

# **Jemena Gas Networks (NSW) Ltd DESIGN GUIDE**

## **JDG-002**

### **DESIGN GUIDE FOR NATURAL GAS METERING**

**Issue 2 – 02/02/2007**

This document is provided by Jemena Gas Networks (NSW) Ltd and is subject to change. It is the responsibility of the user to ensure they have the latest version by referring to the Jemena web site.

## 1. Purpose

This document defines the allowable metering configurations by Jemena Gas Networks (NSW) Ltd

## 2. Principles

The following principles are to be adhered to:

- Jemena is responsible for the approval of the metering configurations;
- Any proposed variations to the standard meter configuration must be submitted to Jemena prior to installation;
- Jemena requires unimpeded access to meters for the purpose of meter reading and maintenance;
- Meters are required to bill the customer consuming the gas. Meters necessary to bill the customer will be provided by Jemena NSW Gas Networks;
- Metering equipment is provided by Jemena, unless otherwise stated within this document or, in the letter of offer to the developer;
- Meter equipment is, and remains the property of, Jemena NSW Gas Networks;
- Jemena reserves the right to make changes to this and related documents from time to time, as required.

## 3. Standard Metering Configurations

Jemena will provide the metering equipment for the configuration specified below. Metering configuration will be based on the appliance and application type.

### 3.1 Individual Appliances

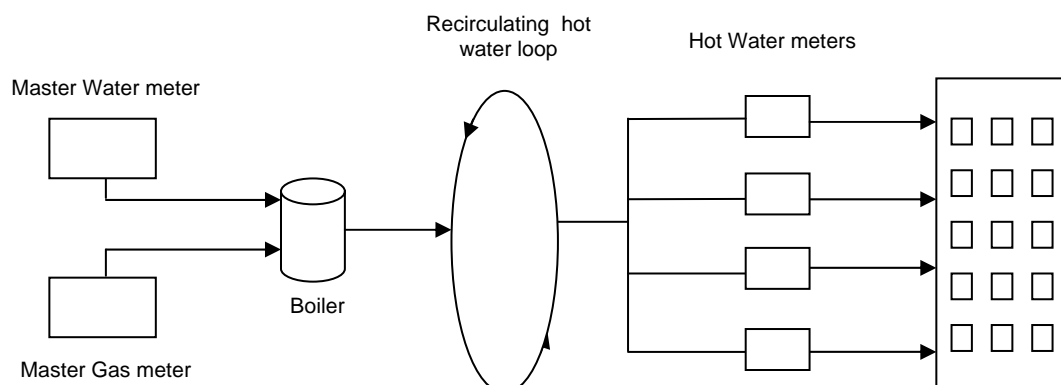
Individual appliances are appliances that consume gas within a dwelling or commercial premises (eg:cooking). For individual appliances, Jemena will provide a single gas meter for each dwelling or commercial premise.

### 3.2 Centralised Hot Water System Appliances

Centralised appliances are appliances that provide a shared service for a number of dwellings. The metering is provided to allocate the energy to each dwelling in proportion to the amount of the service used.

Jemena will provide the following meters for the provision of natural gas to the centralised hot water system:

- Master Gas meter (for centralised hot water system);
- Master Cold water meter;
- Individual hot water meter for each dwelling/common area.



Any tempering of water temperature after the boiler and before the individual hot water meters shall draw water downstream of the master cold water meter. This ensures that the integrity of the common factor calculation is maintained to verify metering performance.

Jemena reserves the right to set minimum energy efficiency performance standards for proposed centralised hot water systems.

For more information on the design of centralised hot water systems refer to “DG-003 Design Guide for Natural Gas Centralised Hot Water”.

### 3.3 Centralised Gas Air Conditioning Appliances

Jemena will provide a master gas meter for a centralised gas heat pump (GHP) air conditioning system.

Secure electronic access by Jemena to the GHP control system will be required on these sites for metering and billing purposes.

### 3.4 Any Combination of The Above Three Applications

Any combination of the previous three applications will require the same amount of meters if they were treated separately.

### 3.5 Common Area Facilities

Jemena will provide a single master gas meter for sites which have any common facilities provided by the body corporate including:

- shared laundry facilities, (gas hot water and gas clothes dryers);
- communal barbecue/entertainment areas;
- communal heated pool/spa/sauna.

### **3.6 Commercial Units**

Commercial units include businesses, serviced apartments and retirement villages.

Jemena will provide gas metering appropriate for the type of commercial site to each commercial unit, depending on whether individual, centralised, or common area appliances are to be installed.

### **3.7 Retrofitting Sites**

Sites that require retrofitting are existing sites that are considering:

- converting from electricity to gas; or
- requiring the installation of new natural gas facilities; or
- requiring a new metering configuration and installation.

Applications for retrofitted sites will be reviewed and approved by Jemena based on the metering configurations detailed above.

There is no obligation on Jemena Gas Networks (NSW) Ltd to retrofit a site.

## **4. Remote Metering Facilities**

Remote metering facilities enable Jemena Gas Networks (NSW) Ltd to obtain metering and billing data through an electronic transfer of information from the site.

Remote metering facilities will be required when access to meters cannot be assured.

Remotely metered developments will require the installation of:

- Meter data loggers (MDL's ) (provided by Jemena) required to measure and record the individual gas and water meter usages on-site;
- A dedicated telephone line (rental & associated charges paid for by the body corporate) to the remote metering facility for the physical transfer of electronic information between the metering facility and Jemena NSW Gas Networks billing systems. This is to be provided by the Developer.
- Inter-connecting cabling for power supply and data transfer from the remote meters to the MDL's. This is to be provided by the Developer.

## **5. Submission of Loads**

The Hydraulic Consultant shall provide the following information to Jemena:

- the calculated peak load for each meter;
- the number of residential units; and the
- preferred metering positions.

Attachment ADG-002A Load Table, provides a template to be used for supplying this information.

The completion of this form does not place any onus on Jemena to connect natural gas or provide what has been proposed on the form.

Once this information has been correctly provided, an offer may be issued to the developer.

## **6. Certification of Centralised Hot Water System Performance**

Jemena will only issue metering equipment for centralised hot water systems that have been certified by a suitably qualified and competent party, to meet the minimum energy efficiency performance specified by Jemena.

For more information on Jemena's certification requirements and minimum energy efficiency performance standards, include key design criteria of centralised hot water systems refer to "DG-003 Design Guide for Natural Gas Centralised Hot Water".