# CITY OF NAPERVILLE
# MEMORANDUM

**DATE:**      October 4, 2013

**TO:**        Douglas Krieger, City Manager

**FROM:**      Jim Holzapfel, P.E., Director, Department of Public Utilities – Water/Wastewater

**SUBJECT:**   Water Automated Meter Infrastructure (AMI) Request for Information (RFI)

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## ACTION REQUESTED:
Provide the City Council information regarding the Water Utility's Automated Meter Infrastructure (AMI) Request for Information.

## BACKGROUND:
In July, City Council identified three strategic plan goals for the future of the organization, one of which is to be recognized as an E-Government innovator.

During the last several months the water utility has been meeting with vendors, equipment suppliers and other communities to gain knowledge working toward implementing a Water AMI project in the future.

Water Automated Meter Reading (AMR)/AMI systems are not new.  Most communities already have AMR systems which allow one way communications, whereby the meter sends out an RF signal approximately every 6 seconds.  The signal is picked up by receiver (drive-by or fixed) to complete the meter reads.  Naperville currently utilizes an AMR system for its unincorporated customers.  The meter reads are picked up by a drive-by vehicle with a receiver.

The advantage of AMI devices is better meter data that supports 2-way communications.  Water AMI systems automate water meter reads and provide customers near real time information on use (including leak detection and notification) as well as other account information.

## DISCUSSION:
The Water Utility recently advertised a Request for Information for Advanced Metering Infrastructure technology for the Water Utility.

The RFI will identify the following:

- The industry leaders with viable Water AMI systems.
- The various vendors' level of customer support.
- Provide insight on the variety of system architectures and communications networks.  With specific interest on how much of DPU-E's communication and other equipment can be utilized in a Water AMI project.
- Identify system compatibility and prior experience integrating their various systems with existing IT systems and equipment similar to Naperville's.
- Determine how the various systems protect data and gain insight on the level of security the various systems have at the equipment and network levels.
- Identify the different system enhancements available, including customer engagement systems (web portals, leak detection, bill analyses, etc).

- Obtain high level budget information of an AMI system that would meet the needs of Naperville's (geographic size and number of customer accounts).

Responses are due on November 1, 2013.  After review, staff will report back to City Council providing information and seeking direction.

**RECOMMENDATION:**
Forward this information to the City Council through the Manager's Memorandum Report.