

CITY OF HIGH POINT

AGENDA ITEM



Title: Tantalus Advanced Metering Infrastructure Master Agreement

From: Eric Olmedo, Assistant City Manager

Meeting Date: January 18, 2022

Public Hearing: None

Advertising Date / N/A

Advertised By:

Attachments: Exhibit III

PURPOSE:

Council is requested to approve a master services agreement with Tantalus Systems, Inc. to install advanced metering infrastructure equipment.

BACKGROUND:

The City of High Point has selected Tantalus Systems, Inc. to install advanced metering infrastructure equipment to collect water/sewer and electric usage data for bill generation. An advanced metering infrastructure (AMI) system includes communications hardware, software, data management software and associated systems that creates a two-way network between advanced meters, meter modules, and utility business systems. The system will allow staff to accurately respond to outages and water leaks, allows for remote disconnect and reconnect of services, offers a much more robust customer information portal, and allows for pre-payment of utility services.

The project will start with a 500-site initial deployment area, and upon successful implementation of the initial area, will be followed up by a managed roll out citywide. The entire process is expected to be complete within 24 months. In addition to the current agreement, additional contracts for project management and acquisition of a meter data management system will be brought to City Council for approval in the near future.

Request for Proposals were received from eight vendors, and five were selected to present to a staff team made up of members of the Customer Service, Electric, Public Services, IT and Finance Departments and City Manager's Office. Three firms were asked back for final presentations, and Tantalus was selected. The City Council was briefed on AMI and Tantalus at its September 20, 2021 Special Meeting and gave staff approval to negotiate final terms with Tantalus. Final pricing is upfront costs of \$6,191,886.11 and annual costs of \$55,937.58.

BUDGET IMPACT:

Funds are available in the Electric Capital Fund for the upfront costs. The annual costs will be budgeted in the appropriate department operating budgets.

RECOMMENDATION / ACTIONS REQUESTED:

Staff recommends and asks the Council to approve the master services agreement with Tantalus Systems, Inc. and authorize the appropriate city official to execute all necessary documents.

Exhibit III - Final Pricing

Network Equipment and Software

TUNet WAN/LAN Equipment ("Network Equipment")

Associated Phase	Product Code	Description	Quantity	Unit Price	Ext. Price
Phase 1	VC-934	Versa Collector ("Tantalus Versa Gateway")	56	\$ 3,400.00	\$ 190,400.00
Phase 1	VC-820-VZ	Verizon Cellular Modem ("Modem")	28	\$ 975.00	\$ 27,300.00
Phase 1	TR-1901	Pole-Mounted 900MHz LAN Repeater ("Tantalus Repeaters")	84	\$ 289.00	\$ 24,276.00
Phase 1	DT-116	Centron Reset Key	2	\$ 32.85	\$ 65.70
Phase 1	DT-420-VM-BUN	Field Deployment Tool Starter Kit with Scanner, Optical Dongle, USB Ethernet Hub, USB Key	1	\$ 2,700.00	\$ 2,700.00
Infrastructure Discount					\$ (241,976.00)
TUNet Infrastructure ("Network Equipment") Sub Total					\$ 2,765.70

TUNet Server & Software ("Software")

Associated Phase	Product Code	Description	Quantity	Unit Price	Ext. Price
Phase 1	TCC-2020	TCC Headend Software License (including embedded Oracle license subject to the terms of the Agreement)	1	\$ 80,000.00	\$ 80,000.00
Phase 1	TLU-010	TCC Headend Upgrade for 15 Minute Intervals	1	\$ 40,000.00	\$ 40,000.00
Phase 1	SV-4040	TCC Hosting Per Month	12	\$ 2,700.00	\$ 32,400.00
500 with Phase 1 41,441 with Phase 2	NSE-201	TUNet Software License - per Electric Endpoint	41,941	\$ 3.50	\$ 146,793.50
Phase 1	TAL-410-5	TUNet Application for Existing Water ERT Read (max 80k devices) (for reading of HPU's "AWMIUs")	1	\$ 100,000.00	\$ 100,000.00
TBD	PPA-1000	Polyphase Software - per Endpoint	4	\$ 11,000.00	\$ 44,000.00
Head End ("Software") Total					\$ 443,193.50

TUNet Equipment and Services ("Network Equipment and Software") Total \$ 445,959.20

Modules and Meters

Tantalus Communication Modules (Integration Included) ("Modules")

Associated Phase	Product Code	Description	Quantity	Unit Price	Ext. Price
500 with Phase 1 37,460 with Phase 2	TC-1220-RD	Tantalus Residential Remote Disconnect Module for Itron C2SXD Meters	37,960	\$46.50	\$ 1,765,140.00
Phase 2	TC-1216	Tantalus Residential Non-Disconnect Modules	145	\$46.50	\$ 6,742.50
Phase 2	TC-1214	Tantalus Residential Remote Disconnect Module for L&G Axe Meters	152	\$46.50	\$ 7,068.00
TBD	PP-1316	Tantalus Commercial Module	3,714	\$140.00	\$ 519,960.00
Module Total					\$2,298,910.50

Meter Pricing ("Meters") (Third-Party Products)

Associated Phase	Product Code	Description	Quantity	Unit Price	Ext. Price
Phase 2	TBD	Itron Centron Single phase 1S	10	\$81.11	\$ 811.10
500 for Phase 1	TBD	Itron Centron 2 Single phase 2S w/ remote disconnect	37,960	\$65.66	\$ 2,492,453.60
Phase 2	TBD	Itron Centron Single phase 3S	108	\$81.11	\$ 8,759.88
Phase 2	TBD	Itron Centron Single phase 4S	27	\$81.11	\$ 2,189.97
Phase 2	TBD	L&G Axe Single phase class 320 w/ remote disconnect	152	\$159.65	\$ 24,266.80
TBD	TBD	Itron CentronPoly 9S	1,333	\$186.39	\$ 248,457.87
TBD	TBD	Itron CentronPoly 16S	1,346	\$186.39	\$ 250,880.94
TBD	TBD	Itron CentronPoly 12S	246	\$186.39	\$ 45,851.94
TBD	TBD	Itron CentronPoly 45S	171	\$186.39	\$ 31,872.69
TBD	TBD	Itron CentronPoly Demand and TOU	528	\$186.39	\$ 98,413.92
TBD	TBD	Itron CentronPoly Reactive Metering	30	\$186.39	\$ 5,591.70
Meter Total					\$3,209,550.41

Services

Project Management and Network Equipment Installation

Associated Phase	Product Code	Description	Quantity	Unit Price	Ext. Price
Phase 1	INS-6001	Infrastructure ("Network Equipment") Installation	1	\$ 71,416.00	\$ 71,416.00
Phase 1	SV-6000	Infrastructure Turnkey Services - (Includes infrastructure programming and configuration; pole location surveys; optimization; Quality Assurance)	1	\$ 18,840.00	\$ 18,840.00
Phase 1 & Phase 2: See Deployment Services Milestone Table(s) below.	SV-1000	Deployment Services - 18 mo.	1	\$ 142,210.00	\$ 142,210.00
Project Management and Installation Grand Total					\$ 232,466.00
As applicable	Estimated Shipping Costs		1	\$ 5,000.00	\$ 5,000.00

Grand Total \$ 6,191,886.11

Software Maintenance and Technical Support

<u>Associated Phase</u>	<u>TUNet System Annual Support & Maintenance</u>	<u>Quantity</u>	<u>Unit Price</u>	<u>Ext. Price</u>
Year 2	SM-2040	TUNet software maintenance, 1 yr, Includes all annual Tantalus & 3rd party licenses	1 \$ 30,000.00 \$	30,000.00
Year 2	SM-4000	Annual ERT License Maintenance	1 \$ 10,000.00 \$	10,000.00
Year 2	SL-2001	TUNet Technical Support - Standard Level	41,941 \$ 0.38 \$	15,937.58
TUNet System Annual Support & Maintenance Total \$				55,937.58

Pricing Notes & Assumptions:

- All fees are in US dollars.
- All prices/service fees exclude applicable taxes.
- Initial Deployment Services are billed on milestones. In the event that additional days are necessary for the Deployment Services due to Customer electing Additional Services or an Excusing Event, Customer will be billed at the rate of \$1,500 per day.
- Annual System Support is available in both Premium and Standard Level. Changes to the Technical Support level elected by Customer are subject to the notice requirements described in Exhibit B – Technical Support.
- Pricing assumes there are no changes or additions to other system factors, including without limitation, deployed meter quantities, software licenses, features and functionalities, server hardware/platforms.
- Additional Services (as defined in Addendum A-1 to the EULA) will be priced pursuant to Tantalus' then-current price list and quoted by Tantalus, as applicable, upon receipt of a written request from Customer. In the event of such changes, the price for annual Maintenance and Support Services is subject to increase.

PHASE 1 INVOICING

Deployment Services Milestones	
Phase 1 Milestones	Percentage of SV-1000 Payment Due
Project Setup/kickoff	\$ 3,500.00
TCC (HES) Installed	\$ 11,000.00
System Design Complete	\$ 7,200.00
Initial Training Session	\$ 12,500.00
System Integration	\$ 22,000.00
Network Deployment	\$ 7,200.00
Second Training	\$ 12,500.00
ISAT	\$ 12,500.00
IDA Project Complete	\$ 3,805.00
Total SV-1000 (Phase 1)	\$ 92,205.00

Bill of Materials	
Phase 1 Products	Quantity
VC-934	56
VC-820-VZ	28
TR-1901	84
DT-116	2
DT-420-VM-BUN	1
Itron Centron 2 Single phase 2S w/ remote disconnect	500
Itron CentronPoly 9S	50
INS-6001	1
SV-6000	1
TC-1220-RD	500
PP-1316	50
TCC-2020	1
TLU-010	1
SV-4040	12
NSE-201	500
TAL-410-5	1
Total Product Cost (Phase 1)	\$ 419,571.20

Phase 1 Tantalus Totals	
Invoice Percentage	Dollar Amount
90%	\$ 358,389.63
10%	\$ 39,821.07
Total	\$ 398,210.70

Phase 1 Third Party Totals	
Invoice Percentage	Dollar Amount
100%	\$ 113,565.50
Total	\$ 113,565.50

NOTE: Shipping estimates have not been included as they will be determined at the time of shipment and billed accordingly.

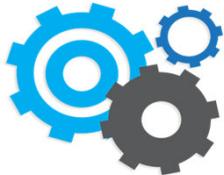
PHASE II INVOICING

Deployment Services Milestones	
Phase II Milestones	Percentage of SV-1000 Payment Due
System Design Complete	\$ 14,000.00
Third Training	\$ 12,500.00
Fourth Training	\$ 12,500.00
FSAT	\$ 7,200.00
Phase 2 Project Complete	\$ 3,805.00
Total SV-1000 (Phase 2)	\$ 50,005.00
Phase II Products	
Description	Quantity
Itron Centron 2 Single phase 2S w/ remote disconnect	37,460
Itron Centron Single phase 1S	10
Itron Centron Single phase 3S	108
Itron Centron Single phase 4S	27
L&G Axe Single phase class 320 w/ remote disconnect	152
Itron CentronPoly 9S	1,283
Itron CentronPoly 16S	1,346
Itron CentronPoly 12S	246
Itron CentronPoly 45S	171
Itron CentronPoly Demand and TOU	528
Itron CentronPoly Reactive Metering	30
PP-1316	3,664
TC-1220-RD	37,460
TC-1216	152
TC-1214	145
PPA-1000	4
NSE-201	41,441
Total Product Cost (Phase II)	\$ 5,625,104.91
Phase II Tantalus Totals	
Invoice Percentage	Dollar Amount
90%	\$ 2,256,938.10
10%	\$ 250,770.90
Total	\$ 2,507,709.00
Phase II Third Party Totals	
Invoice Percentage	Dollar Amount
100%	\$ 3,167,400.91
Total	\$ 3,167,400.91

NOTE: Shipping estimates have not been included as they will be determined at the time of shipment and billed accordingly.

Tantulus is the Recommend Vendor

Best balance of functionality, references and costs



Functionality

- 1) Highest scores for requirements
- 2) Highly rated software by employees
- 3) Scalability for future smart city programs
- 4) Similar network and meter proposed by all bidders



Simplicity

- 1) Water and Electric over same network
- 2) Software provided by Tantulus without an MDM
- 3) Can leave water meters in place.
- 4) Support coming from Raleigh. NC
- 5) MultiSpeak Integration



Customer Satisfaction and Cultural Fit

- 1) Focus on public power utilities like the City of High Point
- 2) Strong references
- 3) Heavy focus on customer satisfaction



Price

- 1) Over \$4 million in 15-year savings versus second lowest priced vendor
- 2) Extend life of existing water meters

Next Steps: 1) Contract negotiation, 2) Council approval, 3) Pilot/Initial Deployment Area