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Gainesville Regional Utilities c/o Jim Ansell 4747 N Main Street Gainesville, FL 32609

## Subject: Business Case Summary for Advanced Metering Infrastructure

Having the opportunity to discuss this project over the past couple of months, the Leidos team has developed a clear understanding of Gainesville Regional Utilities (GRU) business case inputs pertaining to your Advanced Metering Infrastructure (AMI) initiative.

The business case accounts for the key components of a successful AMI implementation, which includes

Equipment	Hardware	Software	Labor	Integrations
Warranty	Field operations	Disaster Recovery	Training	Business Process
Change Mgmt.	Cust. Engagement	Software Support	Cyber Security	Data Analytics

GRU currently has approximately 204,700 electric, water, and gas metering end points. The AMI field equipment directly purchased by GRU is listed in the following table.

100% of the 95,983 electric meters					
90% of the residential 71,579 water meters					
50% of the 1,073 commercial/industrial water meters					
7.5% of the 36,065 gas meters					
100% gas modules/radios					
100% water modules/radios and meter lids drilled					
<b>Thirteen (13)</b> point to point IPv6 collectors attached to existing towers or forty eight (48) mesh IPv6 collectors attached to existing utility poles					

**Eight (8)** field trouble shooting hand held devices

The AMI implementation schedule is two (2) years, and assumes that 100 percent of the collectors and 25 percent of the meters are deployed within the first year. The remaining 75 percent of the meters are deployed by the end of the second year.

The business case considers three scenarios of AMI implementation

- Utility builds, owns, and operates
- Hosted approach the successful AMI provider hosts the AMI head end and Meter Data Management (MDM) system but the utility operates these applications

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Managed service - the successful AMI provider is responsible for the AMI head end and MDM system as well as the operation of these applications

The typical AMI implementation project costs common for three (3) scenarios is approximately \$40,600,000 and is included in the table below. These costs include the following project management, mass equipment installation oversight, business process/training, integration of new applications with existing applications, AMI field equipment plus ten (10 percent) spares, mass equipment installation vendor, consumer outreach, prepay program, ten (10 percent) contingency and applicable taxes.

Combining the AMI costs common for each scenario with the incremental project and recurring costs specific to each scenario is as follows:

The major benefits specific to GRU consist of electric meter accuracy, water meter accuracy, meter reading efficiency, meter replacement budget deferral, disconnect/reconnect/transfer efficiency, revenue protection, transformer right sizing, back office billing/bill complaints efficiency, and prepay cash flow. The benefits are predominately realized after the two (2) year implementation period with an approximate **annual benefit of \$9,668,000.** 

AMI Scenario	AMI costs common for each scenario	Incremental project costs per scenario	Recurring costs over the four (4) years following implementation per scenario	Total cost per scenario for implementation and following four (4) years	Benefit realized over implementation and following four (4) years	Simple pay back after 2 year implementation
Utility Build, Own, & Operate	\$40,600,000	\$2,632,000	\$4,616,000 (4 x \$1,154,000)	\$47,848,000	\$43,680,000	53 months
Hosted	\$40,600,000	\$550,000	\$6,840,000 (4 x \$1,710,000)	\$47,990,000	\$43,680,000	54 months
Managed Service	\$40,600,000	\$306,000	\$7,420,000 (4 x \$1,855,000)	\$48,326,000	\$43,680,000	54 months

As shown in the table above, the major benefits applied to the combined project and recurring costs specific for all three (3) scenarios results in a simple pay back after a two (2) implementation period of fifty three (53) to fifty four (54) months.

Though the simple pay back is similar for each scenario, the risk profile is certainly different. The utility assumes the most risk for the utility builds, owns and operates scenario. The utility risk is less with the hosted scenario and the utility incurs the least risk with the managed service scenario.

It has been our pleasure to work with the GRU team and please feel free to contact me as required.

Sincerely, Leidos Engineering, LLC

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