



Legislation Text

File #: PUB16-176, Version: 1

Agenda Information Sheet

DEPARTMENT: Denton Municipal Electric

CM/ ACM: Howard Martin

Date: August 8, 2016

SUBJECT

Consider recommending approval for a three-year Professional Services Agreement (PSA) with SSP Innovations to provide professional services in aid of Denton Municipal Electric (DME)'s Operation Technology and related software systems. Texas Local Government Code 252.022(4) allows for an exemption to competitive requirements for the expenditure of funds for procurement for a personal, professional, or planning service. Approval is for an amount not to exceed \$2,000,000.00. (PSA 6122)

BACKGROUND

In the last decade, the electric utility industry has seen an increase of available technologies not seen in previous decades. These technologies have improved service and allowed customers to have greater insight into their energy usage. In the electric utility industry, two technology categories are in the forefront for modernization of the electric grid. Information Technology (IT) is the hardware and software that enables the development, maintenance, and use of computer systems, software, and networks for the processing and distribution of corporate data. Operation Technology (OT) is the hardware and software that detects or causes a change through direct monitoring and/or control of physical devices, processes, and events on the electric grid. These two categories appear to be nearing convergence and it is important for both IT and OT to work together to develop DME's overall system policies and cyber security compliance programs. However, each is sufficiently unique in its application and accountability that independent plans must be made to proceed down a path that supports its focus. TABLE 1 provides detail regarding the delineation of these technologies.

	Information Technology (IT)	Operation Technology (OT)
Purpose	Transaction systems, business systems, information systems, IT security standards	Control systems, data systems and repository, control or monitor physical processes or equipment, regulatory security standards
Architecture	Infrastructure that relates to business oriented applications	Infrastructure that is event driven, real-time, embedded hardware and software (utility grade)

Interfaces	Operating systems and applications, GUI, Web browser, terminal, and keyboard	Operating systems and applications, Unix, GUI, Web browser, terminal, keyboard, Electromechanical & Digital sensors, actuators, coded displays, PLC, SCADA
Ownership	CIOs, IT/IS, finance and administration departments	Engineers, technicians, operators, and managers
Connectivity	Corporate network, Internet, IP-based	Control networks, fiber and radio networks, hard wired twisted pair, IP-based
Role	Supports business applications and office personnel	Supports control processes and field personnel safety

Table 1

DME has already initiated OT through the management of its Geographic Information System, fiber and/or radio communications system, and advance metering infrastructure. These three components provide the foundation for DME's "Smart Grid." Sub-processes which rely on these components, such as the SCADA system, provide DME with information that allows rapid response to outages on the transmission and distribution systems which provides higher reliability for our customers. The group within DME responsible for development and leadership of OT is Engineering & Operations (E&O) Technology.

After gaining to input from numerous departments within DME, as well as departments outside of DME such as the City of Denton Technology Services and Customer Service, E&O Technology developed a comprehensive 5-year roadmap called the "Innovation Plan" which is included as EXHIBIT 1. This roadmap provides details on projects to advance DMEs OT internal support and field technology as it begins to implement the Smart Grid. The Innovation Plan contains a number of short- and long-term integrations that provide direct and indirect service improvement to our customers.

1. 16-2-3 Integration of Schneider Electric's Responder OMS with
Clevest MWM \$46,435
2. 16-2-9 Integration of Schneider Electric's Responder OMS with
Trilliant AMI \$51,170
3. 16-2-11 ArcGIS Online Public Streetlight Reporting Application \$28,005
4. Integration of Responder OMS to DME Community Relations
Outage Application \$55,000
5. Improvement of Public Facing Outage Map \$16,000
6. Implementation of New DME Web-Based GIS Solution

(Current system is nearing end-of-life) \$24,900

The Innovation Plan contains a number of short- and long-term system and information management applications.

1. Implementation of GIS Management Dashboard \$98,405
2. Implementation of Reporting Solution for Legacy OMS Data \$18,900
3. GIS Health Checkup \$30,870
4. Assistance with GIS Upgrade \$156,620
5. Review of Disaster Recovery & Backup Solutions for GIS,
OMS, and Related Systems \$33,235
6. Implementation of GIS-Based Asset Management
Software (Engineering & Operations focus) \$263,490
7. Development of Custom DME GIS Training Materials \$75,610
8. GIS Support and Additional Projects (i.e. Advanced
Analytics Applications) \$241,360

The Innovation Plan includes provisions for assisting DME with vetting and the potential use of:

1. GIS-Related Projects for Distribution Automation and
Unmanned Aerial Vehicle Systems \$260,000
 2. Implementation of Graphic Work Design & Work Order
Management System Integration \$600,000
- \$2,000,000

The Innovation Plan is extensive and the need for an outside contractor, engaged through a PSA, to provide professional services was identified. Projects included with the Innovation Plan all fall under the OT umbrella. E&O Technology staff have, at times, been requested to tweak or provide additional integrations or systems which are beyond their programming capabilities. The PSA grants the outside contractor the ability to provide programming, structural, and implementation support for many of the identified projects and support for items that may arise unexpectedly. Use of an outside contractor provides expertise and support not currently within E&O Technology and can minimize full-time staff requirements in the future.

The PSA is for a 3-year term. Before returning for any subsequent agreements, DME will review the

Innovation Plan and make adjustments to reflect then current needs and requirements. It should be noted no software is included in the PSA. When additional software or applications are identified, DME will use the City of Denton standard purchasing practices to obtain approval.

SSP Innovations has been selected as the vendor to enter into a PSA contract to assist in these projects. SSP Innovations has a proven track record of work within the Telecom and Electric utility industries. DME E&O Staff have personal knowledge of SSP Innovation's capabilities gained by services performed by them previously.

SSP Innovations is a twelve year old GIS consulting company based near Denver, Colorado who focuses on utilities. SSP Innovations is the preeminent company suited to work with a combination of Schneider Electric ArcFM implementation and integration projects as well as leadership within the ESRI platform. In 2015 and 2016, ESRI selected their silver partner, SSP Innovations, with Partnership Awards at the ESRI Partner Conference. SSP Innovations is also a member of ESRI's 12 member ESRI Partnering Advisory Council. The DME GIS group recognizes the partnership between ESRI and SSP Innovations and the importance of this relationship to the future of the utility GIS industry.

SSP Innovations has performed installation, configuration, data conversion, data modeling, configuration, and training projects for many utilities. This work around solution oriented consulting will help DME with many projects including database health and tuning, upgrades, and filling needed technological gaps with customization and integration projects.

SSP Innovations has over 100 years of combined experience implementing the entire Schneider Electric Product line. SSP Innovations has performed work with many other municipal utilities across the United States including Garland Power & Light (Garland, TX), CPS Energy (San Antonio, TX), City of Houston (Houston, TX), City of New Braunfels (New Braunfels, TX), Memphis Light Gas & Water (Memphis, TN), and Burbank Water & Power (Burbank, CA). SSP Innovations also has worked with CoServ (Corinth, TX), Texas-New Mexico Power (Lewisville, TX), Tri-County Electric (Azle, TX), Alabama Power (Birmingham, AL) and Georgia Power (Atlanta, GA). SSP Innovations has earned the recognition of becoming the first utility-focused ArcGIS Online Specialty Partner.

OPTIONS

1. Recommend awarding a three year professional services agreement contract to SSP Innovations, LLC in the total estimated expenditure not to exceed \$2,000,000.00.
2. Not recommend awarding a three year professional services agreement contract to SSP Innovations, LLC in the total estimated expenditure not to exceed \$2,000,000.00, and provide staff direction on what other actions to take.

RECOMMENDATION

DME recommends awarding a three-year professional services agreement to SSP Innovations, LLC in a total estimated expenditure not to exceed \$2,000,000.00.

ESTIMATED SCHEDULE OF PROJECT

Upon approval from the Public Utility Board and Denton City Council, it is anticipated the first project will begin in August 2016.

PRIOR ACTION/REVIEW (Council, Boards, Commissions)

No prior action.

FISCAL INFORMATION

The services included in this PSA will be funded from project number 603582500.

STRATEGIC PLAN RELATIONSHIP

The City of Denton's Strategic Plan is an action-oriented road map that will help the City achieve its vision. The foundation for the plan is the five long-term Key Focus Areas (KFA): Organizational Excellence; Public Infrastructure; Economic Development; Safe, Livable, and Family-Friendly Community; and Sustainability and Environmental Stewardship. While individual items may support multiple KFAs, this specific City Council agenda item contributes most directly to the following KFA and goal:

Related Key Focus Area: Choose an item.

Related Goal: Choose an item.

EXHIBITS

1. DME GIS Strategic Plan
2. #16-2-3 SSP Statement of Work for Clevest MWFM & Responder Integration
3. #16-2-9 SSP Statement of Work for Integration of Schneider Electric's Responder OMS with Trilliant AMI
4. #16-2-11 SSP Statement of Work for ArcGIS Online Public Streetlight Reporting Application
5. SSP Ballpark Estimate for Miscellaneous Requirements (Three-year PSA)
6. Selection of Vendor Justification
7. Professional Services Agreement with SSP Innovations

Respectfully submitted:
Phil Williams
General Manager

Prepared by:
Jerry Fielder, P.E.
Division Engineering Manager - Distribution
Denton Municipal Electric