## nationalgrid

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National Gas Emergency Service - 0800 111 999\* (24hrs) \*calls will be recorded and may be monitored

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19 April 2010

Your Reference RE: Measurement Errors EA002 (Matching Green), EA009 (Yelverton), EM005 (Blyborough), NT007 (Peters Green) and NW006 (Samlesbury)

## Re: orifice Plate Mis-measurement.

Dear Colleague,

In September 2009 National Grid Gas Distribution reported a number of suspected meter errors as a result of a bias introduced for the period October 2006 to November 2007 to the coordinate measurement machine (CMM) used to measure the orifice plate internal bore dimension.

Since notification to the Joint Office and the wider community of the suspected meter error, National Grid Gas Distribution has been supporting the process to resolve the meter error by ongoing audit, investigation of data and processes associated with the orifice plate measurement.

## In response to the questions raised by Graham Wood, British Gas;

- 1. The measurement error amendments and additions have been identified by analysis of new data provided by the calibration laboratory undertaking operation of the CMM and further examination of data originally used for the initial declaration.
- 2. The nature of the investigations that were undertaken has been the comparison of data used for the initial orifice plate identification, procedure used by the calibration laboratory for 'booking in' of the plates for calibration, the calibration procedure itself, 'booking out' procedure and analysis of the declared bore diameter for each orifice plate serial number.
- 3. The following actions have been undertaken to ensure the validity of the originally notified orifice plate errors;

Data analysis to determine the orifice plate had been measured during the affected period by:-

- Analysis of the measured orifice plate internal bore dimension.
- o Comparison of the calibration date on the orifice plate certificate.
- Comparison of the OP reference number on the orifice plate certificate
- Analysis of the calibration laboratory data logbook.
- Analysis of the declared orifice plate bore values.

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- 4. Following analysis of all available data we are confident that all affected orifice plates have been identified along with the corresponding orifice plate meter installation.
- 5. It is anticipated that no further new data will be available for the resolution of the meter error. The main National Grid Gas Distribution effort at present is the gathering of data required for the ITE.

National Grid Gas UKD is striving to close out this mater in a robust and efficient manner. As the process is ongoing and until the ITE has completed the reports required for this meter error the investigation will remain open, but we do not anticipate any further findings.

Yours sincerely

Stuart Gibbons National Grid Distribution