1.0 OBJECTIVE OF GUIDANCE NOTE

This guidance note is to help staff take a meter reading from their gas or electricity meter. It covers the following:

- how to identify which type of meter reader you have on site
- how to take a reading
- how to calculate the site’s consumption

Please note, that there are many types of meters in operation, therefore some may not look exactly the same as those shown in the pictures. This guidance should be only used as a general guide and some adaptation to them may be needed for a small number of sites.

Ideally, you will need to take your meter reading on the last working day of every month to ensure you can compare consumption between months.

2.0 TAKING A METER READING FOR ELECTRICITY

The first step is to identify where your electricity readers are, remember, there may be more than one.

2.1 Identify the Type of Electricity Meter

The next step is to identify what type of electricity meters they are, use the photographs below to identify them and then go to the section in this document indicated next to the photograph.

Dial Meter  Go to Section 2.1.1  Digital Meter  Go to Section 2.1.2  Code 5 Meter  Go to Section 2.1.3
2.1.1 How to Read an Electricity Dial Meter

These have rows of dials/clocks with pointers which move from 0 - 9. For electricity meters, read the five dials from 10,000 to 1. Ignore the dial marked 1/10 of a unit; this is for testing only.

For the following example:

Always write down the number the pointer has **passed** (this is not necessarily the nearest number to the pointer). So if the pointer is anywhere between, say, 4 and 5, write down 4. The sample meter reading shown will be 45928 kWh.

![Dial Meter Example](image)

2.1.2 How to Read an Electricity Digital Meter

There are two types of digital meter; single register and two register.

**Single register digital meter**

To read a single register digital meter, write down the numbers shown from left to right. Ignore the last figure marked 0.1.

**Digital meter with two registers**

If you are on a tariff which gives you lower-priced off-peak electricity, your meter may have two rows of figures. The top row records your use of off-peak electricity and is marked 'LOW'. The bottom row records normal rate units and is marked 'NORMAL'.
2.1.3 How to read a Code 5 Electricity Reader

A Code 5 meter stores numbers which can be read from the front of the meter, either as the meter automatically scrolls through them (about one each second) or in response to pushing a button on the meter.

The parameters and the order of display will vary, but the following list shows the main ones. The meters will often display a code and a value for each parameter, sometimes with an explanation of the codes printed on the meter.

The main parameters, in approximate order of display are as follows

- *Date*: Month and Day, and sometimes the day of the week (e.g. Monday = 1)
- *Time*: Should show standard time, even during daylight savings period.
- *Total electricity*: Total kWh used in all periods since meter installation.
- *On-peak use*: Total kWh used in the on-peak period since meter installation.

You will need to record the total electricity (the parameter underlined above).

3.0 TAKING A METER READING FOR GAS

The first step is to identify where your gas meters are. Note there may be more than one.

3.1 Identify the Type of Gas Meter

As for reading the electricity meter, identify what type of gas meters you have on site using the images below to identify them and then go to the relevant section in this document. (There are a number of different gas meters used on sites and they have to be read differently).
3.1.1 **Dial Type Meter Reader**

Meters are normally read in 100s of cu.ft. or whole numbers of cu.m., ignoring the decimal sub-multiples.

For example, in the meter shown to the left, there are 5 dials having multipliers of 10, 100, 1000, 10000 and 100000 cubic feet (cu.ft.) per division, plus a test dial showing 2 cu.ft. per revolution.

The index on the example shown is 138210 cu.ft., but normally only the first four digits would be recorded, i.e. 1382, making the Meter Reading 138200 cu-ft.

3.1.2 **Pirect Gas Meter**

The Pirect Gas Meter, shown to the right, shows 5 digits with the least significant (right hand) red digit recording in tens of cu.tt with a fixed printed zero and a test dial showing 1 eu.tt per revolution. In this case the index on the example is showing 123410 cu.ft., but normally only the first four digits would be recorded i.e. 1234 and not red digits, making the Meter Reading 123400 cu-ft.
3.1.3 Direct Reader Gas Meter

The direct reader meter, to the left, shows 6 digits with the least significant (right-hand) digit recording in hundreds of cu.ft. as the printed multiplier is X100, with a test dial showing 10 cu.ft per revolution.

The meter reading on the example shown is 12345600 cu.tt. and all six digits would be recorded.

3.1.4 Electronic Digital Gas Reader

The electronic digital gas meter, to the right, records in cubic metres, not cubic feet and displays consumption in sub-decimals of a cubic metre for test purposes. The index on the example shown is 00254.013 m³, but normally only the whole numbers of cubic metres, i.e. the first five digits, would be recorded making the Meter Reading 00254 m³.

4.0 CALCULATING MONTHLY GAS AND ELECTRICITY CONSUMPTION

Meters are not reset each month. The readings increase from month to month. The difference between one month’s meter reading and the next is the amount of energy consumed during the month. This is the same for gas and electricity.

For example:

Electric Meter
Current Reading 9653
Previous Reading 9630
23 kWh used in one month

Use the tables on the next two pages should help you calculate your energy consumption.

If you have more than one gas or electricity meter on site you will have to calculate the total energy consumed measured on each meter and then add them together.
# METER READINGS FOR ELECTRICITY CONSUMPTION

**SITE NAME**

<table>
<thead>
<tr>
<th>Electricity Meter Reference</th>
<th>Date of Meter Reading</th>
<th>Units of Meter Reading</th>
<th>Calculated Consumption*</th>
<th>Likely reasons for change in consumption **</th>
<th>Signature of Meter Reader</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

* Take current reading and subtract from previous reading.
**Likely reasons, for example, change in working times, use of electrical fan heaters, increase in work days, an increased use of air conditioning units.
# METER READINGS FOR GAS CONSUMPTION

**SITE NAME**

<table>
<thead>
<tr>
<th>Gas Meter Reference</th>
<th>Date of Meter Reading</th>
<th>Units of Meter Reading</th>
<th>Calculated Consumption*</th>
<th>Likely reasons for change in consumption **</th>
<th>Signature of Meter Reader</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

* Take current reading and subtract from previous reading,
**Likely reasons for example, change in working times, use of gas heating, heating left on, an increase in work days.