



# Competition Effects of the Proposed Acquisition of Contact Energy's Gas Metering Assets by Vector

28 January 2013

## 1 Introduction and Summary

Vector has asked Castalia to consider the competition effects of the proposed merger between the gas metering businesses currently owned by Vector and Contact. The proposed transaction would result in Vector owning approximately 70 percent of the gas meters in New Zealand.

In this report, we:

- Examine the nature of competition between the owners of gas metering assets, and
- Ask whether—given the features of competition in the relevant markets—the proposed aggregation of meter asset ownership is likely to substantially lessen competition.

We conclude that due to the unique features of the relevant markets in this case, there is unlikely to be a material difference in the competitive constraints on meter owners under the proposal (“the factual”) and a counterfactual where the proposed aggregation does not occur.

This report is structured as follows:

- In Section 2 we investigate the specific role of gas meter asset owners in the gas metering market in New Zealand, and the role of other players in this market
- In Section 3 we examine evidence on how asset owners compete
- In Section 4 we use information from the preceding two sections to compare competitive conditions under the factual and the counterfactual.
- Section 5 concludes.

## 2 Gas Meter Asset Ownership

Several parties are involved in the delivery of gas metering services to retailers and end consumers. This section describes the particular role that gas meter owners play in the gas metering service supply chain, and how this role is distinct from the roles played by meter suppliers and field service providers. This understanding allows us to analyse the product and geographic boundaries of the market for owning gas meters in New Zealand.

## 2.1 The Gas Metering Service Supply Chain

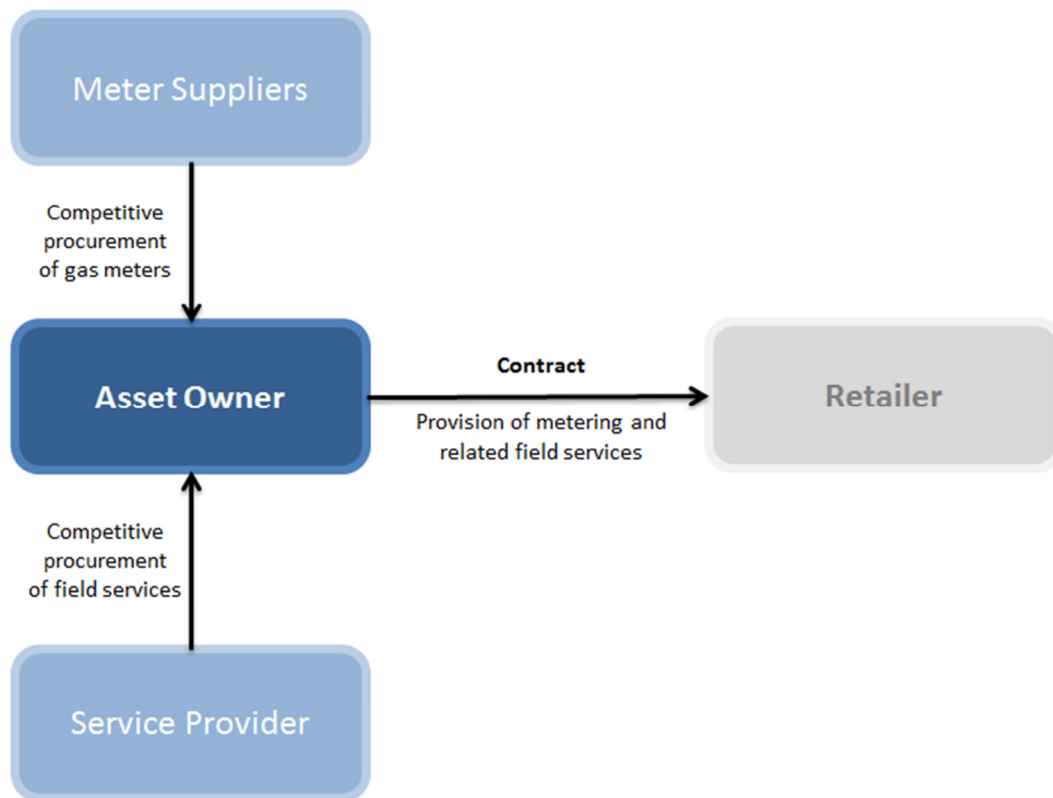
To determine whether the concentration of gas meter ownership creates any competition issues, it is important to first understand the distinct role that gas meter owners play in delivering metering services.

### Meter owners play a distinct role in the gas metering supply chain

An overview of the key procurement and contractual relationships in the gas metering service supply chain are shown in Figure 2.1. In this market structure, the owners of gas meters coordinate a web of contractual arrangements by:

- Competitively procuring meters and other components required to produce a Gas measurement System (GMS) from meter suppliers
- Competitively procuring field services, such as installation, maintenance and meter reading, from specialist service providers
- Contract with retailers for the provision of metering and related field services.

Figure 2.1: Meter Asset Ownership



Through these contractual arrangements, asset owners offer two types of services:

- **Asset owners provide capital.** As a result, any competition between gas meter asset owners should in part reflect the relative cost of capital of each market participant
- **Asset owners provide contract and relationship management skills.** The asset owners themselves do not supply, install or service meters. However, they need technical and commercial skills to decide on which meters to procure, how to enter and manage contracts with service companies (such as

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Tenix) in order to provide retailers with the products and services demanded by end-consumers.

## **Competitive procurement for the supply of meters and field services**

Gas meters can be sourced from a number of meter manufacturers. The New Zealand market for new gas meters appears to be around [ ], accounting for both new installations and replacement of aging meters. While larger asset owners may enjoy the benefit of scale in procurement, it is unlikely that scale could be used as a barrier to entry by potential new asset owners:

- There are many gas meter manufacturers around the world. A new entrant may be able to get discounts from manufacturers interested in entering the New Zealand market
- Any market entry (as we discuss later in the paper) is likely to be at scale, involving early replacement of a significant number of existing meters. Hence, it is likely that a potential new entrant would enjoy a greater benefit of scale than existing asset owners who only procure for new installations and replacements.

Service companies, such as Tenix, provide the full range of field services, including installation and servicing (as required). The key requirement for the provision of field services is the knowledge of the New Zealand gas regulations and the necessary technical qualifications and registrations. A number of companies have the expertise to supply such services, and the barriers to entry into the market for the supply of field service are low: any group of qualified engineers and technicians could form a service provider to rival the incumbents. The formation of a new Gas Measurement System (GMS) service provider delivering services to the industry appears relatively simple. As an example, Electrix established their gas division in early 2009 and quickly grew the business that year to become the service provider to Contact. Since that time, they have expanded their client base to include, Vector, [ ] and other gas industry participants. They were able to achieve this through sourcing suitable skilled and qualified personnel, and the required materials.

Existing service providers do not provide service exclusively to any asset owner. This means that access to technical skills and the cost of carrying out installation and other field services are also not likely to be barriers to entry by new asset owners.

## **The distinct role of gas meter owners is important for understanding competition**

In our view, the fact that the gas metering service provided by the GMS is fundamentally an asset ownership business is critical to understanding the nature of competition in this market. To the extent that meters owners compete at all, this competition does not occur on any of the usual product and service dimensions, such as the technical characteristics of the meters they own or the quality of field services. Those factors are largely common to all asset owners through their access to the same metering equipment suppliers and field service providers.

In other words, any competition between asset owners must occur on:

- The cost of capital (since price differentials between asset owners would be primarily driven by the cost of capital), and
- The quality of contract management service provided to retailers. Retailers will be concerned to ensure that field services are responsive to customer requests

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and technical needs, and that the billing arrangements are easily integrated into retail billing.

Overall, retailers are looking for an outcome, and are aware that the ultimate sanction they can exercise is to contract with another asset owner to replace the entire meter fleet servicing their customers. Asset owners will structure their offering and pricing to avoid triggering such an event.

## 2.2 The Product Dimension of the Gas Metering Market

In our view, there is a distinction between the ownership of mass market gas meters and the ownership of large industrial and commercial gas meters (time of use) because:

- The installation of commercial and industrial meters generally requires bespoke design
- The cost of the meter and other materials is likely to be a smaller proportion of the overall cost of large industrial and commercial metering, with installation and maintenance making up a larger proportion of total costs. Once the equipment is installed, there are relatively low barriers to replacing the actual meter and other components with alternative equipment. In fact, we understand that there are some examples of large commercial and industrial meters being replaced by equipment owned by another asset owner prior to their retirement. No such examples exist for mass market gas meters.

Most crucially, a large industrial or commercial user has the realistic choice of becoming an asset owner itself. While such choice (in theory) is open to all gas users, the transactions costs of managing the procurement of meter and related works, and contracting with the retailers to exclude GMS asset charges from the standard retail bill would likely be overwhelming for mass market customers. In contrast, industrial and commercial users either directly or utilise consultant to engage in the meter design process through providing details of capacity and pressure requirements to enable the correct selection of the GMS to match the installation needs. These entities could realistically replace the functions carried out by the asset owner and become asset owners themselves as they already employ or engage people with the appropriate knowledge and skill with experience in other gases or fluids with similar measurement and pressure control requirements.

## 2.3 The Geographic Dimension of the Gas Metering Market

Our analysis suggests that there is no geographic dimension to asset ownership. Since asset owners contract all meter supply and field services, such contracts can and do cover all of New Zealand.

The Commerce Commission has observed that asset owners associated with a gas network tend to largely operate on that network, and that there has been little change in asset market shares across networks. However, we do not believe this fact indicates that the geographic dimension is important. Rather, the geographic persistence of asset ownership reflects the fact that there are relatively few new service point installations. For example, we understand from Vector that it installed around [ ] gas meters during the 2012 financial year. [ ]

While the churn in the retail market is estimated at around [ ] percent, such churn cannot be expected to translate into churn in meter asset ownership. Rather, a change in the geographic pattern of asset ownership would occur if a retailer decided to go through a

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bulk replacement of the existing meters. Since asset owners are careful to price to avoid that, we would expect to observe a stable geographic pattern set by the incumbency of the gas meters.

## **2.4 Conclusions**

The proposed gas meter acquisition will result in a merger between asset owners, and does not involve any changes to the market for the supply of gas meters or the market for the provision of technical field services that contract with asset owners. This means that the analysis of competitive effects needs to focus on any material changes in the constraints on asset owners in performing their specific functions in the gas supply chain.

### 3 Competition between Asset Owners

We now apply the understanding of the characteristics of the gas metering market and the role of asset owners to consider how competition plays out between different asset owners. We believe that the key feature of any potential competition between gas meter owners is the fact that once a meter is installed, it effectively acquires an element of natural monopoly at that particular ICP and can be priced up to replacement cost. The constraint on pricing decisions and maintaining service quality therefore comes from the risk that a retailer will switch to self-supplying meters (at scale), rather than through the interactions between different asset owners or potential entrants.

#### **Price competition for mass market metering is limited to replacement and new meters**

In the mass market, the cost of dis-assembling an existing meter and installing a new meter (including administration costs) is [ ]. The capital costs of a new meter and regulator fall between [ ] and [ ]. This means that a competitor seeking to replace a meter would incur costs that [ ] capital cost recovered by the incumbent owner through its prices. In order to out-compete an incumbent asset owner on price, a competitor would therefore have to be able to access capital at a cost [ ] of the incumbent's cost of capital. Since this is unlikely, we would not expect to see effective competition for the right to replace an existing meter prior to retirement.

Competition on price is possible at the time that meters are retired: in principle, at that time, a replacement meter can be provided by any asset owner. However, in practice, the transactions costs of identifying retiring meter opportunities are likely to be too high for this to be a viable entry strategy. The current asset owner has a significant information advantage in knowing when a meter needs to be replaced, and has no incentive to share that information with other market participants or potential entrants. Since retailers tend to contract for a fleet of meters and do not monitor the condition of any particular meter, an asset owner is likely to manage a meter replacement program in a way that minimises the risk of a change in ownership.

This means that in the mass market, the only likely area of competition is for new customer installations. In principle, such an installation could be carried out by any asset owner. Since the gas retail market in New Zealand is only growing very slowly, there are relatively few such installations. However, when they occur, existing asset owners do not enjoy any benefits from incumbency.

Competition for new installations is also the main field of competition in the commercial and industrial segment of the market. As described above, there is considerably more opportunity for competition with respect to replacement of the existing meters in the large commercial and industrial market segment. The economic benefit of incumbency in such meters is lower (i.e. there is less of a natural monopoly effect once the meter is installed), while the opportunity for the user to become the asset owner is enhanced.

The key question is whether the competition for new installations influences the pricing of the incumbent meters. [

] Conceptually,

pricing in this market could work in one of two possible ways:

- One theory is that prices are driven by new installations. In this case, we would expect that in a competitive market, price would trend towards marginal cost. In this case, it would mean that the daily charges would be set

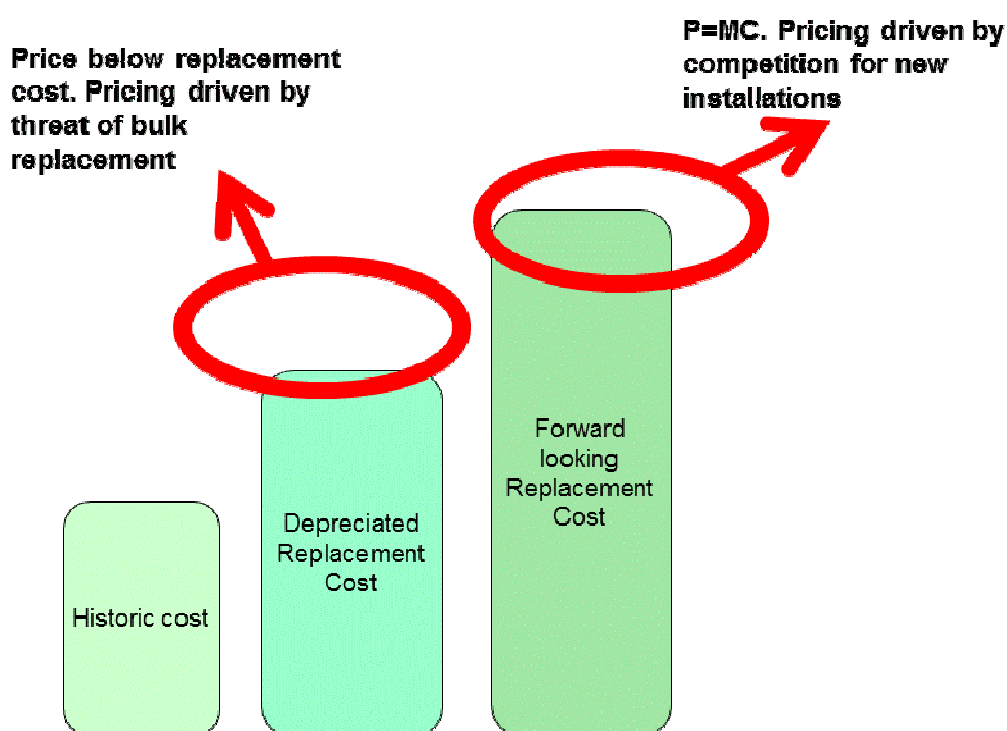
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to cover the forward looking replacement cost of new meters. Since the incumbent meter fleet is substantially depreciated, asset owners pricing at the long-run marginal cost should be earning a high economic profit on their meter asset base

- The other theory is that pricing by asset owners is limited by the threat of bulk replacement by a disgruntled retailer. To avoid that risk, asset owners would set the daily charges to cover less than the replacement cost of the fleet. For example, the charges may be related to the depreciated replacement cost. On this basis, the asset owner would actually make an economic loss on each new meter. However, this marginal economic loss would be necessary to maintain an on-going business.

The chart below illustrates this concept.

Figure 3.1: Asset base valuation as an indicator of pricing strategy



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## Evidence of pricing from the Powerco gas authorisation

Given the nature of competition described above, and the lack of growth in the New Zealand gas retail market, we would expect to observe that market shares of gas meter asset owners remain static despite persistent price differences. The time period covered by the gas authorisations provides a useful natural experiment to test this expectation. Under the gas authorisations, the gas meter assets owned by Powerco were included in

the Powerco regulated asset base, while the gas metering assets on Vector's network were not subject to the authorisation.<sup>1</sup> As a result, the cost of capital involved in gas meter asset ownership on the Powerco network was effectively set at the same level as for other regulated network assets.

We understand that during the time period covered by the authorisation Powerco's GMS charges were substantially lower than the charges of other GMS asset owners. While a direct comparison between different prices is difficult, it appears that Powerco's charges were [ ]percent to [ ]percent lower than GasNet or AMS charges (which were not subject to an authorisation).

Our discussions with the industry sources suggest that during the period of regulation, Powerco did not attempt to gain market share, and may have even tried to discourage new customers to avoid making an economic loss on providing new meters. However, even if Powerco were discouraging new customers, we would have expected that motivated customers on networks where Powerco was operating and did not already have 100 percent market share (such as Wellington) would have found a way to take some advantage of Powerco's lower prices. The persistence of such pricing differences without noticeable changes in market shares further illustrates the lack of importance of price competition in this market.

### **Replacement costs provide a limit to prices that has not been reached**

Overall, the market evidence suggests that the discipline on the prices charged by gas meter asset owners comes from the threat of bulk replacement of incumbent meters, rather than from the marginal competition for new customer service point installations. In our view, the nature of the gas metering market implies the following limits:

- For meters that are already installed and do not require replacement, prices could rise to just below the level that would trigger replacement. The degree of concentration of meter asset ownership makes no difference to the nature of this constraint
- Competition for the right to install the original meter at a new customer service point should drive prices to just cover the replacement cost. However, since asset owners charge the same price for incumbent and new meters, the price for new meters will also be set by the need to avoid triggering replacement. This would, again, mean that the concentration of incumbent asset ownership is unlikely to affect pricing decisions. If all prices were set by competitive tension for new installation, then the number of asset owners would matter, and greater concentration could lead to higher prices. However, if prices are set by the replacement cost limit, then greater concentration would make no difference.

Overall, the relatively small number of new customer service point installations compared with already installed meters, and the limited ability to discriminate through various ancillary installation-related charges, suggests that any price effects of competition for new installations are unlikely to influence pricing in the broader gas metering market. As we highlighted above, persistent price differentials between GMS asset owners support this view.

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<sup>1</sup> The reasons for this different treatment are explained at paragraphs 82 and 83 of the Decisions Paper dated 30 October 2008, available on the Commission's website at: <http://www.comcom.govt.nz/assets/Imported-from-old-site/industryregulation/Gas/CommissionReportsandDocuments/ContentFiles/Documents/comcom-controlofsupplyauthorisationspowercoandvectordecisionspaper-oct2008.pdf>



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However, we note with interest—from the information supplied by Vector to the Commission— [ ]

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## **The decision of retailers to switch (at scale) disciplines the behaviour of meter owners**

In our view, this form of price restraint is consistent with the explanation provided by Vector to the Commerce Commission: that the main risk to asset owners is that retailers would choose to switch to self-provision of meters.

If a retailer became unhappy with the pricing decisions made by the meter owner, it could potentially replace all the meters currently leased by that retailer from an asset owner. Such bulk replacement would cost considerably less per unit than one-off meter replacements:

- The retailer could contract for bulk supply of meters. The opportunity to supply, say, [ ] in a market that normally takes around [

] A service provider, such as Electrix, who has an existing relationship with [ ] could meet this need through extending their business model by becoming a meter asset owner themselves.

This threat is particularly heightened by the possibility that a retailer may wish to switch to advanced meters anyway, and could use that opportunity to extract value from the asset owner.

- The retailer would have similar bargaining power with field service providers as existing asset owners. Field service providers would also compete keenly for contracts to replace a substantial number of meters, and to provide field services to the retailer.

In other words, gas meter asset owners have every incentive to set prices that are well within the comfort level of the retailers, as well as providing contracting services that are seen by retailers as responsive and helpful.

## **The evidence on demand characteristics is consistent with this form of discipline**

We understand that in various discussions and materials provided to the Commission, the attitude of the retailers has been characterised as:

- Being driven by good information about the costs of the asset owners
- Reluctance to own gas meter assets unless absolutely necessary
- As long as the asset owners' charges and service were seen as reasonable, concern to ensure that all retailers were charged on the same basis.

We believe this evidence is consistent with our observations about competition in this market:

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- Retailers understand that self-provision is the only competitive constraint in this market, while also understanding that actual self-provision is unlikely
- Hence, retailers expect that asset owners will set prices below the level that would justify self-provision
- In this setting, an individual retailer has no mechanism to turn GMS pricing into a competitive advantage. Rather, the key competitive consideration for retailers is to ensure that GMS services are responsive to their needs, particularly with respect to timeliness

Given these demand characteristics, we would expect that retailers' only practical concern about GMS pricing would be that it does not discriminate in favour of other retailers.

## **Summary of the key features of the gas metering market**

To summarise, there appears to be a limited amount of price competition between gas meter asset owners at the margin for new customer service point installations. This competition is unlikely to exercise significant constraint on the pricing for the incumbent metering assets. Asset owners do not exercise any competitive pressures on other asset owner's pricing for the incumbent meter fleet. The constraint on such pricing comes from the risk of bulk self-provision by a disgruntled retailer.

## 4 Effects of the Proposed Acquisition

When considering whether to grant clearance to the proposed acquisition, the Commerce Commission needs to decide whether combining gas meter asset ownership in the manner proposed would substantially lessen competition. Substantial lessening of competition would mean that prices would rise or service quality would decline (or both) due to the loss of competitive constraints.

In the preceding sections of this note, we have described the nature of competition between gas meter asset owners and found that:

- The relevant market is the market for the gas meter asset ownership services, which includes the provision of capital and of contracted services
- There are two distinct product sub-markets: mass market meters and bespoke industrial and commercial meters
- The relevant geographic market is New Zealand.

We now consider what these conditions mean for competition in the counterfactual and the factual.

### **Competition if the acquisition does not proceed (“the counterfactual”)**

In the counterfactual (if the acquisition did not proceed), the existing market structure will have three key features:

- Prices for the incumbent mass market meter fleets will be limited by the threat of replacement self-provision by retailers. Without that constraint, ownership of the already installed mass market meters could be treated as a natural monopoly
- Pricing for bespoke industrial and commercial meters will continue to be constrained by the lower barrier to replacement, and by the additional opportunity for the end consumer to become the asset owner.
- At the margin, asset owners will compete for new customer point installations.

### **Competition if the acquisition does proceed (“the factual”)**

The key question is how (and whether) the factual—where the merged entity will own approximately [ ] percent of the already installed meter assets—will differ from the counterfactual. In our view, none of the three key features present in the counterfactual will change:

- Constraint by self-provision. This constraint is unlikely to be influenced by the concentration of incumbent meter asset ownership. The limit of retailer’s tolerance and the effort required to self-provide are not affected by the concentration of incumbent meter asset ownership.
- Bespoke metering solutions for industrial and commercial customers. Our analysis suggests that the concentration of incumbent meter ownership will make no difference to this form of competition. The pricing constraint here also arises not from other incumbent asset owners but from the enhanced threat of self-provision, and the lower barrier to physical replacement.
- Competition for new customer service point installations. At a conceptual level, the proposed merger may reduce the degree of competition for new installations. The new large-scale asset owner may be more focused on its

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incumbent fleet, and even less inclined to risk spill-over from competition at the margin into pricing for the already installed fleet. However, we believe any such reduction in competition would not be material in practice because:

- There is limited evidence of current price competition for new installations
- There will be on-going competition from at least [3] remaining asset owners
- The number of such installations is so small, that the overall effect would be minimal.

## **5 Conclusion**

We conclude that the unique circumstances of gas meter asset ownership mean that the proposed acquisition would not have material effects on competition, despite a significant increase in market concentration.