TOWN OF LUNENBURG

RFP TOL2025005
March 31, 2025
ADDENDUM #3 – Water Meter Supply & Install

1. **Page 14, Section 2.2 Scope of Work:** The Town has specified that the meter's encoder registers shall be capable of being read with either a portable handheld unit or a drive-by unit via a radio frequency RF signal that shall allow automatic meter reading technology. It is clear that the Town wishes to implement an Automated Meter Reading (AMR) system with RF transmitters for their meter installation project. That said, the Town has not provided any specifications in the RFP for the RF transmitters. Is the Town agreeable to amending the RFP to provide the minimum specification for an AMR system by using the following publicly available RF transmitter and AMR system specification?

RF Transmitter
The RF transmitter must meet FCC Part 15.247 and have a minimum of 75mW of output power. Preference will be given to a proponent who is the sole manufacturer of the different components of the system (reading equipment, RF transmitters, and meters). The system must work with existing commercial Neptune Meters that will not be replaced.
As a minimum, the RF transmitter shall transmit the encoded meter reading and its unique ID number. Preference will be given to the manufacturer who will guarantee that the reading obtained electronically matches the odometer reading on the register and will pay the difference at the current rates whenever a discrepancy appears. Therefore, synchronization of electronic reading and mechanical read for any reason (battery change, register change, cut wire, register roll-over, etc.) is not acceptable. If wiring has been disconnected or cut, a "non-reading" shall be provided indicating possible wire tampering. A reading that gives the last available reading is an incorrect reading.

Power shall be supplied to the RF transmitter by a lithium battery. The Proponent shall warrant that any battery provided and installed in the RF transmitter by the Proponent shall be free of manufacturer and design defects for a minimum period of ten (10) years from the date of shipment from the factory without pro-rating and twenty (20) years overall, where the RF transmitter is working under the environmental and meter reading conditions specified. The expected battery life of the RF transmitter must be 20 years.
Preference will be given to the Proponent whose battery warranty does not need to make exceptions to meet the minimum overall performance as defined in this RFP.

Each device shall have a unique pre-programmed identification number of 10 characters. The ID number will be permanent and shall not be altered. Each device shall be labeled with the ID number in numeric form. The label shall also display FCC and Industry Canada approval information and manufacturer's designation.

The RF transmitter shall be mounted according to the manufacturer's installation instructions. The same RF MIUs must be capable of being read by a walk-by handheld computer equipped with a RF receiver, a mobile system with an RF receiver mounted in a vehicle, and a fixed network data collection system. Preference will be given to RF Transmitters that allow an easy migration between the three-meter reading systems without any programming change to the MIU devices or revisiting the site.

Preference will be given to the Proponent whose radio transmitters are integrated with the encoder register and can log 96 days of hourly consumption data, available for retrieval via RF activation from the handheld data collection device.

AMR SYSTEM SOFTWARE APPLICATION OVERVIEW

The AMR application must provide all the controls needed in the network for the essential functions of the metering data output received from the communication with field collection devices. The application must present this data within an intuitive user interface that is easy to interpret and understand. It must integrate seamlessly with other third-party applications the Town utilizes such as CIS/billing software applications and work order management systems.

Basic Functionality for AMR

- The Town application shall have the capability of interfacing with the Town's CIS/billing software (TownSuite) through a file layout that meets the specifications provided by the systems vendor.
- The application must have a method to import and export files for billing processes.
- A method must be available for a user to specify the routes to be exported and for transferring files from the application to the billing system.
- The application must be accessible through an internet web browser for accessibility anywhere.
- The Town application must operate within a Microsoft Windows platform and is hosted by the systems vendor.
- A geographical view of metering assets shall be available within the user interface.
- The Town application must allow Mobile AMR and AMI networks metering processes to be run in parallel within a single user interface.
- Graphical presentation of consumption data must be viewable within the user interface.
- The application must have a method to display individual account consumption based on meter size, meter type and unit of measure.
- Multiple levels of user security access must be available within the Town application.
- A method to search for records matching an MIU ID, Account, Name, or Address must be available within the application.

- The application must support meter readings (4-8 digits) and MIU ID numbers up to 10 digits.
- All metering output data, such as leaks and reverse flow indications, shall be viewable within the application. Granular reporting shall be available that defines all accounts that have triggered the event.
- The Town application shall display the top 10 consumers with the highest consumption within the user interface. A method to view additional high usage consumers should be available.
- Reading performance reports and usage analysis capabilities shall be available within the Town application.
- All available reports shall be exportable to Microsoft Excel or PDF formats.
- The Town application shall present to the user the number of successful, unsuccessful and invalid readings.

The cloud platform must provide the capabilities of collecting metering data from the Mobile AMR collection devices and present the data in a user-friendly view for consumption by Town users. The following functionality shall be provided within the software:

- The Town application must have a method to view, load, and make route assignments for meter readers.
- A method of loading routes to handheld, mobile drive-by handheld, cellular phones and tablet devices shall be viewable within the application.
- The application shall provide a method of data transfer to the mobile drive-by device and accept data from the device.
- The application shall manage the routes that are loaded into the data collection device.
- The application shall have a method to communicate wirelessly to handheld, cellular phones, or tablet devices.
- The Town application shall have a method to split routes by collection method or into equal parts for managing meter reading load activities.

Mobile Application Device Compatibility (if applicable)

- The mobile application shall contain a method of completing meter reading tasks via an Android or an iOS mobile phone or tablet device.
- The mobile application shall contain a method to provide data log capabilities via a mobile phone or tablet device.
- When using a mobile device for meter reading, the software platform shall provide a method of real-time synchronization for loading and unloading routes on the device.
- The mobile application shall have a method to data log a meter endpoint, and it shall include graphical and tabular views that include any meter output such as leaks and reverse flow indications.

The Town requires a vendor that is responsible for ownership of the software and all associated hardware to operate the software. The Town shall only be responsible for the computers or laptops needed to access the applications via a web browser. The Town of Stellarton shall maintain ownership of all data received by the AMR/AMI system and shall be provided online access to all data during an active subscription. In the event the subscription terminates, the vendor shall provide the data to the Town in an agreed upon media format.

The vendor shall provide the following services to the Town during the subscription:

- The SaaS vendor must have a minimum of two years' experience providing hosting services within the water utility space.
- The SaaS subscription must cover all software patches, operating system updates, security and network monitoring, and platform preventive maintenance.
- The vendor shall provide the Town with a service level agreement that meets 99% application availability during business hours of operation, excluding corporate holidays.
- A disaster recovery plan for any failures at the managed services center to ensure continuity of the Town's data and continued access that meets agreed upon contract SLAs shall be provided by the SaaS vendor.
- The SaaS vendor must have a data backup strategy and process.
- A method of communicating or alerting the Town in the event of system failure or downtime must be provided by the vendor.
- The vendor shall have security and monitoring services in place that ensures the privacy and security of the Town's data.
- The vendor shall ensure that the data and all redundant data is housed in Canada.
- All data in transit to the cloud must be encrypte

Answer 1:

The Town recommends that Proponents include details relating to the RF transmitters included in their Proposal so that they can be properly reviewed and evaluated accordingly

2. **Page 9, 1.12 Proposal Form and Content:** The Town has requested proponents ensure that the Proposal content be organized in the same sequence as the Proposal contents. Is the Town open to also including in their sequence of proposal content proponents, the following content requirements for the Town properly evaluate the system that will be in place for the next 20 years?

Solution Overview

a) Provide an overview of the proposed meter and meter reading solution, including how data will be collected from the water meter and sent back to the Customer Information System (CIS).

b) Detail the RF frequency(s) at which the proposed system operates, and all Industry Canada approvals or licenses required to use it. If a license is required, provide a detailed description of the process required to secure the license, including all costs and the level of involvement required of The Town.
c) Describe the Proponents history in providing water meter reading equipment in Nova Scotia, Canada, and North America (include the quantity of equipment and duration of use) in the last five years.

Reading System Specification

Radio Transmitter

Provide a chart detailing which water meter manufacturers' encoders the proposed radio transmitter is compatible with and how compatibility is achieved (separate models of radio, programming, or different wiring, automatically detect the encoder protocol, etc.)

a) How many encoded digits does the radio transmitter read for each manufacturer it is compatible with?
b) Provide the RF transmitter output power and that will provide a 20 year life expectancy.
c) Detail the environmental conditions in which the radio transmitter can operate, (high and low temperate ranges and relative humidity). Confirm that the radio transmitter has proven capable of operation at the high and low end of the stated operating temperature range.
d) Describe the performance characteristics of the radio transmitter (RF signal strength, how often the radio reads the meter, how often the readings are transmitted, number of readings transmitted). Detail any limitations that may have an impact on performance.
e) Is the radio transmitter a one-way or two-way device?
f) Does the radio transmitter store any readings or flags, please explain? How can these readings or flags be accessed?
g) Describe the radio transmitter's warranty and any factors that may affect the warranty (faulty installation, hourly readings, etc.).

Data Collection Devices

a) Describe the different components that make up the proposed meter reading solution (handheld, mobile device, network, etc.).
b) Detail how the proposed collection device operates and what actions are required from the user throughout the entire meter reading process.
c) Describe the performance characteristics of the proposed collection device(s) including the maximum distance at which it can receive radio transmissions, the device(s) ability to collect information from several radios at once, and the expected read success percentage.

d) Detail the environmental conditions in which the collection device(s) can operate (high and low temperate ranges and relative humidity.
e) What equipment can collect daily or hourly readings and describe the process.
f) Describe the warranty of the proposed data collection devices and any factors that may affect the warranty. Detail the expected life of the proposed data collection device.

Answer 2:

1. It is up to Proponents to decide which supplementary information best supports their Proposal.

Software

a) Describe how the software works during each part of the meter reading process and how it interfaces with the CIS system.
b) Detail the hardware and software specifications required to operate the meter reading software.
c) Describe the reporting capabilities of the meter reading software.
d) Describe the systems the meter reading software needs to be interfaced to, has the meter reading software been interfaced with the Town's accounting system (TownSuite) before (provide a list of utilities). Describe what is required for a transfer file/program and how this will be actioned/implemented.
e) Describe the warranty and expected life of the meter reading software.
f) Detail any features of the meter reading software.
g) Detail process for updating software.

Product Support and Maintenance

a) Describe the product support that comes with the proposed meter reading solution by component:
    i. Radio transmitters
    ii. Data collector options
    iii. Meter reading software
b) Detail the minimum number of years the proposed meter reading solution will be supported and what is included in the support agreement (loaners, onsite support, upgrades, and patches).

Training and Software Implementation

a) Detail the training that will be conducted (who will be required, when and where it will be conducted, how long it will be, what materials will be handed out to prepare The Town to use the software.

3. **Page 14, Scope of Work:** The Town has requested that water meters must be positive displacement type meters with horizontal installation conforming to AWWA standard C700. As the AWWA C700 encompasses a wide range of water meter technologies, is the Town agreeable to adding more specificity to the RFP. If so, may we suggest the following that other municipalities have used as the base specifications for waters meters:

COLD WATER METERS/DISPLACEMENT TYPE
Meters and components of meters shall meet or exceed the following applicable ANSI/AWWA standards and the requirements of this RFP:

- C700-15 Cold-Water Meters – Displacement Type Bronze Main Case
- All cold-water meters (displacement type - magnetic drive 5⁄8" - 2") furnished shall be produced from a manufacturing facility whose QMS is ISO 9001 certified, conform to the "Standard Specifications for Cold Water Meters" C700 latest revision issued by AWWA.

- The manufacturer or proponent shall furnish a certificate showing that each meter was tested for accuracy of registration and that it complies with the accuracy and capacity requirements of AWWA C- 700 when tested in accordance with the AWWA M6 Manual.
- All meter main cases shall comply with the NSF 61 standard. The serial number should be stamped. Main case markings shall indicate size, model, direction of flow, and NSF 61 certification. A copy of the NSF 61 certificate shall also be included with the proposal.
- The chamber shall be warranted for ten (10) years against freeze damage if the meter has been equipped with a frost-proof cast iron or synthetic polymer bottom cap.
- All meters shall be equipped with encoder remote registers per AWWA C707 and meet all AWWA C700 performance standards.
- Casing bolts shall be made of AISI Type 316 stainless steel.

Answer #3 :
Page 17 of the RFP document states "*If Proponents have an alternative product and/or methodology they wish to propose, please do so here*".

4. **Page 7, Evaluation Criteria:** The Town has provided an Evaluation Criteria table which focuses on the experience and competence of the Proponent and its proposed Team. Is the Town intending to evaluate the function, feature set and track record of the proposed water meters and the meter reading system? If so, is the Town agreeable to amend their Evaluation Criteria to include the following:

Section Description	Sub-Section	Percentage
Proponent	**Knowledge**	10%
	Experience	
	Technical Competence	
	Ability to complete all RFP components	
Project Installation Methodology	**Project Management**	35%
	Project Team	
	Project Plan	
	Work Requirements	
	Data Management	
	Customer Service	
	Public Communication Plan	
	Quality Assurance	

Reading System Specifications	**Radio Transmitter**	15%
	Data Collection Devices	
	Software	
	Product Support and Maintenance	
	Training and Software Implementation	
Water Meter Specifications	**Water Meter Functionality and Features**	10%
	Product Warranty	
	Product Support	
References	**Relevant References**	5%
Total Technical Score		**75%**
Price	**Financial Score = (Lowest Required Solution Total Cost) / (Respondent's required Solution Total Cost) * 25%**	**25%**
Total Score = Total Technical Score + Financial Score		**100%**

Answer 4:
The Town shall stick with the Evaluation Criteria set out in the RFP document.

5. **Page 16, Section 3.0 Proposal Form:** Can the Town please clarify the type of check valves required for this project? Section 2.2, Scope of Work**,** makes reference to control valves shall be installed as required at the meter locations to allow each individual meter to be isolated, however there is no mention of or specification for check valves.

Answer 5: Standard ball valves for plumbing purposes are required.