HYDRUS protects resources in the Caribbean

Picture 1. Ultrasonic Meter HYDRUS

Following the success of their project in Barbados, Diehl Metering is setting another milestone in Jamaica. The HYDRUS ultrasonic water meter is convincingly withstanding the demanding environmental conditions in the Caribbean – and Diehl Metering's technologies are achieving a lasting improvement in the distribution system.

The majority of the water meters in Jamaica are located outdoors and are therefore permanently exposed to direct sunlight, high temperatures and high humidity. Whereas European vacationers are happy to spend eight hours flying to Jamaica for the heat and humidity – for mechanical water meters, it means permanent strain and a high degree of wear.

Ideal technology for Caribbean climate

The distribution systems in Jamaica are subject to fluctuating pressure conditions due to large leaks. Another problem is the heavy debris caused by sand and small stones. Many mechanical water meters stop working in the face of the adverse environmental conditions, which naturally leads to falling revenues for the water utility, the National Water Commission (NWC).

As is the case in Barbados – reported in the December 2014 issue of Metering & Smart Energy International – the HYDRUS ultrasonic water meter is proving its worth as a problem solver in Jamaica. The robust design, the UV-resistant housing, the fully encapsulated electronics and the static measuring principle ensure a long life – even with high humidity and pressure surges in the distribution system. The HYDRUS provides many years of fault-free operation.

Accurate even with air in the pipes

HYDRUS is unbeatable in terms of long-term operating and service costs. With a battery life of up to 15 years, it has the lowest power consumption of any ultrasonic meter on the market and needs no maintenance.

The static ultrasonic measuring principle manages without moving parts – for high precision and long-term stability, even with heavily soiled water, sand or stones in the pipes. This appreciably increases the life of a meter.

HYDRUS also detects air in the pipes and measures only the actual water consumption – with maximum accuracy. Mechanical water meters, by contrast, are known for their "overrun" when air is present in the pipe. This is now a thing of the past in Jamaica.

Picture 2. Signing of contractual agreement

First step towards a smart infrastructure

Diehl Metering has supplied NWC with a mid-five-figure quantity of HYDRUS water meters. Every meter is equipped, as standard, with an integrated radio module – and is thus ready for automatic meter reading immediately after installation.

This is a revolutionary step for the water supply system in Jamaica, because in the past simple mechanical meters were read manually. In the next step the NWC staff are to be equipped with reading sets comprising a tablet with a radio receiver. This will make reading in walk-by or drive-by mode possible – immediately and without additional programing of the water meters.

Home and dry

Back in November the National Water Commission (NWC) signed a contract with Diehl Metering that included the supply of HYDRUS water meters in the mid-five-figure range. NWC president Mark Barnett emphasized the potential of Diehl Metering's modern technologies for increasing efficiency and cutting costs. NWC also expects consistently high measuring accuracy – and appreciably fewer objections from customers.

The rollout was preceded by a pilot project in which a fully automatic fixed network was installed near the Long Mountains. Here NWC was able to convince itself of the efficiency of Diehl Metering's radio technology and also thoroughly test the HYDRUS water meter.

NWC is sure to get local problems under control with the help of Diehl Metering's technology. The new infrastructure will also increase customer satisfaction. Leaks and shortages in the water supply are to be discovered and cleared quickly. Once again technologies from Diehl Metering are proving to be ideal for the climate and demands of the Caribbean region. Other projects are under preparation. MI

ABOUT THE AUTHOR

Stefan Raeder is Diehl Metering´s regional manager of business development. With more than 7 years of experience in the water, energy and AMR/AMI market, Stefan has supplied a large number of metering projects to various countries in the Middle East and the Caribbean.