

## MEMORANDUM

To: Mayor and City Councilmembers Steve Parker, City Manager

From: Clarence Smith, Director of Electric Utilities

Through: Rick Cortes, Deputy City Manager

Date: January 18, 2022

RE: Meter and MTU and Software upgrade

As part of the FY 21/22 Capital budget, \$2.7 Million dollars was approved for the second part of the meter upgrade. On 2008, the City of Seguin installed AMR/AMI electric and water meters throughout our system. As with all technology, changes and refinement of these systems change are introduced over time. In 2010 Aclara ended the software lifecycle for "STAR Electric" meters which made the City of Seguin the only active user of Aclara STAR Electric meters in the United States. Due to age, staff is experiencing a growth of STAR Electric module failures. The data losses that occur due to aging infrastructure have a downstream impact on the utility billing process with missing data. To re-capture this data, meter technicians are having to manually re-read the meters making our system less effective. In an effort to correct these aforementioned deficiencies, the staff proposes the following.

**Stage one** – replaces all (9) DCU Radio Collector Units in the field and update the Aclara STAR Software with Aclara RF Software. The (9) DCU units capture the data sent from the meter modules and then forward the data to the new Aclara RF Platform. Stage one will provide the needed infrastructure upgrade to support Stage 2, scheduled for 2021-2022 budget request.

**Stage two** – change out of the outdated STAR modules to the new RF modules. Combining stage one and stage two will give the City of Seguin a modern and robust AMI infrastructure capable of providing a higher level of efficiency. The main benefactor will be the citizens and industrial customers by providing them a higher level of data accuracy for their consumption or analysis.

**Stage three** – Convert the system to a "Cloud Platform" platform. Hardware upgrades, software maintenance and monitoring have caused un-necessary duties including software troubleshooting of backend products and service monitoring of sever hardware by the Utilities Service Department. This conversion will provide the City with a robust "Platform as Service" or Cloud Solution to allow our department to focus on data integrations, data analysis, meter exchanges, meter reading, billing duties and customer consumption products like Tyler Customer Engagement Portal. The new "Platform" will consolidate three

## **ELECTRIC UTILITIES DEPARTMENT**

existing software interfaces into one unified "SaaS" or "Cloud Service," allowing utility services and billing to login into one main portal and giving us a holistic view of our water and electric "AMI System."

If approved staff will be working with Techline out of San Antonio to order all necessary equipment; installation will be conducted by Aclara. Cost should not exceed the budgeted amount of 2.7 million dollars.

Staff is recommending approval:

An Overall System Field Reference:

Actor	a RF Cloud (Paas)	and Billing.	nd for meter management	Dak DCU	
	Each DCU Reports meter data to Aclara Cloud Using Industry Standard Security	ZDT's DCU		Mockingbird DCU	Cementary Pole DCU
	Sto-Freestation DCU Service Area Service A	Coiseum DCU	U Report to DCU	Siren Pole DCU	
and the second					and the second s