



CITY COMMISSION STAFF REPORT

DEPARTMENT: Utilities Department

DATE: June 11, 2024

SUBJECT: Motion to approve and authorize the purchase of 100 Telemetry Control Units (TCU) TCU800, to replace the existing TCU001 for the Lift Stations SCADA System, from Data Flow Systems LLC. (DFS), the previously approved sole source vendor for the TCUs for the City's Wastewater Collection and Transmission Supervisory Control And Data Acquisition (SCADA) System, in the amount not to exceed \$449,700.00. - **Utilities**

CITY MANAGER RECOMMENDATION:

The City Manager recommends the approval and authorization for the purchase of 100 Telemetry Control Units (TCU) TCU800, to replace the existing TCU001 for the Lift Stations SCADA System, from Data Flow Systems LLC. (DFS), the previously approved sole source vendor for the TCUs for the City's Wastewater Collection and Transmission Supervisory Control And Data Acquisition (SCADA) System, in the amount not to exceed \$449,700.00.

BACKGROUND OF ITEM:

The City's Wastewater Collection and Transmission Division heavily relies on Telemetry Control Units (TCUs) to ensure the smooth daily operation of our lift stations. At present, our Utilities Department manages 83 operational TCU001 units across the city's lift stations, with an additional 17 units held in reserve to mitigate the risk of electrical or electronic failures, as well as lightning strikes.

DFS is extending its previously advertised 15% discount for the purchase of a TCU800 pump controller, with the exchange of a TCU001 pump controller. Additionally, DFS is offering an exclusive 10% quantity discount for Cooper City on bulk purchases of 100 or more new TCU800 pump controllers, with the equal exchange of TCU001 pump controllers. This trade-up offer presents an opportunity for City to upgrade our pump controllers efficiently and cost-effectively while ensuring the continued smooth operation of our lift stations.

ANALYSIS:

While the TCU001 has served as the backbone of our operations for over 8 years, the rapid evolution of software and technology has made sourcing its components increasingly challenging. Acknowledging the necessity to adapt, the Utilities Department is preparing to phase

out the TCU001. Moving forward, it will only be available for repairs and parts for the next year through DFS.

Its successor, the TCU800, represents a significant advancement. Equipped with a faster microprocessor, expanded analog inputs, and enhanced monitoring capabilities, including a larger display and touchscreen graphical interface, the TCU800 promises to revolutionize our SCADA system. With 18 digital monitoring inputs, compared to the previous 12, the TCU800 empowers the City to monitor a broader range of equipment, facilitating more efficient operations and reduced downtime in each lift station.

Embracing this upgrade will not only enhance data collection speed but also fortify our overall system resilience, ensuring continued reliable service to the community.

PROCUREMENT:

Sec. 2-258. – Exclusions and exceptions to bid and proposal requirements.

(b)Sole and single source procurements.

(1) A contract may be awarded for a supply, service, or construction item without competition when the purchasing agent or a designee determines in writing that there is only one economically feasible source for the required supply, service, or construction item, or when requirements for standardization, warranty, geographic and territorial restrictions, or other factors create a situation where competition is either not feasible or practicable.

FISCAL IMPACT:

There is sufficient funding available in the Water and Sewer Utility Fund. Hence, the Utilities Department is requesting a transfer of \$400,000.00 from the "Gravity Sewer Improvements" Capital Improvement Project (CIP) account 453-930-563610-535-WS003, to the "Lift Station Rehabilitation" CIP account 453-930-563150-535-WS004. This transfer will ensure the necessary financing for the TCU replacement project without compromising other critical infrastructure initiatives.

<u>General Ledger Acct. Number</u>	<u>Remaining Available</u>	<u>Requested Amount</u>	<u>Remaining Amount</u>
453-930-563150-535-WS004	\$454,940.49	\$449,700.00	\$5,240.49

ALTERNATIVES:

In light of concerns regarding discontinued support for TCU001 and the cost-effectiveness of the proposed solution, an alternative approach emerges. This entails retaining the TCU001 units while actively tackling challenges in component sourcing. Rather than an immediate phase-out, the department could sustain its use while implementing a strategic plan to mitigate risks associated with component sourcing difficulties. Such a strategy may involve actively exploring alternative suppliers, strategically stockpiling critical components, or proactively negotiating long-term contracts with existing suppliers. However, it is essential to recognize that adopting this approach might necessitate the department incurring additional migration costs.

ATTACHMENTS:

1. TCU800 PUMP CONTROLLER TRADE_ Proposal
2. TCU800 vs.TCU001 - Comparison
3. Data Flow Systems, LLC_ Sole Source Letter
4. Previously approved sole source agenda item for reference
5. Vendor Compliance