

PARTICIPANT BUILD PACK 1: CSV DATA FORMAT SPECIFICATION

PREPARED BY: AEMO
DOCUMENT REF: 305192
VERSION: 3.7
EFFECTIVE DATE: 10 October 2022
STATUS: FINAL

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Version History

| VERSION | DATE | AUTHOR(S) | CHANGES AND COMMENTS |
|---------|------------|-----------|--|
| 0.1 | 24/05/2002 | MK | <ul style="list-style-type: none"> Initial draft |
| 0.2 | 31/05/2002 | MK | <ul style="list-style-type: none"> Draft update following GTPWG review |
| 0.3 | 11/06/2002 | MK, DM | <ul style="list-style-type: none"> Added clarification of “\$” sign treatment, Added trigger descriptions for some transactions, Minor typographical error corrections. Street_Identifier data element is renamed to Street_ID Suburb_or_Locality data element is renamed to Suburb_Or_Place_Or_Locality to align it with the same element in PBP3. Gas_Meter_Number is removed from T330. Added comment related to password protection of compressed files. |
| 1.0 | 17/06/2002 | MK | <ul style="list-style-type: none"> First release |
| 1.1 | | MK | <ul style="list-style-type: none"> Added “no-acknowledgements” statement for CSV delivered via e-mail or on a disk. Change #2. Clarified the fixed column order for CSV components. Change #3. Planned_Outage_Commencement_Time is of type Time. Change #5. Added section 2.10 to explicitly state that the use of CDATA, <, >, & and hexadecimal characters is prohibited in CSV components. Change #6. Section 6.1 specifies transaction names as they should appear in CSV file name or e-mail subject. Change #7. Added “BAS” to Meter_Attachments element values (T333). Change #9. |
| 1.2 | 23/02/2004 | DM | <ul style="list-style-type: none"> Change Request 41. Add Customer Contact details transaction (see section 6.12) and update Data Dictionary section 7 as per CR 41 |
| | | DM | <ul style="list-style-type: none"> Change Request 20. Add “Street Suffix” (eg “N” North) and Postcode (optional) to Street and Suburb combination file. See 6.8 Refresh of New Street Listing for MIRN Discovery (T298). |

| | | | |
|-----|------------|----|---|
| | | DM | <ul style="list-style-type: none"> Minor changes to introduction and approval section to accommodate post FRC operation |
| 1.3 | 8/11/2004 | DM | <ul style="list-style-type: none"> Change Request 67. Add further clarity as to how “space” characters are to be treated. See Section 2.11 (Leading and Trailing Spaces) |
| 1.4 | 18/07/2005 | DM | <ul style="list-style-type: none"> Minor changes to approval section to reflect organisational changes |
| 1.5 | 30/06/2006 | DM | <ul style="list-style-type: none"> Change Request 80. Add Complete MIRN Listing transaction (T299) (see section 6.13) and update and Compression Format section 4.4 as per CR 80 |
| 1.6 | 1/06/2009 | DM | <ul style="list-style-type: none"> Update to include transactions for RoLR. Update to include transaction changes following the implementation workshop (see CR92). Update to include changes following review (to be included in CR94). Update to include changes for CR95. Consolidated 1.6 changes. |
| 3.0 | 1/07/2010 | SM | <ul style="list-style-type: none"> Ensure document meets AEMO standards. Check references. Add References to Predecessors |
| 3.1 | 30/07/2012 | SM | <ul style="list-style-type: none"> IN011/12 – Residual changes to align systems and schema with documentation (NECF) |
| 3.2 | 01/03/2013 | JL | <ul style="list-style-type: none"> IN029/12 Pilot Program BAU Process |
| 3.3 | 01/01/2014 | DM | <ul style="list-style-type: none"> IN004/12 – Redundant Provision and minor GIP and Spec Pack changes |
| 3.4 | 29/09/2017 | ND | <ul style="list-style-type: none"> IN039/16 – Harmonisation of T900 Password Protection minor GIP and Spec Pack changes |
| 3.5 | 30/04/2021 | DM | <ul style="list-style-type: none"> IN008/18 – Add AEMO MIRN Discovery process (T282 and T283) to align with existing RMP obligations. This is part of IN004/17 consultation. |
| 3.6 | 29/11/2021 | AP | <ul style="list-style-type: none"> IN018/20 – Delete T71 |
| 3.7 | 10/10/2022 | DM | <ul style="list-style-type: none"> IN007/20 Add further clarity to the description of the T299 (Complete MIRN Listing) file. |

Executive Summary

This document is the Participant Build Pack 1 - CSV Data Format Specifications v 3.5 (Marked up) for delivery of the Comma-Separated Values files to support the operation of the Victorian Gas Retail Market.

References to Predecessors

To reflect the governance changes implemented on 1 July 2009, this document has been amended to remove references to the Victorian Energy Networks Corporation (VENCorp) and replace such references with Australian Energy Market Operator (AEMO). Where any content inadvertently refers to VENCorp it should be read as referring to AEMO.

It should be noted that participant ID "VENCORP" remains as the participant ID for AEMO as the gas market operator in Victoria and Queensland.

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1. INTRODUCTION

1.1 Purpose

This document defines format of Comma-Separated Values (CSV) files for transactions that are to be exchanged amongst AEMO and Market Participants, to enable the Gas Retail Market in Victoria to operate in a uniformed manner.

1.2 Audience

The audience of this document includes IT developers, IT managers, testers, system analysts and system architects involved in the design and development of systems for Gas Retail Market in Victoria.

1.3 Scope

This document covers the delivery format of CSV component that is either incorporated into an aseXML transaction or as a file attached to an e-mail or provided on a disk. Transactions for which the delivery is via MIBB do not form part of this document.

The contents of CSV components carried in aseXML transactions are defined in Ref.[3,4].

1.4 Related Documents

| REF | NAME | VERSION | RESPONSIBLE PARTY OR AUTHOR(S) |
|-----|---|---|--|
| 1 | PBP1, Process Maps, Table of Transactions & Data Elements | Current version as published in the GIP | GTPWG |
| 2 | W3C Recommendation Extensible Markup Language (XML) | 2 nd Edition | W3C, 6/10/1998 |
| 3 | PBP2 Interface Definitions | Current version as published in the GIP | AEMO |
| 4 | PBP3 Interface Definitions | Current version as published in the GIP | AEMO |
| 5 | Retail Market Procedures (Victoria) | Current version as published AEMO's website | <i>Gas Retail Consultative Forum – Victoria (GRFC-V)</i> |

1.5 Definitions and Acronyms

The following acronyms and abbreviations used throughout this document:

| | |
|---------------|---|
| AEMO | Australian Energy Market Operator |
| aseXML | A Standard for Energy Transactions in XML |
| ASCII | American Standard Code for Information Interchange |
| CSV | Comma-Separated Values |
| MIBB | Market Information Bulletin Board |
| MIRN | Meter Installation Registration Number. |
| NMI | National Metering Identifier |
| PBP | Participant Build Pack |
| XML | eXtensible Markup Language |

Note that terms **MIRN** and **NMI**, for all intents and purposes of this document are identical and are used interchangeably.

CSV Component for the purpose of this document is defined as one or more rows of comma-separated values to be integrated into a file or an aseXML transaction.

CSV Element for the purpose of this document is defined as a data element as per transaction definition in Ref.[1].

1.6 Overview and Structure

Section 2 of this document defines the requirements to a CSV component format, use of line separators, tabs and treatment of literals and numeric values.

Section 3 specifies requirements to the format of a file that may carry a CSV component.

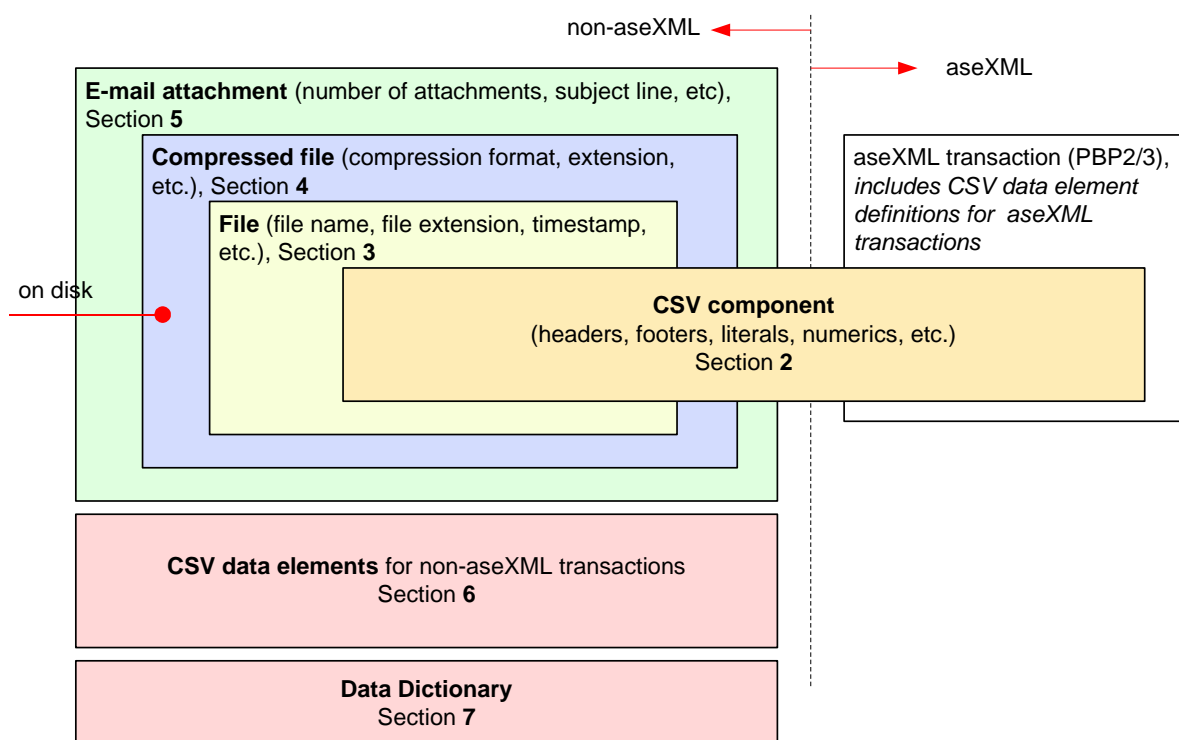
Section 4 describes the compression format to be used with CSV files.

Section 5 covers requirements to the format of an e-mail that may have compressed CSV file attached.

Section 6 details CSV data elements for transactions that otherwise not covered in Ref.[3,4]

Section 7 describes CSV data element types used in section 6.

The following diagram pictures the relationship between various portions of this specification with a reference to the Section of this or external document the portion has been described in.



• FIGURE 1-1. SPECIFICATION OVERVIEW

•

2. CSV FORMAT

A CSV component contains the values in a table as a series of ASCII text lines organized so that each column value is separated by a comma from the next columns value and each row starts a new line.

This section specifies CSV format details. Most of the sections here particularize requirements to CSV component to be delivered not via aseXML. The CSV incorporated into aseXML transactions shall follow the guidelines specified in Ref.[2].

2.1 Character Set

The character set that is to be used within a CSV component is ASCII 7-bit. No Unicode characters are allowed.

2.2 Header

The very first line in a CSV component shall contain a set of column designators (column headers) that can be used in further processing. The column designators make CSV files more human readable and facilitate tracking of import problems.

Only one header per CSV component is allowed.

2.3 Footer

No footer is required for a CSV component.

2.4 Literals treatment

The CSV import application shall be capable of parsing literals whether they are surrounded by double-quotes or not. A CSV import tool/parser shall interpret the following two rows from a CSV file analogously:

```
123,"This is a sample field",456
123,This is a sample field,456
```

If a literal containing double-quotes needs to be inserted into a CSV, the entire field must be surrounded by double-quotes in addition to prefixing each contained double-quote with another one, e.g. in order to insert a field

```
This is a sample "quoted" field
```

into a CSV row, the following format shall be used:

```
"This is a sample "quoted" field"
```

This treatment allows for the incorporation of commas and quotes into a CSV element, if necessary. As the "lowest denominator", the format produced by Microsoft® Excel matches this treatment of literals.

2.5 Line breaks

The CSV components shall have a combination of Carriage Return (CR, ASCII decimal code 13) and Line Feed (LF, ASCII decimal code 10) at the end of each line.

Empty lines, i.e. lines containing just CR and LF, are not allowed.

2.6 Values separator

A comma "," is to be used to separate values in CSV file. If a comma shall occur inside a literal, then the entire literal shall be surrounded by double quotes as per 2.4.

No trailing commas are allowed at the end of each line, i.e. the number of value separators in any one row will always be: *number_of_values* – 1.

2.7 Optional elements

Where a CSV element is defined as "optional" or marked as "not required" or "NR" in Participant Build Packs, at very least, a placeholder for that element shall be present in a CSV component row.

For example, consider a 7-value CSV row for which 6th and 7th values are defined as optional.

```
Col_Hdr_1,Col_Hdr_2,Col_Hdr_3,Col_Hdr_4,Col_Hdr_5,Col_Hdr_6,Col_Hdr_7
abcdef1,defgh1,1234,123.45,qwertyuio,,
abcdef2,defgh2,6543,234.56,qwertyuio,,
. . .
```

2.8 Numeric values

2.8.1 Positive and negative values

Positive numbers in CSV file shall be unsigned. Negative numbers shall be prefixed with a negative sign.

2.8.2 Leading and trailing zeroes

There shall be no leading zeroes unless a specific data format requires this. Trailing zeroes are allowed only when the *scale* value requires so, refer to 2.8.3.

2.8.3 Format

The numeric values format definition in this document matching one defined in PBP2/3 and clarified in PBP2/3 Change Logs.

The numeric format is defined as **numeric** [(*precision* [, *scale*)). The *precision* (referred to as "length" in PBP1/2/3) and *scale* (referred to as "decimal places" in PBP1/2/3) determine the range of values that can be stored in a numeric field:

- The precision specifies the maximum number of decimal digits that can be stored in the column. It includes *all* digits, both to the right and to the left of the decimal point. Precisions can range from 1 digit to 38 digits.
- The scale specifies the maximum number of digits that can be stored to the right of the decimal point. The scale shall be less than or equal to the precision. You can specify a scale ranging from 0 digits to 38 digits or use the default scale of 0 digits.
- The number of digits to the left of the decimal point cannot exceed $precision - scale$

An *Integer* can be represented as a numeric value with the *scale* of 0, i.e. Numeric(11,0)

Below are examples of **valid** values for a numeric type defined as Numeric(5,3)

| | | |
|---------|--------|---|
| 12.345 | 12.000 | 0 |
| -12.345 | 12 | |
| 12.100 | 12.0 | |

Here are some examples of **invalid** values for the type defined as Numeric(5,3):

| | |
|-----------|-----------|
| 1,200 | 12- |
| 12.345678 | 123456.78 |

2.8.4 Dollar amounts

Dollar amounts shall not use a dollar sign "\$" either as a prefix or a postfix.

2.9 Tab characters

Tab characters shall not be used in CSV files.

2.10 Special characters

The use of CDATA (non-parsed character data as defined in Ref.[2]), characters "<", ">", "&" and hexadecimal characters is prohibited.

2.11 Leading and Trailing Spaces

In the case of numeric values the use of a leading, embedded or trailing space is inappropriate. Spaces should not be used where a value has a Numeric characteristic.

Where the value has a "text" characteristic that by its nature it can have a space or spaces as part of the structure, only embedded spaces are permitted. Leading and trailing space-characters immediately adjacent to the comma field separators should not be included in the CSV file. Therefore "John Citizen" resolves to ---,John Citizen,--- or ---,"John Citizen",---

Where values must have a leading or trailing spaces as a valid part of the data it must be delimited with double-quote characters. In this way it indicates that the leading and trailing spaces are a component part of the data for example:

---," John Citizen ",---

3. FILE FORMAT

For non-aseXML transactions, CSV component may be incorporated into a file. Following the compression, the file can be delivered to the receiver as an e-mail attachment or on a disk.

3.1 File name and extension

The file name shall be constructed of the following elements separated by underscore "_" signs:

1. The FRC market. For Victoria Gas FRC it shall always be "VICGAS".
2. The name of the transaction to which the CSV file is supplied, as defined in 6.1.
3. The CSV file originator identifier, valid participant as per PBP2/3 ParticipantID
4. The CSV file recipient identifier, valid participant as per PBP2/3 ParticipantID. If the same CSV file is intended for more than one participant or destination is not specific, then "ALL" shall be used in place of the recipient identifier.
5. Date/time stamp in the format CCYYMMDDHHmmSS when the file has been generated, 24-hour format, local time of the originator.
6. The file extension of "CSV", case-sensitive, all uppercase, separated from the file name with a period "."

Here's an example of a CSV file name:

VICGAS_ENERGYHISTORYRESPONSE_TXUR_PULSE_20020503131500.CSV

The following is an example of a CSV file name that is intended for more than one recipient:

VICGAS_ENERGYHISTORYRESPONSE_TXUR_ALL_20020503151500.CSV

3.2 End of file marker

The application that parses CSV shall be able to handle End-Of-File mark (EOF, ASCII decimal code 26) at the end of the file, if present.

4. COMPRESSION FORMAT

4.1 Format

The supplied file shall be compressed using ZLIB format specification, as per RFC1950. The zip format is defined as being compatible with the PKZIP v2.04G utility. Utilities that support this format include WinZip and PKZIP.

Default level of compression shall be used.

4.2 Number of CSV components per file

There shall be only one CSV component per compressed file.

4.3 File name and extension

The name of the compressed CSV file name shall match the uncompressed CSV file name with extension "ZIP", case-sensitive, replacing "CSV".

4.4 Password protection

Compressed files are not normally password protected. If they are to be password protected these requirements will be specified in the transactions definition. Section 6 of this document details each transaction definition.

5. EMAIL FORMAT

A compressed file containing CSV component shall be attached to an e-mail for delivery to a participant. The specifications in this section facilitate internal delivery by participants.

5.1 Subject Line

The e-mail subject line for the compressed file incorporating CSV component shall be composed of the following parts, separated by a "_" signs:

1. The Gas Retail Market. For Victoria Gas it shall always be "VICGAS".
2. The name of the transaction to which the CSV file is supplied, as defined in 6.1.
3. The CSV file originator identifier, valid participant as per PBP2/3 ParticipantID.
4. The CSV file recipient identifier, valid participant as per PBP2/3 ParticipantID.
5. Date/time stamp in the format CCYYMMDDHHmmSS when the file has been generated, 24-hour format, local time of the originator.

Below is an example of a constructed e-mail subject line:

VICGAS_ENERGYHISTORYRESPONSE_TXUR_PULSE_20020503131500

5.2 Number of attachments

Each e-mail shall only contain one compressed file attachment to simplify internal routing that may be implemented by some participants.

5.3 Size restrictions

Compressed e-mail attachment shall not exceed 2MB in size to support limitations imposed by some e-mail gateways.

5.4 Acknowledgements

No acknowledgments shall be expected to CSV files delivered by e-mail or on the disk.

6. CSV DATA ELEMENTS

6.1 Overview

The definitions for CSV components that are carried within aseXML transactions are given in Ref.[3] and Ref.[4].

The following sections specify the format of CSV components that will be delivered via e-mail or on a disk. The CSV component will be incorporated into a file, compressed and then attached to an e-mail or stored on a disk.

The CSV file name shall be constructed as described in section 3.1, the transaction name must be taken from the table below. E-mail subject line must be constructed as defined in section 5.1, the transaction name must be taken from the table below.

This document covers CSV details for the following transactions from the Ref.[1]:

| TRANSACTION NUMBER | TRANSACTION TYPE DESCRIPTION | CSV FILE NAME / E-MAIL SUBJECT COMPONENT NAME | SECTION |
|--------------------|--|---|---------|
| 45 | Energy History Request | ENERGYHISTORYREQUEST | 6.2 |
| 46 | Energy History Response | ENERGYHISTORYRESPONSE | 6.3 |
| 74 | Annual Meter Reading Schedule | METERREADINGSCHEDULE | 0 |
| 75 | Meter Reading Route Change | READINGROUTECHANGE | 6.5 |
| 136 | Time Expired Meters Notification | TIMEEXPIREDMETERS | 0 |
| 282 | MIRN Discovery Request | MIRNDISCOVERYREQUEST | 6.6A |
| 283 | MIRN Discovery Response | MIRNDISCOVERYRESPONSE | 6.6B |
| 289 | Standing Data Change From DB | STANDINGDATACHANGE | 0 |
| 298 | Refresh of New Street Listing for MIRN Discovery | NEWSTREETLISTING | 6.8 |
| 330 | Notification of Mains/Service Renewal | SERVICERENEWAL | 6.9 |
| 333 | Meter Range Updates | METERRANGEUPDATE | 6.10 |
| 337 | Retailer Churn for Tariff V & D | RETAILERCHURN | 6.11 |

| TRANSACTION NUMBER | TRANSACTION TYPE DESCRIPTION | CSV FILE NAME / E-MAIL SUBJECT COMPONENT NAME | SECTION |
|--------------------|--|---|---------|
| 900 | Customer Details from Non-Declared Host Retailers for RoLR | CUSTOMERSITEDetailsSMO NTHLY | 6.14 |
| 1000 | MIRN Standing Data | MIRNSTANDINGDATA | 6.17 |
| 1005 | Account Creation | ACCOUNTCREATION | 6.18 |
| 1010 | Customer Site Details from FRB | CUSTOMERSITEDetailsFRB | 6.19 |

Note, the order of columns designators/headers in CSV files described by this document is fixed and is as defined in this specification.

6.2 Energy History Request (T45)

This transaction is an ad-hoc type request used to by the Retailer to request energy history from the Distributor. The requests may have resulted from a customer requesting such information or the Retailer may require the information as an integrity check. It is initiated by the Retailer and is passed to the Distributor and the frequency is unknown at this point in time.

| TRANSACTION 45 | | |
|---------------------------|---------------------|---------|
| Heading/Column designator | Mandatory/ Optional | Comment |
| NMI | M | |
| NMI_Checksum | M | |
| Begin_Date | M | |
| End_Date | M | |
| Full_History_Required | M | |

6.3 Energy History Response (T46)

This transaction is a response to the Energy History Request (T45). Upon receipt of the request the Distributor has till 5:00pm on the 5th business day to provide this information proving that the request pertains to a period of time no more than 2 years or 10 business days if the period of time exceeds 2

years (see Ref[5], 2.1.5 (e)). This response is initiated by the Distributor and is passed to the Retailer and the frequency is unknown at this point in time.

The Meter Status is indicative of the current meter status and has no relevance to history.

| TRANSACTION 46, CSVHISTORYRESPONSEDATA | | |
|---|------------------------|---|
| Heading/Column designator | Mandatory/ Optional | Comment |
| NMI | M | |
| NMI_Checksum | M | |
| RB_Reference_Number | O | Required when this record fulfils a Special Read Request |
| Reason_for_Read | M | |
| Gas_Meter_Number | M | |
| Gas_Meter_Units | M | |
| Previous_Index_Value | O | Required unless this is the first read for a meter. If not provided the Consumed_Energy will be zero. |
| Previous_Read_Date | O | Required unless this is the first read for a meter. If not provided the Consumed_Energy will be zero. |
| Current_Index_Value | M | |
| Current_Read_Date | M | |
| Volume_Flow | M | Volume Flow is measured in cubic meters |
| Average_Heating_Value | M | |
| Pressure_Correction_Factor | M | |

| TRANSACTION 46, CSVHISTORYRESPONSEDATA | | |
|---|------------------------|--|
| Heading/Column designator | Mandatory/ Optional | Comment |
| Consumed_Energy | M | Consumed Energy is measured in Megajoules |
| Type_of_Read | M | |
| Estimation_Substitution_Type | O | Required if Type of Read = "E" or "S" |
| Estimation_Substitution_Reason_Code | O | Required if Type of Read = "E" or "S" |
| Meter_Status | M | This element reflects the current meter status. |
| Next_Scheduled_Read_Date | M | |
| Hi_Low_Failure | M | |
| Meter_Capacity_Failure | M | |
| Adjustment_Reason_Code | M | If not = "NC" indicates Meter Data Adjustment |
| Energy_Calculation_Date_Stamp | NR | This element is defined for use in the corresponding B2M transactions. It is not required for the transactions in this document. |
| Energy_Calculation_Time_Stamp | NR | This element is defined for use in the corresponding B2M transactions. It is not required for the transactions in this document. |

6.4 Annual Meter Reading Schedule (T74)

This transaction is used to advise the Retailer of the annual listing of proposed reading schedule. It is initiated by the Distributor and is passed to the Retailer and the frequency is once a year. The data is expected to be sorted in date order.

An example of a CSV file is below:

```
Scheduled_Reading_Day_Number,Meter_Read_Frequency,Date_of_Future_Read
12,B,2002-01-17
12,B,2002-03-19
12,B,2002-05-20
12,B,2002-07-18
12,B,2002-09-16
12,B,2002-11-14
```

| TRANSACTION 74 | | |
|------------------------------|--------------------|---------|
| Heading/Column designator | Mandatory/Optional | Comment |
| Scheduled_Reading_Day_Number | M | |
| Meter_Read_Frequency | M | |
| Date_of_Future_Read | M | |

6.5 Meter Reading Route Change (T75)

This transaction is used to notification a Retailer of a change to schedule reading day. It is initiated by the Distributor and is passed to the Retailer and the frequency approximately 10,000 per year.

| TRANSACTION 75, CSVAMENDSCHEDULEDREADINGDAY | | |
|---|--------------------|---------|
| Heading/Column designator | Mandatory/Optional | Comment |
| NMI | M | |
| NMI_Checksum | M | |
| Reading_Day_Change_Effective_Date | M | |

| TRANSACTION 75, CSVAMENDSCHEDULEDREADINGDAY | | |
|--|------------------------|---------|
| Heading/Column designator | Mandatory/ Optional | Comment |
| Scheduled_Reading_Day_Number | M | |

6.6 Time Expired Meters Notification (T136)

This transaction is an ad-hoc type advice used by the Distributor to notify the Retailer of any planned meter changes it expects to undertake as a result of the Distributors meter time expired program change. The Retailer may use this information to advise customers and/or call centres of any such changes. It is initiated by the Distributor and is passed to the Retailer. The frequency of the transaction is unknown, however the number of meter changes undertaken as a result of time expired meter programs is 20,000.

| TRANSACTION 136 | | |
|----------------------------------|------------------------|---------|
| Heading/Column designator | Mandatory/ Optional | Comment |
| NMI | M | |
| NMI_Checksum | M | |
| Proposed_Meter_Change_Start_Date | M | |
| Proposed_Meter_Change_End_Date | M | |

6.6A MIRN Discovery Request (T282)

This transaction is an ad-hoc type e-mail request used by AEMO to obtain information about the distribution supply point. It is initiated by the AEMO and is passed to the Distributor. (see Ref.[5], 3.2.1). At least either the NMI/NMI Check sum or Address must be provided.

| TRANSACTION 282 | | |
|---------------------------|------------------------|---------|
| Heading/Column designator | Mandatory/ Optional | Comment |
| NMI | O | |
| NMI_Checksum | O | |
| Address | O | |

6.6B MIRN Discovery Response (T283)

This transaction is triggered in response to a MIRN Discovery Request (T282) which is sent by AEMO. It is initiated by the Distributor and the distribution supply point information is passed to AEMO via e-mail. (see Ref.[5], 3.3.2). If either the NMI or the Address doesn't find a match in the Distributor database, the Distributor send an e-mail to AEMO advising "record not found".

| TRANSACTION 282 | | |
|----------------------------|------------------------|---|
| Heading/Column designator | Mandatory/ Optional | Comment |
| NMI | M | |
| Checksum | M | |
| DistributionTariff | O | Required if meter is attached. |
| TransmissionZone | O | Required if meter is attached. |
| HeatingValueZone | O | Required if meter is attached. |
| CustomerCharacterisation | O | Required if Basic Meter is attached |
| CustomerClassificationCode | O | Mandatory in Victoria and Queensland |
| ConsumptionThresholdCode | O | Not required where CustomerClassificationCode is "RES". |

| TRANSACTION 282 | | |
|--|------------------------|---|
| Heading/Column designator | Mandatory/ Optional | Comment |
| MIRNStatus | O | Required if meter is attached. |
| MeterSerialNumber | O | Required if meter is attached. |
| PressureCorrectionFactor | O | Required if meter is attached. |
| MeterStatus | O | If MeterStatus is set to "No Meter", then no meter is attached to the MIRN. |
| SupplyPointCode | O | Required if meter is attached. |
| Current/ ReadDate | O | Required if Basic Meter is attached |
| NextScheduledReadDate | O | Required if Basic Meter is attached |
| MeterReadFrequency | O | Required if Basic Meter is attached |
| NextScheduledSpecialRead/ Preferred/ Date | O | Required if Basic Meter is attached |
| CommunicationEquipmentPresent | O | Required if Interval Meter is attached |
| ExcludedServicesCharges/ ChargeItem/ Category | O | Only used for Interval meters . |
| ExcludedServicesCharges/ ChargeItem/ Amount | O | Only used for Interval meters |
| ExcludedServicesCharges/ ChargeItem/ ExpiryDate | O | Only used for Interval meters |
| Address | M | |
| AdditionalDataToFollow | M | Required if Interval Meter is attached |

6.7 Standing Data Change From DB (T289)

This transaction is sent to the Retailer to advise that a change in either the Transmission Zone, Heating Value Zone or Distribution Tariff has occurred. The frequency of the transaction is unknown at this point in time.

| TRANSACTION 289 | | |
|------------------------------|------------------------|---------|
| Heading/Column designator | Mandatory/ Optional | Comment |
| NMI | M | |
| NMI_Checksum | M | |
| Transmission_Zone | O | |
| Heating_Value_Zone | O | |
| Distribution_Tariff | O | |
| Standing_Data_Effective_Date | M | |

6.8 Refresh of New Street Listing for MIRN Discovery (T298)

The Distributor must make available in an electronic form a remotely accessed street/suburb combination listing for Retailers. This listing is to be refreshed at least once a month (see Ref.[5], 3.3.1) and it is used by the Retailer to assist with MIRN Discovery requests (eg: the street name the Distributor uses in its database).

The data is prepared by the Distributor and can either be download from the Distributors website or e-mailed, if requested.

| TRANSACTION 298 | | |
|---------------------------|------------------------|---------|
| Heading/Column designator | Mandatory/ Optional | Comment |
| | | |

| | | |
|-----------------------------|---|----------------------|
| Street_Name | M | |
| Street_ID | O | Mandatory if present |
| Street_Suffix | O | Mandatory if present |
| Suburb_Or_Place_Or_Locality | M | |
| Site_Address_Postcode | O | |
| Date_Updated | M | |

6.9 Notification of Mains/Service Renewal (T330)

This transaction is passed by a Distributor to a Retailer to notify of service / mains renewal. It is an ad-hoc advice to the Retailer and advises of any planned service/mains work which may interrupt supply. The Retailer may use this information to advise customers and/or the call centre. It is initiated by the Distributor and is passed to the Retailer. The frequency of the transaction is unknown at this point in time.

| TRANSACTION 330 | | |
|----------------------------------|------------------------|---------|
| Heading/Column designator | Mandatory/ Optional | Comment |
| NMI | M | |
| NMI_Checksum | M | |
| Planned_Outage_Commencement_Date | M | |
| Planned_Outage_Commencement_Time | M | |
| Duration_of_Outage | M | |

6.10 Meter Range Updates (T333)

This transaction is used to notify a Retailer to update Meter Attributes such as “Number of Dials” for a given Meter Number Range etc. It is initiated by the Distributor and is passed to the Retailer and the frequency is approximately 4 per year.

| TRANSACTION 333 | | |
|---------------------------|------------------------|---------|
| Heading/Column designator | Mandatory/ Optional | Comment |
| Low_Meter_Range | M | |
| High_Meter_Range | M | |
| Meter_Type_Size_Code | M | |
| Number_of_Meter_Dials | M | |
| Capacity_Group | M | |
| Meter_Description | M | |
| Metric_Imperial_Indicator | M | |
| Capacity | M | |
| Meter_Attachments | M | |

6.11 Retailer Churn for Tariff V & D (T337)

This transaction is used by AEMO to notify a Distributor of the tariff "V" and "D" MIRNs which AEMO has in its meter register.

| TRANSACTION 337 | | |
|---------------------------|------------------------|---------|
| Heading/Column designator | Mandatory/ Optional | Comment |
| NMI | M | |
| NMI_Checksum | M | |
| Rel_From_Date | M | |
| Fro_Id | M | |

| | | |
|----------|---|--|
| Fro_Name | M | |
|----------|---|--|

6.12 There is no section 6.12.

6.13 Complete MIRN Listing (T299)

The Distributor must make available to Retailers a listing of all distribution metering supply points that have a MIRN assigned and a MIRN status of either Registered (up stand installed), Commissioned (meter installed) or Decommissioned (meter removed or meter installed but delivery point is disconnected). The Distributor must ensure that all data fields as per Transaction 299 that are available in their database are transferred to the Complete MIRN listing irrespective of whether the data field is designated as O (optional) in the table for T299.

The Distributor must ensure that the complete MIRN listing file is encrypted and compressed (see section 4.4 for allowable compression formats) in a way that when the Retailer retrieves the file it can be decrypted and uncompressed using the “WinZip” utility.

The Distributor will utilise the CSV fields and formats consistent with the fields and formats that are used in the aseXML schema applicable for a MIRN Discovery response which is defined in Participant Build Pack 3 B2B Systems Interface Definitions, section 4.3.2.3 (NMIDiscoveryResponse).

The complete MIRN listing is to be refreshed after the end of the calendar month by the Distributor and the Distributor must FTP the refreshed files to AEMO. AEMO will provide a secure location for each file that enables only Distributors to directly place the file in a location that enables only Retailers to retrieve that file from the secure location to which the relevant Retailers have Market Information Bulletin Board (MIBB) access privileges that require a username and password.

When the file is FTP'd to AEMO the file extension is to be written as a “.tmp” file and then renamed to prevent the file being processed while it is being delivered. The following file naming convention is to be used:

distributor_ccyymmddhhmiss.zip

Note: Reference to “Distributor” and “Retailer” refer to the Hub participant ID.

The file will be accessible via directory browsing on the MIBB rather than via a separate HTML page that would need to be maintained manually.

| TRANSACTION 299 | | |
|---------------------------|------------------------|-----------------|
| Heading/Column designator | Mandatory/ Optional | Comment |
| MIRN | M | Must be present |
| MIRNChecksum | M | Must be present |
| FlatOrUnitType | O | |
| FlatOrUnitNumber | O | |
| FloorOrLevelType | O | |
| FloorOrLevelNumber | O | |
| BuildingOrPropertyName1 | O | |
| BuildingOrPropertyName2 | O | |
| LocationDescriptor | O | |
| HouseNumber1 | O | |
| HouseNumber2 | O | |
| HouseNumberSuffix1 | O | |
| HouseNumberSuffix2 | O | |
| LotNumber | O | |
| StreetName1 | O | |
| StreetName2 | O | |
| StreetType1 | O | |
| StreetType2 | O | |

| TRANSACTION 299 | | |
|----------------------------|------------------------|---------|
| Heading/Column designator | Mandatory/ Optional | Comment |
| StreetSuffix1 | O | |
| StreetSuffix2 | O | |
| PostalDeliveryType | O | |
| PostalDeliveryNumberPrefix | O | |
| PostalDeliveryNumberValue | O | |
| PostalDeliveryNumberSuffix | O | |
| SiteAddressCity | O | |
| SiteAddressState | O | |
| SiteAddressPostcode | O | |
| SiteAddressDPID | O | |
| GasMeterNumber | O | |
| Address1 | O | |
| Address2 | O | |
| Address3 | O | |

6.13.1 Password exchange process

The complete MIRN listing password exchange process is as follows:

- Retailer to nominate an email address to send password. These details are sent to DB's.
- Password to change each 90 days consistent with AEMO's MSATS Systems & AEMO's MIBB.
- DB's to email password details to retailer prior to it being used.

6.14 Customer and Site Details (Monthly – Non Host update) (T900)

In order to manage the ‘transfer’ and customer set up following a RoLR event, all non-Declared Host Retailers are to provide to AEMO, on a monthly basis, a list of MIRNS and associated details for which they are the FRO.

The Customer and Site Details (Monthly) listing is to be refreshed after the end of the calendar month by the non-Declared Host Retailers and the non-Declared Host Retailers must FTP the refreshed files to AEMO.

(A) Customer and Site Details File Format

The file must be provided to AEMO in a compressed CSV format (refer to chapter 4 Compression Format in this document) and without any password Protection.

(B) File Format Transitional Requirement

The requirement to provide the file in the format described in (A) above does not apply to retailers registered before 29 September 2017 until 1 September 2018. For the avoidance of doubt all retailers must provide the file to AEMO in a compressed CSV format after 1 September 2018 (refer to chapter 4 Compression Format in this document).

AEMO will provide a secure location for each file that enables only all non-Declared Host Retailers to directly place the file in a secure location to which the relevant all non-Declared Host Retailer has Market Information Bulletin Board (MIBB) access privileges that require a username and password.

The following file naming convention is to be used:

VICGAS_CUSTOMERSITEDetailsMONTHLY_OriginatorID_RecipientID_CCYYMMDDHHmmSS

Note: Reference to “all non-Declared Host Retailer” refer to the Hub participant ID.

| TRANSACTION 900 | | |
|---------------------------|------------------------|---|
| Heading/Column designator | Mandatory/ Optional | Comment |
| NMI | M | Must be present |
| NMI_Checksum | M | Must be present |
| Person_Name_Title | O | Contains customer’s title |
| Person_Name_Given | O | Contains customer’s first name |
| Person_Name_Family | O | Contains customer’s surname if Business-Name is not populated |

| TRANSACTION 900 | | |
|----------------------------|------------------------|--|
| Heading/Column designator | Mandatory/ Optional | Comment |
| Business_Name | O | Contains company or business name, required if Person_Name_Family is not populated |
| Building_OrProperty_Name_1 | O | Defines the building or Property name as per the Australian Standard AS4590 |
| Building_OrProperty_Name_2 | O | Defines the building or Property name as per the Australian Standard AS4590 |
| ContactDetail_PersonName | O | Contains contact's mailing name or company name |
| Flat_Or_Unit_Type | O | This relates to the site of the MIRN |
| Flat_Or_Unit_Number | O | This relates to the site of the MIRN |
| Floor_Or_Level_Type | O | This relates to the site of the MIRN |
| Floor_Or_Level_Number | O | This relates to the site of the MIRN |
| Location_Description | O | This relates to the site of the MIRN |
| House_Number_1 | O | This relates to the site of the MIRN |
| House_Number_2 | O | This relates to the site of the MIRN |
| House_Number_Suffix_1 | O | This relates to the site of the MIRN |
| House_Number_Suffix_2 | O | This relates to the site of the MIRN |
| Lot_Number | O | This relates to the site of the MIRN |
| Street_Name_1 | M | This relates to the site of the MIRN |
| Street_Name_2 | O | This relates to the site of the MIRN |

| TRANSACTION 900 | | |
|-----------------------------|------------------------|--|
| Heading/Column designator | Mandatory/ Optional | Comment |
| Street_Type_1 | M | This relates to the site of the MIRN |
| Street_Type_2 | O | This relates to the site of the MIRN |
| Street_Suffix_1 | O | This relates to the site of the MIRN |
| Street_Suffix_2 | O | This relates to the site of the MIRN |
| Site_Address_City | M | This relates to the site of the MIRN |
| Site_Address_State | M | This relates to the site of the MIRN |
| Site_Address_Postcode | M | This relates to the site of the MIRN |
| Mail_Address_Line_1 | O | Contains formatted postal address details |
| Mail_Address_Line_2 | O | Contains formatted postal address details |
| Mail_Address_Line_3 | O | Contains formatted postal address details |
| Suburb_Or_Place_Or_Locality | O | Contains formatted postal address details |
| State_Or_Territory | O | Contains formatted postal address details |
| Postcode | | Contains formatted postal address details |
| ContactDetail_PhoneNumber_1 | O | Contains contact's primary phone number |
| ContactDetail_PhoneNumber_2 | O | Contains contact's secondary phone number |
| Rebate_Code | O | Allowed Codes: Pension Card Health Care Card Health Benefits Card |

| TRANSACTION 900 | | |
|------------------------------------|------------------------|---|
| Heading/Column designator | Mandatory/ Optional | Comment |
| | | Veterans Affairs Card |
| Pensioner_Or_HealthCare_CardNumber | O | 10 – string Nine Numeric and one alpha unique identifier as issued by the Dept. of Social Security or Veterans' Affairs |
| From_Date | O | Effective date at which the card is valid |
| To_Date | O | Date at which the card expires |
| Date_Of_Birth | O | Customer's date of Birth |
| Customer_Identification | O | 12 – string. Contains Customer's Driver's license |
| RoLR | M | Declared Host Retailer |

6.14A RoLR CATS Accelerated (T940 / T950/ T960 INT607)

The T940 / T950/ T960 is a file list all RoLR related Accelerated to Completion MIRNs. It is sent to retailers and Distributors. AEMO will provide this via the MIBB after a RoLR event. The file format is located in the Master MIBB Guide.

See INT607.

6.15 Customer and Site Details (T970 / INT602)

The T970 is a file that AEMO provide the RoLRs to manage the transfer and set up of customers in their systems. AEMO will provide this via the MIBB and as such, the schema for this file is located in the Master MIBB Guide.

See INT602.

6.16 List of RoLR transfers (T980 / INT603)

After a RoLR event has occurred, AEMO will provide the DBs a list of the MIRNs that have been transferred away from the FRB to the RoLRs. AEMO will provide this via the MIBB and as such, the schema for this file is located in the Master MIBB Guide.

See INT603.

6.17 MIRN Standing Data (T1000)

In order for the Retailer of Last Resort to manage the customer set up following a RoLR event, the DB is to provide to the Retailer of Last Resort the standing data details for MIRNs which the Retailer of Last Resort has become the FRO for during the RoLR event.

This will be based on the MIRNs provided to the DBs in the T980

The method of data delivery will be via CD.

The following file naming convention is to be used:

VICGAS_MIRNSTANDINGDATA_OriginatorID_RecipientID_CCYYMMDDHHmmSS

| TRANSACTION 1000 | | |
|------------------------------|------------------------|----------------------------------|
| Heading/Column designator | Mandatory/ Optional | Comment |
| NMI | M | Must be present |
| NMI_Checksum | M | Must be present |
| Distribution_Tariff | O | Required if meter is attached |
| Transmisson_Zone | M | |
| Heating_Value_Zone | M | |
| Customer_Characterisation | O | Required if basic meter attached |
| Customer_Classification_Code | O | Required if provided by Retailer |

| TRANSACTION 1000 | | |
|----------------------------------|------------------------|---|
| Heading/Column designator | Mandatory/ Optional | Comment |
| Customer_Threshold_Code | O | Provided where customer classification code is a business customer |
| Meter_Serial_Number | O | Required if meter is attached |
| Pressure_Correction_Factor | O | Required if meter is attached |
| Meter_Status | O | Required if meter is attached |
| Supply_Point_Code | O | Required if meter is attached |
| Current_Read_Date | O | Required if Basic Meter is attached |
| Next_Scheduled_Read_Date | O | Required if Basic Meter is attached |
| MIRN_Status | M | |
| Meter_Read_Frequency | O | Required if Basic Meter is attached |
| Next_Scheduled_Special_Read_Date | O | Optional if Basic Meter is attached. Populated if there is a Special Read appointment booked against this MIRN |
| Communication_Equipment_Present | O | Required if Interval Meter is attached |
| Charge_Category | O | Only used for Interval meters This information may be provided in a subsequent NMIDiscoveryResponse message if the AdditionalDataToFollow element is set to "true" |
| Charge_Amount | O | Only used for Interval meters. This information may be provided in a subsequent NMIDiscoveryResponse message if |

| TRANSACTION 1000 | | |
|---------------------------|------------------------|--|
| Heading/Column designator | Mandatory/ Optional | Comment |
| | | the AdditionalDataToFollow element is set to "true" |
| Charge_Expiry_Date | O | Only used for Interval meters. This information may be provided in a subsequent NMIDiscoveryResponse message if the AdditionalDataToFollow element is set to "true" |

Note: The Address, AdditionalDataToFollow and Event elements has not been replicated in T1000 from the original aseXML transaction T281.

6.18 Account Creation (T1005)

In order for the Retailer of Last Resort to manage the customer set up following a RoLR event, the DB is to provide to the Retailer of Last Resort the standing data details for MIRNs which the Retailer of Last Resort has become the FRO for during the RoLR event.

This will be based on the MIRNs provided to the DBs in the T980

The method of data delivery will be via CD.

The following file naming convention is to be used:

VICGAS_ACCOUNTCREATION_OriginatorID_RecipientID_CCYYMMDDHHmmSS

| TRANSACTION 1005 | | |
|---------------------------|------------------------|-----------------|
| Heading/Column designator | Mandatory/ Optional | Comment |
| NMI | M | Must be present |
| NMI_Checksum | M | Must be present |
| Meter_Serial_Number | M | |
| Meter_Type_Size_Code | M | |

| TRANSACTION 1005 | | |
|------------------------------|------------------------|--|
| Heading/Column designator | Mandatory/ Optional | Comment |
| Current_Index_Value | M | |
| Current_Read_Date | M | |
| Scheduled_Reading_Day_Number | M | |
| Access_Details | O | Optional data that will be provided if available |
| Melway_Grid_Reference | O | Optional data that will be provided if available |
| Meter_Position | O | Optional data that will be provided if available |

6.19 Customer and Site Details from FRB to RoLR (T1010)

In order to manage the 'transfer' and customer set up following a RoLR event, all non-Declared Host Retailers are to provide to the Retailer of Last Resort a list of MIRNS and associated details for which they are the FRO at the time of the RoLR event.

The trigger for this data delivery will be AEMO issues a Suspension Notice to the FRB.

The method of data delivery will be via CD.

The following file naming convention is to be used:

VICGAS_CUSTOMERSITEDetailsFRB_OriginatorID_RecipientID_CCYYMMDDHHmmSS

| TRANSACTION 1010 | | |
|---------------------------|------------------------|--------------------------------|
| Heading/Column designator | Mandatory/ Optional | Comment |
| NMI | M | Must be present |
| NMI_Checksum | M | Must be present |
| Person_Name_Title | O | Contains customer's title |
| Person_Name_Given | O | Contains customer's first name |

| TRANSACTION 1010 | | |
|----------------------------|------------------------|--|
| Heading/Column designator | Mandatory/ Optional | Comment |
| Person_Name_Family | O | Contains customer's surname if Business-Name is not populated |
| Business_Name | O | Contains company or business name, required if Person_Name_Family is not populated |
| Building_OrProperty_Name_1 | O | Defines the building or Property name as per the Australian Standard AS4590 |
| Building_OrProperty_Name_2 | O | Defines the building or Property name as per the Australian Standard AS4590 |
| ContactDetail_PersonName | O | Contains contact's mailing name or company name |
| Flat_Or_Unit_Type | O | |
| Flat_Or_Unit_Number | O | |
| Floor_Or_Level_Type | O | |
| Floor_Or_Level_Number | O | |
| Location_Description | O | |
| House_Number_1 | O | |
| House_Number_2 | O | |
| House_Number_Suffix_1 | O | |
| House_Number_Suffix_2 | O | |
| Lot_Number | O | |
| Street_Name_1 | M | |

| TRANSACTION 1010 | | |
|-----------------------------|------------------------|---|
| Heading/Column designator | Mandatory/ Optional | Comment |
| Street_Name_2 | O | |
| Street_Type_1 | M | |
| Street_Type_2 | O | |
| Street_Suffix_1 | O | |
| Street_Suffix_2 | O | |
| Site_Address_City | M | |
| Site_Address_State | M | |
| Site_Address_Postcode | M | |
| Mail_Address_Line_1 | O | Contains formatted postal address details |
| Mail_Address_Line_2 | O | Contains formatted postal address details |
| Mail_Address_Line_3 | O | Contains formatted postal address details |
| Suburb_Or_Place_Or_Locality | O | Contains formatted postal address details |
| State_Or_Territory | O | Contains formatted postal address details |
| Postcode | | Contains formatted postal address details |
| ContactDetail_PhoneNumber_1 | O | Contains contact's primary phone number |
| ContactDetail_PhoneNumber_2 | O | Contains contact's secondary phone number |
| Rebate_Code | O | Allowed Codes: Pension Card |

| TRANSACTION 1010 | | |
|------------------------------------|------------------------|--|
| Heading/Column designator | Mandatory/ Optional | Comment |
| | | Health Care Card Health Benefits Card Veterans Affairs Card |
| Pensioner_Or_HealthCare_CardNumber | O | 10 –string - Nine Numeric and one alpha unique identifier as issued by the Dept. of Social Security or Veterans' Affairs |
| From_Date | O | Effective date at which the card is valid |
| To_Date | O | Date at which the card expires |
| Date_Of_Birth | O | Customer's date of Birth |
| Customer_Identification | O | Contains Customer's Driver's license |
| RoLR | M | Declared Host Retailer |

6.20 Basic Meter Metering Data (T1020 / INT604)

After a RoLR event has occurred, AEMO will provide the RoLR some information in order for their business to complete its Wholesale Market nominations. AEMO will provide this via the MIBB and as such, the schema for this file is located in the Master MIBB Guide.

See INT604.

6.21 Interval Meter Metering Data (T1030 / INT605)

After a RoLR event has occurred, AEMO will provide the RoLR some information in order for their business to complete its Wholesale Market nominations. AEMO will provide this via the MIBB and as such, the schema for this file is located in the Master MIBB Guide.

See INT605.

6.22 List of Cancelled Service Orders (T1050)

This data can be delivered via CD or e-mail. If delivery is via e-mail then the formats described in Participants Build Pack 1 (CSV Data Format Specification) is to apply. Below is an example if Envestra is sending the file:

E-mail address:

Subject Line:

"VICGAS_SERVICE_ORDERS_INFLIGHT_ENVESTRA_20080730131500"

CSV Attachment:

Header (note: to be included in first row):

| TRANSACTION 1050 | | |
|---------------------------|------------------------|-----------------|
| Heading/Column designator | Mandatory/ Optional | Comment |
| NMI | M | Must be present |
| NMI_Checksum | M | Must be present |
| Job Enquiry Code | M | |
| Flat_Or_Unit_Type | O | |
| Flat_Or_Unit_Number | O | |
| Floor_Or_Level_Type | O | |
| Floor_Or_Level_Number | O | |
| Location_Description | O | |
| House_Number_1 | O | |

| TRANSACTION 1050 | | |
|---------------------------|------------------------|---|
| Heading/Column designator | Mandatory/ Optional | Comment |
| House_Number_2 | O | |
| House_Number_Suffix_1 | O | |
| House_Number_Suffix_2 | O | |
| Lot_Number | O | |
| Street_Name_1 | M | |
| Street_Name_2 | O | |
| Street_Type_1 | M | |
| Street_Type_2 | O | |
| Street_Suffix_1 | O | |
| Street_Suffix_2 | O | |
| Site_Address_City | M | |
| Site_Address_State | M | |
| Site_Address_Postcode | M | |
| Postcode | | Contains formatted postal address details |
| Special Job Instructions | M | |

6.23 List of AEMO Meter Fixes (T1060 / INT606)

After a RoLR event has occurred, AEMO will provide the RoLR meter fix. AEMO will provide this via the MIBB and as such, the schema for this file is located in the Master MIBB Guide.

See INT606.

6.24 Obtain CFRO for MRM and/or SDR Service Order Requests (T356)

This email notification is an ad-hoc request used by the Retailer where they have received a request to undertake a MRM (Meter Removal Request) or SDR (Service Disconnection Request) service order and they are not the FRO for the MIRM.

Having confirmed they are not the FRO the Retailer will:

- Capture the customers' details
- Complete a MIRM discovery (if required) and,
- Send an email to AEMO Support Hub with the subject "OBTAIN CFRO FOR MRM AND/OR SDR".

AEMO will forward the email onto the CFRO; the CFRO will contact the customer and raise the service order request with the Distributor.

Note: the email will be sent to the CFRO as identified in AEMO's meter register. Where the MIRM does not exist in AEMO's meter register, AEMO will assume that it belongs to the host retailer and will send the email to the appropriate host retailer. The method of data delivery will be via email.

| TRANSACTION 356 | | |
|-----------------------------|------------------------|--|
| Heading/Column designator | Mandatory/ Optional | Comment |
| Fro_Name | M | Contains initiating retailer |
| NMI | M | |
| Person_Name_Given | M | Contains customer name |
| ContactDetail_PhoneNumber_1 | M | |
| ContactDetail_PhoneNumber_2 | M | |
| Site Address | M | Contains supply point address which includes postcode |
| Suburb_Or_Place_Or_Locality | M | |
| Service Order Request | M | "SDR" = Service Disconnection Request "MRM" = Meter Removal Or both. |



| | | |
|-------------------|---|--|
| Other Information | O | |
|-------------------|---|--|

7. DATA DICTIONARY

| CSV DATA ELEMENT NAME | ATTRIBUTE / FORMAT | LENGTH / DECIMAL PLACES | ALLOWED VALUES / COMMENTS |
|------------------------------|--------------------|-------------------------|--|
| Adjustment_Reason_Code | String | 2 | "UR" = Under Read "OR" = Over Read "UE" = Under Estimated "OE" = Over Estimated "NC" = No Change |
| Average_Heating_Value | Numeric | 4,2 | |
| Begin_Date | Date | 10 | ccyy-MM-dd |
| Building_OrProperty_Name_1 | Char | 36 | Free text. There is a total 36 characters available for both name_1 and name_2, not 36 chars each. |
| Building_OrProperty_Name_2 | Char | 36 | Free text. There is a total 36 characters available for both name_1 and name_2, not 36 chars each. |
| Business_Name | String | 60 | |
| Capacity | String | 4 | In cubic meters |
| Capacity_Group | String | 2 | "10" = up to and including 6cm "20" = 7cm to 49cm "30" = 50cm and above "40" = Prepaid meters 50 = Hot Water |
| Consumed_Energy | Numeric | 11,0 | In megajoules |
| ContactDetail_PersonName | String | 60 | |
| ContactDetail_PhoneNumber_1 | String | 15 | |
| ContactDetail_PhoneNumber_2 | String | 15 | |
| Current_Index_Value | Numeric | 7,0 | |
| Current_Read_Date | Date | 10 | ccyy-MM-dd |
| Customer_Identification | Char | 12 | Any valid driver's license number. |
| Customer_Classification_Code | Alpha | 20 | RES = Residential BUS = Business |

| CSV DATA ELEMENT NAME | ATTRIBUTE / FORMAT | LENGTH / DECIMAL PLACES | ALLOWED VALUES / COMMENTS |
|-------------------------------------|--------------------|-------------------------|---|
| Customer_Threshold_Code | Alpha | 20 | "LOW" = Business Customer Consumption 0 – 399 GJ "MED" = Business Customer Consumption 400 – 999 GJ "HIGH" = Business Customer Consumption more than 1000GJ |
| Date_Of_Birth | Date | 8 | ccyy-MM-dd |
| Date_of_Future_Read_N | Date | 10 | ccyy-MM-dd Note, suffix "N" must be replaced with the future date ordinal |
| Date_Updated | Date | 10 | ccyy-MM-dd |
| Distribution_Tariff | String | 1 | "V" = Volume "D" = Demand |
| Duration_of_Outage | Numeric | 2,0 | |
| End_Date | Date | 10 | ccyy-MM-dd |
| Energy_Calculation_Date_Stamp | Date | 10 | ccyy-MM-dd |
| Energy_Calculation_Time_Stamp | Time | 8 | hh:mm:ss |
| Estimation_Substitution_Reason_Code | String | 2 | "01" = Meter Removed "02" = Meter Obstructed "03" = Dirty Dial "04" = Can't Locate Meter "05" = Gate Locked "06" = Savage Dog "07" = Meter Changed "08" = Refused Access "09" = Locked & No Answer "00" = Other "10" = Delayed Read "11" = Adjustment Read "12" = Damaged Meter "13" = Dial out of Alignment "14" = Key Required "15" = Access Overgrown "16" = Hi/Low Failure "17" = Meter Capacity Failure |
| Estimation_Substitution_Type | String | 2 | "E1" = Estimation method 1 |

| CSV DATA ELEMENT NAME | ATTRIBUTE / FORMAT | LENGTH / DECIMAL PLACES | ALLOWED VALUES / COMMENTS |
|-----------------------|--------------------|-------------------------|---|
| | | | "E2" = Estimation method 2 "E3" = RB/DB agreed value "S1" = Substitution method 1 "S2" = Substitution method 2 "S3" = RB/DB agreed substituted value |
| Fro_Id | Integer | | Defined in MIBB report documentation |
| Fro_Name | String | 40 | Defined in MIBB report documentation |
| From_Date | Date | 8 | ccyy-MM-dd |
| Full_History_Required | String | 1 | "Y" = Yes "N" = No |
| Gas_Meter_Number | String | 12 | |
| Gas_Meter_Units | String | 1 | "I" = Imperial "M" = Metric |
| Heating_Value_Zone | String | 3 | |
| Hi_Low_Failure | String | 1 | "Y" = Yes "N" = No |
| High_Meter_Range | String | 12 | |
| Low_Meter_Range | String | 12 | |
| Mail_Address_Line_1 | String | 80 | |
| Mail_Address_Line_2 | String | 80 | |
| Mail_Address_Line_3 | String | 80 | |
| Meter_Attachments | String | 3 | "HEX" = hexagram (hard wired remote meter reading system). "DIA" = dialog attachment for remote meter reading. "RAD" =radio remote meter reading attachment. "SMC" =smart card prepayment meter attachment. "TEL" = telemetry attachment for remote meter reading |

| CSV DATA ELEMENT NAME | ATTRIBUTE / FORMAT | LENGTH / DECIMAL PLACES | ALLOWED VALUES / COMMENTS |
|------------------------------------|--------------------|-------------------------|--|
| Meter_Capacity_Failure | String | 1 | "Y" = Yes "N" = No |
| Meter_Description | String | 14 | |
| Meter_Read_Frequency | String | 1 | "B" = Bi-Monthly "M" = Monthly "Q" = Quarterly Q = Quarterly |
| Meter_Status | String | 10 | "Turned on" "Turned off" "Plugged" = Meter is disconnected "No meter" |
| Meter_Type_Size_Code | String | 3 | |
| Metric_Imperial_Indicator | String | 1 | "I" = Imperial "M" = Metric |
| Movement_Type | String | 2 | "MI" = Move In "MO" = Move Out "UP" = Update |
| Next_Scheduled_Read_Date | Date | 10 | ccyy-MM-dd |
| NMI | String | 10 | |
| NMI_Checksum | Integer | 1 | |
| Number_of_Meter_Dials | String | 2 | |
| Pensioner_Or_HealthCare_CardNumber | Char | 15 | Number conforms to DSS or DVA pensioner number formats. |
| Person_Name_Family | String | 40 | |
| Person_Name_Given | String | 40 | |
| Person_Name_Title | String | 12 | |
| Planned_Outage_Commencement_Date | Date | 10 | ccyy-MM-dd |
| Planned_Outage_Commencement_Time | Time | 8 | hh:mm:ss |
| Pressure_Correction_Factor | Numeric | 6,4 | |

| CSV DATA ELEMENT NAME | ATTRIBUTE / FORMAT | LENGTH / DECIMAL PLACES | ALLOWED VALUES / COMMENTS |
|-----------------------------------|--------------------|-------------------------|---|
| Previous_Index_Value | Numeric | 7,0 | |
| Previous_Read_Date | Date | 10 | ccyy-MM-dd |
| Proposed_Meter_Change_End_Date | Date | 10 | ccyy-MM-dd |
| Proposed_Meter_Change_Start_Date | Date | 10 | ccyy-MM-dd |
| RB_Reference_Number | String | 10 | |
| Reading_Day_Change_Effective_Date | Date | 10 | ccyy-MM-dd |
| Reason_for_Read | String | 3 | "SRF" = Special Final Read, "SRR" = Special Reference Read, "SRA" = Special Account Investigation, "SRD" = Special Disconnection "SRT" = Special Transfer Read "SCH" = Schedule Cycle Read "INI" = Meter Installation Read "REM" = Meter Remove "OSO" = Other Service Order "MDV" = Meter Data Verify (residual) |
| Rebate_Code | Char | 4 | Stored as the charge-origin code as part of a Charge record within Debtors. The 4 characters are broken into a 3 char code followed by a 1 char suffix code. |
| Rel_From_Date | Date | | Defined in MIBB report documentation |
| Scheduled_Reading_Day_Number | String | 2 | |
| Sensitive_Load_Flag | String | 1 | "Y" = Yes "N" = No |

| CSV DATA ELEMENT NAME | ATTRIBUTE / FORMAT | LENGTH / DECIMAL PLACES | ALLOWED VALUES / COMMENTS |
|------------------------------|--------------------|-------------------------|---|
| Service_Order_Request | Char | 10 | "SDR" – Service Disconnection Request "MRM" – Meter Removal or both |
| Site_Address | | | Standard Form |
| Site_Address_City | Char | 29 | Free text. |
| Site_Address_Postcode | String | 4 | |
| Site_Address_State | Char | 3 | State abbreviation eg. SA, VIC, NSW, etc. |
| Standing_Data_Effective_Date | Date | 10 | ccyy-MM-dd |
| Street_ID | String | 4 | Refer to aseXML for allowed values |
| Street_Name | String | 30 | |
| Street_Suffix | String | 2 | Refer to aseXML for allowed values |
| Suburb_Or_Place_Or_Locality | String | 46 | |
| To_Date | Date | 8 | ccyy-MM-dd |
| Transmission_Zone | Numeric | 2,0 | |
| Type_of_Read | String | 1 | "A" = Actual, "E" = Estimated "S" = Substituted "C" = Customer Own Read. |
| Volume_Flow | Numeric | 11,2 | Cubic Metres |