DREW CAMPANY
Water Superintendent

Commissioners:
KATHY ERDO, BRIAN BORTREE
JIM CHAMBERLAIN, ZAK KRISTAN
IHOR SEMKO
LIZA SAUNDERS, Clerk

CITY OF ONEIDA
WATER DEPARTMENT

To Members of the Common Council
From Drew Campany, Water Superintendent

February 11, 2026

Subject: Memo of Justification – Non-Competitive Procurement of Water Meters

Background

The City of Oneida Water Department is undertaking a phased upgrade of its water metering system to improve accuracy, reliability, and long-term operational efficiency. This memorandum documents the justification for:

1. Transitioning from existing mechanical water meters and associated reading platforms,

2. Selecting Neptune Technology Group as the meter manufacturer,

3. Standardizing on the Neptune MACH 10 ultrasonic meter with integrated R900 radio for residential 5/8" services,

4. Procuring meters and related services through Ti-Sales as the authorized regional distributor, and

5. Utilizing a non-competitive procurement approach in accordance with City purchasing policy.

This justification supports an initial meter purchase estimated at approximately $200,000 to begin the upgrade program.

Transition Away from Existing Mechanical Meter Technology

The City of Oneida current system consists primarily of traditional mechanical meters with moving internal components, paired with a mix of touchpad and radio-based reading technology. While serviceable in the past, this system presents increasing limitations:

➢ Mechanical wear over time leads to accuracy drift and higher maintenance.

➢ Limited low-flow sensitivity reduces the ability to capture small but continuous leaks.

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> ➤ Certain legacy reading equipment and platforms are being discontinued, creating long-term compatibility and support concerns.

Given these factors, continued investment in aging mechanical technology is not in the best long-term interest of the City of Oneida or its neighboring districts. The Water Department evaluated modern alternatives with a focus on lifecycle cost, reliability, and future-readiness.

Selection of Meter Manufacturer

Neptune Technology Group was selected as the preferred meter manufacturer based on its ability to support both the Water Department's current system and its long-term transition goals.

Key considerations include:

> ➤ Compatibility During Transition: Neptune's R900 radio technology is capable of reading existing meters and touchpads currently deployed in the Water Department's system, allowing for a phased transition without service disruption.
>
> ➤ Scalability: The platform supports touch read, mobile AMR, fixed network AMI, and cellular options.
>
> ➤ Active Product Support: Meters, radios, and software are fully supported, reducing obsolescence risk.
>
> ➤ System Integration: Neptune 360 provides centralized, cloud-based data management with billing system compatibility.

Selecting Neptune establishes a stable, forward-looking metering platform while maintaining flexibility during the transition period.

Selection of the Neptune MACH 10 as Standard Residential Meter

After reviewing mechanical and ultrasonic options, the MACH 10 ultrasonic meter was selected as the standard residential 5/8" meter.

Key advantages of the MACH 10 include:

> ➤ Solid-state ultrasonic technology with no moving parts, eliminating mechanical wear, clogging, and accuracy drift.
>
> ➤ Superior low-flow accuracy, improving leak detection and billing accuracy.

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➢ Flexible installation orientation (horizontal or vertical), reducing field constraints.

➢ A 20-year warranty and long-term accuracy assurance, compared to shorter warranty periods for mechanical meters.

➢ UL/FM approval and enhanced safety compliance.

➢ The ability to collect pressure and temperature data when paired with Neptune radios.

➢ Comparable pricing in the 5/8" size and lower pricing in larger residential sizes, resulting in reduced lifecycle cost.

Based on these factors, the MACH 10 provides improved performance, reduced maintenance, and long-term cost effectiveness.

Selection of Ti-Sales as Authorized Distributor

Ti-Sales was selected as the distributor for Neptune meters and related services based on experience, support capabilities, and regional presence.

Relevant considerations include:

➢ Authorized Neptune distributor since 1984 and supports over 430 municipal customers throughout New England and Upstate New York.

➢ Maintains substantial inventory, allowing for rapid fulfillment and next-day delivery in most cases.

➢ Provides dedicated technical support, system setup assistance, and transition planning services at no additional cost.

These factors reduce operational risk and ensure continuity of service during the meter upgrade process.

Justification for Non-Competitive Procurement

While competitive bidding is generally preferred, an open bid for this upgrade would introduce significant operational risks:

➢ System Fragmentation: Multiple manufacturers or incompatible technologies would increase complexity in reading, billing integration, training, and inventory.

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> ➢ Customer Service Impacts: Multiple vendors complicate troubleshooting, warranty coordination, and response times.

> ➢ Lifecycle Risk: Selecting equipment based solely on lowest initial cost may result in unsupported products, higher maintenance costs, or premature replacement.

> ➢ Transition Complications: Introducing additional platforms during an active phased transition would increase operational burden and delay modernization.

> ➢ Total Cost of Ownership: Long-term operational value outweighs short-term unit price differences.

For these reasons, standardizing on a single, supported metering platform through non-competitive procurement provides the greatest operational stability and lowest long-term risk.

Conclusion

The proposed upgrade reflects a deliberate strategy to modernize the City of Oneida Water Department's metering infrastructure. Transitioning from mechanical meters to Neptune ultrasonic technology, standardizing on the MACH 10, procuring through Ti-Sales, and avoiding system fragmentation through open bidding together provide improved accuracy, reduced maintenance, enhanced data capability, and long-term platform stability. This approach aligns with City purchasing policy and represents a responsible investment in essential utility infrastructure.

Sincerely,

Drew Campany
Water Superintendent

Enclosed: Quick Information Guide on Ti-Sales and Neptune
Mach 10 Integrated Spec
Sole Source Letter (Neptune- Ti-Sales)

Guaranteed Accuracy, Efficiency, and Integration

Neptune® MACH 10®)R900*i*™

The Neptune® MACH 10®)R900*i*™ is designed as an all-in-one package — pairing the MACH 10® ultrasonic meter with an integrated R900® System endpoint — adding simplicity and efficiency to your metering program. The durable, no-maintenance MACH 10, combined with reliable, integrated network connectivity, accurately measures consumption and delivers data to optimize system performance, improve customer service, maximize revenue, and support water conservation initiatives all right out of the box.

- Eliminate the hassle of endpoint programming and wiring

- Flexible meter reading options with AMR/AMI capabilities:
  - R900 (AMR/AMI)
  - LoRaWAN (AMI)
  - Cellular (AMI)

- Peace of mind with access to 96 days of stored history

- Prevent tampering and environmental damage with no external wires

- Improve quality of service and billing accuracy with detailed consumption data

- Reduce inventory with an all-in-one meter and endpoint package

- Eliminate meter maintenance with cutting-edge ultrasonic technology and a durable maincase

- Measure every drop with improved accuracy and low flow detection

- Pinpoint trouble areas quickly with flags that identify leaks, low battery, reverse flow, and tampering

- Improve installation efficiency with a lead free, bronze maincase that can be installed in either horizontal or vertical applications

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TECHNOLOGY GROUP

#winyourday

Endpoint Specifications

Electrical Specifications

- Endpoint power:
  lithium battery with capacitor

Transmitter Specifications:

- Two-way endpoint
- Meter Reading & Flag Interval:
  - Every 15 minutes
  - Leak, Backflow, Tamper, Excessive Flow, Low Battery
- Data Logging Interval:
  96 days of hourly data

Environmental Conditions

- Operating Temperature:
  +15°F to +149°F (-10°C to +65°C)
- Storage Temperature:
  -40°F to +158°F (-40°C to +70°C)
- Operating Humidity:
  100% condensing, fully submersible

Materials

- Register Housing:
  Engineer Polymer
- Lens: Tempered Glass

Antennas

- Internal antenna (not available on LoRaWAN or cellular)
- Optional through-the-lid antenna
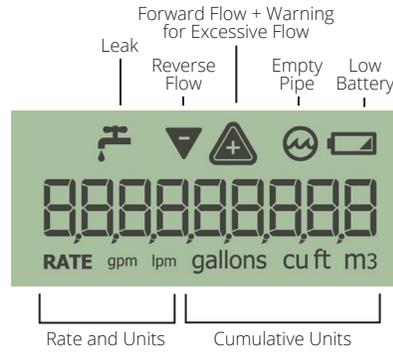- 18" coax
- 6' coax
- 20' coax

Options

Compatibility

- Available for ⅝"-12" MACH 10
- Handhelds/mobile devices with belt clip transceiver – mobile RF
- Mobile data collector RF
- R900® Gateway – fixed network RF
- LoRaWAN gateway – fixed network RF

Units of Measure

- U.S. Gallons, Cubic Feet, Imperial Gallons, Cubic Metres

LCD Display

Forward Flow + Warning for Excessive Flow
Leak
Reverse Flow
Empty Pipe
Low Battery

RATE gpm lpm gallons cu ft m3

Rate and Units — Cumulative Units

Operating Characteristics

Meter Size	Extended Low Flow @ 100% Accuracy (U.S. gpm ± 3%)	Normal Operating Range @ 100% Accuracy (U.S. gpm ± 1.5%)	Safe Maximum Operating Capacity (U.S. gpm)	
			Normal Operation	Fire Service
⅝"	0.05	0.10 to 25	25	N/A
¾"	0.05	0.10 to 35	35	35
1"	0.25	0.40 to 55	55	55
1½"	0.30	0.80 to 125	125	125
2"	0.50	1.5 to 160	160	160
3"	0.50	0.75 to 500	500	420
4"	0.75	1.5 to 1250	1250	1100
6"	1.0	2.0 to 2000	2000	1800
8"	4.0	6.0 to 4000	4000	4000
10"	6.0	10.0 to 6500	6500	6500
12"	8.0	12.0 to 8000	8000	6500

Registration

High Resolution (8-digit reading)

MACH 10 Size	G	ft³	m³
⅝", ¾", 1"	0.1	0.01	0.001
1½", 2", 3", 4"	1	0.1	0.01
6", 8", 10", 12"	10	1	0.1

Meter Specifications

- See non-integrated MACH 10 Product Sheets for additional meter specifications

Warranty

- Neptune provides a limited warranty for performance, materials, and workmanship. See warranty statement for details.

neptunetg.com

Neptune Technology Group
1600 Alabama Highway 229
Tallassee, AL 36078
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Quick Information Guide on Ti-Sales and Neptune

Overview of Oneida
- Service connections: 4,600 total
  - ~4,200 with touchpads
  - ~400 with MXU radio reads
- Current setup: Neptune meters paired with Sensus touchpads and radios
- Have a lot of existing Sensus meters in the system
- Software & equipment: Sensus platform for meter reading equipment, Tyler Technologies for billing, one Neptune Pocket ProReader
- Goals: Transitioning toward radio reads for efficiency and scalability

About Ti-SALES
- Based in Sudbury, MA; Neptune distributor since 1984 for New England & Upstate New York
- Longest-running meter manufacture partnership in the Northeast
- Serve 430+ customers across the region
- Maintain $8M+ in Neptune inventory at all times; next-day shipping standard
- 6 dedicated support staff, with no additional charge for support

Meters
- Attached: *Mach 10 vs. T-10 comparison chart*
- Both available as stand-alone or with integrated R900 radios
- Pit-rated options available

R900 Radios
- Two options: RF R900 radio and cellular radio (comparison attached)
- Can read all existing Sensus meters in your system
- Available as integrated with Neptune meters or stand-alone units for compatibility with current Sensus meters
- Dual messaging:
  - Mobile message every 14 seconds
  - Fixed network message every 7.5 minutes
    → Seamless transition path to AMI when ready
- No programming required – radios auto-detect meters, reducing install time

Existing Touchpads
- We can read all existing touchpads in your system
- Requires spinning up Neptune 360 software and providing a BCT (included in folder)

Neptune 360 Software
- Cloud-based platform with all metering data centralized
- Supports touch, AMR, AMI, and cellular
- Provides real-time insights, leak detection, and consumption anomaly alerts

- Dashboards & reports for easy monitoring
- Mobile access for field teams
- Scalable SaaS model, secure data, and enhanced customer notifications

Sensus SRII (majority of existing meters) vs. Neptune Mach 10 Ultrasonic

Feature / Spec	Sensus SRII	MACH 10 Meter
Measurement Principle	Piston (postivie displacement)	Ultrasonic (solid state, no moving parts)
Low flow Accuracy	1/4 GPM at 98.5-101.5% accuracy	1/20 GPM at +/-3%
Sizes Available	5/8", 3/4", 1"	5/8"–1" (residential);1.5"–12" (commercial/industrial)
Register / Display	Mechanical / magnetic drive register; encoder options for AMR/AMI	Electronic LCD display; sealed/potted electronics; AMR/AMI integration
Durability	Moving parts wear over time; may drift in accuracy	No moving parts; stable accuracy over life
Pressure Rating	~150 psi	~175 psi
Temperature Range	Up to ~80 °F (for potable models)	33 °F to 122 °F (0.5–50 °C)
Installation Orientation	Horizontal	Horizontal or vertical
Warranty	10 years	20 years
UL/FM	None	Has UL/FM
Temperature and pressure data	None	15 minute data with Neptune radios
Intergrated option	None	Yes

Neptune T-10 mechanical meter vs. Neptune Mach 10 Ultrasonic

Feature / Spec	T-10	MACH 10 Meter
Measurement Principle	Nutating Dis (postivie displacement)	Ultrasonic (solid state, no moving parts)
Low flow Accuracy	1/4 GPM at 98.5-101.5% accuracy	1/20 GPM at +/-3%
Sizes Available	5/8", 3/4", 1"	5/8"–1" (residential);1.5"–12" (commercial/industrial)
Register / Display	Mechanical / magnetic drive register; encoder options for AMR/AMI	Electronic LCD display; sealed/potted electronics; AMR/AMI integration
Durability	Moving parts wear over time; may drift in accuracy	No moving parts; stable accuracy over life
Pressure Rating	~150 psi	~175 psi
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Installation Orientation	Horizontal	Horizontal or vertical
Warranty	10 years	20 years
UL/FM	None	Has UL/FM
Temperature and pressure data	None	15 minute data with Neptune radios
Intergrated option	Yes	Yes

- Low flow at .05GPM. 90% accurate at .0075 GPM. T-10 is ½ GPM at 98.5-101%
- Mach 10 can be installed at any angle. T-10 is horizontal only.
- 20 year warranty vs 10 year warranty.
- UL/FM approved.
- 20 year full accuracy warranty. T-10 is 5 years.
- No wear or tear or the possibility of the meter getting clogged.
- They are also lighter in weight.
- Very minimal cost difference, if none at all.

February 9th, 2026

City of Oneida
Drew Campany
Water Superintendent
109 North Main Street
Oneida, NY 13421

Subject: TI-SALES LLC - Sole Authorized Distributor – State of NY

To whom it may concern:

Neptune Technology Group Inc is pleased to affirm that **TI-SALES LLC**, is the sole authorized distributor for Upstate State of NY for Neptune RF meter reading equipment and software, Neptune water meters and Neptune parts.

TI – SALES LLC is authorized by Neptune to submit an offer for Neptune water meters and related products.

Thank you for your interest in Neptune products. If you have any questions, please contact your local Ti – SALES LLC representative, Jim Pierce at (315)345-1169, or your local Neptune representative, Zach Mendes at (585) 557-0226. Sincerely,

Zachary Mendes
Neptune Technology Group Inc.