



How to interpret data contained in Detailed Data format

The easiest way to view the data in the file is to open it in Microsoft Excel or similar program. If you are a windows user, it can also be viewed in Notepad.

This file format is very similar to the market standard used by network distributors and sent to retailers for customer billing. The data provided per interval is in Eastern Standard Time (EST).

When analysing the data file and comparing this with the consumption charged on your bill, you must take into consideration if you live in a state which has Daylight Savings Time (DST) and adjust the data accordingly at 2am on the date DST starts and ends.

The data provided in the detailed report is displayed in records to assist in interpreting the data contained in the file:

Record	Description
200	NMI Data Details Record
300	Interval Data Record These lines show your usage (and generation if applicable).
400	Interval Event Record This line is only displayed if you have a mix of actual or substitute data during one read date

Glossary of Terms Used

Meter Number -meter serial number found on your physical meter and on your bill.

NMI Number -National Metering Identifier number found on your bill.

NMI Suffix -A collection of interval data readings associated with a meter register recording usage on your meter.

In the 200 record, there are fields identified as a NMI Suffix. A Meter can contain more than one NMI Suffix and more than one NMI Suffix may be needed to determine the total energy consumption at the premise.

The example file used in this guide has E1 and an E2 NMI Suffixes, an E1 NMI Suffix is usually associated with general light and power usage and the E2 NMI Suffix is usually associated with electric off peak hot water system (controlled load). In some cases, where you have more than one meter onsite you will be required to add NMI Suffixes together to determine the total consumption.

If you have a solar installation at your premise, you will also see a B1 NMI Suffix. The data associated with the B1 NMI Suffix is energy that your installation is generating back into your distribution network.

Quality Flag – summary of data quality and substitution flags for all interval values contained in the file:

A Actual Data

S Substitute Data

F Final Substitute Data (data that the distributor has advised will not ever be replaced with an actual. It is a final version of data.

V Variable Data (a mix of actual, substituted or final substituted data found in the read date represented in the 300 record.

Reason Codes - Reason codes are shown in the table below taken from AEMO Meter Data File Format Specification NEM12 & NEM13 Document.

Register ID - Interval meter register identifier.

UOM - Unit of Measure. For electricity, kWh (kilowatt hour) is used. It is a derived unit of energy being used at a constant rate over an hour period of time.

<u>REASON CODE</u>	<u>REASON CODE DESCRIPTION</u>	<u>DETAILED DESCRIPTION</u>
0	Free text description	For use in the case that other reason code descriptions cannot be reasonably utilised.
1	Meter/equipment changed	Where <i>metering installation</i> has changed.
2	Extreme weather conditions	Extreme weather conditions have prevented data collection.
3	Quarantined premises	Premises under quarantine preventing access to <i>metering installation</i> .
4	Dangerous dog	Dog has been identified as posing an immediate hazard to <i>metering installation</i> access.
5	Blank screen	Electronic meter has blank display, could be powered off or faulty display but unable to determine.
6	De-energised premises	Blank screen on an electronic meter where the reader is able to determine that the site is de-en or an interval metered site where the MDP is providing substituted data for a site that is de-en but data streams are left active.
7	Unable to locate meter	The customer premises were found, but unable to locate the <i>metering installation</i> .
8	Vacant premises	Data collector believes the property is vacant.
9	Under investigation	An issue with the <i>metering installation</i> has been identified and is under

		investigation.
10	Lock damaged unable to open	Unable to open lock due to damage and the lock is preventing access to the <i>metering installation</i> .
11	In wrong route	Unable to obtain reading due to the <i>metering installation</i> being in the wrong route.
12	Locked premises	Unable to obtain access to <i>metering installation</i> due to premises being locked.
13	Locked gate	Locked gate at premises is preventing access to <i>metering installation</i> .
14	Locked meter box	Locked meter box is preventing access to <i>metering installation</i> .
15	Overgrown vegetation	Overgrown vegetation at premises is preventing access to <i>metering installation</i> .
16	Noxious weeds	Noxious weeds at premises are preventing access to <i>metering installation</i> .
17	Unsafe equipment/location	The equipment or the location of the metering installation has been identified as unsafe (other than meter being high).
18	Read less than previous	Current read obtained is less than previous read, no evidence of tampering and no reverse energy observed.
20	Damaged equipment/panel	The equipment or the panel of the metering installation has been damaged but has not been identified as unsafe.
21	Main switch off	Blank screen on an electronic meter where the reader is able to determine that the main switch has been turned off or interval metered site where the MDP is providing substituted data for a site that the main switch is off but data streams are left active.
22	Meter/equipment seals missing	One or more seals are missing from the metering installation, no tampering has been identified.
23	Reader error	MDP identified that reading provided by the meter reader was incorrect.
24	Substituted/replaced data (data correction)	Interval reading – MDP replaced erroneous data for specific intervals.
25	Unable to locate premises	Unable to locate premises.
26	Negative consumption (generation)	Basic meter where the previous reading is higher than the current reading, generally site will have generation.

27	RoLR	To be used when transferring customers as a result of a Retailer of Last Resort event.
28	CT/VT fault	MDP has corrected data due to a known instrument transformer (CT/VT) fault.
29	Relay faulty/damaged	Data collector has identified the relay device within the metering installation is faulty.
31	Not all meters read	Readings for all meters linked to the premises have not been received by the MDP (typically as a result of a non-scheduled reading).
32	Re-energised without readings	Unable to obtain readings due to exceptional circumstances when the site is re-energised outside of standard practice.
33	De-energised without readings	Unable to obtain readings at the time of de-energisation including disconnection for non-payment.
34	Meter not in handheld	Unexpected meter found on premises (new meter on premises or additional meter on premises).
35	Timeswitch faulty/reset required	Data collector has identified the time switching device within the metering installation is faulty and required resetting.
36	Meter high/ladder required	Meter in a high position requiring a ladder to obtain reading.
37	Meter under churn	MDP has substituted data based on metering data not being received from relevant MDP.
38	Unmarried lock	Premises has two or more locks, one of which is a power industry lock and they have not been interlocked together correctly to allow access to the premises.
39	Reverse energy observed	Reverse energy observed where site isn't expected to have reverse energy.
40	Unrestrained livestock	Data collector observed that livestock is roaming free on the premises and could potentially be hazardous, or access wasn't obtained due to potential for livestock to escape.
41	Faulty Meter display/dials	Display or dials on the meter are faulty and site is not de-energised nor is the display blank on an electronic meter.
42	Channel added/removed	MDP obtained metering data for a channel that has been added or

substituted metering data where a channel has been removed but the data stream is still active in MSATS.

43	Power outage	Interval meter – intervals have been substituted due to power not being available at the metering installation.
44	Meter testing	MDP identifies meter has been under testing regime and has substituted data to reflect energy consumption values during testing period.
45	Readings failed to validate	Readings have been loaded into MDP's system, have failed validation and have been substituted.
47	Refused access	The customer refused to provide access when requested.
48	Dog on premises	Data collector has identified that there is a dog on the premises but has been unable to determine if the dog is dangerous.
51	Installation demolished	Metering installation no longer exists at the premises.
52	Access – blocked	Used when there are items blocking safe access to the meter or premises.
53	Pests in meter box	Pests have been identified within the meter box that poses a risk to metering data accuracy, safety of the installation or a hazard to the meter reader.
54	Meter box damaged/faulty	Data collector identifies that the meter box is damaged or faulty and the mechanical protection or weather proofing of the metering installation is compromised as a result.
55	Dials obscured	Data collector unable to obtain reading due to meter dials being obscured, meter face painted over, viewing panel in locked meter box with pvc panel misted over/faded/mouldy etc. No evidence of tampering.
60	Illegal connection	Data collector has identified that the premises has been illegally connected.
61	Equipment tampered	Data collector identified that the metering installation has been tampered with and the recording of energy consumption may have been affected as a result.
62	NSRD window expired	Where the NSRD window has expired and the data collector has been unable to deliver actual readings.

64	Key required	Data collector typically has access to the key but was unable to obtain/locate at the time of reading.
65	Wrong key provided	Data collector has been provided with a key but the key no longer opens the lock.
68	Zero consumption	Where a site has known zero consumption and the site is not de-energised in MSATS but no energy is flowing to the meter.
69	Reading exceeds substitute	Re-substituted data that has been modified to improve the smoothing of energy to align with the next actual reading
71	Probe read error	Data collector unable to read the meter due to the meter probe being unable to extract the metering data.
72	Re-calculated based on actual reads	MDP received actual reads and prior substitutes have been amended.
73	Low consumption	Reading failed validation as being too low based on historical consumption and has been either left as an actual or replaced by a substitute.
74	High consumption	Reading failed validation as being too high based on historical consumption and has been either left as an actual or replaced by a substitute.
75	Customer read	Read provided to the MDP by the customer. (only applicable in jurisdictions where customer reads are allowed).
76	Communications fault	Data collector attempted to read the meter but was unable due to not being able to remotely communicate with the meter.
77	Estimation Forecast	Optional reason code that can be applied to forward estimations.
78	Null Data	For interval meters where no data was received and substitutes created to cover this period.
79	Power Outage Alarm	For interval meters where a power outage has been detected by the meter.
80	Short Interval Alarm	For interval meters where the time in the meter is slow and has now been corrected, resulting in the interval consumption not being a full 15 or 30 minutes in length.
81	Long Interval Alarm	For interval meters where the time in the meter is fast and has now been

corrected, resulting in the interval consumption exceeding a full 15 or 30 minutes in length.

Resetting of the meter due to re-programming, change of tariff or firmware upgrade etc.

Where a time reset has occurred within the metering installation.

87 Reset occurred

89 Time reset occurred