

Electricity metering data made easy

We know it's important for you to stay informed about your energy usage so you can understand how to manage it. After all, the data we gather from your energy meter is what determines your electricity usage and rates.

That's why we've put together an easy to understand guide for interval meters that helps take the guesswork out of any technical terms you'll see on your NEM 12 meter data extract CSV file – and so when you receive your bill, you know when your energy has been used and how you've been billed. We've also included an example of a bill as a helpful reference on page 4.

Key terms and what they mean

Term	What it means	
Kilowatt hour (kWh)	This is the standard unit of measurement for your energy supply.	
Controlled Load	A dedicated circuit for appliances like hot water systems or slab / underfloor heating. The appliance has its own meter and the rate is based on the energy it uses. Not all meters will have this.	
Usage	How much energy you've used, as recorded by your meter.	
Generation	How much energy your solar panels generate and puts back into the grid.	

How to read and understand the Metering Data

Your metering data will look like this example below, starting with the number 100. 100,NEM12,200301011534,MDP1, AGL.

Order of data	Example	What it means
Record Indicator	100	The details of the entity who collected and validated the metering data, and the retailer (AGL) who received it.
Version Header	NEM12	NEM stands for National Electricity Market. The number represents the version as set by the market.
Date Time	YYYYMMDDHHMM	The date and time the data was created by the retailer.
From Participant	MDP1	MDP stands for Meter Data Provider. This is who collected and validated the metering data.
To Participant	AGL	The energy retailer, in this case AGL.

NMI Data and what it means

Your metering data will look like this example below, starting with the number 200. 200,VABD000163,E1Q1,1,E1,N1,METSER123,kWh,30

Order of data	Example	What it means
Record Indicator	200	The details contained in this row are specific to your meter equipment.
NMI	VABD000163	NMI stands for National Meter Identifier. It's a unique number that's assigned to the electricity supply point at your address. You'll see this at the top of your bill in the section 'Your details'.
NMI Configuration	E1Q1	This code details how your meter is set up for consumption and generation.
Register IDs	1	Interval/digital meters can measure and record different types of energy such as general consumption, off peak hot water or solar. The register is the mechanism by which a meter can record each function.
NMI Suffix	E1	The register which records your home's electricity usage.
MDM Data Stream Identifier	N1	MDM is the market defined value for data delivered to the AEMO.
Meter Serial Number	alphanumeric characters	Electricity meters have their own unique serial number, usually located on the front of the device.
UOM	mWh, kWh or Wh	UOM stands for Unit of Measure. It's the unit by which the quantity of energy is measured.
Interval Length	5,15 or 30	The length of time in minutes that your home's energy usage or generation is recorded.

Interval Data and what it means

Your metering data will look like this example below, starting with the number 300. $300,20030501,50.1,\ldots,21.5,V_{,,,}20030101153445$

Order of data	Example	What it means
Record Indicator	300	The energy usage for each interval of time, along with any supporting information like identifying any estimated data provided.
Interval Date	20030501	The date that the interval data relates to.
Interval Value	50.1	The energy usage recorded on the date indicated.
Quality Method	A,S,F or V	At a given time meter data for interval/s may have not been retrieved. The flag assigned informs the user of the status of the read at the time it was retrieved. A - (actual) for validated and accepted actual metering data recovered from the meter. S - Temporary metering data and may be replaced by actual metering data. Taken a value of consumption for a similar period and used it until an actual read is available. F - Unable to obtain an actual read for the interval/s. It is a permanent replacement value and cannot be replaced by an actual read at any time. This value is an average of the meter consumption for a similar period of time. V- (variable) combination of A,S or F quality methods.
Reason Code		A code used to explain why an actual read was not recorded for a given interval.
Reason Description		The explanation why an actual read was not recorded for a given interval.
Update Date Time	YYYYDDMMHHMM	The date we received the meter's data.

^{*}AEMO stands for Australian Energy Market Operator. It's a body corporate that is responsible for operating Australia's largest wholesale gas and electricity markets and power systems.

Interval Event and what it means

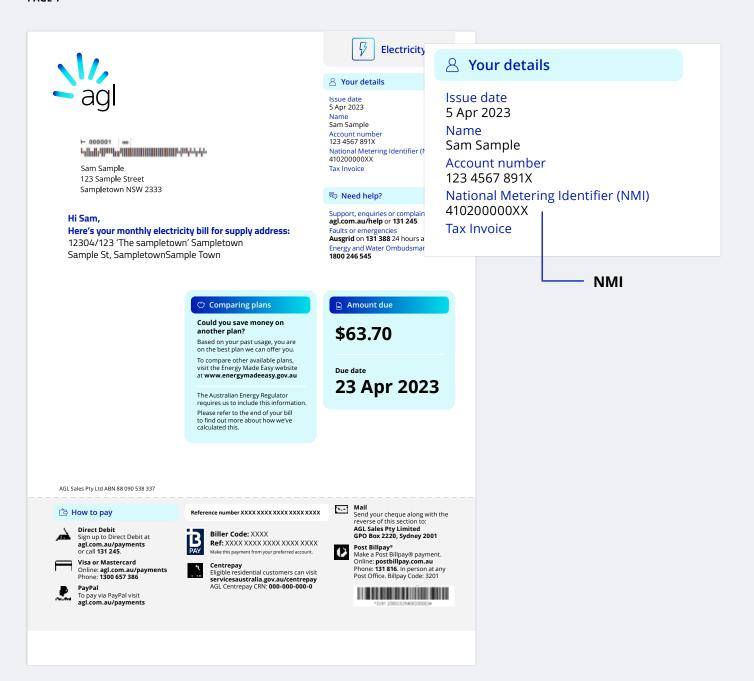
Your metering data will look like this example below, starting with the number 400. 400,1,28,S14,32.

Order of data	Example	What it means
Record Indicator	400	The details of the data intervals impacted by a power interruption.
Start Interval	1	The start time that the interval event began.
End Interval	28	The end time the interval event ended.
Quality Method		The accuracy of your meter's read.
Reason Code	32	A code used to explain why an actual read was not recorded for a given interval.
Reason Description		The explanation why an actual read was not recorded for a given interval.

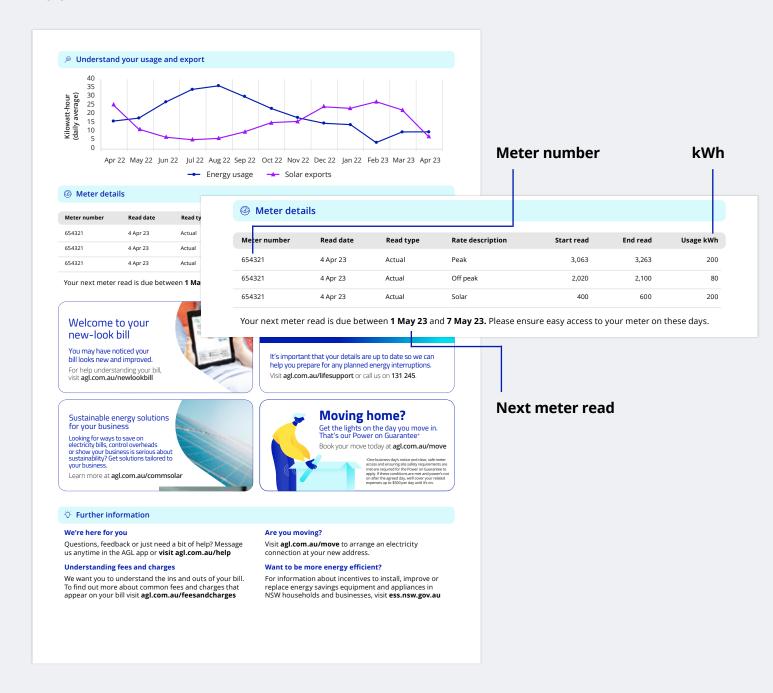
How to read this information on your bill

Some of the above fields can also be found on your bill. Take a look at the example bill below to look at where you can find them.

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Want more information?

Head online to **agl.com.au/meterdatarequest** or if you'd like to review the standards set by the AEMO, visit **aemo.com.au/energy-systems/electricity/national-electricity-market-nem/market-operations/retail-and-metering/metering-procedures-guidelines-and-processes**