

County of Los Alamos

Council Meeting Staff Report

February 15, 2017

Agenda No.:	7.A
Indexes (Council Goals):	BCC - N/A
Presenters:	Rafael De LaTorre
Legislative File:	8978-17

Title

Approval and Ratification of Quote No. 40429 for \$106,131.06 from Milsoft Utility Solutions for Software Licensing, GIS Database Conversion and Server Setup, and Training, Configuration; and for Ongoing Annual Software Maintenance and Support Services

Recommended Action

Motion 1: I move that the Board of Public Utilities approve and ratify the invoiced costs of Milsoft Utility Solutions, quote No. 40429, for \$106,131.06 for work performed to date. Motion 2: I further move that the Board of Public Utilities approve the procurement of ongoing but optional software maintenance and support services of the Milsoft software in the amount of \$25,400.00.

Staff Recommendation

Staff recommends that the Board approve the two motions as presented as the software and services are beneficial and in the best interest of the County and Department of Public Utilities. **Body**

During 2008, Staff considered and evaluated three (3) geographical information system (GIS) engineering modeling software systems that incorporates electrical distribution system mapping and modeling capabilities. Such programs are generally unique to the municipal electrical distribution (ED) field and few systems are capable of performing complex analysis of ED system calculations. The programs considered and evaluated by the Department of Public Utilities (DPU or Department) included Milsoft, Synergee, and Aspen. The Department found that the Milsoft platform met both the price and performance requirements of the County. Subsequently, under the small purchase provisions of the County's Procurement Code, licenses for the Milsoft Windmil engineering modeling, Contingency Analysis, and Light Table were purchased. The cost for the 3 licenses was approximately \$35,000 with each having an annual, but optional, 20% maintenance, update, and support fee. The Board of Public Utilities (Board) approved the purchase at that time through the normal Departmental budgeting process.

Over the course of 4 months, visual data from the GIS electrical system was utilized to manually enter electrical modeling data into Windmil and create an electrical model of the County's entire electrical distribution (ED) system for electrical engineering analysis purposes. The over-current device (OCD) protection analysis of the software proved that all OCD settings needed to be reprogrammed and all overhead fuses needed to be replaced. This project took one year to implement but improved the SAIDI by at least one hour.

Recognizing the value of this program and need to evaluate and plan for future system configurations to the County's ED system, the Department in 2010, budgeted an additional \$120,000 for the purpose of advancing the software's abilities and functions. The expenditure was subsequently approved for the FY 2012 budget. The scope of the project was to include that Milsoft would convert the County's GIS ED grid system into the new software as well as train DPU staff on its uses, functions, and capabilities. Milsoft provided to the County a quote for the GIS data conversion of the

system, manual system programing of the application, and finally onsite training and use of the in Milsoft Quote No. 40429 (attached).

Prior to this project, the electrical distribution system consisted of an generalized GIS system profile with little to no value from an electrical engineering modeling perspective and a separate 2009 electrical distribution model. Therefore, having to maintain two separate software systems, two databases (one good, one bad) into the future, the Department believed this was unworkable.

During April, 2011 the Milsoft purchase order was approved for payment in the in the amount of \$114,000 during the FY 2012 fiscal period with \$57,000.00 or 50% of the quote amount to be paid in September, 2011. The Milsoft quote also contemplated that the County would then pay Milsoft another 40% after Milsoft's entry of the data into the Windmill system and then installation of the complete database and Milsoft software on the County's server, with the remainder, 10% to be paid within 30 days after installation.

Over the next 3 years, there were numerous interactions between DPU GIS staff and Milsoft with respect to the ED system data conversion and entry into Windmil. There were numerous and contentious issues to work through including conversion of the existing DPU electrical ESRI GIS data into the Windmil Map application (i.e., development of the electrical distribution modeling component).

During the 4th year, DPU worked with the County's IT department to install a server, hardware, etc. to host a newly converted DPU electrical GIS database utilizing network licenses for Milsoft's Windmil Map. In essence this provided the County and DPU with a seamless electrical GIS database and electrical distribution modeling capability.

In September, 2016, Milsoft finished the configuration of the DPU hardware, installed two new Windmil Map network licenses, provided onsite training to DPU staff, and installed the desk top software. Subsequently, in October, 2016, Milsoft submitted for payment invoices totaling \$33,681.06 which included the remaining \$31,800 payment and actual travel costs of \$1,881.06 for the onsite training. It was then that current County and DPU accounting processes flagged the invoices because current procedures now require that all project costs such as these (possibly exceeding \$50,000 in total) be combined as one procurement item. Thus it was recommended that the DPU seek Board ratification and approval in lieu of continuing under individual signed Quote #40429.

Important to understand is that, the project is critical to the electrical department's success now and into the future. Having a singularly and seamless software transition from a useful and accurate GIS electrical database into an electrical distribution modeling component is imperative for any electric utility. For example, having the ability in-house to electrically model the Los Alamos Sub-Station (LASS) Project, in advance of construction, to determine the best feeder configuration, Open and Closed electrical points, develop OCD settings, etc. can only be performed with electrical distribution engineering modeling software which this program is capable. Having to contract out the LASS engineering analysis to outside sources could easily exceed \$30,000 to \$40,000 for individual project review and analysis.

Alternatives

Two motions have been provided for Board consideration. As to the first, the Board could choose to not ratify Milsoft's prior invoices which in effect would be a directive to not pay the remaining invoiced amounts for work already performed. This however could subject the County to potential claims from Milsoft, and its subcontractors where applicable, for recovery of their actual costs and expenditures. Milsoft has rendered products and services to the County to which the County has benefited. As provided, the Purchasing Agent and Utilities Manager has each has found that continuation of the

services is in the best interest of the County and DPU and that there was no bad faith involved in this award process.

As to the second motion, the Board could approve the payment of prior invoices but discontinue any further services as related to optional software support and services, with Milsoft. The impact here would be that Milsoft would not provide further software, database, and programmatic application support. Milsoft would also not be required to provide any further program updates, fixes, or patches. Although the software would continue to be usable to the Department, the program and software would be fixed to its current capabilities and limitations as of the date of the Board's decision and no further application support from the developer would be provided.

Fiscal and Staff Impact

The fiscal impact for this year is \$49,131.00. Funds from another project would be utilized for continuation of this project. Optional annual support fees in the amount of \$12,700 (20% of software costs for 5 different licenses: Windmil, Light Table, Contingency Analysis, 2-Windmil Map) would be budgeted each year for at least two (2) years. We want to allow DPU GIS and Engineering Staff hands on time with the Milsoft software systems, update the electrical model with other missing information, etc. for at least 2 years; thereafter, the department can consider doing away with the optional 20% annual maintenance support fees.

Attachments

A - Final Tabulation Cost for Milsoft GIS Data Conversion Project with 2 new Windmil Map license seats

B - Original Milsoft Quote

C - Written Determination of the Purchasing Agent