

# NEM12

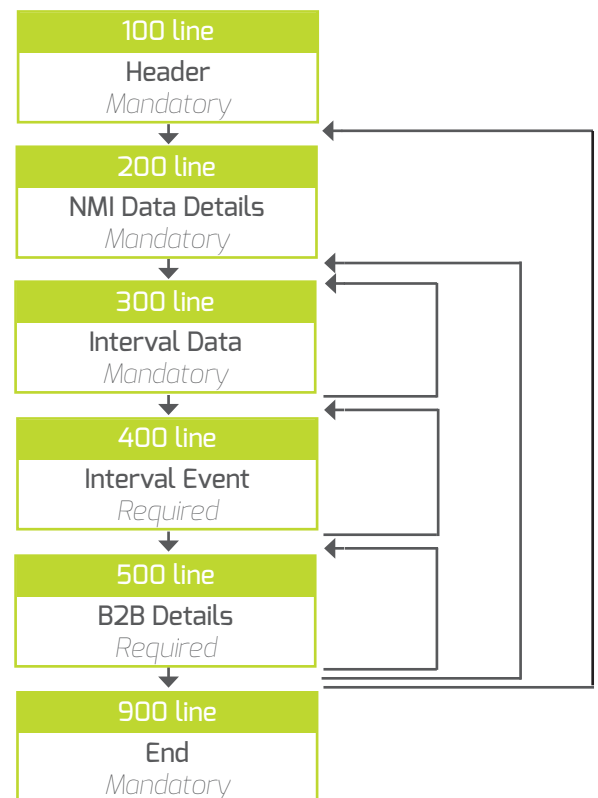
## Meter Data File Format (MDFF) Quick Guide

a NEM 12 file is the current Australian Energy Market Operator (AEMO) format for interval data.

### blocking cycle

The blocking of records will be as per the below diagram, Therefore;

- Files will only contain one 100 line / record.
- Each time something in the 200 line changes a new 200 line is required for the subsequent 300 line. E.g. The UOM, Interval length or NMISuffix changes.
- Multiple 300-500 record blocks are allowed within a single 200 record
- 400 and 500 lines are not always required, these lines will only occur when required.
- Files will only contain one 900 line / record.



### technical information

Knowledge of the following elements will assist in the deciphering of NEM12 data files;

- A NEM12 file is a single .csv data block.
- A comma is required between all fields even if the field is NULL.
- Commas are not permitted as valid characters in any field.
- Data is across the page in 48 or 96 intervals depending on interval length.
- Interval data is presented in sequential time order.
- Interval times are always period ending (I.e. The consumption between 1:00am and 1:30am will be shown as interval 01:30).
- Date format is always YYYYMMDD, YYYYMMDDhhmm or YYYYMMDDhhmmss (all components of the data time fields are given in double digits).
- Only 1 .csv file can be included in a .zip file.
- File extension is .V# and can be opened in Notepad.

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**Please turn overleaf for details on how to decipher a NEM12 file.**

## NEM12 Example File

```
File Edit Format View Help
100,NEM12,201403051415,ENERGEXM,AGLE
200,XXXXXXXXXX,E1Q1,,E1,N1,201010189,kWh,30,
300,20130301,36.89,37.31,34.93,35.39,37.67,37.51,37.62,36.11,
300,20130302,1.06,1.12,.99,.95,1.12,.98,1.15,.96,1.54,1.03,1.
300,20130303,1.01,1.02,1.02,1.09,1.38,1.09,1.06,1.02,1.11,
300,20130304,53.22,41.46,38.97,39.35,59.8,61.76,58.09,54.2,
300,20130305,36.47,35.87,34.79,35.9,35.15,35.89,36.38,35.13,
400,1,21,A,,
400,22,23,A,79,Power Outage Alarm
400,24,48,A,,
31,26.59,27.28,33.99,33.57,34.3,35.05,36.13,34.32,34.32,34.
300,20140306,27.91,28.12,24.72,25.19,27.16,27.02,27.15,27.
300,20140307,26.89,27.05,22.53,25.14,26.86,27.14,25.87,25.5,
300,20140308,30.33,30.23,26.36,27.16,26.74,24.79,28.57,30.1
900
```

insightful.

82168  
476453  
5279341  
365798

## 100 line - File Header

100,NEM12,201403281502,ENERGEXM,AGLQLD2041

Field Name	Example data	Comments
Record Indicator	100	Refers to the line number
VersionHeader	NEM12	Displays the file type
DateTime	201403281502	Date the file was generated in YYYYMMDDhhmm
FromParticipant	ENERGEXM	ENERGEXM is the Metering Dynamics MDA Participant ID
ToParticipant	AGLQLD2041	Participant who is authorised to receive the data. This field cannot be left blank, therefore it may just contain the NMI

## 200 line - NMI Data Details Record

200,XXXXXXXXXX,E1Q1,,E1,N1,20111111,kWh,15,

Field Name	Example data	Comments
Record Indicator	200	Refers to the line number
NMI	XXXXXXXXXX	10 digit NMI for the supply point
NMI Configuration	E1Q1	String of all NMI suffixes applicable to the NMI
RegisterID		Not required for type 1-4 or when sending data to another MDP
NMISuffix	E1	The E channel of Meter 1
MDMData Stream Identifier	N1	Not required when sending data to another MDP
MeterSerial Number	20111111	For sub-metering the serial number and channel of the logger will be displayed
UOM	kWh	Unit of measure / what value the usage data reflects
IntervalLength	15	Length of the metering interval (15 or 30 minutes)
NextScheduled ReadDate		Not required for remotely read meters (will always be blank for MD meters)

## 300 line - Interval data record

300,20130301,.92 (x48 or 96),A,,,20130302014259,

Field Name	Example data	Comments
Record Indicator	300	Refers to the line number
IntervalDate	20130301	Date of data in YYYYMMDD
IntervalValue	.92	Usage for the interval (there will be 48 or 96 fields depending on the interval length). Missing data will be shown as N (NULL)
QualityMethod	A	Summary of data quality. In this example the data is ACTUAL. SUBSTITUTED data will be represented with 'S', PERM SUBS with 'F'
ReasonCode		The reason for substituted/estimated data (not required for QualityMethod A, N, E)
Reason Description		Description of the reason code
Update DateTime	20130302 014259	Latest datetime that the record was updated in YYYYMMDDhhmmss
MSATSLoad DateTime		The date/time stamp that the data was loaded into MSATS

## 400 line - Interval Event Record

For a detailed explanation please refer to AEMO's detailed MDFF specification

## 900 line - B2B Details Record

For a detailed explanation please refer to AEMO's detailed MDFF specification

## 900 line - End of data

900

Field Name	Example data	Comments
Record Indicator	900	End of File