Energy Coordination Act 1994

Gas Distribution Licence Performance Reporting Handbook

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Economic Regulation Authority
WESTERN AUSTRALIA

Contents

1 Background

The Economic Regulation Authority (**Authority**) is responsible for administering the gas licensing scheme under the *Energy Coordination Act 1994* (**Act**). A business licensed by the Authority is required to comply with a range of obligations prescribed by the Act and its associated regulations and codes.

Under section 11M of the Act, the Authority may determine licence terms and conditions, including requiring a licensee to provide to the Authority specified information in relation to the licence. In accordance with these powers, the Authority requires the holders of gas distribution licences to report against the performance indicators identified in section 16.2 of the Gas Compliance Reporting Manual (**Reporting Manual**). The annual performance report for the year ending 30 June is to be provided to the Authority by 30 September.

2 Purpose of this Handbook

This document has been developed to accompany the performance reporting obligations for gas distribution licensees in the Reporting Manual, published by the Authority in September 2009.[1]

The template in section 16.2 of the Reporting Manual applies to the supply of gas to small use customers.[2] It is important that there is a shared understanding amongst all stakeholders in respect of the information that is to be reported by gas distribution licensees, including the definitions to be applied to the performance indicators and the Authority's expectations as to the manner in which the information should be presented. Consistent with this objective, the Authority has issued this guide to inform gas distribution licensees about:

- the definitions to be applied to the performance indicators in the performance reports; and
- how to calculate the performance data (where applicable).

Where reference is made to other documents within this guide, the Authority recommends that the licensee familiarise themselves with these other documents in order to obtain a fuller understanding of the reporting context.

3 Performance Reporting Tools

The Authority has issued a Microsoft Excel workbook called the Performance Reporting Datasheets – Gas Distributors (**Performance Report**). It is mandatory for licensees to provide a completed Performance Report to the Authority by 30 September for the year ending 30 June. The latest version of the Performance Report can be found on the Authority's website.[3]

[1] This document can be found on the Authority's website at: http://www.erawa.com.au/2/319/51/regulatory_guid.pm

[2] A small use customer consumes less than 1 terajoule (TJ) of gas per annum.

[3] The latest version of the Datasheets can be found on the Economic Regulation Authority website at: http://www.erawa.com.au/2/319/51/regulatory_guid.pm

The Performance Report comprises a cover worksheet and 7 other worksheets, one for each of the performance reporting categories set out in section 16.2 of the Reporting Manual:

- Customer Connections;
- Gas Consumption;
- Leaks;
- Network Reliability;
- Complaints;
- Call Centre Performance;
- Network Construction.

4 Completing the Performance Report

The Performance Report comprises a number of worksheets containing tables in the format shown in Table 1 below.

Table 1: Example datasheet format

Indicator No.	Reference	Description	Basis of Reporting		Comments
			Number	Percentage	
DF 1	SCONRRR	Total number of telephone calls to an operator			

When completing the worksheets in the Performance Report, it is important that the structure of the data entry cells is not modified by inserting, deleting or re-ordering rows/columns. A number of cells contain values that are calculated from data that has been entered into other cells. These cells have been locked to protect the calculation formula and have been shaded yellow for identification purposes.

Only enter data into the cells that are not shaded grey or yellow, or by entering data in relation to reliability, distribution mains and leak repairs by completing the tables in Annexure 1, Annexure 2 and Annexure 3 respectively.

The Indicator no. column contains the unique reference number for the indicator. In this case the indicator is the first indicator in the distribution licence indicator set (D), category F (Call Centre Performance).

The reference column identifies the document from which the indicator has been derived, if applicable.

The description provides a short form explanation of what the indicator is intended to measure.

The basis of reporting offers two options:

- Number (this is used to enter any numerical value other than a percentage).
- Percentage (usually this is automatically generated from the numerical data).

The data entry cells have been formatted to align with the required degree of accuracy (i.e., number. of decimal places), appropriate for each indicator.

If it is not possible to provide the required data for an indicator then the cell should be left blank and a comment added in the “Comments” cell to explain why the data cannot be provided. Alternatively, the licensee may wish to use the “Comments” cell to add explanatory notes where there has been a significant change in values from previous reporting periods or where the licensee feels that additional context to the data provided is necessary.

5 Submission of Completed Datasheets to the Authority

Licensees are required to provide to the Authority a completed copy of the MS Excel workbook in electronic format. The completed workbook may be provided on a USB memory stick, CD-ROM or emailed to the Authority at: glicensing@erawa.com.au. Compliance with the licence in respect of providing performance reports will not be achieved until an electronic copy of the workbook has been received by the Authority.

6 Customer Connections

Purpose

To report on the number of small use customer connections supplied by each gas distribution network.

Reported Indicators

No.	Indicator
DA 1	Total number of connections provided
DA 2	The total number of connections not provided on or before the agreed date
DA 3	Total number of customers who are connected to the distributor's network

Definitions

Connection means a customer supply address that is connected to the distribution network by means of a service pipe and a meter that are ready to supply gas. Connections that do not have an assigned customer (i.e., inactive connections) during all or part of the reporting year are to be included.

Not provided on or before the agreed date means connections not provided within any regulated time limit and connections not provided by the date agreed with the customer.

Total number of customers connected means the average of the number of residential and non-residential customer connections at the beginning of the reporting period and the end of the reporting period.

7 Gas Consumption

Purpose

To report on the amount of gas supplied through distribution networks to small use customers, and the level of unaccounted for gas.

Reported Indicators

No.	Indicator
DB 1	Gas consumption – residential (GJ)
DB 2	Gas consumption – residential percentage change from previous year
DB 3	Gas consumption – non-residential (GJ)
DB 4	Gas consumption – non-residential percentage change from previous year
DB 5	Peak gas demand (GJ/hour)
DB 6	Unaccounted for gas (GJ)

Definitions

Gas consumption means the total amount of gas that has been supplied to a class of customer (residential or non-residential) during the reporting period.

Note: Gas that has been supplied, but where the relevant meter has not been read during any part of the reporting period is excluded from the measurement of gas consumption. It is recognised that this may present slight variations in the amount of gas consumed between reporting periods, but this is preferable to estimations based on prior period consumption.

Residential Customers are defined as having a gas supply for "residential purposes" under regulation 4(2) of the *Energy Coordination (Gas Tariffs) Regulations 2000* (**regulations**). The regulations state a supply of gas is for residential purposes if the gas:

(a) is supplied to —

(i) a dwelling; or
(ii) a place, other than a dwelling, to which the supply of gas is separately metered;

and

(b) is solely for residential use.

Non-residential Customers are customers that are not residential.

Peak gas demand means the maximum hourly quantity of gas injected into the distribution system at all transfer points during the reporting period. The unit of measurement is GJ/hour.

Unaccounted for gas (UAFG) means the difference between the amount of gas injected into the distribution system at all transfer points and the amount of gas withdrawn from the distribution system at all distribution supply points, which may include, but is not limited to, leakage or other actual losses, discrepancies due to metering inaccuracies and variations of temperature, pressure and other parameters. The unit of measurement is GJ per annum.

Calculations

The reporting year for gas consumption indicators DB1 – DB6 is the calendar year immediately preceding the year in which the performance report is provided to the

Authority, i.e., 1 January 2009 to 31 December 2009 for the report provided to the Authority on or before 30 September 2010.

8 Leaks

Purpose

To report on the number of loss of containment events on the distribution network.

Reported Indicators

No.	Indicator
DC 1	Number of leak repairs to HP, MP and LP mains
DC 2	Number of leak repairs to HP, MP and LP service connections
DC 3	Number of leak repairs to HP, MP and LP meters

Definitions

Gas installation means any gas equipment located at a customer supply address that is not part of the distribution system.

High pressure (HP) means the parts of the distribution system operating at a pressure in the range 210 to 1050kPa. This also includes any parts of the distribution system operated at a pressure in excess of 1050kPa that have been designated as part of the distribution system.

Leak repair means works undertaken to remedy a loss of containment on mains, service pipes, meters regulators, or related distribution equipment. Repairs that have been recorded in the repair log as leak repairs and where subsequent investigation shows that no leak is found should be excluded.

Low pressure (LP) means the parts of the distribution system operating at a pressure of up to 7kPa.

Mains means those parts of the distribution system that are not service connections or gas meters.

Medium pressure (MP) means the parts of the distribution system operating at a pressure in the range 7 to 210kPa.

Meter means an instrument that measures the quantity of gas that passes through it, including equipment intended to filter, control or regulate the flow of gas.

Service connection means a pipe that terminates on a meter, or in the case of an unmetered site, a gas installation that connects a distribution pipeline to the customer supply address.

9 Network Reliability

Purpose

To report on the frequency and duration of interruptions to supply experienced by customers on the distribution network during the reporting year.

Reported Indicators

No.	Indicator
DD 1	Number of customer connections that have been interrupted for more than 12 hours continuously during the reporting period
DD 2	Number of customer connections affected by 5 or more unplanned interruptions during the reporting period
DD 3	The average percentage of time that gas has been supplied to customer premises
	Overall interruptions -
DD 4	Overall SAIDI
DD 5	Overall SAIFI
DD 6	Overall CAIDI
	Unplanned interruptions -
DD 7	Unplanned SAIDI
DD 8	Unplanned SAIFI
DD 9	Unplanned CAIDI
	Planned interruptions -
DD 10	Planned SAIDI
DD 11	Planned SAIFI
DD 12	Planned CAIDI
	Normalised interruptions -
DD 13	Normalised SAIDI
DD 14	Normalised SAIFI
DD 15	Normalised CAIDI

Definitions

CAIDI (Customer Average Interruption Duration Index) is the average time to restore service to a customer when a sustained interruption has occurred.

Outage means a state on the network where it is not able to perform its intended function due to an event associated with a network component. An outage may not always result in an interruption of supply to a supply address.

Major Event Day is defined in the Institute of Electrical and Electronics Engineers (IEEE) standard 1366-2003, IEEE Guide for Electric Power Distribution Reliability Indices. Distributors are required to apply the "2.5-beta method" described in this standard to calculate the major event day boundary (T_{MED}). If 4 years of interruption data is not available to calculate T_{MED}, then distributors are required to calculate T_{MED} using the maximum available period of time for which interruption data is available.

Planned interruption means a sustained interruption of supply to a supply address that has been caused by scheduled works, for example, preventative maintenance, repairs, network augmentation and mains replacement. Customers are notified in advance of planned interruptions. Planned meter replacements are excluded.

SAIDI (System Average Interruption Duration Index) is the total duration of interruption (minutes off supply) experienced by the average customer as a result of sustained interruptions.

SAIFI (System Average Interruption Frequency Index) is the number of supply interruptions experienced by the average customer as a result of sustained interruptions.

Sustained interruption means a loss of gas associated with an outage on any part of the network of more than five minutes in duration. The interruption starts when it is recorded by equipment (such as a SCADA system) or, where such equipment does not exist, at the time that the first customer call relating to the network outage is received. The interruption ends when supply has been restored to the supply address, or when the supply is reasonably assumed to have been restored if there is no equipment available to record the time of restoration.

Third party event is an outage that is caused by the action of a third party where the distributor cannot reasonably be expected to mitigate the effect of the event by prudent asset management.

Unplanned interruption means a sustained interruption that is not a planned interruption, or a planned interruption where the required notice of the interruption has not been given to the customer. This includes events where the system pressure at customer premises has fallen below the lower design threshold.

Calculations

SAIDI is calculated as:

(∑ Customer interruption durations)/ Number of customers served

SAIFI is calculated as:

(∑ Number of customers interrupted)/ Number of customers served

CAIDI is calculated as:

(∑ Customer interruption durations)/ Total number of customers interrupted[4]

The "average percentage of time that gas has been supplied to customer premises" is calculated as:

100 x (Number of minutes per year[5] – Overall SAIDI)/Number of minutes per year

When calculating SAIDI, SAIFI and CAIDI the data set definitions in Table 2 should be applied.

[4] CAIDI is also calculated as the ratio SAIDI/SAIFI.

[5] There are 525,600 minutes in a normal year and 527,040 minutes in a leap year.

Table 2: Reliability data sets for sustained interruptions

Label	Data Set
Overall interruptions	All sustained planned and unplanned interruptions including those caused by transmission outages[6] and third party events
Unplanned and Planned	Excludes transmission outages and third party events
Normalised	All unplanned sustained interruptions with the exclusion of interruptions: • that are caused by third party events • that are caused by transmission outages • where the daily unplanned SAIDI exceeds the Major Event Day boundary[7]

[6] A Transmission outage refers to an outage that is the result of an incident occurring in the gas transmission system. The gas transmission system may include the transmission pipeline or any other bulk gas transport system (i.e., road or rail transport), used to deliver gas to the distribution system.

[7] The SAIFI and CAIDI associated with interruption should also be excluded from the calculation of normalised SAIFI and normalised CAIDI.

10 Complaints

Purpose

To report on the level of satisfaction with the distributor's service and to provide information about the level of customer complaints against defined categories.

Reported Indicators

No.	Indicator
DE 1	Total number of complaints received
DE 2	Connection and augmentation complaints as a percentage of total complaints
DE 3	Reliability of supply complaints as a percentage of total complaints
DE 4	Quality of supply complaints as a percentage of total complaints
DE 5	Network charges and costs complaints as a percentage of total complaints
DE 6	Administrative processes or customer service complaints as a percentage of total complaints
DE 7	Other complaints as a percentage of total complaints

Definitions

Administrative processes or customer service complaints includes complaints in relation to meter reading, timeliness of correspondence and other customer communications, the complaints handling process, timeliness of response to complaints and any other process of a general administrative nature.

Complaint means an expression of dissatisfaction made to an organisation, related to its products/services, or the complaints handling process itself where a response or resolution is explicitly or implicitly expected. The reader is referred to the detailed discussion of complaints, with examples, in Appendix 1 of the 2007 SCONRRR Report.[8] This document draws on the guidelines for complaints handling in standard AS ISO 10002-2006 Customer satisfaction – Guidelines for complaints handling in organisations.

Note:

- Complaints may be received via telephone, mail, facsimile, email or in person.
- More than one complaint can be made per customer contact. If a customer makes a complaint about a network charges and costs matter and a transfer matter in the same communication, then 2 complaints should be recorded.

Connection and augmentation complaints includes quality and timeliness of providing new service connections or network augmentation works. Also includes complaints in relation to customer demand not being met due to distribution network unavailability.

Network charges and costs complaints includes complaints in relation to any fee or charge levied by the distributor in respect of the services it provides to customers.

Other complaints includes complaints including meter reading, privacy considerations, health and safety issues, and any other matter not falling into the connection and augmentation, reliability of supply, quality of supply, network charges and costs and administrative processes or customer service categories.

Quality of supply complaints includes complaints in relation to gas quality or supply pressure.

[8] National Energy Retail Performance Indicators, Standing Committee on National Regulatory Reporting Requirements – Retail Working Group, May 2007. A copy can be obtained on the Authority's website: http://www.erawa.com.au/2/319/51/regulatory_guid.pm

Reliability of supply complaints includes complaints in relation to supply interruptions, both planned and unplanned.

11 Call Centre Performance

Purpose

To report on the level of service provided to customers who contact the distributor by telephone.[9]

Reported Indicators

No.	Indicator
DF 1	Total number of telephone calls to an operator
DF 2	Number of operator calls responded to within 30 seconds
DF 3	Percentage of operator calls responded to within 30 seconds
DF 4	Average wait before call answered by operator (seconds)
DF 5	Percentage of calls that are unanswered

Definitions

Number of operator calls responded to within 30 seconds means the number of calls to an operator or customer service operator that were answered within 30 seconds. In the case of an IVR[10] system the measurement period commences at the time that the customer selects an operator option.

Total number of calls to an operator means the total number of calls received by a retailer that were handled by an operator or customer service operator, and in the case of an IVR system covers the number of calls where the customer has selected the relevant operator option (i.e., indicated they wish to be connected to an operator or customer service officer). This indicator excludes all calls that do not require operator attention, including IVR calls where the customer does not select an operator option, and calls that were terminated by the customer **before** an operator option was selected.

Note:

- This is to include all calls to an operator or customer service officer.
- This measure includes all calls that were terminated by the customer **after** the customer selects an option indicating they wish to speak to an operator.
- Calls to third parties, such as contractors or marketing agents acting on behalf of the distributor, are not to be included. However, calls received by a contractor that is providing all or part of the distributor's customer service operations, i.e., an outsourced call centre, are to be included.

Calls that are unanswered means where the customer has terminated the call before it was answered by an operator or, in the case of an IVR system, includes all calls where the customer selected an option indicating they wished to speak with an operator, but then subsequently terminated the call before it was answered by an operator. Calls to an IVR system that were terminated by the customer prior to selecting a relevant operator option are not included.

[9] Reporting against these indicators is mandatory for retailers who operate a call centre that is capable of automatically recording some or all of the responsiveness indicators. Retailers who have other systems to handle customer calls may report on those responsiveness indicators that they record on a voluntary basis.

[10] Interactive Voice Response – equipment that allows a call centre telephone system to detect voice and keypad tone signals and then respond with pre-recorded or dynamically generated audio to further direct callers to the service they require.

Calculations

The “average duration before call answered by operator” is calculated as:

∑(answer wait times)/total number of calls answered by an operator

Note:

- This measure only includes calls that are answered by an operator.
- For IVR systems, the measurement period commences at the time that the customer selects an option indicating they wish to speak to an operator.
- For non-IVR systems, the measurement period commences when the call is received by the switchboard and ends when the call is answered by an operator who is able to respond to the customer’s enquiry (rather than place the customer into a queue).
- Calls that are unanswered are excluded from the calculation of this indicator.

12 Network Construction

Purpose

To report on the construction materials used in the distribution system and the relative density of service connections.

Reported Indicators

No.	Indicator			
	Length of gas distribution mains constructed from (km) -	**HP**	**MP**	**LP**
DG 1	Cast iron			
DG 2	Unprotected steel			
DG 3	Protected steel			
DG 4	PVC			
DG 5	Polyethylene			
DG 6	Other			
DG 7	Total length of all distribution mains installed and in service			
DG 8	Number of service connections per km of gas mains			

Definitions

Cast iron means gas mains that are constructed from cast iron.

Other means gas mains constructed from materials other than cast iron, polyethylene, PVC and steel.

PVC means plastic gas mains constructed from polyvinylchloride material that has been installed in accordance with the requirements of standard AS 3723 or a precedent standard or industry practice.

Polyethylene means plastic gas mains constructed from polyethylene material that has been installed in accordance with the requirements of standard AS 3723, or a precedent standard or industry practice.

Protected steel means unprotected steel mains that are subject to additional measures, such as a protective concrete covering, or burial to a depth in excess of the minimum required by AS 1697 in order to provide additional protection against damage.

Unprotected steel means gas mains constructed from steel material that has been installed in accordance with the requirements of standard AS 1697, or a precedent standard or industry practice.

The terms high pressure, medium pressure and low pressure have the same meanings as in section 8.

Calculations

The “number of service connections per km of gas mains” is calculated by dividing the total number of small use distribution connections[11] by the total length of gas mains installed and in service.

[11] Small use customers consume no more than 1 terajoule of gas per annum.