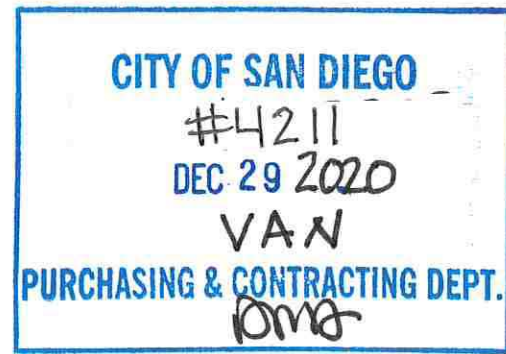


Purchasing and Contracting Department
Sole Source Request and Certification Form



To: Director of Purchasing and Contracting
Cc: Deputy Chief Operating Officer, Neighborhood Services
From: William Curcio, Interim Deputy Director, Public Utilities Department
Date: December 21, 2020

In alignment with the guidance provided in the San Diego Municipal Code section 22.3016, the Purchasing Agent (Director of Purchasing and Contracting) must certify that the award of a sole source contract is necessary by memorializing in writing why strict compliance with a competitive process would be unavailing or would not produce an advantage, and why soliciting bids or proposals would therefore be undesirable, impractical, or impossible.

For consideration, this form must be completed and all required accompanying information must be submitted together, including any related contracts. Failure to do so will result in a delay of approval of the request.

Describe commodity or service(s) to be purchased. Include vendor contact information.

The Public Utilities Department (PUD) requests approval of this certification for sole source procurement with Emerson Process Management Power & Water Solution, Inc. (Emerson) to acquire urgent temporary innovation technology services support for SCADA. Under normal conditions, these services are critical to maintain SCADA systems support, which is essentially the backbone of the water distribution communications system. The need for this temporary service is further compounded due to the COVID-19 pandemic and the City's restricted hiring practices for the remainder of FY21. Therefore, PUD is unable to recruit and fill the current vacant Program Coordinator and other positions responsible for systems support until at least July 2021.

The necessity of this request is supported by the City's issuance of RFP# 10089582-20-V in October 2019 to which the review panel recommended the the new contract be awarded to Emerson. Upon the issuance of the intent to award, the City and Emerson have diligently negotiated the exclusions and other contract terms and conditions. The negotiations have been progressing, but the COVID-19 Pandemic crisis significantly complicated and slowed the progress. It is now anticipated that this contract will be ready for enactment in April/May 2021.

The requested needs are straight forward but are extremely technical and challenging to implement. To best assist PUD, the Consultant shall develop policies and procedures to standardize the City's SCADA operations, re-architect and re-configure SCADA systems to be compliant with National Institute of Standards and Technology (NIST) best practices and Department of Homeland Security's risk-based protection strategies for the Water and Wastewater Sector, specific to COVID-19 outbreak. This desired team of consultants will include a Lead Engineer who shall be under the direct supervision of the IT Operations Program Manager and supervise the remainder of the consulting Team. They will provide day-to-day operations, project support, implement a single IT Operations Management (ITOM) framework for industrial control systems (ICS) programming and overall system administration support.

Specifically, this sole source will centralize the focus on several CIP projects that are currently stalled for reasons directly related to the services requested. This includes the following CIP Water Pump Station Projects: 69th & Mohawk, Soledad, Tierrasanta, Navajo and the pressure regulating system at Curlew Street. It will also help resolve the continued issues Lake Hodges and Chollas Yard. The inability to fully network and activate the SCADA components at these locations has the potential to cost PUD millions in construction contract delays.

Emerson is currently involved in providing services for both the Wastewater COMNET and Pure Water communication systems. Thus, this makes them uniquely and singularly suited to correct deficiencies in SCADA while simultaneously aligning corrections back to Pure Water needs, which SCADA will help feed the potable water into. It also provides for a smoother transition as once competitively bid contract is approved by council and executed, there is no need for employee turnover. Overall, Emerson's combination of existing knowledge of industrial control systems and the technical complexities of Pure Water coupled with the pending contract provide the most efficient and beneficial solution to this time sensitive and critical operational need.

This sole source contract would have Emerson provide services under the existing negotiated terms. PUD is requesting the sole source authorization for four (4) months for an estimated contract value of \$500,000 and will terminate once the City Council approves the new contract associated with RFP 10089582-20-V.

Vendor contact information:
Glenn Heintl, Vice President NA Lifecycle Services
Email: Michael.Q.Brown@Emerson.com
Telephone: 412-963-4625

Justification

1. This product or service is available from only one supplier and meets at least one of the following criteria (please check all that are applicable):

- One-of-a-kind/Compatibility*
 - a. Required by Warranty: the product matches existing equipment, infrastructure and is required by warranty. **(A letter from the provider which supports this claim must be provided.)**
 - b. Goods and Services:
 - i. the good has no competitive product or alternative on the market.
 - ii. the service requires a special skill, ability, or expertise linked to the current project that cannot be provided by another supplier.

(Documentation in support of either of the above claims must be provided by the requesting department.)

City Standards The product or service complies with established, existing City standards.

Replacement The product or service is the only compatible replacement component that supports a larger system. Or, the services are the only ones that can replace the existing service requirements.

2. Do any of the following situations exist?

Limited Competition Department made an attempt to find a second or multiple sources to no avail.

Emergency There is an urgent need for the item or service and time does not permit the City to solicit for competitive bids, as in the cases of emergencies as defined under SDMC section 22.3208,. (Delays in solicitation do not satisfy this criteria)

Cost/Market Analysis

Purchasing and Contracting will perform due diligence on each request. If Purchasing and Contracting can find a suitable, cost effective alternative, this request will be denied and that alternative will be pursued after your department has been contacted to discuss the revised determination.

This form does not take the place of an agreement and all sole source requests for a period of one year or longer will require the **submission of an agreement**. The requesting department must submit a purchase requisition and a copy of this certification to Purchasing and Contracting for a Purchase Order to be issued.

PCO Due Diligence (PCO to initial all that apply)

- ___ Proof of warranty or maintenance requirement for standardized and replacement items confirmed.
- ___ Vendor/Supplier confirmed submission of justification letter.
- ___ Market test confirmed that there is no advantage to the City in competing this contracting opportunity to multiple vendors.
- ___ Emergency verified with the department.
- VD Pricing agreement has been reviewed.
- VD Purchasing and Contracting has reviewed this request and affirms that this request for a sole source justification is appropriate.

This sole source is approved for:

- One (1) year from the signature date below. (4 months)
- For the entire length of the contract, but not more than five (5) years.

The length of the contract must be consistent with the sole source approval. A sole source request must be submitted and approved by the Purchasing and Contracting Director prior to the award of each new contract and prior to each extension of an existing contract that was not contemplated in the initial contract term.

- ___ After reviewing the provided information and due diligence, I cannot recommend the approval of this request.

Purchasing and Contracting Director Review

I certify that strict compliance with a competitive process would be unavailing or would not produce an advantage, and that soliciting bids or proposals would be therefore undesirable, impracticable or impossible. My approval is contingent on the information provided in this form.

- In accordance with SDMC §22.3016, this request is approved.
- Based on the information provided and due diligence recommendation of staff, this request is denied.

By: C. Abarca
Claudia C. Abarca
Interim Director
Purchasing & Contracting

January 27, 2021
Date

AGREEMENT

BETWEEN THE

CITY OF SAN DIEGO



AND

**EMERSON PROCESS MANAGEMENT POWER
& WATER SOLUTIONS, INC.**

**TO PROVIDE TEMPORARY DISTRIBUTED
CONTROL SYSTEM (DCS) AND SCADA
SUPPORT SERVICES**

AGREEMENT

This Agreement (Agreement) is entered into by and between the City of San Diego, a municipal corporation (City), and Emerson Process Management Power & Water Solutions, Inc. (Contractor).

RECITALS

- A. City wishes to retain Contractor to DCS and SCADA Support Services (Services) as further described in the Scope of Work, attached hereto as Exhibit A.
- B. Contractor has the expertise, experience, and personnel necessary to provide the Services.
- C. City and Contractor (collectively, the “Parties”) wish to enter into an agreement whereby City will retain Contractor to provide the Services.
- D. This Agreement is exempt from competitive bidding requirements pursuant to San Diego Municipal Code (SDMC) section 22.3208(d) because the Purchasing Agent has certified that the award of a sole source contract is necessary under SDMC section 22.3016(a).

NOW, THEREFORE, for good and valuable consideration, the sufficiency of which is acknowledged, City and Contractor agree as follows:

ARTICLE 1 CONTRACTOR SERVICES

- 1.1 Scope of Services.** Contractor shall provide the Services to the City as described in Exhibit A, Scope of Work, which is incorporated herein by reference.
- 1.2 Contract Administrator.** The Public Utilities Department (Department) is the Contract Administrator for this Agreement. Contractor shall provide the Services under the direction of a designated representative of the Department as follows:
 - Cyrus Moaveni
 - Senior Electrical Engineer
 - Public Utilities Department
 - 9192 Topaz Way, San Diego, CA 92123
 - 858-654-4224
 - MCMoaveni@sandiego.gov
- 1.3 General Contract Terms and Provisions.** This Agreement incorporates by reference the General Contract Terms and Provisions, attached hereto as Exhibit B.
- 1.4 Submittals Required with the Agreement.** Contractor is required to submit all

forms and information delineated in Exhibit C before the Agreement is executed.

ARTICLE 2 DURATION OF AGREEMENT

2.1 Term. This Agreement shall be for an initial term of four (4) months beginning on the January 1, 2021 and extending through April 30, 2021. The term of this Agreement shall not exceed five years unless approved by the City Council by ordinance.

2.2 Effective Date. This Agreement shall be effective on the date it is executed by the last Party to sign the Agreement, and approved by the City Attorney in accordance with San Diego Charter Section 40 (Effective Date).

ARTICLE 3 COMPENSATION

3.1 Amount of Compensation. City shall pay Contractor for the performance of all Services rendered in accordance with this Agreement in an amount not to exceed \$500,000.00 or the amount referenced in the Purchase Order.

ARTICLE 4 WAGE REQUIREMENTS

4.1 Wage Requirements. This Contract incorporates by reference the City's Wage Requirements, attached hereto as Exhibit D.

ARTICLE 5 CONTRACT DOCUMENTS

5.1 Contract Documents. This Agreement including its exhibits and attachments completely describes the goods and services to be provided.

5.2 Counterparts. This Agreement may be executed in counterparts, which when taken together shall constitute a single signed original as though all Parties had executed the same page.

IN WITNESS WHEREOF, this Agreement is executed by City and Contractor acting by and through their authorized officers.

CONTRACTOR
Emerson Process Management
Power & Water Solutions, Inc.

CITY OF SAN DIEGO
A Municipal Corporation

By: Susan E. Long

By: C. Barca

Name: Susan E. Long

Name: Claudia C. Barca

Title: Director, Commercial Operations

Director, Purchasing & Contracting

Date: 1/14/21

Date: January 27, 2021

Approved as to form this 28th day of
January, 2021.
MARA W. ELLIOTT, City Attorney

By: Leone
Deputy City Attorney

Christine Leone

Print Name

EXHIBIT A SCOPE OF WORK

A. INTRODUCTION

Contractor shall provide qualified personnel to support the Application Development & Maintenance and System Administration for the City's Public Utilities Department's (PUD) Distributed Control System (DCS) and Supervisory Control and Data Acquisition (SCADA) systems.

1. PUD Distributed Control System Overview

The City of San Diego's Public Utilities Department (PUD) through its Wastewater Treatment & Disposal Division (WWTD) owns and operates a Distributed Control System (DCS) for monitoring and control of its wastewater facilities. The overall system is referred to as COMNET (Cleanwater Operations Management Network). COMNET's implementation, using the Emerson's DCS product, started in 1995 and continued for several years thereafter for approximately \$121 million. With additional investments made on new facilities and system expansion and upgrades made since the original implementation, the City's investment in COMNET to date is estimated at over \$200 million. Additional upgrades to the current system and system expansion due to new facility construction are planned through the next 5 to 7 years.

COMNET's management and routine maintenance and custom programming enhancements are currently performed by a team of engineers and programmers consisting of City employees and embedded consultants/programmers. The offices for the COMNET team are located at 9192 Topaz Way in San Diego, and team members travel to various City offices and wastewater facilities, as required, to attend meetings and perform their programming services.

The wastewater facilities included in COMNET include:

- Point Loma Wastewater Plant (PLWTP)
- North City Water Reclamation Plant (NCWRP)
- South Bay Water Reclamation Plant (SBWRP)
- Metropolitan Biosolids Center (MBC)
- Several major sewage pump stations (PS2, PS1, Pensaquitos PS, PS64, PS 65, Grove Ave PS, Otay River PS)

The COMNET team's involvement with the DCS maintenance, upgrades and enhancements include, but not limited to, the following system components:

- Input/output and communications modules
- Network switches and routers
- Main servers and controllers
- Operator workstations
- System software upgrades and services
- Control algorithm development and enhancements
- Cybersecurity updates
- Disaster recovery planning and exercise

2. PUD WSO SCADA Systems Overview

The City of San Diego PUD through its Water System Operations (WSO) Division owns and operates two Supervisory Control and Data Acquisition (SCADA) systems for monitoring and control of its water facilities. These include nine raw water dams, three treatment plants, five recycled water pump stations, 49 pump stations, 27 distribution reservoirs and standpipes and 185 monitoring points.

The current SCADA system for the distribution system and the treatment plants are primarily based on Schneider Modicon programmable logic controllers (PLCs), and Transdyne's proprietary applications software, DYNAC, and Windows based Wonderware InTouch Human Machine Interface (HMI) software. Dynac is the primary HMI for the distribution system and Wonderware is the primary HMI for the other systems, including the water treatment plants and raw water system. The support of these sites is provided by a combination of a City employees and embedded consultants.

The Chollas Control Center, located at 2781 Caminito Chollas, is the focal point of the water system telemetry. The main control room has a virtual view to the sites within the City's water distribution network. The embedded consultants are expected to perform their services at the Chollas Control Center or any other City offices or water facilities, as required.

The City is planning an upgrade of the SCADA systems, which will take place during the next 5 to 7 years.

3. Strategic Goals and Objectives

Contractor shall assist the City in achieving its strategic goals and objectives, as indicated below:

- Enhance quality of application development, application maintenance and system admin activities through deployment of highly qualified and experienced resources
- Improve cost effectiveness of operations for the DCS and SCADA systems through competitive market pricing for the in-scope positions sought
- Enhance flexibility and scalability of required resources over the Term of the Agreement
- Leverage highly qualified Contractor staff to exceed City's expectations
- Provide resources with a high level of technical expertise for the support services, including ongoing expertise based on regular and recurring training and professional development activities over the term of the Agreement

4. Assets

Contractor shall be responsible for providing its resources with a computing device (e.g., laptop, desktop PC) that meets City requirements, a mobile phone, and transportation to get to/from City Locations required to perform their duties (e.g., car). The City will

provide the Contractor's resources with a work location/desk, network connectivity to the City's network, and use of network printing devices at in scope City locations.

**B. DISTRIBUTED CONTROL SYSTEMS PROGRAMMING & NETWORK SERVICES
OVERVIEW AND OBJECTIVES**

This section sets forth the required and desired skill profile and responsibilities of the Contractor's staff under this temporary Agreement as part of the Services.

Contractor shall furnish competent personnel that meet the requirements defined in Section 3. Onsite Staffing Support below. The Services will be principally delivered from 9192 Topaz Way, San Diego, CA 92123 for Wastewater Treatment & Disposal Division's (WWTD) Distributed Control System (DCS) and 2781 Caminito Chollas, San Diego, CA 92105 for Water System Operations' (WSO) Supervisory Control and Data Acquisition (SCADA) systems. It is anticipated that Contractor's DCS-based resources will spend significant time at other City locations. The control and supervision of the Services will be retained by the City.

Contractor will be responsible for the following:

- Providing Personnel with the skills and experience as described in Section 4. Service Support Roles below
- Providing Personnel that have undergone the necessary training required to perform the Services, including ongoing training to maintain technical currency for the systems they support
- Providing Personnel that have undergone the training on Emerson's DCS family of products

1. SERVICE ENVIRONMENT

Wastewater Treatment & Disposal Division's Distributed Control System

The City of San Diego's Public Utilities Department (PUD) through its Wastewater Treatment & Disposal Division (WWTD) owns and operates a Distributed Control System (DCS) for monitoring and control of its wastewater facilities. The overall system is referred to as COMNET (Cleanwater Operations Management Network). COMNET's implementation, using the Emerson's DCS product (currently "Ovation"), started in 1995 and continued for several years thereafter. Additional upgrades to the current system and system expansion due to new facility construction are planned through the next 5 to 7 years.

COMNET's management and routine maintenance and custom programming enhancements are currently performed by a team of engineers and programmers consisting of City employees and embedded consultants and programmers. The offices for the COMNET team are located at 9192 Topaz Way in San Diego, and team members travel to various City offices and wastewater facilities, as required, to attend meetings and perform their programming services.

The wastewater facilities included in COMNET include:

- Point Loma Wastewater Plant (PLWTP)
- North City Water Reclamation Plant (NCWRP)

- South Bay Water Reclamation Plant (SBWRP)
- Metropolitan Biosolids Center (MBC)
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- System software upgrades and services
- Control algorithm development and enhancements
- Cybersecurity updates
- Disaster recovery planning and exercise

WSO SCADA SYSTEMS

The City of San Diego PUD through its Water System Operations (WSO) Division owns and operates two Supervisory Control and Data Acquisition (SCADA) systems for monitoring and control of its water facilities. These include nine raw water dams, three treatment plants, five recycled water pump stations, 49 pump stations, 27 distribution reservoirs and standpipes and 185 monitoring points.

The current SCADA system for the distribution system and the treatment plants are primarily based on Schneider Modicon programmable logic controllers (PLCs), and Transdyne's LINUX-based DYNAC and Windows based Wonderware InTouch Human Machine Interface (HMI) software. Dynac is the primary HMI for the distribution system and Wonderware is the primary HMI for the other systems, including the water treatment plants. The support of these sites is provided by a combination of a City employees and embedded consultants.

The Chollas Control Center, located at 2781 Caminito Chollas, is the focal point of the water system telemetry. The main control room has a virtual view to the sites within the City's water distribution network. The embedded consultants are expected to perform their services at the Chollas Control Center or any other City offices or water facilities, as required.

The City is planning an upgrade of the SCADA systems, which will take place during the next 5 to 7 years. Embedded consultants and programmers, whose qualifications are described in 4. Support Service Roles below are intended to augment City staff and provide support for the maintenance, upkeep and enhancement of the current systems, as well as assisting in designer and contractor submittals review for the new or upgrade projects. Additionally, participation is expected in new and upgrade system implementation in the field, including assistance with system switchover and integration into the overall SCADA systems.

2. CLIENT SERVICE LOCATIONS

2.1 Primary Service Locations

Primary Service Locations are the City locations where Contractor’s resources will primarily perform the Services. The Contractor’s personnel will be expected to make Primary Locations as their “work base” location for delivery of the Services, as applicable to the system(s) they support. Transportation mileage to/from these locations to/from the Service Contractor personnel home locations will not be eligible for reimbursements on a Pass-Through Fees basis.

Table 1. Primary Service Locations

#	Location Name	Address
1	DCS Primary Service Location	City of San Diego Public Utilities Department 9192 Topaz Way, San Diego, CA 92123
2	SCADA Primary Service Location	City of San Diego Water Systems Operations 2781 Caminito Chollas, San Diego, CA 92105

2.2 Secondary Service Locations

Secondary locations are those City locations where Contractor personnel may be required to travel in the performance of the Services. Transportation mileage to/from these locations from the Service Contractor Personnel’s Primary Service Location, home locations or other City Secondary Service Locations will be eligible for reimbursements on a Pass-Through Fees basis.

Table 2. Secondary Service Locations

#	Location Name	Address
1	All wastewater facilities and City and its agents’ and contractors’ offices as required to perform the services.	Various locations with San Diego County, and rare, but possible trips to other cities.
2	All water facilities and City and its agents’ and contractors’ offices as required to perform the services.	Various locations with San Diego County, and rare, but possible trips to other cities.

3. ONSITE STAFFING SUPPORT

Contractor shall provide the City with full-time, dedicated onsite staffing to support WWTD’s DCS and WSO’s SCADA systems as per the following requirements:

- a. 7 Ovation DCS Programmers
- b. 1 DCS Programmer with Emphasis on I&C and PLC
- c. 1 DCS Network Backup Admin
- d. 1 DCS Tech Writer
- e. 1 SCADA PLC Programmer
- f. 1 SCADA Instrumentation & Controls Specialist
- g. 1 SCADA Network Backup Admin
- h. 1 SCADA Tech Writer

4. SERVICE SUPPORT ROLES

The following sections set forth the role descriptions, responsibilities and accountabilities, technical competencies, behavioral competencies, and required experience, education and certifications for each of the personnel that the Contractor shall provide to the City as part of the Services.

4.1 Ovation DCS Programmer

Role Description:

Ovation DCS Programmer is responsible for performing analysis, modification, documentation and support of daily operations as well as involvement with system design, upgrade and enhancement while being under the general supervision of the PUD's Control Systems Engineer.

Responsibilities and Accountabilities:

- Provide programming support for wastewater facilities who have Westinghouse WDPF, Emerson Ovation Distributed Control and SCADA Systems.
- Work as part of a team and independently evaluate, select and apply standard engineering techniques and procedures.
- Conduct site investigation and make recommendations for systems design and upgrades.
- Work with UNIX, Sun Solaris, and Windows operating systems.
- Ensure software program continuity and consistency of application and control philosophy, as appropriate, throughout multiple facilities and in the design of new facilities.
- Perform basic principles of instrumentation trouble shooting, problem identification and change implementation.
- Accurately and quickly access and interpret system and program diagnostic results.
- Provide summary data and information reports for a wide variety of software products, instruments and equipment.

- Program and troubleshoot smart instruments and experience in working with HART protocol.
- Perform basic principles of instrumentation trouble shooting, problem identification and change implementation.

Technical Competencies:

- Ability & willingness to respond to COMNET system trouble calls at a facility when needed, including afterhours and weekends.
- Knowledge of the relevant technology, hardware and software tools, diagnostic and preventive maintenance practices used to manage and maintain DCS, information, data, and communication systems.
- Knowledge of wastewater treatment plant design, construction and operations.
- Conduct loop checks through process equipment testing.
- Experience leading large scale complex projects.
- Performs engineering reviews of all designer and contractor submittals.
- Skilled in reading/interpreting P&IDs.
- Excellent understanding of PID algorithms.
- Skilled in PID parameter tuning.
- Skilled in working with/configuring relational databases.
- Skilled in hardware and software troubleshooting.
- Skilled in networks and security troubleshooting.
- Experience in field startup and switchover of complex, operational control systems.

Behavioral Competencies:

- Exhibit strong communication skills and able to work in a fast-paced team environment with multiple deadlines.
- Demonstrated ability of effective communication and meeting customer needs.
- Adaptability and Flexibility - The ability to keep functioning effectively when under pressure and/or experiencing rapidly changing or uncertain conditions. Openness to different and new ways of doing things; willingness to modify one's preferred way of doing things.
- Accountability and Credibility - Takes responsibility for the results. Demonstrated concern that one be perceived as responsible, reliable, and trustworthy.
- Customer Orientation - Demonstrated concern for satisfying one's external and internal customers.

- Results Orientation - Focusing on the desired end result of one's own or one's unit's work; setting challenging goals, focusing effort on the goals, and meeting or exceeding them.
- Analytical Thinking - Approaching a problem by using a logical, systematic, sequential approach.
- Interpersonal Effectiveness - The ability to notice, interpret, and anticipate others' concerns and feelings, and to communicate this awareness empathetically to others.

Required Experience

- 5+ Years of Emerson Ovation DCS Programming Experience
- 2+ Year of Unix or Windows network administration
- 2+ Years of WDPF DCS Programming Experience

Required Education/Certifications

- A relevant University degree/technical certification, and/or relevant experience commensurate to the role

Preferred Education/Certifications

- Certifications in core programming languages, agile methodologies (CSPO, PMI-ACP, etc.)

4.2 DCS Programmer with Emphasis on I&C and PLC

Role Description:

DCS Programmer is responsible for performing analysis, modification, documentation and support of daily operations as well as involvement with system design, upgrade and enhancement for Programmable Logic Controller (PLC) and Instruments & Control (I&C), while being under the general supervision of the PUD's Control Systems Engineer.

Responsibilities and Accountabilities:

- Provide programming and engineering support for I&C and PLC systems.
- Work as part of a team and independently evaluate, select and apply standard engineering techniques and procedures.
- Conduct site investigation and make recommendations for systems design and upgrades.
- Work with Windows operating systems.
- Perform basic principles of instrumentation trouble shooting, problem identification and change implementation.
- Accurately and quickly access and interpret system and program diagnostic results.

- Provide summary data and information reports for a wide variety of software products, instruments and equipment.
- Program and troubleshoot smart instruments and experience in working with HART protocol.
- Perform basic principles of instrumentation trouble shooting, problem identification and change implementation.

Technical Competencies:

- Thorough understanding of P&IDs
- Thorough understanding of control theory
- Hands-on experience in PLC configuration and programming

Behavioral Competencies:

- Ability & willingness to respond to DCS system trouble calls at a facility when needed, including afterhours and weekends.
- Adaptability and Flexibility - The ability to keep functioning effectively when under pressure and/or experiencing rapidly changing or uncertain conditions. Openness to different and new ways of doing things; willingness to modify one's preferred way of doing things.
- Accountability and Credibility - Takes responsibility for the results. Demonstrated concern that one be perceived as responsible, reliable, and trustworthy.
- Customer Orientation - Demonstrated concern for satisfying one's external and internal customers.
- Results Orientation - Focusing on the desired end result of one's own or one's unit's work; setting challenging goals, focusing effort on the goals, and meeting or exceeding them.
- Analytical Thinking - Approaching a problem by using a logical, systematic, sequential approach.
- Interpersonal Effectiveness - The ability to notice, interpret, and anticipate others' concerns and feelings, and to communicate this awareness empathetically to others.

Required Experience

- Minimum 10 years' experience in the control systems design and integration field
- Experience in water/wastewater applications
- Familiarity with Emerson Ovation DCS programming & troubleshooting
- Experience with A-B PLCs

Required Education/Certifications

- Minimum a BS degree in electrical engineering, computer sciences, or a related field

4.3 DCS Network Admin Backup

Role Description:

The role is responsible for installing, maintaining and upgrading any software or hardware required to efficiently run a computer network related to COMNET. The network may extend to a local area network, wide area network, the Internet and intranets. The role supports City's Network platforms for systems management, ad-hoc operational requests, and problem / defect resolution.

Responsibilities and Accountabilities:

- Ensure Network operations are in alignment with PUD's business goals and objectives.
- Support the problem, defect, and incident management processes for seamless Network operations.
- Support in delivering evidence of Network compliance to audit requests.
- Develop and measure performance and functional metrics for all Network services.
- Troubleshoot problems, configure hardware and software, implement back up processes and assess systems for upgrades or replacement.
- Support the rollout of new systems/software and enhancements to current systems.
- Monitor and ensure all COMNET software, hardware, computer systems and network equipment are running smoothly including loading and installing of all necessary software applications onto the network equipment, servers and workstations.
- Ensure a high level of network availability and security.
- Participate in documenting and improving DCS network equipment and configuration.
- Develop training materials and procedures as required.
- Liaise with external contacts (software, hardware vendors/suppliers) regarding DCS network issues.

Technical Competencies:

- Thorough familiarity and experience with network configuration and operation in control systems environments.

Behavioral Competencies:

- Ability & willingness to respond to DCS trouble calls at a facility when needed, including afterhours and weekends.
- Adaptability and Flexibility - The ability to keep functioning effectively when under pressure and/or experiencing rapidly changing or uncertain conditions. Openness to different and new ways of doing things; willingness to modify one's preferred way of doing things.
- Accountability and Credibility - Takes responsibility for the results and future direction of the organization. Demonstrated concern that one be perceived as responsible, reliable, and trustworthy.
- Customer Orientation - Demonstrated concern for satisfying one's external and internal customers.
- Results Orientation - Focusing on the desired end result of one's own or one's unit's work; setting challenging goals, focusing effort on the goals, and meeting or exceeding them.
- Analytical Thinking - Approaching a problem by using a logical, systematic, sequential approach.
- Interpersonal Effectiveness - The ability to notice, interpret, and anticipate others' concerns and feelings, and to communicate this awareness empathetically to others.

Required Experience

- Experience with Windows 2008 Server R2 Standard
- Experience with Windows 7 and 10 Professional
- Experience with Microsoft Active Directory
- Experience with Anti-virus systems
- Experience with Cisco ASA firewalls
- Experience with Cisco switches
- Experience with Cisco routers
- Experience with Enterasys switches
- Experience with fiber optics
- Experience with TCP/IP and Ethernet
- Knowledge of OSI network model
- Experience with backup and disaster recovery systems
- Experience with Domain Name System (DNS)
- Experience with latest Microsoft Windows and Server Software & Operating Systems

Desired Experience

- Experience with scripting languages such as PERL and BASH
- Experience with mission-critical/ “real time” control systems
- Experience with Sun/Oracle Solaris
- Experience with Red Hat Linux
- Experience with the Emerson Distributed Control System
 - WESGate datalinks
 - SCADA Server datalinks
 - Enterprise Data Server (EDS)
 - WDPF WESNet highway
 - Ovation Process Historian (OPH)
 - Ovation Controllers
 - Ovation Data highway
 - Ovation Roles and Security
 - Ovation R-Line IO
 - WDPF Q-line IO

Required Education

- Bachelor’s degree in Electrical Engineering, Computer Sciences, or similar field
- Formal education in networking principles and engineering

Desired Certifications

- Network Certification
- Cybersecurity Certification

4.4 DCS Tech Writer

Role Description:

The role is responsible for preparing instruction manuals and other supporting technical documents to communicate complex and technical information more easily to engineers and operators. The role is also responsible for documenting modifications and enhancements that are made by programmers and engineers to the DCS, including configuration, functionality, control algorithms and logic, etc., on a continuous basis.

Responsibilities and Accountabilities:

- Define and enhance the contents of a disaster recovery plan.
- Test disaster recovery plans before execution to resolve any problems.

- Determine the needs of end users of technical documentation.
- Work with technical staff to make Disaster recovery plans easier to use and thus need fewer instructions.
- Organize and write supporting documents.
- Use photographs, drawings, diagrams, animation, and charts where necessary.
- Standardize content.
- Gather usability feedback from engineers and operators and revise documents as new issues arise and/or as system modifications/enhancements are made.

Technical Competencies:

- Proficient in interviewing skills, extracting information effectively and asking the right questions.
- Basic knowledge of Microsoft Windows 10 and Microsoft Windows 2008-R2 Server.
- Proficiency in Word and PDF files and knowledge of publishing documents.
- Basic Microsoft Active Directory knowledge.
- Basic network knowledge (OSI model, Ethernet, TCP/IP).
- Basic knowledge of Cisco hardware (switches and firewalls).
- Basic knowledge of Linux and Sun Solaris operating systems.
- General control systems exposure.
- Proficient in writing and translating complex control system policies and procedures.
- Exposure to writing and defining the contents of a disaster recovery plan.
- Proficient in writing and defining the contents of a disaster recovery plan.
- Proficient in testing disaster recovery plans before execution to resolve any problems.
- Latest Microsoft Office Suite, Windows and Server products.

Behavioral Competencies:

- Self-starter and motivated individual.
- Excellent communication skills.
- Adaptability and Flexibility - The ability to keep functioning effectively when under pressure and/or experiencing rapidly changing or uncertain conditions. Openness to different and new ways of doing things; willingness to modify one's preferred way of doing things.

- Accountability and Credibility - Takes responsibility for the results. Demonstrated concern that one be perceived as responsible, reliable, and trustworthy.
- Customer Orientation - Demonstrated concern for satisfying one's external and/or internal customers.
- Results Orientation - Focusing on the desired end result of one's own or one's unit's work; setting challenging goals, focusing effort on the goals, and meeting or exceeding them.
- Analytical Thinking - Approaching a problem by using a logical, systematic, sequential approach.
- Interpersonal Effectiveness - The ability to notice, interpret, and anticipate others' concerns and feelings, and to communicate this awareness empathetically to others.

Required Experience

- At least 5 years' experience creating and maintaining technical documents tailored for engineers and operators in an industrial process control environment.
- Document management and version control experience.
- Experience in testing documented policies and procedures before execution to resolve any problems.
- Experience in performing a business impact analysis and risk assessment.

Required Education/Certifications

- A relevant University degree/technical certification, and/or relevant experience commensurate to the role

4.5 SCADA PLC Programmer

Role Description:

Currently, the majority of WSO legacy PLC hardware and software (mainly Modicon products) require upgrades to a current, supported platform. The upgrades would include cutover/commissioning services at water treatment and distribution facilities.

The role responsible for performing analysis, modification, documentation and support of daily operations of current systems as well as involvement with system design, upgrade and enhancement while being under the general supervision of the PUD's PLC Engineer.

Responsibilities and Accountabilities:

- Develop PLC Code standards.
- Migrate existing PLC programs to current, supported platforms.
- Develop & commission new PLC code.

- Develop cutover strategies.
- Develop detail PLC logic documentation.
- Integrate new projects/facilities into the existing SCADA system.
- Develop written control strategies.
- Develop PLC coding guidelines.
- Develop legacy PLC hardware transition plan.
- Develop PLC project libraries.
- Review project proposals for both treatment and distribution facilities.
- Support and participate in the review of new projects.
- Prepare PLC cyber security strategy.
- Develop PLC hardware & software maintenance plans.
- Participate in the asset management system as required to include PLC in the SAP EAM.
- Provide as needed programming workshops.

Technical Competencies:

- Ability & willingness to respond to SCADA system trouble calls at a facility when needed, including afterhours and weekends.
- Familiarity with Wonderware HMI highly desirable

Behavioral Competencies:

- Adaptability and Flexibility - The ability to keep functioning effectively when under pressure and/or experiencing rapidly changing or uncertain conditions. Openness to different and new ways of doing things; willingness to modify one's preferred way of doing things.
- Accountability and Credibility - Takes responsibility for the results. Demonstrated concern that one be perceived as responsible, reliable, and trustworthy.
- Customer Orientation - Demonstrated concern for satisfying one's external and/or internal customers.
- Results Orientation - Focusing on the desired end result of one's own or one's unit's work; setting challenging goals, focusing effort on the goals, and meeting or exceeding them.
- Analytical Thinking - Approaching a problem by using a logical, systematic, sequential approach.
- Interpersonal Effectiveness - The ability to notice, interpret, and anticipate others' concerns and feelings, and to communicate this awareness empathetically to others.

Required Experience

- Experience in serial Ethernet and radio communications
- Experience in Modicon PLC programming
- Experience in field startup and live switchover
- Experience in water systems controls
- Understanding of P&IDs

Required Education/Certifications

- A relevant University degree/technical certification, and/or relevant experience commensurate to the role

4.6 SCADA Instrumentation & Controls Specialist

Role Description:

The support function of the I&C specialist is to address maintenance of current systems, new projects, and legacy sensor technology. A large portion of this support role is focused on plan checking functions during the facility design stage. Also, these services are to be utilized at both treatment and distribution facilities. This function will also assist with maintenance planning and change management that will need to be implemented to address WSO's SCADA governance.

Responsibilities and Accountabilities:

- Develop instrumentation standards
- Participate and provide responses as needed to support the plan checking process
- Prepare instrumentation maintenance plans
- Develop instrumentation design guidelines
- Develop instrumentation change management guidelines
- Develop process performance plans
- Develop instrument alarm strategies
- Design instrumentation solutions
- Develop instrumentation inventories
- Develop instrumentation process manuals
- Develop process control strategies
- Develop control narratives
- Develop legacy sensor transition plans
- Develop P&ID drawings to meet specific facility needs
- Provide as needed instrumentation workshops

- Review consultant proposals for both treatment and distribution facilities
- Participate in the asset management system as required to include PLC in the City's SAP EAM

Technical Competencies:

- Demonstrated ability to perform the responsibilities stated above

Behavioral Competencies:

- Ability & willingness to respond to SCADA system trouble calls at a facility when needed, including afterhours and weekends.
- Adaptability and Flexibility - The ability to keep functioning effectively when under pressure and/or experiencing rapidly changing or uncertain conditions. Openness to different and new ways of doing things; willingness to modify one's preferred way of doing things.
- Accountability and Credibility - Takes responsibility for the results. Demonstrated concern that one be perceived as responsible, reliable, and trustworthy.
- Customer Orientation - Demonstrated concern for satisfying one's external and internal customers.
- Results Orientation - Focusing on the desired end result of one's own or one's unit's work; setting challenging goals, focusing effort on the goals, and meeting or exceeding them.
- Analytical Thinking - Approaching a problem by using a logical, systematic, sequential approach.
- Interpersonal Effectiveness - The ability to notice, interpret, and anticipate others' concerns and feelings, and to communicate this awareness empathetically to others.

Required Experience

- Experience in serial and Ethernet radio communications
- Experience in field startup and live switchover
- Experience in water systems controls

Required Education/Certifications

- A relevant University degree/technical certification, and/or relevant experience commensurate to the role

4.7 SCADA Network Admin Backup

Role Description:

The role is responsible for installing, maintaining and upgrading any software or hardware required to efficiently run a computer network related to WSO's SCADA Systems. The network may extend to a local area network, wide area

network, the Internet and intranets. The role supports City's Network platforms for systems management, ad-hoc operational requests, and problem / defect resolution.

Responsibilities and Accountabilities:

- Ensure Network operations are in alignment with PUD's business goals and objectives.
- Support the problem, defect, and incident management processes for seamless Network operations.
- Support in delivering evidence of Network compliance to audit requests.
- Develop and measure performance and functional metrics for all Network services.
- Troubleshoot problems, configure hardware and software, implement back up processes and assess systems for upgrades or replacement.
- Support the rollout of new systems/software and enhancements to current systems.
- Monitor and ensure all SCADA software, hardware, computer systems and network equipment are running smoothly including loading and installing of all necessary software applications onto the network equipment, servers and workstations.
- Ensure a high level of network availability and security.
- Participate in documenting and improving SCADA network equipment and configuration.
- Develop training materials and procedures as required.
- Liaise with external contacts (software, hardware vendors/suppliers) regarding SCADA network issues.

Technical Competencies:

- Thorough familiarity and experience with network configuration and operation in control systems environments.

Behavioral Competencies:

- Ability & willingness to respond to SCADA trouble calls at a facility when needed, including afterhours and weekends.
- Adaptability and Flexibility - The ability to keep functioning effectively when under pressure and/or experiencing rapidly changing or uncertain conditions. Openness to different and new ways of doing things; willingness to modify one's preferred way of doing things.
- Accountability and Credibility - Takes responsibility for the results and future direction of the organization. Demonstrated concern that one be perceived as responsible, reliable, and trustworthy.

- Customer Orientation - Demonstrated concern for satisfying one's external and internal customers.
- Results Orientation - Focusing on the desired end result of one's own or one's unit's work; setting challenging goals, focusing effort on the goals, and meeting or exceeding them.
- Analytical Thinking - Approaching a problem by using a logical, systematic, sequential approach.
- Interpersonal Effectiveness - The ability to notice, interpret, and anticipate others' concerns and feelings, and to communicate this awareness empathetically to others.

Required Experience

- Experience with Windows 2008 Server R2 Standard
- Experience with Windows 7 and 10 Professional
- Experience with Microsoft Active Directory
- Experience with Anti-virus systems
- Experience with Cisco ASA firewalls
- Experience with Cisco switches
- Experience with Cisco routers
- Experience with Enterasys switches
- Experience with fiber optics
- Experience with TCP/IP and Ethernet
- Knowledge of OSI network model
- Experience with backup and disaster recovery systems
- Experience with Domain Name System (DNS)
- Experience with latest Microsoft Windows and Server Software & Operating Systems
- Experience with Red Hat Linux
- Experience with Java and JavaScript environments

Desired Experience

- Experience with scripting languages such as PERL and BASH
- Experience with mission-critical/"real time" control systems

Required Education

- Bachelor's degree in Electrical Engineering, Computer Sciences, or similar field
- Formal education in networking principles and engineering

Desired Certifications

- Network certification
- Cybersecurity certification

4.8 SCADA Tech Writer

Role Description:

The role is responsible for preparing instruction manuals and other supporting technical documents to communicate complex and technical information more easily to engineers and operators. The role is also responsible for documenting modifications and enhancements that are made by programmers and engineers to the WSO's SCADA Systems, including configuration, functionality, control algorithms and logic, etc., on a continuous basis.

Responsibilities and Accountabilities:

- Define and enhance the contents of a disaster recovery plan.
- Test disaster recovery plans before execution to resolve any problems.
- Determine the needs of end users of technical documentation.
- Work with technical staff to make Disaster recovery plans easier to use and thus need fewer instructions.
- Organize and write supporting documents.
- Use photographs, drawings, diagrams, animation, and charts where necessary.
- Standardize content.
- Gather usability feedback from engineers and operators and revise documents as new issues arise and/or as system modifications/enhancements are made.

Technical Competencies:

- Proficient in interviewing skills, extracting information effectively and asking the right questions.
- Basic knowledge of Microsoft Windows 10 and Microsoft Windows 2008-R2 Server.
- Proficiency in Word and PDF files and knowledge of publishing documents.
- Basic Microsoft Active Directory knowledge.
- Basic network knowledge (OSI model, Ethernet, TCP/IP).
- Basic knowledge of Cisco hardware (switches and firewalls).
- Basic knowledge of Linux and Sun Solaris operating systems.
- General control systems exposure.

- Proficient in writing and translating complex control system policies and procedures.
- Exposure to writing and defining the contents of a disaster recovery plan.
- Proficient in writing and defining the contents of a disaster recovery plan.
- Proficient in testing disaster recovery plans before execution to resolve any problems.
- Latest Microsoft Office Suite, Windows and Server products.

Behavioral Competencies:

- Self-starter and motivated individual.
- Excellent communication skills.
- Adaptability and Flexibility - The ability to keep functioning effectively when under pressure and/or experiencing rapidly changing or uncertain conditions. Openness to different and new ways of doing things; willingness to modify one's preferred way of doing things.
- Accountability and Credibility - Takes responsibility for the results. Demonstrated concern that one be perceived as responsible, reliable, and trustworthy.
- Customer Orientation - Demonstrated concern for satisfying one's external and/or internal customers.
- Results Orientation - Focusing on the desired end result of one's own or one's unit's work; setting challenging goals, focusing effort on the goals, and meeting or exceeding them.
- Analytical Thinking - Approaching a problem by using a logical, systematic, sequential approach.
- Interpersonal Effectiveness - The ability to notice, interpret, and anticipate others' concerns and feelings, and to communicate this awareness empathetically to others.

Required Experience

- At least 5 years' experience creating and maintaining technical documents tailored for engineers and operators in an industrial process control environment.
- Document management and version control experience.
- Experience in testing documented policies and procedures before execution to resolve any problems.
- Experience in performing a business impact analysis and risk assessment.

Required Education/Certifications

- A relevant University degree/technical certification, and/or relevant experience commensurate to the role

C. SERVICE WINDOW

Standard business hours for all roles listed in Section 4. Service Support Roles above, shall be 8:00 am – 5:00 pm Pacific (which includes a one-hour, unpaid lunch break period). On occasion, the persons in the roles may be asked to perform work outside of these hours (e.g., project commissioning, unanticipated outages/incidents), including weekends and holidays, as required to support the DCS.

D. STAFF APPROVAL PROCESS

All staff assigned to this contract must undergo a thorough background check including criminal history within 30 days before they may begin work under this contract. The background check shall be nationwide in scope. Staff must not have any felony arrests or convictions within the past seven (7) years. Contractor shall provide proof that proposed resources have successfully passed the background check. The proof shall be presented to the Technical Representative at least two (2) working days prior to the proposed resources' start of work under this contract.

Prior to assigning any Contractor resources to the City, Contractor will furnish the City with proposed resource resumes and other information about the proposed resource as may be reasonably requested by the City. The City will have the unilateral right to approve or reject all Contractor-proposed resources. If the City rejects in good faith the proposed assignment, Contractor shall propose other resources to meet City staffing requirements.

During the term of the Agreement, if the City determines in good faith that the continued assignment of a Contractor resource is not in the best interests of City and as such requests replacement of such resource(s), Contractor will replace that resource(s) with an alternative resource(s) of suitable ability and qualifications per the resource approval process described above.

E. ROLES & RESPONSIBILITIES

The Contractor will identify and provide the following Distributed Control System and SCADA Systems Support key roles (one individual may be designated for both roles):

1. DCS Client Service Delivery Lead – Contractor shall designate one of its resources identified herein as the Client Service Delivery Lead. The Client Service Delivery Lead shall:
 - Act as a single point of contact for initial escalation of issues related to service delivery and performance
 - Participate in established and ad hoc weekly, monthly, semi-annual and other project, governance and planning meetings
 - Be a full-time resource under the Agreement
2. SCADA Client Service Delivery Lead – Contractor shall designate one of its resources identified herein as the Client Service Delivery Lead. The Client Service Delivery Lead shall:
 - Act as a single point of contact for initial escalation of issues related to service delivery and performance.

- Participate in established and ad hoc weekly, monthly, semi-annual and other project, governance and planning meetings.
 - Be a full-time resource under the Agreement.
3. Client Executive – Contractor shall designate a Client Executive, which shall:
- Act as a point of escalation for all matters that cannot be resolved with other Contractor resources and the Client.
 - Participate in the monthly and semi-annual meetings identified in Section 2 below, and other ad hoc meetings as reasonably requested by the Client.

The following table identifies Distributed Control System and SCADA Systems Support Services Roles and Responsibilities associated with this SOW. An “X” is placed in the column under the Party that shall be responsible for performing the task. Contractor responsibilities are indicated in the column labeled “Contractor.” Table 1. Distributed Control Systems and SCADA Systems Support Services

Roles and Responsibilities

Distributed Control System and SCADA Systems Support Services Roles and Responsibilities	City	Contractor
1. Provide City policies with which Contractor shall comply in the delivery of the Services	X	
2. Provide Services that comport with applicable City policies, including those set forth in Exhibit C.		X
3. Select appropriate job title, and provide any additional requirements for Services to be submitted to applicable suppliers	X	
4. Pre-qualify resources with appropriate skills and experience before review by the City		X
5. Review and approve resources	X	
6. Provide feedback to the Contractor on candidates that were not selected, or did not meet City requirements	X	
7. Provide resources with the required skills and experience		X
8. Provide resources that possess the experience, skill set as stated in this RFP and have undergone the necessary training, including ongoing training and professional development, required to perform the Services associated with their role		X

Distributed Control System and SCADA Systems Support Services Roles and Responsibilities	City	Contractor
9. Maintain financial responsibility for all training and professional development (i.e., initial and ongoing) cost		X
10. Maintain financial responsibility for all Contractor Personnel costs associated with Personal Time Off (PTO) (e.g., personal time, vacation, holidays)		X
11. Supervise and assign tasks to the Contractor resources for activities related to the Services required	X	
12. Provide a Contractor team lead to interface with the City as required		X
13. Participate in weekly, monthly, semi-annual and other scheduled or ad hoc meetings with the City, including those set forth in Section F. Meeting Requirements		X
14. Provide weekly activity reports and monthly invoices, in accordance with City-approved processes and requirements		X
15. Maintain financial responsibility associated with onboarding Contractor resources that are added as a result of poor resource performance		X

F. ADDITIONAL GENERAL CONTRACT TERMS AND PROVISIONS

In addition to the City’s General Contract Terms and Provisions, attached as Exhibit C, the following additional general contract terms and provisions apply:

1. Relationship Between and Legal Status of Parties

This Agreement shall in no event be construed in such a way that either Party constitutes, or is deemed to be, the representative, agent, employee, partner, or joint venture of the other Party. Vendor is and shall at all times be an independent contractor with regard to all performance under this Agreement. Neither Party shall have the authority to enter into any agreement, nor to assume any liability, on behalf of the other Party, nor to bind or commit the other Party in a manner, except as expressly provided herein. Vendor and its Subcontractors shall be responsible for all aspects of labor relations with such employees, including their hiring, supervision, evaluation, discipline, firing, wages, benefits, overtime, job and shift assignments, and all other terms and conditions of their employment, and City shall have no responsibility

whatsoever for any of the foregoing.

2. **Conduct on Other Party's Premises**

Each Party shall, at all times, comply with and abide by all reasonable policies and procedures of the other Party (or that may be established thereby, from time to time) that pertain to conduct on the Party's premises, possession or distribution of contraband, or the access to, and security of, the Party's real property or facilities, to the extent that the other Party has been provided with a copy of such policy or procedure. Each Party shall exercise due care and diligence to prevent any injury to Persons personnel on the other Party's property shall conform to posted and other applicable regulations and safe-driving practices. Vehicular accidents occurring on a Party's property and involving either Party's personnel shall be reported promptly to the appropriate Party's personnel. Each Party covenants that at all times during the Term, it, and its employees, agents, and Subcontractors shall comply with, and take no action that results in the other Party being in violation of, any applicable federal, state, and local laws, ordinances, regulations, and rules. Each Party's personnel shall clearly identify themselves as the appropriate Party's personnel and not as employees of the other Party. When on the other Party's premises, each Party's personnel shall wear and clearly display identification badges or tags, as approved by the other Party.

G. MEETING REQUIREMENTS

Meetings should be collaborative in nature with both Parties providing appropriate input. Meetings shall be held for each in scope system (i.e., DCS and SCADA) per the following:

1. **Weekly Operational Status Meetings**

The Weekly Operational Status Meetings shall be led by the Client. Parties will participate in the Weekly Status Meetings (or more frequently if required by the Client), in order to:

- Review the status of each in scope system
- Discuss and resolve any open items, challenges, issues, incidents or problems associated with the systems
- Discuss planning activities associated with the in-scope systems and Services

2. **Monthly Review Meetings**

The Monthly Review includes the following:

- Overview of all performance and reporting metrics defined in Section G. Invoicing and Reporting
- Overview of each system's projects and initiatives
- Accomplishments in the previous month

- Capacity Plans, including utilization and forecasting
- Client Satisfaction survey results
- Additional Service metrics, as agreed to by the Parties

H. INVOICING AND REPORTING

The Contractor staff shall use a City-approved time reporting system to submit weekly time sheets for all roles in Section E. Roles and Responsibilities above on a weekly basis. Time sheets and reporting requirements are set forth below.

1. Invoicing Requirements

On or before the 10th Calendar Day of every month during the Term of the Agreement, Service Contractor will invoice the City for the previous Calendar Month’s Fees, per following format.

Table 1. Invoicing Format

Invoice for the Month of: January 2020*									
#	Name	Role	Total Hours	Personal Time Off in Hours	Training Period in Hours	Hourly Rate	Billed Hours	Invoice Amount	Comments
1	Tom Clooney	Ovation DCS Programmer	184	16	16	\$125	152	\$19,000	1 st month of the resource
2	Janet Scarlett	SCADA PLC Programmer	184	24	0	\$125	160	\$20,000	
Subtotal							304	\$39,000	
Pass-Through Fees – City-Approved Mileage (Reports Attached)								\$480	Travel to Secondary Locations
Pass-Through Fees - Other City-Approved Expenses (Receipts Attached)								\$1,000	
Total Invoice Amount								\$40,480	

(Note: Add as many rows as required before the Subtotal row)

The Contractor’s invoices shall be based on time sheets (“Activity Reports”) that each Contractor resource is required to submit to the City on a weekly basis. An Activity Report is a timesheet that provides information concerning each resource’s daily activities. Each Activity Report shall contain the following information:

- Resource Name
- Activity / Task Description

- c. Location(s) Where Task Was Performed
- d. Date Task Started
- e. % complete for the Task
- f. Estimated Completion Date

2. Reporting Requirements

On or before the 10th Calendar Day of every month during the Term of the Agreement, Service Contractor will furnish the City with performance reports per the following:

- a. Monthly Invoicing Accuracy
- b. Monthly Invoicing Timeliness
- c. Timesheet Entry Timeliness
- d. Timesheet Entry Accuracy
- e. Time to Provide Qualified Resources for the City's Consideration
- f. Time to Onboard New Resources
- g. Turnover (Number and Rate) of Assigned Personnel
- h. Client Satisfaction

I. TECHNICAL REPRESENTATIVE

The Technical Representative for this Contract is identified in the notice of award and is responsible for overseeing and monitoring this Contract.

J. PRICING SCHEDULE

Pricing shall be in accordance with Attachment 1 – Pricing Schedule with their proposal to be considered responsive to this RFP. Evaluation points for cost will be assessed based on the 5-year total cost in Pricing Schedule.

1. Types of Fees

For the purposes of this Agreement, the "Fees" include all of the fees type and charges comprising the Services, which are set forth in the attached Pricing Schedule. The items below describe the different Fee types that Contractor may employ to charge the Client for the Services as set forth in the attached Pricing Schedule, subject to the Parties' mutual agreement.

a. Hourly Rate-based Fees.

"Hourly Rate-based Fees" means the Fees associated with the Contractor's resources time working for Client. Hourly Rate-based Fees include all Fees associated with standard full-time labor and any additional labor in excess of same (e.g. "overtime").

b. Pass-Through Fees

“Pass-Through Fees” are Client-approved reimbursable expenses (e.g., Contractor resource mileage to/from Client-approved locations that are exclusive of a resource’s home and designated primary Client Service delivery location) that are passed from the Contractor to Client. Pass-Through Fees will be done at no mark-up to Client. Contractor shall itemize its Pass-Through Fees per project resource, as part of its monthly invoicing process, and in accordance with Section G. Invoicing and Reporting.

c. Management Fees

Any Management Fees associated with the provision or associated administration of the Services (e.g., Contractor’s account and general service management services) shall be incorporated into Contractor’s hourly rates set forth in Pricing Schedule. Contractor shall not invoice the Client separately for any Management Fees.

2. Calculation of Fees

Fees for the Services shall be based on the hourly rates for each project resource, which are set forth in the attached Pricing Schedule.

No later than 10 calendar days after the end of each month during the Term of the Agreement, Contractor shall submit an invoice, in accordance with Section G. Invoicing and Reporting. The invoice shall be the basis for payment of all Fees to the Contractor, including all Hourly Rate-based Fees and all Pass-Through Fees.

3. Travel & Miscellaneous Expenses

- Mileage reimbursement rate shall be at the City’s current mileage rate (mileage log required). Mileage reimbursement will be made for travelling from the resource’s normal work location (Kearny Mesa-MOC or Chollas) to other facilities, per City’s request, to perform their work.
- Travel expenses for the lowest cost-effective Air Fare, Train, and/or Car Rental, will be reimbursed at actual costs (receipts required).
- Lodging and Per Diem will be reimbursed at actual costs (receipts required) up to the maximum allowance for the San Diego area a published/posted on the U.S. General Services Administration website (<http://www.gsa.gov/portal/category/100120>).
- All subconsultant costs are reimbursed as a “direct expense” at actual costs (invoice/receipts required).
- All vendor, supplier, material and rental equipment costs are reimbursed as a “direct expense” at actual costs (invoice/receipts required).

K. STATEMENT OF WORK DEFINITIONS

“Admin” means an individual responsible for the upkeep, configuration, and reliable operation of computer systems, of infrastructure, network and other computer systems.

“Application(s)” or **“Application System(s)”** means a Software Application managed by the Contractor in support of services rendered.

“Business Day(s)” means any weekday on which the City of San Diego is open for business, excluding City declared holidays.

“Calendar Day(s)” means a twenty-four (24) hour period from 12 a.m. Pacific Time, to 12 a.m. Pacific Time being a day in the Gregorian calendar, and irrespective of whether it is a Business Day or not.

“Change(s)” means any alteration, modification, action or decision with respect to the Services or the Systems.

“Change Management” means the process responsible for controlling the lifecycle of all Changes, enabling beneficial changes to be made with minimum disruption to IT Services.

“City Policy” or **“City Policies”** means the City’s formally documented expectations and intentions with regards to how particular activities within the City should be performed or governed. City Policies are generally used to direct decisions, and to ensure consistent and appropriate development and implementation of processes, standards, roles, activities, IT infrastructure etc.

“Client/Customer Satisfaction” means a subjective rating obtained through a combination of periodic Client or Customer surveys and feedback.

“HART” means Highway Addressable Remote Transducer.

“PID” means proportional integral derivative.

“P&ID” means Piping and Instrumentation Diagram.

“Policy” or **“Policies”** see City Policy.

“Programmer” means an individual who creates, writes or edits software programs and/or codes.

“Contractor Personnel” means the Contractor employees performing the Services described in the Agreement.

“PS” means Pump Station.

“Reporting Period” means all reports are provided on a monthly basis, within five (5) Business Days of the close of the calendar month, unless stated otherwise.

“Subject Matter Expert(s)” means an individual with specific domain expertise, or who is an authority in a particular area or topic.

“Third Party” or ***“Third Parties”*** means a person or entity other than the Parties.

“WDPF” means Westinghouse Distributed Process Family.