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To Licensed Gas Transporters,  
Shippers and Suppliers;  
Consumers; Customer groups  
and other interested parties

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Date: 2 May 2018

Dear Colleague

### **Pressure Calibration Devices in T/PR/ME/2**

This is an open letter to the industry regarding Ofgem's view on the acceptability of using alternatives to a deadweight tester for checking the accuracy of pressure sensor devices as is currently required by T/PR/ME/2 Part 3.

#### **Background**

When metering gas for the purposes of the UNC Offtake Arrangements Document, it is necessary to check that the instrumentation and gas parameter sensors utilised are sufficiently accurate. The requirements are set out in the technical document T/PR/ME/2 which is a Subsidiary Document defined in the Offtake Arrangements Document.

Part 3 of T/PR/ME/2 specifies that a deadweight tester must be used to calibrate pressure transducers.

A deadweight tester is capable of measuring gas pressure (N/m<sup>2</sup> or Pa) derived directly from base System Internationale (SI) units of mass (kg) and length (metre). These instruments are expensive and delicate, but their inherent accuracy can be impaired by dust/dirt contamination, temperature extremes and physical damage through manhandling. The accuracy of deadweight testers can therefore suffer when used in the field /on-site if sufficient care is not taken to mitigate against the factors that can lead to measurement inaccuracies.

Ofgem has been approached by representatives of the growing biomethane industry who have raised concerns over whether it is proportionate to require the sole use of a dead weight tester for calibrating pressure sensors in such circumstances. They have also highlighted that gas transporters are interpreting the technical requirements of T/PR/ME/2 differently before they will accept connection to their systems.

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## Discussion

We note that Section 5 Test Equipment and Software of T/PR/ME/2 Part 1 states:

### *TEST EQUIPMENT AND SOFTWARE*

*All test equipment used shall have a suitable and current calibration certificate no greater than twelve (12) months old, from a facility having accreditation at the appropriate level for the equipment and ranges under test eg UKAS, verifying the uncertainty of the equipment.*

In addition, for pressure generation, ME/2 part 1 states a minimum accuracy requirement of 0.025% of actual reading.

It could therefore be interpreted that an alternative calibration device that meets this 0.025% requirement and holds a valid certificate should also be sufficient.

We have discussed these matters informally with service users, other representatives of the industry and those who are rigidly applying the requirements of T/PR/ME/2.

Ofgem is mindful of the concerns raised by users of the service regarding the variances of approach by GDNs and their inability to benefit from the advance of electronic pressure measurement technology.

## Ofgem's view

We have considered the issues and representations from the industry. We conclude that the explicit requirement solely to use a deadweight tester in Part 3 of T/PR/ME/2 could be regarded as disproportionate and un-necessarily prescriptive, particularly so as technology develops and when the lower pressures and flow rates typical in biomethane connections are involved.

On the basis of the information available, Ofgem would be minded to support a change to the references in T/PR/ME/2 to the sole use of a deadweight tester in Part 3 such that it instead (for example) could refer to a *deadweight tester or any other suitably accurate and calibrated electronic pressure measuring device*.

Since T/PR/ME/2 is an Offtake Subsidiary Document as defined in the Offtake Arrangements Document, we recognise that proposals to formal modify or replace it would require consideration by the industry in accordance with the Joint Office of Gas Transporters UNC Modification Rules.

We would therefore support a review of T/PR/ME/2 in this regard, and are pleased to note that Cadent raised this issue at the ENA Biomethane working group meeting in March 2018.

In the meantime, we would be supportive of GDNs accommodating the reasonable needs of users by adopting a more flexible approach as to what measuring instrumentation is utilised if it can be demonstrated that the use of alternative technologies to deadweight testers is reasonable and appropriate to the circumstances prevailing at a site.

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This could (as stated in T/PR/ME/2 part 1) for pressure generation include the use of a suitably calibrated device that meets the minimum accuracy requirement of 0.025% of actual reading.

If you have any queries regarding this letter, please contact Steve Brown directly using the contact details provided.

Yours faithfully

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