
Gas Metering Review

Review of metering service provider arrangements

Redacted version for publication

Prepared for

Gas Industry Co

by

Rod Crone

Rod Crone Consulting

1 March 2017

Contents

Executive Summary	4
Background	6
Gas metering services providers	6
Gas metering services market share	8
Current market arrangements	10
Bypass	21
TOU metering and data services	21
Are GMSAs “future proof” in the face of new metering technology?	23
Other feedback relevant to gas metering services	24
Appendix: Terms of reference.....	25

Executive Summary

Standalone agreements for the supply of gas metering services are given various titles, but for the purposes of this paper are collectively referred to as gas metering services agreements (“GMSAs”). Unsigned GMSAs are sometimes referred to as template or standard agreements.

Apart from GMSAs between Vector AMS and three retailers (one put into place at the time of Contact’s sales of its gas metering assets to Vector AMS), current gas metering services arrangements are based on legacy agreements which are in most cases bundled with network services agreements. The metering services component of the legacy agreements typically lack some terms, service definitions and performance standards expected in the current market for gas metering services.

Of the meter owners who provided standalone GMSAs for review:

- Vector AMS’s template GMSA is executable and was offered to retailers in 2013, but no retailer has signed.
- Powerco’s standard GMSA is work in progress and close to being finalised before sharing with retailers and seeking feedback.

GasNet did not provide a standalone GMSA for review.

A review of the GMSAs provided and discussion with participants indicate gas meter owners do not appear to be actively competing for new connections, and retailers are choosing the network owner’s related GMS provider. The reasons for this are:

- the primary focus of gas meter owners is the supply of metering services on networks where they are also the network owner (“related meter owner”);
- in the absence of a significant difference in price or service, retailers have indicated a preference for dealing with one party to provide both network and metering services because of the operational efficiencies and customer benefits from a more seamless process;
- where the network owner is generating the bulk of the demand for new connections and has its own metering business, it is logical the network owner provides metering services through its related meter owner for the new connections it has generated.

Retailers were mostly of the view that agreements should allow for a competitive market for gas metering services where retailers have choice of GMS provider notwithstanding that the retailer may choose the related meter owner (or incumbent GMS provider where there is no related meter owner to provide metering services) for new connections.

The lack of competition is characterised by what is happening with new connections. Analysis of 17 months of registry data up to May 2016 confirms ~100% (> 99.9%) alignment between the GMS provider chosen by retailers and the related network owner.

Preferred supplier status provisions in some GMSAs, where the retailer is obliged to choose a particular GMS provider for new connections, and new connections service request processes also lead retailers towards choosing the related meter owner for new connections in each network area.

Several retailers indicated a preference for material alignment of core terms in new GMSAs across meter owners. Normal commercial negotiations should facilitate a degree of alignment, and it is noted that many of the core terms in the Powerco draft standard GMSA and Vector AMS template GMSA are already materially aligned.

Given the material alignment of core terms, and noting the Vector AMS template and Powerco standard GMSAs include terms, service definitions and performance standards expected in today's market for gas metering services, it does not appear necessary or desirable for Gas Industry Co to prescribe more standardised arrangements through development of a model GMSA, benchmark terms or contracting principles. In any event, standardisation of non-core terms, service definitions and performance standards, reduces the opportunity for service differentiation which promotes competition.

It is noted that in one signed GMSA, preferred supplier status and/or first right of refusal provisions extend to retailer-initiated 3rd party meter replacements and upgrades. Where retailer-initiated 3rd party meter replacements are a consequence of a network marketing programme aimed at incentivising former gas consumers to reconnect, it could lead to further aggregation of the gas metering services market. However, it would have a much more significant impact if this provision can be invoked (or was amended so it could be invoked) for each ICP with a 3rd party meter included in an advanced metering mass deployment agreement.

While preferred supplier status is relatively common in electricity advanced metering services agreements, it is not yet known how this will play out in the gas metering services market. In any event, it is considered likely that new commercial agreements necessary for mass roll-out of gas advanced metering will include preferred supplier status and first right of refusal provisions, and

this, along with like provisions in existing GMSAs, could lead to further aggregation of the gas metering services market.

On balance, it appears there is more scope for aggregation of the gas metering services market from the introduction of advanced metering than there is from increased competition.

Background

1. The Government Policy Statement on Gas Governance (April 2008) seeks a number of outcomes, one of which is:

“An efficient market for the provision of gas metering..... services”.

This is supported in the Gas Act, at section 43G(2)(f), which allows the Minister to make regulations for the purpose of *“providing for terms and conditions of access to meters by gas retailers”*.

2. Gas Industry Co intends to produce two papers as follows:
 - a) a review of the current arrangements for provision of gas metering services by meter owners (including time-of-use (TOU) metering data management services but not manual meter reading services); and
 - b) a narrative that provides Gas Industry Co and stakeholders with an up to date assessment of the current state of gas smart metering technology and where it is heading, and the likely benefits in the context of the New Zealand gas industry so Gas Industry Co is well positioned to ensure the regulatory framework supports achieving the anticipated benefits.
3. Gas Industry Co has engaged Rod Crone Consulting to complete both reviews. This paper covers current metering service provider arrangements. The terms of reference for this paper are included in an appendix.

Gas metering services providers

4. Five participants provide gas metering¹ services to retailers - Vector AMS, Powerco, GasNet, Nova Energy, and Metrix.

¹ “[gas] metering equipment” and “gas measurement system” or “GMS”, and “[gas] metering services” and “GMS services”, have similar meanings throughout the agreements and this report.

Vector

5. Vector owns and operates the gas distribution networks in Auckland, owns gas meters and provides gas metering services throughout the North Island, and retails gas through its subsidiary Vector Gas Trading Limited (also trading as OnGas).
6. Vector's gas metering services are provided through Vector AMS and wholly owned subsidiaries Advanced Metering Assets Limited ("AMA") and Advanced Metering Services Limited ("AMS").
7. The gas transmission system and North Island gas distribution networks owned by Vector Gas Limited were recently sold to Australian investor First State Funds. Vector Gas Limited was renamed First Gas Limited (now trading as First Gas) following completion of the sale.
8. Vector AMS gas metering assets are installed on the networks owned by Vector, First Gas and Powerco. Vector AMS has 99% of the meters installed on Vector's Auckland network and First Gas's Bay of Plenty, Gisborne, Northland, Waikato, and Kapiti networks. While it has always owned some GMSs on the Powerco networks, it now has over 80% of the meters on Powerco's Hawke's Bay and Manawatu networks due to its 2013 purchase of Contact Energy's gas metering business. The meters owned by Vector AMS on the First Gas networks, and the NGC meters on Vector's network, were initially acquired as part of the purchase of 100% of the shares in NGC Holdings Limited ("NGC") which also owned the North Island gas distribution networks.

Powerco

9. Powerco owns and operates gas distribution networks in Taranaki, Manawatu, Hutt Valley, Porirua, Wellington City, Horowhenua and Hawke's Bay regions.
10. Powerco also owns gas meters and provides gas metering services on all its gas networks. Overall it owns 53% of the meters on its networks, including nearly all of the meters on the Taranaki network and just over half of the meters on the Hutt Valley/Porirua networks. The balance of meters on its networks are almost all owned by Vector AMS.

GasNet

11. GasNet owns and operates gas distribution networks in the Wanganui-Rangitikei region.
12. GasNet owns 100% of the gas meters and provides gas metering services on its gas network; it also owns a small number of meters on Powerco's Hawke's Bay and Manawatu networks.

Nova Energy

13. Nova Energy owns the gas meters and provides metering services on its own private (bypass) networks and has some meters on Vector's Auckland network, as well as a few on Powerco's networks. It has no signed agreements in place for gas metering services provided to other retailers.
14. Nova Energy is also a gas retailer.
15. While the sample analysis of new connections indicates Nova Energy does not currently compete in the metering services market, at least for new connections, it has the capability to do so if it wished to. This threat and Nova Energy's knowledge of metering costs should act as a restraint on other meter owners providing metering services to Nova Energy as a retailer.

Metrix

16. Metrix owns a handful of gas meters on the Vector network.

Gas metering services market share

Existing market share

17. Vector AMS, Powerco and GasNet together comprise over 99% of the gas metering services market.
18. New connections data from the gas registry file PR-010 for the 17 months since 1 January 2015 indicate neither Nova Energy nor Metrix are growing their gas metering services presence on the open-access gas distribution networks from new connections.

New Connections

19. Analysis of gas registry data extracted from the PR-010 ICP list file for the 17 months since 1 January 2015 indicates ~100% (> 99.9%) alignment for new connections between the meter services provider chosen by retailers and the related network owner, i.e. Vector AMS has become the meter owner for new connections on the Vector Auckland and ex Vector North Island (now First Gas) networks, Powerco on the Powerco networks, and GasNet on the GasNet networks.
20. This alignment is primarily due to the lack of price and service differentiation, operational efficiencies from a more seamless process dealing with a single party, and the view it enables a better customer experience particularly where a process issue arises. In some cases, the

preferred supplier status provisions in some GMSAs and/or the new connections service request process (with limited options) lead retailers towards 'choosing' the related meter owner for new connections in each network area. Notwithstanding limited choice, retailers have commented in general that, given the operational efficiencies and customer benefits, and there being very little differentiation in price or service, they prefer to nominate the related meter owner where the network owner also provides metering services.

21. Vector's Siebel system is used with an online portal for new connection applications on the Vector networks, and retailers nominate the meter owner in the same system. The options available to retailers are Vector AMS or Nova. Notwithstanding the limited options, retailers have indicated they are comfortable choosing Vector AMS as the metering services provider for the same reasons as outlined above. Vector AMS also uses Siebel for metering only service requests on both the Vector networks and networks owned by other parties (referred to as 'Siebel Light' by Vector AMS).
22. Since First Gas transitioned away from Vector's Siebel system in August 2016, new connection applications have been logged in their MS Dynamics (CRM) system which has an interface to its asset management system (Maximo). When a quote is accepted, it requires the customer to nominate a retailer. The retailer is then notified and prompted to nominate a GMS provider (options being Vector AMS, Powerco, Nova Energy, GasNet) in MS Dynamics and to log into the nominated GMS provider's system to complete the GMS installation service request. First Gas has noted that retailers have been choosing Vector AMS and logging the service request in Siebel, so at this point the change in ownership of the North Island networks and new connections process has not influenced a change to the GMS provider nominated for new connections. While First Gas has yet to determine its long-term approach to make the process more seamless, it notes that some synergies currently exist from First Gas and Vector AMS having a common field services provider (Electrix).
23. Powerco's Customer Works Management System (CWMS) is used with an online portal for new connection applications, and retailers nominate the GMS owner for new connections. While the options available to retailers include Powerco, Nova, GasNet and Vector AMS (and several other options that are not relevant), Powerco is the default option. As the majority of new connections activity is generated by Powerco through its Gas Hub, and with there being the operational efficiencies and customer benefits from dealing with a single party, it is logical retailers are choosing Powerco as the default GMS provider on its networks.

24. GasNet uses a Network & GMS Services Request spreadsheet and email for new connections applications, with the choice of service being Network & GMS Services, Network Services only, or GMS Services only. While for the Network Services only option there is no explicit option to nominate a GMS provider other than GasNet, and while the default for new connections would be to tick Network & GMS Services (i.e. GasNet as the GMS provider), GasNet has advised that retailers are free to choose their GMS provider.
25. It is noted that the systems and processes used for new connections and associated metering requests are also used by GMS owners for gas metering only service requests, including on other networks. For example, Vector AMS uses Siebel (without the network component) for metering only service requests on the Vector, Powerco and First Gas networks.

Current market arrangements

26. Gas Industry Co sought consent from retailers for meter owners to provide their gas metering service agreements (“GMSAs”) in respect of all open access networks to Gas Industry Co (for analysis by Rod Crone Consulting).
27. The request included:
 - a) Copies of all current GMSAs between meter owners and retailers (including agreements that have expired between the parties);
 - b) Copies of all standard GMSAs that are currently offered by meter owners (i.e. standard terms and conditions);
 - c) Copies of GMSAs between meter owners and retailers that are currently subject to negotiation or yet to be progressed (including transition from bundled network and metering services agreements to separate agreements.
28. The request for information noted that pricing information would be treated as confidential information, and meter owners were required to indicate whether all or part of the GMSAs provided were confidential or commercially sensitive, together with reasons for classifying information as confidential or commercially sensitive. All the signed agreements and template agreement provided by Vector AMS had pricing information redacted.
29. All retailers except Greymouth Gas NZ Ltd provided their consent.
30. As a general comment, most legacy gas metering services arrangements were bundled with gas network services agreements and lack appropriate terms, service definitions and performance

standards for gas metering services. With network services being a monopoly service, and gas metering services contestable, the expectation is that GMSAs should be unbundled and standalone, and contain terms, service definitions and performance standards relevant to today's conditions. For example:

- a) Industry arrangements (registry, customer switching and reconciliation arrangements, disconnection and reconnection protocols adopted by the industry) have changed, but legacy agreements mostly reflect historical arrangements.
- b) Regulatory changes such as the Gas (Safety and Measurement) Regulations 2010 have prompted retailers to require information on the quality assurance procedures and outcomes of the compliance programmes of other parties in the supply chain (including meter owners) to meet their own legal responsibilities.
- c) Expectations around health and safety provisions have changed.
- d) Service request processes have changed, but legacy agreements mostly reflect historical arrangements.
- e) New GMSAs are expected to contain comprehensive service definitions and related performance standards which are absent in legacy agreements.
- f) Legacy agreements in many cases contain inappropriate price change notification provisions.

31. Vector AMS provided its executable template GMSA and Powerco its draft standard GMSAs for review. GasNet provided its standard distribution services agreement ("DSA"), which bundles network and metering services, via a link to its website.

- a) The GMSAs provided by Vector AMS include those executed with two retailers in 2012 and 2013. Although Vector tabled its template GMSA with other retailers in 2013, it received very little feedback on it and has finalised and executed an agreement with only one other retailer. The 2013 signed GMSA was made in the context of the Vector AMS purchase of Contact's gas metering assets.
- b) Powerco is well advanced with drafting its new standard GMSA and has yet to engage with retailers.
- c) Accordingly, and apart from the three GMSAs executed with Vector AMS, the industry is still on the journey to standalone GMSAs appropriate to today's conditions and expectations.

It is noted that Vector Gas Trading acts as agent for GMS services (and network services) for smaller new entrant gas retailers Switch Utilities and Pulse Energy.

32. Notwithstanding that progress is being made, it was suggested by several participants that they would like to see the pace of change towards separate network services and metering service agreements incentivised. Despite Gas Industry Co already having an oversight scheme incentivising the shift towards separate network services agreements aligned with the distribution contracting principles, progress is still slow. It is important to note however that it takes constructive engagement by both parties to achieve the outcomes being sought.
33. Information for this review has been obtained through a review of all the signed GMSAs and unsigned in-progress template/standard GMSAs provided by meter owners, and interviews of all gas meter owners (except GasNet which was unavailable), and all retailers (except for Switch Utilities and Pulse Energy who have contracted Vector Gas Trading Limited to act as agent for gas metering services).
34. The review of GMSAs and discussion with participants indicates gas meter owners do not appear to be competing actively for new connections, and retailers are choosing the network owner's related GMS provider. It is noted that:
- a) the primary focus of gas meter owners is the supply of metering services on networks where they are also the network owner;
 - b) where the network owner also owns a metering business, and the network owner's service request process provides for choice of GMS provider, retailers are choosing or defaulting to the related GMS provider;
 - c) unless there is a differentiated price or service reason, retailers have indicated a preference for dealing with one party to provide both network and metering services because of the operational efficiencies and customer benefits from a more seamless process;
 - d) even with Vector's sale of its North Island gas distribution network assets to First Gas, which has implemented a separate system for network service requests and new connection applications, retailers are continuing to nominate Vector AMS as the GMS provider for all new connections;
 - e) where the network owner is generating the bulk of the demand for new connections and has its own metering business, it is logical the network owner provides metering services for the new connections it has generated
35. With Vector's sale of its North Island gas distribution assets to First Gas, the situation has changed in that the industry now has a network owner who is not a metering services provider.

After initially continuing to use Vector's Siebel system for network and metering services requests, First Gas implemented its own system for new connection applications (MS Dynamics CRM system interfaced to its Maximo asset management system). Despite this change, retailers are still nominating Vector AMS as the GMS provider in First Gas's MS Dynamics system, and separately logging corresponding GMS installation service requests in Vector's Siebel system.

36. Retailers were mostly of the view that agreements should allow for a competitive market for gas metering services where retailers have a choice of GMS provider, notwithstanding that the retailer may choose the related meter owner (or incumbent GMS provider where there is no related meter owner to provide metering services) for new connections for the reasons outlined above.

37. The current state of signed and unsigned gas metering services arrangements and GMSAs provided by meter owners is summarised below. Meter owners would prefer all retailers are on signed GMSAs so that the rights and obligations of the parties are clear and unambiguous; however, there is little meter owners can do to force engagement and execution. The following comments are focused on provisions that are different to what may be expected in a standard/template GMSA; however, they may be considered quite acceptable if the provision is intentional and both parties agree (i.e., if preferred supplier status is intentional and there is a commercial trade-off).

Vector AMS GMSAs

38. Vector AMS provided three GMSAs.

a) [Redacted at the request of Vector AMS.]

b) [Redacted at the request of Vector AMS.]

- c) **Vector AMS template GMSA** (open term). The template GMSA was provided to uncontracted retailers for review and feedback in October 2013. Vector AMS has advised it received very little feedback on it and no retailer has yet signed. In the absence of any other signed GMSA, Vector AMS advised it is providing GMS services in accordance with the template GMSA terms. It is noted that there are a lot of terms in the Vector AMS template GMSA that are similar to the Powerco draft standard GMSA, and that in general it includes terms and performance standards expected in today's market for metering services. Terms relevant to this review include:
- i. **Clause 18 Preferred supplier status for Vector GMSs at retailer supplied ICPs as at commencement date** – Retailer is obligated to continue to use Vector AMS GMS services if such services are supplied at an ICP that is supplied by the retailer as at the commencement date. However, the obligation is subject to Vector providing GMS services that are as favourable in terms of price, terms, quality, timeliness, location and technology as are available to the retailer in its own right or from a 3rd party service provider. It provides for a process of notification by the retailer and response by Vector AMS, including an opportunity for Vector AMS to amend its GMS services so that its offer is as favourable. This clause would limit the retailer's choice but in the absence of differentiated price or services (including advanced metering services) would seem to have little effect for retailers.
 - ii. **Clause 7.9 Preferred supplier status for replacement of Vector GMSs installed at retailer's ICPs as at commencement date** – Where the retailer wishes to replace a Vector AMS GMS and/or associated equipment with a 3rd party's metering equipment, it must give one month's notice and comply with clauses 5.4 (prior written approval to work on and remove Vector AMS's metering equipment) and 18 (preferred supplier status). This clause is similar in effect to clause 18 which would limit the retailer's choice but in the absence of

differentiated price or services (including advanced metering services) would seem to have little effect for retailers.

- iii. **Schedule 2 GMS Performance standards** - Includes a comprehensive set of GMS service definitions and performance standards, and an additional nine critical GMS performance standards which are categorised into three subsets reflecting the importance and bearing on the retailer's business performance. For the critical GMS performance standards, it is intended that the relationship managers will meet monthly to review and agree actions based on a predetermined threshold matrix. The inclusion of critical performance standards provides an excellent platform for continuous improvement in areas that are considered most important to the retailer's business performance, and a useful addition to the reactive performance standards. The inclusion of the comprehensive performance standards ensures clarity for both parties, and is a significant improvement on legacy agreements.
- iv. **Clause 13 Variation of GMS Service Fees** - Vector AMS may vary prices on one month's notice, not more than once in any consecutive 12 months, and if the increase is greater than x% must consult in good faith. The notice period is not consistent with the industry norm which requires 40 business days' notice which is intended to give retailers time to process and make decisions before providing at least 30 days' notice to customers in accordance with standard customer contracts should the retailer wish to pass through in part or in full.
- v. **Equitable treatment** – There is nothing in the template GMSA that contemplates inequitable treatment of retailers, neither did any of the interviews indicate any evidence of failure by Vector AMS to treat all retailers even-handedly in the provision of GMS services. It is noted that Vector Gas Trading acts as agent for GMS services (and network services) for smaller new entrant gas retailers Switch Utilities and Pulse Energy.

Powerco GMSAs

39. Powerco provided three GMSAs and its Price Book.

- a) **Powerco standard GMSA** (open term). The standard GMSA is work in progress, however as it is close to final draft Powerco wished it to be considered as part of this review even though it is not yet in a state to share with retailers. It reflects Powerco's intention to replace its legacy agreements (unbundled or bundled with network services and/or

geographically bound) with a separate standalone fit-for-purpose GMSA covering GMS services across all its serviced areas which are currently aligned with Powerco's gas network regions. It is noted that there are a lot of terms in the Powerco draft standard GMSA that are similar to the Vector AMS template GMSA, and that in general it includes terms, service definitions and performance standards expected in today's market for metering services. Terms relevant to this review include:

- i. **Clause 1.1 Defined terms** – This provides for an Early Termination Charge specified in, or determined in accordance with, the Price Book. While there is nothing specified in the Price Book, clause 7.5 of the GMSA states that an Early Termination Charge will apply for retailer initiated Powerco GMS removals, except where Powerco agrees otherwise in writing or either party terminates the GMSA in accordance with the termination clause 15. While attention is drawn to this provision which may restrict competition, it is impossible to comment without more detail.
- ii. **Clause 10 Charges** - Powerco may vary prices on 40 business days' notice, not more than once in any consecutive 12 months. While there are no provisions in clause 10 requiring Powerco to consult on price structure changes or price increases above a predefined level, clause 15.4 provides for an "Adjustment Threshold" which entitles the retailer to terminate the GMSA if the notified overall increase exceeds CPI plus x%.
- iii. **Amendments to GMSA** – Clause 19.3 provides for either party to request changes, and for good faith negotiations. It also allows for proposed changes required by law or any mandatory rules or protocols to be referred to "technical arbitration" to be resolved by a person with appropriate technical and/or industry experience. This clause 19.3, and clause 19.2 which allows Powerco to amend the variable provisions (KPIs, Price Book excluding prices) following consultation and ensuring consistency with good industry practice, is an appropriate mechanism to maintain common terms in all GMSAs based on the standard GMSA.
- iv. **Schedule 1 GMS Services and Schedule 2 KPIs** - Includes a comprehensive set of GMS services with target service levels, and service standards/KPIs. The inclusion of the comprehensive service definitions, target service levels, and performance standards ensures clarity for both parties, and is a significant improvement on legacy agreements.

- b) **Powerco Taranaki GMSA** (initial term 1 year, extended monthly thereafter until terminated with 1 month notice). This agreement has been around since around 2000, and while it is a standalone GMSA and reflects good industry practice at the time it lacks some terms, service definitions and performance standards expected in today's market for metering services. Terms relevant to this review include:
- i. **Clause 2 Use of [Powerco] metering equipment** – gives Powerco the right to supply Powerco metering equipment at all ICPs supplied by the retailer on Powerco's Taranaki gas networks, and the right to nominate any ICPs at which it will not supply or cease supplying Powerco metering equipment.
 - ii. **Price changes** - Clause 7 allows Powerco to vary prices on 1 month notice which is inconsistent with the industry norm of 40 business days, and not more than once in any 12 consecutive months. It obligates Powerco to act fairly and reasonably and treat all retailers equitably when setting prices, and must consult with the retailer if it proposes making material changes to its pricing methodology which would, if introduced, have a material adverse effect on the retailer. However, clause 16 provides for 20 business days' consultation before notification of any price change, and 60 days' notice of price changes which is consistent with the industry norm. Notwithstanding clauses 7 and 16, Powerco's standard process is to engage with retailers before notifying GMS price changes.
 - iii. **Equitable treatment** – Clause 8 provides that where Powerco offers terms to another party which differ in any material way from the terms in the GMSA with the retailer, it is obliged to offer the same terms to the retailer.
 - iv. **Clause 16 Review and Variations to Agreement** – This clause sets out the process that enables either party to propose variations or initiate a review, the requirement for good faith negotiation and referral to arbitration if agreement is not reached. The arbitrator must have regard to the respective benefits and burdens, the effect of any changes or reasonably anticipated changes in any law, technology, or accepted industry practice, and the requirement for equitable treatment of retailers.
 - v. **Performance standards** - there are no service definitions or performance standards in the agreement.
- c) **Powerco AGL Network Services Agreement and associated Information Memorandum which applies to the Hutt Valley network** (initially a 10 year term which expired in 2009). While the provision of gas metering services is included in both the Network

Services Agreement (“NSA”) and Information Memorandum (“IM”), they bundle network and metering services and lack the terms, service definitions and performance standards expected in today’s market for metering services. Terms relevant to this review include:

- i. Both the NSA and IM reflect outdated industry arrangements before development of the gas market for unbundled services.
 - ii. Gas metering is to be provided by Powerco unless otherwise requested.
 - iii. The NSA allows for 3rd party telemetry equipment, but if Powerco telemetry equipment is installed Powerco is required to download and provide interval metering data to the retailer.
 - iv. The terms for price changes do not reflect current practice.
 - v. There are no metering service definitions or performance standards in the NSA or IM.
- d) **Price Book.** While this includes service descriptions for chargeable gas metering services, they are primarily focused on pricing rather than setting service definitions and performance standards.
- e) **Equitable treatment** – There are no terms in the draft standard GMSA or any of the signed metering services agreements that contemplate or allow for inequitable treatment of retailers, neither did any of the interviews indicate any evidence of failure by Powerco to treat all retailers even-handedly in the provision of GMS services.

GasNet GMSA

40. GasNet provided its standard distribution services agreement (“DSA”) which bundles network and metering services via a link to its website. It is apparent the terms have changed over the years, but it is not known to what extent the terms of the various signed agreements differ. In any event the current agreement has been reviewed for the purposes of this report. GasNet has a draft GMSA which is work in progress, but the agreement requires further review and drafting before it can be released as a draft to retailers for their consideration. Due to other priorities GasNet was not available to be interviewed to discuss current and future arrangements, including the extent of progress towards the separate standalone GMSA.

- a) **GasNet standard DSA** (open term). In general, the current standard DSA lacks some terms, service definitions and performance standards expected in today’s market for metering services. Terms in the standard DSA relevant to this review include:

- i. **Clause 7.6 TOU device** – The retailer is obligated to use GasNet to provide a TOU device (corrector) at all delivery points with a nominated annual quantity > 10TJ, there is no option to use 3rd party provider.
- ii. **Clause 12.2 Delivery Point measurement** – Clause 12.2.1 states that subject to any other arrangement between the parties, GasNet is to provide gas metering equipment at all delivery points to measure the amount of gas delivered to the retailer for the purposes of network charges. Clause 12.3 confirms that the quantities used for network billing can only be measured by GasNet’s meter and any TOU device installed by GasNet. While it suggests a retailer may be able to negotiate an agreement with GasNet that entitles the retailer to engage a 3rd party to provide metering services, registry statistics indicate that currently GasNet provides metering for 100% of the ICPs on the GasNet network.
- iii. **13.9 Price changes** - Allows GasNet to vary prices annually on 2 months’ notice which is consistent with the industry norm of 40 business days. In the event the retailer does not accept the new prices it may require GasNet to submit to dispute resolution, albeit it cannot dispute the pricing methodology. GasNet must consult with the retailer to ensure the economic impact of the price changes are equitable if it proposes making material changes to its pricing methodology which would, if introduced, have a material adverse effect on the retailer.
- iv. **Clause 3.2 Equitable treatment** – GasNet warrants to treat all retailers on an arms-length basis.

Bypass

- 41. There are no provisions in the GMSAs or evidence provided in interviews that suggest the threat of gas network bypass is having any impact on gas metering service arrangements.
- 42. Comment was made that transparency from the separation of network and metering has influenced a change.

TOU metering and data services

- 43. Gas TOU metering and data services are largely relevant to sites > 10TJ which are required to have TOU metering and retailers are required to provide daily consumption data to the allocation agent in accordance with the Gas (Downstream Reconciliation) Rules 2008. The TOU

sites are either Allocation Group 1 (AG1) sites with telemetry, or Allocation Group 2 (AG2) sites without telemetry.

44. In the context of this review, TOU metering and data services includes only AG1 and AG2 sites, and does not include AG4 sites (250GJ-10TJ) or AG6 sites (< 250GJ) for which a different solution more suited to residential and small/medium commercial sites may be offered in due course (e.g. gas advanced metering and data services).
45. Currently there are around 450 gas TOU sites - 120 AG1 on telemetry, and 330 AG2 without telemetry across all meter owners and retailers.
46. The TOU metering and data services available to retailers for AG1 and AG2 sites includes:
 - a) Conversion device capable of recording interval data, either
 - i. corrector with pressure and/or temperature correction; or
 - ii. data logger installed on a fixed factor meter.
 - b) Communications cabinet, requiring continuous power supply
 - c) Telemetry - provision of modem installed in communication cabinet
 - d) Pulse output – from communications cabinet to safe area for use by the customer’s energy management system
 - e) Data conversion – downloading metering data and processing to hourly or daily energy format (conversion from actual m³ to standard m³ to energy (GJ)) which is provided to retailers daily and/or monthly.
47. Vector AMS, Powerco and GasNet all provide TOU gas metering services including telemetry to enable remote data collection where requested, but only Vector AMS provides data conversion services.
48. The Vector AMS data conversion service provided to retailers who have contracted for the service includes downloading the interval metering data via telemetry and dial-up from AG1 sites where TOU metering and telemetry equipment is installed, irrespective of the owner – i.e. it is providing the service for sites where equipment owned by Vector AMS, Powerco or GasNet is installed.
49. Alternatively, a retailer may have its own capability to download metering data via telemetry and dial up from AG1 sites, and to convert metered volumes to energy in its own system.
50. All retailers with AG2 sites have arrangements in place to download metering data via laptop following month end. The metering data is then processed from metered volume to standard volume to energy by individual retailers in their own systems, or by Vector AMS providing a data conversion service.

51. The current arrangements have their limitations, and are not easily scalable both from technical and cost perspectives. The future will be driven by the need for more accurate daily allocations required for efficient management of daily balancing (i.e. more accurate D+1 daily allocations), and by customer expectations for more transparency of their energy usage. It is inappropriate to speculate on what changes may be in the pipeline, but it could include:
- a) Moving more (if not all) AG2 sites to AG1, subject either to a business case to incentivise or potentially a change to the rules.
 - b) A change away from pull (dial-up) to push to collect interval data, similar to the approach used for advanced metering.
 - c) Introduction of advanced metering services.

Are GMSAs “future proof” in the face of new metering technology?

52. Current and draft template/standard GMSAs are not future proof in the face of new metering technology, or advanced metering and data services.
53. While Vector AMS’s template GMSA includes some terms pointing to the future of smart (advanced) gas metering and/or pulse output metering, the GMSA does not include the terms that would be required to support mass deployment of advanced gas metering and provision of associated services.
54. Powerco’s draft standard GMSA does not include any terms pointing to the future of smart (advanced) gas metering, and therefore the same comment applies that the GMSA does not include the terms that would be required to support mass deployment of advanced gas metering and provision of associated services.
55. GasNet’s DSA does not contemplate the future of smart (advanced) gas metering.
56. New standalone advanced metering and data services agreements will be required to support mass deployment of advanced gas meters and provision of associated services, and will likely mirror similar agreements in the electricity industry which emerged from commercial negotiations. In addition to the normal core commercial terms, such agreements would need to cover deployment plans and customer communications, ownership and use of data, security of data, new service definitions and performance standards, and prices for smart metering services and data services. It is also likely that the mass deployment agreements will include preferred supplier and first right of refusal terms given the significant investments required.
57. It may be that interim arrangements for limited deployments (e.g. trial sites, new connections, end-of-service-life replacement of standard GMS with advanced metering) could be negotiated

as variations to the template/standard GMSAs, however they will need to include terms that provide for, among other things, new service definitions, prices, and ownership and use of data.

Other feedback relevant to gas metering services

58. The following is not attributable to any particular participant, but is intended to record some suggestions put forward during interviews.
59. The registry should include meter make and model as additional information to support retailer management of installation information and billing quality. It is noted that this issue was reviewed prior to the registry enhancements but was not pursued due to the risk of data duplication.
60. The ICP number should be recorded on the meter on a sticker (as is the case for electricity meters) to reduce the opportunity for errors with associated installation details used for correct billing set-ups and billing - such as incorrect address, incorrect ICPs, wrong meter details, meter reader reading wrong meter, wrong ICP switched. While there has been some discussion between one retailer and meter owner, it would be useful if Gas Industry Co facilitated discussion across all affected participants to see if it is a practicable and useful improvement, and if so who would meet the cost.

Appendix: Terms of reference

The terms of reference for the review of current arrangements includes the following:

1. checking with the Commerce Commission to ascertain whether work they have undertaken regarding the gas metering market (e.g. the preliminary assessment of whether to conduct a Part 4 enquiry into gas metering services) or any other studies that would cross-over with this work;
2. reviewing the meter service agreements (both currently active and intended) and gathering feedback from meter owners and their customers on any issues with those agreements;
3. considering whether the agreements are “future proof” in the face of new metering technology;
4. interviewing counterparties to obtain a qualitative view of whether the market is sufficiently contestable that parties are able to negotiate reasonable terms and conditions and whether there is any evidence of differing treatment (e.g. small and/or new-entrant retailers receiving different terms/conditions/prices);
5. comparing actual agreements with meter owners’ current standard agreements (noting where no standard agreement exists);
6. reviewing the contestability of the gas metering market in relation to the provision of services by meter owners, for example by:
 - a) examining how easy is it for a third-party meter owner to enter the gas market;
 - b) ascertaining whether the threat of bypass presents an issue for metering service provider arrangements; and
 - c) ascertaining whether new connection arrangements present any restrictive practices to be concerned about where distributors also own metering businesses;
7. considering whether the review indicates there is any need for:
 - a) standardising arrangements (e.g. model contract, benchmark terms, regulated access arrangements, etc.);
 - b) testing conclusions with market participants; and
 - c) holding further discussion with the Commerce Commission to discuss the most efficient approach to addressing any issues that may be identified.