

METER VERIFICATION

The Application...

Regulatory bodies in the UK such as the Environment Agency and OFWAT have demanded that the water companies of England and Wales rise to the challenge of improving their flow measurement. The regulatory bodies do not view internal verification as independent. As such, an external consultant is required to review the accuracy of its source and strategic meters. To review the accuracy of 150 source and supply Key Meters throughout a UK water board over a 5-year period, in line with the Abstraction Metering Good Practise Guide (1997). Establish errors in the current data-reporting path from the primary cell through to telemetry.

The Solution...

RS Hydro devised a meter verification test methodology based on two types of test equipment:

- (1) portable ultrasonic flow meters; and
- (2) electromagnetic insertion meters.

The Technology...

Fig 1:
Ultrasonic flowmeter (left) and insertion meter.



The Results...

- RS Hydro developed and implemented on schedule
- We provided experienced personnel to undertake precise and repeatable testing which can be traced to UKAS standard
- The tests provide accurate assessment of Key Meters and hence benchmark volumes for leakage assessment
- The tests localise leakage and meter anomalies
- Once the data has been analysed, it is possible to measure the integrity of the metering system as a whole. Further investigations for meters displaying significant discrepancies between meter and reference measurements were carried out to ascertain sources of error. Certificates of meter accuracy were subsequently issued
- “RS Hydro have worked with us since 2000 offering a specialist resource to calibrate all source and strategic meters. They have introduced expert knowledge and a deep understanding of metering issues. Specialist resources like that at RS Hydro have allowed us to concentrate on other business activities and also to localise efforts to reduce leakage levels. I would not hesitate in recommending RS Hydro to any company requiring an efficient and advanced flow metering resource”

(Water Board Leakage Manager)

Case Study

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