City of Grand Island

Tuesday, December 4, 2018
Council Session

Item G-2

#2018-358 - Approving Outage Management System between the City of Grand Island Utilities Department and Open Systems International, Inc.

Staff Contact: Tim Luchsinger, Stacy Nonhof

Council Agenda Memo

From:	Tim Luchsinger, Utilities Director
	Stacy Nonhof, Assistant City Attorney
Meeting:	December 4, 2018
Subject:	Outage Management System
Presenter(s):	Tim Luchsinger, Utilities Director

Background

The Grand Island Utilities Department is tasked with providing a reliable power supply to the City. One major component of that mission is fast response to outages when they occur. Today's technology allows for a variety of methods to receive outage information. These methods include online outage reporting, calls into the outage call center and meter outage notices received through the Advanced Metering Infrastructure (AMI) system.

Currently, a manual process is used to determine what component within the system is causing an outage. With the aid of an Outage Management System (OMS), this process can be automated with the system automatically determining the most logical cause of an outage. In addition, an OMS can provide a variety of other resources including an online outage map for customers, mobile technology for service crews and switching simulations to help avoid human errors.

Discussion

A Request for Proposal was advertised in accordance with City procurement requirements. Specifications were sent to four regional providers. Proposals were publicly opened at 4:00 p.m. on October 18, 2018.

Two proposals were received; from Milsoft Utility Solutions, Inc., and Open Systems International, Inc. (OSI). Both proposals were evaluated by department staff. OSI was evaluated as the better option based upon their ability to meet the requirements listed in the Request for Proposal. The contract is for three years with the following pricing:

Initial Setup Fee:	$50,500.00
Monthly Fee:	$ 3,392.00

Alternatives

It appears that the Council has the following alternatives concerning the issue at hand. The Council may:

1. Move to approve
2. Refer the issue to a Committee
3. Postpone the issue to a future date
4. Take no action on the issue

Recommendation

City Administration recommends that the Council approve the contract for Outage Management System from Open Systems International, Inc., of Medina, Minnesota.

Sample Motion

Move to approve the contract for Outage Management System from Open Systems International, Inc.

CITY OF GRAND ISLAND

**REQUEST FOR PROPOSAL
FOR
OUTAGE MANAGEMENT SYSTEM**

RFP DUE DATE:	**October 18, 2018 at 4:00 p.m.**
DEPARTMENT:	**Utilities**
PUBLICATION DATE:	**September 24, 2018**
NO. POTENTIAL BIDDERS:	**4**

SUMMARY OF PROPOSALS RECEIVED

Milsoft Utility Solutions, Inc.
Abilene, TX

Open Systems International, Inc.
Medina, MN

cc: Tim Luchsinger, Utilities Director   Pat Gericke, Utilities Admin. Assist.
         Marlan Ferguson, City Administrator   Patrick Brown, Finance Director
         Stacy Nonhof, Purchasing Agent   Travis Burdett, Deputy Utilities Director
         Christy Leshner, Utilities Secretary

P2071

Hosted Solution E-SCADA Services Contract

between

Open Systems International, Inc.

and

City of Grand Island d/b/a Grand Island

Utilities Department

<Date>

HOSTED SOLUTION E-SCADA SERVICES CONTRACT
STANDARD TERMS AND CONDITIONS

Effective Date: _____

Customer Name, Entity Type and Address: <u>City of Grand Island d/b/a Grand Island Utilities Department with offices at 700 E. Bischeld Street, Grand Island, Nebraska 68801</u> ("Customer" or "You"/"Your")

This Services Contract ("Contract") is by and between Open Systems International, Inc. ("OSI") and Customer. OSI and Customer agree as follows:

1. OSI provides a web-based hosted **Applications services** known as **e-scada.com** to its subscribers, including You. By becoming a subscriber of OSI's **e-scada.com** service (the "Service"), You agree to be bound by this Contract (the "Contract"). This Contract is subject to change by OSI at any time, and changes are effective upon notice to each subscriber.

2. OSI currently offers two levels of memberships for Hosting: a "View Only, Monitoring" Membership and a "Monitor and Device Control" Membership. Both Memberships consist of communication services to the Host, alarming services, reporting services and web access.

3. You are responsible to pay any agreed upon startup fees and periodic monthly subscription fees according to OSI's then-current billing terms as per the Scope of Services. Subscription fees are non-refundable and are pre-billed quarterly. Unless and until this Contract is cancelled in accordance with the terms hereof, You authorize OSI to bill You for Your ongoing cost of membership. You shall transmit payment to OSI accounting within 15 days of Your receipt of OSI's invoice.

4. Subscription to the Service may be terminated at any time, and without cause, by either OSI or You upon 30 day written notice which may be provided electronically or by conventional mail. If You request termination, subscription fees (if any) are <u>not</u> refunded to You and You are liable for all charges incurred until termination of Service.

5. OSI will use commercially reasonable efforts to make the Services available to You. However, OSI shall have no responsibility if: (a) access is unavailable due to security settings and policies; (b) access is sought during a planned downtime for which You have been provided 24 hours advance notice; (c) unavailability is caused by circumstances beyond OSI's reasonable control, including without limitation, down time of network service providers, downtime of external 3rd party data providers, acts of God, acts of government, flood, fire, earthquakes, civil unrest, acts of terror, strikes, or other labor problems, or internet failures or delays. OSI will use its best endeavors to minimize any disruption and resume the Service in the fastest time possible.

6. OSI takes no responsibility for any fines, sanctions, claims or actions that result from incidents that occur on sites monitored by You under this Contract or any other entity in relations to Service provided under this Contract.

7. OSI reserves the right at any time and from time to time to modify or discontinue, temporarily or permanently, the Service (or any part thereof) with or without notice. You agree that OSI will not be liable to You or to any third party for any such modification,

suspension or discontinuance of the Service. Planned service disruptions will be communicated ahead of time to you.

8. Operational Limits. OSI's providing of Service to You is subject to the availability and the operational limitations of the requisite equipment and associated facilities. You agree and understand that temporary interruptions of the Service may occur as normal events in the providing of the Service and that OSI is not responsible for these interruptions. You further understand and agree that OSI has no control over third party networks You may access in the course of Your use of the Service and therefore delays and disruptions of other network transmissions are beyond the control of OSI. OSI shall use its best efforts to fulfill this Contract, but should network or commercial limitations prevent OSI from such fulfillment, You shall not have any claim against OSI for damages, whether actual, consequential, reliance or otherwise.

9. You are responsible for providing all computer and communications equipment necessary to gain access to the Service, all communications equipment and hardware to connect Your computers and plants to the Internet. Access to and use of the Service is through a combination of an ID and a password. You are responsible to maintain the security and integrity of passwords to access the Service. For security reasons, OSI will not release passwords for any reason, except as may be specifically required by law or court order. Unauthorized access to the Service is a breach of this Contract and a violation of law.

10. You are fully responsible for all charges associated with Your equipment and all dealings with Your telecommunications provider to establish a link to our hosted solution. You shall be responsible to monitor the reliability of communications between the remote site and the hosted solution.

11. You shall not (a) make the Services available to anyone other than Your own authorized users; (b) sell, resell, rent or lease the Services; (c) use the Services or the information obtained there to provide Software services to third-party entities whose assets are not owned by You as part of a facility management, timesharing, service provider, or service bureau arrangement or otherwise in direct competition with OSI; (d) use the Services to store or transmit malicious code or information; (e) interfere with or disrupt the integrity or performance of the Services; or (f) attempt to gain unauthorized access to the Services or their systems or networks. Breaches of this clause may cause termination of Your access to Services.

12. You agree not to disclose any proprietary or confidential information (Confidential Information), as designated or marked by OSI or any information provider to OSI, to any third party or use this Confidential Information for any purpose independent of the efforts and purposes intended under this Contract. You shall not use any Confidential Information to the detriment of OSI or the applicable information provider and shall use efforts to protect the confidentiality of any such Confidential Information commensurate with those which You employ to protect Your own Confidential Information. You will ensure that You enter into agreements with Your employees, consultants, agents, shareholders and any other who have or may obtain access to the Confidential Information, to maintain such Confidential Information in confidence.

In the event You receive a subpoena or other validly issued administrative or judicial process demanding production of Confidential Information previously provided by OSI, You shall promptly notify OSI of this fact and tender the defense of or opposition to this subpoena or demand to OSI. If the subpoena or demand is not timely limited, quashed or extended, You shall thereafter be entitled to comply with such subpoena or demand to

the extent required by law. If requested by OSI after the tender of defense or opposition is accepted, You shall cooperate in the defense or opposition at the expense of the OSI.

13. In the event You receive any Software or other tangible products from OSI as part of the Service, or to enable You to use the Service, You shall not (a) make copies of the Software or tangible products except as necessary for Your use of the Service or for archival purposes; (b) distribute the Software or tangible products to third parties; or (c) disassemble, decompile, reverse-engineer or otherwise reduce the Software or tangible products to human-perceivable form in whole or in part, including but not limited to translating or creating derivative works, or to bypass any licensing restrictions.

OSI represents that it is the owner of the Software You may receive or use, if any, and all portions thereof or has appropriate sublicensing rights.

14. Your Subscription may not be assigned or transferred to any other person or entity.

15. No warranty is made by OSI regarding any information, services, or products provided through or in connection with the Service and all Services are provided "AS IS". OSI expressly disclaims any and all warranties, including without limitation: 1) any warranties as to the availability, accuracy, or content of information, products or services; 2) any warranties of merchantability or fitness for a particular purpose; any warranties of non-infringement.

16. OSI is not liable for damages resulting from disseminating, failing to disseminate, or incorrectly or inaccurately disseminating any Materials, data, advertisement or other communication at or through the site. The entire risk as to the quality and performance of the Services provided by OSI is borne by You. Should the Materials or any other service provided by OSI prove defective and/or cause any damage to Your computer or inconvenience to You, You, and not OSI, assume the entire cost and all damages which may result from any and all such defects. This disclaimer is essential to this Contract.

17. Under no circumstances and under no cause of action or legal theory, shall OSI be liable for any indirect, special, incidental, or consequential damages of any character including, without limitation, damages for loss of goodwill, work stoppage, computer failure or malfunction, or any and all other commercial damages, personal injury, death or property damage resulting from any use of the Services. Any liability of OSI, including without limitation any failure of performance, error, omission, interruption, deletion, defect, delay in operation or transmission, communications line failure, theft or destruction or unauthorized access to, alteration of, or use of records, whether for breach of contract, tortious behavior, negligence, or under any other cause or action, shall be strictly limited to the amount of membership fee You paid for the preceding 12 months.

18. If OSI should at any time provide any service which enables subscribers to communicate with or otherwise share information with other subscribers, You agree not to submit, publish, display, disseminate, or otherwise communicate any defamatory, inaccurate, abusive, threatening, offensive, or illegal material using the Services or the system which provides the Services. Transmission of such material, or any material that violates any national, federal, state, or local law, including but not limited to copyright law, is strictly prohibited and shall constitute a material breach of this Contract entitling OSI to immediately terminate all rights to the Services or access to the site. You are solely responsible for all information which You submit, publish, display, disseminate or otherwise communicate through the site even if a claim should arise after termination of Services.

19. OSI will use certain third-party software in the performance of its Services and therefore You agree that OSI's performance will be subject to the license terms and conditions of those third-party software vendors.

20. If You have purchased a Monitor and Device Control Membership You will have the ability to control Your power system equipment. Unless otherwise agreed in writing, You and OSI agree that the Service provided herein does not qualify as a North American Electric Reliability Corporation (NERC) Critical Cyber infrastructure and OSI will not be subject to any regulation by NERC or the Federal Energy Regulatory Commission (FERC) under the NERC CIP (Critical Infrastructure Protection) standards. Should You be classified as a NERC entity with critical power system assets, Your use of the Service shall be at Your own risk with all consequences directed at Your organization. You agree to hold OSI harmless of any and all misuses of the Service in this regard.

21. This Contract contains the entire Contract between You and OSI regarding Your use of the Services. This Contract supersedes all prior written and oral understandings, writings, and representations and may only be amended upon notice by OSI. Unless otherwise explicitly stated, the provisions of this Contract shall survive its termination.

22. The Contract shall be governed pursuant to the laws of the State of Nebraska and the United States of America.

23. Sections 11, 12, 13 and 17 shall survive termination of this Contract for any reason.

Customer herby requests OSI's provision of the Services above to be provided upon the Terms and Condition stated herein.

OPEN SYSTEMS INTERNATIONAL, INC.	CITY OF GRAND ISLAND D/B/A GRAND ISLAND UTILITIES DEPARTMENT
BY: _____ (Signature)	BY: _____ (Signature)
NAME: _____	NAME: _____
TITLE: _____	TITLE: _____
DATE: _____	DATE: _____

PRICE FORMS

Item No.		Description		Price
1		**Initial Setup Fee** Installation, testing, interface development and training (one week of onsite training at City of Grand Island)		**$32,500**
2		**Monthly Hosting Services Subscription Cost**		**$2,567**

Selected Options

1		**Block of Four (4) Additional Concurrent Web User Licenses** Adjustment to Monthly Hosting Services Subscription Cost		$250
2		**Spectra DPF Distribution Power Flow** Adjustment to Initial Setup Fee Adjustment to Monthly Hosting Services Subscription Cost		$10,000 $350
3		**Customer Outage Map and Outage Reporting Interface** Adjustment to Initial Setup Fee Adjustment to Monthly Hosting Services Subscription Cost		$8,000 $225

Terms and Conditions

1. Prices are in US Dollars and do not include Sales or usage taxes.
2. Prices exclude shipping costs. Applicable shipping costs will be added to invoices.
3. Payment terms for the Setup Fee are as follows:
   a. 50% Upon Receipt of Order
   b. 50% System Ready
4. The monthly subscription hosting fees will be billed on a quarterly basis at the beginning of each quarter.
5. Pricing requires a three (3) year commitment from customer. The monthly subscription cost is fixed for the first three (3) years.
6. Monthly subscription cost beyond Year 4 will be subject to a 4% increase or CPI, whichever is greater.
7. User Training as quoted includes training on site at the Grand Island Utilities Department's facilities.
8. Travel is not included and will be billed at cost.
9. Project Schedule is approximately 9 - 10 months from contract signing.
10. The Monthly Hosting Services Subscription Cost includes Support and Helpdesk for up to 6 incidents per month. Additional incidents will be billed on a T&M basis.
11. The implementation assumes **GIUD** will provide a complete network model including connectivity and electrical characteristics.
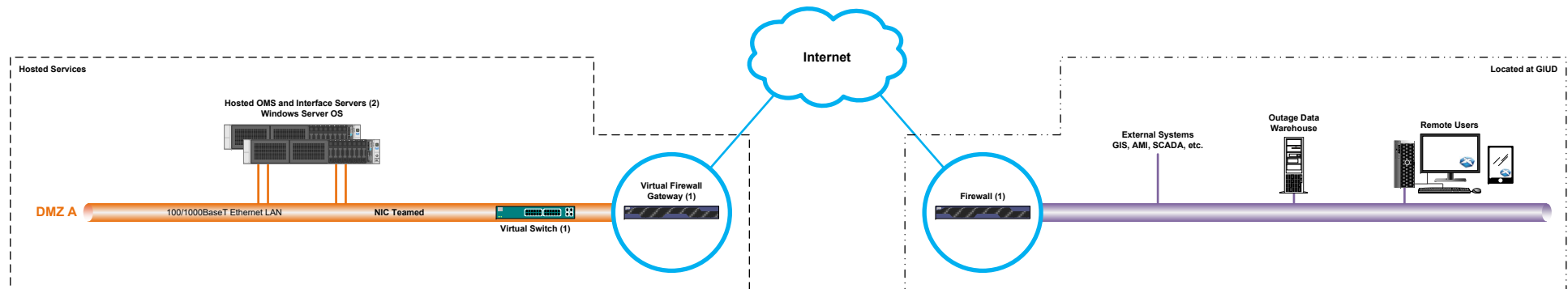
LIST OF DELIVERABLES

OSI Software

Item	Description	Qty
1	**Spectra eMAP** (Distribution System Analysis and Planning) License (Distribution Topology Processing)	A*
2	**Electra OMS** (Outage Management System) License (Including Contact Management, Outage Analysis, Work Management, Outage Information, Customer Outage Map, Customer Outage Reporting) (Up to 26,000 meters) (Up to 8 Concurrent Web Users)	A*
3	**OpenView** GUI/MMI Client License (Per Console)	2
4	Advanced Tabular Viewer (Per Console)	2
5	Advanced Tabular Builder (Per Maintenance Console)	1
6a	Data Explorer Server License	B*
6b	Data Explorer Client License (Per Maintenance Console)	1
7	**OpenGIS** (Geographical Information System) License (Milsoft GIS Interface)	A*
8	**Spectra DPF** (Distribution Power Flow) License	

9	OMS Interface Licenses
	    L&G AMI
	    Wonderware SCADA
	    NPPD Trouble Tickets
	    Generic Web Service API to support other interfaces
		A*

Notes

  * A is defined as server licenses for the proposed *redundant Production system and Maintenance Console*

    B is defined as server licenses for the proposed *Maintenance Console*

SYSTEM CONFIGURATION DIAGRAM

CITY OF
GRAND ISLAND

Internet

Hosted Services

Hosted OMS and Interface Servers (2)
Windows Server OS

Located at GIUD

DMZ A

100/1000BaseT Ethernet LAN   NIC Teamed

Virtual Switch (1)

Virtual Firewall
Gateway (1)

Firewall (1)

External Systems
GIS, AMI, SCADA, etc.

Outage Data
Warehouse

Remote Users

Note:
Most servers can be Windows or
Linux based on preference.

Revision: 1.2
GIUD_SysCnfg_1.2_101118.vsd

Confidential

PROPOSAL REQUIREMENTS

PROPOSAL REQUIREMENTS

Please find OSI's response to the proposal requirements section below:

1) Milsoft Windmil modeling software (V. 8.6.6.9782)

    OSI's GIS interface product will facilitate this integration.

2) Landis & Gyr AMI system – currently 4600 meters out of a total of 26000 meters. We anticipate being fully deployed within the next 5 years.

    OSI assumes MultiSpeak will be used for this integration.

3) NPPD call center trouble ticket software capable of exporting tickets via ftp site. GIUD contracts with NPPD for outage call answering services.

    OSI assumes tickets can be provided in a csv/xml file format for this integration.

4) Wonderware InTouch SCADA system with fiber optic backbone to all substations.

    OSI assumes OPC, ICCP, or MultiSpeak will be used for this integration.

The proposal shall address pricing information and the ability to provide the following capabilities:

1) Utilizing the existing Windmil model, the OMS shall import outage information from the above listed sources and display them on an interactive map that can determine the most logical cause of an outage.

    A standard GIS interface product is provided for the import of the network model and geographic maps from the corporate GIS. The interface supports the import of the full network model including all device information, connectivity information, as well as non-electrical data such as land base data, poles, etc. The GIS interface operates in a full import mode as well as an "incremental update" mode. The incremental update mode runs on a regular basis such as daily or weekly.

2) Provide an online outage reporting system that uses the same database as the NPPD call center for a consistent outage addressing system.

    Electra OMS *includes a native web based user interface for Call Management (Customer Service Representatives), Crew Dispatch (local and remote dispatchers) and Outage Reporting users (to view current and historical reports and dashboards) that can be accessed from multiple locations (e.g. outside of the control room) via standard web browsers. In addition, OSI's OMS supports an Outage Data Warehouse export that can export all outage data to an RDBMS provided by* GIUD *(e.g. PostgreSQL, Oracle, MSSQL). Optionally the outage data warehouse can be located on the hosted servers in a PostgreSQL RDBMS to be used for outage reporting.*

3) Allow for virtual operating of field switches to configure the OMS to match field conditions.

This can be done in multiple ways, the system can rely on the integration to the SCADA system to receive device updates as well as allowing switches to be manually toggled by a dispatcher.

4) Generate an online outage map for use by our customers.

The OSI solution has the ability to create an online outage map for customer use.

5) Produce social media posts about current outages.

The OSI solution supports APIs to provide outage information to a GIUD selected social media application. This includes "triggers" that can be configured to run based on certain events (e.g. priority customer outaged, or affected customers > 100). The proposed solution would use standard web service APIs to integrate to a GIUD customer notification system.

6) Simulate switching operations prior to performing them in the field to confirm correct procedures resulting in no outages.

The OSI solution provides a function to simulate the switching operation in a study/what-if analysis mode with the topology processing application running in that study scenario. The user is then presented with the results of the analysis so they can know the impact of the operation before they perform it.

R E S O L U T I O N   2018-358

WHEREAS, the City of Grand Island invited proposals for an Outage Management System, according to plans and specifications on file with the Utilities Department; and

WHEREAS, on October 18, 2018, proposals were received, opened and reviewed; and

WHEREAS, Open Systems International, Inc., of Medina, Minnesota, submitted a three-year contract proposal in accordance with the terms of the advertisement of plans and specifications and all other statutory requirements contained therein, such quote being an Initial Set-up Fee of $50,500.00, and a monthly fee of $3,392.00.

NOW, THEREFORE, BE IT RESOLVED BY THE MAYOR AND COUNCIL OF THE CITY OF GRAND ISLAND, NEBRASKA, that the proposal of Open Systems International, Inc., for the Outage Management System, is hereby approved, and the Mayor is authorized to sign the contract on behalf of the City of Grand Island.

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Adopted by the City Council of the City of Grand Island, Nebraska, December 4, 2018.

_____
Roger G. Steele, Mayor

Attest:

_____
RaNae Edwards, City Clerk

Approved as to Form ¤ _____
November 30, 2018   ¤ City Attorney