

SHARED NETWORK PARTNERSHIPS:

Leveraging AML Infrastructure for Cost-Efficient Water Utility Modernization

The City of Neenah and We Energies Blueprint



Landis+Gyr



Standalone municipal water utilities often struggle to implement reliable communication networks for advanced metering infrastructure (AMI) for several reasons. First, they typically don't own the infrastructure, such as power poles, necessary for mounting routers and other network communication devices. Water meter encoders are often located in basements or pits which limit use of cellular modems. And business cases for water AMI rarely support large network investments.

This is why Landis+Gyr has developed opportunities for its electric utility customers, operating under a Managed Services agreement, to share their network space in a partnership with water utilities operating in the same service territory. Through a lease agreement that Landis+Gyr maintains, the partnership allows the water utility to access the electric utility's network. The water utility can then use a special version of the head end software (HES) to fully manage their AMI solution over the network.

Case in Point: City of Neenah (WI) Water Utility and We Energies

Challenges

With an outdated AMR system for its water meters in place, the Neenah Water Utility was experiencing unforeseen endpoint failures, periods of excessive water loss, and consumer frustration with lack of communication about high usage or leakage. The utility clearly needed an AMI solution, but the cost and time required to implement AMI in the utility's service area presented a major ROI challenge. In addition, like many water utilities, the Neenah Water Utility lacks access to both utility poles and electric service at the meter. After researching several technology options, the utility contacted Landis+Gyr, which proposed a multi-tenancy partnership between Neenah, Landis+Gyr, and the local electric service provider, We Energies.

AT-A-GLANCE



1893

formation of city water utility



140+

miles of water mains



11,000+

meters in service



AMR to AMI
transition



We Energies

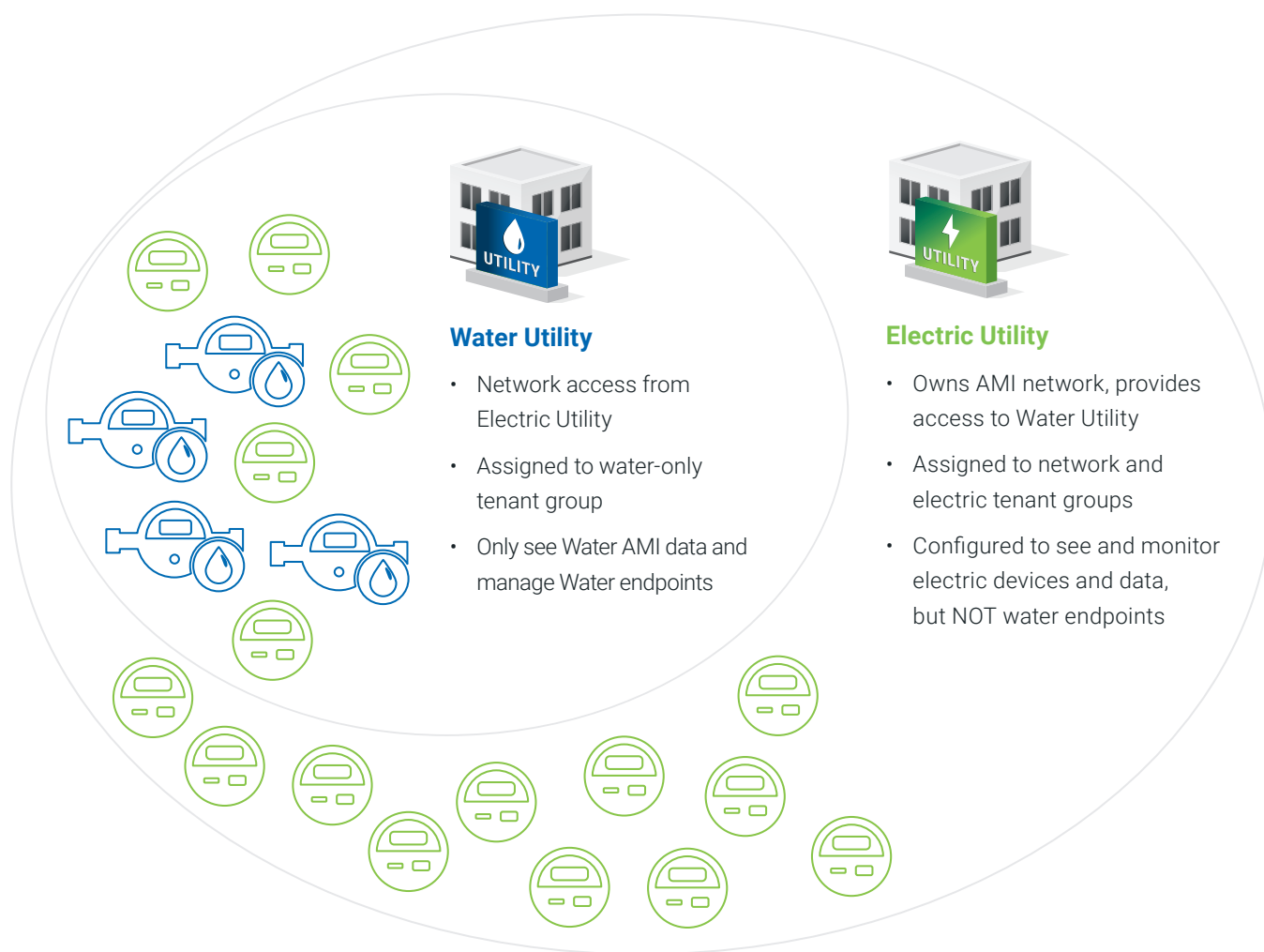
multi-tenancy network partnership

City of Neenah Solution Highlights

For water utilities, such as Neenah, that lack access to needed infrastructure for deploying an AMI network, existing electric utility AMI networks can easily be extended to support water assets. By leveraging Landis+Gyr's Shared Network Partnership model with a multi-year network rental agreement, Neenah Water Utilities can access data and send commands to its meters utilizing We Energies' existing electric AMI network for two-way communication.

Multi-tenancy Solution with Landis+Gyr's Head End Software

The Shared Network Partnership model provides the opportunity to further leverage a utility's investment in their own AMI network by leasing access to other utilities within their service territory. In addition to offsetting the electric utility's expense and addressing the networking needs of the water utility, such a partnership serves the greater good by enabling interagency cooperation and delivering efficiencies that benefit the environment. In support of this partnership, Landis+Gyr's HES provides multi-tenancy support, creating tenant groups of devices and assigning permission-based access to device data and management functions.



Smart endpoints

Landis+Gyr's water AMI solution starts with RF Mesh communication modules that retrofit existing water meters. The truly two-way AMI devices enable near real-time access to critical water assets and come in different form factors for different meter location and pit environments. Neenah Water Utility is deploying Landis+Gyr interpreter register water modules for their existing and new water meters. The interpreter module is easily mounted to the meter with an adapter, without disrupting the existing meter. There are no wires, and the radio and encoder are sealed within a single unit for added security and durability.

Key Utility Benefits

Water Utility



Lower costs

Over-the-air meter reading and billing reduces the need for truck roll to a customer premise to get meter reads



Improved consumer satisfaction

More detailed usage information available for customers – ability to view hourly usage data online and usage alerts help customers save on water bills



Recognized operational efficiencies

A shared investment in a single, multipurpose network and head end drives operational efficiencies



Leverage partnership expertise

Ease of implementation, led by Landis+Gyr, allows both utilities in partnership to keep their focus on operations and customer experience

Electric Utility



Monthly lease payments

Substantially offset overall network expense for the electric utility



No additional overhead

No additional management, maintenance, or infrastructure costs related to the lease

Landis+Gyr is a leading global provider of integrated energy management solutions. We measure and analyze energy utilization to generate empowering analytics for smart grid and infrastructure management, enabling utilities and consumers to reduce energy and water consumption. Our innovative and proven portfolio of software, services and intelligent sensor technology is a key driver to decarbonize the grid. Having enabled 9 million tons of CO₂ savings in FY 2024 through our product offerings, Landis+Gyr manages energy better – since 1896. With sales of USD 1.7 billion in FY 2024, Landis+Gyr employs around 6,300 talented people across five continents. For more information, please visit our website www.landisgyr.com.