

Staff Report

TO: Board of Directors

FROM: Keane Sommers, P.E., Director of Power Systems
Nathan Droivold, Project Manager

DATE: September 14, 2022

SUBJECT: Award of Contract for 2022 SCADA System Upgrade (Consent)

HYDROELECTRIC

RECOMMENDATION:

Authorize the award of a sole-sourced agreement and material purchase to Open Systems International Inc. (OSI) for a total amount of \$128,946.00 to complete necessary upgrades to the District's Supervisory Control and Data Acquisition (SCADA) network and authorize the General Manager to execute the necessary documents.

BACKGROUND:

NID's SCADA network is responsible for monitoring various aspects of the District's Operations including reservoir levels, the status of powerhouse systems, and more. The SCADA network is a critical system for the District that is required to be maintained and operational to ensure NID's water and power systems are monitored during 24/7 operation at various District facilities.

In 2017, NID elected to use OSI platforms to support its SCADA network because OSI had been used in the existing SCADA network for District Hydroelectric facilities up to that point, and staff were already familiar with the existing system. OSI SCADA networks are also the standard for Pacific Gas & Electric Company (PG&E) and NID typically follows PG&E standards for powerhouse systems to ensure ease of operation for facilities remotely monitored by PG&E. For these reasons, OSI was determined to be the most cost effective solution for SCADA network upgrades, and this remains true today.

Having been five years since the last significant upgrade, it is now time to revamp NID's SCADA network. The industry standard lifetime for computer hardware and software running on these devices is about five years, making these upgrades

necessary in 2022. Deferral of this work could lead to hardware failures or more costly upgrades in the future as systems allowed to become obsolete will become more expensive to replace over time as manufacturer support is lost. Therefore, the Hydroelectric Department recommends awarding a sole-sourced agreement to program and prepare hardware for District use in the amount of \$76,874.00 and a material purchase for hardware and software in the amount of \$52,072.00 to OSI to complete important upgrades to NID's SCADA system.

Due to the complexity of the District's SCADA system and security concerns surrounding the proposed upgrade, the terms of the agreement between NID and OSI are still being negotiated and the draft contract could not be included with this staff report at the time of publication. The redacted quotation is included for information. Staff in cooperation with District Legal Counsel have been working with OSI on a contract acceptable to both parties.

This sole source award complies with the following District Procurement Policy Section:

3080.3.J.2 In order to match other products in use on a particular public improvement either completed or in the course of completion

This expenditure is in alignment with Goal No. 1 of the District's Strategic Plan as upgrading NID's SCADA network will maintain water and power system monitoring required in order to continue the reliable delivery of water for power generation and use downstream by District customers.

BUDGETARY IMPACT:

The current draft of the proposed 2023 Hydroelectric Department Operations Budget (Fund 50) includes \$150,000 designated for the SCADA network upgrades to cover the cost of this a sole-sourced agreement and material purchase. These funds are expected to be spent in 2023 due to OSI's schedule not allowing work to begin for at least four months after receipt of a purchase order due to backlogged work.

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Attachments: (1)

- July 20, 2022 Quotation from OSI (Redacted)

Quote To:
Nevada Irrigation District
28311 Secret Town Road
Colfax CA 95713
USA

OSI Sales Contact:
Name: Shawn Niebler
Phone: 763-746-7395
Email: Shawn.Niebler@osii.com

Date:
7/20/2022
Valid Until:
9/18/2022

Attention:
Thomas Kluge
(530) 273-8571 x130
kluget@nidwater.com

Quote Description:
System Upgrade

Description	Qty	Unit Cost	Unit	Extended Cost
Base Quote: System Upgrade				
Third Party Hardware				
Server [REDACTED]	4	5,785.00	EA	US\$ 23,140.00
Replacement Workstation [REDACTED]	6	2,470.00	EA	US\$ 14,820.00
LAN Cabling/Connectors	1	910.00	LOT	US\$ 910.00
Third Party Hardware Subtotal:				US\$ 38,870.00
OSI Software [REDACTED]	1	0.00	EA	US\$ 0.00

Description	Qty	Unit Cost	Unit	Extended Cost	
[REDACTED]	1	0.00	EA	US\$	0.00
[REDACTED]	1	0.00	EA	US\$	0.00
OSI Software Subtotal:				US\$	0.00
Third Party Software					
[REDACTED]	1	0.00	LOT	US\$	0.00
[REDACTED]	2	560.00	EA	US\$	1,120.00
[REDACTED]	4	1,196.00	EA	US\$	4,784.00
[REDACTED]	6	46.00	EA	US\$	276.00
[REDACTED]	6	182.00	EA	US\$	1,092.00
[REDACTED]	6	507.00	EA	US\$	3,042.00
[REDACTED]	1	1,008.00	EA	US\$	1,008.00
[REDACTED]	6	235.00	EA	US\$	1,410.00
[REDACTED]	2	235.00	EA	US\$	470.00
Third Party Software Subtotal:				US\$	13,202.00

Description	Qty	Unit Cost	Unit	Extended Cost	
Project Implementation					
System Upgrade Implementation	1	90,440.00	EA	US\$	90,440.00
At OSI: <ul style="list-style-type: none"> - Project Management and Coordination - Project Engineering and Design - NERC CIP Baseline Documentation of System Ports, Users, and Services Necessary for Upgraded System Operation - NERC CIP Hardening and Patching of Operating Systems and Applicable Third Party Software at Initial Installation and Prior to Delivery - Cyber Security Evaluation of Network Modifications Required for Upgrade - Configuration and Restriction of Access Control Policies for Applicable Firewall Equipment - Hardware Staging, Configuration, and Lockdown - Software Installation and Configuration - Database and Display Conversion and Integration - Maintenance Server Data Engineering Workshop - Factory Q/A Testing - Hardware Packaging - Remote Networking Integration Assistance - Post-Cutover Problem Resolution and Assistance - System Documentation Updates At NID: <ul style="list-style-type: none"> - Site Installation and Configuration - Site Testing - Cutover Preparation - Feature Differences Operator Training Session - Execute Cutover Includes 15% Customer Appreciation Discount					
Discount:				US\$	-13,566.00
Project Implementation Subtotal:				US\$	76,874.00
Base Quote Subtotal:				US\$	142,512.00
Discount Total:				US\$	-13,566.00
Total:				US\$	128,946.00

Customer Address Info:

Bill To:

Nevada Irrigation District
1036 W Main Street
Grass Valley CA 95945-5424
USA

Ship To:

Nevada Irrigation District
28311 Secret Town Road
Colfax CA 95713
USA

Payment Terms:

Net 30 Days

Milestone Payment Details:

25% Upon Quote Acceptance
25% Upon Software Installation
25% Upon Completion of Factory Q/A Testing
25% Upon Project Completion

Special Terms and Conditions:

1. All hardware and third-party software licensing quoted above will be drop-shipped to OSI's facility for installation and configuration.
2. NID will participate in a two-day Data Engineering Workshop in which OSI will train NID on the OSI Maintenance Server product.
3. If required, NID will handle any custom display and database work, and will test and verify all external links and interfaces.
4. [REDACTED]
5. NID will be responsible for any necessary network switch and firewall configuration.
6. NID will provide sufficient cabinet space and cabling for new hardware. If NID is not able to provide this, additional cabinets and/or cables can be quoted separately.
7. NID will be responsible for staging and cabling all hardware onsite.
8. [REDACTED]
9. A feature differences operator review session is included but limited to a brief hands-on, informal session. Additional training can be quoted separately as needed.

Standard Terms and Conditions

1. All quoted prices are in US Dollars (\$), unless otherwise stated.
2. Travel and associated administrative costs are not included in this quote, and will be billed as incurred, unless otherwise stated.
3. Customer shall pay all applicable shipping and tariffs, unless otherwise stated.
4. Quoted price does not include applicable taxes, unless otherwise stated.
5. OSI will schedule all work upon receipt of the Customer's written acceptance, subject to OSI's resource availability.
6. Training, if applicable, will be provided at OSI's facility, unless otherwise stated.
7. Training Units may be used for up to 18 months from the date of purchase; any remaining unused Units will expire thereafter. One Training Unit is equivalent to one student attending one day of instruction for OSI University courses in Minneapolis (including Web-U courses).
8. Customer shall provide all relevant system information required for the work as needed (i.e. databases, displays, reports, IP addresses, networking information, RTU channel information, etc.) and shall be responsible for all delays caused by Customer's failure to do so in a timely manner.
9. Customer will have dedicated personnel available to assist OSI in the work, unless otherwise stated.
10. All third-party hardware purchased as part of this quote carries a standard OEM warranty, unless otherwise stated. All OSI hardware purchased as part of this quote carries a one-year warranty against defects from date of delivery, unless otherwise stated.
11. OSI does not guarantee that third-party goods will be available at time of quote acceptance. If third-party goods are not available, upon Customer's authorization, OSI will provide suitable replacements and bill any resulting cost differences to the Customer. Failure to timely authorize replacements may result in delays and/or need to re-quote.
12. When applicable, Customers subscribing to Gold or above Support Plans may be entitled to new software version updates without charge. With the exception of Diamond Plan subscribers, the Customer will be responsible to pay for any engineering services required to implement the software upgrades.
13. Unless otherwise agreed and quoted, Customer is responsible for all preparations for OSI's installation of software, hardware or services and any post-installation compatibility testing and compliance issues.
14. Customer will provide adequate environmental and power conditions onsite, unless otherwise stated.
15. Cutover is defined as the quoted functionality being operational with no outstanding critical incidents.
16. Any Quote(s) for system upgrade services require(s) that at the time of actual implementation Customer has a valid premium monarch™ Support plan which includes software upgrade privileges and that the system size or scope does not change dramatically between the issuance of the quote and implementation of the service.
17. Customer Furnished Hardware and Software: Customer shall provide all required third-party equipment and software ("CFE") for the Project except for the OSI-provided equipment identified in this quote. Customer shall be responsible to timely deliver all CFE to OSI in compliance with the mutually agreed upon Project Schedule for integration with the OSI software. Customer shall pay all shipping and insurance costs both to and from OSI and shall be responsible for all CFE warranties.
18. Export Controls:
 - 18.1. Customer represents: It is not a citizen, national, or resident of, and is not under control of, the government of Cuba, Iran, Libya, North Korea, Syria, nor any country to which the United States has prohibited export and that it is not listed on the United States Department of Treasury lists of Specially Designated Nationals, Specially Designated Terrorists, and Specially Designated Narcotic Traffickers, nor is it listed on the United States Department of Commerce Table of Denial Orders.
 - 18.2. Customer agrees that it will not export or re-export the Product(s), directly or indirectly, to the above mentioned countries nor to citizens, nationals or residents of those countries nor to any entity so listed on any of the above mentioned lists.
 - 18.3. Customer agrees that it will not use the Product(s) for, and will not allow the Product(s) to be used for the development, design, manufacture or production of nuclear, chemical or biological weapons of mass destruction.
 - 18.4. The requirements of 18.2 and 18.3 above apply to all Product(s) purchased or licensed to Customer from OSI, whether included in this quote or purchased or licensed previously.

Notice: OSI's quote is based upon Customer's acceptance of all applicable Terms and Conditions. Requests for additions to, deletions of, or different Terms and Conditions, may require a revised quote and/or additional costs or schedule delays.