GAS INDUSTRY COMPANY LIMITED

1. Switching & Registry

Retail Gas Governance Forum

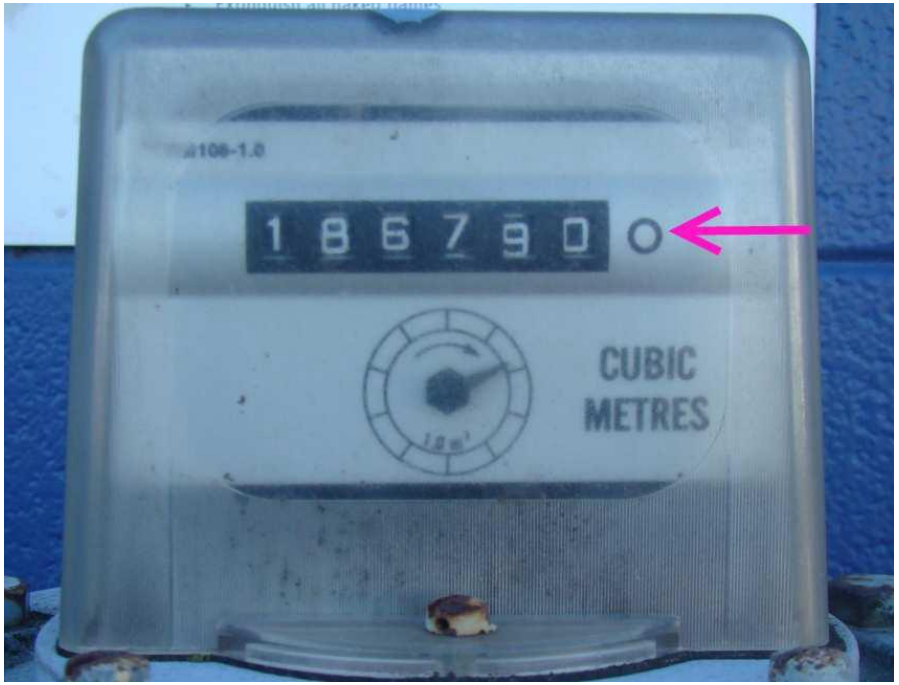
6 December 2011

Issues raised in consultation on Billing Factors Guideline Note

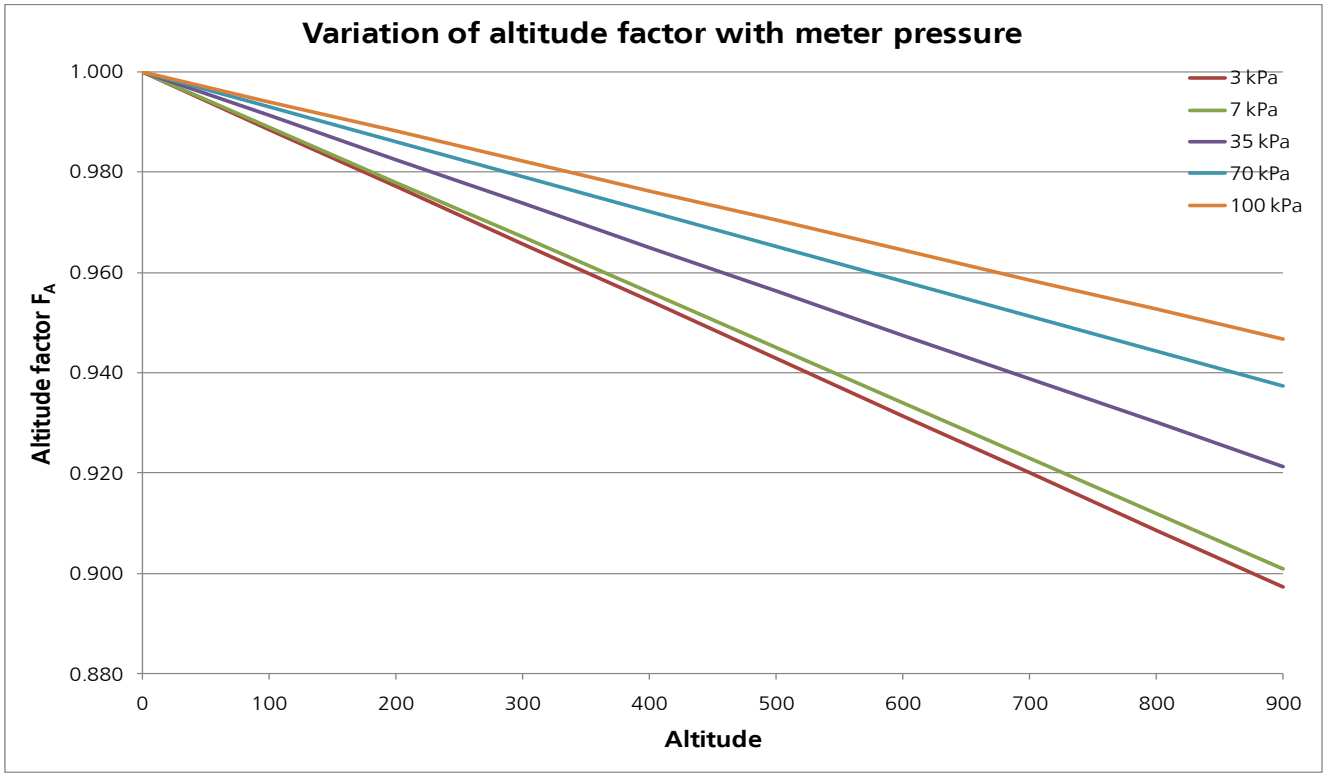
- **Painted 0 on meter register**
- **Accuracy of altitude and network pressure**
- **Additional meter fields on the registry**
- **Audits of registry data**

Audits have found instances of misread painted zeroes on meters

- Ideally, all participants would treat such meters the same
- Discussion with meter owners suggests that zero should be counted as register digit, rather than multiplier
- Gas Industry Co will add this issue to the guideline on billing factors



NZS5259 specifies a 1% maximum permissible error for altitude in energy conversion



The 2009 amendment to NZS5259 included a note that "To minimise uncertainty due to altitude factor the aim should be to determine the altitude within 10m where practicable."

Guideline seeks same level of accuracy as standard

Gas Industry Co expectations regarding altitude:

- Distributors populate the registry with altitude information to within 10 m for each ICP on its network.
- Retailers to use ICP-specific altitude in the registry for its conversions of metered volume to standard volume.

Network pressure is required to correct for Joule-Thompson effect

Audit findings:

UFG of

4.8 TJs (Greater Hamilton)

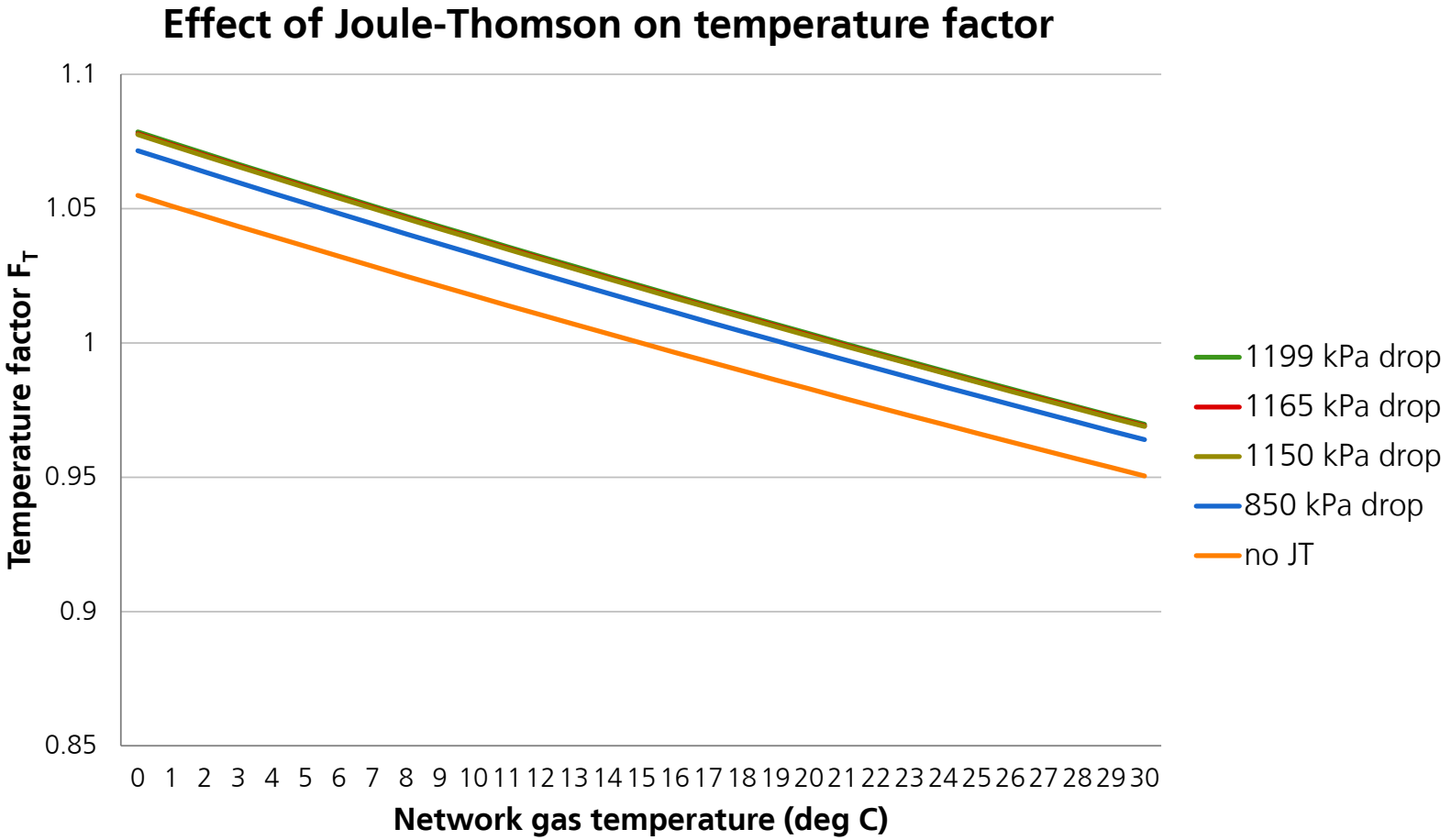
3.2 TJs (Palmerston North)

caused by not correcting for Joule-Thompson effect

Recommendations:

- *Retailers should apply Joule-Thompson effect for their fixed factor ICPs, or install correctors at large volume sites*
- *Network owners should check and populate the registry with correct nominal network pressures*

Joule-Thomson effect increases with magnitude of pressure drop from network to metering pressure



Guideline note consistent with audit recommendations

Gas Industry Co expectations regarding Joule-Thompson

- Network owners ensure nominal operating pressures are correctly populated in the registry for all ICPs on their networks.
- Once network pressures are correctly populated, retailers ensure that they account for the Joule-Thomson effect by using the network pressure in the registry in their conversion of metered volumes to standard volumes.

Additional metering fields

Audit reports have consistently recommended that

- Meter pressure
- Number of dials
- Meter multiplier

be added to the registry

Support from meter owners for adding fields

Strawman from Powerco – are there other fields that should be added?

Implementing registry changes

Two distinct but parallel processes:

1. Technical work
    - functional specification change to registry
    - integration with participants' systems
    - implementation issues
2. Amendments to Switching Rules

Gas Industry Co plans to convene a technical advisory group to inform and assist with the technical considerations – one representative per organisation

First meeting February/March 2012

Accuracy of registry data

- Suggestion is to make obligations under the Switching Rules subject to audit
- Issue will be included in considerations for amendments to Switching Rules

Common temperature dataset

Suggested in audit reports

- Would provide consistency in temperature conversions
- Able to be updated regularly

Feedback from submitters was lukewarm –

Is it worth pursuing?