



TO THE HONORABLE CHAIRMAN AND TRUSTEES

REPORT TO: STILLWATER UTILITIES AUTHORITY

No. SUA-16-04

ISSUED BY THE GENERAL MANAGER - STILLWATER, OKLAHOMA

Date of Meeting: January 4, 2016

Subject: Contract Approval: Fiber Optic Network Installation – SUA RFP#: 2015-919

Background: On June 2, 2014, the Trustees approved the Power Generation Station (PGS) completion plan and since then staff has been working to acquire the equipment/services associated with the new PGS. The new PGS will require a secure and redundant high-speed fiber optic network connection with City Hall to tie into the City network. The fiber optic connection will serve three primary purposes including high speed connectivity for phone/computer use, the ability to securely transfer high speed data from City Hall to the City of Stillwater disaster recovery system located in the hardened area of the new PGS administration building, and allow for critical communications with the Supervisory Control and Data Acquisition (SCADA) system network that the Stillwater Electric Utility (SEU) uses to communicate with its electrical transmission and distribution system. Fiber connection between the PGS and the SEU substations will play an integral part in moving toward using advanced relaying equipment that is designed to protect the transmission system and rapidly isolate outages.

Discussion: With the above stated purposes in mind, City staff acquired assistance from consultants to develop plans for a fiber optic network to connect the identified key facilities and assets. Plans were developed to include a dual-ring network consisting of a northern and southern loop that is designed to offer fail-over and redundancy should a portion of the network lose connectivity. The initial phase of the installation will consist of the northern loop connecting the PGS to City Hall and five electrical substations along the route.

Once the plans were developed, a Request for Proposal (RFP) was prepared by City staff and then advertised in accordance with the City’s purchasing manual. The RFP’s were sent to prospective fiber optic network providers on August 24, 2015. On September 28, 2015, the SEU received four proposals in response to RFP#: 2015-919 for the installation of the northern loop.

<u>COMPANY NAME:</u>	<u>BASE PROPOSAL AMOUNT:</u>
Trace Technologies	\$650,000
Specialty Telecommunications Services	\$650,327
Techsico	\$873,971
Precision Contracting Services, Inc.	\$999,417

After reviewing the proposals and conducting several follow-up meetings, Trace Technologies was selected and contract negotiations were started. Negotiations have now concluded and a final contract is ready for approval.

During the development phases of the fiber network, staff inquired about using an existing fiber optic provider’s fiber backbone to connect into the new PGS. After evaluating the cost and the communication speeds available to support the PGS, it was determined that the benefits of the City owning its own secure and redundant, high-speed fiber optic network would pay for itself in a few short years. It is also important to note that once the north fiber optic loop is installed, all City owned facilities along the route could be connected,

eliminating costs for 3rd party connections and providing security, redundancy, and high speed connectivity to all of those facilities.

Budget Impact: The approximately \$70 million estimated cost of the PGS project includes funding for this purchase. This item requires no new appropriation or budget amendment and will not affect year-end projected balances. Funding is available in the PGS project fund which is held by the Bond Trustee bank.

Alternatives:

- 1) Authorize staff to enter into a contract with Trace Technologies for the installation of the north fiber optic loop.
- 2) Direct staff to work with the existing fiber provider to connect into the new PGS. To obtain the necessary speed to support the PGS and the City disaster recovery system, it will cost \$160,800 per year. This option would not provide the necessary security or redundant communication required for the SEU substations and City buildings.

Recommendation: It is recommended that the Trustees authorize staff to enter into a contract with Trace Technologies for the installation of the north fiber optic loop in the amount of \$650,000 and authorize expenditures from the PGS project fund up to \$715,000 (10% contingency).

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Reviewed by City Manager's Office:	Dan Blankenship, SUA Director
Date of Preparation:	December 18, 2015

Submitted by:



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Attachment: Fiber Optic Loop Map