stakeholders shall start the team on the path to success with the following key outcomes:

- Stakeholders are thoroughly identified and analyzed;
- Business analysis activities and deliverables are defined and agreed to;
- Processes that will be used for validating, verifying, and approving requirements and solutions are acceptable to key stakeholders;
- The process for proposing changes to requirements is defined and understood; and
- Key stakeholders are aware of and support the activities and time commitments required to complete the requirements effort.
KEY TASKS FOR PHASE 1

Task 1: Project Management

Every successful project comes with an underlying strong project management and control plan. Our approach builds on the Project Management Institute's (PMBOK) guidelines, Software Development Life Cycle (SDLC) processes, and knowledge areas. With our collective past experiences managing and delivering successful projects, ESC developed a proprietary PMF. The methodology and tools incorporate PMI best practices, SDLC processes, agile and waterfall delivery models and Oracle technology framework. This ensures that the PMI's knowledge areas are efficiently and effectively addressed throughout our project delivery and Oracle technical guidelines are embedded to ensure the quality of the solution. The framework is unique because it's tailored towards Oracle Utilities Suite implementations. The ESC team incorporates these key areas in our Project Management Framework (PMF).

Project management activities are required throughout the life of the project and are included as part of the Project Management function. Our team will utilize PMF to manage the delivery of this project and all services.

The framework reflects the professional experience of the ESC's team Subject Matter Experts from the complete spectrum of our services and has been inspired by some of the industry's best practices and standards (ITIL, PMI-PMBOK and SEI-CMM).

The PMF integrates well with other methodologies that may be in place in the SFPUC organization. The flexibility we have built into our framework allows each engagement we undertake to be adapted to our client's specific needs, and it allows for the continuous improvement of our methods. In fact, the PMF requires that we develop and implement customized, delivery-management plans for each client. The PMF has been tailored for successful delivery of a wide variety of projects conducted, including references cited in this proposal, and is a key factor in the ESC's team long-term relationships with our clients and our successful delivery track record.

Our team is comprised of Project Management Institute (PMI) certified professionals responsible for managing the quality of the project. We believe that the cornerstone of excellent project management is quality. Quality is essential to client satisfaction and our success as a team. The PMF is integrated throughout the project delivery, from the kick-off meeting and throughout all the proposed project tasks described in the Scope of Services. The ESC team utilizes its secure online PMF portal for collaboration and tracking of key project related activities. The PMF solution is provided to SFPUC at no cost, and all data will be transitioned to SFPUC at the end of the project.

For this engagement, the PMF has been tailored to support three main activities:
- **Project Start-Up**: Establish the management environment in which the project will be executed.
- **Project Execution and Control**: Conduct the project and control its execution by applying the project management processes defined in the Project Plan.
- **Project Closure**: Formal process to recognize the completion of the C2M implementation project stage and transition to AMS.

**Task 2.1 Project Start-Up**

The Project Start-Up process establishes the management environment in which the project is executed. This ensures that the proper project organizational structure and project management processes are in place for the project to be successful.

At the beginning of the project, ESC's team project manager will work with all stakeholders and project team members to produce the Project Plan that will be tailored to the project's scope, size, complexity, and risk level.

The Project Plan will contain the following information:

**PMO & OCM Model**

**Planning**
- Use of proven planning standards and agreed SLOC/WBS to ensure consistency of plans
- Use of MSProject to provide easily consumable schedule and status information
- Use of weekly planning cycles and discrete short term deliverables to maintain project tightly

**Cost**
- Detailed resource identification to set the budget
- Rigorous tracking of performance to deliverable plan and scope
- Innovative resource allocation to manage variances
- Proactive analysis via reporting and decision control

**Risk & Issue Management**
- Proactive identification and management of risks
- Scheduled risk and issue evaluation meetings
- Escalation processes built into the model
- Analytical review of project status to inform decision processes

**Change Control**
- Use of defined sign-off points for both interim and final deliverables
- Early confirmation of scope with sign-off at major project milestones
- Robust governance with aligned decision-making authority and accountability

**Delivery Management**
- Identification of work packages and delivery with assigned owners
- Daily stand up and weekly status reviews to ensure team communications and feedback
- Quality reviews and approval sign-off on all deliverables

**Reporting & Decision Control**
- Centralized repository for project documents
- Weekly reporting of status informing monthly executive reviews of milestones, budget, risks, and issues
- Use of KPIs and metrics to measure progress
- Analysis of variance to predict future outcomes
- Dashboard reporting for executing management review

**Image Reference**

[Image: Refer to the figure illustrating the PMO & OCM Model, including Planning, Cost, Risk & Issue Management, Change Control, Delivery Management, and Reporting & Decision Control sections.]
The Project definition:
- Project scope, time, and cost parameters
- Description of the project phases
- List of all the project deliverables

The Project organizational (governance) structure including the roles and responsibilities of ESC's team and SFPUC, as well as issue escalation routes.

Project Management procedures, including:
- Quality assurance criteria and methods for the approval of deliverables compliant with agreed quality standards, testing procedures and client acceptance processes.
- The method for recording and approving project change requests.
- The succession plan and the method for orienting new members to the project team.
- The frequency and content of project status reports, including accomplishments, deliverable status, estimated effort remaining, budget tracking, and issue tracking.
- The project communication plan, including project monitoring and reporting as well as documentation storage and control mechanisms.
- The risk management plan for the identification of risks and mitigating mechanisms.
- Any relevant project procurement procedures.

The activities during the Project Start-Up process will confirm:
- The project work environment
- The project scope and assumptions
- The organizational structure and assignment of project team members
- The management processes to be followed
- The Stage 1 implementation services work plan

Task 1.2 Project Execution and Control

This activity covers the ongoing management of our team's delivery of the Stage 1 implementation services within the context of the plans and processes defined by the Project Plan.

Our management activities will include:
- Tracking deliverable status, effort, and costs
- Managing risks
- Controlling work assignments
- Procuring appropriate resources
- Processing project change requests
- Tracking and resolving important issues
- Verifying deliverable quality compliance
- Communicating and reporting the project status to all project stakeholders
- Conducting milestone reviews, including re-estimating the effort to complete the project, if necessary
- Invoking appropriate succession plans, when needed
- Evaluating project team member performance
Task 1.3 Project Closure

At the end of the CIS implementation stage, ESC's team project manager will ensure the following activities occur:

- Producing a final status report describing the results of the completed project
- Verifying all project materials including source code, executables, and documentation have been delivered to SFPUCC
- Assessing and closing the implementation services contractual requirements
- Indexing and archiving all relevant project files
- Recording any "lessons learned" that may be incorporated into future implementation efforts

Figure: PMF Project Quality Management Module – 360-degree view of project
Task 2: Preparation

This preparation task is comprised of the guidelines, steps, and activities that commence before involving the full resources of ESC and SFPUC’s project teams. Some of the project start-up tasks may occur concurrently with the contract negotiation. Preparation is conducted at two levels: project preparation in which the Project Start-Up requirements are addressed; and technical preparation in which the technical environments required for the project are initiated.

Task 2.1 Project Set-up Requirements

Project preparation steps include the following:

- Finalize the detailed Project Schedule
- Finalize project roles
- Finalize the project team
- Establish the teamwork area(s)
- Accept project standards and controls
- Communicate project standards and controls
- Execute kickoff meetings

As part of the project standards and controls step, the ESC team will develop the project management procedures as outlined in the PMF Project Start-Up section. These procedures include communication, issue resolution, change management, and risk management.

The management plans are critical to establishing a strong partnership and ensuring SFPUC’s satisfaction throughout the course of the project. Additionally, a key component of achieving a successful implementation and building strong rapport with our clients is by providing timely communication to senior management of critical project activities. During the Project Preparation phase, one important initiative is the establishment of regularly scheduled meetings between ESC’s Executive Sponsor and SFPUC’s Senior Management team to review the progress and status of the project. These meetings will be held outside of the regularly scheduled "Steering Committee" meetings.

Both project teams will also be involved with developing issue resolution procedures and performing periodic reviews of risk triggers and mitigation plans.

Task 2.2 Initial Hardware and Hosting Setup

Besides the administrative preparation, the technical platform for this project shall be setup which will include the following steps:

- Identify and plan for the initial technical environment necessary to support the product analysis and design effort
- Adapt and adopt the technical standards, security standards, technical procedures, and environment approach.

Our activities start with initial setup coordination with SFPUC IT to understand and plan appropriately for the network and hardware configurations. We will work with SFPUC to establish IPSEC Site to Site tunnel from SFPUC to Primary Data Center and SFPUC to the secondary data center.
The following key steps will need to be performed at each location.

- Step 1: Review Firewall version and ensure compatibility with production devices
- Step 2: Configure IPSEC Tunnels
- Step 3: Create Extended ACLs for interesting traffic to pass through Internet tunneling traffic
- Step 4: Create an IPSEC Transform (ISAKMP Phase 2)
- Step 5: Apply maps to public interfaces
- Step 6: Configure network address translation
- Step 7: Bring up and verify tunnels
- Step 8: Test connectivity between site, bandwidth performance and latency.

**Task 3: Kick-off Meeting**

After planning activities are completed, the project will begin with a kick-off meeting hosted by the SFPUC executive management team. This meeting is designed to provide all project stakeholders with a comprehensive view of the business drivers and project goals associated with the project phase. The participants will be provided with an overall project timeline, expectations regarding project participation, identification of project leadership, and identification of next steps associated with this stage of the project effort. Kickoff team presenters will include, but not be limited to, SFPUC’s Project Sponsor, Business Community Leaders, and Project Officer. The ESC team’s Project Sponsor and Project Manager will also have active presentation roles.

A typical agenda for the formal project kickoff meeting includes:

- Messages/directives from key SFPUC Executives
- Orientation and common foundation for project – review of vision, goals, etc.
- Guiding principles for the project
- General timeline overview, with a deep dive into timeline and milestones for the Stage 1 implementation services
- Methodology and deliverables overview, with a deep dive into deliverables and associated templates for the Stage 1 implementation services
- Team introductions and team building

**Task 4: Training for Project Overview, Core Team, and IT Team**

Our team has had success on prior engagements by getting all project stakeholders familiar with the project delivery process and with the functionality of the Oracle platform. The team shall conduct three training sessions for different stakeholder groups, so they are empowered to understand and contribute to the implementation review effectively.

The involvement of SFPUC’s core team in support of initial data analysis, configuration, report needs-analysis, and interface definition will not only accelerate the project schedule, but initiate the knowledge transition of specific C2M operational knowledge during the Fit-
Gap Analysis and Design phase of the project. This represents a significant advantage to SFPUC because their core team members get hands-on experience with the business operations of the C2M application utilizing their business processes while lessening the need for classroom training after subsequent testing phases.

The training sessions to be conducted are as followed:

**Task 4.1 Project Overview Training**

Project overview training occurs during the initial start-up of the project. It entails informing the project participants, managers, executives, and the Steering Committee members what they can expect during the life of the project. The major project tasks are explained and the expectations for participation are discussed.

**Task 4.2 Core Team Training**

This course provides attendees with an architectural and functional understanding of C2M functionality. A combination of slide lecture and hands-on exercises covers the functional extensiveness of the system relevant to the client's specific implementation. This course is designed to prepare implementation team members to participate effectively in the analysis sessions of the company's upcoming implementation project. Topic areas include

**Core Team Topics**

- C2M Overview
- Batch Processing
- Plug-in Components
- Financial Transactions
- Customer Information
- Case Management
- Field Work
- Device Management
- Meter Reading
- Billing
- Rates
- Adjustments
- Payments
- Credit and Collections
- Umbrella Agreements
- To Do Lists
- Workflow Processing and Notifications
- Application Security

**Task 4.3 Knowledge Transfer and Configuration Workshops**

The goal of Configuration workshop training is to educate SFPUC technical administrators and the Application Support Services team on the fundamental approach and execution of system development and maintenance tasks. These courses are offered as a combination of class sessions and mentoring workshops. They introduce advanced concepts in the topic area but will primarily focus on hands-on problem solving using the customer's actual data and real-life situations. The purpose of these sessions is to address a specific lack of knowledge areas and/or current system issues in such a way that future system issues can be solved independently. Configuration workshops will be provided as needed to the project based on knowledge level and project responsibility of SFPUC staff.
**Configuration/Administration Workshops**

<table>
<thead>
<tr>
<th>SA Type Configuration</th>
<th>C2M Advanced Configuration Tools</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rate Engineering</td>
<td>C2M Technical Operations Best Practice</td>
</tr>
<tr>
<td>Credit and Collection Configuration</td>
<td>C2M Report Integration/Development</td>
</tr>
<tr>
<td>C2M Application Security</td>
<td></td>
</tr>
</tbody>
</table>

**Task 4.4 IT Team Training**

The IT Team training will consist of formal and hands-on training to SFPUC’s IT team regarding application installation, system setup, and architecture overview. These activities will allow SFPUC’s IT team to get an understanding of the architecture of C2M, DB structure, API’s, integration points, batch processing, etc. These sessions are part of the ongoing knowledge transfer sessions which will continue throughout the course of the project.

- C2M Overview
- Batch Processing
- Plug-In Components
- Financial Transactions
- Customer Information
- Case Management
- Service Order Management
- Device Management
- Meter Reading
- Billing
- Rates
- Adjustments
- Payments
- Credit and Collections
- To-Do Lists
- MDM
- Application Security

**Task 5: Technical Preparation and Organizational Readiness Assessment**

This task is comprised of activities designed to prepare SFPUC’s team leads and team members for project participation. Project preparation activities represent an agreement on the scope of work between ESC and SFPUC teams. In addition, the two teams will agree on project environmental processes, including work location, desks, equipment, SFPUC’s internal procedures to be accommodated by ESC, project repository setup, and other housekeeping duties.

**Task 5.1 Technical Preparation**

The team will also identify and plan for the technical environment necessary to support the product implementation effort and adapt (and adopt) the technical standards, security standards, technical procedures, and environment approach. In terms of the technical preparation, SFPUC must validate that the initial installation of the C2M product be available in support of core team training and subsequent tasks.

**Task 5.2 Organizational Readiness Assessment**

ESC’s team will also perform an organizational readiness assessment as a prerequisite prior to completion of Phase 1. The assessment will be focused on evaluating the organization’s readiness to proceed to the next phase by reviewing the state of the PMO, completion and effectiveness of initial training activities, budget allocation, IT environments, business commitment, and resource allocation to the effort. An assessment report will be generated and reviewed by the project sponsors for sign-off of Phase 1 efforts and approval to move to Phase 2 of the project.
# Phase 1 Key Activities and Deliverables

<table>
<thead>
<tr>
<th>Phase</th>
<th>Activities</th>
</tr>
</thead>
<tbody>
<tr>
<td>Project Initiation &amp; Planning</td>
<td>• Finalize C2M project team and project management infrastructure.</td>
</tr>
<tr>
<td></td>
<td>• Develop, review, and accept project standards and controls.</td>
</tr>
<tr>
<td></td>
<td>• Develop, review, and accept technical standards and procedures.</td>
</tr>
<tr>
<td></td>
<td>• Confirm/update resource loading chart.</td>
</tr>
<tr>
<td></td>
<td>• Conduct project kickoff and team training.</td>
</tr>
<tr>
<td></td>
<td>• Create project team knowledge transfer plan.</td>
</tr>
<tr>
<td></td>
<td>• For Business Process Controls, develop and document business process internal controls, project work plan, and approach</td>
</tr>
<tr>
<td></td>
<td>• Finalize phase scope and approach.</td>
</tr>
<tr>
<td></td>
<td>• Develop detailed design phase project plan.</td>
</tr>
<tr>
<td></td>
<td>• Review and refine the implementation roadmap.</td>
</tr>
<tr>
<td></td>
<td>• Finalize hardware and software installation.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Duration</th>
<th>Quality Control Process</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Month</td>
<td>• Document review per deliverable</td>
</tr>
<tr>
<td></td>
<td>• Mutual sign-off to proceed</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Key Deliverables</th>
<th>Key References</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Project organization and roles</td>
<td>• ESC Project Management Framework Online Tool</td>
</tr>
<tr>
<td>• Issues, risk, and change request log templates</td>
<td>• C2M Design Phase Plan Template</td>
</tr>
<tr>
<td>• Kickoff meeting</td>
<td>• Status report templates</td>
</tr>
<tr>
<td>• Core team and IT team training</td>
<td>• Change Request templates</td>
</tr>
</tbody>
</table>
**Key Deliverables - Cont.**

- Project scope and approach
- Implementation roadmap
- C2M Scope Management plan
- Detailed design phase project plan
- Project plan tracking and progress reporting
- Preliminary project schedule
- Installed software
- Business process controls approach
- Business process internal controls risk and controls framework template

**If SFUC has purchased training credits from Oracle, it would be advisable for core team members to attend appropriate courses prior to the start of the project.**

- SFUC should begin to gather pertinent documents and other artifacts that will be important to the project (e.g., as-is process designs if available, organization charts, samples of existing reports).
- SFUC should determine where the project will be "housed" and give thought to establishing certain processes and protocols (e.g., security badge acquisition).
- It will be critical for SFUC to identify the appropriate resources to fill the necessary roles for the project.

**Roles and Responsibilities**

- Project Manager
- Project Coordinator
- Solutions Architect
- Technical Architect

The following SFUC roles are required for this phase:

- C2M Functional Leadership
- C2M Technical Leadership
- C2M Project Director
- Technical Resources
- Business Process Analysts
- Subject Matter Experts
- Functional Process
- Leads
- Database Administrator
- System Administrator
- Network Administrator

While full-time participation is not required for all of the above resources, it will be important for them to participate in certain key planning and visioning activities. Actual participation will be confirmed during the Project Initiation & Planning phase.
PHASE 2 - ANALYSIS AND DESIGN

APPROACH AND OBJECTIVES

The Analysis and Design phase comprises the tasks and activities that focus on learning how the identified business processes and functional requirements will be met with C2M product modules. Each current business process will be analyzed and processed through design sessions commonly known as "Fit/Gap". Business processes that are identified as "Out of the Box" or can be achieved via configuration (no modification or code required) will be tagged as "Fit" and items those are not "Out of the box" or requiring configuration will be identified as "Gap" and recorded in the master development list. Based on the "Fit" and "Gap" results, a series of actions will be performed (i.e., configuration, business process change, design development etc.). The tasks identified in this phase are the joint responsibilities of the members of the ESC and SFPUC teams who will need to provide access to their staff with support from various Subject Matter Experts (SMEs).

The low chart below represents how a "Fit/Gap" process will lead into actionable results allowing SFPUC to have control over the scope at all times:

![chart](image)

KEY TASKS FOR PHASE 2

Task 6: Business Process Analysis

The ESC team will conduct a detailed business process analysis for each business area related to the C2M product being implemented. Each process will be reviewed to identify how the product can be used to improve the process. The ESC team will work with the SFPUC project team to identify the core business functions and processes that are performed. These business processes will be divided into functions that can be re-engineered and functions that must remain intact. The various business process analysis sessions will also allow the ESC team to collect additional data and information on specific module-related business practices.
The primary activities performed during the business process analysis includes:

- Reviewing SFPUC’s current business processes
- Determining specific business drivers and objectives (i.e., industry influence, market changes, cycle time decrease, cost reductions, and output quality)
- Defining key business lows within functional departments and across the organization
- Identifying the high-impact process deterring from business vision and prioritize redesign urgency
- Designing a cross-functional common business baseline mapped to leading practices
- Presenting process efficiencies and uptakes, operational improvements, re-engineering opportunities, and standard operating procedure impact.
- Providing the future stated business prototype with "best practices" and software solution capabilities aligned to business drivers and objectives.

**Task 7: Fit-Gap Analysis**

After Core Team training (Task 4) has been completed, the ESC team will prepare an agenda and appropriate handouts for the Fit-Gap Analysis sessions on each module, including a list of tables and processes to be covered. Fit-Gap workshop schedule based on Oracle C2M URM mapped to functional areas of SFPUC business will be developed.

A comprehensive review of all relevant configuration options for a specific module will be performed. Using the product, a prototype of business processes designed in the product will be demonstrated. The prototype will be used to compare SFPUC’s business requirements with the available functionality, and this exercise will facilitate a process design.

For these sessions, Oracle URM (Utilities Reference Models) process low templates will be used by our Functional Analyst consultants to conduct a detailed overview session for each business process in scope for SFPUC’s implementation. The purpose of this activity is to review the processes in detail to educate SFPUC’S project team on leading practices and to capture SFPUC’s specific process nuances that will affect system setup. Each process low will be reviewed in detail and will be demonstrated in the prototype system. During this process, detailed business process discussions will occur and all the key setup decisions will be captured. All business requirements will be tracked and documented using the PMF tool.

During the Fit/Gap Analysis sessions, new policies and procedures will be defined, security requirements will be reviewed, new edits and validations will be identified, and requirements not met with the delivered functionality in the product will be identified. Gaps, issues, and configuration options that require additional research will be documented. A preliminary list of conversions and interfaces for each module being implemented will be developed and tracked.
### Figure: Requirements traceability and tracking via PMF

The primary activities performed during the Fit-Gap analysis includes:

- Reviewing business requirements
- Reviewing product processing
- Conducting Fit Analysis sessions covering the "to-be" processes as required to complete the work step
- Confirming the catalog of interfaces and conversions
- Reviewing the adopted technical standards and procedures
- Providing leadership and guidance on the conversion, interface, and modification approaches
- Providing leadership and guidance on system maintenance.

### Task 8: Configuration

This activity simultaneously validates the configured instance. The Configuration task begins simultaneously with the Fit-Gap Analysis task. The ESC team will ensure that an initial product configuration is in place to accommodate the Core Team training and the Fit-Gap Analysis sessions. During this task, ESC functional analyst team will ensure configuration knowledge transfer and training to SFPUC team member. This activity
simultaneously validates the configured instance. Configuration fine tuning will occur throughout the duration of the implementation stage.

The Functional Analyst consultants will conduct a one-on-one or small-group hands-on Oracle training using pre-defined user procedures. The hands on configuration training is where SFPUC's team members will learn the new system functionality needed to reinforce long-term ownership of the system.

Multiple configuration templates are provided that the team will complete as decisions to the values of fields as the control tables are determined. Throughout the configuration process, ESC's team will provide the guidance and leadership that SFPUC's team needs to efficiently and effectively make decisions about configuration. After the configuration has been documented and reviewed, the results will be populated into the C2M product tables.

The primary activities performed during the configuration task includes:

- Providing the initial product configuration
- Providing Configuration document templates
- Providing guidance and leadership during the development of configuration
- Documenting all required product configuration
- Reviewing the system configuration
- Translating the documented configuration into the product
- Configuring/reconfiguring each module based on information received during the Business Process and Fit-Gap Analysis sessions
- Testing the configuration.

Task 9: Business Process Documentation

The ESC team shall support SFPUC "To-Be" business process documentation for each business area related to the specific modules being implemented. Each "As-Is" business process will be reviewed and discussed as to how the product can best be used to improve the processes identified. The "To-Be" business processes should be presented in a graphical format depicting the process steps, interfaces, and reports.

The primary activities performed during the configuration task includes:

- Reviewing SFPUC's "As-Is" business process documentation
- Making corrections, changes, additions, and deletions to the "As-Is" documents based on the decisions made during the Design and Development phases of the project
- Identifying, developing, and documenting the SFPUC "To-Be" business processes.

Task 10: Master Development List Preparation (RICEFW List)

During the Fit-Gap analysis process, each requirement will go through functional mapping into C2M functional modules. The requirements which are not met via configuration and/
or "Out of Box" functionality of C2M will require a design to be created for development. These "Gap" designs are further classified as – Reports, Interfaces, Customizations, Enhancements, Forms, and Workflows (RICEFW). The process low shown below will be followed to determine if requirements need to go into the RICEFW workflow:

![Diagram](image)

**Figure: RICEFW Approach/Process Flow**

**Task 11: Data Conversion**

A critical component of any CIS implementation is successful data conversion. Data conversion involves converting over legacy (SFPUC Hetch Hetchy Power Electric Billing System) into the C2M data structure to make it available for day-to-day operations post go-live. Data conversion is also responsible for ensuring data accuracy and financial balancing between legacy and C2M systems.

A critical component of our implementation approach is our data migration (conversion) methodology. Utilizing the ESC team's proven techniques for data migration from legacy to the C2M platform will allow SFPUC to keep the project on track and within budget and at low risk. The ESC team will deploy its proven CC&B to C2M conversion mapping tools, scripts, and C2M pre-build conversion toolkit to ensure data migration is successful. Through the use of our methodology and experienced resources, our team will deliver the efforts for a successful conversion in both a timely and thorough fashion.

The project team will develop a plan that addresses the conversion of the data to the new system. Activities addressed in the plan will include data content analysis, data quality analysis, comparative analysis, data mapping and specifications, performance design reviews, conversion programming and unit testing, system testing, integration and user acceptance testing, multiple mock conversions, manual conversion, dress rehearsal, and final conversion.
Our methodology takes data migration off the critical path by surfacing data compatibility and content issues early in the project timeline. Our solution design significantly limits the degree to which source environment SMEs are required. Moreover, our solution design will prompt interaction with SME personnel much earlier in the data migration process than with traditional data migration approaches.

During the design phase, The ESC team will focus on the following key activities:

- Conversion strategy and plan
- Conversion mapping based on Core C2M data model
- Conversion mapping based on C2M configuration decisions
- Financial balancing process development
- Initial scripting of "Customer Information" module for SFPUC to view their data using CC&B

By surfacing issues early in the process, our approach facilitates a more predictable outcome at the point of migration. We rely less on SMEs and can better schedule and use their valuable time wisely. While we will use the supplied documentation in our extract and formatting process, we will base our decisions on the actual data as opposed to the documentation. We will address the migration as a business problem, not simply just from a technical perspective.

**Task 12: IT Environment Strategy, Set-up, and Operation**

This task focuses on the IT computing environments required to support the current, upcoming project activities, and future needs. The ESC technical team members will work collaboratively with SFPUC's technical team to review current environments for sizing and performance as well as establishing the overall strategy and plan for maintaining the various C2M environments required throughout the project's life cycle. Typical areas of focus include environments for Sandbox Configuration, Development, Testing, Integration, Conversion, and Production.

The IT environment plan will additionally detail the processes to be utilized to move data and configuration tables from one environment to the next in a controlled and repeatable fashion.
<table>
<thead>
<tr>
<th>Seq</th>
<th>Environment</th>
<th>Purpose</th>
<th>Team</th>
<th>Phase(s)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>C2MDEMO Demo Environment)</td>
<td>This is the initial CC&amp;B installation environment containing demonstration data. This environment will be maintained in its original state and used only for reference.</td>
<td>All</td>
<td>Initial to Production</td>
</tr>
<tr>
<td>2</td>
<td>C2MMST</td>
<td>This is the environment containing the master configuration specific to SFPUC. This environment will be the sole source for configuration promotions to all other CC&amp;B environments. This environment will not contain transactional data.</td>
<td>System Administration</td>
<td>Analysis &amp; Design thru Managed Services</td>
</tr>
<tr>
<td>3</td>
<td>C2MDEV</td>
<td>This environment is used for the initial development and unit testing of SFPUC developed customization and interfaces. This environment will be built out such that it can support integration and interface development.</td>
<td>Technical</td>
<td>Analysis &amp; Design thru Managed Services</td>
</tr>
<tr>
<td>4</td>
<td>C2MDROP</td>
<td>This environment is used for testing code drops. All custom code will be installed in this environment for verification ('smoke testing') to ensure the delivery is complete and compatible with the C2MMST configuration.</td>
<td>ESC</td>
<td>Analysis &amp; Design thru Managed Services</td>
</tr>
<tr>
<td>5</td>
<td>C2MFUNC</td>
<td>This environment is used for the initial configuration and business process development. This environment is used to verify C2M configuration before the configuration is promoted to C2MMST. This environment is maintained as a 'play pin' for continued knowledge transfer for the project team.</td>
<td>Functional</td>
<td>Analysis &amp; Design thru Production Go-Live</td>
</tr>
<tr>
<td>6</td>
<td>C2MCONV</td>
<td>This environment is used for running the data conversion process.</td>
<td>Conversion</td>
<td>Analysis &amp; Design thru Production Go-Live</td>
</tr>
<tr>
<td>7</td>
<td>C2MSIT</td>
<td>This environment is used for QA integration testing. This environment will contain the master configuration and SFPUC code from C2MMST and the converted data from C2MCONV.</td>
<td>Testing</td>
<td>Analysis &amp; Design thru Production Go-Live</td>
</tr>
<tr>
<td>8</td>
<td>C2MUAT</td>
<td>This environment is used for user acceptance testing C2M and the associated SFPUC business processes. This environment will contain the master configuration and SFPUC code from C2MMST and the converted TA data from C2MCONV.</td>
<td>Testing</td>
<td>Analysis &amp; Design thru Production Go-Live</td>
</tr>
<tr>
<td>Seq</td>
<td>Environment</td>
<td>Purpose</td>
<td>Team</td>
<td>Phase(s)</td>
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<td>-------------------------------------------------------------------------</td>
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<td>------------------------------</td>
</tr>
<tr>
<td>9</td>
<td>C2MTRNM</td>
<td>This environment is the master data set used for end-user training.</td>
<td>Training</td>
<td>Analysis &amp; Design thru Managed Services</td>
</tr>
<tr>
<td>10</td>
<td>C2MPROD</td>
<td>This is the go-live production environment.</td>
<td>All</td>
<td>Go-Live Thru Managed Services</td>
</tr>
</tbody>
</table>
### Phase 2 Key Activities and Deliverables

<table>
<thead>
<tr>
<th>Phase</th>
<th>Key Activities</th>
</tr>
</thead>
</table>
| Analysis and Design | • Develop business requirements.  
  • Develop "To-Be" process flow diagrams and activity profiles.  
  • Conduct design review/challenge sessions.  
  • Initial Configuration  
  • Finalize the detailed process design and business activities.  
  • Develop functional and technical specifications.  
  • Develop the data migration strategy.  
  • Develop the testing strategy and plan.  
  • Develop integrated scripts for business scenarios.  
  • Develop the detailed Development phase project plan.  
  • Identify, document and define key financial reporting related to risks and mitigating controls to-be processes for business process controls task. |

<table>
<thead>
<tr>
<th>Duration</th>
<th>Quality Control Process</th>
</tr>
</thead>
</table>
| 4 Months | • Design documents reviewed and approved  
  • Testing plan development initiated  
  • Training plans reviewed and approved |
**Key Deliverables:**

- Business requirements
- "To-Be" process flow diagrams and activity profile documents
- Gap analysis and solution recommendations
- Reports, Interfaces, Conversions, and Extensions (RICE) build strategy and plan
- Data migration strategy
- Functional test scripts
- Detailed Phase Project plan
- Initial Business Process Risk and Internal Controls Frameworks
- Initial Segregation of Duties Matrix
- Initial Critical Access Matrix

- PMF for requirements gathering through design specifications
- Tools, frameworks and other repositories specific to Oracle environments for compliance
- ESC’s Consulting leading practice risk assessments and control frameworks
- ESC’s Consulting leading practice existing segregation of duty and critical access rules matrices
- Utility Best Practices & Integration Points

**SFPUC Considerations**

- It will be critical that the appropriate subject matter experts are available for design workshops and are in attendance at the workshops that they are assigned to attend.
- Process teams must work closely with the Change Management team during this phase to capture organizational impacts of the new technology and processes. These will drive change, communication, training plans and activities.
- SFPUC’s leadership should be active participants and be visible to the project to demonstrate their commitment to the effort.
- SFPUC must empower people to make decisions (e.g., process changes) in the design workshops.

**Roles and Responsibilities**

- Project Mgmt. Team
- Solutions Architect
- Functional Analyst
- Designers
- Technical Team
- Conversion Lead

**SFPUC Resource Requirements (Roles)**

The following SFPUC roles are required for this phase:

- C2M Functional Leadership
- C2M Technical Leadership
- C2M Project Director
- Technical Resources
- Business Process Analysts
- Subject Matter Experts
- Database Administrator
- Functional Process Leads
- System Administrator
- Network Administrator

While full time participation is not required for all of the above. It will be important for
them to participate in certain key planning and visioning activities. Actual participation will be confirmed during Month 1 and adjusted as necessary at the end of Phase 1.
PHASE 3 - BUILD (DEVELOPMENT) AND TESTING

APPROACH AND OBJECTIVES

The project Build phase represents the most extensive time and effort portion of the project. It is during this phase that the project team performs the detail design, build, test, and rollout of the new system. As part of our approach, aligned with the Systems Development Life Cycle (SDLC), the phases of development are repeated iteratively. Using this approach, the teams start mapping the business requirements implemented to Oracle C2M modules and build small pieces of the system repeatedly until the system is integrated. Using this approach, errors are caught swiftly, quick wins are realized, and system integration is controlled and accurate.

ESC’s technical resources will validate and gather respective information related to interfaces, conversions, reports, and other technical aspects of project scope.

KEY TASKS FOR PHASE 3

Task 13: Data Conversion

The Build/Development phase of the project includes data conversion activities to be performed during the Design phase (Phase 2). In Phase 3, the ESC conversion team will continue to build on conversion processes initiated in Phase 2. Our approach to data conversion is a “target” oriented method, meaning that the approach analyzes the data required to power the C2M application which determines where and how to extract and/ or derive the data from the legacy CIS application. The methodology utilizes experts in each area of the traditional Extract, Transform, and Load (ETL) approach placing specific responsibility for the legacy extraction and data quality remediation at the source of the data – the legacy CIS. A traditional SDLC approach will be used incorporating the following elements to gain progressively more quality until mock go-live runs:

- Strategic vision for the conversion
- Data mapping design
- Iterative code, test, and remediate cycles.

Conversion Objectives

The primary objectives of the conversion are:

1. Commit to the Project Plan deadlines and milestones.
2. Convert the required data in a timely manner such that system unavailability is acceptable for continued business processing.
3. Minimize the manual effort to correct converted or rejected data.
5. Provide control totals to support the reconciliation process.
6. Provide normalized and consistent data for the CIS application.
7. Minimize changes to customer numbers and other identifiers.
8. Perform data cleanup prior to conversion where possible.
9. Adapt to in-light C2M custom enhancements and/or legacy system maintenance changes.

The ESC team recognizes the scope and importance of this Data Conversion effort. Extracting, moving, and conditioning legacy data is arguably the most important aspect of SFPUC's implementation to its new platform. Data Integrity is the core driver to successful data conversion. As such, the Data Analysis activity of our Data Conversion is the key driver of our data migration methodology.

5. Overview

In order to execute an efficient conversion project and mitigate risk for SFPUC, ESC will employ a conversion methodology founded upon a modified ETL (Extract, Transform, Load) cycle.

For efficient management of each conversion run, a Conversion Checklist will be utilized to control and communicate the tasks and progress of each conversion run.

The summary of conversion processes is listed next by categorization into phases:

1. **Extraction Phase:** There are two extractions of data involved in this conversion:
   a. Extracting data from legacy systems to an Oracle Database (SOURCE). This process involves reformatting of data from the C2M data structure to C2M.
      - The character types have changed between C2M and hence might require reformatting/cleansing of data. This formatted data will be considered as SOURCE.
   b. Extracting data from Oracle Database (Reading from source). Filters are applied in this phase for the subset of data which will be converted.

2. **Transformation Phase:** Custom conversion code from SFPUC mapping sessions will be executed in this phase to transform the legacy data to C2M data. The transformation rules, defined in the data conversion mapping design document will be applied to the data at this phase.

3. **Load Phase:** In this phase, transformed data is loaded into the STGADM schema of the staging database. Note: These are not production ready data, this is staging data.

4. **Oracle Conversion Toolkit (OCT) Phase:** OCT is the conversion toolkit provided by Oracle as part of the base product. During this phase, the multi-stage OCT will be executed to generate production keys, validate, balance, and load C2M data from the staging area to the production area. The OCT will be supplemented by custom validation and post-conversion cleanup processes.

5. **Quality Assurance Phase:** Quality Assurance will be performed by the business analysts (Subject Matter Experts) to ensure its validity and functionality. Quality Assurance includes testing using converted data as well as comparing data values in the legacy system with data values in C2M. In addition to the C2M system operating correctly from a testing perspective, the data must also be correct from a business perspective.
Conversion Data Mapping

Data Mapping is the process of analyzing the data structures and business processes in the legacy systems, identifying corresponding data structures and business processes in C2M as well as the attendant transformation and rejection rules.

It is envisaged that a fit/gap and mapping exercise will identify three categories of data elements:

i. Mandatory C2M data elements required for a functional C2M system supporting "must have" business processes.

ii. Optional C2M data elements required to utilize "nice to have" functionality in the C2M system.

iii. Legacy data elements that have not already been listed in the preceding categories but have been tagged for conversion to the C2M platform.

To support identification of the above data elements, perform adequate due diligence, and drive the prioritization of the conversion tasks, there will be two distinct data mapping sweeps of the C2M and legacy systems:

i. A C2M centric process to identify the mandatory and optional data elements.

ii. A legacy system centric process to identify the legacy data elements not selected in the first sweep but needing to be retained on the new platform.

The team will commence mapping the tables and fields between the two systems and formulating any applicable rules of transformation. The following describes the various transformation rules that may be used and the circumstances under which they will be applied.

1. Exact Context Match – The legacy field context and usage matches the C2M requirements.

2. Combination – One or more legacy system values are combined using specific rules to build a C2M value, e.g. names, addresses.

3. Parsing – Legacy system fields are manipulated according to specific rules to derive required values, e.g. obtaining C2M alert and customer contact data from legacy comments.

4. Translation – Legacy system values are translated into a new C2M value, e.g. alphabetic legacy keys to numeric C2M keys.

5. Extrapolation – Multiple C2M column values are obtained from a single legacy system value, e.g. obtaining CIS region, state, city, etc. from legacy CIS.

6. Source Absent – A value has to be defaulted by the legacy reformat/extract programs where an equivalent does not exist in the legacy system.

7. Target Absent – Characteristics may have to be added to specific C2M objects to retain legacy system data not specifically catered for.

8. Modify Target – For data structures that must be converted from legacy but have no equivalent structures in CC&B, custom data structures need to be added in CC&B.
The mapping design specifications will be the deliverables from the data mapping phase. Data has the data mapping design template to be used by the conversion functional team member to document the outcome of the analyses and the specifications for mapping a given table.

& Development

A summary of the typical processes for each iterative conversion run is presented below in the order of occurrence. Note that not all processes will run for each iterative conversion run and that for cutover the initial processes could likely be executed on legacy production at system sunset.

The data mapping specifications completed in the prior phase provides the foundation for the conversion programming and subsequent testing activities. ESC's conversion team will perform iterative data conversion runs designed to build incremental portions of the C2M data model facilitating incremental validation and reconciliation of the data being migrated from the legacy billing application.

Steps:

- Design and develop conversion scripts
- Unit test and perform validation / reconciliation on each converted object
- Unit test the full conversion run and perform validation / reconciliation on the entire run
- Perform system and performance tests inclusive of financial balancing and reconciliation
- Perform user acceptance test
Financial Balancing

A key indicator of success to conversion is balancing the financials to the penny. Tidy Balances and Balance Controls are two steps in the financial balancing that assist with reconciling the legacy source balances with C2M balances.

ESC takes a lot of pride in the unique approach and templates we have used successfully with our clients. We have a track record of balancing financials to the penny.

Task 14: Interfaces

This task includes design and development of inbound and outbound interfaces required to implement modules and functionality. The ESC team’s technical consultants will provide information on the product end of interfaces while SFPUC’s technical personnel will provide the third-party systems information for integration purposes. We will prepare high-level documents that cover the purpose and requirements of interfaces identified during Fit/Gap Analysis sessions, development of detailed designs, review and approvals of design documents, programming, and testing of interfaces.

The ESC and SFPUC technical team will be expected to provide support in the planning, analysis, design, testing, and installation tasks. Additionally, the ESC team’s technical personnel will be responsible for coordinating the information exchange with other third-party solutions that have been deployed and provide information about the other side of each interface in the Interface Control document, such as the following:

- Map of the placement of incoming data from the intermediary tables into the third-party or legacy application data model
- Map of the placement of outgoing data from the third-party or legacy application data model into the intermediary tables
- Description of the frequency of the import and export task to support each interface within the third-party or legacy application
- Description of the processing that is to take place upon receipt of the imported data by the third-party or legacy application, including date validation, exception processing, and reporting.

Before any interface development can commence, SFPUC’s team must approve the Solution document, for the specified interface(s). It is the responsibility of the ESC team to address and resolve any interface issues identified with the assistance of SFPUC. Because of the complexity of the subject, it is expected that each Solution document will cycle through multiple iterations before the final approval is achieved.

The ESC interface developers will be responsible for developing the application(s) side of each interface according to the specification in the Interface Control document and adhering to the delivery dates specified in the approved project schedule. Likewise, our team will also be responsible for writing data to non-CIS applications for each interface according to the specifications in the Interface Control document and adhering to the delivery dates specified in the approved project schedule.
Our project teams will perform the following primary activities during the interface task:

- Review the interfaces list (developed in Tasks 3 and 4)
- Identify the interface requirements
- Finalize the interface scope by the completion of Functional Testing
- Prepare, review, and approve the Interface Design documents
- Develop and test the interface programs.

**Task 15: Configuration Tools, Algorithms, User Exits and Extensions (Modifications)**

Configuration tools (Scripting), Algorithms, User Exits and Extensions (otherwise referred to as modifications) are used to further configure the Oracle C2M system to SFPUC's specifications. The applications comprising SFPUC's new CIS system are extremely flexible and configurable using scripting, algorithms and user exits. It is expected that most modifications will be accomplished through changes in business processes. Once the Technical Architect approves the design of the selected algorithms, user exits and extensions, coding and testing will commence.

The primary activities performed by the project teams during this task includes:

- Developing the high-level design and estimates for each script, algorithm and user exit
- Reviewing and approving the scripting, algorithms, and user exits for detail design
- Reviewing and approving the detail designs
- Generating code, test scripts, algorithms, and user exits.

**Task 16: Reports**

ESC is responsible for leading the team in identifying custom reports as required by SFPUC. Through the Fit/Gap Analysis sessions, the reports necessary for SFPUC will be documented and prioritized. Once reports are finalized/approved by SFPUC, ESC's technical team will be responsible in the development of SQL queries required to extract the data required for these reports. SFPUC's reporting team will be responsible for reports (front-end UI) development and testing.

The primary activities performed by the project teams during this task includes:

- Identifying the report requirements
- Reviewing the reporting requirements with the delivered system components
- Documenting the reporting gaps, if any
- Preparing report design documents
- Reviewing and approving report design documents
- Developing and testing the reports
- Reviewing the requirements with the delivered system components
- Reviewing and approving the documents.
Task 17: Security

ESC recognizes the critical importance of security over systems and data. Security will be fully defined and set up prior to placing the new system into production. ESC will work with the appropriate SFPUC's functional and technical team members to determine their security needs and profiles. SFPUC's team will implement security in accordance with the defined security profiles. ESC will assist SFPUC in setting up the initial security profiles. SF-PUC will be responsible for ongoing management of security.

Steps and activities include the preparation of high-level documents that cover the purpose and requirements of security identified during Business Process Analysis, Fit/Gap Analysis sessions, and configuration, development of detailed designs, review and approvals of design documents, configuration of security tables, and testing of security.

The primary activities performed by the project teams during this task includes:

- Defining the user profiles and groups
- Reviewing and approving the security groups and profiles
- Implementing and testing the security profiles

Task 18: Testing

Testing is performed in succeeding levels to verify that the solution built conforms to the business process and requirements identified during Fit-Gap analysis task. Analysis, design, and development start with high level business objectives and drilled down into greater details, eventually completing code development for the most complex components. Testing follows the reverse path, verifying that the solution meets requirements in more complex combinations, ending with end-to-end testing against business objectives. It follows a structured and methodical approach to identify process, technical, and other defects or omissions so they can be remediated before the solution is used in a production environment.

For each type of testing, a similar process is followed: Test Planning and Preparation, followed by Test Execution:
Over the course of the project, the following work streams will be conducted:

- **Master Test Planning** - This stream documents the detailed approach for each of the different testing streams.
- **Unit Testing** - This stream ensures that the system is properly configured at the individual table level.
- **System Testing** - This stream ensures that entire system functions by verifying all requirements have been met and verifying common error cases.
- **Integration Testing** - This stream ensures that major functional areas, basic business cases and workflows function with the components interacting and passing data correctly and cohesively.
- **Conversion Testing** - This stream verifies all of the data that is converted in the system database has been correctly converted and that the conversion routines perform within the required timeframe.
- **Performance Testing** - This stream verifies the system, including the networks, can handle the required processing volumes (both batch and online) within established performance requirements.
- **Regression Testing** - This stream ensures that all changes that occur during the different testing streams don't adversely affect other components associated with the systems.
- **User Acceptance Test and Parallel Testing** - This stream validates the system functionality, procedures, and user documentation meets Client requirements.
- **Batch Performance Testing** - This test includes a brief description of the jobs to be run to test batch system performance.

**Quality Management**

Our quality management approach defines the process for deliverable production and the process for peer and quality review. This is built into the planning for each deliverable's production, including identifying the people responsible and also allocating the time for the activity to be completed.

ESC utilizes the finalized functional matrix to create the project traceability matrix. This traceability matrix serves as the single source of record for the approval status of each project requirement. As each requirement is reviewed, the project team updates the project’s defect tracking tool with the details of identified defects until the system meets the requirement. At that time, the requirement is marked as passed. Each bundled set of requirements must be passed for the requirements bundle to move to the next phase of the project testing cycle.

Our Project Manager and Coordinator will collaborate to support the development of approved RICEFW objects and their management between the onshore and offshore teams. The project schedule tracks development of each object through its lifecycle. We track completion and sign-offs, providing an audit trail of the quality assurance activities. With a global rollout, this enables efficient handoffs and tracking across countries and time zones for ownership and review as required. In addition, our approach provides progress reports and management information that enables monitoring of progress against plan and presentation of the information for decision-making.
The PMO team includes a Quality Manager whose responsibility is to coordinate quality management and assurance activities in the delivery of the solution. While the PMO team has this role, it is the responsibility of everybody who is involved in designing and building the solution to ensure that quality is built into solution delivery.

Our implementation approach includes an iterative five level quality management approach that sets the process for the design, development, review and approval of the solution from requirements through to implemented solution. This incremental approval method informs the project’s scope and change management efforts as SFPUC’s team members become engaged with the system and its overall capabilities.

Task 19: Training Plan and Delivery

The Training task for each phase is divided into two major subtasks:

- Training Design and Development
- Training Delivery

Training Design and Development

Training Design and Development effort focuses to build on the Organizational change management effort towards seamless knowledge transfer that our team starts from the initiation of the implementation stage. End-User Training is a critical component of a successful project deployment. In addition to project knowledge transfer throughout the project, formal training of the end-users is conducted prior to go-live. The team shall utilize the information generated to develop curriculum to support knowledge transfer related to the following:

- Full system documentation, including new business and technical processes,
- Configuration/rates maintenance,
- User interface changes, system integration components
- Technical code

Our implementation experience has helped us learn the benefits of Involvement of core team from the start. This approach facilitates knowledge sharing of our team with SFPUC team members related to design and development of custom code, data and technical components built for the implementation. The format in which such code will be shared shall comply with the standard export mechanisms applicable for the proposed base billing system, or in a format approved by SFPUC. The Training Manager will plan for end user training. There are a number of critical training design, development, and planning activities that occur during this task, which we include in the following table.
### End-User Training Deliverable: Analysis

**Description and Objective**

The End-User Learning Needs Analysis and Strategy has two key components:

- The training infrastructure and target audience assessments
- The training approach and work plan documents that are developed based on assessment results

The Needs Analysis is an information gathering activity. Surveys are distributed and interviews are performed to gain a focused understanding of the organization's education landscape.

**ESC Accelerators**

- Training Infrastructure Assessment Template
- End-User Learning Needs Template
- End-User Learning Scope Statement
- End-User Learning Work Plan

**SFPUC Considerations**

We will validate the findings and revise the end user training strategy before curriculum design and material development begins.

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### End-User Training Deliverable: Strategy/Curriculum

**Description and Objective**

Strategy/Curriculum is a collection of reports, processes and assessments that forms the basis for end-user training program development. The End-User Training Strategy/Curriculum consists of any combination of the following, as appropriate for project scope:

- Assumptions
- Instructional Techniques and Media
- Performance Support Vision
- End-User Learning Development Process
- End-User Learning Work plan
- Performance and Training Support System Structure
- End-User Learning Curriculum
- Description of any development processes used to build the components of the program
- Comments and Issues sections.
End-User Training Deliverable: Strategy/Curriculum

| ESC Accelerators | • Instructional Techniques and Media  
|                  | • Performance Support Vision  
|                  | • End-User Learning Gap Analysis  
|                  | • End-User Learning Development Process  
|                  | • Performance and Training Support System Structure  
|                  | • End-User Training Curriculum  
|                  | • End-User Training Course Outlines  

| SFPUC Considerations | Learning methods for the End User Training (e.g., a blended learning solution). As with other deliverables, we will validate the design implications as they relate to training material usage for the SFPUC.  

End-User Training Deliverable: Course Customization Support

| Description and Objective | Based on specifications defined during Curriculum Design, Team Langan/ESC and SFPUC material developers will create/customize materials required for the end user education program.  
|                          | As a starting point for training content, Team Langan/ESC will leverage our library of documented business processes for Oracle. The material library consists of material development templates, system process documents, class presentations and classroom exercises. These end user education materials have been developed based on our implementation experience and are based on Oracle applications leading practices.  

| ESC Accelerators | • Training Development Standards and Templates  
|                 | • End-User Training Materials  
|                 | • End-User Learning Program Quality Review  

118 Proposal for SFPUC Hetchy Power Electric Billing System Replacement
End-User Training Deliverable: Data Development Support

Description and Objective
Team Langan/ESC will populate data into the Oracle CC&B training environment. The training environment provides a space where learners can execute transactions and reports during training without affecting the production, development, or testing environments. The training environment should be identical (or as similar as possible) to the production environment in both configuration and data. We will leverage full copies of the test or production environments as appropriate to minimize data population requirements.

ESC Accelerators
- Data Set Input Sheets
- Instance Refresh Schedule

SFPUC Considerations
To further facilitate learning for key SFPUC end users, enabling those users to participate in data population may result in improved understanding of system transactions.

The design and development task shall result in development of training material, operational procedures document and training for SFPUC staff, including ITS and Customer Services Bureau staff.

ESC will conduct meetings with training staff, management staff, and SME’s to ask the right people the right questions to gain an absolute understanding of the organization's training needs and goals. Specifically, this includes:

- Correlating SFPUC’s new business processes to training materials and identifying areas of customization
- Verifying the types of training materials (i.e. student guides, job aids, quick references guides, etc.) required for successful training delivery
- Confirming SFPUC’s current resources
- Validating end-user roles and user group training needs
- Reviewing and/or creating training milestones and deadlines
- Understanding the expectations of training as related to the outcome.
Training Delivery
There are a number of critical training delivery steps that occur during this project phase:

<table>
<thead>
<tr>
<th>Description and Objective</th>
<th>The training delivered by our team will include a detailed review of the system and relevant knowledge content tailored to the attendee groups for the sessions.</th>
</tr>
</thead>
</table>
| ESC Accelerators          | - Materials (including workshop presentation and relevant handouts on adult learning theory, etc.)  
                           |   - Training Delivery Checklist  
                           |   - Training Tips and Tricks |
| SFPUC Considerations      | The effectiveness of training sessions required will also depend on the availability of SFPUC to participate with no conflicts. |

We will provide a full life-cycle training curriculum for C2M. Every aspect of SFPUC’s training needs through every phase of C2M implementation will be delivered through this curriculum. At the highest level, the technical and functional training courses prepare and reinforce SFPUC’s project team to handle the challenge of C2M system implementation. The technical and functional component consists of two early-stage overview courses and several hands-on configuration workshops. The next level of training is end-user training. End-user training is a customizable curriculum that teaches the rest of the organization how to manage the day-to-day operational tasks within C2M according to SFPUC’s own business processes.

Based on the training plan design by our team, we shall provide SFPUC training sessions that include, but are not limited to the following:

- A minimum of three training sessions for Customer Service representatives in the usage and administration of the new billing system, such that staff are sufficiently trained to perform their daily tasks;
- At least one training session for read-only users of the system, such that staff are sufficiently trained to perform their daily tasks; and
- At least one training session for administrator-level users, such that staff are sufficiently trained to perform their daily tasks.
**End-User Training** is a critical component of a successful project deployment. In addition to project knowledge transfer throughout the project, formal training of the end-users is conducted prior to go-live.

We will provide a full life-cycle training curriculum for C2M. Every aspect of SFPUC's training needs through every phase of C2M implementation will be delivered through this curriculum. At the highest level, the technical and functional training courses prepare and reinforce SFPUC's project team to handle the challenge of C2M system implementation. The technical and functional component consists of two early-stage overview courses and several hands-on configuration workshops. The next level of training is end-user training. End-user training is a customizable curriculum that teaches the rest of the organization how to manage the day-to-day operational tasks within C2M according to SFPUC's own business processes.
### Phase 3 Key Activities and Deliverables

<table>
<thead>
<tr>
<th>Phase</th>
<th>Key Activities</th>
</tr>
</thead>
<tbody>
<tr>
<td>3</td>
<td>Build and Test</td>
</tr>
<tr>
<td></td>
<td>• Develop functional and technical specifications.</td>
</tr>
<tr>
<td></td>
<td>• Develop configuration and code required to satisfy RICEFW components</td>
</tr>
<tr>
<td></td>
<td>• Unit test code</td>
</tr>
<tr>
<td></td>
<td>• Develop the data conversion plan</td>
</tr>
<tr>
<td></td>
<td>• Develop conversion code based on mapping</td>
</tr>
<tr>
<td></td>
<td>• Unit test conversion</td>
</tr>
<tr>
<td></td>
<td>• Develop the testing strategy and plan</td>
</tr>
<tr>
<td></td>
<td>• Develop test scripts based on to-be process and requirements</td>
</tr>
<tr>
<td></td>
<td>• Develop integrated scripts for business scenarios</td>
</tr>
<tr>
<td></td>
<td>• Design application security</td>
</tr>
<tr>
<td></td>
<td>• Configure application security</td>
</tr>
<tr>
<td></td>
<td>• Develop knowledge transfer documents in support of AMS</td>
</tr>
<tr>
<td></td>
<td>• IT infrastructure and system plan for production setup</td>
</tr>
<tr>
<td></td>
<td>• Develop training plan</td>
</tr>
<tr>
<td></td>
<td>• Test training plan – Sample training</td>
</tr>
<tr>
<td></td>
<td>• Release training plan for approval</td>
</tr>
</tbody>
</table>

### Duration

- 15 Months

### Quality Control Process

- Design documents reviewed and approved
- Testing scripts approval
- Training documents reviewed and approved
**KEY DELIVERABLES**

- Conversion Plan
- Conversion Scripts
- Successful Conversion Run
- Financial Balancing Reports - Conversion
- Technical Design Document
- Packages for RICEFW components
- Reports Technical Design
- SQL/Extraction for reports
- Application Security Documentation
- Testing Strategy/Plan
- Test Scripts
- Test execution
- Training Plan
- Training Documentation
- Training Execution

**KEY ACCELERATORS**

- PMF for requirements gathering through design specifications
- Existing code base from ESC past projects
- ESC Conversion framework
- ESC Integrated Support Services tool for defect tracking

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**SFPUC CONSIDERATIONS**

- Technical team be well verse with Groovy technology since all the custom components will be developed using that technology
- Process teams must work closely with the Change Management team during this phase to capture organizational impacts of the new technology and processes. These will drive change, communication, and training plans and activities.
- SFPUC's leadership should be active participants and be visible to the project to demonstrate their commitment to the effort.
- SFPUC must empower people to make decisions (e.g., process changes) in the design workshops.
**ROLES AND RESPONSIBILITIES**

- Project Management Team
- Solutions Architect
- Functional Analyst
- Designers
- C2M Testing Lead
- C2M Training Lead
- Technical Team
- C2M Testers
- C2M Trainers
- Conversion Lead
- C2M Developers

**SFPUC RESOURCE REQUIREMENTS (ROLES)**

The following SFPUC roles are required for this phase:

- C2M Functional Leadership
- C2M Technical Leadership
- C2M Project Director
- Technical Resources
- Business Process Analysts
- Subject Matter Experts
- Database Administrator
- Functional Process Leads
- System Administrator
- Network Administrator

While full time participation is not required for all of the above. It will be important for them to participate in certain key planning and visioning activities. Actual participation will be confirmed during Month 1 and adjusted as necessary at the end of Phase 1.
PHASE 4. - MIGRATION

OBJECTIVES

After the completion of all successful testing, the system is ready for Go-Live, which is executed in the Migration phase. ESC team, with support from SFPUC, performs a readiness assessment that validates that the necessary components for Go-Live are complete and correct. ESC team also provides a Go-Live plan and coordinates internal and external readiness and schedules with SFPUC. The final Go-Live decision is made by the SFPUC team based on the documented criteria developed in the Go-Live plan and accepted by SFPUC.

Final end-user training is completed just in time for Go-Live, with training validation performed during, up to, and after Go-Live. Once the Go-Live plan is executed, the system goes live with support from the Implementation team.

KEY TASKS FOR PHASE 4

Task 20: Cutover Preparation

The purpose of this task is to perform two "dress-rehearsals" and "Mock Go-Live's" of the production environment prior to the live date of the system. The Cutover Preparation task includes the activities that must be completed to prepare for cutover to production. This plan includes all activities related to production instance preparation, conversions, interfaces, system administration, network administration, setting up user accounts, desktop administration, peripheral device management, code migration, end-user training, transitional procedures, communications, help desk, and other items that should be managed in the transition to Go-Live. The Implementation team will conduct Migration planning meetings with SFPUC. The purpose of the meetings is to clarify the responsibilities of the remaining activities and to define and finalize the criteria to move into production.

A Migration plan will be developed as a result of the Planning meetings. The Migration plan addresses three primary areas: the creation of the Stage environment, the development of the System and Acceptance Test plans, and the definition of acceptance criteria.

Steps:

- Conduct the Migration Planning meeting
- Develop the Migration plan
- Create the Stage environment
- Development of the System Test plan
- Create the Performance Test plan
- Define the Bill Cycle Test plan
- Develop the acceptance criteria
- Create the Acceptance Test plan.
Task 21: Testing and Acceptance

Prior to the cutover to production, a series of tests will be performed against the final prototype (Stage) of the system. The Stage environment includes the final configuration and security setup and testing, and all converted data, interfaces, and modifications. The System and Performance Test plan, including a pre-determined number of parallel tests as defined in Task 18, will be run, validated, and then corrective action taken if needed in the Stage environment. The Implementation team will work with SFPUC on the validation of the performance test and parallel test results, as well as monitor the performance of the transaction processes.

After successful completion of the system test conducted by the Implementation team, SFPUC will execute the Performance Test plan and the Acceptance Test plan with assistance from the Implementation team. The purpose of the acceptance test is to execute and provide validation of all functions deemed mandatory for signoff and cutover to the production system.

Prior to cutover, the Implementation team and the SFPUC project teams will develop a Project Closing summary that lists outstanding activities of both parties that must be completed to close the project component. This summary will include additional report development, performance tuning, end-user training, and definition of year-end processes to be supported by the Implementation team.

Steps:

- Perform the system test
- Perform the performance test
- Perform the bill cycle test
- Perform the acceptance test
- Perform a minimum of two dry runs (dress rehearsals)
- Complete the readiness assessment
- Develop the Project Closing summary
- Sign off on the system
- Cutover to Production.

Key Activities and Deliverables

The Migration phase includes all the activities necessary to validate that the product is ready for "Live Processing," converted data is ready to be loaded, users are trained and ready for the system, and the infrastructure is in place to support the new processes and system. The Migration phase culminates with the conversion to the CIS as the system of record.
Phase 4 Key Activities and Deliverables

<table>
<thead>
<tr>
<th>Phase</th>
<th>Key Activities</th>
</tr>
</thead>
<tbody>
<tr>
<td>Migrate</td>
<td>- Develop the Go-Live end-user support plan</td>
</tr>
<tr>
<td></td>
<td>- Conduct user-acceptance testing</td>
</tr>
<tr>
<td></td>
<td>- Migrate configured application and custom programs to the Production environment</td>
</tr>
<tr>
<td></td>
<td>- Begin data migration</td>
</tr>
<tr>
<td></td>
<td>- Complete data migration production setup</td>
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<tr>
<td></td>
<td>- Develop training plan</td>
</tr>
<tr>
<td></td>
<td>- Test training plan – Sample training</td>
</tr>
<tr>
<td></td>
<td>- Release training plan for approval</td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>Duration</th>
<th>Quality Control Process</th>
</tr>
</thead>
<tbody>
<tr>
<td>2 Months</td>
<td>- Go-Live Readiness Checklist</td>
</tr>
<tr>
<td></td>
<td>- Go-Live Score Card</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Key Deliverables</th>
<th>Key Acclerations</th>
</tr>
</thead>
<tbody>
<tr>
<td>- User acceptance test plan, scripts, and results</td>
<td></td>
</tr>
<tr>
<td>- Cutover strategy, plan, and schedule</td>
<td></td>
</tr>
<tr>
<td>- Go-Live end-user support plan</td>
<td></td>
</tr>
<tr>
<td>- Configured Production environment</td>
<td></td>
</tr>
<tr>
<td>- Migrated data from legacy systems</td>
<td></td>
</tr>
<tr>
<td>- End-user training</td>
<td></td>
</tr>
<tr>
<td></td>
<td>- PMF for requirements gathering through design specifications</td>
</tr>
<tr>
<td></td>
<td>- PMF Score Card</td>
</tr>
</tbody>
</table>

SFPUC Considerations

- Back-up support for key resources  
- Vacation plans for key resources identified and planned
**Roles and Responsibilities**

- Project Management Team
- Solutions Architect
- Functional Analyst
- Designers
- C2M Testing Lead
- C2M Training Lead
- Technical Team
- C2M Testers
- C2M Trainers
- Conversion Lead
- C2M Developers

**SFPUC Resource Requirements (Roles)**

The following SFPUC roles are required for this phase:

- C2M Functional Leadership
- C2M Technical Leadership
- C2M Project Director
- Technical Resources
- Business Process Analysts
- Subject Matter Experts
- System Administrator
- Database Administrator
- Functional Process Leads
- Network Administrator

While full time participation is not required for all of the above, it will be important for them to participate in certain key planning and visioning activities. Actual participation will be confirmed during Month 1 and adjusted as necessary at the end of Phase 1.
PHASE 5 – POST-IMPLEMENTATION SUPPORT (HYPER CARE)

OBJECTIVES

The Post-Implementation Support phase consists of the major technical and functional activities in which SFPUC and the Implementation team will engage after "Go-Live." Typical post Go-Live issues that may arise after cutover to new systems will be addressed in this phase. Tasks include the following: routine maintenance and support, assistance with resolution of issues and problems as detected, revision and communication of procedures to the user community, and establishment of a help line support and workshops (as needed) for users in the field.

PHASE 5

Task 22: Post-Implementation Support (Hyper Care)

The purpose of the Post-Implementation Support task is to acknowledge that issues may arise after cutting over to the new system and plan accordingly for the need of remote and on-site functional and technical support during the initial period on the new system. Steps include routine maintenance and support, assistance with the resolution of issues and problems as detected, revision of procedures as needed, communication of updated procedures to the user community, and providing help-line support and workshops for users as mutually agreed upon by the Implementation team and SFPUC.

Steps:

- Provide on-site Support for two calendar months following signoff of the last phase. This support will be provided by the project team on-site and remotely. Since the schedules will be staggered, there will be continuous on-site support during the two-month period.

Key Activities and Deliverables

Post-Implementation Support activities and deliverables are focused on initiating production operations in accordance with the Project Management plan and enabling effective utilization of the Oracle application with minimal disruption to business operations. SFPUC will provide reasonable assistance to the Implementation team for these activities. A project close report is produced at the end of the post Go-Live support period. This report documents SFPUC’s acceptance criteria for final signoff and represents the official close of the implementation project.

The specific activities to be completed by the Implementation team for SFPUC’s approval in this phase are detailed in the following table.
## Phase 5 Key Activities and Deliverables

<table>
<thead>
<tr>
<th>Phase</th>
<th>Key Activities</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>- Cutover to new processes and applications</td>
</tr>
<tr>
<td></td>
<td>- Provide Go-Live end-user support</td>
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<tr>
<td></td>
<td>- Plan and hold the Go-Live celebration</td>
</tr>
<tr>
<td></td>
<td>- Assess performance</td>
</tr>
<tr>
<td></td>
<td>- Monitor systems operations and make adjustments as necessary to optimize</td>
</tr>
<tr>
<td></td>
<td>- Provide post-production support.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Duration</th>
<th>Quality Control Process</th>
</tr>
</thead>
<tbody>
<tr>
<td>2 Months</td>
<td>- Support Effectiveness Validation</td>
</tr>
<tr>
<td></td>
<td>- SLA Objective Validation</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Key Deliverables</th>
<th>Key Accelerators</th>
</tr>
</thead>
<tbody>
<tr>
<td>- New processes and applications</td>
<td></td>
</tr>
<tr>
<td>- Go-Live end-user support</td>
<td></td>
</tr>
<tr>
<td>- Go-Live celebration and recognition</td>
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<tr>
<td>- Lessons learned</td>
<td></td>
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<tr>
<td>- Project Close report.</td>
<td></td>
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<tr>
<td>- PMF for requirements gathering through design specifications</td>
<td></td>
</tr>
<tr>
<td>- PMF Score Card</td>
<td></td>
</tr>
</tbody>
</table>

### SFPUC Considerations
- Plan for extra support for customer service team

### ESC Roles and Responsibilities
- **Project Management Team**
- **Functional Analyst**
- **Conversion Lead**
- **Technical Team**
- **C2M Developers**
- **Solutions Architect**

### SFPUC Resource Requirements (Roles)

The following SFPUC roles are required for this phase:

- **C2M Functional Leadership**
- **Technical Resources**
- **Functional Process Leads**
- **C2M Technical Leadership**
- **Business Process Analysts**
- **System Administrator**
- **C2M Project Director**
- **Subject Matter Experts**
- **Database Administrator**
- **Network Administrator**
While full time participation is not required for all of the above, it will be important for them to participate in certain key planning and visioning activities. Actual participation will be confirmed during Month 1 and adjusted as necessary at the end of Phase 1.

**Project Transition**

**Stage 1 - Implementation Services to Stage 2 - Application Management Services**

Preparation for Stage 2 - Application Management Services (AMS) will occur throughout the first stage of the implementation services project. Members of our AMS team will be assigned as Developers, Conversion Analysts, Business Analysts, Testing, Documentation and Quality Assurance resources. These resources will bring critical knowledge to the Application Management Services team; and experience required to ensure consistent quality service. The project teams will apply processes, checklists, and controls to ensure deliverables are produced that will be necessary for the support teams. These deliverables typically include the following:

- Entity Relationship Model
- Business Process Decomposition
- Business Process Descriptions
- Data Flow Models
- System Specifications
- Program Documentation
- Database Documentation
- Knowledge Management Portal.

The ESC team has extensive expertise and experience in managing and executing Transition Projects for Application Management Services contracts. This experience will be applied to ensure support commitments are achieved as soon as the solution goes into production.
Like SFPUC, we are interested in building a long-term relationship based on flexibility and transparency that are key characteristics to achieving business results and client satisfaction.

As an ITIL® best-practice methodology we focus on the end user ahead of the technology for governance of our support. We focus on the following aspects to ensure that high quality is made available to all SFPUC users with us involving the right resources for supporting our implemented solution:

- Fiscal Management
- Risk Management
- Resource Management
- Quality Management
- Process Management
- Communications Management

This section will describe:

- The overall approach to CIS solution support:
  - ESC Support Team, Oracle Premier Support
  - The use of ESC project resources (Stage 1 - Implementation Team) through the warranty period
- How the Application Management Services team will become prepared to support the solution through project involvement and production of deliverables necessary for support
- ESC Application Management Services Framework, Methodologies, Tools, and Processes

APPLICATION MANAGEMENT SERVICES FRAMEWORK

The ESC team will provide comprehensive Oracle C2M functional and technical support services under Application Management Services 24/7 support. The C2M application and Hosting support team will integrate with SFPUC's IT support organization to establish, operate, and provide knowledge transition associated with an industry best practices application support operation.

The following graphic illustrates our proposed Application Management framework:
ESC AMS Stack

The scope for the Application Managed Services includes:

1. Service Desk function for both application and hosting services during business hours
2. 24/7 Technical support for all standard Oracle C2M functionality implemented during Stage 1 – Implementation
3. 24/7 Technical Support for all Modifications and Interfaces (i.e., configuration changes, customizations, etc.) implemented during Stage 1 – Implementation Services
4. 24/7 System monitoring and defect resolution for database instances, batch, and application servers
5. 24/7 Hosting support including hardware, operating system, network, and infrastructure security monitoring and management
6. As-needed support (up to 120 hours per year of no cost preventive maintenance hours for enhancements, reports development, or any other mutually agreed support
7. As-needed, "additional customization" development, consulting support will be provided as requested by SFPUC based on agreed upon rate card
8. All code, data, configuration, etc. will be owned by SFPUC and will be provided full access at all time
9. Termination clauses can be built into contract to allow SFPUC to bring back hosting and support services at no additional cost

10. Dedicated Application Delivery Manager / Lead will be assigned by ESC for this engagement

APPLICATION MANAGEMENT PROCESSES

ESC's Application Management Services are based on industry best practices as well as incorporating our collective experience in providing IT services for over 33 years. ESC's Application Management processes are rigorous, not rigid, and adaptable to the unique requirements of each client. We have a proven ability to engage stakeholders and obtain their buy-in through strong communication and effective change management. Our goal is to work together to develop long term, true collaborative business partnerships.

Application Management Services processes provided to ESC clients depend on each individual client's needs and are built on ESC's frameworks and methodologies. The following provides a high-level description of the processes that can be leveraged for each client engagement:

- **EISS** – The ESC Integrated Support Services Framework (EISS) is our approach for defining, developing and implementing managed applications. The EISS institutionalizes our best practices and is fully conformant with ITIL's Best Practice IT Service Management models.

- **TCO** – True CIS Optimization (TCO®) is ESC's Systems Development Life Cycle (SDLC) methodology will be employed for the development of enhancements or new applications.

- **Operational Framework** – The Operational Framework details the interface/touchpoints and workflows involved in the day-to-day activities. The Operational Framework also describes the processes used for Incident and Problem Management, Change and Release Management, and Configuration Management.

- **Transition Approach** – ESC's transition approach takes a suite of applications from its current state to the target state as quickly as possible without compromising Service Level Agreements (SLAs) and quality of service.

- **OrangeHRM** – OrangeHRM is ESC's maintenance human resource framework, based on well-known problem-solving techniques and team dynamics. It will promote high-performing, self-directing teams who will retain knowledge of our client's applications, giving resilience to our service. One of the key benefits of this approach is the driver / rider principle which mitigates the risk of all the application knowledge residing with an individual.

Our team provides a full suite of application services, from strategic planning and business process outsourcing, to application integration, development, maintenance, support and service desk. ESC adheres to ISO 9001, SEI CMM Level 3, and ITIL's Best Practice IT Service Management models to ensure that we provide our clients with the highest level of quality. The information that follows will focus specifically on the Application Maintenance and Support services, highlighted in the diagram.
**Application Management Services Model**

**APPLICATION MANAGEMENT SERVICE ACTIVITIES**

Our team's Application Management Services program is comprised of the following activities:

<table>
<thead>
<tr>
<th>Activity</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Transition (Throughout Stage 1 Implementation)</td>
<td>Time spent in knowledge transition designed to inform the support team of system architecture and details to enhance their ability to support operations efficiently.</td>
</tr>
<tr>
<td>Event</td>
<td>Application initiated trouble ticket indicating a break in expected operational performance.</td>
</tr>
<tr>
<td>Incident</td>
<td>User initiated trouble ticket indicating a break in expected operational performance.</td>
</tr>
<tr>
<td>Problem</td>
<td>Deeper investigation and repair of issues with the goal of eliminating repeat breaks in production operations.</td>
</tr>
<tr>
<td>Access / Security (SFPC Primary Responsibility)</td>
<td>Executing requests for password reset, new employee access, access changes, etc.</td>
</tr>
<tr>
<td>Service request - Estimations</td>
<td>The provision of high level estimations and minor enhancements to system functionality.</td>
</tr>
<tr>
<td>Preventative Maintenance</td>
<td>Routine scheduled activities designed to proactively prevent breaks in the production operation.</td>
</tr>
<tr>
<td>Vendor Management</td>
<td>Escalation, monitoring, and reporting of hardware/software vendor based issues.</td>
</tr>
<tr>
<td>IT Governance / Reporting</td>
<td>Oversight of the Application Managed Services operation keeping activities aligned with defined business objectives.</td>
</tr>
</tbody>
</table>
1) Transition Services
The ESC team starts transition planning early into the implementation stage of projects to ensure that knowledge management is effectively performed during our engagement. We will invest time in knowledge transition efforts designed to inform the support team of system architecture and details to enhance their ability to support operations efficiently.

2) Event, Incident, and Problem Management (Break/Fix)
ESC will conduct all break/fix activity within the scope of services. Break/fix activities can include, but not be limited to the following:
- Triage of a reported event or incident
- Validation of the event/incident severity and priority
- Assignment to an appropriately skilled resource
- Resolution or reassignment of the event/incident
- Root cause analysis
- Submission of a long-term problem correction request
- Status updates of open events/incidents

3) Access and Security
Access/Security activities by nature are unplanned events. Access/Security activities will be primarily performed by the Customer's resources. Access/Security activities include executing requests for password reset, new employee access, access changes, etc.

4) Application Service Request Estimations/Projects
ESC will provide minor, incremental application implementation and integration projects on a service request basis from Customer. Service requests will be accepted and evaluated for generation of specific statements of work (SOW) that will describe the scope, approach, schedule, and pricing associated with the request. Customer and ESC will agree on a mutually acceptable delivery date for the requested SOW(s) during the requirements gathering activities necessary to generate the SOW response. Estimation and execution of service requests will be prioritized as secondary efforts to production support tickets.

5) Preventative Maintenance
ESC will conduct ten (10) hours of Preventative Maintenance "PM" activities per month (120 Hrs per year) for no cost. PM activity, with the understanding and agreement of the Customer, will be performed offsite. A Preventative Maintenance Checklist detailing all PM activities completed will be provided to the customer on a monthly basis. If all PM activities cannot be completed within the allotted 10 hours that month, a review with the Customer will be conducted and a plan for remediation will be made.

These PM activities typically include:
- Minor enhancement
- Configuration change
- Report development
- Additional system setup
6) Vendor Management

Vendor management activities include escalation, monitoring, and reporting of hardware/software vendor based issues. ESC will be responsible for coordinating and managing hosting, operating system and software vendor for any/all issues.

7) IT Governance and Reporting

Our team will conduct IT Governance/Reporting "G/R" related to the scope of services of this agreement. The G/R activities will be performed by the designated Application Managed Services Delivery Manager. The G/R activities may include, but not be limited to the following:

- Management of the support team including staffing and personnel management
- Identification of risks and issues
- Management reporting
- IT budgeting and financial review
- Issue review and performance evaluation
- Next month planning
- Reporting and evaluating level of effort trends and recommend future adjustments (as illustrated below):

APPLICATION SERVICES SUPPORT STRUCTURE

Application support services will be provided by a strong, national support team with access to Level 3 product support from Oracle product support, as required. The diagram below describes Application Services Support in relation to the overall governance structure for the ESC team and the C2M solution.

The ESC team will subscribe to Oracle Premier Support for the C2M (C2M) application. Premier Support is available for five years from the date of General Availability for any specific version of C2M. If SFPUC does not upgrade to a newer version before five years the support level would drop to a Sustaining Support Level and would remain at that level of support for as long as annual maintenance fees are paid as per Oracle's Lifetime Support Policy.

Key features of Oracle Premier Support Include:

- Certification with new third-party products and product versions
- New program updates, fixes, security alerts, and critical patch updates
- 24-hour commitment and response guidelines for Severity 1 service requests.
Service Level Agreements and Reporting
The ESC team utilizes the following definitions within this SLA section:

Our team will achieve the requirement defined in the RFP for responding to maintenance requests as follows:

<table>
<thead>
<tr>
<th>ESC TERM</th>
<th>DEFINITION</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Event</strong></td>
<td>System generated alert to the ESC support team from agents monitoring equipment and/or applications within the production environment.</td>
</tr>
<tr>
<td><strong>Severity</strong></td>
<td>Classification assigned to a Service Request. Used to determine response time and priority by ESC when a service request is issued.</td>
</tr>
<tr>
<td><strong>Defect Severity Level 1 (HIGH)</strong></td>
<td>An event or service request within the production environment(s) that prevents, or otherwise severely impacts, the client's ability to conduct business, requiring the quickest response time and resolution.</td>
</tr>
<tr>
<td><strong>Defect Severity Level 2 &amp; 3 (MEDIUM)</strong></td>
<td>An event or service request within the production environment(s) that impairs the client's ability to conduct business, but has a workaround and doesn't require immediate resolution</td>
</tr>
<tr>
<td><strong>Defect Severity Level 4 (LOW)</strong></td>
<td>A request for service that does not require immediate resolution. May be a long-term enhancement request or placeholder for later review.</td>
</tr>
<tr>
<td><strong>Target</strong></td>
<td>Defined standard for a specific SLA measurement.</td>
</tr>
<tr>
<td><strong>Goal</strong></td>
<td>Percentage of time the target is met in ideal circumstances.</td>
</tr>
<tr>
<td><strong>Success</strong></td>
<td>Percentage of time the target is met over the course of the agreement to be considered successful.</td>
</tr>
<tr>
<td><strong>Service Request</strong></td>
<td>A request for support issued by the client via the client's Helpdesk Support Utility (Mantis Ticketing System)</td>
</tr>
<tr>
<td>SFPUC Service Level Description</td>
<td>SFPUC Service Level Calculation (Target Response Time)</td>
</tr>
<tr>
<td>---------------------------------</td>
<td>-------------------------------------------------------</td>
</tr>
<tr>
<td><strong>Defect Severity Level 1:</strong> Requires immediate attention - Critical production functionality is not available or a large number of users cannot access the Application. Causes a major business impact where service is lost or degraded and no workaround is available, therefore preventing operation of the business.</td>
<td>Request Response Time: 30 minutes. Request Resolution Time Target: &lt; 2 hours. Maximum Permitted Request Resolution Time: &lt; 48 hours.</td>
</tr>
<tr>
<td>SFPUC Service Level Description</td>
<td>SFPUC Service Level Calculation (Target Response Time)</td>
</tr>
<tr>
<td>---------------------------------</td>
<td>-----------------------------------------------------</td>
</tr>
<tr>
<td><strong>Defect Severity Level 2:</strong> Requires priority attention - Some important production functionality is not available, or a small number of users cannot access the system. Causes significant business impact where service is lost or degraded and no workaround is available, however the business can continue to operate in a limited fashion.</td>
<td>Request Response Time: 1 hr. Request Resolution Time Target: &lt; 4 hours Maximum Permitted Request Resolution Time: &lt; 96 hours</td>
</tr>
<tr>
<td><strong>Defect Severity Level 3:</strong> Requires attention - There is a problem or inconvenience. Causes a business impact where there is minimal loss of service and a workaround is available such that the system can continue to operate fully and users are able to continue business operations.</td>
<td>Request Response Time: 1 hr. Request Resolution Time Target: &lt; 6 hours Maximum Permitted Request Resolution Time: &lt; 7 days</td>
</tr>
<tr>
<td>SFPUC Service Level Description</td>
<td>SFPUC Service Level Calculation (Target Response Time)</td>
</tr>
<tr>
<td>--------------------------------</td>
<td>-------------------------------------------------------</td>
</tr>
<tr>
<td><strong>Defect Severity Level 4:</strong> There is a problem or issue with no loss of service and no business impact</td>
<td>Request Response Time: 1 hr.</td>
</tr>
<tr>
<td></td>
<td>Request Resolution Time Target: &lt; 24 hours</td>
</tr>
<tr>
<td></td>
<td>Maximum Permitted Request Resolution Time: &lt; 7 days</td>
</tr>
</tbody>
</table>

Reporting is an important aspect of the overall service level management process. The ESC team will gather data by automated and manual means (depending on the tools available for this partnership) and consolidate into meaningful reports.

Our standard business practice is to develop SLAs jointly with the customer. This joint development is a multi-stage process, which follows ESC's process framework (based on ITIL). This begins with establishing Service Level Requirements (SLRs), followed by a stabilization period in which Service Level Objectives are targeted, and, finally, the SLAs are established. This practice ensures a balance for both SFPUC and ESC whereby SFPUC has a SLA tailored to their specific needs without having to over-engineer the solutions.

The following sections describe aspects of this approach and ESC's approach to Service Level Management in more detail.

**The SLA Definition Process**

In general, SLA definition involves:

- Understanding the needs and objectives
- Determining and validating the SLR's
- Verifying the stability of service
- Developing and obtaining agreement to the SLA
The process will vary slightly in relation to the maturity of the service level metrics and measurements at the time of transition. In order to rapidly manage the quality of service delivered, we propose to execute the following three-phase plan:

1. During the proposed Analysis and Design phase (Stage 1 - Phase 2), ESC and SFPUC will identify all components, elements, and severity levels, priorities subject to SLA or Key Measurements (KM). Methodologies, processes, and algorithms will also be defined. Temporary Service Level Objectives "SLOs" will be mutually agreed upon.

2. The Measurement Phase will begin once agreement for the service levels have been established and will proceed to capture information for monthly reporting prior to the end of the post go-live / hyper care period. The post go-live period will last 2 months. During this phase ESC will perform the measurements agreed to and these measurements will be used to define the Service Levels Objectives for Critical (SLA) and Non-Critical (KM) components, elements, groups and services. It is expected that these measurements will be above the mentioned SLO and equal or above Industry Standards for a similar environment.

3. Based upon the results of the Measurement Phase, Service Level Agreements will be defined, negotiated and documented.

Our team proposes that the post go-live support period be considered the Measurement Phase for the purposes of finalizing service levels. We are fully committed to SLA-based contracts supported with penalty and reward conditions.

**APPLICATION SUPPORT WORKFLOW**

Our team will utilize our standard Application Management Services support methods to achieve the items identified within scope. Our escalation of Oracle C2M application support is shown below with all issues being handled by the appropriate support group to resolve issues communicated via email/phone by SFPUC users.
The following chart shows the level of support involved in the Application Management Services and their responsibilities:

<table>
<thead>
<tr>
<th>Level</th>
<th>Responsibility</th>
<th>Description of Support Services</th>
</tr>
</thead>
<tbody>
<tr>
<td>Level 0</td>
<td>SFPUC Super User / Authorized Contact</td>
<td>Initial problem resolution support provided from super users to end users of the C2M application. Where SFPUC super users cannot resolve the problem, they will contact and report the problem to ESC's Service Desk.</td>
</tr>
<tr>
<td>Level 1</td>
<td>ESC's Service Desk (Application or Hosting)</td>
<td>Problem resolution support for end users, which may include call triage and prioritization, navigation, password resets, &quot;How to,&quot; or other support which can be done quickly without having to perform root cause analysis. May not be C2M questions or issues.</td>
</tr>
</tbody>
</table>
| Level 2| ESC's AMS Application Support (C2M)     | ESC's AMS Hosting Support (Hosting)  
Break-fix resolution and root cause analysis support to address C2M application problems assigned to ESC. Level 2 problems could include incidents/events, detailed how-to questions, configuration changes or minor enhancements. 
Managed hosting break-fix resolution and root cause analysis support. Support includes hardware, network, security, access related issues. |
| Level 3| ESC's AMS As-Needed Support Team        | Major enhancements that require an estimate consisting of a full SDLC to implement, requiring scope, planning, and management as standalone projects (e.g., major upgrades, introduction of a new module or sub-module). May also include the application of patches or support for enhancements. Escalation of break-fix issues from level 2. |
| Level 4| Oracle's Product Support (Application)  | Break-fix resolution and root cause analysis support to address C2M and/or application problems which may require liaising with Oracle to resolve. 
Break-fix resolution and root cause analysis support to address hardware, Network or operating system related problems which may require liaising with product vendor to resolve. |
|        | Hardware Product Support (Hosting)      |                                                                                                  |
Level 1 – Application and Hosting Services Responsibilities

Service Desk roles and responsibilities are as follows:

- Log any reported incident or inquiry and its related information in ESC's Remedy ITSP tool
- Transfer the incident or inquiry to the Application Support Services or Hosting Services team. The incident or the inquiry is transferred to the application monitoring and tracking tool via an automatic interface
- Responsible for the incident management process (from the creation to the resolution of the incident) for all incidents reported to them.

Assumption: Initial triage and problem resolution will be performed by ESC's Service Desk. The ESC Services will log and dispatch reported Incidents to Application Support or Infrastructure teams as required.

Level 2 - Application Support Services and Hosting Services Responsibilities

Application Support Services and Hosting Services roles and responsibilities include, but are not limited to, the following:

- Log updates to any reported incident or inquiry and its related information in ESC's Remedy ITSP tool after assignment to the incident or inquiry.
- Provide answers to user inquiries and attempt resolution on application incidents where specific knowledge-base or personal expertise exists.
- Transfer the Incident or Inquiry to the Level 3 team (i.e., Oracle) whenever they cannot provide prompt resolution to the incident or quick answer to the inquiry, as defined in the Operational Framework.
- The Service Desk is responsible for the incident management process (from creation to resolution of the incident) for all reported incidents. They will track, report, and escalate as defined in the Operational Framework.

Incident ownership remains with the ESC Application Support team at all times.

Level 3 - Application and Infrastructure Support; Third Parties

Roles and responsibilities of Level 3 support in relation to incidents include:

- Provide SME support in incident diagnosis
- Provide SME support in the resolution of the incident
- Participate in escalations when required
- Participate in the preparation of the incident report.

The Incidents Management activity is largely reactive, because the intention is to restore service to the end-users with minimum disruption to their work. Thus, the lifecycle of an incident is usually rapid from its logging to closure. Typically, Incidents that cannot be resolved immediately by the service desk are also assigned to a client's business line specialist group in preparation for a work-around or resolution to be provided as quickly as possible while the Level 2 or Level 3 support team continues the investigation and corrective measures.
**Level 4 - Oracle C2M Product and Hosting Hardware Support:**

Roles and responsibilities of Level 4 support in relation to incidents include:

- Provide SME support related to Hardware and Software
- Provide patch support
- Provide hardware and software bug fixes

**WHY ESC AMS?**

The benefits of our CIS solution support approach are that it:

- Your business matters to us – whether you serve 3,000 clients to 9,000,000. Everyone is just as important to us and receives top priority and personalized service – on demand and available to you 24/7.
- Ensures a smooth and thorough transition of knowledge from project resources to support team resources
- Minimizes the risk in early stages of the support cycle
- Ensures a disciplined and structured approach to installation of software fixes, code patches, updates and releases
- Provides responsiveness and flexibility aligned to the business needs of SFPUC
- Ensures the highest standard of quality through the use of best-in-class AMS processes and toolsets, ongoing measurement of client satisfaction and a service level based approach
- Provides commitment – ESC is comfortable with SLA-based agreements where there are penalties associated with missed service levels.
## Phase 2 Key Activities and Deliverables

<table>
<thead>
<tr>
<th>Phase</th>
<th>Key Activities</th>
</tr>
</thead>
</table>
| Analysis & Design | - Develop business requirements.  
- Develop "To-Be" process flow diagrams and activity profiles.  
- Conduct design review/challenge sessions.  
- Initial Configuration  
- Finalize the detailed process design and business activities.  
- Develop functional and technical specifications.  
- Develop the data migration strategy.  
- Develop the testing strategy and plan.  
- Develop integrated scripts for business scenarios.  
- Develop the detailed Development phase project plan.  
- Identify, document and define key financial reporting related to risks and mitigating controls to-be processes for business process controls task. |

<table>
<thead>
<tr>
<th>Duration</th>
<th>Quality Control Process</th>
</tr>
</thead>
</table>
| 4 Months | - Design documents reviewed and approved  
- Testing plan development initiated  
- Training plans reviewed and approved |

<table>
<thead>
<tr>
<th>Key Deliverables</th>
<th>Key Application</th>
</tr>
</thead>
</table>
| Business requirements  
"To-Be" process flow diagrams and activity profile documents  
Gap analysis and solution recommendations  
Reports, Interfaces, Conversions, and Extensions (RICE) build strategy and plan  
Data migration strategy  
Functional test scripts  
Detailed Phase Project plan  
Initial Business Process Risk and Internal Controls Frameworks  
Initial Segregation of Duties Matrix  
Initial Critical Access Matrix | - PMF for requirements gathering through design specifications  
- Tools, frameworks and other repositories specific to Oracle environments for compliance  
- ESC's Consulting leading practice risk assessments and control frameworks  
- ESC's Consulting leading practice existing segregation of duty and critical access rules matrices  
- Utility Best Practices & Integration Points |
Request for Proposal

RFP Name: SFPUC Hetch Hetchy Power Electric Billing System Replacement Project

Version: 1.0

Agreement No: PUC.PRO.0113

Date: May 28, 2018

San Francisco Water Power Sewer
Services of the San Francisco Public Utilities Commission

By participating in this competitive process, Proposer agrees that any agreement resulting from this process may be utilized by other public entities to procure the commodities and/or services on the same terms.

525 Golden Gate Ave • San Francisco, CA 94102.
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1 Definitions and Acronyms

"Agreement" refers to the agreement or contract negotiated between the Consultant and the City pursuant to this RFP.

"Consultant" refers to the Proposer awarded the Agreement for services under this RFP.

"Proposer" refers to any legal entity(ies) submitting a proposal in response to this RFP.

Abbreviations and acronyms that may be used throughout this RFP include:

AD................. Microsoft Active Directory
AGM................. Assistant General Manager
CC&B.............. Customer Care & Billing
CCA................. Community Choice Aggregation
CIS................. Customer Information System
CMD................. Contract Monitoring Division
CPSF.............. CleanPowerSF
CSB................. Customer Services Bureau
EDS................. Energy Data Systems
EOPR.............. Effective Overhead and Profit Rate
FSHP.............. First Source Hiring Program
HHP................. Hetch Hetchy Power
IRS................. Internal Revenue Service
ITS................. Information Technology Services
JV................. Joint Venture
LBE................. Local Business Enterprise
MCO................. Minimum Compensation Ordinance
MDMS.............. Meter Data Management System
NTP................. Notice to Proceed
PE................. Power Enterprise
POU................. Publicly Owned Utility
RFP................. Request for Proposals
RS................. Retail Services
SaaS................. Software as a Service
SFPUC............. San Francisco Public Utilities Commission
SI................. System Integrator
USE................. Utility Star Enterprise
VPN................. Virtual Private Network
2 Introduction

The San Francisco Public Utilities Commission (SFPUC) is a department of the City and County of San Francisco (City or CCSF). SFPUC provides retail water and sewer services to San Francisco, wholesale water to three Bay Area Counties, and power to customers in San Francisco.

SFPUC’s Customer Services Bureau, in coordination with Information Technology Services, manages the billing operations for 180,000 water and wastewater customers using Oracle Utilities Customer Care & Billing (CC&B) software, version 2.5 SP2. In addition, SFPUC’s Power Enterprise services approximately 3,500 electric customers throughout San Francisco and Moccasin, as well 270 water, wastewater and gas customers located at Treasure Island using Able-Soft Utility Star Enterprise.

At this time, SFPUC’s Power Enterprise would like to replace its current electric billing system with a new off-premise, turn-key billing system that is fully compatible with the existing Oracle CC&B billing system used by SFPUC’s Customer Services Bureau, and capable of sharing many of its custom-built interfaces, as described in greater detail herein.

The proposed billing system must be comprehensive, flexible and state of the art. It must be designed to service the operational needs of an organization operating in the utility sector, meet governing regulatory requirements, and support the complete billing cycle, including service connection, meter reading, application of rates, billing, payments processing, collections, and fieldwork. The system must be integrated with other systems developed by SFPUC, as described in greater detail herein. The system must handle customer requests for any kind of service that they may need (new service connection request, change meter request, etc.). Finally, the system must be fully managed offsite, utilizing all hardware, software and other necessary components necessary to maintain it at an agreed upon level of service.

The anticipated total amount and duration of the Agreement are as follows:

1. **Contract Start Date:** No later than the date on which an Agreement is reached pursuant to the RFP schedule outlined in Section 2.2.

2. **Contract Duration:** Seven years with option to renew and extend for an additional three years for a total of ten years. The actual contract term may vary, depending upon service and project needs at the City’s sole, absolute discretion. The breakdown for the contract duration is estimated to be as follows:
   i. **Implementation Services:** Up to 24 months.
ii. **On-Going Managed Services**: A period up to five years from final acceptance of the proposed system. Thereafter, the City may elect to renew the contract annually for up to three additional years.

3. **Contract Amount**: The total seven year cost for this project is expected to be $5,750,000 or less. For this reason, Proposals containing higher bids will receive lower scores. The bid amount is inclusive of all reimbursable costs and tasks, including the combined cost of:

   a. **Implementation and Integration Services**: Fixed fee for Implementation and Integration services, which shall include all costs, including travel costs as per Federal CONUS guidelines.

   b. **Managed Services**: Five years of Managed Services, which shall include all fees related to the hosting and licensing of the proposed electric billing system for up to five years and up to a maximum of 25,000 accounts. The total fee for Managed Services shall be paid annually, provided the SFPUC, in its sole and absolute discretion, elects to continue with Proposer’s Managed Services each year.

   c. **As-Needed Technical Services**: As-needed technical services to be used by SFPUC, in its sole discretion, to secure enhancements and customizations not included as part of the Implementation and Integration Services and Managed Services. As-Needed Technical Services shall be charged based on time and material and shall not exceed $1,250,000 during the initial contract term of 7 years.

**2.1 Tentative RFP Schedule**

The SFPUC has established the following target dates for issuance, receipt and evaluation of proposals, in addition to award of an Agreement in response to this RFP. The following dates are tentative, non-binding, and are subject to change without prior notice:

- Advertisement of RFP: 05/30/2018
- Mandatory Pre-Submittal Conference: 06/12/2018 (10:00 AM-12 PM)
- Deadline for Proposers to Submit Questions: 06/25/2018 (5:00 PM)
- Publication of Responses to Proposer Questions: 07/02/2018 (5:00 PM)
- Deadline for Proposers to Submit Proposals: 08/02/2018 (5:00 PM)
- Preliminary Notice of Proposal Rejection: 08/09/2018 (5:00 PM)
- Notification for Oral Interviews: 08/09/2018 (5:00 PM)
2.2 Mandatory Pre-Submittal Conference and Proposer Requests for Information

The pre-submittal conference will be held on June 12, 2018 at 10 AM at:

SFPUC
525 Golden Gate Avenue
Yosemite Conference Room, 2nd Floor
San Francisco, CA 94102
Time: 10 AM – 12 PM

Attendance at the pre-submittal conference is mandatory. Questions regarding this RFP will be addressed at this conference and new information may be provided at that time. While City staff may provide oral clarifications, explanations, or responses to any inquiries, the City is not bound by any oral representation. If any new and/or substantive information is provided in response to questions raised at the pre-submittal conference, it will be memorialized in a written addendum to this RFP and posted on https://sfbid.sfwater.org/ as PUC.PRO.0113.

All requests for information concerning the RFP, whether submitted before or after the pre-submittal conference, must be in writing by email to:

Taraneh Moayed
Principal Administrative Analyst
SFPUC IT Services
525 Golden Gate Avenue, 5th Flr
San Francisco, CA 94102
Email tmoayed@sfwater.org

Substantive replies will be memorialized in written addenda to be made part of this RFP and posted on https://sfbid.sfwater.org/ as PUC.PRO.0113. With the exception of inquiries related to issues identified below, no questions or requests for interpretation will be accepted after the date identified in Section 2.2 of this RFP.

2.3 How to Register as a City Supplier

The following requirements pertain to Proposers not currently registered with the City as a Supplier. Proposers who have completed their Supplier registration and Proposers who will be submitting their proposal through an existing registered City Supplier may skip this section.
Step 1: Register as a BIDDER at: https://sfsupplierportal.sfgov.org/psp/supplier/SUPPLIER/ERP/h/?tab=DEFAULT

Step 2: Follow instructions for converting your BIDDER ID to a SUPPLIER ID. This will require you to register with the City Tax Collector’s Office and submit Chapter 12B and 12C forms through the Supplier portal. Once these forms have been completed, submitted, and processed, you will be notified via email with your organization’s new Supplier ID. That email will also provide instructions for completing your Supplier registration.

City Business Tax Registration Inquiries: For questions regarding business tax registration procedures and requirements, contact the Tax Collector’s Office at (415) 554-4400 or, if calling from within the City and County of San Francisco, 311.

Chapter 12(B) and 12(C) Inquiries: For questions concerning the City’s Chapter 12(B) and 12(C) Equal Benefits and Non Discrimination in Contracting requirements, go to www.sfgov.org/cmd.
3 System Description and Requirements

3.1 HHP Metering System

SFPUC owns and operates the Hetch Hetchy Electric Power System. This system is composed of three hydroelectric powerhouses with a combined total hydroelectric output of nearly 400 megawatts. The SFPUC also generates over 10 megawatts of clean, renewable energy from its 19 solar arrays and 2 biogas cogeneration facilities within San Francisco.

The Hetch Hetchy Power System is managed by SFPUC’s Power Enterprise, which is composed of two business divisions: CleanPowerSF (CPSF), which is San Francisco’s community choice aggregation program, and Hetch Hetchy Power (HHP), which manages the Hetch Hetchy Electric Power System.

This RFP pertains solely to the billing of customers serviced by HHP. HHP has 3,500 electric customers, approximately 270 water, wastewater and gas customers located at Treasure Island, and approximately 100 electric customers in the Moccasin, CA area. The number of electric customer accounts may grow to up to 25,000 within 10 years because the SFPUC will provide power to planned new developments at Candlestick Point, Hunters Point, Treasure Island and Yerba Buena Island. HHP also performs pass-through billing for approximately 350 gas and 15 steam customers.

HHP electric customer charges are based on various rate schedules, including rate schedules that mirror Pacific Gas and Electric Company’s (PG&E’s) commercial, residential, industrial, and flat rates, as well as additional commercial and residential rate schedules developed by HHP. As shown in the following table, electric meter data is received from a variety of sources. SFPUC estimates that customer growth will increase the number of meters and accounts to roughly 25,000 units by 2030. While the existing customer base is primarily municipal, the majority of account growth will occur in the residential sector.

<table>
<thead>
<tr>
<th>Meter Types</th>
<th>Intervals</th>
<th>Owned By</th>
<th>Read By</th>
<th>Billed By</th>
<th>Total Count</th>
</tr>
</thead>
<tbody>
<tr>
<td>Interval Data</td>
<td>5 &amp; 15 minutes</td>
<td>SFPUC, PG&amp;E</td>
<td>Honeywell El Server</td>
<td>SFPUC</td>
<td>600</td>
</tr>
<tr>
<td>Non-Interval or CIS</td>
<td>N/A</td>
<td>PG&amp;E</td>
<td>PG&amp;E</td>
<td>SFPUC</td>
<td>700</td>
</tr>
<tr>
<td>Non-Interval or CIS</td>
<td>N/A</td>
<td>SFPUC</td>
<td>SFPUC</td>
<td>SFPUC</td>
<td>1100</td>
</tr>
<tr>
<td>SmartMeters</td>
<td>15 &amp; 60 minutes</td>
<td>PG&amp;E</td>
<td>PG&amp;E</td>
<td>SFPUC</td>
<td>1100</td>
</tr>
</tbody>
</table>

*Note: Meter counts and proportions may vary prior to Go-Live.

3.2 HHP Existing Billing System

In addition to managing the billing operations for SFPUC’s 180,000 water and wastewater customers using Oracle Utilities Customer Care & Billing (Oracle Utilities or CC&B) software,
SFPUC's Customer Services Bureau (CSB) performs HHP's billing operations using Able-Soft Utility Star Enterprise (Utility Star). Utility Star is a browser-based Customer Information System (CIS) software application built on a SQL Server backend that supports the billing operations for 3,500 power customers using approximately 40 electric rates. Approximately 7 additional rates for water, sewer, gas, and electric are used at Treasure Island. The Utility Star CIS platform is a heavily-modified platform that does not have the core functionality essential to SFPUC for its billing and meter management operations. As a result, many billing operation tasks must be performed manually. Furthermore, the Utility Star system cannot be upgraded to either perform or automate these manual tasks without significant coding.

### 3.3 Managed Services Billing System

The current Utility Star CIS system cannot support a significant increase in HHP's customer base. Given this and various other limitations of the Utility Star CIS system, SFPUC has elected to replace it with a more robust, turnkey billing system that is fully operated offsite by a Managed Service Provider. Ultimately, and depending on cost and feasibility, SFPUC seeks to merge its HHP billing system with the Oracle Utilities Billing System currently utilized for its Water and Wastewater customers.

Figure 1: HHP's Existing, Proposed and Future Billing Systems

This three phase transition will enable CSB and HHP to effectively handle every aspect of the customer lifecycle - including service connection, meter reading, application of rates, billing, payment processing, collections, and fieldwork. Other goals served by this transition include:
• Operating a single call center that can serve customers of both SFPUC Water and HHP;
• Disaggregating revenue to match up with utility costs;
• Accommodating future products, programs, and services that SFPUC will offer its electric customers;
• Supporting complex billing tariffs, including net energy metering;
• Streamlining and aligning manual and automated business processes to make business operations more efficient;
• Supporting necessary integration and interfaces between SPFUC’s automated systems to provide for automation and a single system of record for the customer, with the goal of eliminating redundancy across systems; and
• Accessing enhanced query, extract, manipulation, and reporting of information from the new CIS solution.

3.3.1 Core Billing System Requirements

The transition to the new billing system must accomplish the following core functionalities, including the ability to perform automated mass/batch processing, where applicable.

1. Billing Management
   a. Billing schedules (cycle driven, data driven, and event driven)
   b. Consumption (time based billing, volume base consumption, real time consumption, estimating, and usage calculations)
   c. Net energy metering generation and calculations
   d. Billing characteristics
   e. Calculating simple and complex bill segments
   f. Billing periods (flexible periods, proration, and billing adjustments)
   g. Non-commodity charges (taxes, surcharges, load fees)
   h. Billing types, programs and calculations
   i. Billable charges
   j. Bill controls and reporting
   k. Bill Production

2. Credit & Collection Management:
   a. Credit profile
   b. Credit scoring process
   c. Credit check
   d. Credit bureau interface
   e. Collection interface
   f. Third-party/guarantor/co-signer
   g. Account balance
   h. Bad debt collection processing
   i. Severance processing
   j. Write-off processing
3. **Customer Service and Care:**
   a. Customer contacts
   b. Customer service user interface and portals
   c. Customer conversation scripting and workflow (BPA Script)
   d. Marketing
   e. Notes/ remarks, correspondence
   f. Communication channels
   g. Automated work queue
   h. Letters
   i. Literature (discount programs, initiatives, changes, etc.)
   j. Faxing

4. **Customer Management:**
   a. Customer types
   b. Customer attributes
   c. Customer processing

5. **Financial Systems Interface:**
   a. Deposits: assessments, types, transfers, billing, review, and interest.
   b. Payment types and sources
   c. Outstanding account balances
   d. Misapplied payments
   e. Payment allocation
   f. Balancing, transfer, and reconciling payments
   g. Posting payments and adjustments
   h. Discounts and voluntary contributions
   i. Refund processing, rebates, and escheatment
   j. Financial management reports
   k. Interface(s)

6. **Inventory Management**
   a. Meter type and status
   b. Meter ID, badge ID, manufacturer, model, and serial number
   c. Meter installation and retire date with retire reason
   d. Meter characteristics and notes
   e. Meter location history
   f. Service point installation history
   g. Meter configuration type and registers
   h. Meter testing and maintenance
   i. Meter identification and access
   j. Master/sub meter set-up and management
   k. Equipment types (transformers, batteries, security lights, volume correctors)
   l. Equipment record status and attributes
7. Portfolio Management:
   a. Service offerings
   b. Program offerings
   c. Contract management
   d. Loans

8. Rates Management:
   a. Rate schedules
   b. Rate structure and components
   c. Special rates
   d. Non-commodity charges and fees
   e. Surcharges
   f. Taxes
   g. Exemptions
   h. Rate development and processing

9. Service Address Management:
   a. Premise and service point development
   b. Premise attributes and characteristics
   c. Service point attributes and characteristics
   d. Service point history
   e. Premise history
   f. Land based interface
   g. Geographic data

10. Service Order Management:
    a. Field Order (FO) types
    b. FO attributes
    c. Field Activities (FA) types
    d. FA attributes
    e. FO/FA processing
    f. FO/FA scheduling and distribution
    g. FO/FA interface

11. Usage Management:
    a. Commodity type (electric, natural gas, water, wastewater, steam, and generation)
    b. Views
    c. Route attributes
    d. Meter reading schedule
    e. Meter reading method
    f. Commodity measurements (therms, gallons, kWh, kVARh, lb)
    g. Reading interface
    h. Consumption validation
    i. Unauthorized usage alerts and controls
12. **Customer Service and Care (out-of-scope):**
The following functionalities are out of scope for this project but will be in-scope for future projects. They are being provided for informational purposes only.

   a. Self service at third-party locations
   b. Interactive voice response
   c. Outbound dialer
   d. Self-service on-demand faxing
   e. Self-service on-demand email

**3.3.2 Integration and Interfacing Requirements**
The implementation of the new billing system will require building interfaces to different external systems to enable data integration and/or interchange between the new billing system and external systems, including, but not limited to, those identified below.

1. **My Account - Power:**
My Account – Power is a customer-facing web portal that provides online access to account information, online bills, and a payment channel. My Account - Power must be interfaced with the proposed billing system.

2. **Honeywell EIserver Meter Data Management (MDM) with CommServer J Module:**
EIserver MDM functions as the communication hub for the interval meters and is the repository for periodic meter reads. Oracle database 12c is used by the MDM. EIserver supports loading and validation-editing-estimation (VEE) of meter data. MDM also stores net energy consumption and generation, generating a file with bill determinants for Utility Star to pick up from the server. EIserver MDM must be interfaced directly with the proposed billing system for billing determinants.

3. **Meter Data Management System (MDMS):**
MDMS supports data management. It receives meter data from meters owned by PG&E, storing interval and usage data for reporting and calculating non-metered load data. MDMS also acts as the system of record for service points and meters. MDMS uses Oracle database 12c. MDMS must be interfaced directly with the proposed billing system for all newly added services/meters.

4. **Cognos Business Intelligence Software (BIS):**
Cognos BIS allows for data querying, evaluation, management, and reporting. Cognos BIS must be interfaced with the proposed billing system.

5. **KUBRA:**
KUBRA is a cloud-based e-billing and self-service platform that offers multiple e-billing delivery models, online payments, inbound e-payment consolidation, and a comprehensive document indexing, archival, and retrieval system. The platform integrates with websites and back-end systems, allowing control of content and maintenance of brand consistency across platforms.
This platform allows customers to make one-time payments as a guest. KUBRA must be interfaced with the proposed billing system. Proposers proposing Oracle Utilities CC&B may access and use all code previously developed by SFPUC to interface KUBRA with SFPUC’s Oracle CC&B system.

6. **iStream:**

iStream is an e-billing platform specific to customers that are registered with My Account Power. Customers can make one-time and recurring payments. iStream must be interfaced with the proposed billing system.

7. **Pitney Bowes DOC-1 and Printing by the City’s Reprographics:**

Bills and letters for electric customers will be processed through Pitney Bowes DOC-1 software and will be printed through City’s Department of Reprographics. The new billing system must extract data to meet the specifications of the DOC-1 software for both bills and letters. The task will also involve design of bills and letters in DOC-1. Pitney Bowes DOC-1 must be interfaced with the proposed billing system. Proposers proposing Oracle Utilities CC&B may access and use all code previously developed by SFPUC to interface Pitney Bowes DOC-1 and the City’s Department of Reprographics with SFPUC’s Oracle CC&B system.

8. **Collections Processing:**

The Bureau of Delinquent Revenue (BDR) is the only entity to which SFPUC refers its delinquent debt. The BDR, at its discretion can pass the collection task to its collection agencies. This requires that a monthly interface extract file be produced from the billing system for all non-liable accounts that have been sent a final delinquent notice letter 15 days or more prior. The file is sent via FTP to BDR for debt collection. Account and delinquency information is provided, as well as contact information (e.g., addresses, phone numbers). Proposers proposing Oracle Utilities CC&B may access and use all code previously developed by SFPUC to interface the BDR with SFPUC’s Oracle CC&B system.

9. **Address Validation:**

SFPUC requires that all active mailing addresses in the system be accurate and certified against the USPS Address Matching System to ensure that bills and correspondence are properly routed to the appropriate customers and that SFPUC qualifies for bulk USPS mailing rates. They currently contract this validation process through an outside vendor, Fredco Marketing. Only US-based addresses are validated.

This interface consists of a download and an upload process.

The download (extract) process searches for customer mailing addresses in the billing system and writes the information into a fixed-length flat file, which is be sent to Fredco Marketing. Fredco receives the file and formats the address components into a standardized output recognized by the US Postal Service. Fredco returns a file containing validated and corrected addresses to SFPUC within 2 days.

The upload process utilizes XML-based Application Integration to read the file received from Fredco and updates the addresses in the billing system. This process may also create “To Do”
entries for address changes that require additional investigation or manual updates by business users.

Proposers proposing Oracle Utilities CC&B may access and use all code previously developed by SFPUC to interface CASS with SFPUC’s Oracle CC&B system.

10. Assessor’s Office Legal Owner:
SFPUC must regularly synch with the City Assessor’s Office to maintain current information for the legal owner and mailing address for each service address. Land records files from the City Assessor are received by SFPUC on a monthly basis. The file contains the block/lot number, land recordation date, legal owner’s name and mailing address, and property address information. Proposers proposing Oracle Utilities CC&B may access and use all code previously developed by SFPUC to interface data from the City’s Assessor’s Office with SFPUC’s Oracle CC&B system.

11. Maximo for Field Work Requests:
Maximo handles the download of field work information from the billing system. It also uploads completion of field activity in the billing system. A download process extracts all field activities from the billing system bound for Maximo and stores the information on an outbound staging table that will be exposed to the Maximo application. Maximo will pull the field activity information from this staging table. Upon completion of the field work, Maximo will store the completion information on a separate staging table. A separate process in the billing system will then pull the field work completion information from this staging table, uploading and completing the field activity in the billing system. Cancelations from Maximo are also handled by this upload process, along with new field work directly created in Maximo. Proposers proposing Oracle Utilities CC&B may access and use all code previously developed by SFPUC to interface Maximo with SFPUC’s Oracle CC&B system.

12. Consolidated Billing Statements for Group Accounts:
SFPUC currently distributes a copy of its statements in report form. Certain accounts request an electronic copy of the statements. For these, a program reads the tables and produces an Excel spreadsheet statement. With the implementation of the new billing system, it is expected that a mechanism to produce such statements will be built, including an interface to produce the excel reports. Proposers proposing Oracle Utilities CC&B may access and use all code previously developed by SFPUC to interface such statements with SFPUC’s Oracle CC&B system.

3.3.3 Managed Services Requirements

The SFPUC is seeking a managed services billing system adequate to support HHP’s processing requirements and response times. To ensure that the selected Proposer does not undervalue the hardware in an attempt to limit the cost of the proposal, specific performance clauses and performance bonds may be associated with the contract.

1. CIS technology criteria currently identified by the SFPUC.

A. Computing Environment: SFPUC will consider an N-Tier solution with the database, processing and presentation layers split across server(s) and the
client. The SFPUC prefers the use of a database server and an application server.

B. Database Environment: The required database system is Oracle database 12c or greater or Microsoft SQL Server 2012 or greater, to allow SFPUC to bring the application on premise at a later date if necessary. No other database will be considered.

C. Client User Interface: A Browser User Interface (BUI) solution is required.

D. Product Customization Language: SFPUC requires all product customizations to be developed in a modern, widely-used programming language. If a SaaS (Software as a Service) version of the proposed billing system exists, and has a required programming/scripting language, that language must be used, such that the implementation will be future-compatible with a move to SaaS.

E. Development Environment: SFPUC requires the solution to utilize standard IDE-based or browser-based development tools to facilitate product maintenance and enhancements.

F. Application Approach: SFPUC prefers that the selected billing system have the ability to use built-in configuration options to meet SFPUC business needs and minimize the need to customize. Extensive customization of the product should definitely be avoided.

2. Remote Data Access
SFPUC requires that the solution utilize relational database technology, with direct access to the database provided to SFPUC. This will require setting up remote networking to the vendor network and database and access to the billing systems code, API, and other components. Therefore, Proposals must identify all RDBMS modules required to implement and operate the proposed solution component.

3. Software Licenses
SFPUC expects that all licenses necessary to implement, operate and provide managed services for the new electric billing system will be procured by the selected Proposer. This includes, but is not limited to, database licenses, web server/application server, billing system licenses or any other necessary licenses required for implementing, operating and providing managed services for the new electric billing system for the duration of the contract, which includes implementation and the managed services period.

Proposers should clearly list all software components required and also explicitly state that they have included the costs of procuring said licenses. Proposer will also be responsible for the costs of the licenses for other software components that were not in the list provided in the proposal, but are necessary to implement, operate and provide managed services for the new electric billing system, for the duration of the contract.
4. **Environments**

A minimum of four electric billing system environments will be required for the build/test phase of the project. A minimum of five electric billing system environments will be required for go-live. These environments may include the environments listed below. However, final specification of environments will be determined by Proposer and the SFPUC project team. Data and software are required to be hosted on servers located within the boundaries of the United States.

A. One production environment ("Primary Data Center");
B. One development environment ("Dev Environment");
C. One quality assurance environment ("QA");
D. One test environment ("Test Environment"); and
E. One training environment ("Training Environment").

At least one of the above environments must include a full copy of the production database. Proposer should strive to include sufficient data in each environment to adequately reflect the production environment. Each environment described above will be provided by the selected Proposer. SFPUC requires fully restorable database backups to be provided upon request, including all necessary program and user schemas, logins and passwords.

5. **Security**

The selected Proposer must provide network and application security which will, at a minimum, include each of the following:

A. Provide virtual private network (VPN) access to the selected Proposer’s network.
B. Establish federated Microsoft Active Directory (AD) integration, if requested.
C. Maintain all customer personal, payment and credit information with appropriate privacy controls in accordance with Payment Card Industry Data Security Standard (PCI DSS) and Personally Identifiable Information (PII) Privacy Act.
D. Encrypt data identified as sensitive in the database, and mask all sensitive on the front end. The permission levels for viewing sensitive data shall correlate with user profiles. For example, cashier staff may have access to bank account information, but call center staff would not have access to this information.
E. Ensure public portals and internal systems are secured in support of an identity theft prevention program as required by the Federal Trade Commission’s Red Flag Rules (2003 FACT Act).

6. **Data Retention**

Proposer’s service provider shall retain all critical data (bills, billed amounts, customer, rate and payment data) to maintain billing system operations and functionality for the
duration of the agreement. Data must be archived in a manner prescribed by SFPUC staff and must meet the following minimum requirements:

A. Proposer’s service provider shall provide incremental subscriber data backups at a minimum of every four (4) hours to an off-site location other than the primary hosting center.

B. Proposer’s service provider shall provide weekly, off-site backups not to exceed thirty-six (36) months of SFPUC data to a location other than the primary hosting center. Off-site backups must include data from the previous eight (8) weeks.

C. SFPUC will be granted access to any backup stored in off-site location up to once per week exempt from any service or egress fees. More frequent requests will be available as-needed, but may be subject to reasonable services and egress fees that apply.

7. Desktop & Connectivity
SFPUC’s existing network and desktop environments must be utilized to whatever extent possible. Proposer will not provide a desktop client solution, connectivity hardware or software. However, Proposer will assist SFPUC in installing the required client environment. Proposer’s proposal must identify:

A. The client hardware and software configurations required to implement and operate the proposed solution component.

B. All hardware, software, or services required to be a resident on the user’s desktop and connected to the in-house or outsourced server to SFPUC’s network.

C. The approach for connecting the proposed server hardware platform with the client desktop and mobile devices.

D. The communication, network, and desktop components needed to provide this connectivity is required.

E. Any missing components required to support the proposed solution.

Approximately 20 user desktops shall initially be enabled with access to this software.

8. Disaster Recovery
Proposer’s proposal must define the Disaster Recovery (DR) plan and response times for its proposed environment. The DR plan is an action plan applied in instances where emergency work or system failure HHP operations for the Primary (production) Environment. The pre-disaster/loss level of service shall be restored as soon as commercially reasonable. The DR plan should include:

A. **Recovery Point Objective:** The Recovery Point Objective (RPO) is the maximum acceptable amount of data loss that HHP may experience due to a temporary loss of services and applications. A maximum RPO of four (4)
hours based on incremental backups being made available between production and backup facilities and recovery, if any, of production data is acceptable.

B. The Recovery Time Objective: The Recovery Time Objective (RTO) is the maximum period of continuous time during which access to the services and software applications shall not be available. A maximum RTO of twenty-four (24) hours is acceptable.

C. Data Synchronization: Data Synchronization is the act of replicating or "mirroring" data from the Primary Environment SQL database server to an off-site "backup" location (the back-up data center). Data Synchronization will be used in the case of a DR event to restore service. Data Synchronization occurring at a set interval of at least once per four (4) hours for incremental data set changes and weekly for a full backup is acceptable.

D. Recovery Testing: The DR Plan must include test and exercise activities at least once per contract year to ensure that the Back-up Data Center and Data Synchronization processes are functioning as expected. A maximum of a two-week runtime within the back-up data center before returning system operation to the Primary Data Center is acceptable.

9. Scalability & Storage
The system must be configured to accommodate up to 20 on-line users, approximately 10 of whom will be concurrent users. The system must also be configured to accommodate a monthly batch billing and file maintenance cycles for a total of 25,000 accounts during the initial five-year production period. All system configurations and interfaces shall be performance tested at load conditions reflecting a customer base of at least 30,000 accounts. Disk space may not exceed 80 percent utilization during the initial five-year production period. The system must allow for expansion and must be configured for: conversion of 3 years of online history, 5 years of growth, RDBMS overhead, system files, system sort, and system workspace.

10. Ongoing Technical Support
The selected Proposer must provide on-going 24/7 technical support, including bug fixes, users’ access issues, minor modifications to the original implementation, environment stabilization for smooth operations, and any other steps necessary to ensure smooth operations of the system post go-live based on a defined ongoing maintenance fee.

SFPUC will have Authorized Users who will make Technical Support requests by agreed upon methods, including calling or emailing or submitting service requests on the Managed Service Provider’s web-portal/issue tracking system. It is expected that the Managed Service Provider’s Technical Support staff shall assign to the request the Defect Severity Level (as defined herein) indicated by the requestor. Defect Severity Level 1 and 2 items will be addressed 24/7. Defect Severity Level 3 and 4 items will be addressed during the standard business hours of 6:00am-6:00pm US Pacific Time. As stated above, the selected Proposer is expected to provide channels
for these requests including a Service Provider Subscriber Portal (preferable), calling a toll-free phone number, or by emailing the vendor).

<table>
<thead>
<tr>
<th>Defect Severity Level</th>
<th>Target Response Time</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Defect Severity Level 1:</strong> Requires immediate attention - Critical production functionality is not available or a large number of users cannot access the Application. Causes a major business impact where service is lost or degraded and no workaround is available, therefore preventing operation of the business.</td>
<td>Request Response Time: 30 minutes. Request Resolution Time Target: &lt; 2 hours. Maximum Permitted Request Resolution Time: &lt; 48 hours</td>
</tr>
<tr>
<td><strong>Defect Severity Level 2:</strong> Requires priority attention - Some important production functionality is not available, or a small number of users cannot access the system. Causes significant business impact where service is lost or degraded and no workaround is available, however the business can continue to operate in a limited fashion.</td>
<td>Request Response Time: 1 hr. Request Resolution Time Target: &lt; 4 hours Maximum Permitted Request Resolution Time: &lt; 96 hours</td>
</tr>
<tr>
<td><strong>Defect Severity Level 3:</strong> Requires attention - There is a problem or inconvenience. Causes a business impact where there is minimal loss of service and a workaround is available such that the system can continue to operate fully and users are able to continue business operations.</td>
<td>Request Response Time: 1 hr. Request Resolution Time Target: &lt; 6 hours Maximum Permitted Request Resolution Time: &lt; 7 days</td>
</tr>
<tr>
<td><strong>Defect Severity Level 4:</strong> There is a problem or issue with no loss of service and no business impact.</td>
<td>Request Response Time: 1 hr. Request Resolution Time Target: &lt; 24 hours Maximum Permitted Request Resolution Time: &lt; 7 days</td>
</tr>
</tbody>
</table>
4 Requested Services

4.1 Project Overview

The purpose of this RFP is to identify and select a qualified Proposer to design, code, and implement a new electric billing Hosted Solution, and deliver post implementation managed services and hosting for HHP. Using the Requirements outlined in Section 3.3 of this RFP, the selected Proposer will implement the new HHP electric billing system, performing the tasks listed in Section 4.4.

4.2 Project Schedule

This project is anticipated to require up to 24 months from the issuance of the Notice to Proceed ("NTP") to complete the implementation work, and up to 3 months to complete the stabilization phase. Managed Services shall commence upon completion of the stabilization period. Actual contract terms may vary, depending upon service and project needs at the City's sole, absolute discretion. Proposer selected must be available to commence work no later than the date on which an Agreement is executed pursuant to the RFP schedule outlined above.

4.3 Task Orders

Performance of the services under this RFP will be executed according to a task order process. Proposer is required to provide adequate quality control processes and deliverables in conformance with the technical requirements of each Task Order. Each Task Order will identify a project scope, sub tasks, staffing plan, schedule, deliverables, and budget and costs to complete the tasks. All costs associated with the development of the scope of work for each task order shall be borne by Proposer. However, as provided in the RFP, the budget, if applicable, identified for tasks is an estimate, and the City reserves the right to modify the applicable budget allocated to any task as more specific information concerning the scope of the Task Order becomes available.

4.4 Description of Tasks

Proposer shall identify the electric billing system with which it will replace SFPUC’s existing Utility Star system. The following is a description of the tasks identified to complete the required assignment. Proposer shall expand upon this description of work and/or add tasks to fully identify work and work products, specifically, as applicable to the proposed replacement billing system.
4.4.1 Business and Functional Requirements

The selected Proposer shall analyze the provided documentation and interview stakeholders to develop the business and functional requirements. The requirements will define in-scope configuration, customizations, and functional specifications for the proposed replacement electric billing system and all necessary system interfaces. In developing the business and functional requirements, the selected Proposer will conduct meeting(s) to obtain clarification and decisions on any outstanding issues. The business and functional requirements document must be approved by the designated authority at SFPUC before it is used for the official solution design.

**Deliverables:**
1. Business and Functional Requirements Document;
2. Weekly progress reports detailing tasks, their respective percent completion, and any projected impediments to on-schedule completion;
3. Scheduled weekly conference calls to discuss progress reports; and
4. Additional in-person meetings or conference calls as-needed to ensure timely project completion.

4.4.2 Initial Hardware and Hosting Setup

The selected Proposer shall be responsible for initial setup of fully-functional and accessible hosted environments for the proposed billing system in conformance with the requirements outlined in Section 3.3. The initial environments will be utilized by the project team members for subsequent phases of the project.

**Deliverables:**
1. Draft IT environment strategy document;
2. Setup of initial hardware for project;
3. Installation and configuration of initial environments;
4. Environments installation and validation as follows:
   - Development
   - Quality Assurance – for functional testing
   - Testing – System Integration testing
   - Training – User Acceptance Testing and User Training
   - Production
5. Performance of network and transport testing/validation for successful access and use.
4.4.3 Software Design Specification Document

The selected Proposer will create a Software Design Specification Document that will provide detailed technical specifications on how the proposed electric billing system will be configured and customized to meet the business requirements set forth in task 4.4.1. This will include the core system and its interfaces.¹

The selected Proposer shall conduct several meetings with the HHP’s project team members before finalizing this document, which will require SFPUC approval prior to solution development. If a SaaS version of the proposed billing system exists, the design should be SaaS-version ready to the greatest extent possible, such that the implementation will be future-compatible with a move to SaaS.

The Design Specification document shall describe in detail:

- Assumptions, dependencies, and constraints.
- Development methodology, specifically, the standard recommended practices for the proposed replacement billing system's configuration and customization.
- Architectural strategies, including programming languages, web services, and/or built-in advanced configuration tools for the solution design.
- System and subsystem architecture, including, but not limited to, core components of the proposed replacement billing system like batch processing, business logic components and algorithms, rates schedule and its associated components, entity extensible data-fields, system components, services, programs and other functionalities.
- Specifications on integration with other systems as necessary, including data synchronization, data validation, interface failure/recovery processing, and other exception processing with data flow into the electric billing system.

Configuration and Customization Considerations: Typical utility billing system software offer users the ability to configure their base software to specific business needs by selecting from existing options within their programs. HHP expects that the proposed billing system will have these features and that they will be utilized extensively to meet the needs of SFPUC’s business processes. However, it is understood that implementation will also require some level of customized process flows to meet some of the complex business needs like: retro start/stop,

¹ As mentioned in Section 3.3.2, the new electric billing system must align with several external systems. Several of these systems already interface with the Oracle Utilities CC&B system utilized by SFPUC for its water and wastewater customers. If an Oracle Utilities CC&B system is proposed for SFPUC's electric customers, the selected Proposer may access and use all code previously developed by SFPUC to interface it existing Oracle Utilities CC&B system to these various external systems.
estimated reads, write-offs, collections and severances, liens, meter read high-low processing, payment distribution, meter netting, net energy metering, and budget billing, etc. Additional process flow customizations detected during the information gathering phase of this project may be included, as necessary.

Deliverables:
2. Generate weekly progress reports detailing tasks, respective percent completion of tasks, and any projected impediments to on-schedule completion;
3. Schedule weekly conference calls to discuss progress reports; and
4. Conduct additional in-person meetings or conference calls as-needed to ensure timely project completion.

4.4.4 Solution Development

The selected Proposer will develop system components, as provided in the Software Design Specification Document, which will include, among other things, initial integrated premise HHP data upload and ongoing electric-related integration components with external systems, including water, wastewater, and gas at Treasure Island. The selected Proposer will use standard recommended programming for the proposed replacement billing system, including scripting tools, Groovy, Java or any other industry standard programming language for developing new components for the project, including embedded portals and new or adapted user pages for SFPUC staff to perform HHP billing and operations related functions as needed to fulfill the requirements.

At Proposer’s option, SFPUC shall share code from the existing CC&B interfaces for water/wastewater with the selected Proposer, where available and applicable. However, the selected Proposer shall be solely responsible for the accuracy of the code in the new electric billing system, if it elects to utilize it.

The selected Proposer shall create and execute detailed unit tests with clear test scenarios for all components developed and/or modified. The selected Proposer shall ensure that all components pass the unit tests and document the results before commencing data conversion, functional testing, system integration testing, and performance testing before user acceptance testing is conducted.

SaaS Considerations: If the proposed system is available as both on premise and software-as-service (SaaS) and selected Proposer is proposing the use of non-SaaS version, implementation of the proposed non-SaaS version must be fully compliant with the specifications for the SaaS version. This will ensure that implementation for future migration to SaaS can be accomplished with minimal effort. Related to this, the selected Proposer must ensure that all customizations, configurations, and other enhancements shall not require any rework in the event SFPUC elects to migrate to the SaaS version of the proposed system. This requirement is applicable to configuration options of the proposed billing system, technologies,
programming languages, database enhancements or any other technical component necessary for implementing the billing system. If deviations are necessary from the specifications of the SaaS version of the proposed system, they must be identified and approved by SFPUC. Unauthorized deviations shall be rectified by the selected Proposer at Proposer’s own cost.

**Deliverables:**

1. Write programs and scripts in standard programming languages like Groovy, scripting, and/or Java;
2. Test plans, execution steps and results;
3. Conduct data conversion scripts and converted data;
4. Generate weekly progress reports detailing tasks, respective percent completion of tasks, and any projected impediments to on-schedule completion;
5. Schedule weekly conference calls to discuss progress reports; and
6. Conduct additional in-person meetings or conference calls as-needed to ensure timely project completion.

### 4.4.5 Data Conversion

The selected Proposer shall convert three years of the most recent customer and billing-related data from Utility Star Enterprise into the proposed electric billing system and ensure that all financial and other data integrity is preserved and that new data meets validation requirements. The selected Proposer shall generate auditor-ready financial data integrity reports following data initialization and for ongoing billing interfaces to external systems. A data integrity analysis and validation must be performed to confirm the data conversion success. Based on the results derived from the data analysis and, the selected Proposer shall make corrections and revisions where necessary, and perform re-tests, as necessary.

**Deliverables:**

1. Convert data scripts;
2. Generate weekly progress reports detailing tasks, respective percent completion of tasks, and any projected impediments to on-schedule completion;
3. Schedule weekly conference calls to discuss progress reports; and
4. Conduct additional in-person meetings or conference calls as-needed to ensure timely project completion.

### 4.4.6 Report Development

The selected Proposer will create reports with the new system or associated business intelligence (BI) products to replace existing reports in use by CSB and Power Retail Services. Anticipated reports needed include:

- Master Account Bill Report
- Meter/submeter report if sub metering is performed in the billing system
- ACH report
- Monthly bill report and database extract
• Accounts receivable report

A complete list of reports should be developed as part of the Business and Functional Requirements. Up to 60 reports may be needed, some of which are likely out-of-the-box for most billing systems.

Deliverables:
1. Report requirements definitions;
2. Completed reports.

4.4.7 Product/Functional Testing

The selected Proposer shall create a test plan for functionally testing the developed components and testing the integration of systems (Product/Functional Testing). Upon the successful completion of the developed solution, the selected Proposer shall conduct product/functional testing to ensure that all newly developed components function seamlessly without any adverse effect on other components within the billing system. Based on the results of the product/functional tests, the selected Proposer shall deliver code/bug fixes, make corrections and revisions where necessary, and perform re-tests, as necessary.

Deliverables:
1. Test plans, scripts, models, execution results and analysis, corrective steps and fixes, as required;
2. Generate weekly progress reports detailing tasks, respective percent completion of tasks, and any projected impediments to on-schedule completion;
3. Schedule weekly conference calls to discuss progress reports; and
4. Conduct additional in-person meetings or conference calls as-needed to ensure timely project completion.

4.4.8 System Integration Testing

Upon the successful completion of Product/Functional Testing, the selected Proposer will conduct system integration testing to ensure that all newly developed components function seamlessly and without any adverse effect on any existing external applications, systems, and processes (System Integration Testing).

System Integration Testing must be documented and show that the new billing system is fully operable. Based on the results derived from the System Integration Testing, the selected Proposer shall make corrections and revisions where necessary, and perform re-tests, as necessary.

Deliverables:
1. Test plans, execution results and analysis, corrective steps and fixes, as required;
2. Generate weekly progress reports detailing tasks, respective percent completion of tasks, and any projected impediments to on-schedule completion;
3. Schedule weekly conference calls to discuss progress reports; and
4. Conduct additional in-person meetings or conference calls as-needed to ensure timely project completion.

4.4.9 Performance Testing

Upon the successful completion of System Integration Testing, the selected Proposer will conduct performance testing to ensure that all newly developed components function seamlessly in large volumes (Performance Testing). Performance Testing shall also include testing the systems’ ability to recover in the event of a disaster or system failure. Performance Testing must be documented. Based on the results derived from the Performance Testing, Proposer shall make corrections and revisions where necessary, and perform re-tests, as necessary.

**Deliverables:**
1. Test plans, execution results and analysis, corrective steps and fixes, as required;
2. Generate weekly progress reports detailing tasks, respective percent completion of tasks, and any projected impediments to on-schedule completion;
3. Schedule weekly conference calls to discuss progress reports; and
4. Conduct additional in-person meetings or conference calls as-needed to ensure timely project completion.

4.4.10 User Acceptance Testing

Upon completing the System Integration Testing, the selected Proposer and HHP will conduct User Acceptance Testing (UAT). The selected Proposer will guide HHP testers in developing test scenarios, defining expected results, executing the tests and documenting the results. Based on the results derived from the UAT effort, the selected Proposer shall make corrections and revisions where necessary, and perform re-tests, as necessary.

**Deliverables:**
- Test plans, execution results and analysis, corrective steps and fixes, if required;
- Generate weekly progress reports detailing tasks, respective percent completion of tasks, and any projected impediments to on-schedule completion; and
- Schedule weekly conference calls to discuss progress reports.

4.4.11 Solution Deployment

Upon the completion of System Integration Testing, the selected Proposer shall deploy all components developed pursuant under the agreement with the SFPUC into SFPUC’s production environment. The selected Proposer will create a detailed Production Deployment Project Plan that will provide detailed steps for actual deployment/Installation in the production environment. The selected Proposer will lead in the deployment, monitor the accuracy of the deployment, and troubleshoot if the need arises during at least two mock go live rehearsals.

**Deliverables:**
- Production Deployment Project Plan, go-live validation steps and results;
• Generate weekly progress reports detailing tasks, respective percent completion of tasks, and any projected impediments to on-schedule completion;
• Schedule weekly conference calls to discuss progress reports; and
• Conduct additional in-person meetings or conference calls as-needed to ensure timely project completion.

4.4.12 Knowledge Transfer & Training

The selected Proposer shall develop documentation to train and transfer knowledge to SFPUC staff. Full system documentation must be delivered, including new business and technical processes, configuration/rates maintenance, user interface changes, system integration components, and a technical/code walk-through.

All custom code, data and technical components built for the implementation of the billing system will have to be made available to SFPUC upon request at no additional charge. The format in which such code will be shared should comply with the standard export mechanisms applicable for the proposed base billing system, or in a format approved by SFPUC. The selected Proposer will also ensure that the full set of such modification are provided without any conditions. The selected Proposer, is however, will not be required to provide SFPUC with technical components that were used by the product vendor to build the “base” billing system. This condition is limited only to those components that were built for customization and configuration of the base system for SFPUC’s requirements. SFPUC, at its discretion, may share such components with its internal staff or other authorized vendors working for it, without any condition.

Deliverables:
• Develop training material, operational procedures document and training for SFPUC staff, including ITS and Customer Services Bureau staff;
• A minimum of three training sessions for Customer Service representatives in the usage and administration of the new billing system, such that staff are sufficiently trained to perform their daily tasks;
• At least one training session for read-only users of the system, such that staff are sufficiently trained to perform their daily tasks; and
• At least one training session for administrator-level users, such that staff are sufficiently trained to perform their daily tasks.

4.4.13 Stabilization Support

Post deployment, the selected Proposer will monitor and maintain the HHP Electric billing system for three full billing cycles to ensure smooth functioning. The work will include all necessary tasks, including monitoring, design work, software development, unit and integration testing and deployment of fixes in production. Proposer shall provide service levels, based on severity and/or priority, with specific maximum response times during and outside of normal business hours.
Deliverables:
- Provide full-time technical staff and functional experts for three full billing cycles;
- Provide technical documentation for fixes for three full billing cycles;
- Generate weekly progress reports detailing tasks, respective percent completion of tasks, and any projected impediments to on-schedule completion;
- Schedule weekly conference calls to discuss progress reports; and
- Conduct additional in-person meetings or conference calls as-needed to ensure timely project completion.

4.4.14 Managed Services

After three successful billing cycles, the selected Proposer shall begin the Managed Services phase. In this phase, the selected Proposer shall monitor and maintain the HHP billing system for up to five years, including maintenance of all required licenses at their own cost. Proposer must maintain three test and development environments for the purpose of testing changes and enhancements to the proposed billing system after the commencement of the Managed Services phase.

Proposals must define Managed Services service levels with specific maximum business hour response times to issues based on their severity level.

Managed Services will include all necessary tasks to keep the system billing consistently, including but not limited to:
- Ensuring all environments (including Production, Development, Test & QA) are safe, secure, and properly maintained as per the standard guidelines for each component that is used to create and run the environment. The tasks include, but are not limited to, timely patching, updates, upgrades, maintenance of security policies for all technical stack components; hardware & software, necessary to support these systems;
- Ensuring that environment is accessible to SFPUC staff;
- System monitoring and ensuring smooth functioning as per the agreed levels of service;
- Design, software development, unit and integration testing for deployment of post deployment bug fixes;
- Design, software development, unit and integration testing for deployment of minor modifications to the system up to 100 hours annually; and
- Ensuring that interfaces are working and system/database uptime is preserved.

Deliverables:
1. A Service Level Agreement for the proposed Managed Services that meet the requirements of Section 3.3.3 ("Managed Service Requirements");
2. List of proposed server hardware and software to be used for Managed Services;
3. Description of server configurations housed within an outsourced facility; and
4. Technical documentation for bugs detected and fixes during the five year period.
4.4.15 Additional Customization Work

Proposers shall include in their proposal an as-needed fund of $1,250,000 ($250,000 per year for a period of five years) to pay for as-needed enhancements and technical services during the managed services phase. This fund shall be applied to software enhancements, changes to business processes that were not anticipated in the initial implementation and which SFPUC anticipates encountering during the contract term, and possibly for a major version upgrade. Each Proposal must clearly identify a detailed list of typical software enhancements or changes the SFPUC may seek during the contract term, as well the range of hourly rates by resource type to perform those rates.

Deliverables:

- List items typically not in scope;
- Estimate costs for out-of-scope items where time can be estimated with some confidence; and
- Provide range of hourly billing rates by resource type for additional customizations beyond original scope.
PERSONAL SERVICES CONTRACT SUMMARY ("PSC FORM 1")

Department: PUBLIC UTILITIES COMMISSION -- PUC
Dept. Code: PUC

Type of Request: ☑ Initial ☐ Modification of an existing PSC (PSC # ___________)

Type of Approval: ☐ Expedited ☑ Regular ☐ Annual ☐ Continuing ☐ (Omit Posting)

Type of Service: Yosemite Creek Daylighting Project (PRO.0123)

Funding Source: Sewer System Improvement Program PSC Duration: 5 years

PSC Amount: $2,000,000

1. Description of Work
   A. Scope of Work/Services to be Contracted Out:
      The consulting team will provide the professional engineering services for the Yosemite Creek Daylighting Project, a Phase 1 Sewer System Improvement Program (SSIP) Green Infrastructure Early Implementation Project. The Yosemite Creek Daylighting Project consists of daylighting approximately 1,700 feet of Yosemite Creek between Bacon/Oxford streets and Wayland/University Streets to convey stormwater adjacent to, or within, the right of way and through McLaren Park. The scope of work will include professional engineering services to support project design and construction, including civil, geotechnical, structural, hydrologic/hydraulic modeling, engineering analysis, and landscape architectural services. The consultant will also provide geomorphology services related to creek channel design. In addition, the consultant will provide expertise on the design and construction of specialized green infrastructure technologies such as sub-surface capillary rise irrigation systems and alternative storage system.

   B. Explain why this service is necessary and the consequence of denial:
      These services are necessary in order to successfully deliver San Francisco's first creek daylighting project, and meet the accepted budget and schedule associated with the re-baselining of SSIP. Creek channel design is a highly specialized endeavor that requires the expertise of engineers with extensive professional experience performing similar projects. In addition, the project includes a subsurface stormwater holding reservoir and associated subsurface capillary rise irrigation system for the Louis Sutter Soccer Field in McLaren Park. Both of these innovative green infrastructure technologies are essential to reaching the project's stormwater management performance metrics. The project cannot be delivered without the consultant expertise.

   C. Has this service been provided in the past? If so, how? If the service was provided under a previous PSC, attach copy of the most recently approved PSC.
      The PUC has an existing consultant contract for as-needed green infrastructure engineering PSC No. 47931-14/15(CS-1000). The scope of work for the Upper Yosemite Creek Daylighting Project will exceed the maximum threshold amount per task order of $400K, which is why we are issuing a project specific RFP.

   D. Will the contract(s) be renewed?
      No.
E. If this is a request for a new PSC in excess of five years, or if your request is to extend (modify) an existing PSC by another five years, please explain why.
   The proposed contract duration is 5-years. The project schedule from design, bid and award, and construction is at minimum 3.5 years. A five year contract allows for unforeseen schedule delays, and allows the consultant to perform required post-construction stormwater monitoring.

2. Reason(s) for the Request
   A. Indicate all that apply (be specific and attach any relevant supporting documents):

   ☑ Short-term or capital projects requiring diverse skills, expertise and/or knowledge.

   B. Explain the qualifying circumstances:
      The Yosemite Creek Daylighting Project is a unique capital project. At the current time, it is the only creek daylighting project planned as part of SSIP Phase 2. Specific, one time expertise is necessary to deliver the project.

3. Description of Required Skills/Expertise
   A. Specify required skills and/or expertise: The consultant will provide engineering services including civil, geomorphology, hydraulics, geotechnical, slope stabilization and structural engineering for the design and construction of the creek channel auxiliary facilities. In addition the consultant will need to have expertise in the design of passive high-efficiency irrigation and alternative storage systems. The consultant will provide an integrated team for all engineering and landscape design of the stream bed and channel. Work outside the stream bed and channel will be performed by City engineering resources.

   B. Which, if any, civil service class(es) normally perform(s) this work? 5260, Architectural Assistant 1; 5261, Architectural Assistant 2; 5262, Landscape Architect Assoc 1; 5272, Landscape Architect Assoc 2; 5274, Landscape Architect;

   C. Will contractor provide facilities and/or equipment not currently possessed by the City? If so, explain:
      No.

4. If applicable, what efforts has the department made to obtain these services through available resources within the City?
   PUC approached both PUC Engineering Management Bureau (EMB) and Public Works Infrastructure Design and Construction regarding providing these specialized design services for the project. PUC does not have the specialized engineering resources for the project though EMB will provide a project engineer to oversee and coordinate city staff engineers and consulting engineers. Public Works agreed to provide engineering services for project elements within the existing roadway, including hydraulics and connections back to the Combined Sewer System (CSS), street and curb ramp design, and environmental specifications. Public Works will also provide landscape architectural services for the areas outside the creek channel. PW also declined to provide the specialized creek channel design and does not have the expertise to design the passive high-efficiency irrigation and alternative storage system.

5. Why Civil Service Employees Cannot Perform the Services to be Contracted Out
   A. Explain why civil service classes are not applicable.
      Creek channel, passive high-efficiency irrigation and alternative storage system design requires specialized services from an interdisciplinary team of civil, environmental, geotechnical, geomorphological, and hydraulic engineers. Civil service staff do not have this expertise as it relates to the design.
B. If there is no civil service class that could perform the work, would it be practical and/or feasible to adopt a new civil service class to perform this work? Explain. No. The services are not likely to be used in the future.

6. Additional Information
A. Will the contractor directly supervise City and County employee? If so, please include an explanation.
   No.

B. Will the contractor train City and County employees and/or is there a transfer of knowledge component that will be included in the contact? If so, please explain what that will entail; if not, explain why not.
   No. Training will not be provided. The skills necessary are very specialized and require knowledge in urban creek daylighting.

C. Are there legal mandates requiring the use of contractual services?
   No.

D. Are there federal or state grant requirements regarding the use of contractual services? If so, please explain and include an excerpt or copy of any such applicable requirement.
   No.

E. Has a board or commission determined that contracting is the most effective way to provide this service? If so, please explain and include a copy of the board or commission action.
   No.

F. Will the proposed work be completed by a contractor that has a current PSC contract with your department? If so, please explain.
   No.

7. Union Notification: On 09/14/2018, the Department notified the following employee organizations of this PSC/RFP request:
   Architect & Engineers, Local 21; Prof & Tech Eng, Local 21; Professional & Tech Engrs, Local 21

☑ I CERTIFY ON BEHALF OF THE DEPARTMENT THAT THE INFORMATION CONTAINED IN AND ATTACHED TO THIS FORM IS COMPLETE AND ACCURATE:

Name: Shamica Jackson   Phone: 415-554-0727   Email: Slackson@sfwater.org

Address: 525 Golden Gate Avenue, 8th Floor San Francisco, CA 94102

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FOR DEPARTMENT OF HUMAN RESOURCES USE

PSC# 44148 - 18/19
DHR Analysis/Recommendation: Civil Service Commission Action:
Commission Approval Required
DHR Approved for 11/19/2018
Receipt of Union Notification(s)
From: dhr-psccoordinator@sfgov.org
To: Jackson_Shamica; amakayan@ftp21.org; annie.wanless@sfgov.org; ecosady@ftp21.org; WendyWong28@yahoo.com; wendywong28@yahoo.com; tmathews@ftp21.org; jschumacher@ftp21.org; lchap@ftp21.org; phebbie@ftp21.org; pkim@ftp21.org; L1PSReview@ftp21.org; Jackson_Shamica; DHR-PSCCoordinator_DHR (HRD)
Subject: Receipt of Notice for new PCS over $100K PSC # 44148 - 18/19
Date: Friday, September 14, 2018 2:01:13 PM

RECEIPT for Union Notification for PSC 44148 - 18/19 more than $100k

The PUBLIC UTILITIES COMMISSION — PUC has submitted a request for a Personal Services Contract (PSC) 44148 - 18/19 for $2,000,000 for Initial Request services for the period 02/01/2019 – 01/31/2024. Notification of 30 days (60 days for SEIU) is required.

After logging into the system please select link below, view the information and verify receipt:

http://apps.sfgov.org/dhrdrupal/node/11569 For union notification, please see the TO: field of the email to verify receipt. If you do not see all the unions you intended to contact, the PSC Coordinator must change the state back to NOT READY, make sure the classes and unions you want to notify are selected and SAVE. Then VIEW the record and verify the list of unions and emails. EDIT the document again, change the state back START UNION NOTIFICATION and SAVE. You should receive the email with all unions to the TO: field as intended
Additional Attachment(s)
PERSONAL SERVICES CONTRACT SUMMARY ("PSC FORM 1")

Department: PUBLIC UTILITIES COMMISSION -- PUC
Dept. Code: PUC

Type of Request: ☑Initial ☐Modification of an existing PSC (PSC # _________)

Type of Approval: ☐Expedited ☑Regular ☐Annual ☐Continuing ☐(Omit Posting)

Type of Service: As-Needed Planning and Design Services for Green Infrastructure (CS-1000)

Funding Source: Sewer System Improv Prog Funds
PSC Amount: $2,000,000 PSC Est. Start Date: 12/01/2014 PSC Est. End Date 12/31/2018

1. Description of Work
   A. Scope of Work/Services to be Contracted Out:
      To provide for green infrastructure projects: civil engineering, landscape architecture, urban design, survey, and geotechnical services specific to green infrastructure project design and delivery; Planning, research, preliminary engineering, project management, engineering design and support for capital and programmatic green infrastructure projects; Green infrastructure construction management, inspection and maintenance planning and implementation; QA/QC services; Research problems, develop studies, provide technical data analysis, identify conceptual design solutions, execute master plans; Habitat assessment for project placement and plant selection; Cost-benefit analyses to inform capital project selection; Creek daylighting expertise including planning and design services (master planning, urban design, safety and accessibility planning and guidance), technical services (engineering, landscape architecture, geomorphology, modeling, and erosion analysis; Regulatory compliance with and enforcement of the San Francisco Stormwater Management Ordinance, including project processing, design review, research of emerging policy and regulatory issues associated with the National Pollutant Discharge Elimination System Permit, inspection, and enforcement of Maintenance Agreements; Decentralized wastewater treatment analysis and design; Wastewater/stormwater/ energy nexus analysis for capital project optimization; and project planning and design with a focus on water conservation, drought planning, and groundwater recharge planning.

   B. Explain why this service is necessary and the consequence of denial:
      If this contract is denied, the schedule of urgent projects within Sewer System Improvement Program (SSIP) will be impacted and will delay crucial planning work performed by the Wastewater Enterprise. The San Francisco Public Utilities Commission (SFPUC) will not be able to meet our goals to successfully deliver the projects and undertake specified planning tasks for SSIP.

   C. Has this service been provided in the past? If so, how? If the service was provided under a previous PSC, attach copy of the most recently approved PSC.
      These services have not been provided in the past. There are no as-needed green infrastructure design service contracts or creek daylighting service contracts that exist to date that satisfy this scope of work. These are relatively new technologies and planning activities for the City.

   D. Will the contract(s) be renewed?
The contract may be renewed depending on future planning needs.

E. If this is a request for a new PSC in excess of five years, or if your request is to extend (modify) an existing PSC by another five years, please explain why.
   not applicable

2. **Reason(s) for the Request**
   A. Indicate all that apply (be specific and attach any relevant supporting documents):
      
      ☑ Short-term or capital projects requiring diverse skills, expertise and/or knowledge.

   B. Explain the qualifying circumstances:
      Specialized expertise includes integrated watershed planning, civil engineering, and landscape design services; planning, designing, and delivering cutting-edge green infrastructure projects at the national level; experience participating on national green infrastructure policy or technical committees; and experience with built green infrastructure projects in dense urban environments. These services will only be needed for a short duration.

3. **Description of Required Skills/Expertise**
   A. Specify required skills and/or expertise: Specialized expertise includes integrated watershed planning, civil engineering, and landscape design services; planning, designing, and delivering cutting-edge green infrastructure projects at the national level; experience participating on national green infrastructure policy or technical committees; and experience with built green infrastructure projects in dense urban environments. For design services, expertise includes urban creek daylighting with built projects.

   B. Which, if any, civil service class(es) normally perform(s) this work? 5203, Asst Engr; 5207, Assoc Engineer; 5211, Eng/Arch/Landscape Arch Sr; 5602, Utility Specialist; 5620, Regulatory Specialist; 6317, Assistant Const Inspector;

   C. Will contractor provide facilities and/or equipment not currently possessed by the City? If so, explain: No.

4. **If applicable, what efforts has the department made to obtain these services through available resources within the City?**
   The City lacks specialized green infrastructure design and engineering and creek daylighting expertise. This contract will provide consultants that have specific expertise and experience relevant to the new technologies and approach that the City does not have experience with.

5. **Why Civil Service Employees Cannot Perform the Services to be Contracted Out**
   A. Explain why civil service classes are not applicable.
      The civil service classes specified above are applicable and will participate in the upcoming design service contracts. However, the consultants will provide specialized green infrastructure design and engineering expertise and experience to City Staff.
B. If there is no civil service class that could perform the work, would it be practical and/or feasible to adopt a new civil service class to perform this work? Explain. Due to the specific nature of these green infrastructure projects, it would not be practical because only short-term support is required at this time.

6. Additional Information
   A. Will the contractor directly supervise City and County employee? If so, please include an explanation.
      No.
   
   B. Will the contractor train City and County employees and/or is there a transfer of knowledge component that will be included in the contact? If so, please explain what that will entail; if not, explain why not.
      Yes. There will be ongoing training for 12 City engineers.
   
   C. Are there legal mandates requiring the use of contractual services?
      No.
   
   D. Are there federal or state grant requirements regarding the use of contractual services? If so, please explain and include an excerpt or copy of any such applicable requirement.
      No.
   
   E. Has a board or commission determined that contracting is the most effective way to provide this service? If so, please explain and include a copy of the board or commission action.
      No.
   
   F. Will the proposed work be completed by a contractor that has a current PSC contract with your department? If so, please explain.
      No.

7. Union Notification: On 08/25/2014, the Department notified the following employee organizations of this PSC/RFP request:
   Architect & Engineers, Local 21; Prof & Tech Eng, Local 21; Professional & Tech Engrs, Local 21

☑ I CERTIFY ON BEHALF OF THE DEPARTMENT THAT THE INFORMATION CONTAINED IN AND ATTACHED TO THIS FORM IS COMPLETE AND ACCURATE:

Name: Stacey Lo	 Phone: 415-554-6732	 Email: Sto@sfwater.org

Address: 525 Golden Gate Avenue, 8th Floor San Francisco, CA 94102

FOR DEPARTMENT OF HUMAN RESOURCES USE

PSC# 47331 - 14/15
DHR Analysis/Recommendation: action date: 10/20/2014
Commission Approval Required Approved by Civil Service Commission
10/20/2014 DHR Approved for 10/20/2014
PERSONAL SERVICES CONTRACT SUMMARY ("PSC FORM 1")

Department: PUBLIC UTILITIES COMMISSION -- PUC
Dept. Code: PUC

Type of Request: ☑ Initial ☐ Modification of an existing PSC (PSC # _________)

Type of Approval: ☐ Expedited ☑ Regular ☐ Annual ☐ Continuing ☐ (Omit Posting)

Type of Service: As-Needed Specialized Health and Safety Trainings (PRO.0115, PRO.0116, PRO.0117)

Funding Source: SFPUC Operating Budget
PSC Amount: $13,500,000 PSC Est. Start Date: 02/01/2019 PSC Est. End Date 01/31/2024

1. Description of Work
   A. Scope of Work/Services to be Contracted Out:
      Provide a large variety of specialized health, safety and regulatory training by trainers with many years of experience who are licensed by the State and/or certified as appropriate. The San Francisco Public Utilities Commission (SFPUC) does not have the resources or expertise to provide such trainings of various topics to employees in various geographic areas at various timeframes.

   B. Explain why this service is necessary and the consequence of denial:
      The San Francisco Public Utilities Commission (SFPUC) is required by California Occupational Safety and Health Administration (Cal-OSHA) and other regulatory agencies to provide initial and annual refresher training to prevent injury and illness. If SFPUC is unable to meet the training mandates, citations of non-compliance from Cal-OSHA would be issued and the SFPUC would be forced to pay any ensuing penalties, as well as Worker’s Compensation costs for incidents of preventable employee injuries.

   C. Has this service been provided in the past? If so, how? If the service was provided under a previous PSC, attach copy of the most recently approved PSC.
      Some training will continue to be provided by SFPUC employees; however, due to the volume of training and the breadth and complexity of the training needed, in the past, outside vendors were hired to fill in the gaps under SFPUC contract PSC CS-294. This service has been provided by PSC 4078-12/13.

   D. Will the contract(s) be renewed?
      No

   E. If this is a request for a new PSC in excess of five years, or if your request is to extend (modify) an existing PSC by another five years, please explain why.
      not applicable

2. Reason(s) for the Request
   A. Indicate all that apply (be specific and attach any relevant supporting documents):
      ☑ Services that require resources that the City lacks (e.g., office space, facilities or equipment with an operator).

   B. Explain the qualifying circumstances:
      The San Francisco Public Utilities Commission (SFPUC) is required by California Occupational Safety and Health Administration (Cal-OSHA) and other regulatory agencies to provide initial and annual refresher training to prevent injury and illness. Currently SFPUC is challenged to provide all mandated training due to the lack of resources or expertise to provide such trainings of various topics to employees in various geographic areas at various timeframe.
3. **Description of Required Skills/Expertise**
   A. Specify required skills and/or expertise: Various required skills and expertise required for various training topics. A State licensed Crane Operators Certified Trainer is required as well as certified trainers for First Aid Cardiopulmonary Resuscitation/Automatic External Defibrillator (CPR/AED), High Voltage Electrical Safety, Wilderness First Aid CPR/AED, Forklift Operations, Hazardous Waste Operations and Emergency Response, Confined Space Rescue, Stream/River Rescue, and other training topics as needs arise.
   
   B. Which, if any, civil service class(es) normally perform(s) this work? 1232, Training Officer; 5177, Safety Officer; 6130, Safety Analyst; 6137, Assistant Industrial Hygienist; 6138, Industrial Hygienist; 6139, Senior Industrial Hygienist;
   
   C. Will contractor provide facilities and/or equipment not currently possessed by the City? If so, explain: Contractors may bring training-related audiovisual equipment and materials to SFPUC facilities.

4. **If applicable, what efforts has the department made to obtain these services through available resources within the City?**
   These are specialized trainings with specific skills and some internal staff can train some of the lower level classes which vendors provide higher level of training. For example, we have Confined Space awareness (one hour) Confined Space Entry for the Entrant (4 hours), and Confined Space Performance Level for the Competent Person (8 hours) all done by our in house staff while the higher level Confined Space Rescue trainings are done in the past by vendor.

5. **Why Civil Service Employees Cannot Perform the Services to be Contracted Out**
   A. Explain why civil service classes are not applicable.
      The Health and Safety trainers do not have the specific expertise or the credentials/certifications to provide such a large variety of specialized training. In the past, staff has trained a few forklift classes under the Train-the-Trainer program, crane certification classroom training only, and coaching and evaluating drivers with preventable accident; however, other topics required specialized expertise not possessed by health and safety staff.
   
   B. If there is no civil service class that could perform the work, would it be practical and/or feasible to adopt a new civil service class to perform this work? Explain. Adding a civil service class would not solve the current situation. The current classifications are appropriate. Current staff could do the job if there were many more of them and each of them only needed to concentrate on a very small group of training topics. At present, given the staff time required for the numerous non-training activities of the present Health and Safety staff, and the SFPUC's multiple geographic locations, very little time would be available for staff to participate in providing the necessary training, and to keep up the skills they would need in so many disciplines to maintain the necessary credentials and certifications.

6. **Additional Information**
   A. Will the contractor directly supervise City and County employee? If so, please include an explanation.
      No.
   
   B. Will the contractor train City and County employees and/or is there a transfer of knowledge component that will be included in the contract? If so, please explain what that will entail; if not, explain why not.
      Yes. Contractors will provide training to City and County of San Francisco employees. Training sessions are of varying durations (40, 32, 24, 16, 8, 4, or 2-3 hours in length.) Approximately 2,000 employees a year are expected to be trained by non-employee subject matter expert trainers, and employees receiving such training will consist of field employees (electrical line workers, wastewater treatment plant operators, laborers, arborists, chemists, stationary engineers, watershed keepers, truck drivers, etc.) and office workers (accountants, analysts, engineers, clerks, managers, support staff, etc.)
   
   C. Are there legal mandates requiring the use of contractual services? No.
D. Are there federal or state grant requirements regarding the use of contractual services? If so, please explain and include an excerpt or copy of any such applicable requirement.
No.

E. Has a board or commission determined that contracting is the most effective way to provide this service? If so, please explain and include a copy of the board or commission action.
No.

F. Will the proposed work be completed by a contractor that has a current PSC contract with your department? If so, please explain.
Yes. We have existing contracts under SFPUC contract CS-294, PSC 4078-12/13 in which the contractors may want to participate in this PSC.

7. Union Notification: On 09/24/2018, the Department notified the following employee organizations of this PSC/RFP request:
   Architect & Engineers, Local 21; Prof & Tech Eng, Local 21; Professional & Tech Engrs, Local 21
   
☐ I CERTIFY ON BEHALF OF THE DEPARTMENT THAT THE INFORMATION CONTAINED IN AND ATTACHED TO THIS FORM IS COMPLETE AND ACCURATE:

Name: Bill Irwin   Phone: 415-934-3975   Email: wirwin@sfwater.org

Address: 525 Golden Gate Avenue 8th Floor San Francisco, CA 94102

FOR DEPARTMENT OF HUMAN RESOURCES USE

PSCH 49913 - 18/19
DHR Analysis/Recommendation: Civil Service Commission Action:
Commission Approval Required
DHR Approved for 11/19/2018
Receipt of Union Notification(s)
From: dhr-psccoordinator@sfgov.org on behalf of wirwin@sfwater.org
Sent: Monday, September 24, 2018 4:36 PM
To: Irwin, William; amakayan@ifpte21.org; annie.wanless@sfgov.org; ecassidy@ifpte21.org; WendyWong26@yahoo.com; wendywong26@yahoo.com; tmathews@ifpte21.org; kschumacher@ifpte21.org; kpage@ifpte21.org; eerbach@ifpte21.org; pkim@ifpte21.org; L21PSCReview@ifpte21.org; Irwin, William; DHR-PSCCoordinator, DHR (HRD)
Subject: Receipt of Notice for new PCS over $100K PSC # 49913 - 18/19

RECEIPT for Union Notification for PSC 49913 - 18/19 more than $100k

The PUBLIC UTILITIES COMMISSION -- PUC has submitted a request for a Personal Services Contract (PSC) 49913 - 18/19 for $13,500,000 for Initial Request services for the period 02/01/2019 – 01/31/2024. Notification of 30 days (60 days for SEIU) is required.

After logging into the system please select link below, view the information and verify receipt:

http://apps.sfgov.org/dhrdrupal/node/11986 For union notification, please see the TO: field of the email to verify receipt. If you do not see all the unions you intended to contact, the PSC Coordinator must change the state back to NOT READY, make sure the classes and unions you want to notify are selected and SAVE. Then VIEW the record and verify the list of unions and emails. EDIT the document again, change the state back START UNION NOTIFICATION and SAVE. You should receive the email with all unions to the TO: field as intended.
Additional Attachment(s)
City and County of San Francisco

Department of Human Resources

PERSONAL SERVICES CONTRACT SUMMARY ("PSC FORM 1")

Department: PUBLIC UTILITIES COMMISSION
Dept. Code: PUC

Type of Request: □ Initial  ☑ Modification of an existing PSC (PSC # 4078-12/13)

Type of Approval: □ Expedited  ☑ Regular  (☐ Omit Posting)

Type of Service: Health, Safety, and Regulatory Training (CS-294)

Funding Source: SFPUC Operating Budget

PSC Original Approved Amount: $3,500,000
PSC Mod#1 Amount: $1,700,000
PSC Mod#2 Amount:
PSC Cumulative Amount Proposed: $5,200,000

PSC Original Approved Duration: 03/04/13 - 12/31/17 (4 years 43 weeks)
PSC Mod#1 Duration: 03/26/14-10/31/19 (1 year 43 weeks)
PSC Mod#2 Duration:
PSC Cumulative Duration Proposed: 6 years 34 weeks

1. Description of Work
A. Scope of Work:
Provide a large variety of specialized health, safety and regulatory training by trainers with many years of experience who are licensed by the State and/or certified as appropriate. The San Francisco Public Utilities Commission (SFPUC) does not have the resources or expertise to provide such trainings of various topics to employees in various geographic areas at various timeframes.

B. Explain why this service is necessary and the consequence of denial:
The SFPUC is required by California Occupational Safety & Health Administration (Cal-OSHA) and other regulatory agencies to provide initial and annual refresher training to prevent injury and illness. If SFPUC is unable to meet the training mandates, citations of non-compliance from Cal-OSHA would be issued and the SFPUC would be forced to pay any ensuing penalties, as well as Worker's Compensation costs for incidents of preventable employee injuries.

C. Has this service been provided in the past. If so, how? If the service was provided via a PSC, provide the most recently approved PSC # and upload a copy of the PSC.
Yes. Prior PSC #4078-12/13

D. Will the contract(s) be renewed? No.

2. Union Notification: On 03/25/14, the Department notified the following employee organizations of this PSC/RFP request: Teamsters, Local 856 Supv Nurses; Teamsters, Local 856 Health Workers; SEIU, Local 1021 (Staff Nurse & Per Diem

FOR DEPARTMENT OF HUMAN RESOURCES USE

PSC# 4078-12/13

DHR Analysis/Recommendation: Commission Approval Not Required
Approved by DHR on 04/08/2014

Civil Service Commission Action:

July 2013
3. **Description of Required Skills/Expertise**
   
   A. Specify required skills and/or expertise:
      
      A State licensed Crane Operators Certified Trainer is required as well as certified trainers for First Aid Cardiopulmonary Resuscitation/Automatic External Defibrillator (CPR/AED), Snowcat Operations, High Voltage Electrical Safety, Wilderness First Aid CPR/AED, Forklift Operations, Hazardous Waste Operations and Emergency Response, Confined Space Rescue, Stream/River Rescue, and other training topics as needs arise.
      
   B. Which, if any, civil service class(es) normally perform(s) this work? 1232, 5177, 6130, 6138, 6139, 2320, 2322, 2323, 2328,
   
   C. Will contractor provide facilities and/or equipment not currently possessed by the City? If yes, explain: Contractor may bring training-related audiovisual equipment and materials to classes.

4. **Why Classified Civil Service Cannot Perform**
   
   A. Explain why civil service classes are not applicable:
      
      The Health and Safety trainers do not have the specific expertise or the credentials/certifications to provide such a large variety of specialized training. In the past City staff has only performed First Aid CPR and forklift trainings as the other topics required specialized expertise not possessed by City health and safety staff.
      
   B. Would it be practical to adopt a new civil service class to perform this work? Explain.
      
      Adding a civil service class would not solve the current situation. The current classifications are appropriate. We do not have enough current staff to both perform their daily tasks as well as a large amount of trainings.

5. **Additional Information (if "yes", attach explanation)**
   
   A. Will the contractor directly supervise City and County employee? YES ☑ NO ☐
   
   B. Will the contractor train City and County employee? YES ☑ NO ☐ see attachment
   
   C. Are there legal mandates requiring the use of contractual services? YES ☑ NO ☐
   
   D. Are there federal or state grant requirements regarding the use of contractual services? YES ☑ NO ☐
   
   E. Has a board or commission determined that contracting is the most effective way to provide this service? YES ☑ NO ☐
   
   F. Will the proposed work be completed by a contractor that has a current PSC contract with your department? Yes, SOS Intl. and Sierra Rescue will continue to do the work. YES ☑ NO ☐

☑ THE ABOVE INFORMATION IS SUBMITTED AS COMPLETE AND ACCURATE ON BEHALF OF THE DEPARTMENT HEAD ON 03/25/14 BY:

Name: Shamica Jackson  
Phone: 415-554-0727  
Email: sjackson@sfwater.org  
Address: 525 Golden Gate Ave.  
San Francisco, CA  

July 2013
Describe Training including number of hours. Indicate occupational type of City & County employees to receive training:

This is an as-needed contract with a pre-qualified pool for several categories of health, safety, and regulatory trainings. Contractors will provide different types of training to City and County of San Francisco employees. Training sessions are of varying durations (40, 32, 24, 16, 8, 4, or 2 – 3 hours in length.) Approximately 2,000 employees a year are expected to be trained by non-employee subject matter expert trainers, and employees receiving such training will consist of field workers (electrical line workers, wastewater treatment plant operators, laborers, arborists, chemists, stationary engineers, watershed keepers, truck drivers, etc.) and office workers (accountants, analysts, engineers, clerks, managers, support staff, etc.).
CIVIL SERVICE COMMISSION
CITY AND COUNTY OF SAN FRANCISCO

EDWIN M. LEE
MAYOR

March 8, 2013

NOTICE OF CIVIL SERVICE COMMISSION ACTION

SUBJECT: REVIEW OF REQUEST FOR APPROVAL OF PROPOSED PERSONAL SERVICES CONTRACT NUMBERS 4074-12/13 THROUGH 4080-12/13; 4057-11/12; 4140-07/08; 3040-11/12; 4138-09/10; 4043-04/05; 4038-11/12.

At its meeting of March 4, 2013 the Civil Service Commission had for its consideration the above matter.

PLEASE NOTE: It is important that a copy of this action be kept in the department files as you will need it in the future as proof of Civil Service Commission approval. Please share it with everyone responsible for follow-up.

The Commission:

1. Adopted the report; Approved the request for approval of PSC# 3040-12/13 as amended to reflect contract duration of five years instead of seven. Notified the Office of the Controller and the Office of Contract Administration.
2. Continued PSC# 4138-09/10 to a later meeting after the department has gone back to the Public Utilities Commission to get clarification on the Public Utilities Commission’s resolution.
3. Continued PSC # 4038-11/12 after the department has re-posted the contract to reflect the correct ending date.
4. Adopted the report; Approved the requests for all remaining contracts. Notified the Office of the Controller and the Office of Contract Administration.

If this matter is subject to Code of Civil Procedure (CCP) Section 1094.5, the time within which judicial review must be sought is set forth in CCP Section 1094.6.

CIVIL SERVICE COMMISSION

JENNIFER JOHNSTON
Executive Officer

Attachment

c: Cynthia Ayukian, Airport Commission
Parveen Bajajani, Municipal Transportation Agency
Jeanne Buick, Department of Human Resources
Micki Callahan, Human Resources Director
Leonor Dang, Department of Human Resources
Kendall Gariq, Technology Department
Shamica Jackson, Public Utilities Commission
Rebekah Krull, Art Commission
Sheila Layton, Juvenile Probation
Joan Lubinskas, General Services Agency
Shawn Wallace, San Francisco Police Department
Commission File
Commissioners' Binder
Chron

25 VAN NESS AVENUE, SUITE 720 ▪ SAN FRANCISCO, CA 94102-6033 ▪ (415) 252-3247 ▪ FAX (415) 252-3260 ▪ www.sfgov.org/civil_service/
## POSTING NO. 03/04/2013

**PROPOSED PERSONAL SERVICES CONTRACTS - Regular**

<table>
<thead>
<tr>
<th>PSC No</th>
<th>Dept No.</th>
<th>Dept Name</th>
<th>Approval Type</th>
<th>Contract Amount</th>
<th>Description of Work</th>
<th>Duration</th>
</tr>
</thead>
<tbody>
<tr>
<td>4074-12/13</td>
<td>12</td>
<td>Juvenile Court</td>
<td>Regular</td>
<td>$90,000</td>
<td>The San Francisco Juvenile Probation Department (JPD) seeks a vendor from licensed clinical laboratories to provide gas chromatography/mass spectrometry (GC/MS) confirmation services for positive client 5-Cup urine and Redject on-site oral swab drug and alcohol screening tests administered by JPD Probation Officers. Gas chromatography/mass spectrometry (GC/MS) is a method that combines the features of gas-liquid chromatography and mass spectrometry to identify different substances within a test sample. Applications of GC/MS include drug detection, fire investigation, environmental analysis, explosives investigation, and identification of unknown samples.</td>
<td>3/1/2013 - 2/28/2016</td>
</tr>
<tr>
<td>4075-12/13</td>
<td>12</td>
<td>Juvenile Court</td>
<td>Regular</td>
<td>$450,000</td>
<td>Contractor will provide electronic monitoring services and necessary equipment for eligible JPD youth. Service will allow the department to track youth released to the program in lieu of detention.</td>
<td>7/1/2013 - 6/30/2016</td>
</tr>
<tr>
<td>4076-12/13</td>
<td>28</td>
<td>Art Commission</td>
<td>Regular</td>
<td>$400,000</td>
<td>Conservation, restoration, cleaning and repair of miscellaneous artworks in the city's collection, including those at San Francisco International Airport, Moscone Convention Center, Golden Gate Park, Market Street, General Hospital, and other locations throughout the city. Work will include conservation, cleaning and repair of artworks in all media. Conservation consulting services are also included to assist the Arts Commission in evaluating the condition of artworks in the city's collection, and evaluating proposed artworks for durability and maintainability. Scope includes major conservation and restoration projects at Cott Tower and the McKinley Monument in Golden Gate Park.</td>
<td>3/1/2013 - 12/31/2016</td>
</tr>
<tr>
<td>4077-12/13</td>
<td>28</td>
<td>Art Commission</td>
<td>Regular</td>
<td>$700,000</td>
<td>Fine art handling services for artworks in the collection of the City and County of San Francisco, including transportation, packing, storing, framing of fine art; de-installation and installation and de-installation of artworks including those of monumental scale, design and fabrication of pedestals and cases. Scope includes major installation and de-installation of monuments artwork including Benvenuto Cellini’s &quot;Peace Monument&quot; located on Brotherhood Way, weighing over 145,000 pounds.</td>
<td>3/1/2013 - 12/31/2016</td>
</tr>
<tr>
<td>4078-12/13</td>
<td>40</td>
<td>Public Utilities Commission</td>
<td>Regular</td>
<td>$3,500,000</td>
<td>To provide a large variety of specialized health, safety and regulatory training by trainers with many years of experience who are licensed by the State and/or certified as appropriate. The SFPUC does not have the resources or expertise to provide such training of various topics to employees in various geographic areas at various timeframe.</td>
<td>3/4/2013 - 12/31/2017</td>
</tr>
<tr>
<td>4079-12/13</td>
<td>68</td>
<td>Municipal Transportation Agency</td>
<td>Regular</td>
<td>$5,000,000</td>
<td>The consultant and subconsultant(s) will provide specialized engineering and technical support during the rehabilitation and replacement of existing rail vehicles. Tasks will include, but not be limited to, quality control services and inspection, vehicle design analysis, vehicle engineering calculations, reliability safety, maintainability and mean distance between failure, vehicle acceptance and testing, warranty administration, competency gap analysis, independent price and cost analysis per FTA guidelines, independent audits for pre-award and post-delivery of FTA's Buy America requirements.</td>
<td>2/15/2013 - 2/15/2019</td>
</tr>
</tbody>
</table>
PERSONAL SERVICES CONTRACT SUMMARY ("PSC FORM 1")

Department: GENERAL SERVICES AGENCY - TECHNOLOGY -- TIS
Dept. Code: TIS

Type of Request: ☑ Initial  ☐ Modification of an existing PSC (PSC # __________)

Type of Approval: ☐ Expedited  ☑ Regular  ☐ Annual  ☐ Continuing  ☐ (Omit Posting)

Type of Service: Telephony, Upgrade the Network, Network Moves, and Contact Center Migration Project Services
Funding Source: General Funds
PSC Amount: $9,500,000  PSC Est. Start Date: 01/02/2019  PSC Est. End Date 12/31/2027

1. Description of Work
A. Scope of Work/Services to be Contracted Out:
The Department of Technology has projects underway in the areas of: upgrading Wide and Local Area Networks, migrating Telephony systems to the City's new Cisco Call Manager, and moving Departments to new office spaces. The Department of Technology will also begin a project to migrate approximately 15 separate Contact Centers to a unified Enterprise Contact Center system. The awarded Supplier will provide project services for the upgrade, move, and migration project areas utilizing following phased structure: 1) Discovery and Analysis, 2) Planning, 3) Upgrade/Migration, 4) Post Go-Live support and training for handoff to City staff. Supplemental services include reviewing current systems and environments, designing new networks and systems, developing migration plans, configuring, installing, and testing new systems, moving and installing networks in new locations, providing support and training City staff on how to maintain and operate new systems.

B. Explain why this service is necessary and the consequence of denial:
This service is necessary for timely completion of projects in critical areas of Wide and Local Area Network upgrades (Upgrade the Network), Voice Over Internet Protocol Migration, and Contact Center Migration. Denying this service will cause significant delays in migrating outdated network and telephony systems to newer, more stable platforms. Significant degradations in service will occur due to delays and may result in outages of critical network, contact center, and telephony systems. Departments will also be delayed in moving to new office space locations.

C. Has this service been provided in the past? If so, how? If the service was provided under a previous PSC, attach copy of the most recently approved PSC.
The service is being provided by a supplier for whom a solicitation was issued to the City's Technology Marketplace.

D. Will the contract(s) be renewed?
Yes, there is a possibility that the contract will be extended or renewed because of the magnitude of the projects as a whole.

E. If this is a request for a new PSC in excess of five years, or if your request is to extend (modify) an existing PSC by another five years, please explain why.
This initiative is a massive multi-year project which includes converting the Citywide Private Branch Exchange to the Voice Over Internet Protocol telephony system, consolidating disparate City Contact Centers to a unified Enterprise Contact Center System and upgrading the Citywide Local and Wide Area Network.

2. Reason(s) for the Request
A. Indicate all that apply (be specific and attach any relevant supporting documents):

☑ Short-term or capital projects requiring diverse skills, expertise and/or knowledge.
B. Explain the qualifying circumstances:
   This is a Citywide investment to convert the current public exchange telephony system to a Voice over Internet Protocol as well as consolidating the City’s disparate Contact Centers and upgrading the City’s Wide and Local Area Networks which requires expertise, knowledge and certifications that City employees do not have.

3. **Description of Required Skills/Expertise**
   A. Specify required skills and/or expertise: Contractor must be a Cisco Gold Level Partner and have at least two Master Certifications from the following list: Collaboration, Cloud Builder, Networking, or Security. Staff working on the projects must have knowledge and experience with Cisco Wide and Local Area Networks, Telephony, and Contact Center systems in subject areas such as scoping, architecture, design, development, configuration, installation, and support. Specific projects will require additional Certifications such as Cisco Certified Network Professional, Cisco Certified Design Professional, Cisco Certified Design Expert, and Cisco Certified Internetwork Expert

   B. Which, if any, civil service class(es) normally perform(s) this work? 1041, IS Engineer-Assistant; 1042, IS Engineer-Journey; 1043, IS Engineer-Senior; 1044, IS Engineer-Principal; 1053, IS Business Analyst-Senior;

   C. Will contractor provide facilities and/or equipment not currently possessed by the City? If so, explain: No

4. **If applicable, what efforts has the department made to obtain these services through available resources within the City?**
   Although City has employees with some of the certifications, no City employee has Master Certifications nor the highly specialized skills to complete a Citywide level Wide and Local Area Networks, Telephony and Contact Center Migration Projects.

5. **Why Civil Service Employees Cannot Perform the Services to be Contracted Out**
   A. Explain why civil service classes are not applicable.
      Although City has employees with some of the certifications, no City employee has Master Certifications nor the highly specialized skills to complete a Citywide level Wide and Local Area Networks, Telephony and Contact Center Migration Projects.

   B. If there is no civil service class that could perform the work, would it be practical and/or feasible to adopt a new civil service class to perform this work? Explain. No, the classifications exist, but no City employee holds the Master Certifications that is needed for these high level projects.

6. **Additional Information**
   A. Will the contractor directly supervise City and County employee? If so, please include an explanation.
      No.

   B. Will the contractor train City and County employees and/or is there a transfer of knowledge component that will be included in the contact? If so, please explain what that will entail; if not, explain why not.
      Yes. Training will vary from project to project but will likely involve 20-40 hours of training for Department of Technology staff when new systems are integrated as part of the project. Systems will be handed over to existing City staff to operate and maintain. Overall training will be approximately 200 hours. Classes to be trained are: 1041 IS Engineer – Assistant 4 1042 IS Engineer – Journey- 7 1043 IS Engineer – Senior- 7 1044 IS Engineer – Principal- 4 1053 IS Business Analyst – Senior- 5

   C. Are there legal mandates requiring the use of contractual services?
      No.
D. Are there federal or state grant requirements regarding the use of contractual services? If so, please explain and include an excerpt or copy of any such applicable requirement.
No.

E. Has a board or commission determined that contracting is the most effective way to provide this service? If so, please explain and include a copy of the board or commission action.
No.

F. Will the proposed work be completed by a contractor that has a current PSC contract with your department? If so, please explain.
No.

7. **Union Notification:** On 08/28/2018, the Department notified the following employee organizations of this PSC/RFP request:
   Prof & Tech Eng, Local 21

☐ I CERTIFY ON BEHALF OF THE DEPARTMENT THAT THE INFORMATION CONTAINED IN AND ATTACHED TO THIS FORM IS COMPLETE AND ACCURATE:

Name: Jolie Gines  Phone: 628 652 5074  Email: jolie.gines@sfgov.org

Address: One South Van Ness Ave., 2nd Floor San Francisco, CA 94103

******************************************************************************
FOR DEPARTMENT OF HUMAN RESOURCES USE

PSC# 44536 - 18/19
DHR Analysis/Recommendation: Civil Service Commission Action:
Commission Approval Required
DHR Approved for 11/19/2018
Receipt of Union Notification(s)
From: dhr-psccoordinator@sfgov.org
To: Gines, Julie (TIS); ecassidy@lifpte21.org; WendyWong26@yahoo.com; wendywong26@yahoo.com; fmathews@lifpte21.org; kschunacher@lifpte21.org; pkim@lifpte21.org; amokavan@lifpte21.org; L2IPSCReview@lifpte21.org; Gines, Julie (TIS); DHR-PSCCoordinator; DHR (HRD)
Subject: Receipt of Notice for new PSC over $100K PSC # 44536 - 18/19
Date: Tuesday, August 28, 2018 4:07:52 PM

RECEIPT for Union Notification for PSC 44536 - 18/19 more than $100k

The GENERAL SERVICES AGENCY - TECHNOLOGY -- TIS has submitted a request for a Personal Services Contract (PSC) 44536 - 18/19 for $9,500,000 for Initial Request services for the period 01/02/2019 – 12/31/2027. Notification of 30 days (60 days for SEIU) is required.

After logging into the system please select link below, view the information and verify receipt:

http://apps.sfgov.org/dhrcupal/node/11909 For union notification, please see the TO: field of the email to verify receipt. If you do not see all the unions you intended to contact, the PSC Coordinator must change the state back to NOT READY, make sure the classes and unions you want to notify are selected and SAVE. Then VIEW the record and verify the list of unions and emails. EDIT the document again, change the state back START UNION NOTIFICATION and SAVE. You should receive the email with all unions to the TO: field as intended.
PERSONAL SERVICES CONTRACT SUMMARY ("PSC FORM 1")

Department: PUBLIC HEALTH -- DPH
Dept. Code: DPH

Type of Request: ☑ Initial □ Modification of an existing PSC (PSC # _________)

Type of Approval: □ Expedited ☑ Regular □ Annual □ Continuing □ (Omit Posting)

Type of Service: As-needed facilities assessments and feasibility studies for the Department of Public Health

Funding Source: General Fund
PSC Duration: 3 years

PSC Amount: $2,000,000

1. Description of Work
   A. Scope of Work/Services to be Contracted Out:
      Contractor(s) will provide studies to comply with the requirements of City Planning and the Joint Commission, and other regulatory agencies, which will include: assessment and feasibility studies of future uses for DPH buildings after the San Francisco General Hospital re-build; future bond measures; Institutional Master Plan and Zuckerberg San Francisco General (ZSFG) Campus Master Plan updates; code advisory services related to regulatory compliance issues.

   B. Explain why this service is necessary and the consequence of denial:
      The services are necessary in order to produce biannual updates of the Institutional Master Plan (IMP) required by the City Planning code; the ability to respond to licensing, accreditation and other regulatory requirements expeditiously, and the general obligation bond report required by board of Supervisors. If the services are denied, the Department will not be in compliance, which may lead to de-certification and loss of the ability to provide or bill for patient services.

   C. Has this service been provided in the past? If so, how? If the service was provided under a previous PSC, attach copy of the most recently approved PSC.
      PSC 4022-13/14

   D. Will the contract(s) be renewed?
      If there is a need and funding is available.

   E. If this is a request for a new PSC in excess of five years, or if your request is to extend (modify) an existing PSC by another five years, please explain why.
      not applicable

2. Reason(s) for the Request
   A. Indicate all that apply (be specific and attach any relevant supporting documents):

      ☑ Services required on an as-needed, intermittent, or periodic basis (e.g., peaks in workload).

      ☑ Regulatory or legal requirements, or requirements or mandates of funding source(s) which limit or preclude the use of Civil Service Employees. Include a copy of the applicable requirement or mandate.

      ☑ Services that require resources that the City lacks (e.g., office space, facilities or equipment with an operator).
B. Explain the qualifying circumstances:
The City requires these assessment and report services to meet regulatory or legal requirements. These studies and assessments are required on an as-needed basis. The provision of these services requires a professional expertise city employees can not provide.

3. Description of Required Skills/Expertise
A. Specify required skills and/or expertise: Contractors must have knowledge of fire and life safety codes and regulations for healthcare facilities, experience in working with the California Office of Statewide Health Planning and Development (OSHPD) requirements for hospital-based services, healthcare facility programming and planning experience, and experience with San Francisco general obligation bond requirements.

B. Which, if any, civil service class(es) normally perform(s) this work?  5215, Fire Protection Engineer; 5218, Structural Engineer; 5241, Engineer; 5502, Project Manager 1; 5504, Project Manager 2; 5506, Project Manager 3; 5508, Project Manager 4; 0941, Manager VI;

C. Will contractor provide facilities and/or equipment not currently possessed by the City? If so, explain: No.

4. If applicable, what efforts has the department made to obtain these services through available resources within the City?
This falls outside the normal scope of work for pre-design and planning projects. There are no civil service classes with the needed healthcare speciality that would normally provide this work on a regular basis.

5. Why Civil Service Employees Cannot Perform the Services to be Contracted Out
A. Explain why civil service classes are not applicable.
This falls outside the normal scope of work for pre-design and planning projects. There are no civil service classes with the needed healthcare speciality that would normally provide this work on a regular basis.

B. If there is no civil service class that could perform the work, would it be practical and/or feasible to adopt a new civil service class to perform this work? Explain. No. The provision of these services requires a professional expertise city employees can not provide.

6. Additional Information
A. Will the contractor directly supervise City and County employee? If so, please include an explanation. No.

B. Will the contractor train City and County employees and/or is there a transfer of knowledge component that will be included in the contract? If so, please explain what that will entail; if not, explain why not. No. There is no training of civil service employees included in the services under this PSC.

C. Are there legal mandates requiring the use of contractual services? No.

D. Are there federal or state grant requirements regarding the use of contractual services? If so, please explain and include an excerpt or copy of any such applicable requirement. No.
E. Has a board or commission determined that contracting is the most effective way to provide this service? If so, please explain and include a copy of the board or commission action.
   No.

F. Will the proposed work be completed by a contractor that has a current PSC contract with your department? If so, please explain.
   No.

7. **Union Notification**: On 09/24/2018, the Department notified the following employee organizations of this PSC/RFP request:
   Municipal Executive Association; Professional & Tech Engrs, Local 21

☐ I CERTIFY ON BEHALF OF THE DEPARTMENT THAT THE INFORMATION CONTAINED IN AND ATTACHED TO THIS FORM IS COMPLETE AND ACCURATE:

   Name: Jacquie Hale      Phone: (415) 554-2609      Email: jacquie.hale@sfdph.org

   Address:  1380 Howard Street, 4th Floor San Francisco, CA, 94103

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FOR DEPARTMENT OF HUMAN RESOURCES USE

PSC# 42035 - 18/19
DHR Analysis/Recommendation:                  Civil Service Commission Action:
Commission Approval Required
DHR Approved for 11/19/2018
Receipt of Union Notification(s)
RECEIPT for Union Notification for PSC 42035 - 18/19 more than $100k

The PUBLIC HEALTH -- DPH has submitted a request for a Personal Services Contract (PSC) 42035 - 18/19 for $2,000,000 for Initial Request services for the period 10/01/2018 – 09/30/2021. Notification of 30 days (60 days for SEIU) is required.

After logging into the system please select link below, view the information and verify receipt:

http://apps.sfgov.org/dhrdopal/node/11993 For union notification, please see the TO: field of the email to verify receipt. If you do not see all the unions you intended to contact, the PSC Coordinator must change the state back to NOT READY, make sure the classes and unions you want to notify are selected and SAVE. Then VIEW the record and verify the list of unions and emails. EDIT the document again, change the state back START UNION NOTIFICATION and SAVE. You should receive the email with all unions to the TO: field as intended
Additional Attachment(s)
September 19, 2013

NOTICE OF CIVIL SERVICE COMMISSION ACTION

SUBJECT: REVIEW OF REQUEST FOR APPROVAL OF PROPOSED PERSONAL SERVICES CONTRACT NUMBERS 4017-13/14; 4018-13/14; 4020-13/14 THROUGH (4822-13/14); 4845-11/12; 4861-07/08; 3035-11/12 AND 4076-99/10.

At its meeting of September 16, 2013 the Civil Service Commission had for its consideration the above matter.

The Commission adopted the report and approved the request for proposed personal services contracts.

PLEASE NOTE: It is important that a copy of this action be kept in the department files as you will need it in the future as proof of Civil Service Commission approval. Please share it with everyone responsible for follow-up.

If this matter is subject to Code of Civil Procedure (CCP) Section 1094.5, the time within which judicial review must be sought is set forth in CCP Section 1094.6.

CIVIL SERVICE COMMISSION

JENNIFER JOHNSTON
Executive Officer

Attachment

Cc: Parveen Boparai, Municipal Transportation Agency
    Micki Callahan, Department of Human Resources
    Jacque Hale, Department of Public Health
    Shamica Jackson, Public Utilities Commission
    Sung Kim, Department of Public Works
    Sheila Layton, Juvenile Probations
    Joan Lubamersky, General Services Agency
    Ben Rosenfield, Controller’s Office
    Jaci Fong, Office of Contract Administration
    Commission File
    Chron
<table>
<thead>
<tr>
<th>PSC No</th>
<th>Dept No.</th>
<th>Dept Name</th>
<th>Approval Type</th>
<th>Contract Amount</th>
<th>Description of Work</th>
<th>Duration</th>
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</thead>
<tbody>
<tr>
<td>4017-13/14</td>
<td>12</td>
<td>Juvenile Court</td>
<td>Regular</td>
<td>$540,000</td>
<td>Contractor will provide electronic monitoring services and necessary equipment for eligible Juvenile Probation Department (JPD) youth. Service will allow the department to track youth released to the program in lieu of detention.</td>
<td>1/1/2014 - 12/31/2017</td>
</tr>
<tr>
<td>4018-13/14</td>
<td>48</td>
<td>Municipal Transportation Agency</td>
<td>Regular</td>
<td>$240,000</td>
<td>To provide an independent evaluation of the quality of the San Francisco Municipal Transportation Agency's (SFMTA) operations as required under San Francisco Charter Section 8.A.107. The consultant will conduct field research including meetings with staff reviewing data collection and calculation methodologies; evaluate/assess the integrity of data and the extent to which the goals, objectives and standards; identify opportunities to improve services; prepare a report and present the report in public hearings before the Citizens' Advisory Council, SFMTA Board of Directors, and the San Francisco Board of Supervisors.</td>
<td>11/18/2013 - 1/30/2019</td>
</tr>
<tr>
<td>4026-13/14</td>
<td>10</td>
<td>General Services Agency</td>
<td>Regular</td>
<td>$1,000,000</td>
<td>Clean interior and exterior windows, skylights and roof windows, greenhouses, plexiglass, marble, stained glass, etc. at City-owned facilities in San Francisco, San Mateo, and Alameda Counties.</td>
<td>12/1/2013 - 1/30/2016</td>
</tr>
<tr>
<td>4021-12/14</td>
<td>31</td>
<td>Public Health</td>
<td>Regular</td>
<td>$700,000</td>
<td>The contractor must be a Qualified/Authorized Medical Physicist and will perform acceptance testing, calibration, consultations, and safety surveys of all imaging equipment in Radiology, Operating Room, Cardiology, Gastrointestinal, Orthopaedics and Dental departments and other departments as needed and assist in the development of quality control programs in all departments within a given facility. A Qualified or Authorized Medical Physicist is an individual who is competent to practice independently in one or more of the specialties of medical physics. Normal expenditures for the Department are approximately $400,000/year. However, due to the SFUH rebuild and the introduction of nuclear medicine capabilities, it is anticipated that the annual usage may temporarily increase, and then return to the normal levels once the facility is fully operational.</td>
<td>1/1/2014 - 2/28/2018</td>
</tr>
<tr>
<td>4022-13/14</td>
<td>31</td>
<td>Public Health</td>
<td>Regular</td>
<td>$4,200,000</td>
<td>Contractor(s) will provide studies to comply with the requirements of City Planning, Joint Commission (which accredits hospitals), and other regulatory agencies which will include: assessment and feasibility studies of future uses for DPR buildings after the San Francisco General Hospital rebuilt; future bond measures; Institutional Master Plan and SFUH Campus Master Plan updates, and advisory services related to regulatory compliance issues.</td>
<td>5/1/2013 - 4/30/2018</td>
</tr>
</tbody>
</table>

Total Amount - Regular: $6,680,000
PERSONAL SERVICES CONTRACT SUMMARY ("PSC FORM 1")

Department: AIRPORT COMMISSION – AIR
Dept. Code: AIR
Type of Request: ☑ Initial  □ Modification of an existing PSC (PSC # ________)

Type of Approval:  □ Expedited  ☑ Regular  □ Annual  □ Continuing  □ (Omit Posting)

Type of Service: Transportation Security Administration Explosive Detection Canine Training

Funding Source: Airport Operating Funds
PSC Amount: $260,000  PSC Est. Start Date: 11/05/2018  PSC Est. End Date: 06/30/2023

1. Description of Work
   A. Scope of Work/Services to be Contracted Out:
      The contractor will provide training to the San Francisco Police Department – Airport Bureau (SFPD-AB) police
      service canines (K-9 unit) and their handlers on explosives detection in accordance with Transportation
      Security Administration (TSA) standards.

   Department of Homeland Security - Transportation Security Administration (TSA) required

   B. Explain why this service is necessary and the consequence of denial:
      TSA requires annual certification for explosives detection of each of the SFPD-AB K-9 unit teams. This training
      will ensure the K-9 unit teams are prepared and more successful during TSA's certification reviews. Not
      providing this training will result in increased failure rates of the K-9 unit teams, which jeopardizes security at
      SFO. It would further require SFO to bring in new K-9 units to the program at an increased cost, rather than
      proactively working with the existing K-9's by providing training.

   C. Has this service been provided in the past? If so, how? If the service was provided under a previous PSC,
      attach copy of the most recently approved PSC.
      This is a new service.

   D. Will the contract(s) be renewed?
      Yes, if there continues to be need for this service at SFO.

   E. If this is a request for a new PSC in excess of five years, or if your request is to extend (modify) an existing
      PSC by another five years, please explain why.
      not applicable

2. Reason(s) for the Request
   A. Indicate all that apply (be specific and attach any relevant supporting documents):

      ☑ Services required on an as-needed, intermittent, or periodic basis (e.g., peaks in workload).

   B. Explain the qualifying circumstances:
      The work is required on an as-needed intermittent basis.
3. **Description of Required Skills/Expertise**
   A. Specify required skills and/or expertise: The contractor must have expertise in training police service K-9's in explosives detection, and must have experience with TSA standards as it relates to training K-9 units working in an Airport environment.

   B. Which, if any, civil service class(es) normally perform(s) this work? Q002, Police Officer; Q003, Police Officer 2; Q004, Police Officer 3; Q050, Sergeant, (Police Department); Q051, Sergeant 2; Q052, Sergeant 3;

   C. Will contractor provide facilities and/or equipment not currently possessed by the City? If so, explain: No.

4. **If applicable, what efforts has the department made to obtain these services through available resources within the City?**
   None. The City has police officers who handle K-9 units, but not who provide training per TSA standards.

5. **Why Civil Service Employees Cannot Perform the Services to be Contracted Out**
   A. Explain why civil service classes are not applicable.
      The City does not have classifications for staff to provide explosives detection training for K-9 unit teams in concurrence with TSA standards.

   B. If there is no civil service class that could perform the work, would it be practical and/or feasible to adopt a new civil service class to perform this work? Explain. No, as the training will happen on an intermittent basis and does not justify creating a new civil service classification.

6. **Additional Information**
   A. Will the contractor directly supervise City and County employee? If so, please include an explanation. No.

   B. Will the contractor train City and County employees and/or is there a transfer of knowledge component that will be included in the contract? If so, please explain what that will entail; if not, explain why not. Yes. Yes, the contractor will provide 17 hrs of field assessment, training and exercise for each team (handler and K-9) to conform to the TSA certification standards on explosive detection. Two (2) Q50 sergeants and 13-18 Q4 Police Officers and their K9s will be trained by the contractor.

   C. Are there legal mandates requiring the use of contractual services? No.

   D. Are there federal or state grant requirements regarding the use of contractual services? If so, please explain and include a excerpt or copy of any such applicable requirement. No.

   E. Has a board or commission determined that contracting is the most effective way to provide this service? If so, please explain and include a copy of the board or commission action. No.

   F. Will the proposed work be completed by a contractor that has a current PSC contract with your department? If so, please explain. No.

7. **Union Notification**: On 09/10/2018, the Department notified the following employee organizations of this PSC/RFP request:
   SFPOA - Q2-Q50
☑️ I CERTIFY ON BEHALF OF THE DEPARTMENT THAT THE INFORMATION CONTAINED IN AND ATTACHED TO THIS FORM IS COMPLETE AND ACCURATE:

Name: Cynthia Avakian  Phone: 650-821-2014  Email: cynthia.avakian@flysfo.com

Address:  P.O. Box 8097 San Francisco, CA 94128

FOR DEPARTMENT OF HUMAN RESOURCES USE

PSC# 49336 - 18/19
DHR Analysis/Recommendation:  
Commission Approval Required
DHR Approved for 11/19/2018

Civil Service Commission Action:
Receipt of Union Notification(s)
Yen,

The SFPOA has had a change in its leadership. Tony Montoya is now the SFPOA President. I have included him in this response.

I discussed your request with Tony and the SFPOA is granting your request, in this case, for a waiver in the 30 day notification requirement.

Marty

Martin Halloran
Advisor/Past President
San Francisco Police Officers' Association
800 Bryant Street, 2nd Floor
San Francisco, CA 94103
Office: (415) 861-5060
Fax: (415) 552-5741

This e-mail message and any attachments may contain confidential information that is legally privileged. If you are not the intended recipient(s) or person responsible for delivering it to the intended recipient(s) you are hereby notified that any review, disclosure, copying, distribution or use of any of the information contained herein is strictly prohibited. If you have received this transmission in error, please contact the sender by reply e-mail and destroy the original transmission and any attachments without reading or saving in any manner.
Marty,

San Francisco International Airport (SFO) has submitted the attached PSC for a Police Canine Training contract. The union notification that was triggered by the submission program did not include you in the email list. We would like to correct that now. SFO would like to request a waiver of the 30 day union notification waiver in order to keep the original Civil Service meeting date.

If you need further please let me know. A response by 2pm Monday, October 29, would be appreciated.

Sincerely,

Yen Pang
Principal Contracts Analyst | Administration and Policy
San Francisco International Airport | P.O. Box 8097 | San Francisco, CA 94128
Tel 650-821-2029 | flysfo.com

Facebook | Twitter | YouTube | Instagram | LinkedIn
RECEIPT for Union Notification for PSC 49336 - 18/19 more than $100k

The AIRPORT COMMISSION -- AIR has submitted a request for a Personal Services Contract (PSC) 49336 - 18/19 for $260,000 for Initial Request services for the period 11/05/2018 – 06/30/2023. Notification of 30 days (60 days for SEIU) is required.

After logging into the system please select link below, view the information and verify receipt:

http://apps.sfgov.org/dhdrupal/node/11858 For union notification, please see the TO: field of the email to verify receipt. If you do not see all the unions you intended to contact, the PSC Coordinator must change the state back to NOT READY, make sure the classes and unions you want to notify are selected and SAVE. Then VIEW the record and verify the list of unions and emails. EDIT the document again, change the state back START UNION NOTIFICATION and SAVE. You should receive the email with all unions to the TO: field as intended.
Modification

Personal Services Contracts
PERSONAL SERVICES CONTRACT SUMMARY (“PSC FORM 1”)

Department: JUVENILE PROBATION
Dept. Code: JUV

Type of Request: ☑ Modification of an existing PSC (PSC # 42264 - 13/14)
☐ Initial
☐ Expedited
☐ Regular
☐ Annual
☐ Continuing
☐ (Omit Posting)

Type of Approval:

Type of Service: Ombudsman Services

Funding Source: State Funds

PSC Original Approved Amount: $200,000
PSC Original Approved Duration: 10/01/14 - 09/30/18 (4 years)

PSC Mod#1 Amount: $60,000
PSC Mod#1 Duration: 10/01/18-09/30/19 (1 year)

PSC Mod#2 Amount: $40,000
PSC Mod#2 Duration: 10/01/18-09/30/20 (1 year 1 day)

PSC Cumulative Amount Proposed: $300,000
PSC Cumulative Duration Proposed: 6 years 1 day

1. Description of Work

A. Scope of Work/Services to be Contracted Out:
The Ombudsperson is responsible for resolving grievances submitted by detained youth at Juvenile Probation Department (JPD) detention facilities. Contractor will serve as a neutral and independent agent who is a liaison between detainees, their parents/guardians and Department staff. When a youth files a grievance, contractor shall investigate and resolve through appropriate means including mediation between the youth and the Department and where appropriate shall recommend procedural changes as part of the recommended resolution of a grievance.

B. Explain why this service is necessary and the consequence of denial:
The provider of the services must be impartial, neutral and an independent agent. If denied, detainees may take legal steps to resolve their grievances.

C. Has this service been provided in the past? If so, how? If the service was provided under a previous PSC, attach copy of the most recently approved PSC.
Yes. This service has been independently contracted out for in the past.

D. Will the contract(s) be renewed?
Yes

E. If this is a request for a new PSC in excess of five years, or if your request is to extend (modify) an existing PSC by another five years, please explain why:
Ombudsman services were solicited in 2014 for 4 years. In July 2018, a new RFP was released for Ombudsman services; the incumbent was the sole respondent. The program requirements have not changed, thus the need to extend the term of the existing PSC without any changes to the service component.
2. **Reason(s) for the Request**
   A. Display all that apply

   ☑ Circumstances where there is a demonstrable potential conflict of interest (e.g., independent appraisals, audits, inspections, third party reviews and evaluations).

   Explain the qualifying circumstances:
   The Ombudsman is an impartial, neutral and independent contractor who tries to mitigate formal grievances and resolve them informally. Ombudsman services are mandated by the State. City staff might be perceived to have biases and have conflicts of interest in providing this service within their own departments.

   B. Reason for the request for modification:
   Modification is required to match the term and amount of PSC to the term and amount of the contract.

3. **Description of Required Skills/Expertise**
   A. Specify required skills and/or expertise: Demonstrated knowledge of the issues facing youth and families involved in the Juvenile Justice System in San Francisco and the services available to those clients. Familiarity with Juvenile Justice laws, Regulations and Organizational Dynamics, Experience with Formal Mediation, Negotiation, Advocacy or similar skill.

   B. Which, if any, civil service class(es) normally perform(s) this work? none

   C. Will contractor provide facilities and/or equipment not currently possessed by the City? If so, explain: No

4. **If applicable, what efforts has the department made to obtain these services through available resources within the City?**
   Not Applicable

5. **Why Civil Service Employees Cannot Perform the Services to be Contracted Out**
   A. Explain why civil service classes are not applicable.
   Services require a neutral and impartial person.

   B. If there is no civil service class that could perform the work, would it be practical and/or feasible to adopt a new civil service class to perform this work? Explain: No, as this service is specific to Juvenile Probation Department.

6. **Additional Information**
   A. Will the contractor directly supervise City and County employee? If so, please include an explanation.
   No.

   B. Will the contractor train City and County employees and/or is there a transfer of knowledge component that will be included in the contract? If so, please explain what that will entail; if not, explain why not.
Ombudsman services are provided to juveniles in a correctional facility by an independent and unbiased contractor, therefore there is no training component to City employees.

C. Are there legal mandates requiring the use of contractual services?
   No.

D. Are there federal or state grant requirements regarding the use of contractual services? If so, please explain and include an excerpt or copy of any such applicable requirement.
   No

E. Has a board or commission determined that contracting is the most effective way to provide this service? If so, please explain and include a copy of the board or commission action.
   No

F. Will the proposed work be completed by a contractor that has a current PSC contract with your department? If so, please explain.
   No.

7. **Union Notification:** On 10/15/18, the Department notified the following employee organizations of this PSC/RFP request:
   all unions were notified

☑️ I CERTIFY ON BEHALF OF THE DEPARTMENT THAT THE INFORMATION CONTAINED IN AND ATTACHED TO THIS FORM IS COMPLETE AND ACCURATE:

Name: Elena Baranoff    Phone: 415-753-7560    Email: Elena.Baranoff@sfgov.org

Address: 375 Woodside Ave Room 206, San Francisco, CA 94127

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FOR DEPARTMENT OF HUMAN RESOURCES USE

PSC# 42264 - 13/14
DHR Analysis/Recommendation: Civil Service Commission Action:
Commission Approval Required
DHR Approved for 11/19/2018
Receipt of Union Notification(s)
From: dhr-psccoordinatord@sfgov.org on behalf of Fiona.Baranoff@sfgov.org
To: Baranoff, Fiona (JUV); Wantess, Annie (HRD); kcranner@nhselu.org; ecassidy@ifpte21.org; WendyWong26@yahoo.com; wendywong26@yahoo.com; sarah.wilson@seiu1021.org; kschumacher@ifpte21.org; tmathevs@ifpte21.org; leagas@ifpte21.org; tklink@iaiid.com; ecbach@ifpte21.org; tmathevs@ifpte21.org; amakavans@ifpte21.org; lb@local16.org; Ricardo.lopez@sfgov.org; Rasconillo, Katherine (PUC); Sandeep.lal@seiu1021.org; pcamarillo_seiu@sbcglobal.net; MRainsford@Local39.org; Wendy.Frigillana@seiu1021.org; pscreviews@seiu1021.org; pkim@ifpte21.org; agonzalez@iam1414.org; ted.zarzecki@seiu1021.org; leah.berlanga@seiu1021.org; sail@stfllocal798.org; cityworker@sfgovu.org; davidmkernsen@gmail.com; dchrisen@seniorlivinglocal39.org; hodlocal@rochell.net; ablood@scrsieu.org; pcamarillo_seiu@sbcglobal.net; Sandeep.lal@seiu1021.org; mdolnick@seiu1021.org; jhughes@lbwv.org; tony@gd16.us; stewart@bac3-ca.org; xiumin.li@seiu1021.org; ponp.Sin.Yee(HSA); mncarney@nccrc.org; mmitchell@twafs.org; grillo@local39.org; fjuritz@uad.com; staff@sfnma.com; mikes@cd16.us; khughes@lbwv.org; L21PSCReview@ifpte21.org; pkim@ifpte21.org; david.maker@seiu1021.org; jhughes@lbwv.org; david.south@seiu1021.org; david.maker@seiu1021.org; jhughes@lbwv.org; jhughes@lbwv.org; david.maker@seiu1021.org; jhughes@lbwv.org; david.maker@seiu1021.org; jhughes@lbwv.org (contact); edemeyer@aoacal.com; thomas.vitale@seiu1021.org; DHR-PSCCOordinatord. DHR (HRD)

Subject: Receipt of Modification Request to PSC # 42264 - 13/14 - MODIFICATIONS

Date: Monday, October 15, 2018 3:20:08 PM

PSC RECEIPT of Modification notification sent to Unions and DHR

The JUVENILE PROBATION -- JUV has submitted a modification request for a Personal Services Contract (PSC) for $40,000 for services for the period October 1, 2018 – September 30, 2020. For all Modification requests, there is a 7-Day noticed to the union(s) prior to DHR Review.

If SEIU is one of the unions that represents the classes you identified in the initial PSC and the cumulative amount of the request is over $100,000, there is a 60 day review period for SEIU.

After logging into the system please select link below:

http://apps.sfgov.org/dhrhrpupal/node/11860

Email sent to the following addresses: L21PSCReview@ifpte21.org
pkim@ifpte21.org
kschumacher@ifpte21.org tmathevs@ifpte21.org wendywong26@yahoo.com
Wendy.Wong26@yahoo.com ecassidy@ifpte21.org jhughes@lbwv.org
david.maker@seiu1021.org Siu.Yee.Poon@sfgov.org xiumin.li@seiu1021.org
ablood@scrsieu.org david.maker@seiu1021.org leah.berlanga@seiu1021.org
ted.zarzecki@seiu1021.org pscreviews@seiu1021.org
Wendy.Frigillana@seiu1021.org
pcamarillo_seiu@sbcglobal.net Sandeep.lal@seiu1021.me
Kbasconilloc@afwater.org
Ricardo.lopez@sfgov.org thomas.vitale@seiu1021.org sarah.wilson@seiu1021.org
Additional Attachment(s)
PERSONAL SERVICES CONTRACT SUMMARY ("PSC FORM 1")

Department: JUVENILE PROBATION

Dept. Code: JUV

Type of Request: ☑ Modification of an existing PSC (PSC # 42264 - 13/14)

Type of Approval: ☑ Regular

Type of Service: Ombudsman Services

Funding Source: State Funds

PSC Original Approved Amount: $200,000
PSC Original Approved Duration: 10/01/14 - 09/30/18 (4 years)

PSC Mod#1 Amount: $60,000
PSC Mod#1 Duration: 10/01/18-09/30/19 (1 year)

PSC Cumulative Amount Proposed: $260,000
PSC Cumulative Duration Proposed: 5 years

1. Description of Work
A. Scope of Work/Services to be Contracted Out:
The Ombudsperson is responsible for resolving grievances submitted by detained youth at Juvenile Probation Department (JPD) detention facilities. Contractor will serve as a neutral and independent agent who is a liaison between detainees, their parents/guardians and Department staff. When a youth files a grievance, contractor shall investigate and resolve through appropriate means including mediation between the youth and the Department and where appropriate shall recommend procedural changes as part of the recommended resolution of a grievance.

B. Explain why this service is necessary and the consequence of denial:
The provider of the services must be impartial, neutral and an independent agent. If denied, detainees may take legal steps to resolve their grievances.

C. Has this service been provided in the past? If so, how? If the service was provided under a previous PSC, attach copy of the most recently approved PSC.
Yes. This service has been independently contracted out for in the past.

D. Will the contract(s) be renewed?
Yes

E. If this is a request for a new PSC in excess of five years, or if your request is to extend (modify) an existing PSC by another five years, please explain why:

2. Reason(s) for the Request
A. Display all that apply

☐ Circumstances where there is a demonstrable potential conflict of interest (e.g., independent appraisals, audits, inspections, third party reviews and evaluations).

Explain the qualifying circumstances:
The Ombudsman is an impartial, neutral and independent contractor who tries to mitigate formal grievances and resolve them informally. Ombudsman services are mandated by the State. City staff might be perceived to have biases and have conflicts of interest in providing this service within their own departments.

B. Reason for the request for modification:
Ombudsman services need to be independently contracted for because resolving grievances are always circumstances where there is a demonstrable potential conflict of interest (e.g., independent appraisals, audits, inspections, third party reviews and evaluations). This modification would extend the contract term and amount.

3. Description of Required Skills/Expertise
A. Specify required skills and/or expertise: Demonstrated knowledge of the issues facing youth and families involved in the Juvenile Justice System in San Francisco and the services available to those clients. Familiarity with Juvenile Justice laws, Regulations and Organizational Dynamics, Experience with Formal Mediation, Negotiation, Advocacy or similar skill.

B. Which, if any, civil service class(es) normally perform(s) this work? none

C. Will contractor provide facilities and/or equipment not currently possessed by the City? If so, explain: No

4. If applicable, what efforts has the department made to obtain these services through available resources within the City?
Not Applicable

5. Why Civil Service Employees Cannot Perform the Services to be Contracted Out
A. Explain why civil service classes are not applicable.
Services require a neutral and impartial person.

B. If there is no civil service class that could perform the work, would it be practical and/or feasible to adopt a new civil service class to perform this work? Explain: No, as this service is specific to Juvenile Probation Department.

6. Additional Information
A. Will the contractor directly supervise City and County employee? If so, please include an explanation.
No.

B. Will the contractor train City and County employees and/or is there a transfer of knowledge component that will be included in the contact? If so, please explain what that will entail; if not, explain why not.
N/A.

C. Are there legal mandates requiring the use of contractual services?
No.

D. Are there federal or state grant requirements regarding the use of contractual services? If so, please explain and include an excerpt or copy of any such applicable requirement.

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No

E. Has a board or commission determined that contracting is the most effective way to provide this service? If so, please explain and include a copy of the board or commission action.
   No

F. Will the proposed work be completed by a contractor that has a current PSC contract with your department? If so, please explain.
   No.

7. **Union Notification**: On 08/20/18, the Department notified the following employee organizations of this PSC/RFP request:
   - All unions were notified

☐ I CERTIFY ON BEHALF OF THE DEPARTMENT THAT THE INFORMATION CONTAINED IN AND ATTACHED TO THIS FORM IS COMPLETE AND ACCURATE:

Name: Elena Baranoff      Phone: 415-753-7560      Email: Elena.Baranoff@sfgov.org

Address: 375 Woodside Ave Room 206, San Francisco, CA 94127

*******************************************************************************

FOR DEPARTMENT OF HUMAN RESOURCES USE

PSC# 42264 - 13/14
DHR Analysis/Recommendation:
Comission Approval Not Required
Approved by DHR on 09/24/2018
City and County of San Francisco

Department of Human Resources

PERSONAL SERVICES CONTRACT SUMMARY (“PSC FORM 1”)

Department: JUVENILE PROBATION -- JUV
Dept. Code: JUV

Type of Request: ☑ Initial  ☐ Modification of an existing PSC (PSC # ________)

Type of Approval:  ☐ Expedited  ☑ Regular  (☐ Omit Posting)

Type of Service: Ombudsman Services

Funding Source: State Funds

PSC Duration: 4 years
PSC Amount: $200,000
PSC Est. Start Date: 10/01/2014  PSC Est. End Date: 09/30/2018

1. Description of Work
   A. Scope of Work:
   The Ombudsperson is responsible for resolving grievances submitted by detained youth at Juvenile Probation Department (JPD) detention facilities. Contractor will serve as a neutral and independent agent who is a liaison between detainees, their parents/guardians and Department staff. When a youth files a grievance, contractor shall investigate and resolve through appropriate means including mediation between the youth and the Department and where appropriate shall recommend procedural changes as part of the recommended resolution of a grievance.

   B. Explain why this service is necessary and the consequence of denial:
   The provider of the services must be impartial, neutral and an independent agent. If denied, detainees may take legal steps to resolve their grievances.

   C. Has this service been provided in the past. If so, how? If the service was provided via a PSC, provide the most recently approved PSC # and upload a copy of the PSC.
   The Civil Service Commission has approved this service in the past. A professional contractor had been selected through a request for proposal.

   D. Will the contract(s) be renewed? Yes

2. Union Notification: On 06/25/2014, the Department notified the following employee organizations of this PSC/RFP request: all unions were notified

FOR DEPARTMENT OF HUMAN RESOURCES USE

PSC# 42264 - 13/14
DHR Analysis/Recommendation: 08/04/2014
Commission Approval Required
DHR Approved for 08/04/2014

Approved by Civil Service Commission

July 2013
3. **Description of Required Skills/Expertise**
   A. Specify required skills and/or expertise:
      Demonstrated knowledge of the issues facing youth and families involved in the Juvenile Justice System in San Francisco and the services available to those clients. Familiarity with Juvenile Justice laws, Regulations and Organizational Dynamics, Experience with Formal Mediation, Negotiation, Advocacy or similar skill.

   B. Which, if any, civil service class(es) normally perform(s) this work? 
      None.

   C. Will contractor provide facilities and/or equipment not currently possessed by the City? If yes, explain: 
      No

4. **Why Classified Civil Service Cannot Perform**
   A. Explain why civil service classes are not applicable:
      Services require a neutral and impartial person.

   B. Would it be practical to adopt a new civil service class to perform this work? Explain.
      No, as this service is specific to Juvenile Probation Department.

5. **Additional Information (if “yes”, attach explanation)**

<table>
<thead>
<tr>
<th>YES</th>
<th>NO</th>
</tr>
</thead>
<tbody>
<tr>
<td>A. Will the contractor directly supervise City and County employee?</td>
<td>☐</td>
</tr>
<tr>
<td>B. Will the contractor train City and County employee? Not Applicable</td>
<td>☐</td>
</tr>
<tr>
<td>C. Are there legal mandates requiring the use of contractual services?</td>
<td>☐</td>
</tr>
<tr>
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<td>☐</td>
</tr>
</tbody>
</table>

☑ THE ABOVE INFORMATION IS SUBMITTED AS COMPLETE AND ACCURATE ON BEHALF OF THE DEPARTMENT HEAD ON 09/07/2018 BY:

Name: Elena Baranoff Phone: 415-753-7560 Email: Elena.Baranoff@sfgov.org

Address: 375 Woodside Ave Room 206 San Francisco, CA 94127

July 2013