

Date:
 1/25/2023

Valid Until:
 3/26/2023

Quote To:
 Independence Power and Light
 21500 E Truman Rd
 Independence MO 64051
 USA

OSI Sales Contact:
 Name: Cindy Weybright
 Phone: (763) 404-4349
 Email: Cindy.Weybright@aspentech.com

Attention:
 Doug Haddan
 (816) 325-7500
 dhaddan@indepmo.org

Quote Description:
 System Upgrade with DNP/IP Option

Description	Qty	Unit Cost	Unit	Extended Cost	
Base Quote: System Upgrade					
Third Party Hardware					
Customer Furnished Replacement Servers and Workstations	1	0.00	LOT	US\$	0.00
Third Party Hardware Subtotal:				US\$	0.00
OSI Software					
monarch Software Upgrade License Free-of-Charge with Gold Support	1	0.00	EA	US\$	0.00
Maintenance Server (Centralized DB Editing Subsystem) License Includes DataExplorer and Maintenance Center - Job Deployment Management - Web Platform Product Config Management - Configurable Workflow/Approval Processes - Unified Audit Trail - System Explorer Display Versioning Support - Job Deployment Against Study/Offline Instance Free-of-Charge	1	0.00	EA	US\$	0.00
Maintenance GUI (DB/Display Editing User Interface) License (Per Maintenance Console) Includes Access to DataExplorer, Design Studio, Tabular Builder, OpenODBC, Tweak Free-of-Charge	7	0.00	EA	US\$	0.00
OSI SecureSync License Real-Time Data Synchronized with the QAS Free-of-Charge	1	0.00	EA	US\$	0.00
OSI Software Subtotal:				US\$	0.00
Third Party Software					
Customer Furnished Microsoft Visual Studio Professional 2022 License Downgrade if Needed	3	0.00	EA	US\$	0.00
Customer Furnished Third Party Software All Other Third Party Licensing	1	0.00	LOT	US\$	0.00
Third Party Software Subtotal:				US\$	0.00

Description	Qty	Unit Cost	Unit	Extended Cost
Project Implementation				
System Upgrade Implementation	1	183,400.00	EA	US\$ 183,400.00
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 COI: <ul style="list-style-type: none"> - Hardware Staging and Wiring - Site Installation and Configuration - Site Testing - Cutover Preparation - Feature Differences Operator Training Session - Execute Cutover 				
Project Implementation Subtotal:				US\$ 183,400.00
Total:				US\$ 183,400.00

Description	Qty	Unit Cost	Unit	Extended Cost
Option #1: OpenFEP License for DNP/IP				
OSI Software				
OpenFEP License Expansion	1	20,000.00	EA	US\$ 20,000.00
Addition of DNP3/IP Protocol				
OSI Software Subtotal:				US\$ 20,000.00
monarch™ Support Adders				
monarch™ Support Adder - Gold	1	3,000.00	EA	US\$ 3,000.00
monarch™ Support Adders Subtotal:				US\$ 3,000.00
Option #1 Total:				US\$ 23,000.00

Customer Address Info:

Bill To:

City of Independence
P.O. Box 1019
Independence MO 64051-0519
USA

Ship To:

Independence Power and Light
21500 E Truman Rd
Independence MO 64051
USA

Payment Terms:

Net 30 Days

Milestone Payment Details:

15% Upon Quote Acceptance
30% Upon Hardware Staging at OSI
40% Upon Completion of Test System/QA Testing
15% Upon Project Cutover

Special Terms and Conditions:

1. Any VM host hardware, workstation hardware, and standalone server hardware supplied by COI must be compliant with monarch™.NET minimum requirements as follows:

Minimum Host Server Specifications Per VM Instance*

- CPU: 4 Physical Cores (8 Threads)
- RAM: 32GB**
- Disk IOPS: 150
- OS: Windows Server 2016, 2019, 2022, RHEL 7, or RHEL 8

Recommended Host Server Specifications Per VM Instance*

- CPU: 8 Physical Cores (16 Threads)
- RAM: 64GB**
- Disk IOPS: 200
- OS: Windows Server 2022 or RHEL 8

Server:

- Xeon CPU: Dual Eight-Core HT, 2.1GHz and Above
- RAM: 64+GB
- OS: Windows Server 2019, RedHat Enterprise Linux 7, or RedHat Enterprise Linux 8

Workstation:

- CPU: Single Quad-Core HT ~3.6GHz and Above
- RAM: 32+GB
- OS: Windows 10 Pro 64-bit
- Video Card: AMD Radeon Pro W5500 8GB or Better

*Quantities are additive, per VM (e.g. a host with 5 VMs will require 5x quantities shown). This does not reflect how to configure the VMs within the hypervisor; it is only a guideline for how to size the host hardware.

**In addition to indicated per VM RAM quantities, another 16GB RAM is required for the Hypervisor component.

2. All replacement server and workstation hardware and associated third party software licensing will be procured by COI and drop-shipped to OSI's facility for installation, configuration and factory Q/A testing.
3. COI will provide all third party hardware, software, licensing, and configuration not specifically mentioned in this quote.
4. If required, COI will handle any custom display and database work, and will test and verify all external links and interfaces.
5. COI will provide high-speed remote access to server and console hardware, if needed (VPN, Remote Desktop Connection, etc.). Dial-up modem connections are insufficient.
6. COI will be responsible for configuration of corporate or external facing firewalls, if applicable.
7. COI will provide sufficient cabinet space and cabling for new hardware.
8. 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.
9. COI will perform a manual sync process to keep the PDS up to date with the production system (i.e. synchronizing displays, database structure, etc.). SecureSync will allow the transfer of real-time SCADA data into the PDS.
10. Quote requires that COI will participate in a 2-Day Data Engineering Workshop in which OSI will train COI on the OSI Maintenance Server product.
11. Travel to not exceed \$12,000 without written agreement between OSI and COI.
12. Option 1 is limited to license delivery only. COI will be responsible for all configuration, testing, and troubleshooting associated with the protocol addition.

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.