



Decision

**Gas Distribution: Monitoring Service
Quality**

June 2003

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1. INTRODUCTION

The Queensland Competition Authority has responsibilities in relation to the regulation of natural gas distribution systems, as outlined in the Gas Pipelines Access (Queensland) Act 1998 and the National Third Party Access Code for Natural Gas Pipeline Systems (the Code). The Act and the Code provide for the Authority to approve access arrangements for covered gas distribution networks in Queensland. These include the networks owned by Allgas Energy Limited (Allgas) and Envestra Limited (Envestra).

In its Final Decision (QCA, 2001) on the proposed access arrangements for the Queensland gas distribution networks, the Authority recognised the possibility for service quality to be sacrificed in exchange for higher profits and flagged its intention to establish an ongoing service quality monitoring regime over the course of the first access arrangement period to address this concern. The foreshadowed monitoring regime would include defined service quality measures and should provide the basis for a more complete assessment of service quality performance in the future.

In November 2002, the Authority released a discussion paper entitled ‘Gas Distribution: Monitoring Service Quality’ which provided a brief overview of the nature and scope of service quality issues relevant to gas distribution in Queensland and sought comment from interested stakeholders by 1 February 2003. A total of eight submissions were received (see Appendix C) in response to the discussion paper. Submissions can be accessed via the Authority’s web page (www.qca.org.au).

Having had regard to the comments received in response to the discussion paper, this paper provides the Authority’s decision on the structure and implementation of a gas distribution service quality monitoring regime in Queensland.

2. DESIGN OF A SERVICE QUALITY MONITORING REGIME

2.1 Objective of Service Quality Monitoring

Service quality monitoring is aimed at ensuring current levels of service quality do not deteriorate and promoting improvements in service quality in areas of poor performance.

Under the current average price cap form of regulation applied to the gas distribution industry in Queensland, there is a possibility for service providers to trade-off service quality in favor of (short term) profitability by, for example, cutting back on necessary maintenance or investment. Eventually this would lead to declining levels of service quality.

Providing information to customers on service quality performance will encourage service providers to respond to areas of poor performance and to improve performance generally across the network.

2.2 Features of a Service Quality Monitoring Regime

The purpose of service quality monitoring is to detect changes in the quality of service provided over time. For services delivered by means of a gas distribution network, the attributes which could be monitored include:

- reliability - refers to the ability of the service provider to maintain continuous gas supply to customers;
- quality of supply - concerned with the technical standard or specification of gas delivered; and
- customer service - relates to the timeliness and responsiveness of the service provider to customer enquiries and concerns.

Each of these attributes could be monitored by selecting a range of measures designed to target different aspects of these service attributes. The measures chosen would generally target aspects of service quality that:

- are of value to customers;
- are within the control of the service provider; and
- ensure areas of service are not ignored (minimum versus average performance).

For each measure, it would be desirable that collection costs are reasonable and that some level of comparative performance assessment is possible.

Customer Value

Customer value refers to the importance customers place on, or preference customers have for, particular service attributes. Customer preferences translate into a willingness to pay and can be used to allocate resources to produce the most efficient level of service, both in terms of quantity and quality. The relative importance of individual service attributes will vary among customers.

Submissions from Stakeholders

In response to the Authority's discussion paper, Allgas suggested that an effective way to match customer demands to particular service quality levels would be to link prices to customers' willingness to pay and that the Authority should consider a price-service approach for gas distribution services for the next regulatory period.

Envestra was of the view that distribution service providers could not differentiate services between one end user and another. Envestra was of the view that willingness to pay for different service levels was of no relevance in gas distribution.

Brisbane CityWorks suggested that customers valued the three aspects of service quality discussed by the Authority (reliability and quality of gas supply and customer service) as well as efficiency.

The Chief Gas Examiner proposed that what was valued by customers depended on the type of customer in question. He considered that:

- industrial customers valued security of supply the most and customer service the least;
- commercial customers valued reliable gas supply, assistance with technical matters, prompt attention to any complaints and, should it be required, the support of an independent arbiter; and
- domestic customers were concerned about security of supply, gas safety and customer service.

QCA Position

The submissions from stakeholders indicated that, to varying degrees, all three aspects of service quality identified by the Authority were likely to be of value to customers.

Measures Controllable by the Service Provider

Ideally, performance measures should reflect activities over which the service provider has control and are not unduly influenced by random or unforeseen events beyond the control of the service provider (Kaufmann and Lowry, 1999; SAIIR, 2002; OFGEM, 2000). For example, measures of total outages could include outages caused by the actions of other parties and through no fault of the network operator. In these cases, it may be appropriate that the measures used to monitor service quality be adjusted or qualified to take account of such extraneous events.

While there is intuitive appeal in the notion that extraneous events should be excluded from service quality measures, it is not always clear what events to exclude. For example, while events caused by third parties may be beyond the control of the service provider, there is still an onus on the service provider to have in place such risk management strategies as may be appropriate to mitigate the potential impact on customers of such events. Thus, it may be inappropriate to exclude all events caused by third parties. However, the costs of protecting users from some extreme and infrequent events (such as flood damage) may exceed the potential benefits to consumers and it may be appropriate that these be excluded from service quality measures, since their inclusion may create an incentive to undertake uneconomic expenditure. It is often difficult to draw the line between events that should be excluded and those that should remain included in service quality measures.

Submissions from Stakeholders

With the exception of Brisbane CityWorks, the submissions generally supported the view that service quality measures should relate to activities within the service providers' control. However, Brisbane CityWorks was concerned this limitation created uncertainty due to the difficulties of defining such events. Brisbane CityWorks noted that there was an expectation among customers that services would still be provided regardless of the occurrence of extraneous events.

Allgas and Envestra were of the view that it was important to take account of factors outside the control of service providers.

Allgas did not support the monitoring of gas quality for a number of reasons. These included:

- gas quality was the responsibility of parties holding contracts to use the Allgas network and was outside the control of Allgas;
- there was neither a history of problems with gas quality or any indication that customers were dissatisfied with the quality of gas supplied;
- as the Allgas network was pressurised, there was very little difference between the quality of gas entering and leaving the system; and
- there was no evidence to suggest that users would be prepared to pay the costs of monitoring gas quality beyond the citygate.

Envestra also believed there was no need to include any measure of technical quality for gas distribution networks. As with Allgas, Envestra noted that retailers were responsible for the quality of gas delivered into the network and to end users. Gas quality was also monitored by the Department of Natural Resources and Mines and the Environmental Protection Agency ensured Envestra complied with environmental regulations.

The Chief Gas Examiner supported the view that service providers had no control over gas quality. He indicated that gas quality was an issue comprehensively addressed under the *Gas Act 1965* and that, in the future, it would receive more rigorous attention under the proposed Petroleum and Gas (Production and Safety) Bill. Further, since technical quality was already monitored extensively under existing legislation, it should not be duplicated by the Authority.

Queensland Treasury indicated that questions regarding technical performance standards being applied to service providers should recognise the existing role of the Department of Natural Resources and Mines.

Allgas and Envestra also considered that damage by third parties should be excluded from published reliability of supply data. Both service providers gave examples of best practice measures that were taken to minimise the potential for the occurrence of this type of damage, such as being members of the Dial-Before-You-Dig service, the erection of above-ground warning signs and pipe installation requirements in accordance with relevant legislation and Australian standards.

Envestra further suggested that, as a general rule, it would not be appropriate to include outages caused by upstream events in distribution service quality measures.

QCA Position

The Authority agrees with the views expressed by stakeholders that it would not be appropriate to incorporate measures of gas quality into distribution service quality monitoring measures on the grounds that this aspect is beyond the control or influence of service providers and that the technical aspects of gas supply are the responsibility of the technical regulator.

However, the Authority is not convinced that excluding extraneous events from service quality measures would provide a fair and accurate representation of the quality of the services delivered by way of the network. While such events may be beyond the control of the service provider, there is an expectation that, in operating and managing a network in accordance with good engineering and industry practices and relevant legislation, service providers would have developed plans in anticipation of, and be able to implement strategies in response to, commonly accepted hazards or possible emergency situations. These could include gas leaks resulting from third party damage or supply failures created by upstream events.

The Authority has decided against making any changes to the reported service quality measures to remove the effects of extraneous events such as third party damage or upstream failures. This approach has also been adopted in other jurisdictions. For example, reliability information relating to the Victorian service providers is not adjusted for external factors (ESC, 2002).

However, the Authority's monitoring regime will provide the opportunity for service providers to highlight such events and explain the impact these may have had on reported measures.

Minimum versus Average Service Quality Measures

Kaufmann and Lowry (1999) have suggested that it is important to ensure that service quality measures do not ignore pockets of poor service quality. If the range of performance measures is too narrow, service quality may progressively get worse in non-targeted areas, such as in older sections of the network. While this problem could be overcome by simply monitoring more measures, this could also lead to more complex and costly data collection, reporting and monitoring.

This raises the question of whether it is preferable to focus on minimum or average measures of service quality. Reporting against minimum measures would assess whether services delivered to individual customers fell below a specified level. Minimum measures may encourage more equitable outcomes for all customers by promoting a degree of uniformity in service quality outcomes. Reporting against average measures would assess service quality outcomes across all (or groups of) customers but could mask pockets of low service quality. A service provider may be delivering services that, on average, appear reasonable but this could be achieved while some customers receive service levels well above, and some well below, the average. Focusing on average service quality measures may encourage the service provider to improve apparent performance by raising service quality outcomes for those customers where it is less difficult and less costly to do so, while some customers could continue to experience sub-standard or worsening levels of service quality. In all likelihood, both minimum and average measures will have some part to play in a comprehensive service quality monitoring regime. The deficiencies of either measure may be overcome by providing more scope for qualification and explanation within the reporting regime. For example, an average standard could be utilised with provision for explanation of any variation around the average.

Neither of these approaches will necessarily promote the most efficient outcome. Theory suggests that the most efficient level of service quality will be achieved where a customer's willingness to pay for additional service quality (marginal willingness to pay or marginal benefit) and a service provider's costs of providing the additional level of service (marginal costs) are equal. However, as noted previously, individual customers will place different values

on service attributes, so that any outcome will always involve some balancing of efficiency against practical constraints.

Submissions from Stakeholders

Submissions provided a mixed response on the issue of whether it was preferable to focus on minimum or average measures of service quality.

Allgas proposed that certain service quality indicators (such as UAG, reliability of supply, calls resulting in actionable work and complaints) were best measured on an average basis, while others (such as response times to emergencies and on-time connections) were more suited to reporting against a minimum standard.

Brisbane CityWorks concurred that both types of measures should be included in a service quality monitoring regime and would be useful for analysis.

The Chief Gas Examiner strongly recommended that the Authority adopt minimum measures either on their own or in combination with average measures. Minimum performance levels were also supported by Origin Energy.

Envestra argued that minimum measures would be too costly to implement as it would require the installation of sophisticated information technology systems to track and report incidents on an individual meter basis. Instead, average service quality measures were recommended. Envestra suggested that one method of ensuring that consumers were not subject to ongoing poor performance could be to monitor the number and type of complaints received by service providers.

QCA Position

The Authority agrees that both types of measures have a role to play in service quality monitoring. However, establishing minimum standards is not a simple task. The proposed monitoring regime contains mainly average measures which provide an indication of the level of service quality experienced by customers as a whole within the respective networks, although information is also required on the spread of performance. In addition, the monitoring regime requires that information on complaints be provided to ensure that service levels do not fall below what would be considered a minimum acceptable standard by customers. This combination appears to strike a reasonable balance between broad measures across groups of customers and individual concerns.

Data Consistency, Comparability and Collection Costs

Service quality information could be used to compare an individual service provider's performance relative to past performance or relative to other distribution businesses. If there is consistency in the information collected and presented, it will enable customers and the Authority to make more robust and meaningful assessments of performance over time. Industry participants also make comparisons of performance to identify potential areas for operational improvement and recognise the importance of performance monitoring and benchmarking in an increasingly competitive environment (AGA, 2002).

Comparability of data has emerged as an issue in the context of national reporting arrangements. In recent years, there has been considerable discussion about consistency in regulatory arrangements between jurisdictions.

Energy businesses operating in multiple jurisdictions may have to collect data in different formats specific to each jurisdiction in which they operate. Not only may this prevent such businesses from achieving economies from a single data base collection system, but it would also make it difficult to compare performance across jurisdictions.

Similarly, with the emergence of a number of multi-utilities that participate in both the electricity and gas markets, there may be some benefit in seeking comparability and consistency of collection and reporting arrangements across industries.

The Authority is also conscious of the need to monitor service quality in a way that does not impose unreasonable requirements or costs on the service provider. Ideally, preference should be given to measures that, if not already collected for internal monitoring purposes, are readily available or can be obtained and maintained at minimal cost to the service provider. However, in some cases, new measures may be required, for example, where they are considered to better reflect the preferences of customers or provide more reliable data. At some point, there will inevitably be a need to weigh the benefits of more consistent and reliable service quality monitoring against the costs of data collection and reporting.

Submissions from Stakeholders

Stakeholders broadly agreed that the service quality measures adopted should be comparable with those collected for the gas distribution industry in other jurisdictions providing it did not impose unnecessary costs on service providers. There was also general consensus that the service quality measures applicable to electricity were not appropriate for the gas industry.

Although comparability with measures in other states was supported by Allgas, it added that the driving priority should be to select measures that provided an accurate picture of service quality performance.

Both service providers indicated the type of service quality information that was currently collected as follows:

- Allgas collects information on unaccounted for gas, unplanned supply losses (measured by customer reports of a loss of supply), response times to emergencies, on-time connections for new customers, calls to the call centre and complaints.
- Envestra collects information on the number of hours of lost gas supply from planned interruptions, the number and hours of lost supply from unplanned interruptions (affecting more than five end users) and actionable calls from the Call Centre.

In terms of the costs of collecting information in the format proposed by the Authority, while not providing an estimate, Allgas claimed there would be significant costs in collecting the reliability information. Envestra suggested that the cost of collecting the proposed information would be around \$100,000 per annum, but noted that 13 of the 16 data fields proposed by the Authority could be reported without any additional cost.

QCA Position

The Authority has weighed the merits of adopting measures that were consistent and comparable with other jurisdictions and the need to monitor service quality in a way that does not impose unreasonable requirements or costs on service providers. In addition, the Authority has considered what measures might meaningfully portray the level of service quality being delivered in Queensland to customers. The Authority has reviewed the various measures adopted in other jurisdictions by both economic and technical regulators (see Chapter 3). In

several jurisdictions, the economic regulator has access to information provided as part of licence conditions. This is currently not the case in Queensland.

The measures selected by the Authority (see Appendix A) provide a high degree of consistency with measures used in other jurisdictions, particularly with those developed by the ESC in Victoria (see Appendix B).

It is not clear what additional costs may be incurred in providing information against the selected measures. However, if any additional costs are significant, the service providers could present a case to the Authority seeking approval to pass these costs through to customers, or to stage the introduction of reporting on specific measures, thereby spreading the associated costs across time.

3. OTHER JURISDICTIONS

The level of involvement with service quality issues and the reporting of service quality information in relation to gas distribution businesses varies between jurisdictions.

3.1 Australian Capital Territory

The Independent Competition and Regulatory Commission (ICRC) has responsibilities which include the regulation of prices, the administration of licences for utilities and the management of industry codes, such as the Consumer Protection Code (ACT Government, 2000). Among other things, the Consumer Protection Code (CP Code) sets out provisions relating to minimum performance standards and, where applicable, rebates for failure to meet these standards. Some of the standards relate to connection times, keeping appointments, response to problems and interruptions.

In making price directions, the ICRC is required to consider consumer protection issues, such as standards of quality, reliability and safety.

The technical attributes of service quality, such as gas standards and pressure, are the responsibility of the technical regulator.

The ICRC has been working in conjunction with the technical regulator, the Department of Urban Services, to develop a system of service quality reporting in gas. Various information must be provided by the gas network operator (and gas suppliers) to measure compliance against the requirements of the Utilities Act, licences and industry and technical codes. This information includes compliance with licence and service standards relating to:

- unaccounted for gas;
- the percentage of customer connections that failed to meet performance standards specified in the CP Code; and
- the percentage of responses to notifications that affected public health, or caused, or were likely to cause, substantial damage or harm to people or property, that failed to meet the performance standards specified in the CP Code.

The distribution service provider also reports against performance indicators which, among other things, measure:

- planned disruptions – the number of disruptions affecting five or more customers and customer hours off supply;
- unplanned interruptions – the number of disruptions affecting five or more customers and customer hours off supply;
- telephone enquiries – the number of calls made to the licensee’s emergency number;
- complaints – the number, nature and outcome of complaints received. Outcomes might include the complaint being settled in-house, referred to the Essential Services Consumer Council, being withdrawn or pending; and
- connections/disconnections – the number of new premises connected and number of premises physically disconnected.

3.2 New South Wales

In New South Wales, the *Independent Pricing and Regulatory Tribunal (IPART) Act 1992* requires the Tribunal to consider a number of factors in making determinations and recommendations, including standards of service for consumer protection and standards of quality, reliability and safety. As a condition of a gas reticulator's authorisation, network operators in New South Wales are required to comply with the service standard requirements set out in the Network Code Guidelines (MOEU, 2001), generally referred to as default standards. These were produced by the NSW Ministry of Energy and Utilities and were designed to support the introduction of full retail competition.

As part of the recent review of the New South Wales energy licensing regime, an assessment of minimum performance standards by National Economic Research Associates (NERA, 2002) found that, compared to the electricity sector, the gas licensing regime did not contain equivalent minimum standard requirements for customer service, reliability or quality of supply and there were no established key performance indicator reporting requirements.

In its Final Report on the Review of Electricity and Gas Licensing Regimes, the Tribunal (2003) recommended that the New South Wales Minister for Energy impose a condition requiring electricity and natural gas businesses to report operating statistics as specified by the Minister. Although natural gas businesses currently report annually on a range of statistical information, this is on a voluntary basis. Recently, the Tribunal (2003a) released an issues paper seeking submissions on the following key issues:

- What aspects of service quality should be measured through guaranteed customer service standards and/or operating statistics?
- At what level should service standards be set?
- When should compensation be paid if the standard is not met, and how much compensation is appropriate?
- How often should operating statistics be published?

As part of a separate process, the Ministry of Energy and Utilities has developed a set of reporting requirements for gas network operators. Annual network reliability and consumer-related reporting requirements includes information on:

- unplanned outages – the total number of unplanned losses of supply and consumer hours of gas supply lost (affecting five or more consumers);
- unaccounted for gas;
- disconnections – by installation type and reason; and
- response times – the total number of incidents/emergencies not responded to within 60 minutes receipt of notification.

In addition, key performance indicators relating to network integrity, safety, reliability and consumer service are being finalised in consultation with the network operators. Although the details of the key performance indicators are not yet publicly available, as they currently stand, there is some degree of overlap with the Authority's proposed measures.

3.3 South Australia

In South Australia, service quality reporting is not an issue dealt with by the economic regulator. In its final decision on the South Australian networks (owned by Envestra), the South Australian Independent Pricing and Access Regulator (SAIPAR, 2001) did not specifically raise the issue of service standards. However, the decision did recognise that there is a Network and Consumer Transfer Code (produced by Envestra and approved by the technical regulator), which does not form part of the access arrangement, but which operates under Envestra's distribution licence. This is a form of customer service code that contains rules for such matters as connection and disconnection, metering, spare capacity, inquiries, dispute resolution and network safety.

The Technical Regulator in South Australia collects and reports an extensive range (approximately 40 data fields) of measures in relation to the Envestra network. These relate to the safety, measurement, quality, reliability and connection of gas. Although these measures are largely technical in nature, the following are of more particular relevance to the information being sought by the Authority:

- outages – the number affecting more than 20 consumers;
- complaints – the number and type of complaints made to the entity in respect of detectability of gas by odour, inadequate gas supply pressure or any other relevant matter, including minor complaints re reinstatement;
- unaccounted for gas – the total amount and percentage average; and
- connections – new connections and total consumer connections.

3.4 Victoria

In Victoria, the Office of the Regulator General released an industry guideline (ORG, 1999) which detailed service standards and targets for gas businesses to report on periodically as part of its performance monitoring regime. Under the new information specification (as the revised guideline is now called), service quality information is collected on a monthly basis and is reported quarterly (see Appendix B). This information, along with similar information provided by the Victorian retail businesses, is published annually in the *Gas Industry Comparative Performance Report*.

The Essential Services Commission (2002c) is of the view that it is important to ensure that the distributors have a clear understanding of the service levels to be provided over the regulatory period. The Commission maintains that this would:

- ensure that users receive reliable and safe gas services;
- provide a point of reference for assessing the distributors' proposed reference tariffs; and
- provide a baseline for determining whether service quality (reliability) has deteriorated as a result of any reductions in costs.

At a minimum, the Commission considers that information on gas distribution reliability should cover such aspects as:

- customer minutes off supply;
- frequency of supply outages;

- timeliness of response to, and duration of, outages; and
- the number of customers affected by outages.

Any benchmarks to apply over the next regulatory period should be set on the basis of performance levels at the end of the current regulatory period. The Commission has flagged its intention to establish a Gas Performance Indicator Working Group, from which any measures developed would be implemented under a distributor's licence obligations.

In its Final Decision on the Gas Access Arrangements (ESC, 2002d), the Commission introduced a guaranteed service levels (GSL) scheme with the support of a number of the distributors. Each of the distributors were required to amend their proposed terms and conditions to give effect to the GSL arrangements, which will be specified in the Gas Distribution System Code (ESC, 2002a). The proposed thresholds, and payments for failure to achieve them, are outlined in the table below.

Table 1: Guaranteed Services Level Thresholds and Payments in Victorian Gas Distribution

<i>Area of Service</i>	<i>Level of service to incur GSL payment</i>	<i>Level of GSL payment</i>
Appointments	> 15 minutes late for appointment with a residential customer ^a	\$50 per event
Connections	Failure to connect a residential customer within 2 days of agreed date	\$80 per day (to a maximum of \$240)
Repeat interruption	> 6 unplanned interruptions to a residential customer in a 12 month period resulting from faults in the distribution system ^b	\$50 for each subsequent event in that calendar year
Lengthy interruptions	Gas supply interruption to a residential customer not restored within 12 hours ^c	\$80 per event

a Appointments rescheduled by the gas businesses should be counted as missed appointments. Appointments rescheduled by the customer are excluded from payments.

b Excluding force majeure, faults in gas installations, transmission faults, third party events and upstream events.

c Excluding force majeure, faults in gas installations, transmission faults and upstream events.

3.5 Western Australia

The Technical and Safety Division was transferred from the Western Australia Office of Energy to the Department of Consumer and Employment Protection in July 2002. Part of the functions of the division is to administer technical and safety regulations relating to gas distribution.

In Western Australia, distribution licence holders are required to lodge the following information (as well as other information) within annual information returns:

- unaccounted for gas – in gigajoules and the percentage change from the previous year;
- unplanned interruptions – the number of and percentage change from the previous year;
- leaks and responsiveness to leaks – various indicators of the number of reported breaks to mains, service pipes and reported leaks in a public area as well as the percentage attended within one hour, three hours and two hours of notification, respectively; and

- new connections – the percentage of new connections to residential premises within seven days where it is practicable to connect the premises without extending the main and where reasonable soil conditions exist.

Since the same service provider (with ring-fenced activities) holds both a gas distribution licence and a gas trading (or retail) licence, information in relation to distribution complaints is collected via the retail arm. Complaints information required to be reported includes:

- the total number of complaints and percentage change from the previous year;
- the nature of complaints; and
- the action taken and timing to rectify complaints.

4. SERVICE QUALITY REPORTING INFORMATION

In its discussion paper (QCA, 2002), the Authority presented a range of service quality measures adopted by various other economic and technical regulators and proposed what it considered to be a reasonable mix of measures upon which to commence a service quality monitoring regime in Queensland. This included information relating to:

- background data;
- reliability of gas supply; and
- customer service.

The proposed regime did not seek information on the quality of gas supplied.

4.1 Background Data

The Authority proposed that service providers report background information on the number, and consumption, of customers within each network customer class, unaccounted for gas and the length of distribution mains.

This information would provide an overview of the operating environment of each distribution system and assist in the interpretation of service quality data.

The Authority also proposed that the information be reported by operating regions.

Submissions from Stakeholders

Allgas maintained that some of the data relating to the number and usage of small and large customers could only be manually extracted from the Allgas database or could not be provided as the information was ring-fenced from the distribution service provider. In addition, Allgas did not support reporting service quality indicators by operating region on the basis that:

- information was generally not maintained according to operating region;
- the additional detail would not provide further insight into recognising and managing problem areas of the network; and
- disaggregation on this basis may permit third parties to determine large customer usage within each region.

Brisbane CityWorks noted that the level of reliability would be perceived differently according to the type of customer and scale of use and that it may be appropriate to distinguish reliability indicators on this basis.

The Chief Gas Examiner was of the view that it would be useful to distinguish between different sections of the networks on the basis of geography (for example, Brisbane CBD, Surfers Paradise CBD, Rockhampton) and to distinguish between customers on the basis of type (industrial, commercial and domestic) as opposed to the small and large user categories applied by the Authority.

Envestra raised no objections to the Authority's proposal for the collection of information by operating regions.

QCA Position

As it is difficult to see how a service provider could be ring-fenced from information relating to its own business, it would appear that there was some confusion by Allgas regarding the nature of the information being sought by the Authority, particularly since the submission referred to end-use customers.

However, the Authority accepts Allgas' comment that the level of detail proposed could potentially raise commercial confidentiality concerns by allowing individual customer's usage to be identified by third parties. Nevertheless, the Authority is concerned that whole of network information may disguise poor service quality being experienced by particular operating regions. The Authority is also aware that in other jurisdictions, network-wide service quality reporting is a relatively common practice and it is conscious of the need to minimise the imposition of additional costs on service providers, particularly where it would be possible to capture the data by a potentially less costly means, such as monitoring complaints.

On balance, the Authority has decided to require reporting of service quality information on a whole of network basis only. However, should this level of reporting prove to be inadequate, it may be necessary to increase the level of disaggregation at some future time.

4.2 Reliability of Supply

To measure reliability of supply, the Authority proposed that four indicators relating to the number of unplanned outages, the number of customers affected by unplanned outages and the time off supply due to outages (both planned and unplanned) be reported. In addition, comments were sought on the measures of reliability that were relevant to the Queensland gas distribution networks and whether there was a need to distinguish between the reliability of different pressure sections of the network.

Submissions from Stakeholders

Envestra suggested that reporting information on the number of planned interruptions due to mains and services renewal work would not be useful given maintenance and renewal occurred on an ongoing basis and was planned well in advance. Envestra claimed such work was scheduled to be undertaken during periods that minimised the inconvenience to customers and the service provider gave reasonable notice of these outages (both two weeks before and one day before the scheduled date of interruption). Further, where customers required alternative supply arrangements, these could usually be accommodated.

Allgas commented that although new connections could result in planned outages, generally these occurred as a result of its network renewal program. Once the program was complete, these outages were expected to be minimal.

Allgas stated that information on the number of customers affected by unplanned outages and the length of those outages was not collected by the company. Nor did Allgas propose to collect this information in the future as it believed that customer reports of a loss of supply provided adequate information to identify and respond to reliability of supply problems.

Allgas further claimed that significant costs would be involved in collecting reliability information in the form proposed by the Authority as field crews would be required to manually collect the information and extra clerical support would be needed to determine all customers affected by an outage as well as to collect and collate reports. In some cases, the services of engineers with extensive knowledge of the network system could be required. Allgas also maintained that even if this information were collected, there would still be some doubts as to its accuracy.

In contrast, Envestra indicated that information on all the proposed reliability indicators (exclusive of one aspect of planned interruptions) could be provided at no additional cost but suggested that unplanned outages be reported exclusive of third party damage.

The Chief Gas Examiner suggested that service providers should keep track of the number of customers affected and hours off gas supply on an outage by outage basis rather than an average.

QCA Position

Although maintenance and renewal is necessary and forms a legitimate part of operating a gas network business, monitoring planned outages should encourage service providers to manage these projects as efficiently as possible. The Authority notes that both service providers were prepared to report on the basis of the total number of hours lost due to planned outages and that it would be possible to detect problems with the frequency of planned outages through monitoring complaints. As a result, the Authority has removed the requirement to report on the total number of planned customer interruptions due to mains and services renewal work.

The Authority accepts that Allgas may incur additional costs to establish and maintain processes required to collect and report information on unplanned outages. However, it is unlikely that such procedures would be unreasonably onerous, particularly given that, as Allgas has stated, most of these outages relate to single customer incidences whereas the Authority is only seeking information on instances affecting five or more consumers. While the proposed indicators may not be deemed necessary by Allgas in identifying and managing problem areas of the network, the Authority considers that customers and other stakeholders would find this information more meaningful than a single measure of the number of reports of lost supply. Information from other jurisdictions would also suggest that these are relatively common measures upon which a network operator would report reliability.

While there is little doubt that data provided on an outage by outage basis would be more enlightening, at this time the Authority believes that a more cost-effective option would be to allow service providers to report outage duration information as an average and supplement this by closely monitoring complaints. The Authority also notes that the general trend has been for detailed information of this nature to be lodged with technical regulators in accordance with relevant legislation rather than economic regulators. For example, the Office of Gas Safety in Victoria collects and publishes details of individual significant outage events, including the month and location of the outage, the number of customers affected, the cause of the damage and the type of mains affected.

4.3 Customer Service

It is likely that the majority of end users would have very little direct interaction with the distribution service provider. End users experiencing problems are more likely to contact the relevant gas retailer in the first instance. Nevertheless, some problems reported to retailers will ultimately be the responsibility of the distribution service provider.

The Authority proposed that distribution customer service could usefully be monitored according to measures of the number of actionable calls to service providers and the number and nature of complaints.

Submissions from Stakeholders

Allgas reported that customer enquiries were received through either its general enquiries telephone number, emergencies/loss of supply telephone number or via calls made directly to its Asset Services Division. After calls had undergone some form of filtering, natural gas

distribution related calls made to these numbers were logged and dispatched to Asset Services for action.

Allgas supported the collection and reporting of measures relating to:

- calls that resulted in actionable work – it was proposed that information on the number of work requests completed by Asset Services be reported as it eliminated all non-natural gas related enquiries and included any calls made directly to Asset Services; and
- complaints – the number and type of complaints was currently recorded for small customers (consumers of less than 10 terajoules per annum). The same type of information was expected to be collected for the large customer class from April 2003.

For recording purposes, Allgas defined complaints as:

‘a communication from an external customer that requirements or expectations have not been met. This could be by telephone, written communication or verbal, and may be offered in a hostile or non-hostile manner. A complaint does not include reports of system failures ... where the report is advice only for [Allgas] to action and is not delivered as a complaint’.

Allgas commented that, if complaints information were required to be based on an alternative definition, additional costs could be incurred to reprogram its computer systems and to retrain staff. However, Allgas also stated that, due to the small number of complaints across natural gas and LPG services, it would be possible (for minimal cost) to use manual processes to report on natural gas distribution-related complaints.

Allgas also recommended the inclusion of two additional measures relating to response times to emergencies and on-time connections to new customers. Allgas considered that both measures were appropriate given they were highly valued by customers and were under Allgas’ direct control.

The two additional measures proposed by Allgas are:

- response times to emergencies - measured by the time from the reporting of the emergency to when the site is made safe; and
- on-time connections for new customers – measured as connection within 10 business days after lodgment of necessary paperwork and payment of customer contribution (if required) where suitable gas mains run down the customer’s street. This measure would exclude any customer-related delays, such as applications for connection made well in advance of when connection is required.

While response times to emergencies is largely a safety (and therefore technical) issue, it is an obvious area of concern to all stakeholders and the general public. As a result, there would appear to be value in monitoring response times to situations which may pose a threat of danger to the safety or health of the public (or property).

Connection delays appear to be monitored in several other jurisdictions. It would appear appropriate to include such a measure in the Authority’s monitoring regime. The Australian Gas Association (AGA) Natural Gas Customer Service Code also includes a measure of connections within 20 days from the date of application and where supply connections already exist, within 1 day.

Envestra explained that retailers were the first point of contact for end users of its Queensland network. Any distribution related enquiries/complaints were then forwarded to the network operator. Envestra noted that it considered customer service to be an important element of its service and one that could be monitored appropriately and cost-effectively by the number of complaints relating to poor service. However, Envestra advised that it could only report on actionable/non-actionable calls and could not further classify complaints.

Both the Chief Gas Examiner and Brisbane CityWorks were of the view that customer service should be monitored.

QCA Position

The Authority's decision on a number of other issues, such as whole of network reporting versus reporting by operating region, relies on its ability to secure more information through complaints reporting. Allgas has indicated its preparedness to report on complaints. Envestra clearly places a high value on customer service.

The Authority is concerned that Allgas' proposed measure of actionable calls could under-report the number of calls made to Allgas. However, as an alternative measure, the Authority would accept the number of work requests received by Asset Services.

There appears to be reasonable common ground in how complaints are defined by the two Queensland network operators and, as a result, the Authority has decided to adopt the definition of complaints proposed by Allgas.

As no firm proposals were received regarding the nature of complaints to be reported, the Authority sought advice from the service providers as to the nature of complaints received. The Authority also notes that there is very little consistency in the categorisation of distribution complaints in other jurisdictions. The Authority has therefore opted for the following disaggregation:

- metering – including faults, access to premises and damage caused by meter readers;
- connections/disconnections – including problems with organising connections, insufficient notice prior to disconnection and unwarranted disconnections;
- reliability – including recurrent outage problems and excessive frequency or duration of interruptions; and
- other – including restoration work and insufficient notice of planned mains renewal and other general areas.

The Authority has also decided to include the two additional measures proposed by Allgas (with a minor change to the time period).

5. DATA COLLECTION, REPORTING AND PUBLISHING

Monitoring service quality will require service providers to collect relevant data in an appropriate format and report this information to the Authority on a regular basis.

The service quality information could be retained for use solely by the Authority or released for scrutiny by customers and other interested stakeholders. Publishing service quality information provides a discipline on the service provider to collect and report information in a timely and professional manner. It also provides an incentive for the service provider to address areas of poor performance.

The service providers may be concerned about the potential for commercially sensitive information to be published. However, this is more likely to be a valid concern where financial information is involved. Further, the service quality indicators proposed by the Authority do not contain any information that has not been published in other jurisdictions or will not be published in the near future.

If meaningful assessments are to be made of service quality performance, there may be a need to ensure that the quality of information provided is reliable, verifiable and comparable.

From a business point of view, good information allows managers to be better equipped to handle customer needs and guide maintenance and investment programs. From the Authority's perspective, if it has confidence in the quality of the information provided, there is scope for the overall investigatory and approval process to become less intrusive and to afford service providers greater regulatory certainty.

Submissions from Stakeholders

The submissions generally supported service quality information being reported on an annual basis and that the information be published.

In terms of the quality of the data provided, Allgas noted that the quality would reflect the costs of collection relative to its usefulness to customers and management.

Envestra indicated that given Origin Energy Asset Management would be providing the information and that it was a quality assured company which had undertaken its own performance monitoring for some time (many of the measures of which overlap with the Authority's proposed measures) the Authority could be assured of the accuracy of the information.

The Chief Gas Examiner suggested that random verification audits would be one possible means to be assured of the quality of the information provided.

Brisbane CityWorks commented that service providers should have no qualms about providing information publicly. It suggested that public release of service quality measures could be a useful marketing tool if excellent or improved track records were identified and could assist in improving customer choice for natural gas.

QCA Position

Service providers will be required to commence the collection of service quality information on 1 July 2003, and to report annually. The first financial year service quality report is to be lodged with the Authority by no later than 30 September 2004. Where data is currently not collected or easily obtainable, the Authority will consider proposals from service providers to commence reporting such measures at a later date.

The Authority intends to publish the reported service quality information along with any explanations of any abnormal performance provided by the service providers. Any agreed commercially sensitive information will be excluded from publication.

6. OTHER CONSIDERATIONS

In its discussion paper, the Authority sought stakeholder views of whether there was a need to extend service quality monitoring to include some form of incentive element.

The access arrangements approved by the Authority implicitly assumed that the level of service quality currently provided was appropriate and that a service quality monitoring regime would show whether service levels changed from those originally provided. The Authority noted that publication of service quality outcomes would provide some incentive for service providers to react to perceived areas of weakness in their reported performance.

6.1 Incentive Mechanisms

An incentive mechanism would be designed to persuade service providers to behave (perform) in a particular manner and might involve some form of reward for improving service quality or penalty when service quality levels declined. A variety of incentives could be applied to the area of service quality, both financial and non-financial, including:

- comparative performance monitoring – the reporting and monitoring of defined service quality indicators. This so-called ‘competition by comparison’ opens service providers to scrutiny by customers, peers and other interested stakeholders;
- minimum service standards – the application or observation of various industry standards, guidelines or codes of practice. Failure to adhere could result in fines or even a loss of distribution licence;
- customer empowerment – aimed at enhancing the position of customers in their interactions with service providers. This might include educating customers about the nature and level of service they can expect to receive, customer representation on advisory boards or the establishment of an industry funded ombudsman scheme;
- customer compensation – where customers receive specified compensation in the event a service provider fails to meet certain standards;
- service fault penalties – whereby service providers face penalties for under-achievement of performance targets. Under this approach penalties generally become increasingly severe as performance gets progressively worse; and/or
- adjustments to the price or revenue cap – with the inclusion of a service quality sensitive factor in the existing pricing regime, that is, CPI-X+S.

Submissions from Stakeholders

Allgas supported the establishment of a service quality incentive regime that rewarded good performance and penalised poor performance.

Envestra was of the view that there was no need to introduce a financial service quality incentive scheme on the basis that it would be costly to introduce and, given the high level of reliability that currently existed in the Queensland networks, would have little effect on service quality. Envestra noted that, in reviewing the 2003 Victorian Gas Access Arrangements, the Essential Services Commission (ESC, 2003) had concluded that such a scheme was not warranted.

The Chief Gas Examiner considered that, while there may be a need to go beyond monitoring service quality, the need was not necessarily to provide an incentive scheme.

Brisbane CityWorks indicated that an incentive scheme should be considered, preferably one that penalised poor performance.

QCA Position

The Authority's main objective has been to establish formal measures upon which to monitor and assess whether the level of service quality delivered by the service providers changes over time and to identify areas of poor performance.

Given there was limited support for the introduction of an incentive scheme in submissions and recognising the relatively small size of the gas market in Queensland (representing around eight per cent of the total energy consumed in the State) the Authority has decided not to go beyond a simple monitoring regime at this stage.

APPENDIX A – QCA SERVICE QUALITY REPORTING TEMPLATE

DATA FIELD	DEFINITION
Background	
Start date	First day of reporting period.
End date	Last day of reporting period.
Supply Area	Whole of network.
Distribution customers – total (number)	Distribution customer defined as any supply point through which gas is delivered from a distribution network identified as a separate account for billing purposes.
Distribution customers – small (number < 10 TJ pa)	All customers subject to small customer class price constraint in access arrangement for the Allgas network and tariff V price constraint for the Envestra network.
Distribution customers – large (number > 10 TJ pa)	All customers subject to large customer class price constraint in access arrangement for the Allgas network and tariff D price constraint for the Envestra network.
Gas consumption – small customer class (TJ)	Amount of gas distributed over reporting period calculated from first to last date of reporting.
Gas consumption – large customer class (TJ)	Amount of gas distributed over reporting period calculated from first to last date of reporting.
Unaccounted for gas (GJ)	Difference between total measurements of gas injected into and withdrawn from the distribution network (pipeline system), with correction for changes in quantity of gas stored in pipeline over measurement period.
Length of distribution mains (km)	For entire distribution network.
Reliability of Supply	
Planned customer interruptions	Reported as the total number of hours lost from planned customer interruptions.
Number of unplanned outages	Any unplanned outage affecting 5+ consumers.
Number of customers affected by unplanned outages	Any unplanned outage affecting 5+ consumers.
Number of hours of gas supply lost through unplanned outages	Any unplanned outage affecting 5+ consumers.
Average duration of unplanned outages	Unplanned outages affecting 5+ consumers. To be reported as the average of: <ul style="list-style-type: none"> • worst 10 per cent; • worst 25 per cent; and • all such outages.
Customer Service	
Actionable Calls	Total number of calls to centre dispatched actionable calls allocated to distribution company.
Complaints – number and nature	Complaint defined as a communication from an external customer that requirements or expectations have not been met. A complaint does not include reports of system failures. The number of complaints are to be reported according to the following categories: <ul style="list-style-type: none"> • metering; • connections/disconnections; • reliability; and • other distribution.

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Response times to emergencies	<p>Measured from the time of report of emergency to when site is made safe. Emergencies cover all reports of gas leaks.</p> <p>To be reported as the average of:</p> <ul style="list-style-type: none"> • all response times; • response time for worst 10 per cent; and • response time for worst 25 per cent.
On-time connections for new customers	<p>Connection within the timeframes specified, after lodgment of necessary paperwork and payment of customer contribution (if required) where suitable gas mains run down the customers street.</p> <p>To be reported as the percentage of the total number of applications received and connected:</p> <ul style="list-style-type: none"> • within 20 days (for new gas connections); and • within 1 day (for existing gas connections). <p>The measure excludes customer-related delays, such as applications made well in advance of when connection is required.</p> <p>Connections also to be reported as the average connection time for:</p> <ul style="list-style-type: none"> • worst 10 per cent; • worst 25 per cent; and • all connections.

APPENDIX B – SERVICE QUALITY INFORMATION REQUIRED BY THE ESC

Summary of distribution performance indicators information specification. Note that there is scope for businesses to indicate any highlights or major achievements for activities during the quarter. This information is to be submitted on a quarterly basis.

DATA FIELD	DEFINITION
Background Distribution	
Start date	First day of reporting period.
End date	Last day of reporting period.
Supply Area	By metropolitan postcodes.
Distribution customers – total	Distribution customer defined as any supply point through which gas is delivered from a distribution network identified as a separate account for billing purposes.
Distribution customers – domestic meters/consumption below 100GJ/pa	<ul style="list-style-type: none"> All franchise customers subject to domestic tariffs. Unmetered supplies included if applicable.
Distribution customers – non-domestic meters/consumption above 100GJ/pa	All franchise customers subject to tariffs other than domestic tariffs reported in following categories: <ul style="list-style-type: none"> remainder of tariff V supply points not included as domestic; and tariff D supply points.
Length of distribution mains (km)	For entire licence area.
Gas consumption – domestic (TJ)	Amount of gas distributed over reporting period calculated from first to last date of reporting.
Gas consumption – non –domestic (TJ)	Amount of gas distributed over reporting period calculated from first to last date of reporting.
Unaccounted for gas (TJ)	Difference between total measurements of gas injected into and withdrawn from the distribution network (pipeline system), with correction for changes in quantity of gas stored in pipeline over measurement period (3 months).
Reliability and Security of Supply (Distribution)	
Planned customer interruptions	Reported as: <ul style="list-style-type: none"> total number of hours lost from planned customer interruptions; and total number of planned customer interruptions due to mains and services renewal work only.
Number of unplanned outages	Any unplanned outage affecting 5+ consumers.
Number of customers affected by unplanned outages	Any unplanned outage affecting 5+ consumers.
Number of hours of gas supply lost through unplanned outages	Any unplanned outage affecting 5+ consumers.
Number of low-low system pressure incidents	Aggregate number of low-low SCADA incidents recorded for company as a whole.

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Enquiries and Complaints (Distribution)	
Calls to call centre fault line	Total number of calls to centre dispatched actionable calls allocated to distribution company by postcode.
Complaints – connection and augmentation (no.)	Complaint defined as any expression of dissatisfaction with a product or service offered or provided (refer Energy Industry Ombudsman Victoria guidelines).
Complaints – quality and reliability of supply (no.)	Complaints defined above.
Complaints – customer requested field tests of meters (no.)	Complaints defined above.
Complaints – percentage of meters found faulty (no.)	Complaints defined above.
Complaints – other distribution	Number of customers or organisations (councils or other utilities) that required follow up rework or re-instatement of roadways, footpaths, driveways, lawns, gardens, nature strips etc arising from works carried out by distribution company.

APPENDIX C – LIST OF SUBMISSIONS

Allgas Energy Limited and Energex Limited

Arnotts Biscuits Limited

Brisbane CityWorks

Chief Gas Examiner

Department of the Premier and Cabinet

Envestra Limited

Origin Energy Limited

Queensland Treasury

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