Request for Proposal
Advanced Metering Infrastructure
Automatic Meter Reading

Closing Date for Proposal Submittal:
February 6, 2014

Submit Proposals to:
City of Kilgore
Attn: Deborah Dane, City Clerk
815 N. Kilgore Street
Kilgore, TX 75662
RFP ADVERTISEMENT

SEALED PROPOSALS addressed to the City Clerk, City of Kilgore, Texas will be received until 2:00 p.m., Thursday, February 6, 2014, at Kilgore City Hall, 815 N. Kilgore Street, Kilgore, Texas 75662, to furnish all labor, materials, equipment, supplies and supervision necessary to implement Advanced Metering Infrastructure/Automatic Meter Reading for the City of Kilgore’s water distribution system, at which time bids will be opened and publicly read at the same location.

SPECIFICATIONS may be obtained free of charge at www.ciplist.com. Bid forms, plans, specifications and contract documents may be examined free of charge at Kilgore City Hall or at www.cityofkilgore.com.

BIDDERS ARE EXPECTED TO INSPECT the site of the work and to inform themselves of all local conditions.

A Bidder's Bond, Certified or Cashier's Check in an amount of not less than five percent (5%) of the total bid shall accompany each bid as a guarantee that, if awarded the contract, the bidder will promptly enter into contract with the City of Kilgore, Texas. The successful bidder or bidders will be required to furnish a Performance Bond and Payment Bond as well as proof of statutory worker’s compensation insurance.

The City of Kilgore reserves the right to: reject any or all bids, waive any or all informalities, and to award the contract to the bidder or bidders who, in the opinion of the Owner, is in the best interest of the City.

Bids may be held by the City of Kilgore for a period not to exceed sixty (60) days from the date of the bid opening for the purpose of reviewing the bids and investigating the bidders' qualifications prior to the contract award.

City of Kilgore

Deborah Dane, City Clerk

Advertise Local Paper:
Saturday, January 11, 2014
Saturday, January 18, 2014
Background and Purpose

Background
The City of Kilgore serves a population of approximately 13,000 people with nearly 5400 water meters serving commercial, industrial and residential areas. Existing meters are of various ages and differing manufacturers. Historically, meters have been maintained and read by three meter reader employees. Primarily Master Meter and ITRON meters will be retrofitted, with new meters to be determined as part of the meter bid, concurrently advertised with this RFP. The majority of meter boxes are cast iron, of various shapes and sizes, which may necessitate antenna boosters.

Purpose
The City of Kilgore is preparing to implement a hybrid AMR/AMI system in conjunction with replacing water meters throughout the City. Supply and Installation of meters will be performed under separate contracts, but concurrently with this AMI installation. The purpose of this RFP is to invite qualified firms to provide quoted (bid) prices to provide materials and installation services as necessary to implement both Automatic Meter Reading (AMR) and Automatic Metering Infrastructure (AMI). The City will be working with the successful respondent to this RFP as well as third-parties for providing and installing the water meters. Due to the geography of Kilgore, and in order to reduce costs, it is anticipated that a hybrid AMI/AMR system will be implemented, although AMI, AMR, and AMI/AMR Hybrids will be considered as a result of this RFP.

The purpose of this RFP is to enter into contract with a vendor that can best meet the needs of the City. The City reserves the right to accept or reject any or all proposals received as a result of this request, or to negotiate with the firm deemed most suitable to perform this work, without reissuing the RFP, and to waive any informalities, defects, or irregularities in any proposal.

The City reserves the right to accept the proposal of a vendor other than that of the lowest bidder.

Instructions for Preparing and Submitting Proposals
Proposals shall not exceed 30 pages, single sided or 15 pages for double-sided, not including technical documentation for each system to be recommended to the City (AMI only, AMR only, and AMI/AMR hybrid)

Proposals shall be submitted to City Hall, Attention: Deborah Dane, City Clerk no later than 2:00 PM on Thursday, February 6, 2014. Proposals shall be placed in an envelope(s) plainly marked “Attn: Deborah Dane-Kilgore AMI RFP”. Proposals should include a bid bond, Certified or Cashier's Check in the amount of 5% of the total proposed contract.

Submit 4 copies and 1 digital copy of the complete proposal in .pdf format.

Submitted proposals and quoted bid prices must remain valid for at least one hundred twenty (120) days from the date of the bid opening.

This RFP and all addenda will be available at http://www.ciplist.com/plans/?Kilgore/city/101787.
THIS BID IS BEING RELEASED COINCIDENT WITH AN RFP TO PROVIDE NEW WATER METERS. BIDDERS ARE ENCOURAGED TO SUBMIT BIDS ON BOTH RFPs FOR A COMPLETE AMI/AMR AND METERING SOLUTION.

A Non-mandatory Pre-Proposal Meeting will be held on Tuesday, January 21, 2014 at 2:00 PM in the City of Kilgore Council Chambers located at 815 N. Kilgore Street, in Kilgore, Texas. Any requested addendums must be received by the City no later than 5:00 PM on Friday January 24, 2014.

Proposals will be accepted by the City Clerk until, 2:00 PM on Thursday, February 6, 2014, at which time the names of vendors who submitted proposals will be opened and read aloud. A committee will then review the proposals and make a recommendation to the City Council for approval.

Successful proposer will be expected to obtain performance and payment bonds in the full amount of the proposed contract. Successful proposer will be required to obtain a maintenance bond in the amount of 100% of the proposed contract, good for one (1) year from the date of acceptance.

The City of Kilgore reserves the right to: reject any or all bids, waive any or all informalities, and to award the contract to the bidder or bidders who, in the opinion of the Owner, is in the best interest of the City.

Questions regarding this RFP or related work should be directed to Seth Sorensen, Public Works Director at 903-984-5081.

Items to be included in the Proposal

- Proposals shall not exceed 30 pages, single sided or 15 pages for double-sided, not including technical documentation for each system to be recommended to the City (AMI only, AMR only, and AMI/AMR hybrid- one or all of these may be submitted to the City at the Proposer’s discretion)
- Brief statement which demonstrates the proposer’s understanding of the project
- Proposer information identifying the proposer’s ability to perform the work:
  - Legal name of firm, address and telephone number, and year the firm was established
  - Principal in charge of project and contact information
  - Personnel background for employees to be used on THIS project
  - Date of RFP submission
  - List of previous AMI/AMR Projects
- Proposed Design and/or propagation study for placement of equipment
- Itemized listing of all equipment, installation services, software, training, etc. to be included in the pricing proposal
- Listing of services which may be required to complete an AMI, AMR, AMI/AMR system but which are not included in the price proposal
• Bandwidth licensing requirements as applicable. Should a licensed bandwidth be proposed, it shall be the responsibility of the contractor (i.e. successful proposer) to provide all services associated with obtaining the appropriate FCC license. Costs associated with this work shall be reflected in the proposal.
• Training that will be made available to Kilgore City Employees and associated costs
• Price Proposal with itemized costs, including labor, training and material
• References from at least 3 municipalities with similar or larger populations as the City of Kilgore for whom you have provided AMI, AMR, AMI/AMR services
• Proof of Insurance in the following amounts:
  o Statutory Worker’s Compensation Insurance
  o Commercial General Liability
    ▪ Combine single limit $500,000
    ▪ General Aggregate $1,000,000
  o Commercial Automobile Liability (Owned, hired and non-owned vehicles)
  o Contractual Liability Insurance covering the indemnity in the same amount and coverage as provided for the Commercial General Liability Policy, specifically referring to this contract
  o Owner’s protective liability naming City of Kilgore, Texas, its offices, agents and employees, and the engineer as insured in the same amount and coverage as provided for in the Commercial General Liability Policy
• Estimated time frame/ schedule for complete install of AMR/AMI system. No systems requiring more than 120 days for completion will be considered.
• Technical documentation for equipment proposed (Not included in page count)
• Signature page with attested signatures and a statement showing the proposer has the authority to submit the RFP and agreeing to hold to submitted prices for a period of 120 days from the date of bid opening.
• Bid Bond in the amount of 5% of total proposed costs (Not included in page count)
• Submit 4 copies and 1 digital copy of the complete proposal in .pdf format.

Bonds and Insurance
Successful proposer will be expected to obtain performance and payment bonds in the full amount of the proposed contract and a maintenance bond in the amount of 100% of the proposed contract, good for one (1) year from the date of acceptance. The successful proposer will be required to provide proof of insurance in amounts satisfactory to the City of Kilgore.

RFP Process

<table>
<thead>
<tr>
<th>Event</th>
<th>Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>Advertisement/ Issue RFP</td>
<td>January 11, 18, 2014</td>
</tr>
<tr>
<td>Pre-Proposal Conference (non-mandatory)</td>
<td>January 21, 2014</td>
</tr>
<tr>
<td>Written Questions Due</td>
<td>January 24, 2014</td>
</tr>
<tr>
<td>Submit Proposals</td>
<td>February 6, 2014</td>
</tr>
<tr>
<td>Review Proposals/ Create Short List</td>
<td>Week of February 10, 2014</td>
</tr>
<tr>
<td>Short List Interviews</td>
<td>As necessary</td>
</tr>
<tr>
<td>Selection of Vendor and Notice to Proceed</td>
<td>February, March 2014</td>
</tr>
</tbody>
</table>
Pre-Proposal Conference
The non-mandatory pre-proposal conference will be held at the Kilgore City Hall, located at 815 N. Kilgore Street, Kilgore TX 75662 on Tuesday, January 21, 2014 at 2:00 PM.

Evaluation of Proposals
Proposals shall be reviewed by a committee of City employees which may include the City Manager, Public Works Director, Utilities Superintendent and others. Proposals shall be graded based on the following evaluation criteria:

<table>
<thead>
<tr>
<th>Evaluation criteria</th>
<th>Points</th>
</tr>
</thead>
<tbody>
<tr>
<td>System and equipment capabilities and compatibility</td>
<td>20</td>
</tr>
<tr>
<td>Experience/Qualifications/References of Vendor</td>
<td>20</td>
</tr>
<tr>
<td>Ability of Vendor to provide technical support</td>
<td>10</td>
</tr>
<tr>
<td>Schedule and ability to work with other Vendors</td>
<td>25</td>
</tr>
<tr>
<td>Costs, including future expansion of the system</td>
<td>25</td>
</tr>
<tr>
<td>Total</td>
<td>100</td>
</tr>
</tbody>
</table>

Overall scores will be obtained from an average of all reviewers’ scores with the highest score granted to the proposer deemed to be the most qualified.

Short List Interviews
Short List interviews will be conducted as necessary.

Project Award
It is expected that this project will be awarded in the month of March, 2014, however, the City will take as much time as necessary to perform due diligence. All prices submitted shall be valid for a period of 120 days from February 6, 2014.

The successful proposer will be expected to provide sufficient performance, payment and maintenance bonds to the City within ten (10) working days of receiving the notice of award.

Non-Responsive Proposals
The following are some reasons why a proposal may be considered as non-responsive:

- Failure to supply sufficient information regarding the materials or services to be provided
- Collusion with other proposers
- Failure to submit the required 5% bid surety
- Proposals which are significantly non-compliant with this RFP
- Late or incomplete proposals
- With the written request from the proposer that their proposal not be considered
- Submittal of a proposal from an entity barred from working with the City or other government entity
Inquiries and Interpretation
Questions regarding this RFP should be directed to Seth Sorensen, Director of Public Works, at (903)984-5081.

Addendums will be issued only in the case of severe oversights in this RFP. Addendums will only be issued at http://www.ciplist.com/plans/?Kilgore/city/101787.

Scope of Services

General
Include as much information as possible as to the services to be provided as part of this proposal as well as those services which are NOT included, but which may be necessary.

Pricing should be itemized and include parts, labor and training.

The following is a synopsis of meters to be fitted with AMR/AMI endpoints:

<table>
<thead>
<tr>
<th>Meter Size</th>
<th>Estimated QTY</th>
</tr>
</thead>
<tbody>
<tr>
<td>5/8&quot; X 3/4&quot;</td>
<td>4770</td>
</tr>
<tr>
<td>3/4&quot;</td>
<td>40</td>
</tr>
<tr>
<td>1&quot;</td>
<td>335</td>
</tr>
<tr>
<td>1.5&quot;</td>
<td>125</td>
</tr>
<tr>
<td>2&quot;</td>
<td>136</td>
</tr>
<tr>
<td>3&quot;</td>
<td>26</td>
</tr>
<tr>
<td>4&quot;</td>
<td>10</td>
</tr>
<tr>
<td>6&quot;</td>
<td>5</td>
</tr>
</tbody>
</table>

**ESTIMATED TOTAL 5447**

The following bid options will be considered as part of this Request for Proposals: Automatic Metering Reading (AMR) System ONLY, Advanced Metering Infrastructure (AMI) System ONLY, Automatic Metering Reading (AMR) / Advanced Metering Infrastructure (AMI) System (AMR/AMI) HYBRID.

Licensed and Unlicensed Bandwidths will both be considered, with the understanding that the successful proposer will be solely responsible for obtaining bandwidth licensing.

Hardware and Software

- Include with the scope of services the cost to provide and, where appropriate, install all software, servers, desktops, handheld and/or field computers, ERTs (endpoints), repeaters and other related appurtenances necessary for a fully functional AMI/AMR system. Hardware, software, towers, transponders, repeaters, boosters, servers and all other appurtenances necessary for a ready-to-use AMI system
• Include plans for software upgrades planned for the next 24 months

Schedule
Submit as part of the proposal a schedule for the installation of the AMI system. Substantial completion of this project will be expected within 4 months from the date outlined in the Notice to Proceed.

Fee Schedule
Any fee submittals will be subject to negotiations during contract negotiations.

The service provider shall provide an estimate of the total fee required to complete the project. This fee shall be broken down by units of work performed. Tasks or services to be provided to the City shall be presented as “unit cost” tasks, and may, at the proposer’s discretion, be presented as a “lump sum” item as long as sufficient information is included regarding the services to be is provided therein. Proposer shall take into consideration all labor, material, rental, or other associated costs to be performed as part of this work.

Advanced Metering Infrastructure System Minimum Requirements

1.0 General
• Provide a system and installation services for all parts of the AMI/AMR system from endpoint to server
• A single software/hardware package capable of both AMR and AMI meter reads
• System must be capable of on-demand reads
• System shall be capable of alerts for high and low flow rates and tamper detection
• Software must be compatible with ArcGIS mapping and STW Financial software packages. It is preferred that the metering software have the capability to integrate with CityWorks Asset Management Software.
• Hardware and software must be adequate to ensure network and data security and integrity
• Fixed base system shall transmit data wirelessly to a single data collection point.
• Data and reports should be viewable in real-time
• Describe ability to expand the system

2.0 AMI Endpoint Module Technical Specifications

2.1 Water AMI Endpoint Module Requirements

2.1.1 AMI endpoint modules must be compatible with leading meter manufacturers.

2.1.2 The AMI endpoint module shall be capable of retrofitting existing Master Meter and ITRON water meters.
2.1.3 AMI Modules meters/service and other related endpoint devices shall be capable of being configured to communicate with the Collectors via a topographically engineered network solution.

2.1.4 Communicate using unlicensed 900 MHz band, certified to comply with FCC Part 15 rules, utilizing multiple RF channel transmissions of data, or communicate using licensed bands (all work associated with licensed bands shall be included in the proposal and shall be the responsibility of the successful proposer).

2.1.5 The AMI Module shall be designed and built for installation in outdoor water meter boxes. External antennas or boosters may be required, as the majority of the City’s water meter boxes are made of cast iron.

2.1.6 Water endpoint devices shall be housed in a single package design designed for rugged, harsh environments and capable of complete submersion in water without damage. It is anticipated that endpoints will be installed in a pit environment.

2.1.7 The AMI Module must function accurately and not be damaged over an operating temperature range of -40 deg C to +70 deg C.

2.1.8 The AMI modules shall be designed to operate in the above conditions and have a battery life of 20 years.

2.1.9 The AMI Module shall be capable of storing meter data including date and time stamps for a minimum of 40 days in non-volatile memory.

2.1.10 The AMI Module shall have true two-way communication on-demand from the Host Software. This shall allow for obtaining real-time data upon request.

2.1.11 The AMI module shall have the capability to receive and process commands from the host system for all firmware updates to eliminate the need to manually perform the update function at each locale. AMI modules must support group firmware updates to reduce system maintenance time.

2.1.12 The AMI Module shall employ actionable alerts; indicate compliance with each below.
   - Tamper Alert or Meter disconnected
   - Cut cable
   - No Flow detected – Specific period of time set in the host software
   - Reverse Flow / Backflow
   - High Flow Rate Detected – Specifics set in host software
   - Battery Health

2.1.13 Each AMI module’s clock date & time settings shall be updated to match reference Date & time that shall be regularly provided to the meter via the Host Server.

2.1.14 Ability to use a hand-held device to upload data into the AMI Module’s memory.

2.1.15 AMI Module must include waterproof in-line connector.

2.1.16 AMI Module must include booster antenna if necessary.
2.1.17 Describe how endpoints are programmed and include all necessary tools to do so.

2.1.18 Endpoints should have the ability to be read by handheld/mobile data collectors, without switching software or any manual adjustments.

2.1.19 System should include the ability to program endpoints remotely from the central server.

2.1.20 Include information on the frequency at which readings are obtained and transmitted, as well as availability of historical information.

2.1.21 Describe method for transmitting data from the endpoint to the central server.

2.1.22 Kilgore requires a system that allows us to choose different collection options for different areas of the service territory. The endpoint must accommodate this requirement without additional effort on the part of utility personnel.

2.1.23 Include information on future or expanded capabilities of endpoints, as well as any costs associated with upgrades.

3 AMI FIXED NETWORK TECHNICAL SPECIFICATIONS

3.1 –Data Collectors

3.1.1 The data collectors shall be an AC or solar powered unit with optional battery backup, which communicates in the unlicensed 900 MHz range with all the AMI Modules in its assigned area. If a licensed band is proposed, all work associated with licensed bands shall be included in the proposal and shall be the responsibility of the successful proposer.

3.1.2 The collector shall communicate via a universal wide area network (WAN) connection, such as GSM/GPRS cellular, Ethernet or fiber to allow communication with the Host Server Software.

3.1.3 Data collectors shall collect and aggregate the stored meter data from all the AMI Modules in its zone a minimum of once per day and upload the information to the Host server a minimum of once per day providing interval reads from each AMI module as programmed. The ability to time-synchronize all devices at least once per day and allow daily upload of meter data.

3.1.4 Data collectors shall communicate on demand to AMI Modules meters/service and other related endpoint devices. Describe how recent the information will be upon a request.

3.1.5 Data collectors Software shall allow self-diagnosis of any problems associated with the back haul of the communication system and the ability to automatically seek an alternate communication path if initial daily or real-time upload is unsuccessful.
Software and hardware should have the ability to determine system-wide health and integrity.

3.1.6 Data collectors shall use data security protocols to prevent unauthorized access to the data.

3.1.7 Data collectors must have the ability to retrieve missing data in the event of a communications or power outage.

3.1.8 Data collector shall allow remote firmware and software upgrades.

3.1.9 Data collectors shall utilize an outdoor rated enclosure, rated for -40C to +60C, with remote antenna capability, with multiple mounting configurations.

3.1.10 Data collectors shall be capable of sending alarms to the base for power loss and low battery conditions.

3.1.11 Describe how interference within the RF band will be handled. Also describe any backup measures, including backhauls, redundancies, mobile data collection, etc.

3.1.12 Describe installation configurations and locations of fixed-network system components.

3.1.13 Describe network-wide time synchronization and how it is accomplished.

3.1.14 Describe network security measures.

3.1.15 Describe network coverage, as well as areas that would be more cost-effective to be serviced as an AMR portion of the system.

3.2 – Host Server, Software and User Interface

3.2.1 The Host Server shall act as the central collection point for the data within the system. The server collects data from all of the Collectors and stores the gathered data in a secure database.

3.2.1.1 -OPTION- to have vendor “host” the data management services of the solution. Please describe your hosting capabilities, including cost savings to Kilgore, location of the hosting operations, failover procedures, and security features. Note any features that are “optional” or “extra,” including price difference.

3.2.2 Data will be available via a user interface that will allow for analysis, as well as bill generation in conjunction with STW software.

3.2.3 The Host system software must include interfaces to allow for integration with existing and planned software applications.

3.2.4 The Host Software must have flexible meter reading data formats that are compatible with the Utilities current billing application.
3.2.5 The Host Software must be capable to: generate reports; view demand graphs, determine usage patterns and option enforce watering restrictions via a high usage notification system.

3.2.6 Using information from alerts uploaded in the data, the Host Software shall have the ability to generate specific e-mail alerts or SMS messages for each status code, configured by the User Interface.

3.2.7 Software must be able to log each AMI Module-generated alert and shall include the duration for which the alert has been active.

3.2.8 The Host Software shall include a GIS tool for viewing the network, system-wide health of the network, basic spatial analysis, and communication routing between AMI modules and collectors. Software shall be able to generate reports of system-wide health and performance.

3.2.9 The GIS tool shall allow monitoring of performance and loading on the utility’s infrastructure with the ability to display this information on GIS maps.

3.2.10 The GIS tool shall be capable of remotely reprogramming Data Collectors and Water Meter AMI Modules.

3.2.10 The User Interface shall permit the sending of alert outages, tampering, out-of-bounds system operating parameters to appropriate utility personnel via cell phone, pager or e-mail.

3.2.11 The User Interface shall allow the utility to correlate consumption with meteorological data available on the user interface.

3.2.12 Software shall be capable of generating and printing reports for: possible customer-side leaks, usage in unoccupied locations, tampering, no usage, inactive meters, etc.

3.2.13 Software and server solutions shall be secure. Demonstrate security measures.

3.2.14 Describe the turnover rate and storage of historical meter data.

AUTOMATIC METER READING SYSTEM MINIMUM REQUIREMENTS

4.0 General

- Provide a system and installation services for all parts of the AMR system from endpoint to server
- A single software/hardware package capable of both AMR and AMI meter reads
- System shall be capable of alerts for high and low flow rates and tamper detection
- Software must be compatible with ArcGIS mapping and STW Financial software packages. It is preferred that the metering software have the capability to integrate with CityWorks Asset Management Software.
• Hardware and software must be adequate to ensure network and data security and integrity
• Describe ability to expand the system

5.0 AMR Endpoint Module Technical Specifications

5.1 – Water AMR Endpoint Module Requirements

5.1.1 AMR endpoint modules must be compatible with leading meter manufacturers.

5.1.2 The AMR endpoint module shall be capable of retrofitting existing Master Meter and ITRON water meters.

5.1.3 AMI Modules meters/service and other related endpoint devices shall be capable of being configured to communicate with the Collectors via a drive-by solution.

5.1.4 Communicate using unlicensed 900 MHz band, certified to comply with FCC Part 15 rules, utilizing multiple RF channel transmissions of data, or communicate using licensed bands (all work associated with licensed bands shall be included in the proposal and shall be the responsibility of the successful proposer).

5.1.5 The AMR Module shall be designed and built for installation in outdoor water meter boxes. External antennas or boosters may be required, as the majority of the City’s water meter boxes are made of cast iron.

5.1.6 Water endpoint devices shall be housed in a single package design designed for rugged, harsh environments and capable of complete submersion in water without damage. It is anticipated that endpoints will be installed in a pit environment.

5.1.7 The AMR Module must function accurately and not be damaged over an operating temperature range of -40 deg C to +70 deg C.

5.1.8 The AMI modules shall be designed to operate in the above conditions and have a battery life of 20 years.

5.1.9 The AMR Module shall be capable of storing meter data including date and time stamps for a minimum of 40 days in non-volatile memory.

5.1.10 The AMR module shall have the capability to receive and process commands from the mobile collection system for all firmware updates to eliminate the need to manually perform the update function at each locale.

5.1.11 The AMI Module shall employ actionable alerts; indicate compliance with each below.
• Tamper Alert or Meter disconnected
• Cut cable
• No Flow detected – Specific period of time set in the host software
• Reverse Flow / Backflow
• High Flow Rate Detected – Specifics set in host software
• Battery Health
5.1.12 Each AMR module’s clock date & time settings shall be updated to match reference Date & time that shall be regularly provided to the meter via the Host Server.

5.1.13 Ability to use a hand-held device to upload data into the AMR Module’s memory.

5.1.14 AMR Module must include waterproof in-line connector.

5.1.15 AMR Module must include booster antenna if necessary.

5.1.16 Describe how endpoints are programmed and include all necessary tools to do so.

5.1.17 Endpoints should have the ability to be read by handheld/mobile data collectors, without switching software or any manual adjustments.

5.1.18 System should include the ability to program endpoints remotely from the mobile computer or handheld device.

5.1.19 Include information on the frequency at which readings are obtained and transmitted, as well as availability of historical information.

5.1.20 Describe method for transmitting data from the endpoint to the central server.

5.1.21 Kilgore requires a system that allows us to choose different collection options for different areas of the service territory. The endpoint must accommodate this requirement without additional effort on the part of utility personnel.

5.1.22 Include information on future or expanded capabilities of endpoints, as well as any costs associated with upgrades.

5.2–Software and User Interface

5.2.2 The Host Server shall act as the central collection point for the data within the system. The server collects data from all of the mobile collection devices and stores the gathered data in a secure database.

5.2.1.1 -OPTION- to have vendor “host” the data management services of the solution. Please describe your hosting capabilities, including cost savings to Kilgore, location of the hosting operations, failover procedures, and security features. Note any features that are “optional” or “extra,” including price difference.

5.2.2 Data will be available via a user interface that will allow for analysis, as well as bill generation in conjunction with STW software.

5.2.3 The Host system software must include interfaces to allow for integration with existing and planned software applications, including ArcGIS, STW Financial software and CityWorks Asset Management Software

5.2.4 The Host Software must have flexible meter reading data formats that are compatible with the Utilities current billing application.
5.2.5 The Host Software must be capable to: generate reports; view demand graphs, determine usage patterns and option enforce watering restrictions via a high usage notification system.

5.2.6 Using information from alerts uploaded in the data, the Host Software shall have the ability to generate specific e-mail alerts or SMS messages for each status code, configured by the User Interface.

5.2.7 Software must be able to log each AMR Module-generated alert and shall include the duration for which the alert has been active.

5.2.8 The Host Software shall include a GIS tool for viewing the network, system-wide health of the network, basic spatial analysis, and communication routing between AMI modules and collectors. Software shall be able to generate reports of system-wide health and performance.

5.2.9 The GIS tool shall allow monitoring of performance and loading on the utility's infrastructure with the ability to display this information on GIS maps.

5.2.10 Describe the turnover rate and storage of historical meter data.

5.2.10 The User Interface shall permit the sending of alert outages, tampering, out-of-bounds system operating parameters to appropriate utility personnel via cell phone, pager or e-mail.

5.2.11 The User Interface shall allow the utility to correlate consumption with meteorological data available on the user interface.

5.2.12 Software shall be capable of generating and printing reports for: possible customer-side leaks, usage in unoccupied locations, tampering, no usage, inactive meters, etc.

5.2.13 Software and server solutions shall be secure. Demonstrate security measures.
6. MOBILE DATA COLLECTION

6.1 - Mobile Data Collector

6.1.1 Mobile data collectors must have the ability to completely integrate with an AMI fixed-based system.

6.1.2 Mobile data collector shall have simultaneous reading capability for multiple routes.

6.1.3 Mobile data collector shall have ability to read all types of endpoints utilized in the network.

6.1.4 Mobile data collector shall have GPS mapping capabilities.

6.1.5 Mobile data collector shall operate under 12V DC Vehicle supply or rechargeable battery.

6.1.6 Mobile data collector system shall include all required software for data collection and network integration.

6.1.7 Communicate using unlicensed 900 MHz band, certified to comply with FCC Part 15 rules, or communicate with a licensed bandwidth (all costs associated with licensing shall be included in the proposal and shall be the sole responsibility of the successful proposer).

6.1.8 Equipment must be ruggedized and capable of operating in -20 deg C to +50 deg C and 0-95% relative humidity. Laptop configuration is preferred.

6.1.9 Mobile data collectors shall be either a handheld unit or mobile laptop, and shall include all antennas or other associated equipment necessary to obtain reads in a drive-by system.

7. TRAINING AND IMPLEMENTATION

7.0.1 The vendor shall be responsible for supplying and delivering the Meter Reading System components complete, including training and ensuring the proposed Meter Reading System is operational prior to full deployment. This includes, support for the development of an interface to the utility billing system and functional testing of the system.

7.0.2 The vendor shall have a proven program of professional project management to ensure successful system installation. Provide resumes for key managers involved.

7.0.3 Project managers shall be experienced in managing the design, installation and optimization of systems. Project management experience shall include system integration and training support.

7.0.4 Provide a proposed implementation schedule for a system such as that proposed here.
7.0.5 Provide information on training program including length of courses, curriculum, schedule, methods and availability. Provide costs for additional training for new hires or re-training of existing staff.

8. SUPPORT

8.0.1 Please describe the following, noting any features that are “optional” or “extra,” including price difference: a) Support for software upgrades and service packs b) IT support c) Access to support, including hours of operation and any costs associated with accessing support. Do these differ for day-to-day vs. emergency situations? d) Access to engineering and other system experts when necessary e) Where is the vendor’s support team located? Is the call center U.S.-based?

8.0.4 As stated in 3.2.1.1, Kilgore requests the option to have the vendor “host” the data management services of the solution. Please describe your hosting capabilities, including cost savings to Kilgore, location of the hosting operations, failover procedures, and security features. Note any features that are “optional” or “extra,” including price difference.

8.0.5 Please describe the support available for all aspects of your solution (endpoints, data collectors, software, hardware, security, etc.). If third-party items are included in your solution, how do you propose to support them?

8.0.6 It is intended that this system be secure from attacks at all vulnerable points. Please explain how you will proactively manage and mitigate security issues.

9. WARRANTY

Provide the warranties and any services, including additional costs, your firm will offer to ensure system functionality and availability of system components for 15 years. At a minimum, a 100% warranty on all equipment, software and labor on the AMI system will be in effect during the first 12 months following commissioning and acceptance. Provide a price for software support and upgrades following the initial warranty period.
**Additional Information**

Any services which are to be considered “optional” or “additional” should be CLEARLY noted and delineated as such in the cost proposal.

The selected vendor will be required to assume responsibility for all services offered in this proposal, including any work to be done by subcontractors of the proposer.

The City reserves the right to accept or reject any or all proposals received as a result of this request, or to negotiate with the firm deemed most suitable to perform this work, without reissuing the RFP, and to waive any informalities, defects, or irregularities in any proposal. The City reserves the right to accept the proposal in the best interest of the City and may include accepting the RFP of a vendor other than that of the lowest bidder.

The following bid options will be considered as part of this Request for Proposals: Automatic Metering Reading (AMR) System ONLY, Advanced Metering Infrastructure (AMI) System ONLY, Automatic Metering Reading (AMR) / Advanced Metering Infrastructure (AMI) System (AMR/AMI) HYBRID. Each configuration will be allowed 30 pages (single sided) or 15 pages (double sided), not including technical documentation.