# Western Australian Electricity Market Build Pack Customer Transfer and Standing Data Procedure:



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# **Version history**

Version	Date	Author	Changes
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0.2	28 April 08	JM	Sent to Synergy as part of review process. Baselined for external comment
0.3	5 May 08	JM	New Connections added. Sent to CW and BC for WP review. Baselined for internal comment.
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### 1 INTRODUCTION

### 1.1 Purpose

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The purpose of this document is to explain in detail the business process and transactions relating to metering services as covered by the Electricity Industry Metering Code 2005 (MC) and the transfer of customers in accordance with the Customer Transfer Code 2004 (CTC).

The document specifies how the business processes and systems interact, and the transactions that are generated, as at the date of the latest version in the version history at the front of the document.

### 1.2 Audience

This document is aimed at all participants in the Western Australia electricity market. The document has been written for business and IT personnel within participants in the Western Australia electricity market, as well as the business and IT personnel of the network operator. It is expected that the audience is familiar with the market structure and cognisant of, and able to refer to, the other market documentation described in the Related Documents section.

### 1.3 Related Documents

This document should be read in conjunction with the following documents:

- Electricity Industry Customer Transfer Code 2004
- Electricity Industry Metering Code 2005
  - All documents that are issued as part of the Western Power Build Pack, as authorised by Part 4 of the Electricity Industry Act Metering Code 2005. A synopsis of these documents is provided in the Build Pack document 'Usage Guidelines'.

### 1.4 Overview & Structure

This document follows a standard structure throughout.

The Introduction section sets the background and provides contextual information for this document.

The Overview of Interfaces section provides general information about the interfaces that are covered in this document, including a schedule of what interfaces / business processes are covered. The Definitions section lists the key terms used and their meanings. Finally, there is an overview of the transactions that are performed within the specific interfaces / business processes. The appendices contain the full schedule of

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received Event Codes (cross-referenced with their initiating transactions) and the detailed listing of the full range of elements used in customer transfer and standing data update transactions.

Each interface/business process is then provided in its own section. Each section has a common 'look and feel' to allow for quicker understanding and easier reference, covering:

- Overview. Provides a general commentary to the business process, how it is initiated and what participants can expect.
- 2. Business Rules. Provides the business rules that are enforced in relation to Submission (e.g. throttling of requests), Validation (e.g. is this an valid transaction for this participant) and Response (e.g. rejections).
- Process Breakdown. The process breakdown looks at the specific interface / business process in relation to the business process and the transactions that are involved.
- Transactions. The transactions defined in the process breakdown are specified individually and details provided about their triggers, the contents of the transactions and sample XML.
- Related Transactions. Related transactions that precede or are subsequent to these transaction are defined in this section.

### 1.5 waeXML schema version

This document refers to the schema version aseXML:r17:WA:r2.00 and uses transactions that can be found in the WA electricity market Build Pack (http://www.westernpower.com.au/documents/buildPack/aseXML\_r17\_WA\_r2.00.07\_publi shed\_01112006.zip).

### 1.6 Business Relationship between Transactions

In this Procedure document, there are situations where transactions are related to each other.

In many instances, these can be linked by sharing common fields. Such a situation exists for:

- a) CustomerTransferRequest transactions are linked to CustomerTransferResponse and CustomerTransferNotification by the initatingTransactionID.
- b) StandingDataRequest transactions are linked to StandingDataReponse transactions by the initatingTransactionID.

Other transactions have related business processes, but these do not have such an explicit relationship to each other. For example, a change to a Meter Read Route can be brought about as a result of a New Connections Service Order. However the StandingDataUpdate notifications produced as a result of the change in Meter Read Route do not contain any linkages to the original service order.

### 1.7 Timestamp formats



All timestamps will use the same format of yyyy-mm-ddThh:mm:ss+hh:mm. The impact of time zones and daylight savings on message and transaction timestamps is specified in the Timestamps section of the WA B2B Procedures – Technical Delivery Specification.



## 2 Overview of Interfaces

### 2.1 Definitions

TERM	DEFINITION
Actual Change Date	This is the element in the Customer Transfer Notification that advises of the actual date in the network operator's systems that the financial responsibility passes from one retailer to another.
Business day	A day that is not a weekend nor a public holiday as defined from time to time in the Western Australian Government Gazette.
СОВ	Close of Business – defined as 17:00 Western Standard Time.
Connection point	A point of supply on a covered network identified in an access contract as an entry point or an exit point. (Definition taken from the Build Pack Glossary.)
Correction customer transfer	A correction customer transfer is a CTR that is submitted with the appropriate Change Reason Code. This CTR will correct a previously completed transfer that was made in error.
Current retailer	The current retailer is the retailer who, as at a given point in time, is financially responsible for a given NMI.
Customer Transfer System	The Customer Transfer System is the system operated by the network operator in WA that fulfils its obligation to provide a registry of connection points including the market participants that service each connection point.
End of Day	End of Day is defined as 11:59 Western Standard Time.
FRMP	A FRMP (Financially Responsible Market Participant) is a role that is played in the National Electricity Market by the participant that is responsible for the energy, at a given connection point, in the wholesale market. In the WA electricity market, this role is performed by the <i>current retailer</i> .



TERM	DEFINITION
Full SDU	A Full SDU is a NMI Standing Data Update notification that is sent to a retailer and contains for a given NMI that current standing data to which the retailer is entitled (Appendix C). This includes all meters with a status of Current or De-energised (Status=C or D), but excludes any removed meters (Status=R)
Incoming retailer	"incoming retailer", in relation to a CTR or transfer, means the retailer that will supply a contestable customer after the transfer time.
LNSP	A LNSP (Local Network Service Provider) is a role that is played in the National Electricity Market by the participant that holds a distribution licence for the distribution network in which a given connection point is sited. In the WA electricity market, this role is performed by the network operator.
Network operator	For the purposes of this document the <i>network</i> operator is the operator of the transmission and distribution network – i.e. Western Power
NSRD	Next Scheduled Read Date
Off-market activities	Off-market activities are business processes that are undertaken in relation to the Western Australia electricity market but which are not via the established systems administered by the network operator. For example, instead of using a service order, these activities are usually complex and non-standard and undertaken using ad hoc, informal means such as emails and telephone calls.
Partial SDU	A Partial SDU is a NMI Standing Data Update notification that contains sufficient information to create a valid transaction together with the NMI standing data that has changed.
Proposed Date	This is the element in the Customer Transfer Request which contains the date proposed by the retailer for the transfer to be executed.
Request day	The request day is the business day where the request was received by the participant before Close of Business (or the next business day if the request is submitted on a non-business day).



TERM	DEFINITION
Retailer	A retailer means any person that holds a retail licence or integrated regional licence.
SDU	A Standing Data Update transaction.
Standing data period	A standing data period is a standard period between each hour, on the hour, at which the network operator's system scans its database on connection points to determine whether any changes have been made to NMI standing data. If any changes have been made for a given NMI, a Full SDU notification is sent to the current retailer.
Submitted date	The submitted date is the same as the <b>Request Day</b> .
Transaction code	In the WA electricity market, the Transaction code relates to the 'CR Code' that is used in a Customer Transfer Request. This should not be confused with a TransactionID.
Transfer date	Is the date on which responsibility for the NMI transfers from one retailer to another. This is the same as the Actual Change Date.

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### 2.2 NMI Discovery Request / Response Transactions

NMI Discovery Request / Response Transactions have been put in place to support the introduction of retail competition in the Western Australia market. A prospective retailer may request, for a contestable connection point, a NMI and Checksum. A retailer can send a request based on meter number or address using the XML transaction NMIDiscoveryRequest to the network operator. The network operator returns the response to the retailer using the XML transaction NMIDiscoveryReponse.

### 10 2.2.1 Overview of transactions

In this Procedure, the following transactions are used. Please note, this list of transactions does not include any related message or transaction acknowledgements (i.e. Business Receipt or Business Accept / Reject). Further details of the related message and transaction acknowledgement process can be found in the WA B2B Procedure: Technical Delivery Specification.

Transaction	Transaction Group	Version	Sender	Receiver
NMIDiscoveryRequest	NMID	r17	Retailer	Network operator
NMIDiscoveryResponse	NMID	r17	Network operator	Retailer

### 2.3 NMI Standing Data Request / Response Transactions

- 20 NMI Standing Data Request / Response Transactions perform multiple tasks within the Western Australia market. They can be used:
  - a) by a retailer to make autonomous requests for information,
  - contribute to providing a better understanding of a customer or site as part of wider business processes (e.g. a customer transfer), and
  - c) ensure participants operate on the basis of a common understanding of the market (e.g. to notify of changes to physical metering).

### 2.3.1 Overview of transactions

In this Procedure document, the following NMI Standing Data Request/Response transactions are used. Please note, this list of transactions does not include any related message or transaction acknowledgements (i.e. Business Receipt or Business Accept / Reject).

Transaction	Transaction Group	Version	Sender	Receiver
NMIStandingDataRequest	NMID	r17	Retailer	Network operator
NMIStandingDataResponse	NMID	r17	Network operator	Retailer

### 2.3.2 Common business rules

This section will be used to document any business rules that are common to all NMI Standing Data Transactions. By so doing, repetition will be avoided.

### 2.3.2.1 Content of Full NMI Standing Data Update Notification transaction

Retailers that receive a Full NMI Standing Data Update Notification transaction can expect to receive XML that contains all of the elements defined by SingleNMIStandingData in the waeXML schema definition with the following exceptions:

10	Element	Notes
	1. Aggregate	Part of the Master standing data. This is not used in the WA market.
	2. NextTestDate	Part of Meter. This is not used in the WA market.
	3. AssetManagementPlan	Part of Meter. This is not used in the WA market.
15	4. CalibrationTables	Part of Meter. This is not used in the WA market.
	5. TimeOfDay	Part of Register Detail data. This is used for basic meters (i.e. this will not be published unless the Meter Installation Code is "BASIC" or "BASICAMI").
20	6. Demand1	Part of Register Detail data. This is not used in the WA market.
	7. Demand2	Part of Register Detail data. This is not used in the WA market.
25	8. Meter	If there is no meter at a NMI, e.g. in the case of the Remove Meter business process, then this element will not be provided.
	9. DataStream	If there is no Registers at a NMI, e.g. in the case of the Remove Meter business process, then this element will not be provided.

### 2.4 NMI Standing Data Update Notification Transactions

A NMI Standing Data Update Notification Transaction (SDU) is used within the Western Australia electricity market to provide notification to a current retailer of changes that have been made to the standing data of a NMI for which they are responsible.

These SDUs can be provided as a result of a service order that has been received by the network operator or as the result of autonomous action by the network operator.

- The SDUs that are received by participants for a particular business scenario can look, prima facie, similar to other SDUs sent by the network operator. However, there are differences in the content of the transactions that reflect the differences between business scenarios. For this reason, the NMI Standing Data Update Notification transactions in this section have been grouped and specified from a business scenario perspective, namely:
  - 1. Meter Exchange Simple
- 15 2. Meter Exchange Basic Simple to Import/Export
  - 3. De-Energisation
  - 4. Re-Energisation
  - 5. Change Read Route and NSRD
  - 6. Remove Meter
- 20 7. Change Network Tariff
  - 8. Meter Reconfiguration
  - 9. Abolish NMI
  - 10. Change Other Detailed Effective and non-Effective dated
  - 11. New Connection
- 25 12. Temporary to Permanent Supply Change
  - 13. Install Meter
  - 14. NMI Merge
  - 15. Crossed Meter Fix
  - 16. Retrospective Change
- 30 17. NMI Split



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### 2.4.1 Overview of Transactions

Transaction	Transaction Group	Version	Sender	Receiver
NMIStandingDataUpdate Notification	NMID	r9	Network Operator	Retailer

### 2.4.2 Common Business Rules

This section will be used to document any business rules that are common to all NMI Standing Data Update Notification (SDU) Transactions. By so doing, repetition will be avoided.

The Metering Code 2005 defines the obligations of the network operator in respect of publishing changes to NMI standing data:

The network operator must notify the current retailer "... of the updated standing data within 2 business days (or such other time as is specified in applicable service level agreement) after updating the registry under clause 4.6."

In practice, the network operator has taken this obligation to mean that it must deliver the relevant notifications by the end of the next business day (11:59) after the registry is updated.

### 2.4.2.1 Service Orders

In this Procedure document, certain interfaces / business processes can be triggered by service orders that themselves may be initiated by either a current retailer or the network operator. Where a network operator creates the service order, the current retailer will have no visibility of the service order.

Full details for the service orders can be found in the WA B2B Procedures: Service Orders Process.

### 25 2.4.2.2 Full and Partial Standing Data Update Notifications

For most changes to the NMI Standing Data, the network operator publishes this to the market in a Partial SDU transaction. For example, a change to the Additional Site Information will be published in an XML message that only contains the changed element with the required key details, which will be:

- the NMI, and
  - any other standing data that is required to uniquely identify the changed standing data.
     (For example, if the standing data is for a meter then the meter serial number will be provided. If the network tariff code changes, then the register ID and the meter serial number will be included.)



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In addition to the Partial SDU, the network operator will also publish a Full SDU for the NMI within 1 business day (generally sooner).

This process may result in the network operator sending multiple Partial SDUs followed by one Full SDU. If the changes that are made in the network operator's system span two full *standing data periods*, two Full SDUs will therefore be published.

It should be noted that Full SDUs have the NMI checksum included, while Partial SDUs do not have the NMI checksum included.

### 2.4.2.3 Status Effective Dates

Where the Network Operator maintains history of changes to standing data elements (eg route, current retailer or meter status), this is done via the use of effective start dates and effective end dates. When standing data is published, the current value for a given element is published with the related effective date (or start date).

For all standing data elements that are effective dated, the published effective date indicate the date from which this value is effective. For example, the following XML shows that the route 405FU\_04 is the current route from the 20<sup>th</sup> of April inclusive.

```
<Route effectiveDate="2008-04-20">405FU_04</Route>
```

In the case of a meter exchange or a meter reconfiguration, there will be an overlap of one day for the old meter and new meter when reviewing the status effective dates. For example, if meter 1 is replaced by meter 2 at 10am on the 5<sup>th</sup> of April, readings will be taken on both the old meter and the new meter at the same time. To allow these readings to be accurately processed and published to market participants by the network operator, Meter 1 must be active up to and including the 5<sup>th</sup> of April (ie status=R from 6<sup>th</sup> April), and Meter 2 must be active from the 5<sup>th</sup> of April. This results in the SDU for the meter removal being:

And the SDU for the meter install being:

```
35 <u>-</u> <WAMeter>

<SerialNumber>0200014807</SerialNumber>
```



<Status effectiveDate="2008-04-05">C</Status>

</WAMeter>

For both of the above meters, readings will be provided to the market with reading dates of 5<sup>th</sup> of April, accurately reflecting the actual business process undertaken.

The following standing data are effective dated in the WA electricity market:

### MasterData (NMI)

- <Status>
- <TransmissionNodeIdentifier>
- 10 < DistributionLossFactorCode>
  - <DistanceFromsubstation>

### Roles

<RoleAssignment>

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### MeterRegister (Meter)

- <Status>
- <InstallationTypeCode>
- <Route>
- 20 <Use>

### Register

- <Status>
- <NetworkTariffCode>

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### **DataStream**

<Status>

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### 2.4.2.4 Standing Data Objection/Negative Acknowledgement Process

If a standing data recipient elects to reject any given standing data update, the negative acknowledgement will be assessed by the network operator based on the related error code and explanation. For example, if a transaction was rejected because it has an invalid NMI checksum, this will manually be reviewed by the network operator and corrected as required. If required, standing data will be reissued to the required market participants.

Modelling the WA market on the change request notifications used in the NEM to publish standing data, objections are only permitted for specific reasons. For example, as the custodian for all standing data, it is unlikely that market participants will reject transactions that include changes to elements like next scheduled read date changes, or network tariff changes as these changes will reflect the outcomes of other business processes. In the NEM, the change requests for these two elements do not allow for any objections. A negative acknowledgement might be expected if a retailer receives standing data updates for a NMI after a transfer away from them has been completed. The list of event codes, together with their initiating transactions, can be found in Appendix A.

### 2.5 Bulk NMI Standing Data Transactions

The network operator will provide Bulk Standing Data to retailers. These transactions are communicated manually, usually via a CD, and comprise data held for all NMIs owned by that retailer. This can be on an as required basis, such as to help facilitate data recovery in the event of a failure of the retailer's systems, and may be requested by an email to Metering System Support Production.

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### 2.6 Customer Transfer Transactions

### 2.6.1 Overview of transactions

A number of standard XML transactions are used to communicate the actions required to transfer a customer from one retailer to another. An overview of these transaction types and there purpose are as follows;

WAElectrictyCustomerTransferRequest: This transaction initiates a customer transfer and is submitted to the Network Operator by the Incoming Retailer. The Network Operator validates the content of the request and will reply with a TransAck (Business Accept) or a TransNack (Business Reject).

WAElectrictyCustomerTransferResponse: This transaction is submitted by the Network Operator to the Incoming Retailer and contains a unique Request ID to be used as a reference in all transactions related to the transfer request.

WAElectrictyCustomerTransferNotification: This transaction type is sent to Retailers by the Network Operator, informing the retailers of the transfer details and its status ie. Pending, Cancelled or Completed.

WAElectrictyCustomerTransferCancelRequest: This transaction can be submitted by the Incoming Retailer to the Network Operator. The Network Operator validates the content of the request and will reply with either a TransAck (Business Accept) or a TransNack (Business Reject).

Please note there is no provision for an objection to a transfer in the Customer Transfer Code. However, the Incoming Retailer can submit a Cancel Request transaction at any time before the transfer date.

### 2.6.2 Customer Transfer Request statuses

The following diagram illustrates the different statuses through which a customer transfer request may pass.

The network operator's systems examine the content of the CTR. If it is invalid, then the status of the transfer will be Rejected and a TransNack sent to the retailer that submitted the CTR. If the content is valid, then the next status depends on the CR code that was submitted in the original request.

If the CR code is 1025, i.e. a Correction Customer Transfer, then the status of the request will move straight to Complete as no reading or metering work will need to take place – the network operator simply needs to back out changes that have been made in its systems. If the CR code is 1000, the transfer status is set to Pending while closing reads and necessary metering work takes place. When this work is successfully concluded, and the responsible retailer for the site is changed, then the status of the customer transfer is set to Complete.

The only other status for a customer transfer request is Cancelled. A CTR, that is in a Pending status, and is then withdrawn, will move to a status of Cancelled.



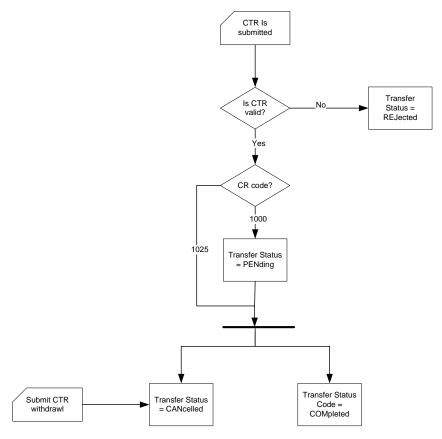


Figure 1: Customer Transfer Request status lifecycle

### 3 Standing Data Interfaces

### 3.1 NMI Discovery process

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### 3.1.1 Overview

The NMI Discovery Function allows a code participant to search for a NMI using a site address or meter number, so they can retrieve details for a connection point on the electricity network.

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### 3.1.2 Business Rules

### Submission rules

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 A code participant may submit a NMI discovery request to the network operator at any time.

2. There is no limit on the number of NMI discovery requests that may be submitted by a code participant over any period.

Any code participant can perform a NMI Discovery request on any contestable connection point or their own connection point. Customer consent is not required.

4. A current retailer may perform a NMI Discovery request on any connection point and embedded network children. Customer consent is not required.

A code participant does not require- verifiable consent from a customer to submit a NMI discovery request.

### 25 Validation

- 6. A NMI discovery request must specify either
  - a. a meter number; or
  - b. two or more components of a supply address, including:
    - i) flat or unit type
    - ii) flat or unit number
    - iii) floor type
    - iv) floor number
    - v) location number
    - vi) house number
- vii) house number suffix



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- viii) lot number
- ix) street name
- x) street type
- xi) street suffix
- xii) suburb
- xiii) state
- xiv) postcode
- 7. If a NMI discovery request specifies components of a supply address then:
  - a. at least a suburb or postcode must be specified; and
  - b. at least a street name or location number must be provided and;
  - c. other components are optional, but should be provided if available.
- 8. The network operator must reject a NMI discovery request if any of the following apply:
  - a. the code participant has failed to satisfy the requirements specified in 6 and
     7.
  - b. no connection point exists in the Metering Registry with a connected meter matching the requested meter number;
  - a connection point exists in the Metering Registry with a connected meter matching the requested meter number, but the requesting code participant is not the current retailer and the connection point is not contestable;
  - d. no connection points exist in the Metering Registry with a supply address exactly matching the requested address components;
  - e. one or more connection points exist in the Metering Registry with a supply address exactly matching the requested address components, but the connection point(s) are extinct.
  - f. one or more connection points exist in the Metering Registry with a supply address exactly matching the requested address components, but the connection point(s) are not contestable and the requesting code participant is not the current retailer.

### Response

If the network operator rejects a NMI discovery request, then it must notify the code participant of this fact by COB on the business day following the request day. The notification must include the reason for the rejection of the request.



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- 10. If a NMI discovery request is not rejected, then the network operator must, by COB on the business day following the request day:
  - a. notify the code participant that their request has been accepted;
  - b. provide the following information to the code participant for each contestable connection point (but only up to a maximum of 99 connection points) that has matched the request criteria:
    - NMI
    - NMI checksum
  - where more than 99 contestable connection points exist that match the request criteria, advise the code participant that additional matches were found
- 11. A code participant (provided it has first made reasonable efforts to submit a successful NMI discovery request), may request the network operator's assistance to determine the NMI for a connection point. The request must include:
  - a. details of the supply address and/or meter number search criteria attempted to date; and
  - any other details (for example customer name) that may assist the network operator to identify the connection point.
- 12. If the network operator receives a request for assistance under Section 2.11, then the network operator must, by COB on the business day after the request day:
  - a. If the code participant is the current retailer, provide the code participant with the requested NMI and NMI checksum; or
  - If the code participant is not the current retailer, provide the NMI and NMI checksum (for contestable NMIs) or advise the code participant that no contestable connection point exists with the details provided (for noncontestable NMIs); or
  - c. If the code participant provides insufficient details pursuant to point 11 above in their request, reject the request. The code participant must then endeavour to contact the network operator for further assistance.

### 3.1.3.1 Process diagram

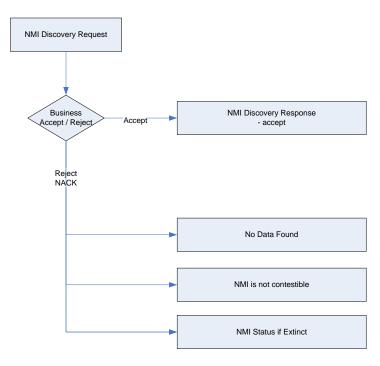


Figure 2: NMI Standing Data Request process

### 3.1.3.2 Transactional Diagram

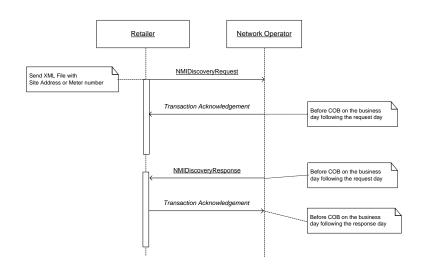


Figure 3: NMI Standing Data Request Process

### 3.1.3.3 Timing Requirements

Transaction	Transaction Group	Version	Sender	Receiver	Timing
NMIDiscoveryRequest	NMID	r17	Retailer	Network operator	At any time
Transaction Acknowledgement	NMID	r17	Network operator	Retailer	Before COB on business day following the request day
NMIDiscoveryResponse	NMID	r17	Network operator	Retailer	Before COB on business day following the request day
Transaction Acknowledgement	NMID	r17	Retailer	Network operator	Before COB on business day following the response day

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### 3.1.4 Transactions

### 3.1.4.1 NMIDiscoveryRequest

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Transaction Definition	NMIDiscoveryRequest			
Trigger	None			
Pre-conditions	A minimum number of data points are provided in the request			
Post-conditions	Network operator advised by retailer of request for NMI standing data.			
Transaction acknowledgement-	Severity	Cod e	Description	
specific event codes	Error	1404	No Data Found	
	Error	1404	NMI is not Contestable	
	Error	1404	NMI Status is Extinct	
	Information	0	Success	

### **Transaction Data Elements**

The attributes of the NMIDiscoveryRequest are as below:

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Table 1: NMI Discovery Request transaction elements

Field	Format	Use	Definition/ Comments	Occurs	Element Path	Data Type
Jurisdiction Code	Varchar2 (3)	R	Jurisdiction code to which the NMI belongs. This code defines the jurisdictional rules, which apply to the transfer of this NMI.	Type: Element Occurs: 1 Default: "WA"	WAMasterData/Jurisd ictionCode	xsd:string maxLength "3" default to WA

Field	Format	Use	Definition/ Comments	Occurs	Element Path	Data Type
Flat or Unit Type	Varchar2 (4)	0	Specification of the type of flat or unit, which is a separately identifiable portion within a building/complex. This value must correspond to a valid Flat Type Code in the Flat Type Codes reference table	Type: Element Occurs: 1 Default: None	WAMasterData/Addre ss/ StructuredAddress/Fl atorUnit/ FlatorUnitType	Enumerated List xsd:string APT CTGE The list is part of the schema (for full list see document List of Codes)
Flat or unit number	Varchar (5)	0	Defines the flat or unit number as per Australian Standard AS4590- 1999.	Type: Element Occurs: 1 Default: None	Address/ StructuredAddress/FI atorUnit/ FlatorUnitNumber	xsd:string
Floor or Level Type	Varchar2 (2)	0	Floor Type is used to identify the floor or level of a multi-storey building/complex. This value must correspond to a valid Floor Type Code in the Floor Type Codes reference table at the end of this document.	Type: Element Occurs: 1 Default: None	WAMasterData/Addre ss/ StructuredAddress/Fl oororLevel/ FloororLevelType	Enumerated List xsd:string B FL The list is part of the schema (for full list see document List of Codes)
Floor or Level Number	Varchar2 (5)	0	Floor Number is used to identify the floor or level of a multi-storey building/complex.	Type: Element Occurs: 1 Default: None	WAMasterData/Addre ss/ StructuredAddress/Fl oororLevel/ FloororLevelNumber	xsd:string
Location number	Varchar (6)	0	Defines the location number as used in Western Australia	Type: Element Occurs: 1 Default: None	Address/ StructuredAddress/Lo cationNumber	xsd:string
House number	Number (5)	0	Defines the house number as per Australian Standard AS4590- 1999.	Type: Element Occurs: 1 Default: None	Address/ StructuredAddress/H ouse/ HouseNumber	xsd: nonNegativeInteger Max: 99999
House number suffix	Varchar (1)	0	Defines the house number suffix as per Australian Standard AS4590- 1999.	Type: Element Occurs: 1 Default: None	Address/ StructuredAddress/H ouse/ HouseNumberSuffix	xsd:string
Lot number	Varchar (6)	0	Defines the lot number as per Australian Standard AS4590- 1999.	Type: Element Occurs: 1 Default: None	Address/ StructuredAddress/Lo t/LotNumber	xsd:string



Field	Format	Use	Definition/ Comments	Occurs	Element Path	Data Type
Street name	Varchar(30)	0	Defines the street name as per Australian Standard AS4590- 1999.	Type: Element Occurs: 1 Use: Optional Default: None	Address/ StructuredAddress/Str eet/ StreetName	xsd:string
Street type	Varchar (4)	0	Defines the street type as per Australian Standard AS4590- 1999.	Type: Element Occurs: 1 Default: None	Address/ StructuredAddress/Str eet/ StreetType	Enumerated List xsd:string ACCS ALLY The list is part of the schema (for full list see document List of Codes)
Street suffix	Varchar (2)	0	Defines the street suffix as per Australian Standard AS4590- 1999.	Type: Element Occurs: 1 Use: Optional Default: None	Address/ StructuredAddress/Str eet/ StreetSuffix	Enumerated List xsd:string CN E The list is part of the schema (for full list see document List of Codes)
Suburb	Varchar(46)	0	Defines the suburb or locality as per Australian Standard AS4590- 1999.	Type: Element Occurs: 1 Default: None	Address/ SuburbOrPlaceOrLoc ality	xsd:string
State	Varchar2 (3)	0	Defined State or Territory abbreviation. Values permitted include: ACT, NSW, QLD, SA, VIC, WA, TAS, NT, AAT (Aus Antarctic Territory)	Type: Element Occurs: 1 Default: "WA"	WAMasterData/Addre ss/ StateorTerritory	Enumerated List;xsd:string;AAT;ACT;;The list is part of the schema; (for full list see document List of Codes)
Postcode	Char (4)	0	Defines the postcode as per Australian Standard AS4590- 1999.	Type: Element Occurs: 1 Default: None	Address/ PostCode	xsd:string
Meter Serial Number	Varchar2 (12)	0	The meter serial number uniquely identifies a meter for a given NMI.	Type: Element Occurs: 1 Default: None	MeterRegister/WAMet er/SerialNumber	xsd:string maxLength: 12

### **Transaction Schema Definition**

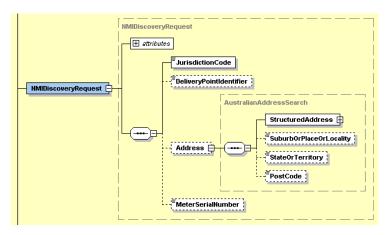


Figure 4: NMI Discovery Request schema definition

### 3.1.4.2 NMIDiscoveryResponse

Transaction Definition	NMIDiscoveryResponse
Trigger	None
Pre-conditions	A schema-compliant NMI Discovery Request has been received
Post-conditions	Retailers is advised of the NMI and checksum or the reason for it not being provided.
Transaction acknowledgement-specific event codes	N/A

### 5 Transaction Data Elements

The attributes of the NMIDiscoveryResponse are as below:

Table 2: Customer Transfer Response transaction elements

Field	Format	Us e	Definition/ Comments	Occurs	Element Path	Data Type
NMI	Char (10)	М	The National Metering Identifier (NMI).	Type: Element Occurs: 1 Default: None	NMI	xsd:string
NMI Checksum	Numeric (1)	М	The Checksum of the NMI.	Type: Attribute Occurs: 0-1 Default: None	NMI/@Checksum	xsd:number
Flat or Unit Type	Varchar2 (4)	0	Specification of the type of flat or unit, which is a separately identifiable portion within a building/complex. This value must correspond to a valid Flat Type Code in the Flat Type Codes reference table	Type: Element Occurs: 1 Default: None	WAMasterData/Addre ss/ StructuredAddress/Fl atorUnit/ FlatorUnitType	Enumerated List xsd:string APT CTGE The list is part of the schema (for full list see document List of Codes)

Field	Format	Us e	Definition/ Comments	Occurs	Element Path	Data Type
Flat or unit number	Varchar (5)	0	Defines the flat or unit number as per Australian Standard AS4590- 1999.	Type: Element Occurs: 1 Default: None	Address/ StructuredAddress/FI atorUnit/ FlatorUnitNumber	xsd:string
Floor or Level Type	Varchar2 (2)	0	Floor Type is used to identify the floor or level of a multistorey building/complex. This value must correspond to a valid Floor Type Code in the Floor Type Code steference table at the end of this document.	Type: Element Occurs: 1 Default: None	WAMasterData/Addre ss/ StructuredAddress/FI oororLevel/ FloororLevelType	Enumerated List xsd:string B FL The list is part of the schema (for full list see document List of Codes)
Floor or Level Number	Varchar2 (5)	0	Floor Number is used to identify the floor or level of a multi-storey building/complex.	Type: Element Occurs: 1 Default: None	WAMasterData/Addre ss/ StructuredAddress/FI oororLevel/ FloororLevelNumber	xsd:string
Location number	Varchar (6)	0	Defines the location number as used in Western Australia	Type: Element Occurs: 1 Default: None	Address/ StructuredAddress/Lo cationNumber	xsd:string
House number	Number (5)	0	Defines the house number as per Australian Standard AS4590- 1999.	Type: Element Occurs: 1 Default: None	Address/ StructuredAddress/H ouse/ HouseNumber	xsd: nonNegativeInteger Max: 99999
House number suffix	Varchar (1)	0	Defines the house number suffix as per Australian Standard AS4590- 1999.	Type: Element Occurs: 1 Default: None	Address/ StructuredAddress/H ouse/ HouseNumberSuffix	xsd:string
Lot number	Varchar (6)	0	Defines the lot number as per Australian Standard AS4590- 1999.	Type: Element Occurs: 1 Default: None	Address/ StructuredAddress/Lo t/LotNumber	xsd:string
Street name	Varchar(30)	0	Defines the street name as per Australian Standard AS4590- 1999.	Type: Element Occurs: 1 Use: Optional Default: None	Address/ StructuredAddress/Str eet/ StreetName	xsd:string

Field	Format	Us e	Definition/ Comments	Occurs	Element Path	Data Type
Street type	Varchar (4)	0	Defines the street type as per Australian Standard AS4590- 1999.	Type: Element Occurs: 1 Default: None	Address/ StructuredAddress/Str eet/ StreetType	Enumerated List xsd:string ACCS ALLY The list is part of the schema (for full list see document List of Codes)
Street suffix	Varchar (2)	0	Defines the street suffix as per Australian Standard AS4590- 1999.	Type: Element Occurs: 1 Use: Optional Default: None	Address/ StructuredAddress/Str eet/ StreetSuffix	Enumerated List xsd:string CN E The list is part of the schema (for full list see document List of Codes and Events)
Suburb	Varchar(46)	0	Defines the suburb or locality as per Australian Standard AS4590- 1999.	Type: Element Occurs: 1 Default: None	Address/ SuburbOrPlaceOrLoc ality	xsd:string
State	Varchar2 (3)	0	Defined State or Territory abbreviation. Values permitted include: ACT, NSW, QLD, SA, VIC, WA, TAS, NT, AAT (Aus Antarctic Territory)	Type: Element Occurs: 1 Default: "WA"	WAMasterData/Addre ss/ StateorTerritory	Enumerated List;xsd:string;AAT;ACT;;The list is part of the schema; (for full list see document List of Codes)
Postcode	Char (4)	0	Defines the postcode as per Australian Standard AS4590-1999.	Type: Element Occurs: 1 Default: None	Address/ PostCode	xsd:string
Meter Serial Number	Varchar2 (12)	0	The meter serial number uniquely identifies a meter for a given NMI.	Type: Element Occurs: 1 Default: None	MeterRegister/WAMet er/SerialNumber	xsd:string maxLength: 12

# **Transaction Schema Definition**

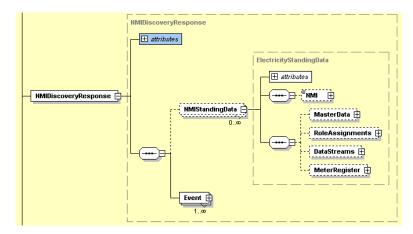


Figure 5: NMI Discovery Response schema definition

# 3.2 NMI Standing Data Request process

#### 3.2.1 Overview

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The NMI Standing Data Request Process is the mechanism by which a retailer, that is a current retailer for a given NMI, can obtain the entire set of NMI standing data held by the network operator.

The set of NMI standing data that is returned to the current retailer by successfully submitting a NMI Standing Data Request is defined by <a href="Table 4">Table 4</a> Table 4 in Appendix C.

Where a retailer is not the current retailer, they may submit a NMI Standing Data Request to the network operator for a site that is contestable. Where this request is accepted, a subset of the NMI standing data held by the network operator will be returned.

The set of NMI standing data that is returned to the retailer that is not a current retailer by successfully submitting a NMI Standing Data Request is defined by <u>Table 5Table 5</u> in Appendix C.

### 3.2.2 Business Rules

#### **Submission rules**

A retailer may submit a NMI Standing Data Request to the network operator at any time.

There is no limit on the number of NMI Standing Data Requests that may be submitted by a retailer over any period.

A current retailer may perform a NMI Standing Data Request on any of their connection points or embedded network children, whether or not these are contestable.

A retailer does not require verifiable consent from a customer to submit a NMI Standing Data Request.

The request for standing data must be submitted for each connection point (NMI) separately.

A NMI Standing Data Request must specify:

- (a) NMI; and
- 30 (b) NMI checksum

# Validation

The network operator must reject a NMI Standing Data Request, if any of the following apply:

a) the NMI checksum is not correct for the requested NMI; or

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- the connection point exists in the Metering Registry with the requested NMI, but the connection point is either extinct or the connection point is not contestable and the requesting retailer is not the current retailer; or
- no connection point or embedded network child exists in the Metering Registry with the requested NMI.

A NMI Standing Data Request for an embedded network child NMI will be rejected due to it being non-contestable unless the requesting party is the current retailer.

If the network operator rejects a NMI Standing Data Request, then it must notify the retailer of this fact by COB on the business day following the request day. The notification must include the reason for the rejection of the request.

### Response

If a NMI Standing Data Request is not rejected, then the network operator must, by COB on the business day following the request day:

- a) notify the retailer that their request has been accepted; and
- provide the following information listed in Appendix C to the retailer for the connection point.
- Definition of the set of data items returned for each connection point and each installed meter at the connection point are included in Appendix C, separated by current and noncurrent retailer.

The data sets that are returned uniquely to a current retailer, as opposed to any retailer, for a given NMI are:

- 25 a) DataStreams; and
  - b) RoleAssignments.

If the connection point is in the process of being set up (i.e. it is greenfield), the request will return the standing data for this NMI e.g. if the meter has not been energised yet, the standing data will show this status on the meter and if a meter has not been installed yet, then no meter details will be provided.

If a NMI has a check meter attached to it, the details of the check meter are only returned in the standing data, if the meter configuration is a Type 1 or Type 2. In all other cases, the check meter is used internally by the network operator and is not communicated to retailers.



# 3.2.3.1 Process diagram

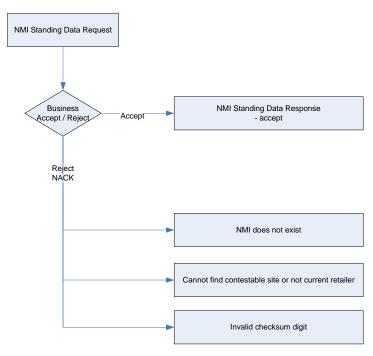


Figure 6: NMI Standing Data Request process

# 3.2.3.2 Transactional Diagram

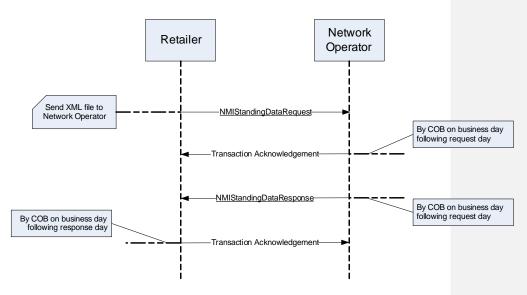


Figure 7: NMI Standing Data Request Process

# 3.2.3.3 Timing Requirements

5

Transaction	Transaction Group	Version	Sender	Receiver	Timing
NMIStandingDataRequest	NMID	r17	Retailer	Network operator	
Transaction Acknowledgement	NMID	r17	Network operator	Retailer	Before COB on business day following the request day
NMIStandingDataResponse	NMID	r17	Network operator	Retailer	Before COB on business day following the request day
Transaction Acknowledgement	NMID	r17	Retailer	Network operator	Before COB on business day following the response day

### 3.2.4 Transactions

# 3.2.4.1 NMIStandingDataRequest

Transaction Definition	NMIStandingDataRequest
Trigger	None
Pre-conditions	None
Post-conditions	Network operator advised by retailer of request for NMI standing data.
Transaction acknowledgement-specific event codes	Refer to Appendix A

# **Transaction Data Elements**

The attributes of the NMIStandingDataRequest are as below:

Field	Format	Use	Definition / Comments	Occurs	Element Path	Data Type
NMI	Char (10)	М	The National Metering Identifier (NMI)	Type: Element Occurs: 1 Use: Mandatory Default: None	NMI	xsd:string
NMI Checksum	Numeric (1)	М	The Checksum of the NMI	Type: Element Occurs: 1 Use: Mandatory Default: None	NMI/@Chec ksum	xsd:number

5

### **Transaction Schema Definition**

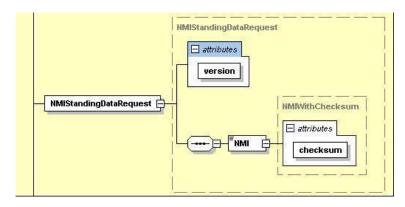


Figure 8: NMI Standing Data Request schema definition

# Sample XML NMI Standing Data Request



# 3.2.4.2 NMIStandingDataResponse

Transaction Definition	NMIStandingDataResponse
Trigger	Network operator receives NMI Standing Data Request from retailer
Pre-conditions	NMI identified in the Request transaction
Post-conditions	The retailer is able to update their system on the basis of the information provided by the network operator.
Transaction acknowledgement-specific event codes	Refer to Appendix A

5

# **Transaction Data Elements**

The attributes of the NMIStandingDataResponse are defined in Appendix C:

# 10 Transaction Schema Definition

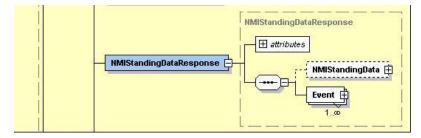


Figure 9: NMI Standing Data Request schema definition

### Sample XML - valid current retailer

```
<?xml version="1.0" encoding="ISO-8859-1" ?>
 5
                  ase:aseXML xmlns:ase="urn:aseXML:r17:WA:r2.00" xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance" xsi:schemaLocation="urn:aseXML:r17:WA:r2.00
                <ase:aseXML
                  http://www.westernpower.com.au/aseXML/schemas/r17/WA:r2.00/aseXML_r17_WA_r2.00.xsd">
                10
                     <TransactionGroup>NMID</TransactionGroup>
<Priority>Medium</Priority>
15
                <Market>WAELEC</Market>
</Header>
<Transactions>
                       <Transaction transactionID="WPNTWRKS-0000a-16539601" transactionDate="2008-04-17T14:58:48+08:00"
initiatingTransactionID="NSD1204070">
20
                      - <NMIStandingDataResponse version="r4">
                           - <NMIStandingData>
<NMI checksum="8">8001767449</NMI>
                              - <WAMasterData>
                                    AMMISCHEDATA

- SurisdictionCode> WA</JurisdictionCode>

- NMIClassificationCode> <5.7KW </MMIClassificationCode>

- TransmissionNodeIdentifier effectiveDate="2005-08-02"> WMOY</TransmissionNodeIdentifier>

- DistributionLossFactorCode effectiveDate="2005-08-02"> QRT1</DistributionLossFactorCode>
25
                                  - <Address>
                                         <WAStructuredAddress>
30
                                           - <FlatOrUnit>
                                                 <FlatOrUnitType>U</FlatOrUnitType>
<FlatOrUnitNumber>A</FlatOrUnitNumber>
                                             </FlatOrUnit>
                                           - <House>
35
                                                 <HouseNumber>45</HouseNumber>
                                             </House>
                                            <Lot>
                                                 <LotNumber>52</LotNumber>
40
                                           - <Street>
                                                 <StreetName>HAROLD</StreetName>
<StreetType>ST</StreetType>
                                             </Street>
                                          /WAStructuredAddress>
45
                                         <SuburbOrPlaceOrLocality>Dianella</SuburbOrPlaceOrLocality>
                                         <StateOrTerritory>WA</StateOrTerritory>
<PostCode>6059</PostCode>
                                     </Address>
                                     Status effectiveDate="2005-08-02">A</Status>
ColistanceFromSubstation effectiveDate="2005-08-02">2.69
DistanceFromSubstation>
50
                                     <Voltage>LV</Voltage>
<PropertyType>Domestic</PropertyType>
                                 </WAMasterData>
                                 <RoleAssignments>
55

    - <RoleAssignment effectiveDate="2005-08-02">

                                         <Party description="Synergy Energy">WPRTL</Party>
<Role>LR</Role>
                                    </RoleAssignment>
</RoleAssignment effectiveDate="2005-08-02">
</Party description="Western Power Networks">WPNTWRKS</Party>
60
                                         <Role>LNSP</Role>
                                      </RoleAssignment>
                                  - <RoleAssignment effectiveDate="2005-08-02">
<Party description="Synergy Energy">WPRTL</Party>
65
                                         <Role>ROLR</Role>
                                   </RoleAssignment>
- <RoleAssignment effectiveDate="2005-08-02":
                                         <Party description="Synergy Energy">WPRTL</Party><Role>RP</Role>
70
                                     </RoleAssignment>
                                    <RoleAssignment effectiveDate="2005-08-02">
<RoleAssignment effectiveDate="2005-08-02">
<Party description="Synergy Energy">WPRTL</Party>
<Role>FRMP</Role>
                                     </RoleAssignment>
```



```
</RoleAssignments>
                                  <DataStreams>
                                     - <DataStream>
                                            <Suffix>11</Suffix>
<ProfileName>NOPROF</ProfileName>
  5
                                            <AveragedDailyLoad>15</AveragedDailyLoad>
<DataStreamType>Consumption</DataStreamType>
                                       </DataStream>
                                </DataStreams>
- <MeterRegister>
10
                                     - <WAMeter>
                                           /AMeter>
<SerialNumber>15D104064</SerialNumber>
<NextScheduledReadDate>2008-03-10</NextScheduledReadDate>
                                            <Location>Right Side</Location>
<Hazard>BD</Hazard>
15
                                            <Point>01</Point>
<Model>M101</Model>
20
                                            <ReadTypeCode>MV2</ReadTypeCode>
<Status effectiveDate="2005-08-02">C</Status>
<AdditionalSiteInformation> Meter box difficult to open</AdditionalSiteInformation>
                                            <KeyCode>MK1</KeyCode>
<CustomerFundedMeter>No</CustomerFundedMeter>
25
                                           <RegisterConfiguration>
                                              - <Register>
                                                    <RegisterID>007</RegisterID>
                                                    NetworkTariffCode effectiveDate="2005-08-02">AER</NetworkTariffCode>
UnitOfMeasure>KWH
/UnitOfMeasure>
30
                                                    <Unitorreasure </pre>
<TimeofDay>ALLDAY
ALLDAY
/Multiplier> 1
/Multiplier> 1
/Multiplier>
/DialFormat>
<Ordified</pre>
/Multiplier>
<ControlledLoad>No
/ControlledLoad>
35
                                                    <ConsumptionType>Cumulative</ConsumptionType>
<Status effectiveDate="2005-08-02">C</Status>
                                                    <DirectionIndicator>Export/DirectionIndicator>
                                            </Register>
</RegisterConfiguration>
40
                                        </WAMeter>
                                    </MeterRegister>
                            </MIStandingData>
- <Event severity="Information">
45
                                  <Code>0</Code>
                          </Event>
</NMIStandingDataResponse>
                      </Transaction>
                  </Transactions>
50
             </ase:aseXML>
```

### Sample XML - valid retailer (not the current retailer)



```
<NMI checksum="8">8001019627</NMI>
                                                                    - <WAMasterData>
                                                                                   <JurisdictionCode>WA</JurisdictionCode>
                                                                                   <a href="https://www.nuclearchee.org/linearchee.org/linearchee.org/linearchee.org/linearchee.org/linearchee.org/linearchee.org/linearchee.org/linearchee.org/linearchee.org/linearchee.org/linearchee.org/linearchee.org/linearchee.org/linearchee.org/linearchee.org/linearchee.org/linearchee.org/linearchee.org/linearchee.org/linearchee.org/linearchee.org/linearchee.org/linearchee.org/linearchee.org/linearchee.org/linearchee.org/linearchee.org/linearchee.org/linearchee.org/linearchee.org/linearchee.org/linearchee.org/linearchee.org/linearchee.org/linearchee.org/linearchee.org/linearchee.org/linearchee.org/linearchee.org/linearchee.org/linearchee.org/linearchee.org/linearchee.org/linearchee.org/linearchee.org/linearchee.org/linearchee.org/linearchee.org/linearchee.org/linearchee.org/linearchee.org/linearchee.org/linearchee.org/linearchee.org/linearchee.org/linearchee.org/linearchee.org/linearchee.org/linearchee.org/linearchee.org/linearchee.org/linearchee.org/linearchee.org/linearchee.org/linearchee.org/linearchee.org/linearchee.org/linearchee.org/linearchee.org/linearchee.org/linearchee.org/linearchee.org/linearchee.org/linearchee.org/linearchee.org/linearchee.org/linearchee.org/linearchee.org/linearchee.org/linearchee.org/linearchee.org/linearchee.org/linearchee.org/linearchee.org/linearchee.org/linearchee.org/linearchee.org/linearchee.org/linearchee.org/linearchee.org/linearchee.org/linearchee.org/linearchee.org/linearchee.org/linearchee.org/linearchee.org/linearchee.org/linearchee.org/linearchee.org/linearchee.org/linearchee.org/linearchee.org/linearchee.org/linearchee.org/linearchee.org/linearchee.org/linearchee.org/linearchee.org/linearchee.org/linearchee.org/linearchee.org/linearchee.org/linearchee.org/linearchee.org/linearchee.org/linearchee.org/linearchee.org/linearchee.org/linearchee.org/linearchee.org/linearchee.org/linearchee.org/linearchee.org/linearchee.org/linearchee.org/linearchee.org/linearchee.org/linearchee.org/linearchee.org/linearchee.org/linearchee.org/linearchee.org/linearchee.org/linearchee.
    5
                                                                             - <Address>
                                                                                      - <WAStructuredAddress>
                                                                                             <u>-</u> <Lot>
10
                                                                                                             <LotNumber>33A</LotNumber>
                                                                                               </Lot>
_ <Street>
                                                                                                             <StreetName>BULONG</StreetName>
                                                                                                              <StreetType>RD</StreetType>
15
                                                                                                      </Street>
                                                                                            </WAStructuredAddress>
<SuburbOrPlaceOrLocality>PARKESTON</SuburbOrPlaceOrLocality>
                                                                                            <StateOrTerritory>WA</StateOrTerritory>
                                                                                             <PostCode>6434</PostCode>
20
                                                                                   </Address>
                                                                                   <Status effectiveDate="2006-11-16">A</Status>
<Voltage>LV</Voltage>
                                                                         </WAMasterData>
                                                                   - <MeterRegister>
- <WAMeter>
25
                                                                                          <SerialNumber>0148005580</SerialNumber>
<InstallationTypeCode effectiveDate="2006-11-14">COMMS4</InstallationTypeCode>
                                                                                            <Model>E305</Model>
                                                                                            <ReadTypeCode>RT1<Status effectiveDate="2006-11-14">C
30
                                                                                      \underline{\phantom{a}} <RegisterConfiguration>
                                                                                              - <Register>
                                                                                                             <RegisterID>01<NetworkTariffCode effectiveDate="2006-11-14">AEB
35
                                                                                                     </Register>
                                                                                               <NetworkTariffCode effectiveDate="2006-11-14">AEB
                                                                                                      </Register>
40
                                                                                               - <Register>
                                                                                                             </Register>
                                                                                                - <Register>
45
                                                                                                             <RegisterID>04</RegisterID>
                                                                                                      <NetworkTariffCode effectiveDate="2006-11-14">AEB</NetworkTariffCode></Register>
                                                                                                - <Register>
                                                                                                              <RegisterID>05</RegisterID>
50
                                                                                                             <NetworkTariffCode effectiveDate="2006-11-14">AEB</NetworkTariffCode>
                                                                                                      </Register>
                                                                                                - <Register>
                                                                                                             <RegisterID>06</RegisterID>
<NetworkTariffCode effectiveDate="2006-11-14">AEB</NetworkTariffCode>
55
                                                                                                      </Register>
                                                                                               <NetworkTariffCode effectiveDate="2006-11-14">AEB</NetworkTariffCode>
                                                                                                      </Register:
60
                                                                                            </RegisterConfiguration>
                                                                                   </WAMeter>
                                                                             - <WAMeter>
                                                                                            <SerialNumber>0201000128</SerialNumber>
                                                                                            <InstallationTypeCode effectiveDate="2006-11-16">COMMS4</InstallationTypeCode>
<Model>E104</Model>
65
                                                                                      <model>elive/model>
<model*vertification
<model*vertification |
70
                                                                                                              <NetworkTariffCode effectiveDate="2006-11-16">AEB</NetworkTariffCode>
                                                                                                      </Register>
                                                                                               75
                                                                                                              <NetworkTariffCode effectiveDate="2006-11-16">AEB</NetworkTariffCode>
                                                                                                     </Register>
                                                                                               - <Register>
```



```
<RegisterID>020</RegisterID>
<NetworkTariffCode effectiveDate="2006-11-16">AEB</NetworkTariffCode>
                                  </Register>
                                - <Register>
 5
                                     <RegisterID>030</RegisterID>
                                      <NetworkTariffCode effectiveDate="2006-11-16">AEB</NetworkTariffCode>
                                   </Register>
                                10
                                      <NetworkTariffCode effectiveDate="2006-11-16">AEB</NetworkTariffCode>
                                   </Register>
                                - <Register>
                                     <RegisterID>01</RegisterID>
                                      <NetworkTariffCode effectiveDate="2006-11-16">AEB</NetworkTariffCode>
15
                                   </Register>
                            </RegisterConfiguration>
</WAMeter>
                          - <WAMeter>
                               <SerialNumber>0148005453</SerialNumber>
<InstallationTypeCode effectiveDate="2006-11-14">COMMS4</InstallationTypeCode>
20
                               <Model>E304</Model>
                               <ReadTypeCode>RT1</ReadTypeCode>
<Status effectiveDate="2006-11-14">C</Status>
                             - <RegisterConfiguration>
25
                                - <Register>
                                     <RegisterID>01</RegisterID>
<NetworkTariffCode effectiveDate="2006-11-14">AEB</NetworkTariffCode>
                                  </Register>
                                - <Register>
30
                                     <RegisterID>02</RegisterID>
                                     <NetworkTariffCode effectiveDate="2006-11-14">AEB</NetworkTariffCode>
                                   </Register>
                                35
                                      <NetworkTariffCode effectiveDate="2006-11-14">AEB</NetworkTariffCode>
                                   </Register>
                                _ <Register>
                                     <RegisterID>04</RegisterID>
<NetworkTariffCode effectiveDate="2006-11-14">AEB</NetworkTariffCode>
40
                                  </Register>
                                  <Register>
                                      <RegisterID>05</RegisterID>
                                      <NetworkTariffCode effectiveDate="2006-11-14">AEB</NetworkTariffCode>
                                   </Register>
45
                                - <Register>
                                     </Register>
                                 - <Register>
50
                                     <RegisterID>07</RegisterID>
                                      <NetworkTariffCode effectiveDate="2006-11-14">AEB</NetworkTariffCode>
                                   </Register>
                            </RegisterConfiguration>
</WAMeter>
55
                          - <WAMeter>
                               <SerialNumber>0148005583</SerialNumber>
                               <InstallationTypeCode effectiveDate="2006-11-14">COMMS4</InstallationTypeCode>
                               <Model>E304</Model>
                               <ReadTypeCode>RT1</ReadTypeCode>
<Status effectiveDate="2006-11-14">C</Status>
60
                             - <RegisterConfiguration>
                                _ <Register>
                                     <RegisterID>01</RegisterID>
                                      <NetworkTariffCode effectiveDate="2006-11-14">AEB</NetworkTariffCode>
65
                                   </Register>
                                <NetworkTariffCode effectiveDate="2006-11-14">AEB</NetworkTariffCode>
70
                                - <Register>
                                     <RegisterID>03</RegisterID>
<NetworkTariffCode effectiveDate="2006-11-14">AEB</NetworkTariffCode>
                                  </Register>
                                - <Register>
75
                                     <RegisterID>04</RegisterID>
                                      <NetworkTariffCode effectiveDate="2006-11-14">AEB</NetworkTariffCode>
                                  </Register>
```



```
- <Register>
                                                           <RegisterID>05</RegisterID>
                                                           <NetworkTariffCode effectiveDate="2006-11-14">AEB</NetworkTariffCode>
  5
                                                   - <Register>
                                                          <RegisterID>06</RegisterID>
<NetworkTariffCode effectiveDate="2006-11-14">AEB</NetworkTariffCode>
                                                      </Register>
                                                   - <Register>
10
                                                           <RegisterID>07</RegisterID>

<
                                                 </RegisterConfiguration>
                                       </WAMeter>
</MeterRegister>
15

</pre
                             </Event>
</NMIStandingDataResponse>
20
                    </Transaction>
               </ase:aseXML>
```

### Sample XML - invalid NMI

25

55

```
30
                  <From description="Western Power Networks">WPNTWRKS</From>
<To description="Synergy Energy">WPRTL</To>
<MessageID> WPNTWRKSMSG-12541337</MessageID>
<MessageDate>2008-04-17716:21:58+08:00</MessageDate>
35
                  <TransactionGroup>NMID</TransactionGroup>
<Priority>High</Priority>
<Market>WAELEC</Market>
40
             </Header>
- <Acknowledgements>
                                                        initiatingTransactionID="NSD1204090" receiptID="WPNTWRKS-3111a-16546070"
                    <TransactionAcknowledgement</p>
                    receiptDate="2008-04-17T16:21:58+08:00" status="Reject" duplicate="No" acceptedCount="0":

- <Event severity="Error" class="Application">

<Code>1454</Code>
45
                          <KeyInfo>9999999999</KeyInfo>
                          <Context /:
                          <Explanation>NMI does not exist</Explanation>
                       </Event>
50
                   </TransactionAcknowledgement>
           </Acknowledgements>
</ase:aseXML>
```

# Sample XML – invalid NMI checksum

50

### Sample XML - Cannot find contestable site or not current retailer

This XML message would be received if, for example, a retailer requested details for a child embedded network NMI and that retailer was not the current retailer.

```
<?xml\ version = "1.0" encoding = "ISO-8859-1"?> < ase:aseXML\ xmlns:ase="urn:aseXML:r17:WA:r2.00"\ xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance" | xmlns:xsi="http://www.w3.org/2001/XMLSch
25
                                   xsi:schemal.ocation="urn:aseXML:r17:WA:r2.00 http://www.westempower.com.au/aseXML/schemas/r17/WA:r2.00/aseXML_r17_WA_r2.00.xsd">
                                            Header
                                                 **From description="Western Power Networks">WPNTWRKS</From>

**From description="Alinta">ALINTA</To>

**MessageID>WPNTWRKSMSG-12541228</MessageID>

**MessageDate>2008-04-17T15:16:46+08:00</MessageDate>
 30
                                                   <TransactionGroup>NMID</TransactionGroup>
<Priority>High</Priority>
<Market>WAELEC</Market>
35
                                            </Header>
                                          <Acknowledgements>
                                  40
                                                                 <Context/>
<Explanation>Cannot find contestable site or not current retailer</Explanation>
45
                                                     </Event>
</TransactionAcknowledgement>
                                    </ase:aseXML>
```

# 3.3 Meter Exchange - Simple Process

#### 3.3.1 Overview

This process may be initiated by a service order request from a current retailer or as a result of the network operator meter replacement procedures. The business process is an example of a meter exchange from a single register meter to a meter capable of supporting various Time Of Use (TOU) periods as well as the Anytime period (i.e. 24 hours a day for all seven days in the week).

A meter install code of 'BASICAMI' is used to advise Retailers that a basic meter is connected to a communications network and capable of providing remote AMI services.

When an AMI compatible ('BASIC') meter connects to a communications network, the communications signal is verified for stability. Upon completion of verification, Retailers will be provided a Standing Data Update advising that the meter install code has changed to 'BASICAMI'.

### 3.3.2 Business Rules

### Submission rules

20 There are none that are specific to this process.

While a service order request may result in the following standing data being sent, this process does not describe the specifics related to a retailer requested service order.

### Validation

There are none that are specific to this process.

### 25 Response

30

35

For both the Meter status and the Register status, this business process results in overlapping effective dates. For example, if a meter exchange is completed on the 16/4/2008:

- the old meter and registers have a status of "R" from 17/4/2008.
- the new meter and registers have a status of "C" from 16/4/2008.

### 3.3.3 Process Breakdown

### 3.3.3.1 Process diagram

In Figure 10, a Meter Exchange is being performed as a result of a triggering activity, namely an Adds And Alts Service Order that can be validly initiated either by a current retailer or by a network operator.

15

20

When the meter exchange details are loaded into the network operator's systems, validation takes place on a number of details such as the closing meter read of the old meter or the swapped-out meter number. The validation performed is the standard set of meter reading validations specified in the metrology procedure applicable to Western Power, details of which can be found on the website of the Economic Regulation Authority.

Providing none of this entered data fails validation, the process continues down the route of Basic Meter Exchange – valid. If any one of these data fails validation, the process follows a different route (Basic Meter Exchange – fail validation) which will result in a different sequence of transactions being communicated to the current retailer.

The sequence of transactions for a valid Basic Meter Exchange can be seen in Figure 11. The sequence of transaction where the Basic Meter Exchange throws up any validation failure can be seen in Figure 12. The two diagrams together show that there is no difference in the messages that are sent to the current retailer – solely in the sequence.

In Figure 10, below, the process can follow the path of having passed or having failed validation. This validation process refers to the validation required of the Western Power Metrology Procedure.

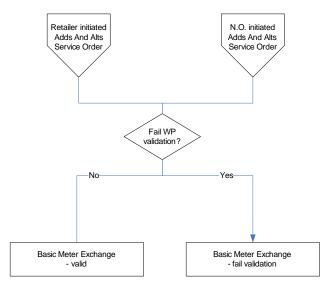


Figure 10: NMI Standing Update notification process - Basic Meter Exchange

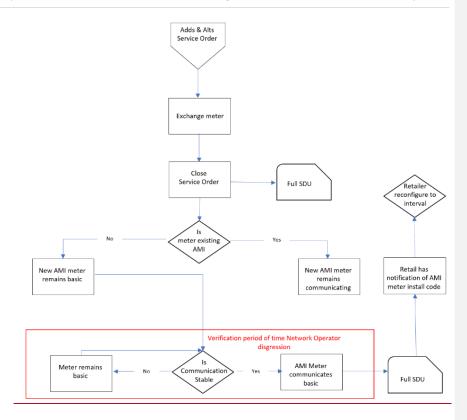


Figure 10a: AMI meter exchange

# 3.3.3.2 Transactional Diagram

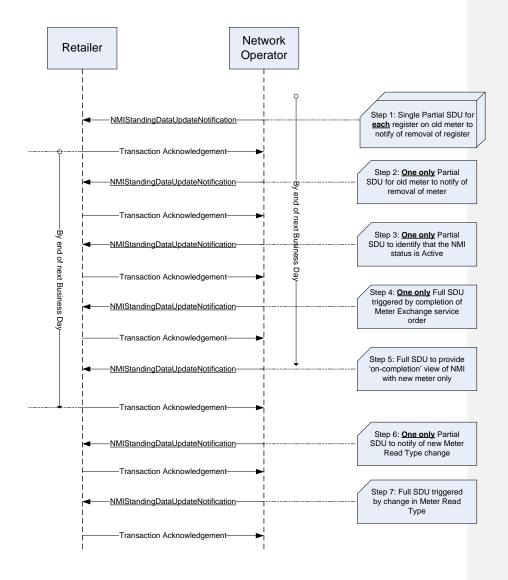


Figure 11: Basic Meter Exchange – valid



5

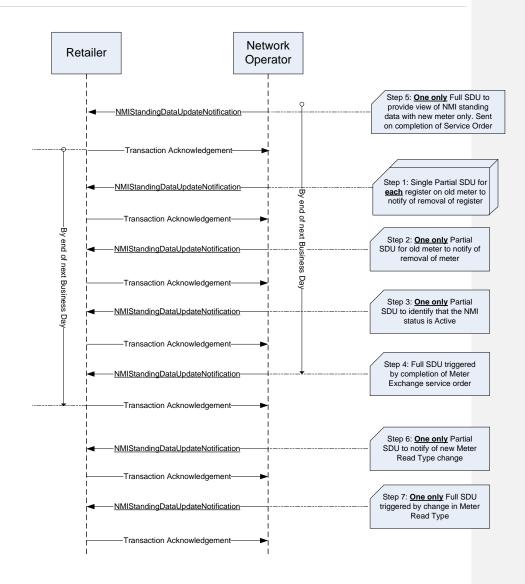


Figure 12: Basic Meter Exchange – invalid

# 3.3.3.3 Timing Requirements

Transaction	Transactio n Group	Version	Sender	Receiver	Timing
NMIStandingData UpdateNotification	NMID	r9	Network operator	Current retailer	Before End of Day on next business day following the change being recorded by the network operator
Transaction Acknowledgement	NMID	r17	Current retailer	Network operator	By end of next Business Day.

5

# 3.3.4 Transactions

The following transactions are seen for a Meter Exchange.

# 3.3.4.1 NMIStandingDataUpdateNotification

10

# Step 1 –Partial SDU to notify of removal of <u>each</u> register on the meter.

Transaction Definition	NMIStandingDataUpdateNotification
Trigger	Register status change.
Pre-conditions	Register must have been Current.
Post-conditions	The retailer is able to update their system on the basis of the information provided by the network operator.
Transaction acknowledgement-specific event codes	Refer to Appendix A

# Step 2- One only Partial SDU to notify of removal of the meter.

Transaction Definition	NMIStandingDataUpdateNotification
Trigger	Meter status change.
Pre-conditions	Meter status is Current.
Post-conditions	The retailer is able to update their system on the basis of the information provided by the network operator.
Transaction acknowledgement-specific event codes	Refer to Appendix A

5

# Step 3 – One only Partial SDU to notify the NMI status is still Active.

Transaction Definition	NMIStandingDataUpdateNotification
Trigger	No trigger.
Pre-conditions	NMI is assigned to a current retailer.
Post-conditions	The retailer is able to update their system on the basis of the information provided by the network operator.
Transaction acknowledgement-specific event codes	Refer to Appendix A

# 10 Step 4 – One only Full SDU triggered by completion of Service Order.

(This SDU is only seen by the current retailer when the current retailer submits the Service Order)

Transaction Definition	NMIStandingDataUpdateNotification
Trigger	Adds And Alts Service Order completed.
Pre-conditions	NMI is assigned to a current retailer.



Post-conditions	The retailer is able to update their system on the basis of the information provided by the network operator.
Transaction acknowledgement-specific event codes	Refer to Appendix A

# Step 5 –Full SDU triggered by previous Partial SDUs.

Transaction Definition	NMIStandingDataUpdateNotification
Trigger	Change to standing data within the previous standing data period.
Pre-conditions	NMI is assigned to a current retailer.
Post-conditions	The retailer is able to update their system on the basis of the information provided by the network operator.
Transaction acknowledgement-specific event codes	Refer to Appendix A

5

# Step 6 – One only Partial SDU triggered by change in Meter Read Type.

This Partial SDU will be received a short while after previous transactions.

Transaction Definition	NMIStandingDataUpdateNotification
Trigger	Change to Meter Read Type
Pre-conditions	NMI is assigned to a current retailer.
Post-conditions	The retailer is able to update their system on the basis of the information provided by the network operator.
Transaction acknowledgement-specific event codes	Refer to Appendix A

# Step 7 -Full SDU triggered by Step 6.

Transaction Definition	NMIStandingDataUpdateNotification
Trigger	Change to the standing data within the previous Standing Data Period.
Pre-conditions	NMI is assigned to a current retailer.
Post-conditions	The retailer is able to update their system on the basis of the information provided by the network operator.
Transaction acknowledgement-specific event codes	Refer to Appendix A

### 5 Transaction Data Elements

The attributes of the NMIStandingDataUpdateNotification are defined in Appendix C.

# **Transaction Schema Definition**

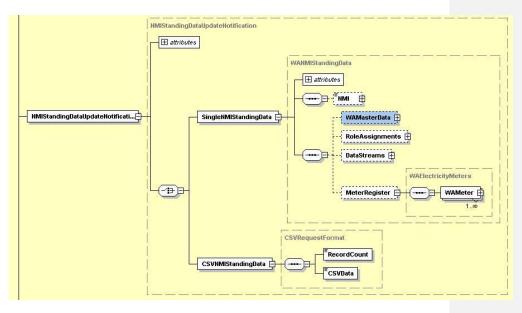


Figure 13: NMI Standing Data Update notification schema definition



# Step 1 - Sample XML -Partial SDU to notify of removal of register

```
5
                xsi:schemalocation="urm:aseXML:r17:WA:r2.00
http://www.westernpower.com.au/aseXML/schemas/r17/WA:r2.00/aseXML_r17_WA_r2.00.xsd">
10
                  <From description="Western Power Networks">WPNTWRKS</From>
<To description="Synergy Energy">WPRTL</To>
<massageID>WPNTWRKSMSG-12546901</massageID>
                  <MessageDate>2008-04-21T23:49:13+08:00</messageDate>
<TransactionGroup>NMID</TransactionGroup>
15
                  <Priority>Medium</priority>
<Market>WAELEC</Market>
              </Header>
            - <Transactions>
                - <Transaction transactionID="WPNTWRKS-0000a-16555627" transactionDate="2008-04-21T23:49:18+08:00">
20
                   _ <NMIStandingDataUpdateNotification version="r9">
_ <SingleNMIStandingData>
                            <NMI>8001654321</NMI>
                          - <MeterRegister>
- <WAMeter>
                                 <SerialNumber>15M00309</SerialNumber>
_ <RegisterConfiguration>
25
                                    - <Register>
                                          <RegisterID>007</RegisterID>
<Status effectiveDate="2008-04-21">R</Status>
30
                                    </Register>
</RegisterConfiguration>
                                </WAMeter>
                          </MeterRegister>
</SingleNMIStandingData>
35
                      </NMIStandingDataUpdateNotification>
                  </Transaction>
               </Transactions>
           </ase:aseXML>
```

# Step 2 - Sample XML -Partial SDU to notify meter is Removed

```
<?xml version="1.0" encoding="ISO-8859-1" ?>
<ase:aseXML xmlns:ase="urn:aseXML:r17
                                                seXML:r17:WA:r2.00" xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
45
               xsi:schemal.ocation="urn:aseXML:r17:WA:r2.00
               http://www.westernpower.com.au/aseXML/schemas/r17/WA:r2.00/aseXML_r17_WA_r2.00.xsd">
           - <Header>
                ceder >
cFrom description="Western Power Networks">WPNTWRKS</From>
<To description="Synergy Energy">WPRTL</To>
<MessageID>WPNTWRKSMSG-12546902</MessageID>
50
                 <MessageDate>2008-04-21T23:49:24+08:00</MessageDate>
                 <TransactionGroup>NMID
                 <Priority>Medium</Priority>
                 <Market>WAELEC</Market>
55
             </Header>
           - <Transactions>
              _ <Transaction transactionID="WPNTWRKS-0000a-16555629" transactionDate="2008-04-21723:49:25+08:00">
                  - <NMIStandingDataUpdateNotification version="r9">
                     - <SingleNMIStandingData>
<NMI>8001654321</NMI>
60
                        - <MeterRegister>
- <WAMeter>
                                 <SerialNumber>15M00309</SerialNumber>
                                 <Status effectiveDate="2008-04-21">R</Status>
65
                              </WAMeter>
```

40

### Step 3 - Sample XML -Partial SDU to notify NMI is Active

```
15
           <From description="Western Power Networks">WPNTWRKS</from>
           <To description="Synergy Energy">WPRTL</To>
           20
         </Header>
         <Transactions>
25
          - <Transaction transactionID="WPNTWRKS-0000a-16555631" transactionDate="2008-04-21T23;49:27+08:00">
             <NMIStandingDataUpdateNotification version="r9":
     - <SingleNMIStandingData>
                  <NMI>8001654321</NMI>
                 - <WAMasterData>
30
                     <Status effectiveDate="2008-04-20">A</Status>
                </WAMasterData>
</SingleNMIStandingData>
              </NMIStandingDataUpdateNotification>
            </Transaction>
35
         </Transactions>
       </ase:aseXML>
```

### Step 4 - Sample XML -Full SDU triggered by closure of service order

```
<?xml version="1.0" encoding="ISO-8859-1" ?>
  <ase:aseXML xmlns:ase="urn:aseXML:r17:WA:r2.00" xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
  xsi:schemaLocation="urn:aseXML:r17:WA:r2.00</pre>
                   http://www.westernpower.com.au/aseXML/schemas/r17/WA:r2.00/aseXML_r17_WA_r2.00.xsd">
45
                      <From description="Western Power Networks">WPNTWRKS</from>
                      <To description="Synergy Energy">WPRTL</To>
<MessageID>WPNTWRKSMSG-12546904</MessageID>
                      <MessageDate>2008-04-21T23:49:41+08:00</messageDate>
<TransactionGroup>NMID</fransactionGroup>
50
                      <Priority>Medium</Priority>
                      <Market>WAELEC</Market>
                  </Header>
               - <Transactions>
55
                   <Transaction transactionID="WPNTWRKS-0000a-16555633" transactionDate="2008-04-21T23:49:42+08:00">
                       <NMIStandingDataUpdateNotification version="r9">
                           - <SingleNMIStandingData>
<NMI checksum="8">8001654321

                                60
                                       <JunsalctonCode>Wa</JunsalctonCode>
MNIClassificationCode> <5.7KW </MNIClassificationCode>
<TransmissionNodeIdentifier effectiveDate="1980-05-28">WRTN</TransmissionNodeIdentifier>
<DistributionLossFactorCode effectiveDate="1980-05-28">QRT1</DistributionLossFactorCode>
<ParentEmbeddedNetworkIdentifier xsi:nil="true" />
<ChildEmbeddedNetworkIdentifier xsi:nil="true" />
65
```

```
<u>-</u> <Address>
                                       - <WAStructuredAddress>
                                           - <House>
                                                  <HouseNumber>60</HouseNumber>
  5
                                              </House>
                                           </Lot>
                                           Street>
10
                                                  <StreetName>HETHERINGTON</StreetName>
                                               <StreetType>DR</StreetType>
                                          </WAStructuredAddress>
                                          <SuburbOrPlaceOrLocality>Bull Creek</SuburbOrPlaceOrLocality>
<StateOrTerritory>WA</StateOrTerritory>
15
                                          <PostCode>6149</PostCode>
                                      </Address>
                                     <Status effectiveDate="2008-04-20">A</Status>
<DistanceFromSubstation effectiveDate="1980-05-28">4.37</DistanceFromSubstation>
<Voltage>LV</Voltage>
20
                                     <PropertyType>Domestic<PoleNumber xsi:nil="true" />
                                  </WAMasterData>
                               - <RoleAssignments>
                                   <RoleAssignment effectiveDate="1980-05-28">
25
                                         <Party description="Synergy Energy">WPRTL</Party>
<Role>LR</Role>
                                   </RoleAssignment>
_ <RoleAssignment effectiveDate="1980-05-28">
    <Party description="Western Power Networks">WPNTWRKS</Party>
30
                                      <Role>LNSP</Role>
</RoleAssignment>
                                   _ <RoleAssignment effectiveDate="1980-05-28">
  <Party description="Synergy Energy">WPRTL</Party>
  <Role>ROLR</Role>
35
                                   </RoleAssignment>
<RoleAssignment effectiveDate="1980-05-28">
                                         <Party description="Synergy Energy">WPRTL</Party>
<Role>RP</Role>
40
                                      </RoleAssignment>
                                   _ <RoleAssignment effectiveDate="1980-05-28">
  <Party description="Synergy Energy">WPRTL</Party>
  <Role>FRMP</Role>
                                      </RoleAssignment>
45
                                 </RoleAssignments>
                              _ <DataStreams>
_ <DataStream>
                                          <Suffix>11</Suffix>
                                         <Suinx>11
/ProfileName> NSLP 
/ProfileName>
<AveragedDailyLoad> 0
/AveragedDailyLoad>
<DataStreamType> Consumption
/DataStreamType>
<Status effectiveDate="2008-04-20">A
/Status>
50
                                   </pr
55
                                     <DataStreamType>Consumption<Status effectiveDate="2008-04-20">A</Status>
60
                                   <ProfileName>NSLP</profileName>
                                          <AveragedDailyLoad>
<AveragedDailyLoad>
<DataStreamType>Consumption</DataStreamType>
65
                                      <Status effectiveDate="2008-04-20">A</Status>
</DataStream>
                                   - <DataStream>
                                         <Suffix>41</Suffix>
<ProfileName>NSLP</ProfileName>
70
                                          <AveragedDailyLoad> 0 </AveragedDailyLoad>
<DataStreamType> Consumption </DataStreamType>
<Status effectiveDate="2008-04-20">A </Status>
                                     </DataStream>
75
                                   - <DataStream>
                                         <Suffix>51</Suffix>
<ProfileName>NSLP</ProfileName>
```



```
<AveragedDailyLoad>
<DataStreamType>Consumption</DataStreamType>
<Status effectiveDate="2008-04-20">A</Status>
                                         </DataStream>
  5
                                     </DataStreams>
                                 - <MeterRegister>
- <WAMeter>
                                              <SerialNumber>0200061996</SerialNumber>
                                              <NextScheduledReadDate>2008-05-08/NextScheduledReadDate>
<Location>Front Door</Location>
10
                                              <use effectiveDate="2007-12-05">REVENUE</use>
15
                                              <Point>01</Point>
                                              <Manufacturer xsi:nil="true" />
<Model>E104</Model>
                                              <TransformerLocation xsi:nil="true" />
<TransformerType xsi:nil="true" />
<TransformerRatio xsi:nil="true" />
20
                                              </pre
                                              <TestResultNotes xsi:nil="true" /
<TestPerformedBy xsi:nil="true"
25
                                              <MeasurementType xsi:nil="true" />
<ReadTypeCode xsi:nil="true" />
<RemotePhoneNumber xsi:nil="true" />
                                              <CommunicationsEquipmentType xsi:nil="true" />
<CommunicationsProtocol xsi:nil="true" />
30
                                              <DataConversion xsi:nil="true" />
<DataValidations xsi:nil="true" />
<Status effectiveDate="2008-04-20">C</Status>
                                              <Program xsi:nil="true" />
<AdditionalSiteInformation xsi:nil="true" />
35
                                              <EstimationInstructions xsi:nil="true" ,

<UserAccessRights xsi:nil="true" />
<Password xsi:nil="true" />
                                              <TestCalibrationProgram xsi:nil="true" />
<KeyCode xsi:nil="true" />
40
                                              <ReadingInstructions xsi:nil="true" />
<CustomerFundedMeter xsi:nil="true" /:
                                              <MeterRequirementForTransfer xsi:nil="true" />
                                          - <RegisterConfiguration>
45
                                               - <Register>
                                                       -gasteriD>007
/RegisterID>
<NetworkTariffCode effectiveDate="2008-04-20">AER
/NetworkTariffCode>

UnitOfMeasure>
WH 

                                                       <TimeOfDay>ALLDAY</TimeOfDay>
50
                                                       <Multiplier>1</Multiplier>
                                                       <DialFormat>6.0/DialFormat>
<Suffix>11</Suffix>
                                                       <ControlledLoad>No</ControlledLoad>
<ConsumptionType>Cumulative</ConsumptionType>
<Status effectiveDate="2008-04-20">C</Status>
55
                                                       <DirectionIndicator>Export
                                                   </Register>
                                               - <Register>
                                                       <RegisterID>010</RegisterID>
<NetworkTariffCode effectiveDate="2008-04-20">AER</NetworkTariffCode>
60
                                                       <UnitOfMeasure>KWH</UnitOfMeasure>
<TimeOfDay>PEAK</TimeOfDay>
                                                       <Multiplier>1</Multiplier>
                                                       <DialFormat>6.0
<Suffix>21
65
                                                       <ControlledLoad>No</ControlledLoad>
<ConsumptionType>Cumulative</ConsumptionType>
<Status effectiveDate="2008-04-20">C</Status>
                                                       <DirectionIndicator>Export/DirectionIndicator>
70
                                                  </Register>
                                                       <RegisterID>020</RegisterID>
                                                       NetworkTariffCode effectiveDate="2008-04-20">AER</NetworkTariffCode>
<UnitOfMeasure>KWH</UnitOfMeasure>
75
                                                       <TimeOfDay>OFFPEAK</TimeOfDay>
                                                      <Multiplier> 1 </multiplier>
<DialFormat>6.0 /DialFormat>
```



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J

```
<Suffix>31</Suffix>
                                                              <ControlledLoad>No</ControlledLoad>

<ConsumptionType > Cumulative </ConsumptionType >
<Status effectiveDate = "2008-04-20" > C </Status >

<DirectionIndicator > Export 
/DirectionIndicator >
  5
                                                         </Register>
                                                     - <Register>
                                                              <RegisterID>030</RegisterID>
                                                              <NetworkTariffCode effectiveDate="2008-04-20">AER</NetworkTariffCode><UnitOfMeasure>KWH</UnitOfMeasure>
10
                                                              <TimeOfDay>HISHLDR</TimeOfDay>
<Multiplier>1</Multiplier>
<DialFormat>6.0</DialFormat>
                                                              <Suffix>41</Suffix>
15
                                                              <ControlledLoad>No</ControlledLoad>
                                                              <ConsumptionType>Cumulative</ConsumptionType>
<Status effectiveDate="2008-04-20">C</Status>
                                                              <DirectionIndicator> Export /DirectionIndicator>
                                                          </Register>
20

    <Register>

                                                             <RegisterID>040</RegisterID>
<NetworkTariffCode effectiveDate="2008-04-20">AER</NetworkTariffCode>
                                                              <UnitOfMeasure>KWH</UnitOfMeasure:
                                                              <TimeOfDay>LOSHLDR</TimeOfDay>
<Multiplier>1</Multiplier>
25
                                                              <Pluidplier > 1 

<p
                                                              <ControlledLoad>No</ControlledLoad>

30
                                                         <DirectionIndicator>Export</DirectionIndicator>
</Register>
                                                    </RegisterConfiguration>
                                         </WAMeter>
</MeterRegister>
35
                               </SingleNMIStandingData>
</NMIStandingDataUpdateNotification>
                          </Transaction>
40
                </ase:aseXML>
```

### Step 5 - Sample XML - Full SDU triggered by previous Partial SDUs

45 This XML message is identical to the sample XML provided in Step 4. It has been omitted for reasons of brevity.

### Step 6 - Sample XML - Partial SDU triggered by change to Read Type Code

```
- <NMIStandingDataUpdateNotification version="r9">
- <SingleNMIStandingData>
- <NMI>8001432899</NMI>
- <MeterRegister>
- <WAMeter>
- <SerialNumber>0200062056</SerialNumber>
- <ReadTypeCode>MV2</ReadTypeCode>
- </WAMeter>
- </MeterRegister>
- </mathre="MeterRegister">
- </mathre="Me
```

# Step 7 - Sample XML - Full SDU triggered by previous Partial SDU

```
<?xml version="1.0" encoding="ISO-8859-1" ?>
<ase:aseXML xmlns:ase="urn:aseXML:r17:WA:r2.00" xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
xsi:schemaLocation="urn:aseXML:r17:WA:r2.00"</pre>
20
                                         http://www.westernpower.com.au/aseXML/schemas/r17/WA:r2.00/aseXML_r17_WA_r2.00.xsd">
                                <From description="Western Power Networks">WPNTWRKS</from>
25
                              <To description="Synergy Energy">WPRTL</To>
<MessageID>WPNTWRKSMSG-14655685</MessageID>
                              <MessageDate>2008-04-18T19:03:16+08:00</messageDate>
<TransactionGroup>NMID</TransactionGroup>
                               <Priority>Medium</Priority>
30
                              <Market>WAELEC</Market>
</Header>
                              <Transactions>
                                <Transaction transactionID="WPNTWRKS-0000a-20047712" transactionDate="2008-04-18T19:03:17+08:00">
                               <NMIStandingDataUpdateNotification version="r9"</p>
35
                               <SingleNMIStandingData>
<NMI checksum="8">8001432899</NMI>
                              <WAMasterData>
                               <JurisdictionCode>WA</JurisdictionCode>
                              <NMIClassificationCode><5.7KW</NMIClassificationCode>
                              TransmissionNodeIdentifier effectiveDate="1977-06-14">WKDA//ransmissionNodeIdentifier>
ClistributionLossFactorCode effectiveDate="1977-06-14">QRT1
ParentEmbeddedNetworkIdentifier xsi:nil="true"/>
40
                               <ChildEmbeddedNetworkIdentifier xsi:nil="true" />
                         _ <Address>
_ <WAStructuredAddress>
45
                              <House>
                              <HouseNumber>15</HouseNumber>
                                       </House>
                          <u>-</u> <Lot>
50
                               <LotNumber>114</LotNumber>
</Lot>
                           _ <Street>
                                <StreetName>LYONIA</StreetName>
                              <StreetType>CT</StreetType>
</Street>
</WAStructuredAddress>
55
                              <Vws.ctucheokutess>
<SuburbOrPlaceOrLocality>Forrestfield</SuburbOrPlaceOrLocality>
<StateOrTerritory>WA</StateOrTerritory>
                               <PostCode>6058</PostCode>
60
                                      </Address>
                              <Status effectiveDate="2008-04-14">A</Status>
<DistanceFromSubstation effectiveDate="1977-06-14">8.56</DistanceFromSubstation>
                              <br/>
<
65
                           - <RoleAssignments>
                         - <RoleAssignment effectiveDate="1977-06-14">
                                <Party description="Synergy Energy">WPRTL</Party>
70
                              <Role>LR</Role>
</RoleAssignment>
                           - <RoleAssignment effectiveDate="1977-06-14">
                                <Party description="Western Power Networks">WPNTWRKS</party>
```

```
<Role>LNSP</Role>
</RoleAssignment>
                   - <RoleAssignment effectiveDate="1977-06-14">
                       <Party description="Synergy Energy">WPRTL</Party>
  5
                      <Role>ROLR</Role>
                  <ROIE>ROIE>(RoleAssignment>
   <ROIeAssignment effectiveDate="1977-06-14">
<Party description="Synergy Energy">WPRTL</Party>
                     <Role>RP</Role>
</RoleAssignment>
10
                   - <RoleAssignment effectiveDate="1977-06-14" >
  <Party description="Synergy Energy">WPRTL</Party>
  <Role>FRMP</Role>
                          </RoleAssignment>
</RoleAssignments>
15
                   - <DataStreams>
                  - <DataStream>
<Suffix>11</Suffix>
                     20
                          </DataStream>
                           </DataStreams>
25
                     <MeterRegister>
                     <WAMeter>
                     <WAMeter>
<SerialNumber> 0200062056</SerialNumber>
<NextScheduledReadDate> 2008-05-21</NextScheduledReadDate>
                      <Location>Right Side</Location>
30
                      <Hazard>BD</Hazard>
                     InstallationTypeCode effectiveDate="2008-04-14">BASIC</InstallationTypeCode>
<Route effectiveDate="2008-04-14">105EN_05</Route>
<Use effectiveDate="2007-12-05">REVENUE</Use>
                      <Point>01</Point>
                     35
                     <TransformerType xsi:nil="true" />
<TransformerRatio xsi:nil="true" />
<Constant xsi:nil="true" />
40
                     <LastTestDate xsi:nil="true" />
<TestResultAccuracy xsi:nil="true" />
                     TestResultNotes xsi.nil="true"/>
TestResultNotes xsi.nil="true"/>
<TestPerformedBy xsi.nil="true"/>
<MeasurementType xsi.nil="true"/>
<ReadTypeCode>MV2</ReadTypeCode>
<RemotePhoneNumber xsi.nil="true"/>
45
                     <RemotePhoneNumber xsi:nil="true"/>
<CommunicationsEquipmentType xsi:nil="true"/>
<CommunicationsProtocol xsi:nil="true"/>
<DataConversion xsi:nil="true"/>
<DataValidations xsi:nil="true"/>
<Status effectiveDate="2008-04-14">C</Status>
<Program xsi:nil="true"/>
<AdditionalSiteInformation xsi:nil="true"/>
<EstimationInstructions xsi:nil="true"/>

50
55
                     <UserAccessRights xsi:nil="true" />
<Password xsi:nil="true" />
                      <TestCalibrationProgram xsi:nil="true" />
                     <KeyCode xsi:nil="true" />
<ReadingInstructions xsi:nil="true" />
60
                     <CustomerFundedMeter xsi:nil="true" />
<MeterRequirementForTransfer xsi:nil="true" />
                     <RegisterConfiguration>
                  - <Register>
<RegisterID>007</RegisterID>
65
                     <NetworkTariffCode effectiveDate="2008-04-14">AER</NetworkTariffCode>
<UnitOfMeasure>KWH</UnitOfMeasure>
                      <TimeOfDay>ALLDAY</TimeOfDay>
                     <Multiplier>1</Multiplier>
<DialFormat>6.0</DialFormat>
70
                     <Suffix>11</Suffix>
<ControlledLoad>No</ControlledLoad>
                      <ConsumptionType>Cumulative</ConsumptionType>
<Status effectiveDate="2008-04-14">C</Status>
75
                      <DirectionIndicator>Export/DirectionIndicator>
                           </Register>
</RegisterConfiguration>
```



```
</WAMeter>
</MeterRegister>
</singleNMIStandingData>
</singleNMIStandingDataUpdateNotification>
</stransaction>
</stransaction>
</stransactions>
</ase:aseXML>
```

#### 10 3.3.5 Related Transactions

### 3.3.5.1 Preceding Transactions

May be preceded by a Service Order transaction of WorkType "Adds And Alts" and Sub Type of "Exchange Meter".

### 15 3.3.5.2 Subsequent Transactions

20

25

No specific transactions are procedurally **tied** to a meter exchange. However, it should be noted that there is a later transaction that is of **interest** to the meter exchange – namely the Meter Data Notification. This Meter Data Notification is delivered as a part of the normal meter data process. If the retailer has submitted the meter exchange service order, the resulting MDN will contain a 550 record in the MDN which references the initiating service order. This cross-reference will not be seen in a service order that is submitted by the network operator.

For informational purposes only, a sample Meter Data Notification is provided below for a Meter Exchange so the readings related to a Meter exchange can be clearly understood. This process assumes any exceptions were resolved.

# Sample XML – Meter Read Notification for a NO-initiated Meter Exchange where validation has failed

```
30
           <?xml version="1.0" encoding="ISO-8859-1" ?>
<ase:aseXML xmlns:ase="urn:aseXML:r17
                                                      XML:r17:WA:r2.00"
                                                                               xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
                xsi:schemaLocation="urn:aseXML:r17:WA:r2.00
                http://www.westernpower.com.au/aseXML/schemas/r17/WA:r2.00/aseXML_r17_WA_r2.00.xsd">
            - <Header>
<From description="Western Power Networks">WPNTWRKS</From>
35
                  <To description="Synergy Energy">WPRTL</To>
<MessageID>WPNTWRKSMSG-14659905</MessageID>
                   <MessageDate>2008-04-19T01:37:12+08:00
                   <TransactionGroup>MTRD</TransactionGroup>
40
                  <Priority>Low</Priority>
                  <Market>WAELEC</Market>
               </Header>
            _ <Transactions>
                <Transaction transactionID="WPNTWRKS--20053245" transactionDate="2008-04-19T01:37:13+08:00">
45
                   - <MeterDataNotification version="r17"</p>
                          <CSVConsumptionData>100,NEM13,200804190137,WPNTWRKS,WPRTL
250,8001432899,000000001111,007,11,,0200062056,E,000000,20080414000000,A,,,000308,20080
52100000,E61,,,0,KWH,20080521,20080418071712, 550,A,,E
250,8001432899,00000001111,007,11,,15M01524,E,08100,20080325124547,A,,,08459,200804140
50
                               00000,A,,,359,KWH,20080521,20080418075815, 550,N,,A, 900</CSVConsumptionD
                  </Transaction>
           </Transactions>
</ase:aseXML>
55
```

# 3.4 Meter Exchange - Basic Simple to Import/Export

### 3.4.1 Overview

5

15

20

25

30

This process is initiated by a retailer's service order request. On receipt of the service order, the network operator will commission the field work which will, in this example, replace the existing single rate meter with a multi-channel import/export meter.

### 3.4.2 Business Rules

### 10 Submission rules

There are none that are specific to this process.

While a service order request may result in the following standing data being sent, this process does not describe the specifics related to a retailer requested service order.

### Validation

There are none that are specific to this process.

### Response

For both the Meter status and the Register status, this business process results in overlapping effective dates. For example, if a meter exchange is completed on the 16/4/2008:

- the old meter and registers have a status of "R" from 17/4/2008.
- the new meter and registers have a status of "C" from 16/4/2008.

### 3.4.3 Process Breakdown

### 3.4.3.1 Process diagram

The process diagram for a Meter Exchange Basic Simple to Import/Export is identical to that described in section 3.3.3.1.

### 3.4.3.2 Transactional Diagram

The transaction diagram for a Meter Exchange Basic Simple to Import/Export is identical to that described in section 3.3.3.2.

# 3.4.3.3 Timing Requirements

The timing requirements for a Meter Exchange Basic Simple to Import/Export is identical to that described in section 3.3.3.3.

### 5 3.4.4 Transactions

The transactions for a Meter Exchange Basic Simple to Import/Export is identical to that described in section 3.3.4.

### 3.4.4.1 NMIStandingDataUpdateNotification

10 Please see section 3.3.4.1 above.

### **Transaction Data Elements**

The attributes of the NMIStandingDataUpdateNotification are defined in Appendix C.

#### 15 Transaction Schema Definition

20

25

30

Please see section 3.3.4.1 above.

### Step 1- Sample XML - Partial SDU to notify of removal of register

Please see section 3.3.4.1 above.

Step 2 - Sample XML - Partial SDU to notify meter is Removed

Please see section 3.3.4.1 above.

# Step 3 - Sample XML - Full SDU triggered by closure of service order

Please see section 3.3.4.1 above.

# Step 4 - Sample XML - Full SDU triggered by previous Partial SDUs

The XML for a Full SDU provided as a result of a meter exchange basic simple to import/export is provided below as it differs from the example in 3.3.4.1. The sample XML for a meter exchange basic simple to import/export has been included to show the following key differences:

- There will be two Registers for a given Suffix, with each of these Registers being associated with a different DirectionIndicator. Each of these Registers has its own RegisterID.
- 2. Where there are two different Registers associated with the same Suffix, as described above, this will result in the <DataStream> element provided in the Full SDU being reproduced within the <DataStream> element for that Suffix. There is no requirement for this duplicate <DataStream> element however this is how the system presently operates.

```
10
                                                              xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
15
              <From description="Western Power Networks">WPNTWRKS</from>
              <To description="Synergy Energy">WPRTL</To>
<MessageID>WPNTWRKSMSG-14604888</MessageID>
              <MessageDate>2008-04-17T08:56:23+08:00</messageDate>
<TransactionGroup>NMID</TransactionGroup>
20
              <Priority>Medium</Priority>
               <Market>WAELEC</Market>
           </Header>
          - <Transactions>
             _ <Transaction transactionID="WPNTWRKS-0000a-19956182" transactionDate="2008-04-17T08:56:23+08:00">
25
               - <NMIStandingDataUpdateNotification version="r9":</p>
                  - <SingleNMIStandingData>
    <NMI checksum="9">8001654321</NMI>
                     - <WAMasterData>
<JurisdictionCode>WA</JurisdictionCode>
30
                          <NMIClassificationCode><5.7KW</NMIClassificationCode>
                          35
                        - <Address>
                           - <WAStructuredAddress>
                              - <House>
                                   <HouseNumber>29</HouseNumber>
                                </House>
40
                              <u>-</u> <Lot>
                                   <LotNumber>207</LotNumber>
                                </Lot>
                              45
                                   <StreetType>ST</StreetType>
                             </WAStructuredAddress>
                             <SuburbOrPlaceOrLocality>Floreat/SuburbOrPlaceOrLocality>
<StateOrTerritory>WA</StateOrTerritory>
50
                             <PostCode>6014</PostCode>
                          <Status effectiveDate="2008-04-15">A</Status>
                          <DistanceFromSubstation effectiveDate="1992-03-31">1.77/DistanceFromSubstation>
<Voltage>LV</voltage>
                          <PropertyType> Domestic/PropertyType>
<PoleNumber xsi:nil="true" />
55
                       </WAMasterData>
                       <RoleAssignments>
_ <RoleAssignment effectiveDate="1992-03-31"
60
                             <Party description="Synergy Energy">WPRTL</Party>
<Role>LR</Role>
                          </RoleAssignment>
                        65
                             <Role>LNSP</Role>
                        </RoleAssignment>
_ <RoleAssignment effectiveDate="1992-03-31">
                             <Party description="Synergy Energy">WPRTL</Party>
<Role>ROLR</Role>
70
                          </RoleAssignment>
```



```
</RoleAssignment>
- <RoleAssignment effectiveDate="1992-03-31">
  5
                                                        <Party description="Synergy Energy">WPRTL</Party>
<Role>FRMP</Role>
                                                   </RoleAssignment>
                                              </RoleAssignments>
10
                                          - <DataStreams>
                                               <AveragedDailyLoad>0</AveragedDailyLoad>
<DataStreamType>Consumption
15
                                                         <Status effectiveDate="2008-04-15">A</Status>
                                                    </DataStream>
                                                _ <DataStream>
                                                        <Suffix>31</Suffix>
<ProfileName>NSLP</ProfileName>
20
                                                         <AveragedDailyLoad> 0

<AveragedDailyLoad> 0

<DataStreamType> Consumption

<Status effectiveDate="2008-04-15">A

<
                                                   </DataStream>
25
                                                - <DataStream>
                                                        vatastream>

Suffix>41</suffix>
ProfileName> NSLP</profileName>
AveragedDailyLoad>0</averagedDailyLoad>
ObataStreamType>Consumption
Status effectiveDate="2008-04-15">A</status>

30
                                               </DataStream>
_ <DataStream>
                                                         <Suffix>51</Suffix>
                                                        <Suffix>51</Suffix>
ProfileName>NSLP</ProfileName>
<AveragedDailyLoad>0</AveragedDailyLoad>
<DataStreamType>Consumption</DataStreamType>
<Status effectiveDate="2008-04-15">A</Status>
35
                                                   </DataStream>
                                                - <DataStream</p>
40
                                                         <Suffix>21</Suffix>
                                                         <ProfileName>NSLP</profileName>
<AveragedDailyLoad>0</AveragedDailyLoad>
                                                         <DataStreamType>Consumption</DataStreamType>
<Status effectiveDate="2008-04-15">A</Status>
45
                                                   </DataStream>
                                                - <DataStream>
     <Suffix>31</Suffix>
     <ProfileName>NSLP</ProfileName>
                                                         <a href="AveragedDailyLoad">AveragedDailyLoad</a> <a href="AveragedDailyLoad">AveragedDailyLoad</a> <a href="DataStreamType">DataStreamType</a> <a href="Consumption">Consumption</a> <a href="DataStreamType">DataStreamType</a>
50
                                                   <Status effectiveDate="2008-04-15">A</Status:
</DataStream>
                                                55
                                                         <AveragedDailyLoad> 0/AveragedDailyLoad>
<DataStreamType>Consumption/Consumption/Status effectiveDate="2008-04-15">A/Status>
                                                   </DataStream>
60
                                                - <DataStream>
                                                        vadasueani>
solfix>51/solfix>
/profileName>
NSLP/profileName>
<averagedDailyLoad><averagedDailyLoad>
<br/>CataStreamType>Consumption/DataStreamType>
<status effectiveDate="2008-04-15">A</status>
65
                                                   </DataStream>
                                              </DataStreams>
                                         _ <MeterRegister>
_ <WAMeter>
70
                                                         <SerialNumber>0200014807</SerialNumber>
                                                         <NextScheduledReadDate>2008-04-30/NextScheduledReadDate>
<Location>Right Side</Location>
                                                         <Hazard xsi:nil="true" />
<InstallationTypeCode effectiveDate="2008-04-15">BASIC</InstallationTypeCode>
<Route effectiveDate="2008-04-15">375X__02</Route>
75
                                                         <Use effectiveDate="2007-03-12">REVENUE</Use>
<Point>01
```



```
<Manufacturer xsi:nil="true" />
<Model>E104</Model>
                                                                                                                                      <TransformerLocation xsi:nil="true" />
                                                                                                                                      <TransformerType xsi:nil="true" />
<TransformerRatio xsi:nil="true" />
      5
                                                                                                                                    <TransformerRatio xsi:nil="true" />
Constant xsi:nil="true" />
<LastTestDate xsi:nil="true" />
<TestResultAccuracy xsi:nil="true" />
CTestResultNotes xsi:nil="true" />
<TestPerformedBy xsi:nil="true" />
<MeasurementType xsi:nil="true" />
<ReadTypeCode>MU2
<ReadTypeCode>MU2
<RemotePhoneNumber xsi:nil="true" />
 10
                                                                                                                                      <CommunicationsEquipmentType xsi:nil="true" />
<CommunicationsProtocol xsi:nil="true" />
 15
                                                                                                                                      Contained to the contai
                                                                                                                                      <Program xsi:nil="true" />
<AdditionalSiteInformation xsi:nil="true" />
 20
                                                                                                                                      <EstimationInstructions xsi:nil="true" />
<UserAccessRights xsi:nil="true" />
<Password xsi:nil="true" />
                                                                                                                                      <TestCalibrationProgram xsi:nil="true" />
<KeyCode xsi:nil="true" />
 25
                                                                                                                                      ReadingInstructions xsi:nil="true" />
<CustomerFundedMeter xsi:nil="true" />
<MeterRequirementForTransfer xsi:nil="true" />
                                                                                                                             - <RegisterConfiguration>
 30
                                                                                                                                          - <Register>
                                                                                                                                                                egister /

- RegisterID > 10A < / RegisterID >

- NetworkTariffCode effectiveDate = "2008-04-15" > TOUS < / NetworkTariffCode >
                                                                                                                                                                 <UnitOfMeasure>KWH</UnitOfMeasure>
                                                                                                                                                                 <TimeOfDay>PEAK</TimeOfDay>
 35
                                                                                                                                                                <Multiplier>1</Multiplier>
<DialFormat>6.0</DialFormat>
<Suffix>21</Suffix>
                                                                                                                                                                 <ControlledLoad>No</ControlledLoad>
                                                                                                                                                                 <ConsumptionType > Cumulative </ConsumptionType >
<Status effectiveDate = "2008-04-15" > C </Status >
 40
                                                                                                                                                    <DirectionIndicator>Export</DirectionIndicator>
</Register>
                                                                                                                                          45
                                                                                                                                                                <Multiplier>1</Multiplier>
<DialFormat>6.0</DialFormat>
<Suffix>31</Suffix>
50
                                                                                                                                                                <Suffix >1
ControlledLoad > No / ControlledLoad >
<ConsumptionType > Cumulative 
ConsumptionType > Cature = "2008-04-15" > C
<Status effectiveDate = "2008-04-15" > C
<Status > ConsumptionType > Con
 55
                                                                                                                                                    </Register>
                                                                                                                                          60
                                                                                                                                                                 <Multiplier>1</Multiplier>
<DialFormat>6.0</DialFormat>
<Suffix>41</Suffix>
                                                                                                                                                                 <ControlledLoad>No</ControlledLoad>
 65
                                                                                                                                                                 <ConsumptionType>Cumulative</ConsumptionType>
                                                                                                                                                                 <Status effectiveDate="2008-04-15">C</Status
<DirectionIndicator>Export</DirectionIndicator>
                                                                                                                                                   </Register>
                                                                                                                                           - <Register>
 70
                                                                                                                                                                 <RegisterID>40D</RegisterID>
                                                                                                                                                                 <NetworkTariffCode effectiveDate="2008-04-15">TOUS</NetworkTariffCode>
<UnitOfMeasure>KWH</UnitOfMeasure>
                                                                                                                                                                 <TimeOfDay>LOSHLDR</TimeOfDay>
<Multiplier>1</Multiplier>
<DialFormat>6.0</DialFormat>
 75
                                                                                                                                                                 <Suffix>51</Suffix>
<ControlledLoad>No</ControlledLoad>
```



```
<ConsumptionType>Cumulative</ConsumptionType><Status effectiveDate="2008-04-15">C</Status><DirectionIndicator>Export</DirectionIndicator>
    5
                                                                                                   - <Register>
                                                                                                                 <UnitOfMeasure>KWH</UnitOfMeasure>
                                                                                                                  <TimeOfDay>PEAK</TimeOfDay>
<Multiplier>1</Multiplier>
10
                                                                                                                 controlledLoad>No//Outpleformat>
controlledLoad>No//controlledLoad>
                                                                                                                  <ConsumptionType>Cumulative</ConsumptionType>
<Status effectiveDate="2008-04-15">C</Status>
15
                                                                                                                  <DirectionIndicator>Import/DirectionIndicator>
                                                                                                          </Register>

<
20
                                                                                                                 <Multiplier>1</Multiplier>
<DialFormat>6.0</DialFormat>
<Suffix>31</Suffix>
25
                                                                                                                  <ControlledLoad>No</ControlledLoad>
<ConsumptionType>Cumulative</ConsumptionType>
<Status effectiveDate="2008-04-15">C</Status>
                                                                                                                  <DirectionIndicator>Import
30
                                                                                                          </Register>
                                                                                                  - <Register>
<RegisterID>70B-</RegisterID>
                                                                                                                 NetworkTariffCode effectiveDate="2008-04-15">TOUS</NetworkTariffCode>
UnitOfMeasure>KWH</UnitOfMeasure>
<TimeOfDay>HISHLDR
TimeOfDay>
35
                                                                                                                 Multiplier>1
Multiplier>
Valify of the first of the f
                                                                                                                 <ConsumptionType > Cumulative</ConsumptionType>
<Status effectiveDate="2008-04-15"> C</Status>
<DirectionIndicator> Import</DirectionIndicator>
40
                                                                                                  </Register>
- <Register>
45
                                                                                                                 <RegisterID>80D-</RegisterID>
                                                                                                                  <NetworkTariffCode effectiveDate="2008-04-15">TOUS</NetworkTariffCode>
<UnitOfMeasure>KWH</UnitOfMeasure>
                                                                                                                  <TimeOfDay>LOSHLDR</TimeOfDay>
                                                                                                                 <Multiplier> 1</Multiplier>
<DialFormat>6.0
50
                                                                                                                  <Suffix>51</Suffix>
<ControlledLoad>No</ControlledLoad>
                                                                                                                  </
55
                                                                                                 </Register>
</RegisterConfiguration>
                                                                                      </WAMeter>
                                                                   </MeterRegister>
</SingleNMIStandingData>
60
                                                          </NMIStandingDataUpdateNotification>
                                                  </Transaction>
                                       </Transactions>
                              </ase:aseXML>
65
```

# Step 5 - Sample XML - Full SDU triggered by closure of service order

This XML message is identical to the sample XML provided in Step 4. It has been omitted for reasons of brevity.



#### 3.4.5 Related Transactions

# 3.4.5.1 Preceding Transactions

This transaction will be preceded by a Service Order transaction of WorkType "Adds And Alts" and Sub Type of "Exchange Meter", which can be initiated by either a current retailer or by the network operator.

# 3.4.5.2 Subsequent Transactions

As for section 3.3.5.2.



#### 3.5 De-energisation

#### 3.5.1 Overview

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5 This process is initiated by a De-energisation service order type that is submitted by a current retailer.

On completion of a relevant service order, either of the following situations will be in place:

- one of the meters associated with the NMI is de-energised, or
- · all of the meters associated with the NMI are de-energised.

In either case, a De-energisation results in the publishing of a single SDU transaction, specifically a Full SDU (with no Partial SDUs published at all).

If, as a result of the de-energisation, none of the meters associated with the NMI have the meter status of "C" Current, then the NMI status is updated to De-energised.

If only one meter on a multi-meter NMI is De-energised, and at least one remaining meter at the NMI is "C" Current, then the NMI status will remain as "A" Active.

To support the de-energisation of a meter on a multi-meter site, the network operator will publish de-energised meters to the current retailer with a meter status of "D" De-energised in the Full SDU. This SDU will also reflect the network operator's setting of all the Registers associated with this meter as "R" Removed, which will prevent these from being read. This feature of the market is part of the market's review of 'defects'. The market will continue to operate as is – and the continuation of the feature will be subject to the market change control process.

In the situation of a "temporary disconnect", such as that required to allow a painter to work around the meter site, no publication of Standing Data takes place.

#### 3.5.2 Business Rules

#### **Submission rules**

There are none that are specific to this process.

While a service order De-energisation request may result in standing data being sent, this process does not describe the specifics related to the service order.

## **Advanced Meters and Multi Metered Sites**

Where a de-energisation service order is raised on a NMI with a combination of AMI and non-AMI meters the de-energisation service order will be allocated for both remote & manual de-energisation by a field resource, as applicable.



## Validation

There are none that are specific to this process.

# Response

There are none that are specific to this process.

5

#### 3.5.3 Process Breakdown

#### 3.5.3.1 Process diagram

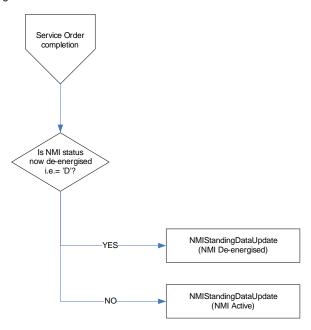


Figure 14: NMI Standing Update notification process – Meter De-energisation

10

3.5.3.2 AMI Process Diagram

15

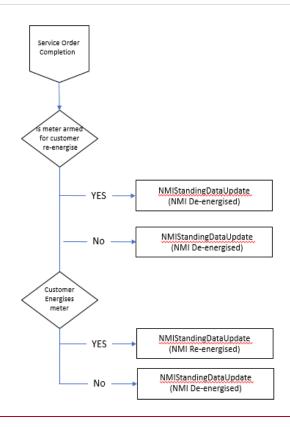


Figure 15a: NMI Standing Update notification process – AMI Meter De-energisation

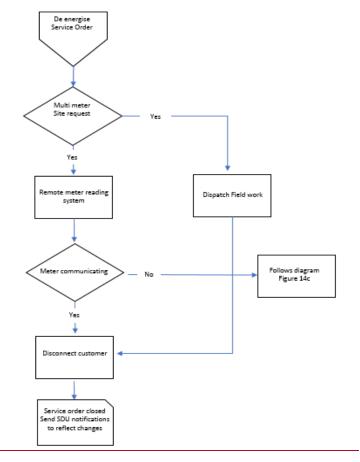


Figure 14b AMI Meter De-energisation on a multi metered site

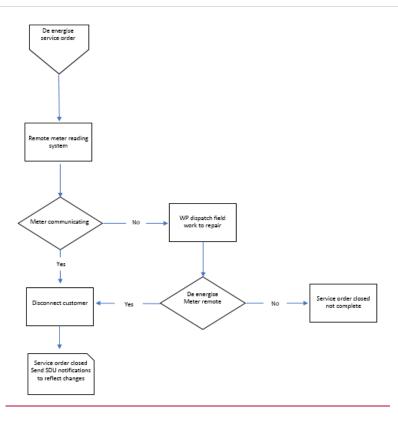


Figure 14c AMI Meter De-energisation on a multi metered site

#### Formatted: Indent: First line: 3.75 cm

## 3.5.3.2 Transactional Diagram

5

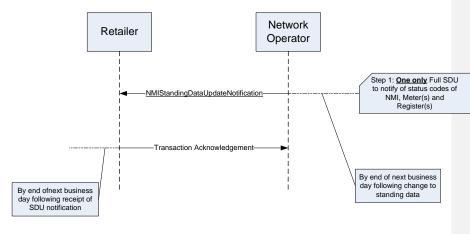


Figure <u>16</u>15: Transaction diagram – De-energisation



# 3.5.3.3 Timing Requirements

Transaction	Transaction Group	Version	Sender	Receiver	Timing
NMIStandingDataUpd ateNotification	NMID	r9	Network operator	Current retailer	Before End of Day on business day following the change being recorded by the network operator
Transaction Acknowledgement	NMID	r17	Current retailer	Network operator	By end of next Business Day

#### 3.5.4 Transactions

# 3.5.4.1 NMIStandingDataUpdateNotification

5

Transaction Definition	NMIStandingDataUpdateNotification
Trigger	Network Operator completes a de-energisation.
Pre-conditions	A NMI is assigned to a current retailer.
Post-conditions	The retailer is able to update their system on the basis of the information provided by the network operator.
Transaction acknowledgement-specific event codes	Refer to Appendix A

#### **Transaction Data Elements**

The attributes of the NMIStandingDataUpdateNotification are defined in Appendix C.

# 10 Transaction Schema Definition

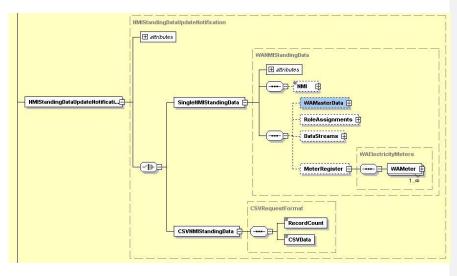


Figure 1746: NMI Standing Data Update notification schema definition



#### Step 1 - Sample XML - Meter De-energised: NMI De-energised

In this sample XML, as a result of the meter status being set to De-energised the NMI status is also set to De-energised and the register status is set to Removed due to the example being on a single metered site.

```
10
                               xsi:schemaLocation="urn:aseXML:r17:WA:r2.00
http://www.westernpower.com.au/aseXML/schemas/r17/WA:r2.00/aseXML_r17_WA_r2.00.xsd">
                                   <From description="Western Power Networks">WPNTWRKS</from>
<To description="Synergy Energy">WPRTL</To>
<MessageID>WPNTWRKSMSG-14731554</MessageID>
15
                                    <MessageDate>2008-04-22T16:51:13+08:00</messageDate>
<TransactionGroup>NMID</TransactionGroup>
                                   <Priority>Medium</Priority>
<Market>WAELEC</Market>
20
                            </Header>
                        - <Transactions>
                               _ <Transaction transactionID="WPNTWRKS-0000a-20162920" transactionDate="2008-04-22T16:51:13+08:00">
                                    25
                                                   - <WAMasterData>
                                                               <JurisdictionCode>WA</JurisdictionCode>
                                                               <a href="https://disabledules.wik/Janadedules/">\summark/Janadedules/</a> (AMIClassificationCode>
</a> <a href="https://disabledules/">\summark/Janadedules/</a> <a href="https://disabledu
30
                                                               <ParentEmbeddedNetworkIdentifier xsi:nil="true" />
<ChildEmbeddedNetworkIdentifier xsi:nil="true" />
                                                           35
                                                                        - <FlatOrUnit>
                                                                                   <FlatOrUnitType>U</FlatOrUnitType>
<FlatOrUnitNumber>15/FlatOrUnitNumber>
                                                                             </FlatOrUnit>
40
                                                                                   <LotNumber>48</LotNumber>
                                                                             </Lot>
                                                                        - <Street>
                                                                                   <StreetName>NORTH WEST COASTAL</StreetName>
<StreetType>HWY</StreetType>
45
                                                                               </Street>
                                                                      </WAStructuredAddress>
                                                                      <SuburbOrPlaceOrLocality>ROEBOURNE</SuburbOrPlaceOrLocality>
                                                                      <StateOrTerritory>WA</StateOrTerritory>
50
                                                               </Address>
                                                               Status effectiveDate="2008-04-23">D
Status>
DistanceFromSubstation effectiveDate="1996-05-30">5.86
DistanceFromSubstation
                                                               <Voltage>LV</Voltage>
<PropertyType>Domestic</PropertyType>
55
                                                               <PoleNumber xsi:nil="true" />
                                                        </WAMasterData>
                                                    - <RoleAssignments>
                                                          60
                                                                      <Role>LR</Role>
                                                                </RoleAssignment>
                                                           - <RoleAssignment effectiveDate="1996-05-30">
                                                                     <Party description="Western Power Networks">WPNTWRKS</Party><Role>LNSP</Role>
65
                                                               </RoleAssignment>
                                                           - <RoleAssignment effectiveDate="1996-05-30">
```



```
<Party description="Synergy Energy">WPRTL</Party>
<Role>ROLR</Role>
                                            5
                                                    <Role>RP</Role>
                                                </RoleAssignment>
                                            10
                                          </RoleAssignments>
                                      - <DataStreams>
                                           - <DataStream>
15
                                                    <Suffix>11</Suffix>
                                                    <ProfileName>NOPROF</ProfileName>
<AveragedDailyLoad>37
AveragedDailyLoad>
                                                    20
                                               </DataStream>
                                          </DataStreams>
                                      - <MeterRegister>
                                           - <WAMeter>
                                                    <SerialNumber>15M144997</SerialNumber>
<NextScheduledReadDate>2008-05-09
<NextScheduledReadDate>2008-05-09
25

<
30
                                                    <Point>01</Point>
<Manufacturer xsi:nil="true" />
<Model>M101</Model>
                                                    <Model> M101</model>

<TransformerIocation xsi:nil="true" />
<TransformerType xsi:nil="true" />
<TransformerRatio xsi:nil="true" />
<Constant xsi:nil="true" />

35
                                                    <lastTestDate xsi:nil="true" />
<TestResultAccuracy xsi:nil="true" />
<TestResultNotes xsi:nil="true" />
40
                                                   <TestResultNotes xsi:nil="true"/>
TestPerformedBy xsi:nil="true" />
<MeasurementType xsi:nil="true" />
<ReadTypeCode>MV1</ReadTypeCode>
<RemotePhoneNumber xsi:nil="true"/>
<CommunicationsEquipmentType xsi:nil="true"/>
<CommunicationsProtocol xsi:nil="true"/>
<DataConversion xsi:nil="true"/>
<DataConversion xsi:nil="true"/>
<Contractions xsi:nil="true"/>

45
                                                    <Status effectiveDate="2008-04-23">D</Status>
<Program xsi:nil="true" />
50
                                                    <a href="mailto:</a>.</a>
<a href="mailto:AdditionalSiteInformation">AdditionalSiteInformation</a> xsi:nil="true" />
<a href="mailto:</a><a href="mailto:"xsi:nil="true"/></a>

    <UserAccessRights xsi:nil="true" />
    <Password xsi:nil="true" />
    <TestCalibrationProgram xsi:nil="true" />

55
                                                    <KeyCode xsi:nil="true" />
<ReadingInstructions effectiveDate="1996-05-30" xsi:nil="true" />
                                                    <CustomerFundedMeter>No</CustomerFundedMeter>
                                                     <MeterRequirementForTransfer xsi:nil="true" />
60
                                                 - <RegisterConfiguration>
                                                     <RegisterID>007
RegisterID>
NetworkTariffCode effectiveDate="1996-05-30">AER</NetworkTariffCode>
<UnitOfMeasure>KWH</UnitOfMeasure>
<TimeOfDay>ALLDAY</TimeOfDay>
65
                                                              <Multiplier>1</Multiplier>
<DialFormat>5.0</DialFormat>
                                                               <Suffix>11</Suffix>
                                                               <ControlledLoad>No</ControlledLoad>
70
                                                               <ConsumptionType>Cumulative</ConsumptionType>
                                                               <Status effectiveDate="2008-04-23">R</Status>
<DirectionIndicator> Export</DirectionIndicator>
                                               </Register>
</RegisterConfiguration>
</WAMeter>
75
                                     </MeterRegister>
</SingleNMIStandingData>
```



10

```
</NMIStandingDataUpdateNotification>
</Transaction>
</Transactions>
</ase:aseXML></a>
```

#### Step 1 Sample XML - Meter De-energised: NMI Active

In this sample XML, as a result of one of the meter's status being set to De-energised while the other meter's status is Current, the NMI status remains as Active.

```
<
15
                       /
/Header>
<From description="Western Power Networks">WPNTWRKS</from>

<To description="Synergy Energy">WPRTL</To>

<MessageID>WPNTWRKSMSG-12549066

20
                               </p
                                <Market>WAELEC</Market>

<
25
                                                <SingleNMIStandingData>
<NNI checksum="7">8001598410</NMI>
<WAMasterData>
<JurisdictionCode>WA</JurisdictionCode>
30
                                                                  \NMIClassificationCode>\Mt<\rangle \text{Nt/StatisticutionCode}\\
<pre>\NMIClassificationCode>\text{\text{Nt/ClassificationCode}}\\
\TransmissionNodeIdentifier effectiveDate="1972-09-27">\WMJX</TransmissionNodeIdentifier>\\
\DistributionLossFactorCode effectiveDate="1972-09-27">\QRT2\/\DistributionLossFactorCode>\\
\ParentEmbeddedNetworkIdentifier \text{\text{xi:nil="true"}}\\
\/\ParentEmbeddedNetworkIdentifier>
35
                                                                   <ChildEmbeddedNetworkIdentifier xsi:nil="true"></ChildEmbeddedNetworkIdentifier>
                                                                   <Address>
<WAStructuredAddress>
40
                                                                                   <House>
     <HouseNumber>310</HouseNumber>
     </House>
                                                                                    <Street>
45
                                                                                            <StreetName>GREAT EASTERN</StreetName>
                                                                                     <StreetType>HWY</StreetType>
                                                                           </WAStructuredAddress>
                                                                           <SuburbOrPlaceOrLocality>Midland</SuburbOrPlaceOrLocality>
<StateOrTerritory>WA</StateOrTerritory>
<PostCode>6056</PostCode>
50
                                                                   </Address>
                                                                   <Status effectiveDate="2007-12-04">A</Status><DistanceFromSubstation effectiveDate="1972-09-27">3.4</DistanceFromSubstation>
                                                                   <Voltage>LV</Voltage>
<PropertyType>Commercial</PropertyType>
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\See effectiveDate="2007-10-18">REVENUE</Use>
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80
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                                                                                                                                                                                                                                                                                                                <RegisterConfiguration>
<Register>
```



#### 3.5.5 Related Transactions

#### 3.5.5.1 Preceding Transactions

This transaction may be preceded by a Service Order transaction of WorkType "Deenergisation" and Sub Type of either:

a) "Remove Fuse",

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- b) "Remove Fuse (Non-Payment)", or
- c) a null Sub Type.

30 It should be noted that a Service Order transaction of WorkType with a Sub Type of "Warning" will not result in a de-energisation.

## 3.5.5.2 Subsequent Transactions

A MDN will be published to the current retailer after the De-energisation. This will contain the Service Order ID in the 500 (or 550) record.

Where the meter is required to provide interval data the MDN will not include the partial day of the De-energisation. Only a complete day of readings will be published within the MDN to the current retailer.



#### 3.6 Re-energisation

#### 3.6.1 Overview

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Re-energisation refers to the business process where a retailer initiates action that leads to the meter for a particular NMI being re-energised. The network operator can also initiate a re-energisation as a part of the new connections process, however this is covered in section 3.13 below.

When this business process is complete, the network operator communicates the standing data changes to the market by publishing a number of Partial SDUs plus one (1) Full SDU triggered by the earlier Partial SDUs. When the Service Order closes, no additional Full SDU is published.

As a result of the Re-energisation, a number of Partial SDUs plus one (1) Full SDU will be published to the current retailer, who should expect to receive:

- one Partial SDU to notify of the change in Register status from "R" Removed to "C" Current for each Register at the Meter;
- 2) one Partial SDU to notify of the change in Meter status to "C" Current;
- 3) one Partial SDU to notify of the NMI status of "A" Active; and
- 4) one Full SDU to notify of the full current standing data for the NMI.

It should be noted that in reference to step 3) above, the Partial SDU is published irrespective of whether or not the status of the NMI has changed as a result of the Reenergisation.

For AMI meters, where the network operator has successfully completed as a Reenergisation request, the meter will be placed into an armed state. Once a meter is armed, electricity flows are enabled by pressing a button on the meter. This action may be performed by the retailer, customer or by the network operator under a service level agreement.

For AMI meters, the Re-energisation Service Order Response advises of the successful completion of the Re-energisation. That is, that the meter has been placed in an armed state.

As result of the prior de-energisation, the NMI will have a meter status of "C" Current and associated Registers will have a status of "R" Removed. The NMI status will remain as Deenergised until the button on the meter is pressed. Once the button on the meter is pressed, a number of Partial SDUs plus one (1) Full SDU will be published to the current retailer, who should expect to receive:

1) one Partial SDU to notify of the change in Register status from "R" Removed to "C" Current for each Register at the Meter;

2) one Partial SDU to notify of the change in Meter status to "C" Current;

3) one Partial SDU to notify of the NMI status of "A" Active; and



# 4) one Full SDU to notify of the full current standing data for the NMI.

#### 3.6.2 Business Rules

#### 5 Submission rules

While a service order Re-energisation request may result in standing data being sent, this process does not describe the specifics related to the service order.

#### Validation

There are none that are specific to this process.

## 10 Response

There are none that are specific to this process.

#### 3.6.3 Process Breakdown

#### 15 3.6.3.1 Process diagram

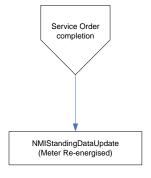


Figure 1817: NMI Standing Update notification process – Meter Re-energisation

#### 3.6.3.1a Process Diagram

20

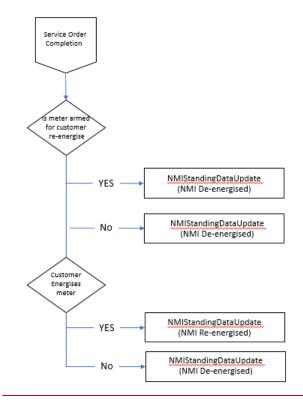
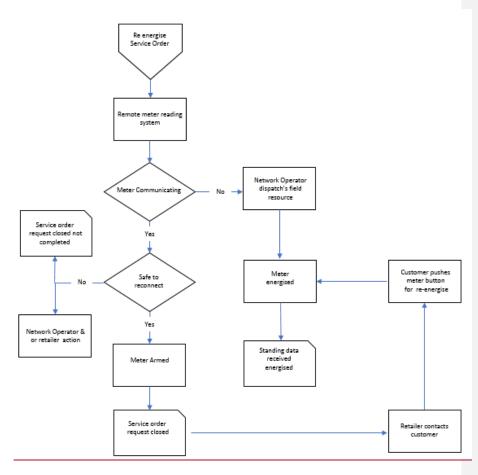


Figure 17a: NMI Standing Update notification process – AMI Meter De-energisation Status from a Re-energisation Request

## 3.6.3.1b Process Diagram



<u>Figure 17b: AMI Meter Re-energisation request - NMI Standing Data Update notification process</u>

3.6.3.1c Process Diagram

Formatted: Indent: First line: 1.5 cm

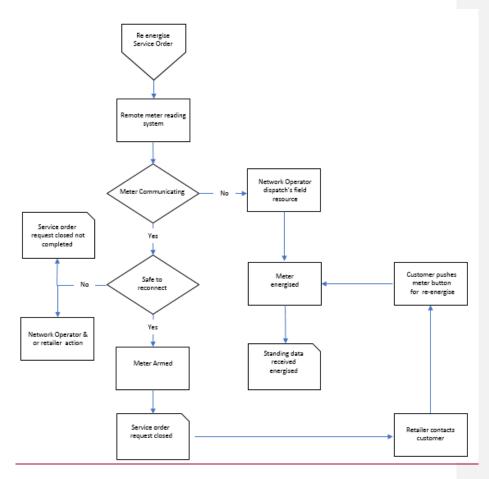


Figure 17c: AMI Meter Re-energisation request multi meter site - NMI Standing Data Update notification process

## 3.6.3.2 Transactional Diagram

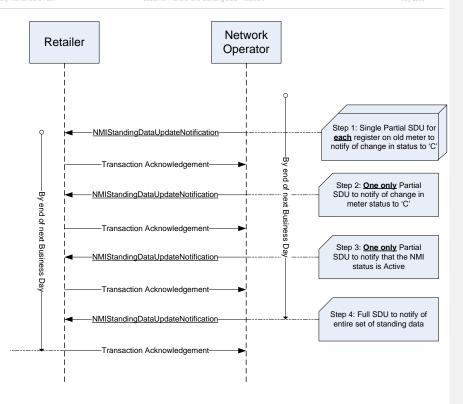


Figure 1918: Transaction diagram – Meter Re-energisation

# 5 3.6.3.3 Timing Requirements

Transaction	Transaction Group	Version	Sender	Receiver	Timing
NMIStandingDataUp dateNotification	NMID	r9	Network Operator	Current Retailer	Before End of Day on next business day following the change being recorded by the network operator
Transaction Acknowledgement	NMID	r17	Current retailer	Network operator	By end of next Business Day

#### 3.6.4 Transactions



# $3.6.4.1 \quad NMIS tanding Data Update Notification$

# Step 1 – One (1) Partial SDU per register to notify of change in register status to Current.

Transaction Definition	NMIStandingDataUpdateNotification
Trigger	Change in register status.
Pre-conditions	A NMI is assigned to a current retailer.
Post-conditions	The retailer is able to update their system on the basis of the information provided by the network operator.
Transaction acknowledgement-specific event codes	Refer to Appendix A

# <u>Step 1a – One (1) Partial SDU per register to notify of change in register status to Current for AMI meter Re-energisation process</u>

Transaction Definition	NMIStandingDataUpdateNotification
Trigger	Change in register status.
<u>Pre-conditions</u>	A NMI is assigned to a current retailer.
	Customer pushes button on armed meter.
Post-conditions	The retailer is able to update their system on the basis of the information provided by the network operator.
Transaction acknowledgement-specific event codes	Refer to Appendix A

# Step 2 – One (1) Partial SDU to notify of change in meter status to Current.

Transaction Definition	NMIStandingDataUpdateNotification
Trigger	Change in meter status.
Pre-conditions	A NMI is assigned to a current retailer.
Post-conditions	The retailer is able to update their system on the basis of the information provided by the network operator.

Transaction	Refer to Appendix A
acknowledgement-specific	
event codes	

# Step 2a – One (1) Partial SDU to notify of change in meter status to Current for AMI meter Re-energisation process.

Transaction Definition	NMIStandingDataUpdateNotification
Trigger	Change in meter status.
<u>Pre-conditions</u>	A NMI is assigned to a current retailer.
	Customer pushes button on armed meter.
<u>Post-conditions</u>	The retailer is able to update their system on the basis of the information provided by the network operator.
Transaction acknowledgement-specific event codes	Refer to Appendix A

## Step 3 - One (1) Partial SDU to notify of the status of the NMI is Active.

Transaction Definition	NMIStandingDataUpdateNotification
Trigger	Network Operator completes a Meter Re-energisation.
Pre-conditions	NMI must have an active meter in order to send this SDU.
Post-conditions	The retailer is able to update their system on the basis of the information provided by the network operator.
Transaction acknowledgement-specific event codes	Refer to Appendix A

# <u>Step 3a – One (1) Partial SDU to notify of the status of the NMI is Active for AMI meter Re-energisation process.</u>

Transaction Definition	<u>NMIStandingDataUpdateNotification</u>
Trigger	Customer pushes button on armed meter.
<u>Pre-conditions</u>	NMI must have an active meter in order to send this

10

	SDU.
Post-conditions	The retailer is able to update their system on the basis of the information provided by the network operator.
Transaction acknowledgement-specific event codes	Refer to Appendix A

# Step 4 -Full SDU to notify of change in standing data created by steps 1-3.

Transaction Definition	NMIStandingDataUpdateNotification
Trigger	Change in standing data during standing data period
Pre-conditions	A NMI is assigned to a current retailer.
Post-conditions	The retailer is able to update their system on the basis of the information provided by the network operator.
Transaction acknowledgement-specific event codes	Refer to Appendix A

Step 4a –Full SDU to notify of change in standing data created by steps 1-3 for AMI meter Re-energisation process.

Transaction Definition	<u>NMIStandingDataUpdateNotification</u>			
Trigger	Customer pushes button on armed meter.			
<u>Pre-conditions</u>	A NMI is assigned to a current retailer.			
Post-conditions	The retailer is able to update their system on the basis of the information provided by the network operator.			
Transaction acknowledgement-specific event codes	Refer to Appendix A			

# **Transaction Data Elements**

The attributes of the NMIStandingDataUpdateNotification are defined in Appendix C.



\_

#### **Transaction Schema Definition**

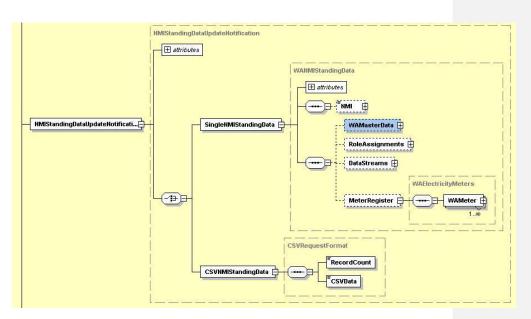


Figure 2019: NMI Standing Data Update notification schema definition

## Step 1 - Sample XML - Partial SDU to reflect register status change

10 In this sample XML, a Partial SDU is published notifying that the status on the Register has changed.

55

```
- <MeterRegister>
                             - <WAMeter>
                                   <SerialNumber>0200050646</SerialNumber>
                                 - <RegisterConfiguration>
 5
                                     - <Register>
                                          <RegisterID>007</RegisterID>
<Status effectiveDate="2008-04-24">C</Status>
                                       </Register>
                                </RegisterConfiguration>
</WAMeter>
10
                          </MeterRegister>
</SingleNMIStandingData>
                     </NMIStandingDataUpdateNotification>
                  </Transaction>
15
              </Transactions>
           </ase:aseXML>
```

## Step 2 - Sample XML - Partial SDU to reflect meter status change

In this sample XML, a Partial SDU is published notifying that the status of one of the Meters on the NMI has changed. It should be noted that the other Meter at this NMI was always "C" Current.

```
<?xml version="1.0" encoding="ISO-8859-1" ?>
<ase:aseXML xmlns:ase="urn:aseXML:r17
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                                                     IL:r17:WA:r2.00" xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
               xsi:schemaLocation="urn:aseXML:r17:WA:r2.00
               http://www.westernpower.com.au/aseXML/schemas/r17/WA:r2.00/aseXML_r17_WA_r2.00.xsd">
                 <From description="Western Power Networks">WPNTWRKS</From>
                 <To description="Synergy Energy">WPRTL</To>
<MessageID>WPNTWRKSMSG-12550935</MessageID>
30
                 <MessageDate>2008-04-24T09:07:10+08:00</messageDate>
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                 <Priority>Medium</Priority>
35
                 <Market>WAELEC</Market>
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           - <Transactions>
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                              <Status effectiveDate="2008-04-25">C</Status>
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                         </MeterRegister>
</SingleNMIStandingData>
                    </NMIStandingDataUpdateNotification>
50
                 </Transaction>
              </Transactions>
          </ase:aseXML>
```

## Step 3 - Sample XML - Partial SDU notifying of NMI status

In this sample XML, a Partial SDU is published notifying that the status of the NMI is "A" Active. This Partial SDU is sent out even though the NMI status had not changed (the other Meter at this NMI was always "C" Current).

60 <?xml version="1.0" encoding="ISO-8859-1" ?>



```
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         Step 4 - Sample XML - Full SDU triggered by prior partials
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                xsi:schemaLocation="urn:aseXML:r17:WA:r2.00
http://www.westernpower.com.au/aseXML/schemas/r17/WA:r2.00/aseXML_r17_WA_r2.00.xsd">
                  <From description="Western Power Networks">WPNTWRKS</From>
<To description="Synergy Energy">WPRTL</To>
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                  <Priority>Medium</priority>
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                                 <JunsalctonCode>WA</JunsalctonCode>
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<ChildEmbeddedNetworkIdentifier xsi:nil="true"/>
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_ <WAStructuredAddress>
55
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                                            <StreetName>GREAT EASTERN</StreetName>
                                          <StreetType>HWY</StreetType>
```



<DistanceFromSubstation effectiveDate="1972-09-27">3.4/DistanceFromSubstation>

SuburbOrPlaceOrLocality>Midland
SuburbOrPlaceOrLocality>
StateOrTerritory>WA
StateOrTerritory>

</WAStructuredAddress>

<Voltage>LV</Voltage>

</WAMasterData>
<RoleAssignments>

<PostCode>6056</PostCode>

<Status effectiveDate="2008-04-25">A</Status>

<PropertyType>Commercial<PoleNumber xsi:nil="true" />

- <RoleAssignment effectiveDate="1972-09-27">

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 40
                                                                                                                                          45
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<Model>E104</Model>
                                                                                                                                           ~\mudel?E104\/\mudel?e104\/\mudel?e104\/\mudel?e104\/\mudel?e104\/\mudel?e104\/\mudel?e104\/\mudel?e104\/\mudel?e104\/\mudel?e104\/\mudel?e104\/\mudel?e104\/\mudel?e104\/\mudel?e104\/\mudel?e104\/\mudel?e104\/\mudel?e104\/\mudel?e104\/\mudel?e104\/\mudel?e104\/\mudel?e104\/\mudel?e104\/\mudel?e104\/\mudel?e104\/\mudel?e104\/\mudel?e104\/\mudel?e104\/\mudel?e104\/\mudel?e104\/\mudel?e104\/\mudel?e104\/\mudel?e104\/\mudel?e104\/\mudel?e104\/\mudel?e104\/\mudel?e104\/\mudel?e104\/\mudel?e104\/\mudel?e104\/\mudel?e104\/\mudel?e104\/\mudel?e104\/\mudel?e104\/\mudel?e104\/\mudel?e104\/\mudel?e104\/\mudel?e104\/\mudel?e104\/\mudel?e104\/\mudel?e104\/\mudel?e104\/\mudel?e104\/\mudel?e104\/\mudel?e104\/\mudel?e104\/\mudel?e104\/\mudel?e104\/\mudel?e104\/\mudel?e104\/\mudel?e104\/\mudel?e104\/\mudel?e104\/\mudel?e104\/\mudel?e104\/\mudel?e104\/\mudel?e104\/\mudel?e104\/\mudel?e104\/\mudel?e104\/\mudel?e104\/\mudel?e104\/\mudel?e104\/\mudel?e104\/\mudel?e104\/\mudel?e104\/\mudel?e104\/\mudel?e104\/\mudel?e104\/\mudel?e104\/\mudel?e104\/\mudel?e104\/\mudel?e104\/\mudel?e104\/\mudel?e104\/\mudel?e104\/\mudel?e104\/\mudel?e104\/\mudel?e104\/\mudel?e104\/\mudel?e104\/\mudel?e104\/\mudel?e104\/\mudel?e104\/\mudel?e104\/\mudel?e104\/\mudel?e104\/\mudel?e104\/\mudel?e104\/\mudel?e104\/\mudel?e104\/\mudel?e104\/\mudel?e104\/\mudel?e104\/\mudel?e104\/\mudel?e104\/\mudel?e104\/\mudel?e104\/\mudel?e104\/\mudel?e104\/\mudel?e104\/\mudel?e104\/\mudel?e104\/\mudel?e104\/\mudel?e104\/\mudel?e104\/\mudel?e104\/\mudel?e104\/\mudel?e104\/\mudel?e104\/\mudel?e104\/\mudel?e104\/\mudel?e104\/\mudel?e104\/\mudel?e104\/\mudel?e104\/\mudel?e104\/\mudel?e104\/\mudel?e104\/\mudel?e104\/\mudel?e104\/\mudel?e104\/\mudel?e104\/\mudel?e104\/\mudel?e104\/\mudel?e104\/\mudel?e104\/\mudel?e104\/\mudel?e104\/\mudel?e104\/\mudel?e104\/\mudel?e104\/\mudel?e104\/\mudel?e104\/\mudel?e104\/\mudel?e104\/\mudel?e104\/\mudel?e104\/\mudel?e104\/\mudel?e104\/\mudel?e104\/\mudel?e104\/\mudel?e104\/\mudel?e104\/\mudel?e104\/\mudel?e104\/\mudel?e104\/\mudel?e104\
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<KeyCode xsi:nil="true" />
<ReadingInstructions xsi:nil="true" />
<CustomerFundedMeter xsi:nil="true" />
<MeterRequirementForTransfer xsi:nil="true" />

 75
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```



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                                                                           <UnitOfMeasure>KWH</UnitOfMeasure>
<TimeOfDay>ALLDAY</TimeOfDay>
<Multiplier>1</Multiplier>
  5
                                                                           <DialFormat>6.0/DialFormat>
<Suffix>11/Suffix>
                                                                           <ControlledLoad>No</ControlledLoad>
                                                                           <ConsumptionType > Cumulative </ConsumptionType>
<Status effectiveDate = "2008-04-24" > C </Status >
10

<
                                                    </WAMeter>
15
                                                              <SerialNumber>0200050712</SerialNumber>
<NextScheduledReadDate>2008-04-10
                                                               <Location>Unknown Location</Location>
                                                              20
                                                               <Point>02</Point>
                                                               <Manufacturer xsi:nil="true" />
<Model>E104</Model>
25
                                                              <model>E104</model>
TransformerLocation xsi:nil="true" />
<TransformerType xsi:nil="true" />
<TransformerRatio xsi:nil="true" />
<Constant xsi:nil="true" />
<LastTestDate xsi:nil="true" />

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<TestResultNotes xsi:nil="true" />
<TestPerformedBy xsi:nil="true" />
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<ReadTypeCode>MY2</ReadTypeCode>
<RemotePhoneNumber xsi:nil="true" />
<CommunicationsEquipmentType xsi:nil="true" />
<CommunicationsProtocol xsi:nil="true" />
<DataConversion xsi:nil="true" />
<DataValidations xsi:nil="true" />
<Status effectiveDate="2007-12-04">C</Status>
35
40
                                                               Open
                                                                                                                                                                                          All
                                                                                                                                                                                                      Day
                                                                                                                                                                                                                      Thurs
                                                                                                                                                                                                                                                 Itp
                                                                                                                                                                                                                                                              Tax
45
                                                               <UserAccessRights xsi:nil="true" />
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                                                               <KeyCode xsi:nil="true" />
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                                                               <CustomerFundedMeter xsi:nil="true" />
<MeterRequirementForTransfer xsi:nil="true" />
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Suffix=12</Suffix>

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ConsumptionType>Cumulative
ConsumptionType>Cumulative
ConsumptionType>ConsumptionType>
Status effectiveDate="2007-12-04">C
Status
DirectionIndicator>Export
ObjectionIndicator>
65
                                                        </Register>
</RegisterConfiguration>
</WAMeter>
                                             </MeterRegister>
</SingleNMIStandingData>
70
                                      </NMIStandingDataUpdateNotification>
                                 </Transaction>
                         </Transactions>
                   </ase:aseXML>
75
```



10

15

#### 3.6.5 Related Transactions

## 3.6.5.1 Preceding Transactions

This transaction may be preceded by a Service Order transaction of WorkType "Reenergisation" and may optionally have a Sub Type of "After Disconnection For Non-Payment".

## 3.6.5.2 Subsequent Transactions

A MDN will be published to the current retailer after the De-energisation. This will contain the Service Order ID in the 500 (or 550) record.

Where the meter is required to provide interval data the MDN will not include the partial day of the Re-energisation. Only a complete day of readings will be published within the MDN to the current retailer.

## 3.7 Change Read Route and NSRD

#### 3.7.1 Overview

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This multi-step business process reflects the activities that take place when a meter read route code is changed with a possible ensuing change to the <a href="Next Scheduled Read Date">Next Scheduled Read Date</a> (NSRD-)Remote interval meters will be assigned a route and a reading schedule however will not update on an ongoing basis to provide a NSRD within standing data.

A Meter Read Route change may occur under the following circumstances:

- 1. New Connection either:
  - a. auto-allocation of route immediately after the New Connection service order is completed, but as a separate process.
  - b. <u>auto and or manual allocation to a route which may occur within a few days of the Connection service order being completed, again as a separate process.</u>
- Route balancing may result in the move of some meters from one route to another. Should this result in a next scheduled read date change, this will be within a limited window either side of the old next scheduled read date. Such a restriction is designed to assist retailers to meet their obligations under the Code of Conduct for the Supply of Electricity to Small Use Customers 2008.
- 3. Change of read method. For example
  - a) from MVRS to self-read card
  - b) manually read to remotely read.
- Change of energy data type. For example, where an accumulation meter is changed to an interval meter.
- —Please refer to the WA B2B Procedures Customer and Site Details Process document for more information on this business process.

#### 3.7.2 Business Rules

# Submission rules

There are none that are specific to this process.

## Validation

There are none that are specific to this process.

#### Response

There are none that are specific to this process.

10

## 3.7.3.1 Process diagram

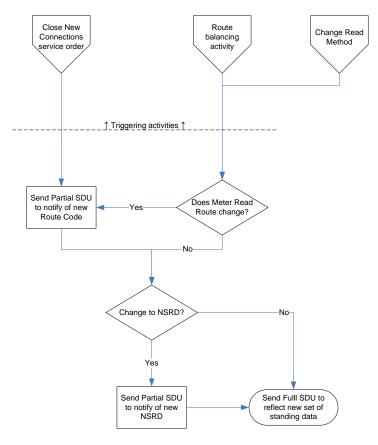


Figure  $\underline{\textbf{2120}}$ : NMI Standing Update notification process – Read Route & NSRD change

In the above diagram, a number of triggering activities can bring about a change in Meter Read Route and NSRD. These triggering activities are <u>not</u> documented in this Procedure document.

Remote interval meters will be assigned a route and a reading schedule however will not update on an ongoing basis to provide a NSRD within standing data.

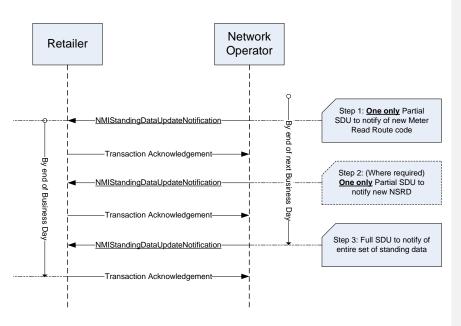


Figure 2224: Transaction diagram – Read Route & NSRD change

# 3.7.3.3 Timing Requirements

Transaction	Transaction Group	Version	Sender	Receiver	Timing
NMIStandingData UpdateNotification	NMID	r9	Network Operator	Current Retailer	Before End of Day on next business day following the change being recorded by the network operator
Transaction Acknowledgement	NMID	r17	Current retailer	Network operator	By end of next Business Day

5

### 3.7.4 Transactions

## 3.7.4.1 NMIStandingDataUpdateNotification

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# Step 1 - One (1) Partial SDU to notify of new Meter Read Route code.

Transaction Definition	NMIStandingDataUpdateNotification
Trigger	Change to the Meter Read Route code.
Pre-conditions	A NMI is assigned to a current retailer.
Post-conditions	The retailer is able to update their system on the basis of the information provided by the network operator.
Transaction acknowledgement-specific event codes	Refer to Appendix A

# Step 2 – One (1) Partial SDU per register to notify of new NSRD.

This transaction will only be executed if there is a change to the NSRD.

10

Transaction Definition	NMIStandingDataUpdateNotification
Trigger	Change to the NSRD.
Pre-conditions	A NMI is assigned to a current retailer.
Post-conditions	The retailer is able to update their system on the basis of the information provided by the network operator.
Transaction acknowledgement-specific event codes	Refer to Appendix A

## Step 3 – Full SDU triggered by changes to the standing data in steps 1 & 2.

Transaction Definition	NMIStandingDataUpdateNotification
Trigger	Changes made to the standing data in the previous



	standing data period.
Pre-conditions	A NMI is assigned to a current retailer.
Post-conditions	The retailer is able to update their system on the basis of the information provided by the network operator.
Transaction acknowledgement-specific event codes	Refer to Appendix A

## **Transaction Data Elements**

The attributes of the NMIStandingDataUpdateNotification are defined in Appendix C.

# **Transaction Schema Definition**

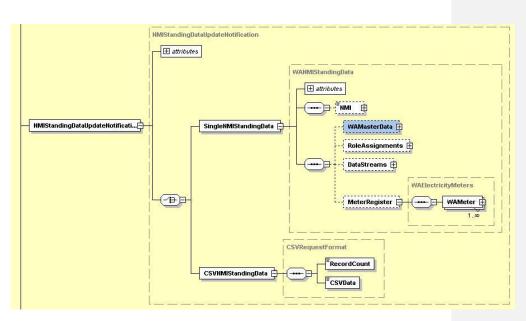


Figure 2322: NMI Standing Data Update notification schema definition

## Step 1 - Sample XML - Partial SDU to notify of change to Meter Read Route

```
<?xml version="1.0" encoding="ISO-8859-1" ?>
 5
              ase:aseXML xmlns:ase="urn:aseXML:r17:WA:r2.00" xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance" xsi:schemaLocation="urn:aseXML:r17:WA:r2.00
            <ase:aseXML
              http://www.westernpower.com.au/aseXML/schemas/r17/WA:r2.00/aseXML_r17_WA_r2.00.xsd">
            <Header>
<From description="Western Power Networks">WPNTWRKS</From>

10
                <To description="Synergy Energy">WPRTL</To>
<MessageID>WPNTWRKSMSG-14748897</MessageID>
                <MessageDate>2008-04-23T08:29:23+08:00</messageDate>
                <TransactionGroup>NMID</TransactionGroup>
<Priority>Medium</Priority>
15
             <Market>WAELEC</Market>
</Header>
          - <Transactions>
             _ <Transaction transactionID="WPNTWRKS-0000a-20184727" transactionDate="2008-04-23T08:29:23+08:00">
                - <NMIStandingDataUpdateNotification version="r9"</p>
20
                    - <SingleNMIStandingData>
                         <NMI>8001996387</NMI>
                       25
                               <Route effectiveDate="2008-04-23">215FN_09</Route>
                            </WAMeter:
                         </MeterRegister>
                   </SingleNMIStandingData>
</NMIStandingDataUpdateNotification>
30
                </Transaction>
             </Transactions>
         </ase:aseXML>
```

### Step 2 - Sample XML - Partial SDU to notify of change to NSRD (where this occurs)

```
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               ase:aseXML xmlns:ase="urn:aseXML:r17:WA:r.xsi:schemaLocation="urn:aseXML:r17:WA:r2.00
             <ase:aseXML
                                                  eXML:r17:WA:r2.00" xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
               http://www.westernpower.com.au/aseXML/schemas/r17/WA:r2.00/aseXML_r17_WA_r2.00.xsd">
40
             <Header>
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"Compared Engrous">WPRTI</To>
                 <To description="Synergy Energy">WPRTL</To>
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<Priority > Medium </Priority >
45
                 <Market>WAELEC</Market>
              </Header>
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50
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                         - <MeterRegister>
                           55
                               </WAMeter>
                           </MeterRegister>
60
                     </SingleNMIStandingData>
</NMIStandingDataUpdateNotification>
                 </Transaction>
          </Transactions>
65
```

Step 3 - Sample XML - Full SDU to notify of changes to standing data



```
<?xml version="1.0" encoding="ISO-8859-1" ?>
  <ase:aseXML xmlns:ase="urn:aseXML:r17:WA:r2.00
  xsi:schemaLocation="urn:aseXML:r17:WA:r2.00</pre>
                                                                                                                                                              eXML:r17:WA:r2.00" xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
                                                http://www.westernpower.com.au/aseXML/schemas/r17/WA:r2.00/aseXML_r17_WA_r2.00.xsd">
     5
                                                      <From description="Western Power Networks">WPNTWRKS</From>

<To description="Synergy Energy">WPRTL</To>

<MessageID>WPNTWRKSMSG-14750108
/MessageID>

10
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</Header>
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                                              - <Transaction transactionID="WPNTWRKS-0000a-20186670" transactionDate="2008-04-23T09:03:44+08:00">
- <NMIStandingDataUpdateNotification version="r9">
- <NMIStandingDataUpdateNotification version="r9">
- <NMISTANDINGENERAL PROPERTY OF THE PROPERTY O
15
                                                                    - <SingleNMIStandingData>
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                                                                                _ <WAMasterData>
20
                                                                                                  <JurisdictionCode>WA</JurisdictionCode</pre>
                                                                                                 <NMIClassificationCode>>5.7KW </NMIClassificationCode>
                                                                                                \texts\texts\texts\texts\texts\texts\texts\texts\texts\texts\texts\texts\texts\texts\texts\texts\texts\texts\texts\texts\texts\texts\texts\texts\texts\texts\texts\texts\texts\texts\texts\texts\texts\texts\texts\texts\texts\texts\texts\texts\texts\texts\texts\texts\texts\texts\texts\texts\texts\texts\texts\texts\texts\texts\texts\texts\texts\texts\texts\texts\texts\texts\texts\texts\texts\texts\texts\texts\texts\texts\texts\texts\texts\texts\texts\texts\texts\texts\texts\texts\texts\texts\texts\texts\texts\texts\texts\texts\texts\texts\texts\texts\texts\texts\texts\texts\texts\texts\texts\texts\texts\texts\texts\texts\texts\texts\texts\texts\texts\texts\texts\texts\texts\texts\texts\texts\texts\texts\texts\texts\texts\texts\texts\texts\texts\texts\texts\texts\texts\texts\texts\texts\texts\texts\texts\texts\texts\texts\texts\texts\texts\texts\texts\texts\texts\texts\texts\texts\texts\texts\texts\texts\texts\texts\texts\texts\texts\texts\texts\texts\texts\texts\texts\texts\texts\texts\texts\texts\texts\texts\texts\texts\texts\texts\texts\texts\texts\texts\texts\texts\texts\texts\texts\texts\texts\texts\texts\texts\texts\texts\texts\texts\texts\texts\texts\texts\texts\texts\texts\texts\texts\texts\texts\texts\texts\texts\texts\texts\texts\texts\texts\texts\texts\texts\texts\texts\texts\texts\texts\texts\texts\texts\texts\texts\texts\texts\texts\texts\texts\texts\texts\texts\texts\texts\texts\texts\texts\texts\texts\texts\texts\texts\texts\texts\texts\texts\texts\texts\texts\texts\texts\texts\texts\texts\texts\texts\texts\texts\texts\texts\texts\texts\texts\texts\texts\texts\texts\texts\texts\texts\texts\texts\texts\texts\texts\texts\texts\texts\texts\texts\texts\texts\texts\texts\texts\texts\texts\texts\texts\texts\texts\texts\texts\texts\texts\texts\texts\texts\texts\texts\texts\texts\texts\texts\texts\texts\texts\texts\texts\texts\texts\texts\texts\texts\texts\texts\texts\texts\texts\texts\texts\texts\texts\texts\texts\texts\texts\texts\texts\texts\texts\texts\texts\texts\texts\texts\texts\texts\texts\texts\te
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- <RoleAssignment>
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                                                                                                  <Party xsi:nil="true" />
<Role>ROLR</Role>
</RoleAssignment>
                                                                                           70
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</RoleAssignments>
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                                                                                      vatastream>

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- <WAMeter>
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                                                                                      **Coctool of Interver | Coctool |
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**Route effectiveDate="2008-04-23">215FN_09</Route>
**Clse effectiveDate="2007-03-29">REVENUE<//Use>
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**Point>"InstallationTypeCode>
**Point>01

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```



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                                                                 10
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UnitOfMeasure>KWH
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</pre>
TimeOfDay>HISHLDR
/TimeOfDay>

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/Multiplier>

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/Suffix>
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                                                                          <Unitorreasure <a href="https://www.nitorreasure">tmeofDay>LOSHLDR</TimeOfDay>

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/Multiplier>
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/ControlledLoad>
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</RegisterConfiguration>
60
                                                   </WAMeter>
</MeterRegister>
                                      </singleNMIStandingData>
</NMIStandingDataUpdateNotification>
65
                                </Transaction>
                   </Transactions>
</ase:aseXML>
```

### 3.7.5 Related Transactions



## 3.7.5.1 Preceding Transactions

The Meter Read Route code & NSRD Partial SDUs (plus associated Full SDU) may be triggered by a New Connections Service Order. However, there are other non-market activities what may also trigger these transactions.

The Site Access Notification may also initiate a change in Route, NSRD and read method. This transaction is used to request a change in read method (eg MVRS to MV90 or UIQ). Documentation of the process of submitting a Site Access Notification is contained in the WA B2B Procedures Customer and Site Details Process.

## 10 3.7.5.2 Subsequent Transactions

None.



## 3.8 Remove Meter

### 3.8.1 Overview

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The Remove Meter business process is initiated by an Adds And Alts Service Order (Sub Type – Remove Meter) that may be submitted by either a current retailer or the network operator. The service order triggers activity in the field, which results in the removal of the meter. The changes made to the standing data in the process of removing the meter cause a Full SDU to be sent to the current retailer for the NMI.

It should be noted that, although removing a meter is the same as the first half of the Exchange Meter process, the Remove Meter process does not trigger Partial SDUs to notify of the status changes of the registers and the meter. This could be identified as an apparent anomaly, and will be registered in a document that contains 'defects'. The system is documented as it presently performs and will not be changed other than through a process agreed with the industry.

3.8.2 Business Rules

### **Submission rules**

There are none that are specific to this process.

### 20 Validation

There are none that are specific to this process.

## Response

There are none that are specific to this process.

### 25 3.8.3 Process Breakdown

## 3.8.3.1 Process diagram

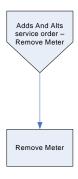


Figure 2423: NMI Standing Update notification process – Remove Meter

# 3.8.3.2 Transactional Diagram

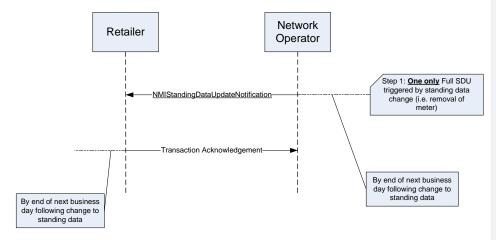


Figure 2524: Transaction diagram – Remove Meter



5

## 3.8.3.3 Timing Requirements

Transaction	Transaction Group	Version	Sender	Receiver	Timing
NMIStandingDataUpd ateNotification	NMID	r9	Network Operator	Current Retailer	Before End of Day on next business day following the change being recorded by the network operator
Transaction Acknowledgement	NMID	r17	Current retailer	Network operator	By end of next Business Day

## 5 3.8.4 Transactions

# 3.8.4.1 NMIStandingDataUpdateNotification

Transaction Definition	NMIStandingDataUpdateNotification
Trigger	Change to standing data caused by removal of a meter.
Pre-conditions	A NMI is assigned to a current retailer.
Post-conditions	The retailer is able to update their system on the basis of the information provided by the network operator.
Transaction acknowledgement-specific event codes	Refer to Appendix A

## 10 Transaction Data Elements

The attributes of the NMIStandingDataUpdateNotification are defined in Appendix C.

10

15

### **Transaction Schema Definition**

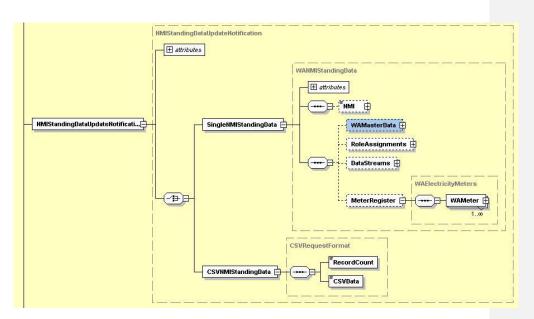


Figure 2625: NMI Standing Data Update notification schema definition

# Sample XML – One only Full SDU triggered by change in standing data

In this sample XML transaction, the Full SDU notification triggered by the standing data changes (that was brought about by the removal of the meter) contains no meter or register data as these are no longer current. It should be noted that the standing data changes, which trigger this Full SDU notification, are themselves not published in Partial SDU notifications.

If there remain meters that have a status of Current at this site, then these will be identified in the Full SDU. Where a Full SDU is published with no meter details, this indicates that, as at the effective date, all the meters on that site have been removed.



```
</Header>
                  - <Transaction transactionID="WPNTWRKS-0000a-20312903" transactionDate="2008-04-24T12:40:46+08:00">
                     - <NMIStandingDataUpdateNotification version="r9">
- <SingleNMIStandingData>
  5
                             <NMI checksum="2">8002003675</NMI>
_ <WAMasterData>
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                                   <JursalctonLoode>WA</JursalctonLoode>

<AmnClassificationCode>>5.7KW 
<MNIClassificationCode>>5.7KW 

<TransmissionNodeIdentifier effectiveDate="2007-07-19">WUNK</TransmissionNodeIdentifier>
<DistributionLossFactorCode effectiveDate="2007-07-25">WRT1

DistributionLossFactorCode>
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<ChildEmbeddedNetworkIdentifier xsi:nil="true" />
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    _ <WAStructuredAddress>
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                                        </Lot>
                                         - <Street>
20
                                                <StreetName>RAYNOR</StreetName>
                                             <StreetType>RD</StreetType></Street>
                                        </WAStructuredAddress>
                                        SuburbOrPlaceOrLocality>BAYNTON
SuburbOrPlaceOrLocality>
StateOrTerritory>WA
StateOrTerritory>
25
                                    <PostCode>6714</PostCode>
</Address>
                                    <Status effectiveDate="2008-04-23">D</Status>
                                    30
                                    <PropertyType> Domestic
<PoleNumber xsi:nil="true" />
                                </WAMasterData>
                             - <RoleAssignments>
35
                                 - <RoleAssignment>
                                       <Party xsi:nil="true" />
<Role>LR</Role>
                                 </RoleAssignment>
_ <RoleAssignment effectiveDate="2007-07-19">
    <Party description="Western Power Networks">WPNTWRKS</Party>
40
                                    <Role>LNSP</Role>
                                 45
                                 </RoleAssignment>

- <RoleAssignment>
                                       <Party xsi:nil="true" />
<Role>RP</Role>
50
                                    </RoleAssignment>
                                 <Role>FRMP</Role>
                                    </RoleAssignment>
55
                                </RoleAssignments>
                        </SingleNMIStandingData>
</NMIStandingDataUpdateNotification>
                    </Transaction>
            </Transactions>
</ase:aseXML>
60
```

## 3.8.5 Related Transactions

65

## 3.8.5.1 Preceding Transactions

This transaction is preceded by an Adds And Alts Service Order Type (Sub Type – Remove Meter) that can be initiated by either a current retailer or by the network operator.

## 3.8.5.2 Subsequent Transactions

In the above diagram, a number of triggering activities can bring about a change in Meter Read Route and NSRD. These triggering activities are <u>not</u> documented in this Procedure document.



## 3.9 Change Network Tariff

### 3.9.1 Overview

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The Change Network Tariff business process involves the receipt of a Meter Reconfiguration Service Order Type (Sub Type - Change Tariff) from the current retailer.

On the face of it, this process should simply involve the change of the network tariff and the publication of the related Partial SDU (followed by a Full SDU). However, because of legacy operational issues in the implementation of the Western Australia electricity market, a Change Network Tariff Service Order often requires a change of the meter configuration. And this can happen without the Partial SDU notifications that would be expected from such a re-configuration. This is due to the working practice of the network operator configuring some registers as "Active, but not sent to market".

To illustrate the Change Network Tariff business process, a complex example will be used where the effects of the "Active, but not sent to market" working practice can be seen.

In the example used in the following sections, a five-register basic meter is installed. If, as is frequently the case, it is only being billed using the "Anytime" register (007), the other registers will not be read by meter readers and the standing data for the remaining four registers will not be published to market. Therefore, while knowledge of the Meter Models in the standing data could be used by the market to deduce that the meter has five registers configured, the network operator does not currently publish all five registers.

This results in registers disappearing from the standing data without the market ever receiving Partial SDU transactions. In the worked example, understanding these working practices will enable an explanation of why the initial Partial SDU shows a tariff change to all five registers (007, 010, 020, 030 and 040), while the Full SDU only shows four registers (now excluding Anytime 007 – which has been set to "Active, but not sent to market")

### 3.9.2 Business Rules

### 30 Submission rules

There are none that are specific to this process.

## Validation

There are none that are specific to this process.

## Response

There are none that are specific to this process.

### 3.9.3 Process Breakdown



## 3.9.3.1 Process diagram

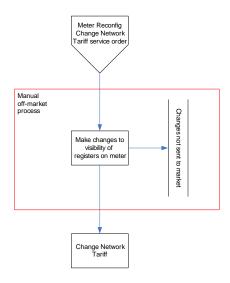


Figure 2726: NMI Standing Update notification process – Change Network Tariff

## 5 3.9.3.2 Transactional Diagram

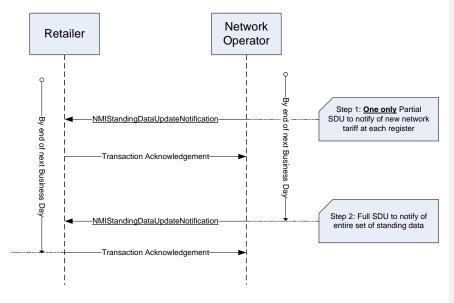


Figure 2827: Transaction diagram – Change Network Tariff

# 3.9.3.3 Timing Requirements

Transaction	Transaction Group	Version	Sender	Receiver	Timing
NMIStandingDataUpdate Notification	NMID	r9	Network Operator	Current Retailer	Before End of Day on next business day following the change being recorded by the network operator
Transaction Acknowledgement	NMID	r17	Current retailer	Network operator	By end of next Business Day

### 3.9.4 Transactions

# $3.9.4.1 \quad NMIS tanding Data Update Notification$

# 5

# Step 1 – One only Partial SDU to notify of new network tariff at all of the registers

Transaction Definition	NMIStandingDataUpdateNotification
Trigger	Network Operator changes the network tariff for the meter.
Pre-conditions	A NMI is assigned to a current retailer.
Post-conditions	The retailer is able to update their system on the basis of the information provided by the network operator.
Transaction acknowledgement-specific event codes	Refer to Appendix A

# Step 2 –Full SDU triggered by change in standing data in Step 1

10

Transaction Definition	NMIStandingDataUpdateNotification
Trigger	Changes made to standing data for the NMI during the previous standing data period.
Pre-conditions	A NMI is assigned to a current retailer.
Post-conditions	The retailer is able to update their system on the basis of the information provided by the network operator.
Transaction acknowledgement-specific event codes	Refer to Appendix A

# **Transaction Data Elements**

The attributes of the NMIStandingDataUpdateNotification are defined in Appendix C.

### **Transaction Schema Definition**

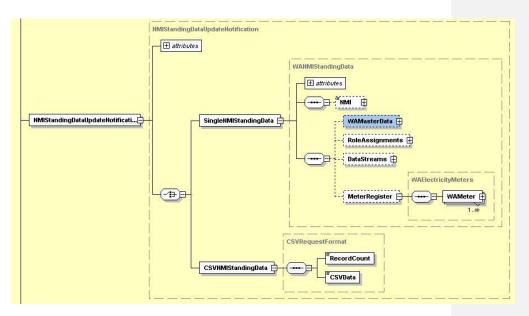


Figure 2928: NMI Standing Data Update notification schema definition

# Step 1 - Sample XML – One only Partial SDU to notify of new network tariff at $\underline{all}$ the registers

```
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15
                                                                        <From description="Western Power Networks">WPNTWRKS</From>
<To description="Synergy Energy">WPRTL</To>
<MessageID>WPNTWRKSMSG-14763294</MessageID>
                                                                        <a href="Message12">Message12">Message12">Message12">Message12">Message12">Message12">Message12">Message12">Message12">Message12">Message12">Message12">Message12">Message12">Message12">Message12">Message12">Message12">Message12">Message12">Message12">Message12">Message12">Message12">Message12"</a>
20
                                                                         <Market>WAELEC</Market>
                                                           </Header>
                                                  -\Transactions>
_ <Transaction transactionID="WPNTWRKS-0000a-20218927" transactionDate="2008-04-23T15:08:25+08:00">
-\text{Venue: Transaction Total Transaction Transaction Total Transaction Transaction Total Transaction Transaction Total Transaction Transacti
25
                                                                            _ <NMIStandingDataUpdateNotification version="r9">
_ <NMIStandingDataUpdateNotification version="r9">
_ <SingleNMIStandingData>
<NMI>8001883479</NMI>
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- <WAMeter>
30
                                                                                                                                               <SerialNumber>0181034142</SerialNumber>
                                                                                                                                       - <RegisterConfiguration>
- <Register>
                                                                                                                                                                           egister / CARegisterID > 007 </RegisterID > < NetworkTariffCode effectiveDate="2008-04-23" > TOUS </ NetworkTariffCode >
```

```
</Register>
                                     - <Register>
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 5
                                        </Register>
                                       <Register>
<RegisterID>020</RegisterID>
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                                     - <Register>
                                          <RegisterID>030</RegisterID>
<NetworkTariffCode effectiveDate="2008-04-23">TOUS</NetworkTariffCode>
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                                     - <Register>
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</WAMeter>
</MeterRegister>
20
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</NMIStandingDataUpdateNotification>
                  </Transaction>
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</ase:aseXML>
25
```

## Step 2 - Sample XML -Full SDU triggered by change in standing data

```
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  http://www.westernpower.com.au/aseXML/schemas/r17/WA:r2.00/aseXML_r17_WA_r2.00.xsd">
30
             35
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                    <Market>WAELEC</Market>

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<ChildEmbeddedNetworkIdentifier xsi:nil="true"/>
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                                            </Street>
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                                   <Voltage>LV</Voltage>
<PropertyType>Domestic</PropertyType>
```



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</RoleAssignment>
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                                                                                                         </RoleAssignment>
                                                                                     </RoleAssignments>
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                                                                                                  _ <DataStream>
                                                                                                                    ataStream>
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                                                                                                                    atastream>

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ProfileName>
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DataStreamType>Consumption
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/ProfileName >
<AveragedDailyLoad > 0
/AveragedDailyLoad >
<DataStreamType > Consumption 
/DataStreamType > Consumptio
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                                                                                                          </DataStream>
                                                                                              </DataStreams>
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                                                                                                                     AMeter>
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*Vise effectiveDate="2006-08-08">REVENUE</Vise>
*Vise effectiveDate="2006-08-08">REVENUE</Vise effectiveDate="2006-08-08">REVENUE</V
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                                                                                                                     <Model>E101</Model>
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                                                                                                                     <TransformerType xsi:nil="true" />
<TransformerRatio xsi:nil="true" />
<Constant xsi:nil="true" />
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                                                                                                                     <LastTestDate xsi:nil="true" />
<TestResultAccuracy xsi:nil="true" />

<
75
```



```
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                                                                                 Containment of the containment o
    5
                                                                                 <Program xsi:nil="true" />
<AdditionalSiteInformation xsi:nil="true" />
                                                                                 <EstimationInstructions xsi:nil="true" />
                                                                                 <UserAccessRights xsi:nil="true" />
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_ <Register>
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<Status effectiveDate = "2008-04-23" > C </Status >
40
                                                                                          <DirectionIndicator>Export</DirectionIndicator>
</Register>
                                                                                    NetworkTariffCode effectiveDate="2008-04-23">TOUS</NetworkTariffCode>
UnitOfMeasure>KWH</UnitOfMeasure>
<TimeOfDay>HISHLDR
(TimeOfDay>
45
                                                                                                  <Multiplier>1</Multiplier>
                                                                                                  <DialFormat>6.0</DialFormat>
50
                                                                                                  <Suffix>41</Suffix>
                                                                                                 <Suffix=12*/Suffix=2
<ControlledLoad>No*/ControlledLoad>
<ConsumptionType>Cumulative</ConsumptionType>
<Status effectiveDate="2008-04-23">C</Status>
<DirectionIndicator>Export</DirectionIndicator>
55
                                                                                          </Register>
                                                                                    60
                                                                                                  <Multiplier>1</Multiplier>
<DialFormat>6.0</DialFormat>
                                                                                                  <Suffix>51</Suffix>
                                                                                                  <ControlledLoad>No</ControlledLoad>
65
                                                                                                  <ConsumptionType>Cumulative</ConsumptionType>
                                                                                                  <Status effectiveDate="2008-04-23">C</Status
<DirectionIndicator>Export</DirectionIndicator>
                                                                                         </Register>
                                                                         </RegisterConfiguration>
</WAMeter>
70
                                                           </MeterRegister>
</SingleNMIStandingData>
                                                  </NMIStandingDataUpdateNotification>
                                         </Transaction>
75
                                  </Transactions>
                         </ase:aseXML>
```



## 3.9.5 Related Transactions

# 3.9.5.1 Preceding Transactions

This transaction is preceded by a Meter Reconfiguration Type Service Order (Sub Type – Change Tariff).

# 3.9.5.2 Subsequent Transactions

None.



## 3.10Meter Reconfiguration

### 3.10.1 Overview

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The Meter Reconfiguration business process reflects the situation where an existing meter is reconfigured in the field in order for it to perform a different task. While it is initiated through the Service Order process, the Meter Reconfiguration process is characterised by a high degree of manual intervention and, as a result, there will be variations in the sequence of standing data that is published to the market.

In the example provided in this section, a meter is reconfigured from a basic configuration with only one register (007 – Anytime) to a two register interval meter (Register 01 – kwh, Register 02 – kvarh). As a part of the reconfiguration, the meter location is changed and a meter reading comment is made to this effect – resulting in two Partial SDUs.

The NMI starts with one meter and one register, and upon completion of the meter reconfiguration it has the same meter but two new registers. While the end result is that the redundant register is 'R' Removed and two new registers are created and made 'C' Current, the visibility of these changes to the market is managed by the "Active, but not sent to market" functionality (see section 3.9.1 above) rather than solely by setting the registers to 'C' Current or 'R' Removed. Therefore the sequence of manual updates will impact on the Partial SDUs published to market. The net effect of this is that when registers become visible (or otherwise) to the market through this process may not be consistent –Partial SDUs may or may not be published as might otherwise be expected.

In the example provided, the 'Anytime' register (007) is made not visible to the market and the two registers (01 and 02) are made visible in an off-market process. Thereafter, changes are made to the standing data of the 'new' registers at the meter prompting the publication of the standing data. Finally, a correction is made to the start date of one of the registers.

As a final point to note in respect of the example provided, some of the Partial SDU notifications published to the market are system-defined 'defaults', which are then overwritten with values supplied by the network operator. Specifically, these transactions are:

- a) Step 7 the system default that is then overwritten by Step 11.
- b) Step 8 the system default that is then overwritten by Step 10.

Each of these steps is reflected in SDU notifications that may be some minutes apart and, consequently, could fall either side of a standing data period. In such a case, Full SDUs could be sent after steps 7 and 8 but before steps 10 and 11 are published.

### 3.10.2 Business Rules

## Submission rules

There are none that are specific to this process.



## Validation

There are none that are specific to this process.

## Response

For both the Meter status and the Register status, this business process results in overlapping effective dates. For example if a Meter Reconfiguration takes place on 13/4/2008:

- the old register(s) will have a status of "R" from 14/4/2008, and
- the new register(s) will have a status of "C" from 13/4/2008.

## 3.10.3 Process Breakdown

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## 3.10.3.1 Process diagram

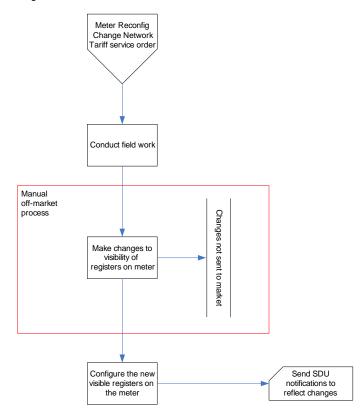
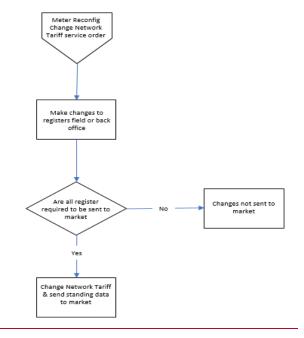


Figure 3029: NMI Standing Update notification process – Meter Reconfiguration



## 3.10.3.1b Process diagram

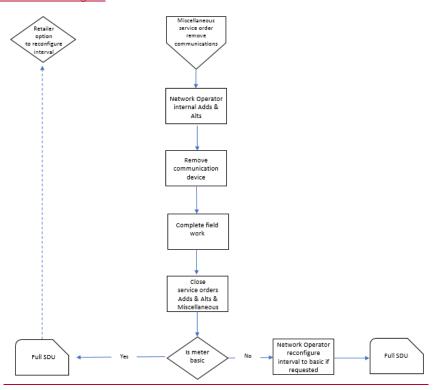


Figure 29a AMI Remove Communication Device via Reconfigure

3.10.3.1c Process diagram

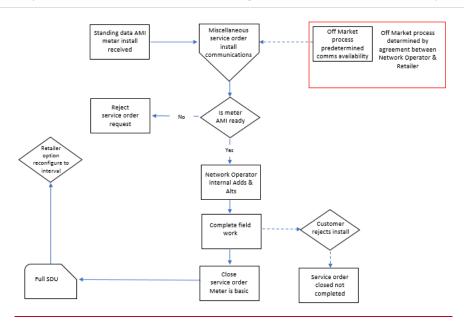


Figure 29a AMI Remove Communication Device via Reconfigure

### 3.10.3.2 Transactional Diagram

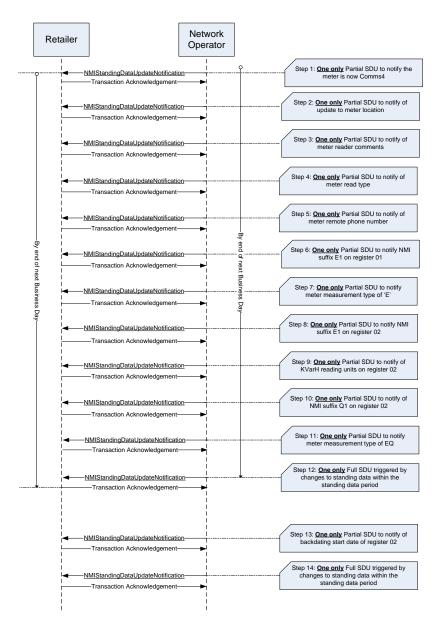


Figure  $\underline{\textbf{3130}}$ : Transaction diagram – Meter Reconfiguration



## 3.10.3.3 Timing Requirements

Transaction	Transaction Group	Version	Sender	Receiver	Timing
NMIStandingDataUpdate Notification	NMID	r9	Network Operator	Current Retailer	Before End of Day on next business day following the change being recorded by the network operator
Transaction Acknowledgement	NMID	r17	Current retailer	Network operator	By end of next Business Day

## 5 3.10.4 Transactions

10

# 3.10.4.1 NMIStandingDataUpdateNotification

# $Step\ 1-Partial\ SDU\ -\ Define\ meter\ as\ Interval\ Comms4$

Transaction Definition	NMIStandingDataUpdateNotification
Trigger	Network Operator updates meter Installation Type Code.
Pre-conditions	A NMI is assigned to a current retailer.
Post-conditions	The retailer is able to update their system on the basis of the information provided by the network operator.
Transaction acknowledgement-specific event codes	Refer to Appendix A

# Step 2 – Partial SDU - Update meter location

Transaction Definition	NMIStandingDataUpdateNotification
Trigger	Network Operator updates meter Location field.
Pre-conditions	A NMI is assigned to a current retailer.
Post-conditions	The retailer is able to update their system on the basis of

	the information provided by the network operator.
Transaction acknowledgement-specific event codes	Refer to Appendix A

# $Step\ 3-Partial\ SDU\ -\ Define\ meter\ reader\ comments$

Transaction Definition	NMIStandingDataUpdateNotification
Trigger	Network Operator updates meter Additional Site Information.
Pre-conditions	A NMI is assigned to a current retailer.
Post-conditions	The retailer is able to update their system on the basis of the information provided by the network operator.
Transaction acknowledgement-specific event codes	Refer to Appendix A

# 5 Step 4 – Partial SDU - Define meter read type

Transaction Definition	NMIStandingDataUpdateNotification
Trigger	Network Operator updates Meter Read Type Code.
Pre-conditions	A NMI is assigned to a current retailer.
Post-conditions	The retailer is able to update their system on the basis of the information provided by the network operator.
Transaction acknowledgement-specific event codes	Refer to Appendix A

# $Step\ 5-Partial\ SDU\ -\ Define\ meter\ remote\ phone\ number$

Transaction Definition	NMIStandingDataUpdateNotification
Trigger	Network Operator updates meter Remote Phone Number.
Pre-conditions	A NMI is assigned to a current retailer.



Post-conditions	The retailer is able to update their system on the basis of the information provided by the network operator.
Transaction acknowledgement-specific event codes	Refer to Appendix A

# Step 6 – Partial SDU - Define NMI suffix E1 on register 01 $\,$

Transaction Definition	NMIStandingDataUpdateNotification
Trigger	Network Operator defines NMI suffix for register.
Pre-conditions	A NMI is assigned to a current retailer.
Post-conditions	The retailer is able to update their system on the basis of the information provided by the network operator.
Transaction acknowledgement-specific event codes	Refer to Appendix A

# 5~ Step 7 – Partial SDU - Define meter measurement type to E

The network operator's system creates (and publishes) the default value that is overwritten by step 11.

Transaction Definition	NMIStandingDataUpdateNotification
Trigger	Network Operator updates meter Measurement Type to 'E'
Pre-conditions	A NMI is assigned to a current retailer.
Post-conditions	The retailer is able to update their system on the basis of the information provided by the network operator.
Transaction acknowledgement-specific event codes	Refer to Appendix A

# Step 8 – Partial SDU - Define NMI suffix E1 on register 02 $\,$

The network operator's system creates (and publishes) the default value that is overwritten by step 10.

Transaction Definition	NMIStandingDataUpdateNotification
Trigger	Network Operator defines NMI suffix for register.
Pre-conditions	A NMI is assigned to a current retailer.
Post-conditions	The retailer is able to update their system on the basis of the information provided by the network operator.
Transaction acknowledgement-specific event codes	Refer to Appendix A

# 5 Step 9 – Partial SDU - Define UOM for register 02 as kvarh

Transaction Definition	NMIStandingDataUpdateNotification
Trigger	Network Operator defines the UOM for register 02.
Pre-conditions	A NMI is assigned to a current retailer.
Post-conditions	The retailer is able to update their system on the basis of the information provided by the network operator.
Transaction acknowledgement-specific event codes	Refer to Appendix A

# $Step\ 10-Partial\ SDU-Define\ NMI\ suffix\ Q1\ on\ register\ 02$

Transaction Definition	NMIStandingDataUpdateNotification
Trigger	Network Operator NMI suffix for register.
Pre-conditions	A NMI is assigned to a current retailer.
Post-conditions	The retailer is able to update their system on the basis of the information provided by the network operator.
Transaction acknowledgement-specific event codes	Refer to Appendix A

## Step 11 – Partial SDU - Update meter measurement type to EQ

Transaction Definition	NMIStandingDataUpdateNotification
Trigger	Network Operator defines Meter Measurement Type as EQ.
Pre-conditions	A NMI is assigned to a current retailer.
Post-conditions	The retailer is able to update their system on the basis of the information provided by the network operator.
Transaction acknowledgement-specific event codes	Refer to Appendix A

# **Step 12 – Full SDU (triggered by previous Partial SDUs)**

Transaction Definition

NMIStandingDataUpdateNotification

Standing data changes made within previous standing data period.

Pre-conditions

A NMI is assigned to a current retailer.

Post-conditions

The retailer is able to update their system on the basis of the information provided by the network operator.

Transaction acknowledgement-specific event codes

# Step 13 – Partial SDU - Correct the start date for register 02

Transaction Definition	NMIStandingDataUpdateNotification
Trigger	Network operator updates the register status effective date.
Pre-conditions	A NMI is assigned to a current retailer.
Post-conditions	The retailer is able to update their system on the basis of the information provided by the network operator.
Transaction acknowledgement-specific event codes	Refer to Appendix A

## Step $14 - Full\ SDU$ - Triggered by previous partial

Transaction Definition	NMIStandingDataUpdateNotification
Trigger	Standing data changes made within previous standing data period.
Pre-conditions	A NMI is assigned to a current retailer.
Post-conditions	The retailer is able to update their system on the basis of the information provided by the network operator.
Transaction acknowledgement-specific event codes	Refer to Appendix A

## 5 Transaction Data Elements

The attributes of the NMIStandingDataUpdateNotification are defined in Appendix C.

## **Transaction Schema Definition**

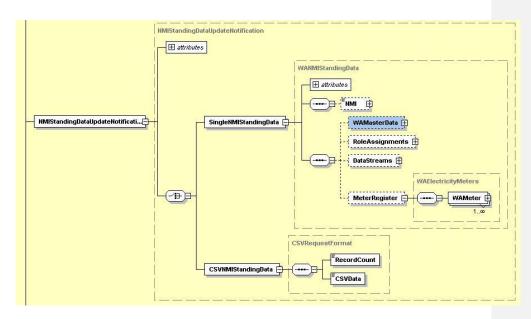


Figure  $\underline{\textbf{3234}}$ : NMI Standing Data Update notification schema definition



65

### Step 1 - Sample XML - Partial SDU - Define meter as Interval Comms4

```
<?xml version="1.0" encoding="ISO-8859-1" ?>
  <ase:aseXML xmlns:ase="urn:aseXML:r17:WA:r2.00" xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
  xsi:schemaLocation="urn:aseXML:r17:WA:r2.00</pre>
 5
              http://www.westernpower.com.au/aseXML/schemas/r17/WA:r2.00/aseXML_r17_WA_r2.00.xsd">
             <Header>
  <From description="Western Power Networks">WPNTWRKS</From>
10
                <To description="Synergy Energy">WPRTL</To>
<MessageID>WPNTWRKSMSG-14612495</MessageID>
<MessageDate>2008-04-17T12:51:55+08:00</MessageDate>
                <TransactionGroup>NMID</TransactionGroup>
<Priority>Medium</Priority>
15
             <Market>WAELEC</Market>
</Header>
           - <Transactions>
             20
                    - <SingleNMIStandingData>
                          <NMI>8001014335</NMI>
                       25
                                <InstallationTypeCode effectiveDate="2008-04-13">COMMS4</InstallationTypeCode>
                             </WAMeter>
                          </MeterRegister>
                   </SingleNMIStandingData>
</NMIStandingDataUpdateNotification>
30
                </Transaction>
             </Transactions>
          </ase:aseXML>
```

## Step 2 - Sample XML - Partial SDU - Update meter location

```
<?xml version="1.0" encoding="ISO-8859-1" ?>
  <ase:aseXML xmlns:ase="urn:aseXML:r17:WA:r2.00
xsi:schemaLocation="urn:aseXML:r17:WA:r2.00</pre>
                                                                                                                                                                                XML:r17:WA:r2.00" xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
                                                     http://www.westernpower.com.au/aseXML/schemas/r17/WA:r2.00/aseXML_r17_WA_r2.00.xsd">
40
                                                           eader >
<From description="Western Power Networks">WPNTWRKS</From>
<To description="Synergy Energy">WPRTL</To>
<MessageID>WPNTWRKSMSG-14612501</MessageID>
                                                            <MessageDate>2008-04-17T12:51:56+08:00</messageDate>
<TransactionGroup>MMID</TransactionGroup>
<Priority>Medium</Priority>
45
                                                            <Market>WAELEC</Market>
                                                  </Header>
                                         - <Transactions>
                                                   ~ <a href="critical color: blue;"> <a href="critical color: b
50
                                                                          - <SingleNMIStandingData>
<NMI>8001014335</NMI>
                                                                                       _ <MeterRegister>
_ <WAMeter>
55
                                                                                                                     <SerialNumber>0136004480</SerialNumber>
                                                                                                                       <Location>Box On Pole</Location>
                                                                                                             </WAMeter>
                                                                                               </MeterRegister>
60
                                                                       </singleNMIStandingData>
</NMIStandingDataUpdateNotification>
                                                 </Transaction>
                                     </ase:aseXML>
```

## Step 3 - Sample XML - Partial SDU - Define meter reader comments

```
<?xml version="1.0" encoding="ISO-8859-1" ?>
 5
             <ase:aseXML xmlns:ase="urn:aseXML:r17:WA:r2.00" xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
xsi:schemaLocation="urn:aseXML:r17:WA:r2.00</pre>
               http://www.westernpower.com.au/aseXML/schemas/r17/WA:r2.00/aseXML_r17_WA_r2.00.xsd">
              <Header>
<From description="Western Power Networks">WPNTWRKS</From>
10
                 <To description="Synergy Energy">WPRTL</To>
<MessageID>WPNTWRKSMSG-14612506</MessageID>
<MessageDate>2008-04-17T12:51:57+08:00</MessageDate>
                 <TransactionGroup>NMID</TransactionGroup>
<Priority>Medium</Priority>
15
              <Market>WAELEC</Market>
</Header>
           _ <Transactions>
               <Transaction transactionID="WPNTWRKS-0000a-19968450" transactionDate="2008-04-17T12:51:57+08:00">
                  - <NMIStandingDataUpdateNotification version="r9"</p>
20
                     - <SingleNMIStandingData>
                           <NMI>8001014335</NMI>
                         - <MeterRegister>
                           25
                                  <AdditionalSiteInformation>BOP.</AdditionalSiteInformation>
                              </WAMeter>
                           </MeterRegister>
                     </SingleNMIStandingData>
</NMIStandingDataUpdateNotification>
30
                 </Transaction>
             </Transactions>
          </ase:aseXML>
```

## 35 Step 4 - Sample XML - Partial SDU - Define meter read type

```
xsi:schemaLocation="urn:aseXML:r17:WA:r2.00
http://www.westernpower.com.au/aseXML/schemas/r17/WA:r2.00/aseXML_r17_WA_r2.00.xsd">
40
                    |leader>

<from description="Western Power Networks">WPNTWRKS</from>

<fro description="Synergy Energy">WPRTL</fro>

<messageID>WPNTWRKSMSG-14612542</messageID>

<messageID>WPNTWRKSMSG-14612542</messageID>

<messageDate>2008-04-17T12:52:34+08:00</messageDate>

<fraransactionGroup>MRID</frarasactionGroup>

<market>WAELEC</market>

Warket>WAELEC</market>

45
                </Header>
50
                  <Transaction transactionID="WPNTWRKS-0000a-19968503" transactionDate="2008-04-17T12:52:34+08:00">
                     - <NMIStandingDataUpdateNotification version="r9"
- <SingleNMIStandingData>
                                <NMI>8001014335</NMI>
                             - <WAMeter>
55
                                        <SerialNumber>0136004480</SerialNumber>
                                         <ReadTypeCode>RT1</ReadTypeCode>
                                    </WAMeter>
60
                                 </MeterRegister>
                        </singleNMIStandingData>
</NMIStandingDataUpdateNotification>
                    </Transaction>
                </Transactions>
65
            </ase:aseXML>
```

## Step 5 - Sample XML - Partial SDU - Define meter remote phone number

```
5
               xsi:schemalocation="urm:aseXML:r17:WA:r2.00
http://www.westernpower.com.au/aseXML/schemas/r17/WA:r2.00/aseXML_r17_WA_r2.00.xsd">
10
                 <From description="Western Power Networks">WPNTWRKS</From>
<To description="Synergy Energy">WPRTL</To>
<massageID>WPNTWRKSMSG-14612543</massageID>
                 <MessageDate>2008-04-17T12:52:35+08:00</messageDate>
<TransactionGroup>NMID</TransactionGroup>
15
                 <Priority>Medium</priority>
<Market>WAELEC</Market>
             </Header>
           - <Transactions>
               - <Transaction transactionID="WPNTWRKS-0000a-19968505" transactionDate="2008-04-17T12:52:35+08:00">
20
                  - <NMIStandingDataUpdateNotification version="r9">
- <SingleNMIStandingData>
                           <NMI>8001014335</NMI>
                         - <MeterRegister>
- <WAMeter>
25
                                  <SerialNumber>0136004480</SerialNumber><RemotePhoneNumber>0488126226
                               </WAMeter>
                         </MeterRegister>
</SingleNMIStandingData>
30
                     </NMIStandingDataUpdateNotification>
                  </Transaction>
              </Transactions>
           </ase:aseXML>
```

## 35 Step 6 - Sample XML - Partial SDU - Define NMI suffix E1 on register 01

```
<?xml version="1.0" encoding="ISO-8859-1" ?>
  <ase:aseXML xmlns:ase="urn:aseXML:r17:WA:r2.00" xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
  xsi:schemaLocation="urn:aseXML:r17:WA:r2.00
  http://www.westernpower.com.au/aseXML/schemas/r17/WA:r2.00/aseXML_r17_WA_r2.00.xsd">
40
                     <From description="Western Power Networks">WPNTWRKS</From>
<To description="Synergy Energy">WPRTL</To>
<MessageID>WPNTWRKSMSG-14612584</MessageID>
                     <MessageDate>2008-04-17T12:53:25+08:00</messageDate>
<TransactionGroup>NMID</TransactionGroup>
45
                     <Priority>Medium</priority>
<Market>WAELEC
                 </Header>
              - <Transactions>
50
                   - <NMIStandingDataUpdateNotification version="r9">
- <SingleNMIStandingData>
                                 <NMI>8001014335</NMI>
                               - <MeterRegister>
- <WAMeter>
55
                                       <SerialNumber> 0136004480 
- <RegisterConfiguration>
                                           - <Register>
60
                                                  <RegisterID>01</RegisterID>
<Suffix>E1</Suffix>
                                          </Register>
</RegisterConfiguration>
                                      </WAMeter>
65
                              </MeterRegister>
</SingleNMIStandingData>
                          </NMIStandingDataUpdateNotification>
                     </Transaction>
```

```
</ase:aseXML>
```

### 5 Step 7 - Sample XML - Partial SDU - Define meter measurement type to E

```
10
               <From description="Western Power Networks">WPNTWRKS</from>
               <To description="Synergy Energy">WPRTL</To>
<MessageID>WPNTWRKSMSG-14612585</MessageID>
15
               <MessageDate>2008-04-17T12:53:33+08:00</messageDate>
<TransactionGroup>NMID</TransactionGroup>
               <Priority>Medium</Priority>
               <Market>WAELEC</Market>
            </Header>
20
          - <Transactions>
             <Transaction transactionID="WPNTWRKS-0000a-19968565" transactionDate="2008-04-17T12:53:33+08:00">
                - <NMIStandingDataUpdateNotification version="r9":</p>
                  - <SingleNMIStandingData>
<NMI>8001014335
25
                      - <MeterRegister>
- <WAMeter>
                             <SerialNumber>0136004480</SerialNumber>
                           <MeasurementType>E</MeasurementType></WAMeter>
                      </MeterRegister>
</SingleNMIStandingData>
30
                  </NMIStandingDataUpdateNotification>
               </Transaction>
            </Transactions>
35
         </ase:aseXML>
```

## Step 8 - Sample XML - Partial SDU - Define NMI suffix E1 on register 02

```
40
                                      seXML:r17:WA:r2.00" xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
             <From description="Western Power Networks">WPNTWRKS</from>
             <To description="Synergy Energy">WPRTL</To>
<MessageID>WPNTWRKSMSG-14612599</MessageID>
45
             <MessageDate>2008-04-17T12:53:57+08:00</MessageDate>
<TransactionGroup>NMID</TransactionGroup>
             <Priority>Medium</Priority>
50
             <Market>WAELEC</Market>
           </Header>
         - <NMIStandingDataUpdateNotification version="r9":</p>
55
                - <SingleNMIStandingData>
<NMI>8001014335
                   - <MeterRegister>
- <WAMeter>
                          <SerialNumber>0136004480</SerialNumber>
                         - <RegisterConfiguration</p>
- <Register>
60
                               <RegisterID>02</RegisterID>
<Suffix>E1
                             </Register>
                        </RegisterConfiguration>
</WAMeter>
65
                     </MeterRegister>
                   </SingleNMIStandingData>
```

```
</MMIStandingDataUpdateNotification>
</Transaction>
</Transactions>
</rase:aseXML>
```

## Step 9 - Sample XML - Partial SDU - Define UOM for register 02 as kvarh

```
<?xml version="1.0" encoding="ISO-8859-1" ?>
  <ase:aseXML xmlns:ase="urn:aseXML:r17:WA:r2.00" xmlns:xsi="http://www.w3.org/2001/XMLSchettp://www.westernpower.com.au/aseXML/schemas/r17/WA:r2.00/aseXML_r17_WA_r2.00.xsd">
                                                                                                            xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
10
                        eader>

<pre
15
                        <Priority>Medium</Priority>
<Market>WAELEC</Market>
20
                   </Header>
                 - <Transactions>
                     <Transaction transactionID="WPNTWRKS-0000a-19968655" transactionDate="2008-04-17T12:54:17+08:00">
                          _ <NMIStandingDataUpdateNotification version="r9"
_ <SingleNMIStandingData>
25
                                       <NMI>8001014335</NMI>
                                    - <MeterRegister>
- <WAMeter>
                                                 <SerialNumber>0136004480</SerialNumber>
                                              - <RegisterConfiguration</p>
30
                                                   - <Register>
     <RegisterID>02</RegisterID>
     <UnitOfMeasure>KVARH</UnitOfMeasure>
                                                   </Register>
</RegisterConfiguration>
35
                                             </WAMeter>
                                        </MeterRegister>
                                    </SingleNMIStandingData>
                              </NMIStandingDataUpdateNotification>
                         </Transaction>
40
                    </Transactions>
               </ase:aseXML>
```

# Step 10 - Sample XML - Partial SDU - Define NMI suffix Q1 on register 02 $\,$

```
45
50
             <MessageDate>2008-04-17T12:54:29+08:00</messageDate>
<TransactionGroup>NMID</TransactionGroup>
             <Priority>Medium</priority>
<Market>WAELEC</Market>
55
          </Header>
            - <Transaction transactionID="WPNTWRKS-0000a-19968685" transactionDate="2008-04-17T12:54:29+08:00">
60
              _ <NMIStandingDataUpdateNotification version="r9"
_ <SingleNMIStandingData>
                     <NMI>8001014335</NMI>
                   - <MeterRegister>
- <WAMeter>
65
                          <SerialNumber>0136004480</SerialNumber>
                        - <RegisterConfiguration>
                           - <Register>
                               <RegisterID>02</RegisterID>
<Suffix>Q1</Suffix>
70
                             </Register>
```

### Step 11 - Sample XML - Partial SDU - Update meter measurement type to EQ

```
ase:aseXML xmins:ase= uritaseAmt.:r17:Wai.2.00 xiiiii...as= intp://www.isy.echam.location="uritaseXML:r17:WA:r2.00" http://www.westernpower.com.au/aseXML/schemas/r17/WA:r2.00/aseXML_r17_WA_r2.00.xsd">
15
                <From description="Western Power Networks">WPNTWRKS</from>
                <To description="Synergy Energy">WPRTL</To>
<MessageID>WPNTWRKSMSG-14612675</MessageID>
20
                <MessageDate>2008-04-17T12:54:32+08:00
                <TransactionGroup>NMID</TransactionGroup><Priority>Medium</Priority>
                <Market>WAELEC</Market>
25
             </Header>
          - <Transactions</p>
              <Transaction transactionID="WPNTWRKS-0000a-19968693" transactionDate="2008-04-17T12:54:32+08:00">
                _ <NMIStandingDataUpdateNotification version="r9"
_ <SingleNMIStandingData>
30
                         <NMI>8001014335</NMI>
                      _ <MeterRegister>
_ <WAMeter>
                               <SerialNumber>0136004480</SerialNumber>
                                <MeasurementType>EQ</MeasurementType>
35
                            </WAMeter>
                          </MeterRegister>
                      </SingleNMIStandingData>
                   </NMIStandingDataUpdateNotification>
                </Transaction>
40
             </Transactions>
          </ase:aseXML>
```

### Step 12 - Sample XML - Full SDU (triggered by previous Partial SDUs)

```
45
50
                    <From description="Western Power Networks">WPNTWRKS</from>
                    <To description="Synergy Energy">WPRTL</To>
<MessageID>WPNTWRKSMSG-14613093</MessageID>
                     <MessageDate>2008-04-17T13:02:58+08:00
                    <TransactionGroup>NMID</TransactionGroup>
<Priority>Medium</Priority>
<Market>WAELEC</Market>
55
                </Header>
                 <Transaction transactionID="WPNTWRKS-0000a-19969289" transactionDate="2008-04-17T13:02:58+08:00">
                     _ <NMIStandingDataUpdateNotification version="r9'
_ <SingleNMIStandingData>
60
                             <NMI checksum="3">8001014335</NMI>
_ <WAMasterData>
                                    <lurisdictionCode>WA</lurisdictionCode>
                                    <JursdictionCode>WA</JursdictionCode>
<NMIClassificationCode effectiveDate="1989-09-21">>5.7KW</NMIClassificationCode>
<TransmissionNodeIdentifier effectiveDate="1989-09-21">WBEL</TransmissionNodeIdentifier>
<DistributionLossFactorCode effectiveDate="1989-09-21">QRT2</DistributionLossFactorCode>
<ParentEmbeddedNetworkIdentifier xsi:nil="true"/>
65
```

```
<ChildEmbeddedNetworkIdentifier xsi:nil="true" />
                                       <WAStructuredAddress>
                                          5
                                          </House>
                                                 <StreetName>GREAT EASTERN</StreetName>
                                                 <StreetType>HWY</StreetType>
10
                                              </Street>
                                         </WAStructuredAddress>
<SuburbOrPlaceOrLocality>Ascot</SuburbOrPlaceOrLocality>
<StateOrTerritory>WA</StateOrTerritory>
                                          <PostCode>6104</PostCode>
15
                                     </Address>
                                     </
                                     <Voltage>LV</Voltage>
                                     <PropertyType>Commercial<PoleNumber xsi:nil="true" />
20
                              </WAMasterData>
- <RoleAssignments>
                                  - <RoleAssignment effectiveDate="1989-09-21">
                                         <Party description="Synergy Energy">WPRTL</Party>
<Role>LR</Role>
25
                                  </RoleAssignment>
_ <RoleAssignment effectiveDate="1989-09-21">
                                         <Party description="Western Power Networks">WPNTWRKS</Party>
                                         <Role>LNSP</Role>
30
                                     </RoleAssignment>
                                  - <RoleAssignment effectiveDate="1989-09-21">
  <Party description="Synergy Energy">WPRTL</Party>
  <Role>ROLR</Role>

<p
35
                                         <Party description="Synergy Energy">WPRTL</Party><Role>RP</Role>
                                  40
                                     <Role>FRMP</Role>
</RoleAssignment>
                              </RoleAssignments>
_ <DataStreams>
45
                                  _ <DataStream>
                                         <Suffix>E1</Suffix>
<ProfileName>NOPROF</ProfileName>
                                         <AveragedDailyLoad>0</AveragedDailyLoad>
<DataStreamType>Interval</DataStreamType>
50
                                         <Status effectiveDate="2008-04-13">A</Status>
                                  </DataStream>
_ <DataStream>
                                         <Suffix>Q1</Suffix>
<ProfileName>NSLP</ProfileName>
<AveragedDailyLoad>0</AveragedDailyLoad>
55
                                         <DataStreamType>Interval<Status effectiveDate="2008-04-16">A/Status>
                                     </DataStream>
                              </DataStreams>
_ <MeterRegister>
60
                                  _ <WAMeter>
                                         /AMeter>

<SerialNumber>0136004480</SerialNumber>

<NextScheduledReadDate>2008-05-08</NextScheduledReadDate>
                                         <Location>Box On Pole</Location>
<Hazard xsi:nil="true" />
65
                                         InstallationTypeCode effectiveDate="2008-04-13">COMMS4</InstallationTypeCode>
Route effectiveDate="2006-02-24">014MEB01
Route effectiveDate="2006-02-24">REVENUE

                                         <Point>01</Point>
70
                                         <Manufacturer xsi:nil="true" />
                                         <Model>E308</Model>
<TransformerLocation xsi:nil="true" />
                                         <TransformerType xsi:nil="true" />
<TransformerRatio xsi:nil="true" />
<Constant xsi:nil="true" />
75
                                         <LastTestDate>2006-03-17</LastTestDate>
<TestResultAccuracy xsi:nil="true" />
```



```
<TestResultNotes xsi:nil="true" /
                                                                                                          <!restresuluture xst.iii= "true />
/TestPerformedBy xst.iii= "true"/>
<MeasurementType>EQ</MeasurementType>
<ReadTypeCode>RT1</ReadTypeCode>
<RemotePhoneNumber>0488126226</RemotePhoneNumber>
     5
                                                                                                           <CommunicationsEquipmentType xsi:nil="true" />
<CommunicationsProtocol xsi:nil="true" />
                                                                                                           <DataConversion xsi:nil="true" />
<DataValidations xsi:nil="true" />
<Status effectiveDate="2006-02-24">C</Status>
10
                                                                                                           <Program xsi:nil="true" />
<AdditionalSiteInformation>BOP.</AdditionalSiteInformation>
                                                                                                           <EstimationInstructions xsi:nil="true" />
                                                                                                           <UserAccessRights xsi:nil="true" />
<Password xsi:nil="true" />
15
                                                                                                           <TestCalibrationProgram xsi:nil="true" />
<KeyCode> MKL</KeyCode>
<ReadingInstructions xsi:nil="true" />
                                                                                                           <CustomerFundedMeter>No</CustomerFundedMeter>
<MeterRequirementForTransfer xsi:nil="true" />
20
                                                                                                    - <RegisterConfiguration>
                                                                                                               - <Register>
                                                                                                                                 <RegisterID>01</RegisterID>
                                                                                                                                 NetworkTariffCode effectiveDate="2006-02-24">AEB</NetworkTariffCode><UnitOfMeasure>KWH<UnitOfMeasure>
25
                                                                                                                                 <Multiplier>1</Multiplier>
<DialFormat>6.0</DialFormat>
<Suffix>E1</Suffix>
                                                                                                                                 <ControlledLoad>No</ControlledLoad>
                                                                                                                                 30
                                                                                                                      </Register>
                                                                                                               - <Register>
35
                                                                                                                                <RegisterID>02</RegisterID>
                                                                                                                                <NetworkTariffCode effectiveDate="2006-02-24">AEB</NetworkTariffCode>
<UnitOfMeasure>KVARH</UnitOfMeasure>
                                                                                                                                <Multiplier>1</Multiplier>
<DialFormat>6.0</DialFormat>
<Suffix>Q1</Suffix>
40
                                                                                                                                <Suffix \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \)
45
                                                                                                                      </Register>
                                                                                                 </RegisterConfiguration>
</WAMeter>
                                                                                      </MeterRegister>
                                                                            </SingleNMIStandingData>
50
                                                                 </NMIStandingDataUpdateNotification>
                                            </Transaction>
                                  </ase:aseXML>
```

### Step 13 - Sample XML - Partial SDU - Correct the start date for register 02

55



### Step 14 - Sample XML - Full SDU - Triggered by previous partial

```
<?xml version="1.0" encoding="ISO-8859-1" ?>
  <ase:aseXML xmlns:ase="urn:aseXML:r17:WA:r2.00" xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
  xsi:schemaLocation="urn:aseXML:r17:WA:r2.00" xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"</pre>
25
                   http://www.westernpower.com.au/aseXML/schemas/r17/WA:r2.00/aseXML_r17_WA_r2.00.xsd">
<header>
                      <From description="Western Power Networks">WPNTWRKS</From>
<To description="Synergy Energy">WPRTL</To>
<MessageID>WPNTWRKSMSG-14636972</MessageID>
30
                      <MessageDate>2008-04-18T09:07:52+08:00</MessageDate>
<TransactionGroup>NMID</TransactionGroup>
<Priority>Medium</Priority>
                  <Market>WAELEC</Market>
</Header>
35
               - <Transactions>
                   _ <\Transaction transactionID="WPNTWRKS-0000a-20005964" transactionDate="2008-04-18T09:07:52+08:00"> _ <\NMIStandingDataUpdateNotification version="r9">
                            40
                                 - <WAMasterData>
                                        <JurisdictionCode>WA</JurisdictionCode>
<NMIClassificationCode effectiveDate="1989-09-21">>5.7KW</NMIClassificationCode>
                                        TransmissionNodeIdentifier effectiveDate="1989-09-21">WBEL
TransmissionNodeIdentifier>
SistributionLossFactorCode
ParentEmbeddedNetworkIdentifier xsi:nil="true"/>
45
                                         <ChildEmbeddedNetworkIdentifier xsi:nil="true" />
                                     - <Address>
                                         <u>-</u> <WAStructuredAddress>
<u>-</u> <House>
50
                                                     <HouseNumber>172</HouseNumber>
                                              - <Street>
                                                     <StreetName>GREAT EASTERN</StreetName>
<StreetType>HWY</StreetType>
55
                                                  </Street>
                                             </WAStructuredAddress>
<SuburbOrPlaceOrLocality>Ascot</SuburbOrPlaceOrLocality>
                                             <StateOrTerritory>WA</StateOrTerritory>
<PostCode>6104</PostCode>
60
                                        </Address>
                                        <Status effectiveDate="1989-09-21">A</Status>
<DistanceFromSubstation effectiveDate="1989-09-21">4.217</DistanceFromSubstation>
                                        <Voltage>LV</Voltage>
<PropertyType>Commercial</PropertyType>
65
                                        <PoleNumber xsi:nil="true" />
                                 </WAMasterData>
- <RoleAssignments>
                                     - <RoleAssignment effectiveDate="1989-09-21">
     <Party description="Synergy Energy">WPRTL</Party>
70
                                             <Role>LR</Role>

</RoleAssignment>
_ <RoleAssignment effectiveDate="1989-09-21">
```



```
<Party description="Western Power Networks">WPNTWRKS</Party><Role>LNSP</Role>
                                                                                             </RoleAssignment>
                                                                                      = <RoleAssignment effectiveDate="1989-09-21">
    <Party description="Synergy Energy">WPRTL</Party>
     5
                                                                                                      <Role>ROLR</Role>
                                                                                              </RoleAssignment>
                                                                                      10
                                                                                                      <Role>RP</Role>
                                                                                      </RoleAssignment>

- <RoleAssignment effectiveDate="1989-09-21">
                                                                                                      <Party description="Synergy Energy">WPRTL</Party>
                                                                                                      <Role>FRMP</Role>
15
                                                                                             </RoleAssignment>
                                                                                  </RoleAssignments>
                                                                            - <DataStreams>
                                                                                     - <DataStream>
                                                                                                      <Suffix>E1</Suffix>
<ProfileName>NOPROF</ProfileName>
20
                                                                                                      <AveragedDailyLoad>0</AveragedDailyLoad>
<DataStreamType>Interval</DataStreamType:
                                                                                                      <Status effectiveDate="2008-04-13">A</Status>
                                                                                             </DataStream>
25
                                                                                      - <DataStream>
                                                                                                    varastream>

<Suffix>Q1
<Pre>

<
30
                                                                                            </DataStream>
                                                                                  </DataStreams>
                                                                           - <MeterRegister>
- <WAMeter>

<SerialNumber> 0136004480 

<
35
                                                                                                     **Coctool But of Pole** / Decaduli**
**Hazard xsi:nil="true" />
**InstallationTypeCode effectiveDate="2008-04-13">COMMS4</InstallationTypeCode>
**Route effectiveDate="2008-04-13">234DOW01</Route>
**Clse effectiveDate="2006-02-24">REVENUE</Use>
**Point>01
**Point>01
**Point>01
**Point>01
**Point>01
**Transful "Install of Points" | Transful of Points of Point>01
**Transful of Points o
40
                                                                                                      <Manufacturer xsi:nil="true" />
<Model>E308</Model>
<TransformerLocation xsi:nil="true" />
45
                                                                                                      <TransformerType xsi:nil="true" />
<TransformerRatio xsi:nil="true" />
                                                                                                       <Constant>.05</Constant>
                                                                                                    <Constant>.05/Constant>
<LastTestDate>2006-03-17/LastTestDate>
<TestResultAccuracy vsi:nil="true" />
<TestResultNotes vsi:nil="true" />
<TestPerformedBy vsi:nil="true" />
<MeasurementType> ED /MeasurementType>
<ReadTypeCode> RT1/ReadTypeCode>
<RemotePhoneNumber> 0488126226/RemotePhoneNumber>

<
50
55
                                                                                                     60
                                                                                                      <Program xsi:nil="true" />
<AdditionalSiteInformation>BOP.</AdditionalSiteInformation>
                                                                                                      <EstimationInstructions xsi:nil="true" />
                                                                                                      <UserAccessRights xsi:nil="true" />
<Password>11111111
65
                                                                                                      <TestCalibrationProgram xsi:nil="true" />
<KeyCode> MKL</KeyCode>
<ReadingInstructions xsi:nil="true" />
                                                                                                        <CustomerFundedMeter>No</CustomerFundedMeter>
70
                                                                                                       <MeterRequirementForTransfer xsi:nil="true" />
                                                                                               - <RegisterConfiguration>
- <Register>
                                                                                                                          <RegisterID>01</RegisterID>
<NetworkTariffCode effectiveDate="2006-02-24">AEB</NetworkTariffCode>
<UnitOfMeasure>KWH</UnitOfMeasure>
75
                                                                                                                          <Multiplier>1</Multiplier>
<DialFormat>6.0</DialFormat>
```



WA Electricity Market Build Pack

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```
July 20
```

#### 3.10.5 Related Transactions

30

3.10.5.1 Preceding Transactions

None.

35 3.10.5.2 Subsequent Transactions

None.



#### 3.11Abolish NMI

#### 3.11.1 Overview

5

10

15

The Abolish NMI business process is used by a current retailer to abolish supply for a given connection point. The process involves the removal of all meters at a given NMI and the decommissioning of that NMI, all of which are handled as a result of submitting the relevant service order (Service Order Type - Supply Abolishment). The Network Operator may also initiate an internal Supply Abolishment Service Order where a temporary supply meter has been removed. This will publish the same standing data transactions as a Retailer submitted request. Although referenced in this section, this document does not cover the submission of the relevant service order.

There is one final point to note in relation to the sequencing of transaction. As the registers and then the NMI are removed, the NMI status automatically changes to Deenergised because there are no Current meters at this NMI. A further step overrides this default NMI setting – changing its status to X – Extinct. As a consequence, a Partial SDU is sent out when the NMI status automatically changes from Active to De-energised (step 3). This is closely followed by a further Partial SDU that publishes the manual change in NMI status from De-energised to Extinct (step 4).

### 20 **3.11.2 Business Rules**

## Submission rules

There are none that are specific to this process.

### Validation

There are none that are specific to this process.

# Response

There are none that are specific to this process.

### 3.11.3 Process Breakdown

30 3.11.3.1 Process diagram



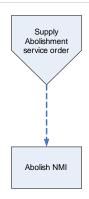


Figure  $\underline{\mathbf{3332}}$ : NMI Standing Update notification process – Abolish NMI

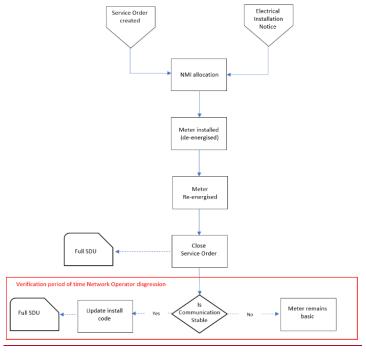


Figure 32a: AMI New Connection Process

# 3.11.3.2 Transactional Diagram

5



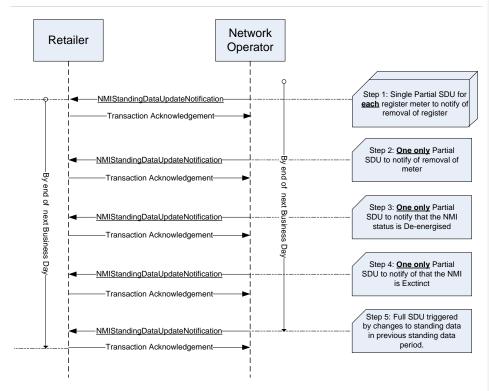


Figure 3433: Transaction diagram – Abolish NMI

# 3.11.3.3 Timing Requirements

5

Transaction	Transaction Group	Version	Sender	Receiver	Timing
NMIStandingDataUpdate Notification	NMID	r9	Network Operator	Current Retailer	Before End of Day on next business day following the change being recorded by the network operator
Transaction Acknowledgement	NMID	r17	Current retailer	Network operator	By end of next Business Day

# 3.11.4 Transactions



# $3.11.4.1\ NMI Standing Data Update Notification$

# Step 1 – Partial SDU to notify of Removal of each register

Transaction Definition	NMIStandingDataUpdateNotification
Trigger	Network Operator sets register status to 'R' Removed
Pre-conditions	A NMI is assigned to a current retailer.
Post-conditions	The retailer is able to update their system on the basis of the information provided by the network operator.
Transaction acknowledgement-specific event codes	Refer to Appendix A

5

# Step 2 – Partial SDU to notify of Removal of meter

Transaction Definition	NMIStandingDataUpdateNotification
Trigger	Network Operator sets meter status to 'R' Removed
Pre-conditions	A NMI is assigned to a current retailer.
Post-conditions	The retailer is able to update their system on the basis of the information provided by the network operator.
Transaction acknowledgement-specific event codes	Refer to Appendix A

10

15

## Step 3 – Partial SDU to notify of De-energisation of NMI

This SDU is created and published by the network operator's system that automatically makes a NMI De-energised when it has no Current meters associated with it. A further process is required to change this to Extinct (Step 4 is the output from this further process).

Transaction Definition	NMIStandingDataUpdateNotification

Trigger	Network Operator automatically sets NMI status to 'D' Deenergised.
Pre-conditions	A NMI is assigned to a current retailer.
Post-conditions	The retailer is able to update their system on the basis of the information provided by the network operator.
Transaction acknowledgement-specific event codes	Refer to Appendix A

# Step 4- Partial SDU to notify of NMI Extinction

Transaction Definition	NMIStandingDataUpdateNotification
Trigger	Network Operator updates NMI status to 'X' Extinct.
Pre-conditions	A NMI is assigned to a current retailer.
Post-conditions	The retailer is able to update their system on the basis of the information provided by the network operator.
Transaction acknowledgement-specific event codes	Refer to Appendix A

# Step 5 – Full SDU triggered by changes in standing data

Transaction Definition	NMIStandingDataUpdateNotification
Trigger	Full SDU issued in response to standing data changes in the previous standing data period.
Pre-conditions	A NMI is assigned to a current retailer.
Post-conditions	The retailer is able to update their system on the basis of the information provided by the network operator.
Transaction acknowledgement-specific event codes	Refer to Appendix A

10

### **Transaction Data Elements**

The attributes of the NMIStandingDataUpdateNotification are defined in Appendix C.

### **Transaction Schema Definition**

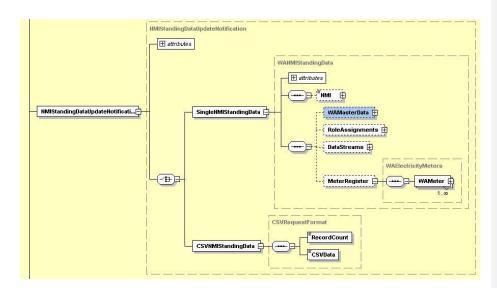


Figure  $\underline{\textbf{3534}}$ : NMI Standing Data Update notification schema definition

## Step 1 - Sample XML - Partial SDU caused by Removal of register



### Step 2 - Sample XML - Partial SDU caused by Removal of meter

```
<?xml version="1.0" encoding="ISO-8859-1" ?>
  <ase:aseXML xmlns:ase="urn:aseXML:r17:WA:r2.00" xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
  xsi:schemaLocation="urn:aseXML:r17:WA:r2.00" xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"</pre>
15
                http://www.westernpower.com.au/aseXML/schemas/r17/WA:r2.00/aseXML_r17_WA_r2.00.xsd">
                  <From description="Western Power Networks">WPNTWRKS</from>
20
                   <To description="Synergy Energy">WPRTL</To>
<MessageID>WPNTWRKSMSG-14724761</MessageID>
                   <MessageDate>2008-04-22T13:23:23+08:00</messageDate>
<TransactionGroup>NMID</TransactionGroup>
                   <Priority>Medium</Priority>
25
                   <Market>WAELEC</Market>
               </Header>
             - <Transactions>
                _ <Transaction transactionID="WPNTWRKS-0000a-20149091" transactionDate="2008-04-22T13:23:24+08:00">
                    - <NMIStandingDataUpdateNotification version="r9"</p>
30
                       - <SingleNMIStandingData>
<NMI>8002009629</NMI>
                           - <MeterRegister>
- <WAMeter>
                                     <SerialNumber>0350005479</SerialNumber>
                                  <Status effectiveDate="2008-04-16">R</Status>
35
                           </MeterRegister>
</SingleNMIStandingData>
                       </NMIStandingDataUpdateNotification>
               </Transaction>
40
           </ase:aseXML>
```

# 45 Step 3 - Sample XML - Partial SDU caused by automated NMI status change

```
<?xml version="1.0" encoding="ISO-8859-1" ?>
  <ase:aseXML xmlns:ase="urn:aseXML:r17:WA:r2.00" xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
  xsi:schemaLocation="urn:aseXML:r17:WA:r2.00</pre>
50
                 http://www.westernpower.com.au/aseXML/schemas/r17/WA:r2.00/aseXML_r17_WA_r2.00.xsd">
                   <From description="Western Power Networks">WPNTWRKS</From>
                   <To description="Synergy Energy">WPRTL</To>
<MessageID>WPNTWRKSMSG-14724762</MessageID>
<MessageDate>2008-04-22T13:23:25+08:00</MessageDate>
55
                   <TransactionGroup>NMID</TransactionGroup><Priority>Medium</Priority>
                   <Market>WAELEC</Market>
               </Header>
60
             - <Transactions
                 _ <Transaction transactionID="WPNTWRKS-0000a-20149093" transactionDate="2008-04-22T13:23:25+08:00">
                    - <NMIStandingDataUpdateNotification version="r9"</p>
                        - <SingleNMIStandingData>
                            <NMI>8002009629</NMI>
- <WAMasterData>
65
```

```
<
```

10 Step 4 - Sample XML - Partial SDU caused by manual NMI status change

```
<?xml version="1.0" encoding="ISO-8859-1" ?>
  <ase:aseXML xmlns:ase="urn:aseXML:r17:WA:r2.00" xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
  xsi:schemaLocation="urn:aseXML:r17:WA:r2.00</pre>
15
                                                  http://www.westernpower.com.au/aseXML/schemas/r17/WA:r2.00/aseXML_r17_WA_r2.00.xsd">
                                                         <From description="Western Power Networks">WPNTWRKS</from>
                                                         <To description="Synergy Energy">WPRTL</To>
<MessageID>WPNTWRKSMSG-14724767</MessageID>
                                                         <messageID > WFNTW MSSMSG-14724707 
/MessageDate > 2008-04-22T13:23:26+08:00 
/MessageDate > Constitution of the control of 
20
                                                         <Priority>Medium</Priority>
                                                          <Market>WAELEC</Market>
                                             </Header>
25
                                       - <Transactions>
- <TransactionID="WPNTWRKS-0000a-20149099" transactionDate="2008-04-22T13:23:26+08:00">
- <Transaction ID="WPNTWRKS-0000a-20149099" transactionDate="2008-04-22T13:23:26+08:00">
                                                           - <NMIStandingDataUpdateNotification version="r9"</p>
                                                                      - <SingleNMIStandingData>
<NMI>8002009629
30
                                                                                 </WAMasterData>
                                                                    </singleNMIStandingData>
</NMIStandingDataUpdateNotification>
                                              </Transaction>
35
                                   </ase:aseXML>
```

40 Step 5 - Sample XML – Full SDU caused by changes in standing data

```
<
45
                     http://www.westernpower.com.au/aseXML/schemas/r17/WA:r2.00/aseXML_r17_WA_r2.00.xsd">
                   <Header>
<From description="Western Power Networks">WPNTWRKS</From>
                        <To description="Synergy Energy">WPRTL</To>
<MessageID>WPNTWRKSMSG-14726224</MessageID>
<MessageDate>2008-04-22T14:01:07+08:00</MessageDate>
50
                        <TransactionGroup>NMID</TransactionGroup><Priority>Medium</Priority>
                        <Market>WAELEC</Market>
55
                - <Transactions>
                     _ <Transaction transactionID="WPNTWRKS-0000a-20150947" transactionDate="2008-04-22T14:01:07+08:00">

    Iransaction transactionID="WPNTWRKS-0000a-20"
    NMIStandingDataUpdateNotification version="r9"
    SingleNMIStandingData>

                                   <NMI checksum="2">8002009629</NMI>
_ <WAMasterData>
60
                                           <lurisdictionCode>WA</lurisdictionCode>
                                           <JurisdictionCode>WA</JurisdictionCode>
<MIClassificationCode>>5.7KW</MIClassificationCode>
<TransmissionNodeIdentifier effectiveDate="2007-09-02">WUNK</TransmissionNodeIdentifier>
<DistributionLossFactorCode effectiveDate="2007-10-10">WRT2</DistributionLossFactorCode>
<ParentEmbeddedNetworkIdentifier xsi:nil="true" />
65
```

```
<ChildEmbeddedNetworkIdentifier xsi:nil="true" />
                                    - <WAStructuredAddress>
                                       - <HouseNumber>6</HouseNumber>
 5
                                        </House>
_ <Lot>
                                              <LotNumber>252</LotNumber>
                                        </Lot>
_ <Street>
10
                                             <StreetName>HALIFAX</StreetName>
<StreetType>RD</StreetType>
                                          </Street>
                                       </WAStructuredAddress>
<SuburbOrPlaceOrLocality> Maylands</SuburbOrPlaceOrLocality>
15
                                       <StateOrTerritory>WA</StateOrTerritory>
<PostCode>6051</PostCode>
                                   </Address>
                                  </
20
                                   <PoleNumber xsi:nil="true" />

</WAMasterData>
</RoleAssignments>

25

</RoleAssignment>
_ <RoleAssignment effectiveDate="2007-09-02">
30
                                      <Party description="Western Power Networks">WPNTWRKS</Party><Role>LNSP</Role>
                                <Role>LRSP/Role>
</RoleAssignment>
= <RoleAssignment>
<Party xsi:nil="true" />
<Role>ROLR</Role>
</RoleAssignment>
35
                                - <RoleAssignment>
     <Party xsi:nil="true" />
     <Role>RP</Role>
40
                                </RoleAssignment>
_ <RoleAssignment effectiveDate="2007-09-02">
                                      <Party description="Synergy Energy">WPRTL</Party>
<Role>FRMP</Role>
45
                                   </RoleAssignment>
                            </RoleAssignments>
</SingleNMIStandingData>
                       </NMIStandingDataUpdateNotification>
                   </Transaction>
50
               </Transactions>
            </ase:aseXML>
```

### 3.11.5 Related Transactions

## 55 3.11.5.1 Preceding Transactions

The transactions associated with the Abolish NMI business process are preceded by a service order of type Supply Abolishment.

# 3.11.5.2 Subsequent Transactions

60 None.



# 3.12Change Other Details – Effective and non-Effective dated

#### 3.12.1 Overview

5

The Change Other Details business process is a miscellaneous collection of updates to NMI standing data. It does not reflect a common, real-life business activity however it serves to demonstrate the difference between Partial SDUs that are effective dated and Partial SDUs that are not.

The example provided involves the network operator making a number of changes to a given NMI, specifically:

- a) change of NMI class;
- b) change of TNI;
- c) change of network tariff;
- 15 d) change of meter location;
  - e) change of the register time of day; and
  - f) change of the register's NMI suffix.

#### 3.12.2 Business Rules

20

## **Submission rules**

There are none that are specific to this process.

### Validation

There are none that are specific to this process.

#### 25 Response

There are none that are specific to this process.

### 3.12.3 Process Breakdown

## 30 3.12.3.1 Process diagram

As this process can reflect any of a multiplicity of changes to the NMI standing data, a process diagram is not relevant.

# 3.12.3.2 Transactional Diagram

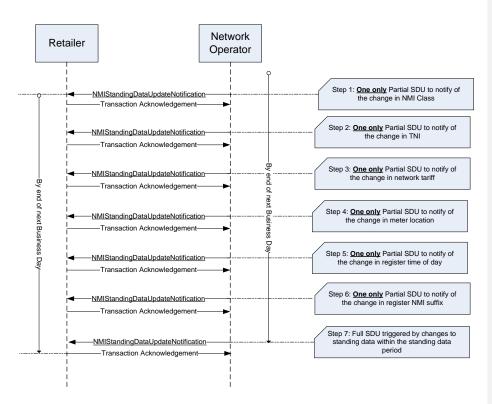


Figure  $\underline{3635}$ : Transaction diagram – Change Other Details

# 3.12.3.3 Timing Requirements

5

Transaction	Transaction Group	Version	Sender	Receiver	Timing
NMIStandingData UpdateNotification	NMID	r9	Network Operator	Current Retailer	Before End of Day on next business day following the change being recorded by the network operator
Transaction Acknowledgement	NMID	r17	Current retailer	Network operator	By end of next Business Day

### 3.12.4 Transactions

# $3.12.4.1\ NMI Standing Data Update Notification$

# 5

# Step 1 - Partial SDU to notify change in NMI Class

Transaction Definition	NMIStandingDataUpdateNotification
Trigger	Network Operator changes the NMI Classification Code.
Pre-conditions	A NMI is assigned to a current retailer.
Post-conditions	The retailer is able to update their system on the basis of the information provided by the network operator.
Transaction acknowledgement-specific event codes	Refer to Appendix A

# Step 2 - Partial SDU to notify change in TNI $\,$

10

Transaction Definition	NMIStandingDataUpdateNotification
Trigger	Network Operator changes the NMI's TNI.
Pre-conditions	A NMI is assigned to a current retailer.
Post-conditions	The retailer is able to update their system on the basis of the information provided by the network operator.
Transaction acknowledgement-specific event codes	Refer to Appendix A

# Step 3 - Partial SDU to notify change in network tariff

Transaction Definition	NMIStandingDataUpdateNotification
Trigger	Network Operator changes the network tariff for the register.
Pre-conditions	A NMI is assigned to a current retailer.

Post-conditions	The retailer is able to update their system on the basis of the information provided by the network operator.
Transaction acknowledgement-specific event codes	Refer to Appendix A

# Step 4 - Partial SDU to notify change in meter location

Transaction Definition	NMIStandingDataUpdateNotification
Trigger	Network Operator changes the Meter Location field value.
Pre-conditions	A NMI is assigned to a current retailer.
Post-conditions	The retailer is able to update their system on the basis of the information provided by the network operator.
Transaction acknowledgement-specific event codes	Refer to Appendix A

# 5 Step 5 - Partial SDU to notify change in register Time of Day

Transaction Definition	NMIStandingDataUpdateNotification
Trigger	Network Operator changes the Time of Day for the register.
Pre-conditions	A NMI is assigned to a current retailer.
Post-conditions	The retailer is able to update their system on the basis of the information provided by the network operator.
Transaction acknowledgement-specific event codes	Refer to Appendix A

# Step 6 - Partial SDU to notify change in register's NMI Suffix

Transaction Definition	NMIStandingDataUpdateNotification
Trigger	Network Operator changes the register's Suffix
Pre-conditions	A NMI is assigned to a current retailer.



Post-conditions	The retailer is able to update their system on the basis of the information provided by the network operator.
Transaction acknowledgement-specific event codes	Refer to Appendix A

# Step $7-Full\ SDU$ to notify of changes in standing data

Transaction Definition	NMIStandingDataUpdateNotification
Trigger	Full SDU published triggered by changes to the standing data in the previous standing data period.
Pre-conditions	A NMI is assigned to a current retailer.
Post-conditions	The retailer is able to update their system on the basis of the information provided by the network operator.
Transaction acknowledgement-specific event codes	Refer to Appendix A

# Transaction Data Elements

5

The attributes of the NMIStandingDataUpdateNotification are defined in Appendix C.

10

#### **Transaction Schema Definition**

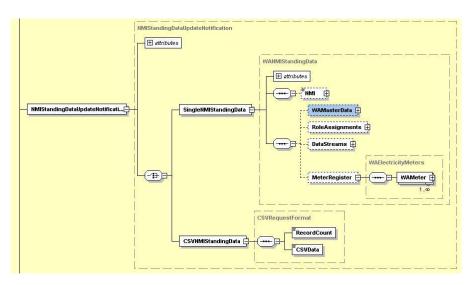


Figure 3736: NMI Standing Data Update notification schema definition

# Step 1 - Sample XML - Partial SDU to reflect new NMI classification code

This change is not effective dated

```
<?xml version="1.0" encoding="ISO-8859-1" ?>
  <ase:aseXML xmlns:ase="urn:aseXML:r17:WA:r2.00" xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
  xsi:schemaLocation="urn:aseXML:r17:WA:r2.00
  http://www.westernpower.com.au/aseXML/schemas/r17/WA:r2.00/aseXML_r17_WA_r2.00.xsd">
15
                  - (Header)

                           <MessageDate>2008-04-27T20:45:14+08:00</MessageDate>
20
                          <TransactionGroup>NMID</TransactionGroup>
<Priority>Medium</Priority>
<Market>WAELEC</Market>
                     </Header>
                  - <Transactions>
25
                        - <Transaction transactionID="WPNTWRKS-0000a-16563623" transactionDate="2008-04-27T20:45:14+08:00">
                            _ <NMIStandingDataUpdateNotification version="r9":
_ <SingleNMIStandingData>
<NMI>8001800783</NMI>
                                      30
                                      </WAMasterData>
</SingleNMIStandingData>
                                </NMIStandingDataUpdateNotification>
                           </Transaction>
35
                     </Transactions>
                </ase:aseXML>
```



## Step 2 - Sample XML - Partial SDU to reflect new TNI

5 This change is effective dated

```
<?xml version="1.0" encoding="ISO-8859-1" ?>
  <ase:aseXML xmlns:ase="urn:aseXML:r17:WA:r2.00" xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
  xsi:schemaLocation="urn:aseXML:r17:WA:r2.00
  http://www.westernpower.com.au/aseXML/schemas/r17/WA:r2.00/aseXML_r17_WA_r2.00.xsd">
10
                    <From description="Western Power Networks">WPNTWRKS</From>
<To description="Synergy Energy">WPRTL</To>
<MessageID>WPNTWRKSMSG-12552919</MessageID>
15
                     <MessageDate>2008-04-27T20:45:19+08:00
                     <TransactionGroup>NMID</TransactionGroup>
                     <Priority>Medium</priority>
<Market>WAELEC
                </Header>
20
                  <Transaction transactionID="WPNTWRKS-0000a-16563626" transactionDate="2008-04-27T20:45:19+08:00">
                     - <NMIStandingDataUpdateNotification version="r9"
- <SingleNMIStandingData>
                                 <NMI>8001800783</NMI>
25
                              - <WAMasterData>
                                     <TransmissionNodeIdentifier effectiveDate="2008-04-27">WYAL</TransmissionNodeIdentifier>
                             </WAMasterData>
</SingleNMIStandingData>
                         </NMIStandingDataUpdateNotification>
30
                     </Transaction>
                 </Transactions>
             </ase:aseXML>
```

## 35 Step 3 - Sample XML - Partial SDU to reflect new network tariff

This change is effective dated



- <RegisterConfiguration>

<SerialNumber>0180032705</SerialNumber>

# Step 4 - Sample XML - Partial SDU to reflect new meter location

This change is not effective dated

20

55

```
</xml version="1.0" encoding="ISO-8859-1" ?>
  <ase:aseXML xmlns:ase="urn:aseXML:r17:WA:r2.00" xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
    xsi:schemaLocation="urn:aseXML:r17:WA:r2.00" xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"</pre>
                 http://www.westernpower.com.au/aseXML/schemas/r17/WA:r2.00/aseXML_r17_WA_r2.00.xsd">
25
                   <From description="Western Power Networks">WPNTWRKS</From>
                   <To description="Synergy Energy">WPRTL</To>
<MessageID>WPNTWRKSMSG-12552921</MessageID>
                   <MessageDate>2008-04-27T20:46:24+08:00<TransactionGroup>NMID/TransactionGroup>
30
                   <Priority>Medium</Priority>
                   <Market>WAELEC</Market>
               </Header>
            _ <Transactions>
_ <Transaction transactionID="WPNTWRKS-0000a-16563630" transactionDate="2008-04-27T20:46:24+08:00">
35
                    - <NMIStandingDataUpdateNotification version="r9">
                        - <SingleNMIStandingData>
<NMI>8001800783</NMI>
                           - <MeterRegister>
- <WAMeter>
40
                                     <SerialNumber>0180032705</SerialNumber>
                                  <Location>Shearing Shed </Location>
</WAMeter>
                           </MeterRegister>
</SingleNMIStandingData>
45
                       </NMIStandingDataUpdateNotification>
               </Transaction>
           </ase:aseXML>
50
```

### Step 5 - Sample XML - Partial SDU to reflect register' new time of day

This change is not effective dated



```
_ <Header>
                        <From description="Western Power Networks">WPNTWRKS</from>
                       <Trionlessription="Synergy Energy">WPRTL</To>

<To description="Synergy Energy">WPRTL</To>

<MessageID>WPNTWRKSMSG-12552922

<MessageDate>2008-04-27T20:47:22+08:00

<TransactionGroup>NMID</TransactionGroup>
<Priority>Medium

<
                        <Market>WAELEC</Market>
                   </Header>
10

    <Transactions>

                    _ <Transaction transactionID="WPNTWRKS-0000a-16563632" transactionDate="2008-04-27T20:47:23+08:00">
_ <NMIStandingDataUpdateNotification version="r9">
_ <SingleNMIStandingData>
                                      <NMI>8001800783</NMI>
15
                                   - <MeterRegister>
                                       20
                                                     <TimeOfDay>PEAK</TimeOfDay>
</Register>
                                                </RegisterConfiguration>
                                      </WAMeter>
</MeterRegister>
25
                             </SingleNMIStandingData>
</NMIStandingDataUpdateNotification>
                        </Transaction>
              </Transactions>
</ase:aseXML>
30
```

## Step 6 - Sample XML - Partial SDU to reflect register's new Suffix value

This change is not effective dated

35

```
<?xml version="1.0" encoding="ISO-8859-1" ?>
  <ase:aseXML xmlns:ase="urn:aseXML:r17:WA:r2.00" xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
  xsi:schemaLocation="urn:aseXML:r17:WA:r2.00
  http://www.westernpower.com.au/aseXML/schemas/r17/WA:r2.00/aseXML_r17_WA_r2.00.xsd">
40
                         <From description="Western Power Networks">WPNTWRKS</From>
<To description="Synergy Energy">WPRTL</To>
<MessageID>WPNTWRKSMSG-12552923</MessageID>
<MessageDate>2008-04-27720:47:35+08:00</MessageDate>
45
                          <TransactionGroup>NMID</TransactionGroup>
<Priority>Medium</Priority>
<Market>WAELEC</Market>
                  </Header>
_ <Transactions>
50
                      <Transaction transactionID="WPNTWRKS-0000a-16563635" transactionDate="2008-04-27T20:47:35+08:00">
                           _ <NMIStandingDataUpdateNotification version="r9"
_ <SingleNMIStandingData>
                                         <NMI>8001800783</NMI>
                                     - <MeterRegister>
- <WAMeter>
55
                                                   <SerialNumber>0180032705</SerialNumber>
                                                - <RegisterConfiguration>
                                                    _ <Register>
     <RegisterID>007</RegisterID>
     <Suffix>21</Suffix>
60
                                              </Register>
</RegisterConfiguration>
</WAMeter>
65
                                     </MeterRegister>
</SingleNMIStandingData>
                               </NMIStandingDataUpdateNotification>
                          </Transaction>
```

```
</Transactions>
</ase:aseXML>
```

### 5 Step 7 - Sample XML - Full SDU to reflect changes in standing data during the period

```
10
                                   <From description="Western Power Networks">WPNTWRKS</from>
                                   <To description="Synergy Energy">WPRTL</To>
<MessageID>WPNTWRKSMSG-12552924</MessageID>
15
                                   <MessageDate>2008-04-27T21:02:22+08:00</messageDate>
<TransactionGroup>NMID</TransactionGroup>
                                   <Priority>Medium</Priority>
                                    <Market>WAELEC</Market>
                             </Header>
20
                        - <Transactions>
                               <Transaction transactionID="WPNTWRKS-0000a-16563638" transactionDate="2008-04-27T21:02:22+08:00">
                                     - <NMIStandingDataUpdateNotification version="r9":</p>
                                            <MMIStandingDataUpdateNotification version="19">
        <SingleNMIStandingData>
        <NMI checksum="1">8001800783</NMI>
        <WAMasterData>
        <IunisdictionCode>WA</JurisdictionCode>
        <NMIClassificationCode>>18.3KW</NMIClassificationCode>
25
                                                              \textsizessinicalisticalisticalisticalisticalisticalisticalisticalisticalisticalisticalisticalisticalisticalisticalisticalisticalisticalisticalisticalisticalisticalisticalisticalisticalisticalisticalisticalisticalisticalisticalisticalisticalisticalisticalisticalisticalisticalisticalisticalisticalisticalisticalisticalisticalisticalisticalisticalisticalisticalisticalisticalisticalisticalisticalisticalisticalisticalisticalisticalisticalisticalisticalisticalisticalisticalisticalisticalisticalisticalisticalisticalisticalisticalisticalisticalisticalisticalisticalisticalisticalisticalisticalisticalisticalisticalisticalisticalisticalisticalisticalisticalisticalisticalisticalisticalisticalisticalisticalisticalisticalisticalisticalisticalisticalisticalisticalisticalisticalisticalisticalisticalisticalisticalisticalisticalisticalisticalisticalisticalisticalisticalisticalisticalisticalisticalisticalisticalisticalisticalisticalisticalisticalisticalisticalisticalisticalisticalisticalisticalisticalisticalisticalisticalisticalisticalisticalisticalisticalisticalisticalisticalisticalisticalisticalisticalisticalisticalisticalisticalisticalisticalisticalisticalisticalisticalisticalisticalisticalisticalisticalisticalisticalisticalisticalisticalisticalisticalisticalisticalisticalisticalisticalisticalisticalisticalisticalisticalisticalisticalisticalisticalisticalisticalisticalisticalisticalisticalisticalisticalisticalisticalisticalisticalisticalisticalisticalisticalisticalisticalisticalisticalisticalisticalisticalisticalisticalisticalisticalisticalisticalisticalisticalisticalisticalisticalisticalisticalisticalisticalisticalisticalisticalisticalisticalisticalisticalisticalisticalisticalisticalisticalisticalisticalisticalisticalisticalisticalisticalisticalisticalisticalisticalisticalisticalisticalisticalisticalisticalisticalisticalisticalisticalisticalisticalisticalisticalisticalisticalisticalisticalisticalisticalisticalisticalisticalisticalisticalisticalisticalisticalisticalisticalisticalisticalisticalisticalisticalisticalisticalist
30
                                                           - <Address>
                                                                 - <WAStructuredAddress>
                                                                        - <House>
35
                                                                             <HouseNumber>6</HouseNumber>
</House>
                                                                        <u>-</u> <Lot>
                                                                                    <LotNumber>663</LotNumber>
                                                                             </Lot>
40
                                                                        <<street>
<streetName>SAN REMO</streetName>
                                                                                    <StreetType>BEND</StreetType>
                                                                      </WAStructuredAddress>
45
                                                                      <SuburbOrPlaceOrLocality>Clarkson</SuburbOrPlaceOrLocality>
<StateOrTerritory>WA</StateOrTerritory>
                                                                      <PostCode>6030</PostCode>
                                                               <Status effectiveDate="2005-07-19">A</Status>
50
                                                               <DistanceFromSubstation effectiveDate="2007-03-23">12.47</DistanceFromSubstation>
<Voltage>LV</Voltage>
                                                        <Pre><Pre><PoleNumber xsi:nil="true" /></WAMasterData>
55
                                                    _ <RoleAssignments>
    _ <RoleAssignment effectiveDate="2005-07-19">
                                                                     <Party description="Synergy Energy">WPRTL</Party>
                                                                       <Role>LR</Role>
                                                                </RoleAssignment>
60
                                                           - <RoleAssignment effectiveDate="2005-07-19">
<Party description="Western Power Networks">WPNTWRKS</Party>
                                                                      <Role>LNSP</Role>
                                                                </RoleAssignment>
                                                           - <RoleAssignment effectiveDate="2005-07-19">
65
                                                                     <Party description="Synergy Energy">WPRTL</Party>
<Role>ROLR</Role>
                                                           </RoleAssignment>
_ <RoleAssignment effectiveDate="2005-07-19">
                                                                      <Party description="Synergy Energy">WPRTL</Party>
70
                                                                      <Role>RP</Role>
                                                                </RoleAssignment>
                                                           - <RoleAssignment effectiveDate="2005-07-19">
```



```
<Party description="Synergy Energy">WPRTL</Party>
<Role>FRMP</Role>
                                                                                                                                      </RoleAssignment>
                                                                                                                        </RoleAssignments>
       5
                                                                                                              - <DataStreams>
                                                                                                                          <ProfileName>NOPROF</ProfileName>
                                                                                                                                                     <AveragedDailyLoad>25</AveragedDailyLoad>
<DataStreamType>Consumption
 10
                                                                                                                                       <Status effectiveDate="2005-07-19">A</Status>
</DataStream>
                                                                                                                       </DataStreams>
                                                                                                             - <MeterRegister>
- <WAMeter>
 15
                                                                                                                                                  VAMeter>

<SerialNumber>0180032705

<SerialNumber>0180032705

<NextScheduledReadDate>2008-03-17

<Location>Shearing Shed

<Location>

<Hazard> BD</Hazard>

<InstallationTypeCode effectiveDate="2005-07-19">BASIC</InstallationTypeCode>

<Route effectiveDate="2005-07-19">REVENUE</Use>

<pre
 20
                                                                                                                                                     <Point>01</Point>
<Manufacturer xsi:nil="true" />
<Model>E301</Model>
 25
                                                                                                                                                   <model>E301
//model>
TransformerLocation xsi:nil="true" />
<TransformerType xsi:nil="true" />
<TransformerRatio xsi:nil="true" />
<Constant xsi:nil="true" />
<LastTestDate xsi:nil="true" />

 30
                                                                                                                                                  <LastTestDate xsi:nil="true" />
<TestResultAccuracy xsi:nil="true" />
<TestResultNotes xsi:nil="true" />
<TestPerformedBy xsi:nil="true" />
<MeasurementType xsi:nil="true" />
<ReadTypeCode>MY2</ReadTypeCode>
<RemotePhoneNumber xsi:nil="true" />
<CommunicationsEquipmentType xsi:nil="true" />
<CommunicationsProtocol xsi:nil="true" />
<DataConversion xsi:nil="true" />
<DataValidations xsi:nil="true" />
<Status effectiveDate="2005-07-19">C</Status>
 35
 40
                                                                                                                                                  <DataValidations xsi:nil="true" />
<Status effectiveDate="2005-07-19">C</Status>
<Program xsi:nil="true" />
<AdditionalSiteInformation xsi:nil="true" />
<EstimationInstructions xsi:nil="true" />
<UserAccessRights xsi:nil="true" />
<Password xsi:nil="true" />
<TestCalibrationProgram xsi:nil="true" />

<pre
 45
                                                                                                                                         <\textcalibility in the first control of the f
50
                                                                                                                                                         _ <Register>
     <RegisterID>007</RegisterID>
     <NetworkTariffCode effectiveDate="2008-04-27">TOUS</NetworkTariffCode>
 55
                                                                                                                                                                                  <UnitOfMeasure>KWH</UnitOfMeasure>
<TimeOfDay>PEAK</TimeOfDay>
                                                                                                                                                                                 <Multiplier>1</Multiplier>
<DialFormat>6.0</DialFormat>
<Suffix>21</Suffix>
 60
                                                                                                                                                                                  <ControlledLoad>No</ControlledLoad>
<ConsumptionType>Cumulative</ConsumptionType>
<Status effectiveDate="2005-07-19">C</Status>
                                                                                                                                                                                  <DirectionIndicator>Export/DirectionIndicator>
 65
                                                                                                                                                                   </Register>
                                                                                                                                       </RegisterConfiguration>
</WAMeter>
                                                                                                                        </MeterRegister>
                                                                                          </singleNMIStandingData>
</NMIStandingDataUpdateNotification>
 70
                                                              </Transaction>
                                               </ase:aseXML>
```

### 3.12.5 Related Transactions

3.12.5.1 Preceding Transactions

Not applicable.

5

3.12.5.2 Subsequent Transactions

Not applicable.



#### **3.13New Connections**

#### 3.13.1 Overview

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The New Connections business process is a complex business process that can involve multiple parties. Because of this, there does not exist a uniform 'new connections' procedure and this will results in variations in the sequence of SDU transactions that participants receive.

The variations that can be seen in the New Connections process can be grouped into two,:

- Contractor connections. These are connections made by contractors with a suitable level
  of certification from Energy Safety. Due to this certification, they are able to provide 'turnkey' new connections where the sites are handed over to the network operator already
  energised and the network operator is able immediately to make all of the standing data
  available at once for the new connection.
  - Non-contractor connections. These are connections that are made by contractors which involve a higher degree of involvement by the network operator, specifically they are left non-energised and the network operator may inspect the site before energising it. The full standing data can then be made available to the market.

It is the non-contractor connections path that exhibits more variations, as can be expected in a process which involves more hand-overs of control. Irrespective of which process path is followed, a number of standard activities have to take place. Each of the processes will handle these activities in different ways – and retailers will experience this by seeing different sequences of SDUs. These standard activities are:

- 1. NMI allocation,
- 2. Meter installation,
- 3. Meter re-energisation, and
- 4. Change Read Route and NSRD.

With the retailer entry model for new connections, the network operator needs two inputs to be received before the connection process can commence through the network operator systems. These are:

- New connection service order from the customer's nominated retailer (sub-type of permanent, temporary or temporary in permanent position.
- 2. An electrical installation notice from an electrical contractor. This may come in two parts with a preliminary notice being received possibly months before the site is ready to be energised and the completion part of the form is submitted. In some cases the network operator will only receive the completion notice as this contains all details from both parts of the form.

Once the above two inputs have been matched the connection process can proceed.

NB: If a preliminary electrical installation notice can be matched to a new connection service order, the NMI may be allocated by the network operator well before the meter is installed and the site is ready to be energised. It will have a 'G' Greenfields status, but no



standing data is published, however a participant would still be able to perform NMI discovery on this site.

#### **Contractor connections**

10

5

In the contractor connections process, a matched pair of service orders (new connection plus electrical installation notice) initiates three standard activities: NMI allocation, meter installation and Re-energisation. Until all of these activities are complete, and the service order can be closed, the meters are in state of 'Active, but not sent to market'. In this state, changes that are made to the NMI standing data do not get sent to market as Partial SDUs. The red box in Figure 38 Figure 37 illustrates which parts of the process are covered by this condition.

15

The closing of the service order, in this business process, triggers the publication of a Full SDU. It should be noted that this Full SDU will contain null values for the Meter Read Route code and the NSRD. A separate business process is deployed by the network operator to automatically populate these null standing data items, and this processes is exactly the same process as that in section 3.7 above.

#### Non-contractor connections

20

During non-contractor connections, a matched pair of service orders (new connection plus electrical installation notice) initiates three standard activities: NMI allocation, meter installation and Re-energisation. However, because the network operator needs to visit the site before Re-energisation, this activity is performed in a slightly different way and involves manually intervention. Consequently, this intervention introduces a lag into the process the length of which defines the order that subsequent SDUs are produced (and indeed their content).

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While the Re-energisation activity is being carried out, an automatic network operator procedure will populate the Meter Read Route code and NSRD in the NMI's standing data. As described more fully in section 3.7 above, this will result in either a real Meter Read Route code and NSRD being populated or placeholder values (which act as a trigger for manual intervention).

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Whether placeholder or real, the population of these bits of standing data normally triggers the issue of a Partial SDU for each, followed by a Full SDU at the end of the next standing data period. However, because these standing data are populated prior to the meter being Re-energised, these meters will have been set-up in the network operator's systems as 'Active, but not sent to market' - and this has the effect of suppressing the Partial SDUs that are normally published when standing data changes.

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Therefore, assigning values to the Meter Read Route code and NSRD will result in the publication of a 'Full' SDU that contains only NMI-level standing data - the meter level standing data in the Full SDU, as well as the two Partial SDUs, having been suppressed by the 'Active, but not sent to market' flag.



Depending on whether the Read Route Code and NSRD are real values, as opposed to placeholder values, determines which route the process takes and what sequence of standing data is published to the market.

### 5 <u>Variation 1</u>

In Variation 1, where the NMI standing data is populated with real values, the process simply waits for the re-energisation activity to be completed. This allows the initiating service order to be closed and a Full SDU published to the current retailer.

#### 10 <u>Variation 2</u>

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If placeholder values are used to populate the NMI standing data, the process will follow one of two paths depending on whether the completion of the re-energisation activity takes place before or after the real values can be manually assigned to the Meter Read Route code and NSRD.

#### Variation 2a

In variation 2a, the network operator manually assigns the real Meter Read Route code and NSRD to the standing data. This is, in effect, the same as the Change Meter Read Route & NSRD process described in section 3.7 above. However, as this takes place while the Meters are 'Active but not sent to market' the current retailer will not receive the two Partial SDUs. Furthermore, the 'Full' SDU that the current retailer receives contains no meter-level standing data – which has been similarly suppressed.

The only remaining activity is for the re-energisation to complete. Once this is done, the initiating service order is closed and a Full SDU is published.

#### Variation 2b

In variation 2b, the re-energisation activity is completed before there is any manual intervention to assign a real Meter Read Route code and NSRD. This re-energisation allows the service order to be closed which, in turn, triggers the publication of a Full SDU. The next, and only remaining activity, is to perform the Change Meter Read Route and NSRD process. This will be done in accordance with the process described in 3.7 above. It should be noted that, as this process will take place when the 'Active, but not sent to market flag' has been removed – both the Partial SDUs and the complete Full SDU will be published.

#### 3.13.2 Business Rules

### **AMI** meter connectivity



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A meter install code of 'BASICAMI' is used to advise Retailers that a basic meter is connected to a communications network and capable of providing remote AMI services. When an AMI compatible ('BASIC') meter connects to a communications network, the communications signal is verified for stability. Upon completion of verification, Retailers will be provided a Standing Data Update advising that the meter install code has changed to 'BASICAMI'.

For new connections, AMI meters have a meter install code of 'BASIC' at inception, once connected to a communications network, the meter install code is updated to 'BASICAMI'.

A Retailer may request a 'BASICAMI' meter be converted to an interval meter (e.g. COMMS6A) in accordance with the Retailer's service agreement with the Network Operator.

#### Submission rules

There are none that are specific to this process.

#### 15 Validation

There are none that are specific to this process.

#### Response

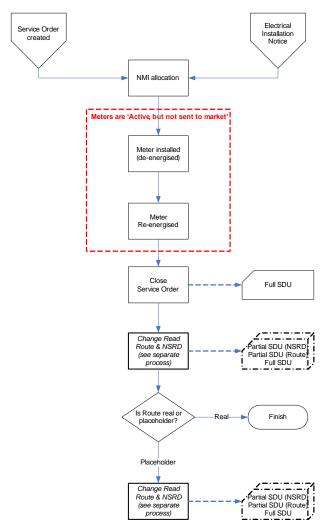
There are none that are specific to this process.

#### 20 3.13.3 Process Breakdown

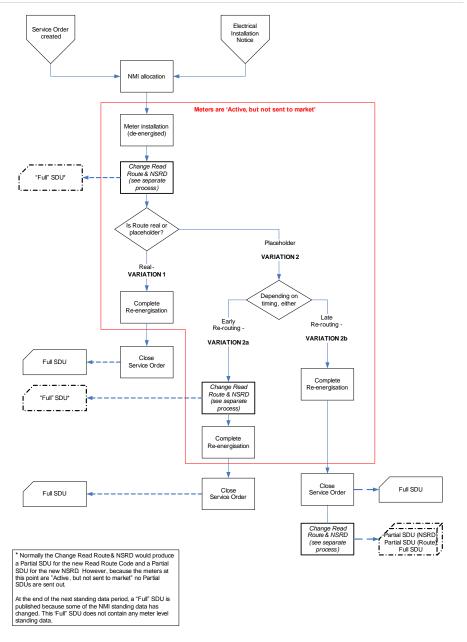
The following process diagrams show the SDUs that are published in the New Connections process. The published SDUs that relate to the change in Meter Read Route and Next Scheduled Read Date are covered by the process in section 3.7 above. These SDUs are identified by the thick broken lines.



# 3.13.3.1 Process diagram



 $\label{eq:sigma-sigma} \textbf{Figure} \ \ \underline{\textbf{3837}} : \ \textbf{NMI} \ \ \textbf{SDU} \ \ \textbf{notification} \ \ \textbf{process} - \ \textbf{New Connections} - \ \textbf{Contractor connected}$ 



 $\textbf{Figure}~~\underline{\textbf{3938}}\text{:}~~\textbf{NMI}~~\textbf{SDU}~~\textbf{notification}~~\textbf{process}~-~\textbf{New}~~\textbf{Connections}~-~\textbf{Non-Contractor}~~\textbf{connected}$ 

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### 3.13.3.2 Transactional Diagram

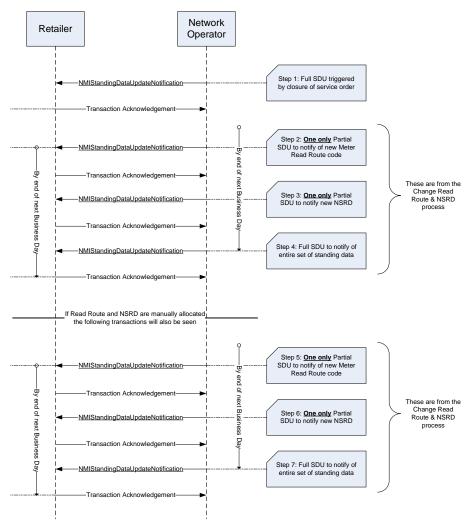


Figure 4039: Transaction diagram – New Connections (Contractor connected)

In the above diagram, if Meter Read Route and NSRD are manually allocated then there will be a short delay between steps 4 and 5. This delay is not governed by an SLA or applicable code provision. The network operator need only meet the more general requirements of the metrology procedure. In general, it should only be a day or two. Participants should be aware that if an unforseen problem arises, a further delay of several days could be seen.

Figure 4140: Transaction diagram – New Connections (Non-contractor connected var. 1)

In the above diagram, the time lag between steps 1 and 2 is not governed by an SLA or applicable code provision. The network operator need only meet the more general requirements of the metrology procedure. In general, it should only be a day or two. Participants should be aware that if an unforseen problem arises, a further delay of several days could be seen.

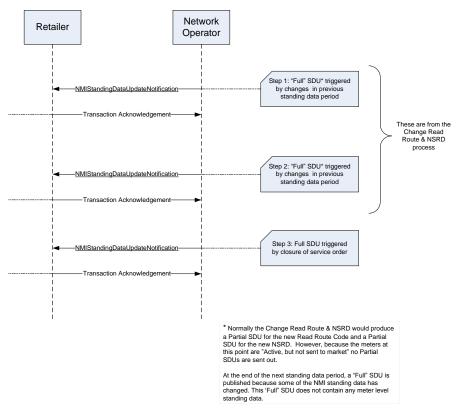


Figure  $\underline{4244}$ : Transaction diagram – New Connections (Non-contractor connected var. 2a)

In the above diagram, the time lag between steps 1 and 2 is not governed by an SLA or applicable code provision. The network operator need only meet the more general requirements of the metrology procedure. In general, it should only be a day or two. Participants should be aware that if an unforseen problem arises, a further delay of several days could be seen.

5

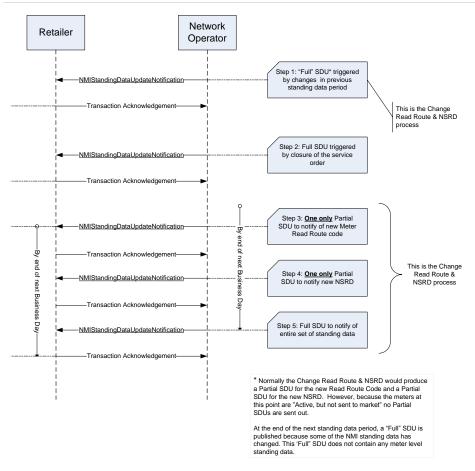


Figure <u>43</u>42: Transaction diagram – New Connections (Non-contractor var. 2b)

In the above diagram, the time lags between steps 1 and 2 and between 2 and 3 are not governed by an SLA or applicable code provision. The network operator need only meet the more general requirements of the metrology procedure. In general, it should only be a day or two. Participants should be aware that if an unforseen problem arises, a further delay of several days could be seen.

# 3.13.3.3 Timing Requirements

Transaction	Transaction Group	Version	Sender	Receiver	Timing
NMIStandingDataUp dateNotification	NMID	r9	Network Operator	Current Retailer	Before End of Day on next business day following the change being recorded by the network operator
Transaction Acknowledgement	NMID	r17	Current retailer	Network operator	By end of next Business Day

5

### 3.13.4 Transactions

# 3.13.4.1 NMIStandingDataUpdateNotification

# 10 3.13.4.1.1 Contractor connected

# Step $1-Full\ SDU$ triggered by closure of service order

The Full SDU at this point will contain null value for Meter Read Route code and NSRD.

Transaction Definition	NMIStandingDataUpdateNotification
Trigger	Service order completion.
Pre-conditions	A NMI is assigned to a current retailer.
Post-conditions	The retailer is able to update their system on the basis of the information provided by the network operator.
Transaction acknowledgement-specific event codes	Refer to Appendix A

# Step 2 - Partial SDU to notify change in Meter Read Route code

	T
Transaction Definition	NMIStandingDataUpdateNotification
Trigger	Change in Meter Read Route code value in standing data.
Pre-conditions	A NMI is assigned to a current retailer.
Post-conditions	The retailer is able to update their system on the basis of the information provided by the network operator.
Transaction acknowledgement-specific event codes	Refer to Appendix A

5

# Step 3 - Partial SDU to notify change in NSRD $\,$

Transaction Definition	NMIStandingDataUpdateNotification
Trigger	Change in NSRD value in standing data.
Pre-conditions	A NMI is assigned to a current retailer.
Post-conditions	The retailer is able to update their system on the basis of the information provided by the network operator.
Transaction acknowledgement-specific event codes	Refer to Appendix A

# 10 Step 4 – Full SDU triggered by change in standing data

Transaction Definition	NMIStandingDataUpdateNotification
Trigger	Changes to NMI standing data within previous standing data period.
Pre-conditions	A NMI is assigned to a current retailer.
Post-conditions	The retailer is able to update their system on the basis of



	the information provided by the network operator.
Transaction acknowledgement-specific event codes	Refer to Appendix A

### Step 5 -7 - Change Meter Read Route & NSRD process

If the network operator's systems was not able to allocate a real Meter Read Route code and NSRD, placeholders will be used that will trigger manual intervention to defined real values. When this happens, SDUs will be triggered as per the process in section 3.7 above.

### 10 Transaction Data Elements

The attributes of the NMIStandingDataUpdateNotification are defined in Appendix C.

### **Transaction Schema Definition**

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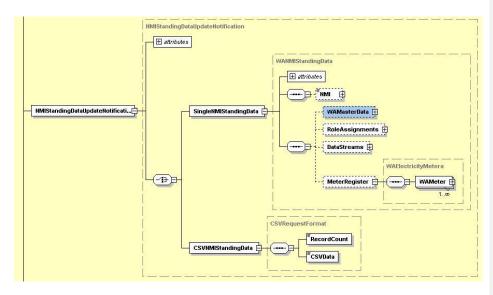


Figure  $\underline{\textbf{4443}}$ : NMI Standing Data Update notification schema definition

### Sample XML - "Full" SDU triggered by closure of service order

This SDU is sent out automatically when the service order is closed. Of note are the null values that are in the standing data for both NSRD and Meter Read Route code.

```
<?xml version = '1.0' encoding = 'ISO-8859-1'?>
<ase:aseXML xmlns:ase="urn:aseXML:r17:WA:r2.00" xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
xsi:schemaLocation="urn:aseXML:r17:WA:r2.00</pre>
10
        http://www.westernpower.com.au/aseXML/schemas/r17/WA:r2.00/aseXML_r17_WA_r2.00.xsd">
           <To description="Synergy Energy">WPRTL</To>
<MessageID>WPNTWRKSMSG-14943805</MessageID>
             15
             <Market>WAELEC</Market>
          </Header>
<Transactions>
20
             <Transaction transactionID="WPNTWRKS-0000a-20594633" transactionDate="2008-04-30T15:35:49+08:00">
               <NMIStandingDataUpdateNotification version="r9">
                <SingleNMIStandingData>
<NMI checksum="5">8002032840</NMI>
<WAMasterData>
25
                    <JurisdictionCode>WA</JurisdictionCode>
                    30
                     <Address>
<WAStructuredAddress>
                        <FlatOrUnit>
<FlatOrUnitType>U</FlatOrUnitType>
35
                          </
                        40
                         <Lot>
<LotNumber>956</LotNumber>
</Lot>
                         < Street
                           <StreetName>CONSTANCE</StreetName>
<StreetType>ST</StreetType>
45
                          </Street>
                       </WAStructuredAddress>
                       50
                     </Address>
<Status effectiveDate="2008-04-30">A</Status>
                  <Status effectiveDate="2008-04-30">A</Status>
Status effectiveDate="2008-04-30">A</Status>
DistanceFromSubstation xsi:nil="true"></DistanceFromSubstation>
<Voltage>LV</Voltage>
<PropertyType>Domestic
PoleNumber xsi:nil="true"></PoleNumber>
</WAMasterData>
<RoleAssignments>
PoleAssignments>
55
60
                    <RoleAssignment>
                    65
                      /RoleAssignment>
                     <RoleAssignment>
                    <RoleAssignment>
<Party >= /Party>
<Role>LR</Role>
</RoleAssignment>
<RoleAssignment effectiveDate="2008-04-30">
<Party description="Synergy Energy">WPRTL</Party>
<Role>FRMP</Role>
70
```



```
</RoleAssignment>
<RoleAssignment>
<Party xsi:nil="true"></Party>
<Role>RP</Role>
       5
                                                                                     </RoleAssignment>
</RoleAssignments>
</DataStreams>
                                                                                          <DataStream>
                                                                                          <UataStream
<Suffix>11</Suffix>
<ProfileName>NSLP</ProfileName>
<AveragedDailyLoad>0</AveragedDailyLoad>
-DataStreamType>Consumption</DataStreamType>
<Status effectiveDate="2008-04-30">A</Status>
</DataStream>
 10
                                                                                   </DataStreams>
</DataStreams>
 15
                                                                                           <WAMeter>
                                                                                                  20
                                                                                               | Use effectiveDate="2008-02-05">REVENUE</Use>
| Voint>01
| Vise effectiveDate="2008-02-05">REVENUE</Use>
| Vise effectiveDate="2008-04-30">REVENUE</use>
| Vise effecti
 25
 30
35
 40
 45
 50
55
                                                                                                             <Register>
                                                                                                                     RegisterID>007</RegisterID>
RegisterID>007
RegisterID>007
NetworkTariffCode effectiveDate="2008-04-30">AER
NetworkTariffCode>
UnitOfMeasure>KWH
/TimeOfDay>ALLDAY
TimeOfDay>ALLDAY
60
                                                                                                                     <Multiplier>1</Multiplier>
<DialFormat>6.0</DialFormat>
<Suffix>11</Suffix>
<ControlledLoad>No</ControlledLoad>
                                                                                                                      <ConsumptionType>Cumulative</ConsumptionType>
<Status effectiveDate="2008-04-30">C</Status>
65
                                                                                                                      <DirectionIndicator>Export
                                                                                                    </Register>
</RegisterConfiguration>
                                                                  </WAMeter>
</MeterRegister>
</SingleNMIStandingData>
</NMIStandingDataVpdateNotification>
 70
                                                        </Transaction>
                                       </Transactions>
</ase:aseXML>
 75
```

Sample XML - Partial SDU to notify of new Meter Read Route code



This is the same as seen in section 3.7.4.1 above.

# Sample XML – Partial SDU to notify of new NSRD

This is the same as seen in section 3.7.4.1 above.

# Sample XML - Full SDU triggered by changes to standing data

This is the same as seen in section 3.7.4.1 above.

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3.13.4.1.2 Non-contractor connected (variation 1)

# Step 1 – "Full" SDU triggered by changes to standing data

A Full SDU is sent out as a result of the allocation of values to Meter Read Route and NSRD.

Transaction Definition	NMIStandingDataUpdateNotification
Trigger	Changes to standing data in the previous standing data period.
Pre-conditions	A NMI is assigned to a current retailer.
Post-conditions	The retailer is able to update their system on the basis of the information provided by the network operator.
Transaction acknowledgement-specific event codes	Refer to Appendix A



### Step 2 - Full SDU triggered by closure of the service order

Transaction Definition	NMIStandingDataUpdateNotification
Trigger	Non-market service order closes.
Pre-conditions	A NMI is assigned to a current retailer.
Post-conditions	The retailer is able to update their system on the basis of the information provided by the network operator.
Transaction acknowledgement-specific event codes	Refer to Appendix A

# 5 Transaction Data Elements

The attributes of the NMIStandingDataUpdateNotification are defined in Appendix C.

### **Transaction Schema Definition**

10

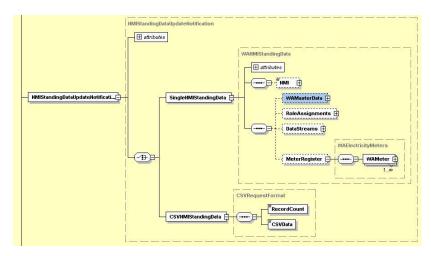


Figure 4544: NMI Standing Data Update notification schema definition

### Sample XML - "Full" SDU triggered by changes to standing data



The Full SDU is triggered by the new standing data for Meter Read Route and NSRD. These did not result in the sending of Partial SDUs because the meter is "Active, but not sent to market". This flag means that the 'Full' SDU contains no meter level information.

```
<?xml version = '1.0' encoding = 'ISO-8859-1'?>
<ase:aseXML xmlns:ase="urn:aseXML:r17:Wa\r2.00" xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
xsi:schemaLocation="urn:aseXML:r17:Wa\r2.00
http://www.westernpower.com.au/aseXML/schemas/r17/WA:r2.00/aseXML_r17_WA_r2.00.xsd">
 10
                                             <From description="Western Power Networks">WPNTWRKS</from>
                                             \timescription="Synergy Energy"\sWPRTL</To>
\timescription="Synergy Energy"\sWPRTL</To>
\timescription="Synergy Energy"\sWPRTL</To>
\timescription="Synergy Energy"\sWPRTL</To>
\timescription="Synergy Energy"\sWPRTL</To>
\timescription="Synergy Synergy Sy
 15
                                      <Priority>Medium/Priority>
<Market>WAELEC</Market>
</Header>
<Transactions>
 20
                                              <Transaction transactionID="WPNTWRKS-0000a-20452761" transactionDate="2008-04-28T16:10:57+08:00">
<NMIStandingDataUndateNotification version="r9">
                                                     <NMIStandingDataUpdateNotification version='</p>
<SingleNMIStandingData>
<NMI checksum="3">8002032506
<WAMasterData>
                                                                         25
 30
                                                                                         <Lot>
                                                                                         <LotNumber>216</LotNumber>
</Lot>
<Street>
 35
                                                                                               <StreetName>ADLER</StreetName>
                                                                                   <StreetName>ADLEK/StreetType>
</StreetType>
</Street>
</WAStructuredAddress>
 40
                                                                                   <SuburbOrPlaceOrLocality>Swan View</SuburbOrPlaceOrLocality>
                                                                          <SuburbUrPlaceOrLocality> wan view</publications/suburbUrPlaceOrLocality>
<StateOrTerritory> WA</StateOrTerritory>
<PostCode>6056</PostCode>
</address>
</address>
<Status effectiveDate="2008-04-23">D</status>
</address>
</address>
<a href="DistanceFromSubstation">DistanceFromSubstation></a>

 45
                                                                           <Voltage>LV</Voltage>
<PropertyType>Domestic</PropertyType>
<PoleNumber xsi:nil="true"></PoleNumber>
50
                                                                       /WAMasterData>
                                                                    55
                                                                           </ri>

60
                                                                           </RoleAssignment>
<RoleAssignment>
<Party xsi:nil="true"></Party>
<Role>ROLR</Role>
65
                                                                          </RoleAssignment>
<RoleAssignment = "2008-04-23">
<RoleAssignment = "EffectiveDate="2008-04-23">
<Party | description="Western Power Networks">WPNTWRKS</Party>
<Role>LNSP</Role>
 70

<
 75
                                      </Transactions>
```



</ase:aseXML>

### Sample XML - Full SDU triggered by closure of service order

As the field work (energisation) has been completed, this Full SDU contains all of the meter and register information.

```
<?xml version = '1.0' encoding = 'ISO-8859-1'?>
<ase:aseXML xmlns:ase="um:aseXML:r17:WA:r2.00" xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
xsi:schemalocation="um:aseXML:r17:WA:r2.00"
http://www.westernpower.com.au/aseXML/schemas/r17/WA:r2.00/aseXML_r17_WA_r2.00.xsd">
10
                                Header>

<from description="Western Power Networks">WPNTWRKS</from>
<To description="Synergy Energy">WPRTL</To>

<messageID>WPNTWRKSMSG-149437998

<messageDate>2008-04-30715:35:46+08:00

<messageDate>2008-04-30715:35:46+08:00

<messageDate>2008-04-30715:35:46+08:00

<messageDate>2008-04-30715:35:46+08:00

<messageDate>2008-04-30715:35:46+08:00

<messageDate>2008-04-30715:35:46+08:00

<messageDate>2008-04-30715:35:46+08:00

<messageDate>2008-04-30715:35:46+08:00

<messageDate>3008-04-30715:35:46+08:00

<messageDate>3008-04-30715:35:46+08:00

<messageDate>4008-04-30715:35:46+08:00

15
                           <Priority>Medium</priority>
<Market>WAELEC</Market>
</Header>
<Transactions>
20
                                 <Transaction transactionID="WPNTWRKS-0000a-20594610" transactionDate="2008-04-30T15:35:46+08:00">
<INMIStandingDataUpdateNotification version="r9">
<INMIStandingDataUpdateNotification version="r9">
<INMI checksum="3">>8002032506</INMI>
25
                                                 <WAMasterData>
                                                     30
35
                                                                      <LotNumber>216</LotNumber>
                                                                </Lot>
<Street>
                                                             <StreetName>ADLER</StreetName>
<StreetType>HTS</StreetType>
</Street>
</WAStructuredAddress>
40
                                                            SuburbOrPlaceOrLocality>Swan View</SuburbOrPlaceOrLocality>
                                                       <StateOrTerritory>WA</StateOrTerritory>
<PostCode><0556</pre>/PostCode>

<Address>
<Status effectiveDate="2008-04-30">A</status>
45
                                                       <DistanceFromSubstation xsi:nil="true"></DistanceFromSubstation>
                                                       <Voltage>LV</Voltage>
<PropertyType>Domestic</PropertyType>
<PoleNumber xsi:nil="true"></PoleNumber>
50
                                                  </WAMasterData>
                                                 <RoleAssignments>
<RoleAssignment>
<Party xsi:nil="true"></Party>
<Role>LR</Role>
55

<
60
                                                      </RoleAssignment>
<RoleAssignment>
<Party xsi:nil="true"></Party>
<Role>RP</Role>
65
                                                       </RoleAssignment>
<RoleAssignment>
<Party xsi:nil="true"></Party>
<Role>ROLR</Role>
                                                       </RoleAssignment>
70
                                                       <RoleAssignment effectiveDate="2008-04-23">
<RoleAssignment effectiveDate="2008-04-23">
<Party description="Western Power Networks">WPNTWRKS</Party>
<Role>LNSP</Role>
                                                 </RoleAssignment>
```



```
<DataStreams>
                               5
                                  <Normalisation</p>
<AveragedDailyLoad > 0</AveragedDailyLoad >
<DataStreamType > Consumption 
<Status effectiveDate = "2008-04-30" > A

                               </DataStream>
                             </DataStreams>
                            <MeterRegister>
<WAMeter>
10
                                  <SerialNumber>0350013461</SerialNumber>
                                  15
                                  < color="block">< Manufacturer xsi:nil="true">< Model>E305Model>
20
                                 25
30
35
40
45
                                  <RegisterConfiguration>
<Register>
<RegisterID>007/RegisterID>
50
                                       NegisterID>uV/RegisterID>
NetworkTariffCode effectiveDate="2008-04-23">AER/NetworkTariffCode>
UnitOfMeasure>KMH/UnitOfMeasure>
<TimeOfDay>ALLDAY/TimeOfDay>
Multiplier>1/Multiplier>
CialFormat>6.0/DialFormat>
Suffix>11/Suffix>
55
                                        <Suint>11

<ControlledLoad>No</ControlledLoad>
<ConsumptionType>Cumulative</ConsumptionType>
<Status effectiveDate="2008-04-30">C</Status>
60
                                         <DirectionIndicator>Export
                               </Register>
</RegisterConfiguration>
</WAMeter>
                            </MeterRegister>
65
                      </singleNMIStandingData>
</MIStandingDataUpdateNotification>
               </Transaction>
             </ase:aseXML>
70
```

3.13.4.1.3 Non-contractor connected (variation 2a)

### Step 1 - "Full" SDU triggered by changes to standing data

A Full SDU is sent out as a result of the allocation of values to Meter Read Route and NSRD (which were not sent).



Transaction Definition	NMIStandingDataUpdateNotification
Trigger	Changes to standing data in the previous standing data period.
Pre-conditions	A NMI is assigned to a current retailer.
Post-conditions	The retailer is able to update their system on the basis of the information provided by the network operator.
Transaction acknowledgement-specific event codes	Refer to Appendix A

# Step 2 – "Full" SDU triggered by changes to standing data

A Full SDU is sent out as a result of the allocation of values to Meter Read Route and NSRD (which were not sent).

Transaction Definition	NMIStandingDataUpdateNotification
Trigger	Changes to standing data in the previous standing data period.
Pre-conditions	A NMI is assigned to a current retailer.
Post-conditions	The retailer is able to update their system on the basis of the information provided by the network operator.
Transaction acknowledgement-specific event codes	Refer to Appendix A

# Step 3 – Full SDU triggered by closure of the service order

10

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Transaction Definition	NMIStandingDataUpdateNotification
Trigger	Non-market service order closes.
Pre-conditions	A NMI is assigned to a current retailer.
Post-conditions	The retailer is able to update their system on the basis of the information provided by the network operator.

10

15

Transaction	Refer to Appendix A
acknowledgement-specific	
event codes	

#### **Transaction Data Elements**

The attributes of the NMIStandingDataUpdateNotification are defined in Appendix C.

# **Transaction Schema Definition**

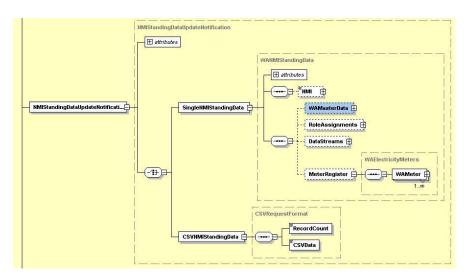


Figure 4645: NMI Standing Data Update notification schema definition

### Step 1 - Sample XML - "Full" SDU triggered by changes to standing data

The Full SDU is triggered by the new standing data for Meter Read Route and NSRD. These did not result in the sending of Partial SDUs because the meter is "Active, but not sent to market". This flag means that the 'Full' SDU contains no meter level information.

This XML is exactly the same as that in 3.13.4.1.2 above.

15

20

### Step 2 - Sample XML - "Full" SDU triggered by changes to standing data

The Full SDU is triggered by the new standing data for Meter Read Route and NSRD. These did not result in the sending of Partial SDUs because the meter is "Active, but not sent to market". This flag means that the 'Full' SDU contains no meter level information.

This XML is exactly the same as that in 3.13.4.1.2 above.

### 10 Step 3 - Sample XML - Full SDU triggered by closure of service order

As the field work (energisation) has been completed, this Full SDU contains all of the meter and register information.

This XML is exactly the same as that in 3.13.4.1.2 above.

3.13.4.1.4 Non-contractor connected (variation 2b)

### Step 1 - "Full" SDU triggered by changes to standing data

A Full SDU is sent out as a result of the allocation of values to Meter Read Route and NSRD (which were not sent).

Transaction Definition	NMIStandingDataUpdateNotification
Trigger	Changes to standing data in the previous standing data period.
Pre-conditions	A NMI is assigned to a current retailer.
Post-conditions	The retailer is able to update their system on the basis of the information provided by the network operator.
Transaction acknowledgement-specific event codes	Refer to Appendix A

### Step 2 - Full SDU triggered by closure of the service order

Transaction Definition	NMIStandingDataUpdateNotification
Trigger	Non-market service order closes.
Pre-conditions	A NMI is assigned to a current retailer.
Post-conditions	The retailer is able to update their system on the basis of the information provided by the network operator.
Transaction acknowledgement-specific event codes	Refer to Appendix A

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# Step 3 -5 – Change Meter Read Route & NSRD process

As the re-energisation field work was completed before the manual allocation of a real Meter Read Route code and NSRD, SDUs will be triggered as per the process in section 3.7 above

### **Transaction Data Elements**

The attributes of the NMIStandingDataUpdateNotification are defined in Appendix C.

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#### **Transaction Schema Definition**

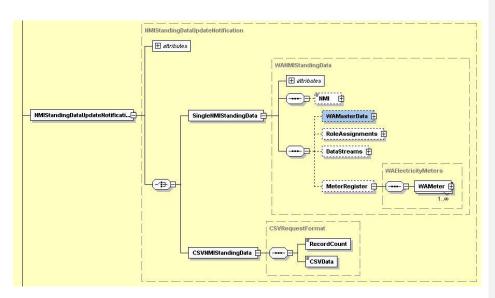


Figure 4746: NMI Standing Data Update notification schema definition

### Step 1 - Sample XML - "Full" SDU triggered by changes to standing data

The Full SDU is triggered by the new standing data for Meter Read Route and NSRD. These did not result in the sending of Partial SDUs because the meter is "Active, but not sent to market". This flag means that the 'Full' SDU contains no meter level information.

This XML is exactly the same as that in 3.13.4.1.2 above.

### Step 2 - Sample XML - Full SDU triggered by closure of service order

As the field work (energisation) has been completed, this Full SDU contains all of the meter and register information.

This XML is exactly the same as that in 3.13.4.1.2 above.

# Step 3 - Sample XML -change in Meter Read Route and NSRD

The XML for these transactions is defined in 3.7.4.1 above.

5

# 3.13.5 Related Transactions

3.13.5.1 Preceding Transactions

10 None.

3.13.5.2 Subsequent Transactions

None.

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### 3.14Temporary to Permanent Supply Change

#### 3 14 1 Overview

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The Temporary to Permanent Supply Change business scenario is, in effect, a daisy chain of three different business scenarios. These are:

- New Connection (Service Order Sub Type Temporary);
  - 2. New Connection (Service Order Sub Type Permanent); and
  - 3. Supply Abolishment.

The business scenario follows the path detailed below. It should be noted that because there can be indeterminate durations between any of the above business scenarios, it is not appropriate to mould them together and they should be best treated as three distinct scenarios.

A temporary supply is created at the service address. This is initiated by the current retailer submitting a New Connection service order. Because there is an intent to later remove this and replace with a permanent supply, the Sub Type of this service order should be Temporary. The transactions received by the current retailer in response to this service order are the same as those received in the New Connections section above (see section 3.13).

When the **same** service address is ready to receive a permanent supply, the current retailer submits a New Connections service order (this time with a Sub Type of Permanent). This process follows that detailed in section 3.13.

After the conclusion of this activity, there will be two separate NMIs at this service address, with each NMI having its own meter. The only remaining activity is to remove the temporary supply, and this is achieved through performing a Supply Abolishment. This can be submitted by the current retailer or it may be initiated by the network operator. In either situation, the current retailer will receive the same transactions as those in the Abolish NMI business process (section 3.11 above).

### 3.14.2 Business Rules

There are none that are specific to this process.

#### 30 3.14.3 Process Breakdown

See the relevant sections described in the narrative above.

#### 3.14.4 Transactions

See the relevant sections described in the narrative above.

#### 3.14.5 Related Transactions

See the relevant sections described in the narrative above.

#### 3.15Install Meter

### 3.15.1 Overview

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The Install Meter business process reflects the relatively infrequent situation where a meter is installed at a site. This can be done through the submission of an Adds And Alts service order (Sub Type – Install Meter), and this can be initiated either by a current retailer or a the network operator. If the network operator initiates the service order, the current retailer will have no visibility of the service order transactions.

When the network operator receives the service order (note that the network operator can send the service order to itself), it will commission the fieldwork to install the meter and update its systems based on the returned paperwork. When the new meter is installed and made active (and sent to market), a single Partial SDU is sent to the current retailer.

This Partial SDU only notifies that the status of the NMI as Active, and this status notification is sent irrespective of the status of the NMI prior to the meter installation. When this is Partial SDU is sent, the service order will then be closed – and this publishes a Full SDU to the current retailer.

After the publication of the Full SDU that relates to the service order, the network operator's systems will automatically allocate a Meter Read Route and NSRD for the new meter. The changes to these two pieces of standing data will result in two Partial SDUs being published, followed by a Full SDU at the end of the next standing data period.

In the unlikely event that the network operator's system is not able to allocate a real Meter Read Route and NSRD, these will be manually assigned. In such a case, the business process described in section 3.7 above will be started.

#### 3.15.2 Business Rules

#### **Submission rules**

There are none that are specific to this process.

#### 30 Validation

There are none that are specific to this process.

### Response

There are none that are specific to this process.

# 3.15.3.1 Process diagram

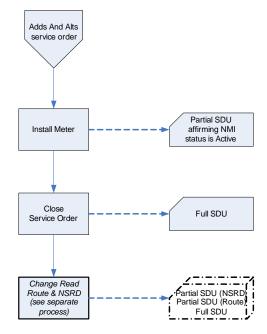


Figure  $\underline{\textbf{48}}\underline{\textbf{47}}$ : NMI Standing Update notification process – Install Meter

10

### 3.15.3.2 Transactional Diagram

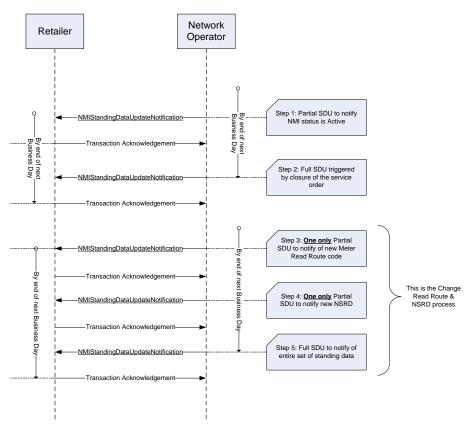


Figure 4948: Transaction diagram – Install Meter

In the above diagram, the time lags between steps 1 and 2 and between 2 and 3 are not governed by an SLA or applicable code provision. The network operator need only meet the more general requirements of the metrology procedure. In general, these time lags should only be a day or two. Participants should be aware that if an unforseen problem arises, a further delay of several days could be seen.

# 3.15.3.3 Timing Requirements

Transaction	Transaction Group	Version	Sender	Receiver	Timing
NMIStandingDataUpdate Notification	NMID	r9	Network Operator	Current Retailer	Before End of Day on next business day following the change being recorded by the network operator
Transaction Acknowledgement	NMID	r15	Current retailer	Network operator	By end of next Business Day

5

10

### 3.15.4 Transactions

# 3.15.4.1 NMIStandingDataUpdateNotification

# Step 1 - Partial SDU to notify NMI status is Active

Transaction Definition	NMIStandingDataUpdateNotification
Trigger	Network Operator completes a Meter Install
Pre-conditions	A NMI is assigned to a current retailer.
Post-conditions	The retailer is able to update their system on the basis of the information provided by the network operator.
Transaction acknowledgement-specific event codes	Refer to Appendix A

Step 2 - Full SDU on service order closure

Transaction Definition	NMIStandingDataUpdateNotification
Trigger	Closure of the Adds And Alts service order
Pre-conditions	A NMI is assigned to a current retailer.
Post-conditions	The retailer is able to update their system on the basis of the information provided by the network operator.
Transaction acknowledgement-specific event codes	Refer to Appendix A

Step 3 – Partial SDU to notify of new Meter Read Route value

Transaction Definition	NMIStandingDataUpdateNotification
Trigger	Value assigned to Meter Read Route code in NMI standing data
Pre-conditions	A NMI is assigned to a current retailer.
Post-conditions	The retailer is able to update their system on the basis of the information provided by the network operator.
Transaction acknowledgement-specific event codes	Refer to Appendix A

# Step 4 - Partial SDU to notify of new NSRD

Transaction Definition	NMIStandingDataUpdateNotification
Trigger	Value assigned to NSRD in NMI standing data
Pre-conditions	A NMI is assigned to a current retailer.
Post-conditions	The retailer is able to update their system on the basis of the information provided by the network operator.
Transaction acknowledgement-specific event codes	Refer to Appendix A

Step 5 – Full SDU triggered by previous partials

Transaction Definition	NMIStandingDataUpdateNotification
Trigger	Changes to NMI standing data within previous standing data period.
Pre-conditions	A NMI is assigned to a current retailer.
Post-conditions	The retailer is able to update their system on the basis of the information provided by the network operator.
Transaction acknowledgement-specific event codes	Refer to Appendix A

### 5 Transaction Data Elements

The attributes of the NMIStandingDataUpdateNotification are defined in Appendix C.

# **Transaction Schema Definition**

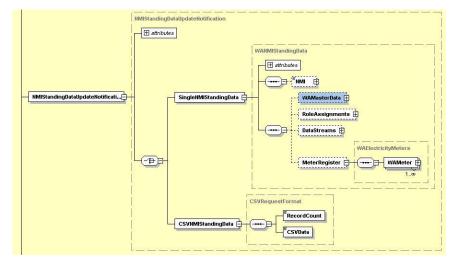


Figure 5049: NMI Standing Data Update notification schema definition

#### Step 1 - Sample XML - Partial SDU to notify NMI status is Active

```
<?xml version = '1.0' encoding = 'ISO-8859-1'?>
  5
            <ase:aseXML xmlns:ase="urn:aseXML:r17:WA:r2.00" xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
xsi:schemaLocation="urn:aseXML:r17:WA:r2.00
http://www.westernpower.com.au/aseXML/schemas/r17/WA:r2.00/aseXML_r17_WA_r2.00.xsd">
                  Header>

From description="Western Power Networks">WPNTWRKS</from>

To description="Synergy Energy">WPRTL</To>

MessageID > WPNTWRKSMSG-12563322

MessageDate>2008-05-05T08:44:33+08:00

MessageDate>
TransactionGroup>MMID</TransactionGroup>

Priority>Medium

Priority>Market> WAELEC

Warket> WAELEC

Market>
10
15
                 </Header>
                <Transactions>
                    20
                             <NMI>8001230982</NMI>
                             <WAMasterData>
                          <WAMasterData>
<Status effectiveDate="2008-05-02">A</Status>
</WAMasterData>
</SingleNMIStandingData>
25
                 </MIStandingDataUpdateNotification>
</Transaction>
</Transactions>
             </ase:aseXML>
```

### Step 2 Sample XML - Full SDU on service order closure

```
<?xml version="1.0" encoding="UTF-8" standalone="no"?>
<aseXML NS1:schemaLocation="urn:aseXML:r17:WA:r2.00</pre>
35
           http://www.westernpower.com.au/aseXML/schemas/r17/WA:r2.00/aseXML_r17_WA_r2.00.xsd" xmlns="urn:aseXML:r17:WA:r2.00" xmlns:NS1="http://www.w3.org/2001/XMLSchema-instance">
                   <Header xmlns=
                           der xmlns="">
<From description="Western Power Networks">WPNTWRKS</From>
                          <To description="Synergy Energy">WPRTL</To>
<MessageID>WPNTWRKSMSG-12563323
<MessageID>WPNTWRKSMSG-12563323

</
40
                           <Priority>Medium</Priority>
                   <Market>WAELEC</Market>
</Header>
45
                   <Transactions xmlns="">
                          <Transaction transactionID="WPNTWRKS-0000a-16578061" transactionDate="2008-05-05708:44:44+08:00">
                                  NMIStandingDataUpdateNotification version="r9">
<NMIStandingDataUpdateNotification version="r9">
<SingleNMIStandingData>
<NMI checksum="7">8001230982</NMI>
50
                                                <WAMasterData>
                                                       55
                                                       <Pare the first true |
</pre>
ChildEmbeddedNetworkIdentifier NS1:nil="true"/>
<Address>

<WAStructuredAddress>
60
                                                                     <BuildingOrPropertyName>Building Name</BuildingOrPropertyName>
<BuildingOrPropertyName>Building line 2</BuildingOrPropertyName>
                                                                     <House>
     <HouseNumber>37</HouseNumber>
                                                                     <Street>
  <StreetName>HOPE</StreetName>
  <StreetType>AVE</StreetType>
65
                                                                      </Street>
                                                              70
                                                       </Address>
<Status effectiveDate="2008-05-02">A</Status>
```



<DistanceFromSubstation effectiveDate="2005-02-23" NS1:nil="true"/>

```
<Voltage>LV</Voltage>
<PropertyType>Domestic</PropertyType>
<PoleNumber NS1:nil="true"/>
        5
                                                                                                                                                                  </WAMasterData>

 10
                                                                                                                                                                                       15
 20
                                                                                                                                                                                          </RoleAssignment>
</RoleAssignment effectiveDate="2005-02-23">
</RoleAssignment effectiveDate="2005-02-23">
</Role> Party description="Synergy Energy">WPRTL</Party>
</Role> FRMP</Role>
 25
                                                                                                                                                                                          </RoleAssianment>
                                                                                                                                                                  </RoleAssignments>
</Box display="block" color="block" col
 30
                                                                                                                                                                                                                 <Suffix>11</Suffix>
                                                                                                                                                                                                                 Sulfux 11/Jounx 2
ProfileName > NOPROF 
/ ProfileName > NOPROF 
/ ProfileName > OPROF 
/ ProfileName > OPROF 
/ DataStreamType > Consumption 
/ DataStreamType > 
Status effectiveDate = "2008-03-02" > A 
/ Status > 

<Status effectiveDate="2008-03-02">A</Status>
</DataStream>
<DataStream>
<Suffix>12</Suffix>
<ProfileName>NSLP</ProfileName>
<AveragedDailyLoad>0</AveragedDailyLoad>
<DataStreamType>Consumption</DataStreamType>
</DataStream2
</DataStream3</pre>
<//DataStream3</pre>
35
 40
                                                                                                                                                                                          </DataStream>
                                                                                                                                                                  </DataStreams>
                                                                                                                                                                  <MeterRegister>
<WAMeter>
 45
                                                                                                                                                                                                              Meter>

<SerialNumber>0180032706</SerialNumber>
<NextScheduledReadDate>2008-03-27</NextScheduledReadDate>
<Location>Right Side </Location>
<Hazard NS1:nil="true"/>
<InstallationTypeCode effectiveDate="2005-02-23">BASIC</InstallationTypeCode>
<Route effectiveDate="2006-02-23">125FM_06</Route>

 50
                                                                                                                                                                                                                55
                                                                                                                                                                                                                <Model>E301</model>
<TransformerLocation NS1:nil="true"/>
<TransformerType NS1:nil="true"/>
<TransformerRatio NS1:nil="true"/>
<Constant NS1:nil="true"/>

60
                                                                                                                                                                                                                <LastTestDate NS1:nil="true"/>
<TestResultAccuracy NS1:nil="true"/>
<TestResultNotes NS1:nil="true"/>
<TestPerformedBy NS1:nil="true"/>
                                                                                                                                                                                                            TestResultivous No1:inil = "true"/>

*TestReformedBy NS1:nil="true"/>

*MeasurementType NS1:nil="true"/>

*ReadTypeCode>MV2./ReadTypeCode>

*RemotePhoneNumber NS1:nil="true"/>

*CommunicationsEquipmentType NS1:nil="true"/>

*CommunicationsProtocol NS1:nil="true"/>

*DataConversion NS1:nil="true"/>

*DataConversion NS1:nil="true"/>

*Status effectiveDate="2008-03-02">C</Status>

*Program NS1:nil="true"/>

*AdditionalSiteInformation NS1:nil="true"/>

*EstimationInstructions NS1:nil="true"/>

*EstimationInstructions NS1:nil="true"/>

*Password NS1:nil="true"/>

*TestCalibrationProgram NS1:nil="true"/>

*KeyCode NS1:nil="true"/>

*ReadingInstructions effectiveDate="2005-02-23" NS1:nil="true"/>

*CustomerFundedMeter>No</CustomerFundedMeter>
*RegisterConfiguration>

*RegisterConfiguration>
65
 70
 75
 80
                                                                                                                                                                                                                <RegisterConfiguration>
<Register>
```



```
<RegisterID>007</RegisterID>
<NetworkTariffCode effectiveDate="2005-02-23">AER</NetworkTariffCode>
<UnitOfMeasure> KWH </UnitOfMeasure>
<TimeOfDay>ALLDAY</TimeOfDay>
<Multiplier> 1</Multiplier>
<UnitOfMeasure>
<Suffix>11</Suffix>
<Suffix>11</Suffix>
   5
                                                                                                                                                       <ControlledLoad>No</ControlledLoad>
                                                                                                                                                       <ConsumptionType>Cumulative/ConsumptionType>
<Status effectiveDate="2008-03-02">C</Status>
<DirectionIndicator>Export/DirectionIndicator>
10
                                                                                                                                         </Register>
                                                                                                             </Register/Configuration>
</WAMeter>
</WAMeter>
15
                                                                                                                           <SerialNumber>0200050002</SerialNumber>
                                                                                                                           <NextScheduledReadDate NS1:nil="true"/>

<
                                                                                                                        20
25
30
35
40
                                                                                                                         <AdditionalSiteInformation NS1:nil="true"/>
EstimationInstructions NS1:nil="true"/>
<UserAccessRights NS1:nil="true"/>
<Password NS1:nil="true"/>
<TestCalibrationProgram NS1:nil="true"/>
<KeyCode NS1:nil="true"/>
<ReadingInstructions NS1:nil="true"/>
<CustomerFundedMeter NS1:nil="true"/>
<MeterRequirementForTransfer NS1:nil="true"/>
<Pacitable Conformations</pre>
45
50
                                                                                                                         55
                                                                                                                                                       <TimeOfDay>ALLDAY</TimeOfDay>

<Multiplier>
<DialFormat>6.0

Output

60
                                                                                                                                                       <Suffix>12</Suffix>
<ControlledLoad>No</ControlledLoad>
<ConsumptionType>Cumulative</ConsumptionType>
<Status effectiveDate="2008-05-02">C</Status>
                                                                                                                                                       <DirectionIndicator>Export/DirectionIndicator>
65
                                                                                                                           </Register>
</RegisterConfiguration>

<
                                                                                              </WAMeter>
</MeterRegister>
70
                       </aseXML>
```

### Steps 3-5 Sample XML – Change to Meter Read Route & NSRD

For detail on these transactions, please see section 3.7.4.



#### 3.15.5 Related Transactions

# 3.15.5.1 Preceding Transactions

5 None.

10

### 3.15.5.2 Subsequent Transactions

If the network operator is not able to automatically assign a real Meter Read Route code and NSRD, a placeholder will be used. This triggers the start of the Change Meter Read Route & NSRD business process, which itself generates the transactions seen in section 3.7.4



### 3.16Merge NMI

#### 3.16.1 Overview

In rare situations where we find that two NMIs have been incorrectly defined for one site that has two or more meters, the remedial action involves manual reorganisation of the Site. This business process can only be undertaken where both NMIs have all the same participants (FRMP, LNSP, RP, etc). The communications in the NMI Merge process are ad hoc (i.e. email and telephone) and are not supported by the WA B2B Procedures.

The end result will be communicated using off-market email to the required market participants as well as the publication of full standing data for the impacted NMIs.

The following will typically be communicated in the email:

- 1. Site 1 address
- 2. Site 1 NMI

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- 3. Site 1 meter number(s)
- 15 4. Site 1 creation date
  - 5. Site 2 address
  - 6. Site 2 NMI
  - 7. Site 2 meter number(s)
  - 8. Site 2 creation date
- 9. Which site is to be retained
  - 10. Which meter(s) are being moved
  - 11. Which NMI will be retained
  - 12. Which NMI will be abolished
  - 13. Confirmation of the remaining sites address

The off-market process involves moving the meter(s) and all related register(s) and reading history from the old NMI to the new NMI (alongside the other meters(s). Upon completion of the process, the network operator will publish the Full SDU for the new NMI and email all impacted market participants, informing them of the changes that have been undertaken.

It should be noted that no SDUs will be published to notify of the extinct NMI. The network operator will advise the retailer of the NMI that is to become extinct by means of an email or similar direct communication.

#### 3.16.2 Business Rules

### Submission rules

This process is a manually-executed market process. It is not included in the scope of the WAEM's B2B transactions. This manual process is initiated by the retailer completing an Electricity Transfer Application Form – which can be found in the network operator's Retailer and Generator Portal.

#### Validation

There are none that are specific to this process.

# 10 Response

5

There are none that are specific to this process.

#### 3.16.3 Process Breakdown

# 15 3.16.3.1 Process diagram



Figure 5150: NMI Standing Update notification process – NMI Merge

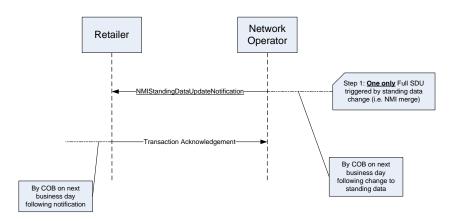


Figure 5254: Transaction diagram – NMI Merge

# 3.16.3.3 Timing Requirements

Transaction	Transaction Group	Version	Sender	Receiver	Timing
NMIStandingData UpdateNotification	NMID	r9	Network Operator	Current Retailer	Before End of Day on next business day following the change being recorded by the network operator
Transaction Acknowledgement	NMID	r15	Current retailer	Network operator	By end of next Business Day

10

5

# 3.16.4 Transactions



# 3.16.4.1 NMIStandingDataUpdateNotification

Transaction Definition	NMIStandingDataUpdateNotification
Trigger	Network Operator completes a NMI Merge process.
Pre-conditions	A NMI is assigned to a current retailer.
Post-conditions	The retailer is able to update their system on the basis of the information provided by the network operator.
Transaction acknowledgement-specific event codes	Refer to Appendix A

5

### **Transaction Data Elements**

The attributes of the NMIStandingDataUpdateNotification are defined in Appendix C.

### **Transaction Schema Definition**

10

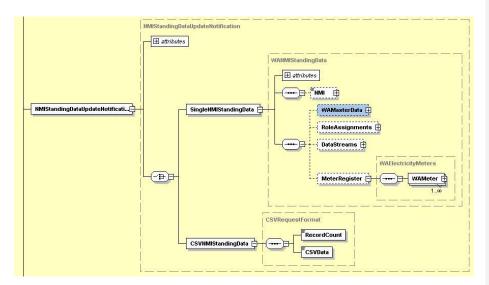


Figure  $\underline{\bf 5352}$ : NMI Standing Data Update notification schema definition



### Step 1 Sample XML - Full SDU to notify of new details for NMI

```
5
                                               <?xml version = '1.0' encoding = 'ISO-8859-1'?>
<ase:aseXML xmlns:ase="urn:aseXML:r17:WA:r2.00" xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
xsi:schemaLocation="urn:aseXML:r17:WA:r2.00</pre>
                                             \text{Kinisterialscool} \text{Winisterialscool} \text{Vinisterialscool} \text{Winisterialscool} \text{Vinisterialscool} \text{
 10
                                                                      \tag{Todescription="Synergy Energy">WPRTL</To>
\tag{Todescription="Synergy Energy">WPRTL</To>
\tag{Todescription="Synergy Energy">WPRTL</To>
\tag{Todescription="Synergy Energy">WPRTL</To>
\tag{Todescription="Synergy Energy">WRSTL</To>
\tag{Todescription="Synergy Energy">WRSTL</To>
\tag{Todescription="Synergy Energy">WRSTL</To>
\tag{Todescription="Synergy Energy">WRSTL</To>
\tag{Todescription="Synergy Energy">WRSTL<\tag{Todescription="Synergy Energy Ener
 15
                                                                        <Priority>Medium</Priority>
<Market>WAELEC</Market>
                                                           </Header>
<Transactions>
                                                                     TransactionIS>
<Transaction transactionID="WPNTWRKS-0000a-16581588" transactionDate="2008-05-06T12:18:15+08:00">
<NMIStandingDataUpdateNotification version="r9">
<SingleNMIStandingData>
<NMI checksum="6">8001749206</NMI>
<WAMasterData>
SuperdictionCodes WAY (2018) in the property of the prope
 20
                                                                                                                     <JurisdictionCode>WA</JurisdictionCode>
                                                                                                                  <JursalctionCode>Wat</JursalctionCode>

<AMTClassificationCode>&It;5.7KW </NMIClassificationCode>
<TransmissionNodeIdentifier effectiveDate="1970-08-21">WAST</TransmissionNodeIdentifier>
<DistributionLossFactorCode effectiveDate="1970-08-21">QRTI</DistributionLossFactorCode>
<ParentEmbeddedNetworkIdentifier xsi:nil="true"></ParentEmbeddedNetworkIdentifier>
<ChildEmbeddedNetworkIdentifier xsi:nil="true"></ChildEmbeddedNetworkIdentifier>
 25
 30
                                                                                                                     <Address>
<WAStructuredAddress>

<
                                                                                                                                          <House>
 35
                                                                                                                                            <Lot>
                                                                                                                                                        <LotNumber>1257</LotNumber>
                                                                                                                                             </Lot>
 40
                                                                                                                                                     <StreetName>CRAIG</StreetName>
                                                                                                                                                        <StreetType>ST</StreetType>
                                                                                                                                                </Street>

</p
 45

<
50
                                                                                                          <Voltage>LV</Voltage>
<PropertyType>Domestic</PropertyType>
<PoleNumber xsi:nil="true"></PoleNumber>
</WAMasterData>
                                                                                                          <RoleAssignments>
                                                                                                                    55
                                                                                                                     </RoleAssignment>
                                                                                                                     60
                                                                                                                     </RoleAssignment>
<RoleAssignment effectiveDate="1970-08-21">
                                                                                                                               <Party description="Synergy Energy">WPRTL</Party>
<Role>ROLR</Role>
65

<
 70
                                                                                                                         75
                                                                                                            </RoleAssignments>
                                                                                                          <DataStreams>
                                                                                                                     <DataStream>
```



```
<Suffix>11</Suffix>
<ProfileName>NOPROF</ProfileName>
<AveragedDailyLoad>112</AveragedDailyLoad>
<DataStreamType>Consumption</DataStreamType>
<Status effectiveDate="1970-08-21">A</Status>
</DataStream>
<DataStream>
<Cuffix>11/<Cuffix>
       5
                                                                                                <Suffix>11</Suffix>
                                                                                                <ProfileName>
<ProfileName>
<AveragedDailyLoad>12</AveragedDailyLoad>
<DataStreamType>Consumption</DataStreamType>
<Status effectiveDate="1981-12-29">A</Status>
 10
                                                                                         </DataStream>
                                                                                 </DataStreams>
                                                                                  <MeterRegister>
<WAMeter>
 15
                                                                                               WAMETER?

SerialNumber>410M3631/SerialNumber>

<NextScheduledReadDate>2008-01-25/NextScheduledReadDate>

<Location>Unknown Location>/Location>
<Hazard xs::nil="true">

 20
                                                                                               25
                                                                                             30
35
 40
 45
 50
                                                                                                <MeterRequirementForTransfer xsi:nil="true"></MeterRequirementForTransfer>
<RegisterConfiguration>
<Register>
                                                                                                            edister Computation:

Register ID > 007 < Register ID >

Register ID > 007 < Register ID > 007 < Register ID >

Register ID > 007 < Register ID > 007 < Register ID > 007 < Register ID >

Register ID > 007 < Regi
 55
 60
 65
                                                                                        </Register>
</RegisterConfiguration>
</WAMeter>
                                                                                        <WAMeter>
                                                                                               70
 75
                                                                                               <Use effectiveDate="1981-12-29">REVENUE</Use>
<Point>01
/Point>01
/Point>01
/Manufacturer xsi:nil="true"></manufacturer>
<model>M301</model>
<TransformerLocation xsi:nil="true"></fransformerLocation>
<TransformerType xsi:nil="true"></fransformerType>
<TransformerRatio xsi:nil="true"></fransformerRatio>

<Constant xsi:nil="true"></constant>
 80
```



```
| Customer Transfer and Standing Data Procedure

| ClastTestDate xsi:nil="true"> </TestResultAccuracy>
| TestResultAccuracy xsi:nil="true"> </TestResultNotes>
| TestPerformedBy xsi:nil="true"> </TestResultNotes>
| TestPerformedBy xsi:nil="true"> </TestPerformedBy>
| MeasurementType xsi:nil="true"> </TestPerformedBy>
| ReadTypeCode> MV2 </ReadTypeCode>
| RemotePhoneNumber xsi:nil="true"> </RemotePhoneNumber>
| CommunicationsEquipmentType xsi:nil="true"> </RemotePhoneNumber>
| CommunicationsProtocol xsi:nil="true"> </RedotationsProtocol>
| CommunicationsProtocol xsi:nil="true"> </RedotationsProtocol xsi:nil="
                5
   10
   15
   20
25
30
35
                                                                                                                            </MAMeter>
</MeterRegister>
</singleNMIStandingData>
</nMIStandingDataUpdateNotification>
</Transaction>
</Transactions>
40
                                                                                                        </ase:aseXML>
45
```

## 3.16.5 Related Transactions

3.16.5.1 Preceding Transactions

None.

3.16.5.2 Subsequent Transactions 50

None.



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#### 3.17Crossed Meters Fix

A crossed meter can be summarised as a customer being billed for consumption on meters that are not attached to their address. The market requires that the correct meter is associated with the correct NMI and the NMI has the correct site address. This is a responsibility of the network operator.

The process is generally initiated by a current retailer following a billing enquiry from a customer. This will involve the submission of a service order to the network operator, and would normally involve a site visit by the network operator to confirm the configuration of the site in question.

It is important to understand that this process must follow a clear path in order to avoid double correction. By this it is meant that a problem may be resolved in both the network operator's and participant's systems resulting in a continuation of the same problem; the customer will still be billed for the incorrect consumption. Therefore, the network operator should complete any investigation and changes to the standing data *before* the current retailer applies any changes. Off-market communication from the network operator will help to clearly define the required end result so participants can confirm that their systems are correctly updated, either automatically via standing data updates, or manually if required.

There are a number of variations to the crossed meter problem, but they can be broadly summarised into one of two types:

- Participant data incorrect: The standing data is correct (ie the meters are defined against the correct address in the standing data), but the current retailer had the incorrect addresses defined for these meters.
- Network operator data incorrect: The standing data is incorrect (ie the meters are defined against the wrong address in the standing data), but the current retailer has the correct addresses defined for these meters.

## 30 3.17.1 Participant Data Incorrect

No system changes required by the Network Operator. The investigation results are communicated off-market to the current retailer so they are able to correct their systems.

# 3.17.2 Network Operator Data Incorrect

A field visit confirms that the standing data is incorrect, so the network operator undertakes the required actions to correct the situation. This process will involve standing data (full and partial SDUs) as well as meter readings being sent to market, but the combinations of messages will depend on the specific situation.

As with all cross meter situations, off market communication from the network operator to related market participants will inform them of the:

- investigation results;
- actions taken by the network operator; and



10

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 end result identifying what meters are related to what NMIs - and what the site address is for each of these NMIs.

An example of this communication is shown below:

This a crossed meter problem that occurred in October 2007 when the underground power was

Meter 0180000440 has been moved from NMI 8001224856 for 113A SUTHERLAND ST PORT HEDLAND to NMI 8001858771 for 113 SUTHERLAND ST PORT HEDLAND.

Meter 0280005608 has been moved from NMI 8001858771 for 113 SUTHERLAND ST PORT HEDLAND to NMI 8001224856 for 113A SUTHERLAND ST PORT HEDLAND from the 12/10/07.

The current readings are as follows:

Meter 0180000440 096399 21/02/2008 Meter 0280005608 0012203 21/02/2008

# 3.18 Retrospective Change

# 3.18.1 Overview

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A retrospective change may be required in a number of scenarios, and a sample of the most common is used below to illustrate the business process:

- Backdated New Connection: A new connection was not submitted by an electrical contractor until well after the meter was installed, so the NMI and meter starts dates are backdated
- Tariff Change: A tariff change (effective dated attribute) has been missed and must be backdated
  - Tariff Change (still current): The new tariff is still current today
  - Tariff Change (now expired): The new tariff was only current for a limited period and a third tariff now applies

#### 15 Backdated New Connection

All new connections and other service order processes are by nature retrospective as the actual work all occurs on or before today, whether one day or two months ago.

Therefore the standing data published will have the NMI, Meter and register status start dates in the past. The transactions published will be the same as those defined for the New Connection process.

If there are other changes that have occurred to effective dated properties during the life of the installation, these are covered by the retrospective attribute changes described below.

# Tariff Change (still current)

If a tariff change is made today, but with an effective start date two months ago, this change will be published using standard processes. This will include a partial SDU followed by a full SDU.

As described above, this is very similar to a tariff change with an effective start date of today.

# Tariff Change (non-current historic tariff)

If a tariff change (or other effective dated attribute) is currently incorrect, the following might be defined in the market:

Network Tariff: AER Start Date: 1/1/2008

If through investigation, it is agreed that the tariff history should be changed to:

Network Tariff: AER Start Date: 1/1/2008 End Date: 31/3/2008

Network Tariff: TOUS Start Date: 1/4/2008 End Date: 30/4/2008

Network Tariff: AEB Start Date: 1/5/2008

5 The changes can be made in chronological sequence, with the following steps:

1. Change the tariff to TOUS and automatically publish a partial SDU:

Network Tariff: TOUS Start Date: 1/4/2008

2. Change the tariff to AEB and automatically publish a partial SDU:

Network Tariff: AEB Start Date: 1/5/2008

In this example, steps 1 and 2 will normally be undertaken very close to each other – i.e. within the same standing data period. This would result in a single Full SDU being published. There may be instances where each of the steps 1 and 2 above may be executed in different standing data periods. This would result in two Full SDUs being published.

If the changes are not made in chronological sequence (eg AEB is defined as the current tariff from 1/5/2008 before the TOUS tariff change is defined), the change will require IT involvement. Therefore this process is generally avoided. If the change is required, offmarket communication of the tariff changes would be undertaken by the Network Operator.

### 20 **3.18.2 Business Rules**

#### **Submission rules**

There are none that are specific to this process.

### Validation

There are none that are specific to this process.

## Response

There are none that are specific to this process.

#### 3.18.3 Process Breakdown

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Retrospective Changes is too generic a business scenario to have a process breakdown.

## 3.18.4 Transactions

# 3.18.4.1 NMIStandingDataUpdateNotification

# Step 1 - Partial SDU triggered by change in tariff

Transaction Definition	NMIStandingDataUpdateNotification
Trigger	Network Operator makes change to NMI Standing Data.
Pre-conditions	A NMI is assigned to a current retailer.
Post-conditions	Retailer is able to update their systems to reflect the new standing data.
Transaction acknowledgement-specific event codes	Refer to Appendix A

# Step 2 - Partial SDU triggered by change in tariff to TOUS

Transaction Definition	NMIStandingDataUpdateNotification
Trigger	Network Operator makes a change to the tariff.
Pre-conditions	A NMI is assigned to a current retailer.
Post-conditions	Retailer is able to update their systems to reflect the new standing data.
Transaction acknowledgement-specific event codes	Refer to Appendix A

# Step 3 – Partial SDU triggered by change in tariff to AER

Transaction Definition	NMIStandingDataUpdateNotification
Trigger	Network Operator makes a change to the tariff.
Pre-conditions	A NMI is assigned to a current retailer.
Post-conditions	Retailer is able to update their systems to reflect the new standing data.
Transaction acknowledgement-specific event codes	Refer to Appendix A

# Step 4 – Full SDU triggered by previous Partial SDUs

Transaction Definition	NMIStandingDataUpdateNotification
Trigger	Changes made to the NMI's standing data in the previous standing data period.
Pre-conditions	A NMI is assigned to a current retailer.
Post-conditions	Retailer is able to update their systems to reflect the new standing data.
Transaction acknowledgement-specific event codes	Refer to Appendix A

# **Transaction Data Elements**

The attributes of the NMIStandingDataUpdateNotification are defined in Appendix C.

# 5

# **Transaction Schema Definition**

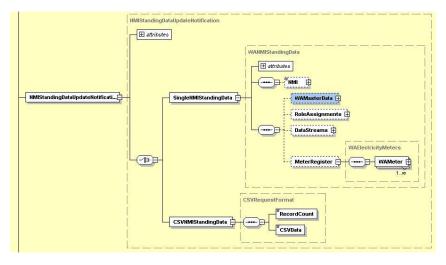


Figure  $\underline{\bf 5453}$ : NMI Standing Data Update notification schema definition

## Step 1 Sample XML - Partial SDU to reflect new TOUS tariff

```
<?xml version="1.0" encoding="ISO-8859-1" ?>
 5
                  <ase:aseXML xmlns:ase="urn:aseXML:r17:WA:r2.00" xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance" xsi:schemaLocation="urn:aseXML:r17:WA:r2.00</p>
                       http://www.westernpower.com.au/aseXML/schemas/r17/WA:r2.00/aseXML_r17_WA_r2.00.xsd">
                 <Header>
<From description="Western Power Networks">WPNTWRKS</from>
10
                 <To description="Synergy Energy">WPRTL</To>
<MessageID>WPNTWRKSMSG-12652903</MessageID>
<MessageDate>2008-06-30T12:40:33+08:00</MessageDate>

<
15
                 <Transactions>
                  <Transaction transactionID="WPNTWRKS-0000a-16719590" transactionDate="2008-06-30T12:40:33+08:00">
<NMIStandingDataUpdateNotification version="r9">

20
                 <SingleNMIStandingData>
<NMI>8001792113</NMI>
              = <MeterRegister>
= <WAMeter>
<SerialNumber>0180032704</SerialNumber>
25
               <RegisterConfiguration>
                  <RegisterID>007</RegisterID>
                 <NetworkTariffCode effectiveDate="2008-04-01">TOUS</NetworkTariffCode>
</Register>
30
                      </RegisterConfiguration>
</WAMeter>
</MeterRegister>
                      </SingleNMIStandingData>
</NMIStandingDataUpdateNotification>
35
                      </Transaction>
                      </Transactions>
</ase:aseXML>
```

# Step 2 Sample XML - Partial SDU to reflect new AEB tariff

```
45
                 <Header>
<From description="Western Power Networks">WPNTWRKS</from>
                 <To description="Synergy Energy">WPRTL</To>

<To description="Synergy Energy">WPRTL</To>

<MessageID> WPNTWRKSMSG-12652904
/MessageID>
<MessageDate>2008-06-30T12:43:17+08:00
/MessageDate>2008-06-30T12:43:17+08:00
/MessageDate>

/TransactionGroup> NMID
/TransactionGroup>

/Priority> Medium
/Priority>

/Market> WAELEC
/Market>
50
                      </Header>
               - <Transactions>
                 <Transaction transactionID="WPNTWRKS-0000a-16719592" transactionDate="2008-06-30T12:43:17+08:00">
<NMIStandingDataUpdateNotification version="r9">

55
                  <SingleNMIStandingData>
<NMI>8001792113</NMI>
               - <MeterRegister>
60
              = <WAMeter>
<SerialNumber>0180032704</SerialNumber>
               - <RegisterConfiguration>
              _ <Register>
<RegisterID>007</RegisterID>
65
                 <NetworkTariffCode effectiveDate="2008-05-01">AEB</NetworkTariffCode>
</Register>
                     </Register>
</RegisterConfiguration>
</WAMeter>
</MeterRegister>
70
                      </SingleNMIStandingData>
```



```
</NMIStandingDataUpdateNotification>
</Transaction>
</Transactions>
</ase:aseXML>
```

## Step 3 Sample XML - Full SDU to reflect changed standing data within standing data period

```
<?xml version="1.0" encoding="ISO-8859-1" ?>
_ <ase:aseXML xmlns:ase="urn:aseXML:r17:WA:r2.00" xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"</pre>
10
                                         xsi:schemaLocation="urn:aseXML:r17:WA:r2.00 http://www.westernpower.com.au/aseXML/schemas/r17/WA:r2.00/aseXML_r17_WA_r2.00.xsd">
                          - <Header
                               15
                               <Priority>Medium</Priority>
<Market>WAELEC</Market>
20
                                       </Header>
                                <Transactions>
                               <Transaction transactionID="WPNTWRKS-0000a-16719928" transactionDate="2008-06-30T12:46:51+08:00">
                               <NMIStandingDataUpdateNotification version="r9"
<SingleNMIStandingData>
25
                                <NMI checksum="1">8001792113</NMI>
                          - <WAMasterData>
<JurisdictionCode>WA</JurisdictionCode>
                               <a href="https://www.nateurincomes.com/whitclassificationCode">
</a> <a href="https://www.nateurincomes.com/whitclassificationCode">
<a href="https://www.nateurincomes
30
                               <ParentEmbeddedNetworkIdentifier xsi:nil="true" />
<ChildEmbeddedNetworkIdentifier xsi:nil="true" />
                          - <Address>
- <WAStructuredAddress>
35
                          - <House>
  <HouseNumber>11</HouseNumber>
                                      </House>
                          _ <Lot>
                                <LotNumber>397</LotNumber>
40
                                      </Lot>
                                <StreetName>BLADE</StreetName>
                               <StreetType>RD</StreetType>
</Street>
45
                                       </WAStructuredAddress>
                               <SuburbOrPlaceOrLocality>Canning Vale</SuburbOrPlaceOrLocality>
<StateOrTerritory>WA</StateOrTerritory>
                                <PostCode>6155</PostCode>
                                       </Address>
50
                               <Status effectiveDate="2005-04-15">A</Status>
<Status effectiveDate="2005-04-15">A</Status>
<DistanceFromSubstation effectiveDate="2005-04-15">3.82</DistanceFromSubstation>
<Voltage>LV</Voltage>
                               <PropertyType> Domestic/PropertyType>
<PoleNumber xsi:nil="true" />
55
                                       </WAMasterData>
                               <RoleAssignments>
<RoleAssignment effectiveDate="2005-04-15":
                               <Party description="Synergy Energy">WPRTL</Party><Role>LR</Role>
60
                          </RoleAssignment>
= <RoleAssignment effectiveDate="2005-04-15">
<Party description="Western Power Networks">WPNTWRKS</Party>
                               <Role>LNSP</Role>
</RoleAssignment>
65
                              <RoleAssignment effectiveDate="2005-04-15">
<Party description="Synergy Energy">WPRTL</Party>
                               <Role>ROLR</Role>
                          </RoleAssignment>
<RoleAssignment effectiveDate="2005-04-15"</p>
70
                               <Party description="Synergy Energy">WPRTL</Party>
<Role> RP</Role>
  </RoleAssignment>
                          - <RoleAssignment effectiveDate="2005-04-15">
<Party description="Synergy Energy">WPRTL</Party>
```

```
<Role>FRMP</Role>
  </RoleAssignment>
  </RoleAssignments>
<DataStreams>
     5
                                      - <DataStream>
                                            <Suffix>11</Suffix>
<ProfileName>NOPROF</ProfileName>
                                            <a href="Avaluation: Avaluation: Avalua
10
                                                     </DataStreams>
                                      - <MeterRegister>
                                    - <WAMeter>
15
                                              <SerialNumber>0180032704</SerialNumber>
                                            <NextScheduledReadDate>2008-02-15</NextScheduledReadDate>
<Location>Unknown Location
                                           20
                                             <Manufacturer xsi:nil="true" />
                                            <Model>E301</Model>
<TransformerLocation xsi:nil="true" />
25
                                            <TransformerType xsi:nil="true" />
<TransformerRatio xsi:nil="true" />
<Constant xsi:nil="true" />
                                            <Constant xsi:nil="true"/>
<LastTestDate xsi:nil="true"/>
<TestResultAccuracy xsi:nil="true"/>
<TestResultNotes xsi:nil="true"/>
<TestPerformedBy xsi:nil="true"/>
30
                                            <MeasurementType xsi:nil="true" />
<ReadTypeCode>MV2</ReadTypeCode>
<RemotePhoneNumber xsi:nil="true" />
35

<
                                            <Communications/rotocol.vsi:nil="true"/>
DataConversion xsi:nil="true"/>
<DataValidations xsi:nil="true"/>
<Status effectiveDate="2005-04-15">C</Status>
<Program xsi:nil="true"/>
<AdditionalSiteInformation xsi:nil="true"/>
40
                                            <EstimationInstructions xsi:nil="true" />
<UserAccessRights xsi:nil="true" />
<Password xsi:nil="true" />
45
                                            CTestCalibrationProgram xsi:nil="true" />
<KeyCode xsi:nil="true" />
<ReadingInstructions effectiveDate="2005-04-15" xsi:nil="true" />
                                              <CustomerFundedMeter>No</CustomerFundedMeter>
50
                                             <MeterRequirementForTransfer xsi:nil="true" />
                                             <RegisterConfiguration>
                                            <Register>
                                            RegisterID>007/RegisterID>

55
                                            <TimeOfDay>ALLDAY</TimeOfDay>
<Multiplier>1</Multiplier>
<DialFormat>6.0</DialFormat>
                                            <Suffix>11</Suffix>
<ControlledLoad>No</ControlledLoad>
60
                                            <ConsumptionType>Cumulative</ConsumptionType>
<Status effectiveDate="2005-04-15">C</Status>
<DirectionIndicator>Export</DirectionIndicator>
                                                        </Register>
</RegisterConfiguration>
65
                                                        </WAMeter>
</MeterRegister>
                                                        </SingleNMIStandingData>
                                                        </NMIStandingDataUpdateNotification>
70
                                                        </Transaction>
                                                        </Transactions>
                                                        </ase:aseXML>
```



## 3.18.5 Related Transactions

3.18.5.1 Preceding Transactions

None.

5 3.18.5.2 Subsequent Transactions

None.



# 3.19NMI Split

#### 3.19.1 Overview

On occasion, an application for NMI splitting will be submitted by a market participant or as a result of a network assessment. The market participant form is under the "Retailer and Generator Forms" on the network operator's web site. This form will include the requested changes and reasons supporting the request.

An example where this might occur is where two meters are currently assigned to one NMI but the meters are both supplied by different connections to the network. In some cases this might also occur if both meters are supplied from completely different network feeders.

Once the change has been approved:

- the new NMI will be created using off-market transactions, generally with the same details and effective dates as the existing NMI;
- the meter will be moved with related meter, register and reading history to the new NMI;
- a Full SDU will be manually initiated by the Network Operator for each impacted NMI; and
- the Network Operator will communicate the changes that have been made to the relevant market participants using off-market communication mechanisms.
- 20 The attached example completes the following request:

Both meters 0295 000181 & 0295 000191 were on nmi # 8002021310. We have now moved meter # 0295 000191 to it's own nmi # 8002013351.

#### 3.19.2 Business Rules

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# Submission rules

This process is a manually-executed market process. It is not included in the scope of the WAEM's B2B transactions. This manual process is initiated by the retailer completing an Electricity Transfer Application Form – which can be found in the network operator's Retailer and Generator Portal.

#### Validation

There are none that are specific to this process.

# Response

There are none that are specific to this process.

30



# 3.19.3.1 Process diagram

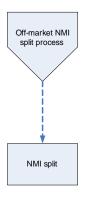


Figure 5554: NMI Standing Update notification process – NMI Split

# 3.19.3.2 Transactional Diagram

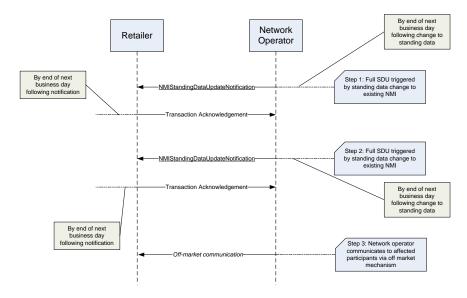


Figure  $\underline{\bf 5655}$ : Transaction diagram – NMI Split

5

#### 3.19.3.3 Timing Requirements

Transaction	Transaction Group	Version	Sender	Receiver	Timing
NMIStandingData UpdateNotification	NMID	r9	Network Operator	Current Retailer	Before End of Day on next business day following the change being recorded by the network operator
Transaction Acknowledgement	NMID	r15	Current retailer	Network operator	By end of next Business Day

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#### 3.19.4 Transactions

The transactions section contains three Full SDUs. Step 0 provides an SDU whose purpose is to give a pre-NMI split view of the standing data. Steps 1 and 2 are SDUs that are published to the relevant participants as a result of the off-market activities to split the NMI.

# 3.19.4.1 NMIStandingDataUpdateNotification

Step 0 – Standing Data Update showing position prior to NMI split.



```
<NMIClassificationCode>>5.7KW</NMIClassificationCode>
<TransmissionNodeIdentifier effectiveDate="2007-12-17">WDUR</TransmissionNodeIdentifier>
<DistributionLossFactorCode effectiveDate="2007-12-17">QRT5

<ParentEmbeddedNetworkIdentifier xs:inil="true">

<ChildEmbeddedNetworkIdentifier xs:inil="true">

<ChildEmbeddedNetworkIdentifier xs:inil="true"</p>

ChildEmbeddedNetworkIdentifier xs:inil="true"

ChildEmbeddedNetworkIdentifier
  5
                                <Address>
<WAStructuredAddress>
                                      <FlatOrUnit>
<FlatOrUnitNumber>A</FlatOrUnitNumber>
10
                                      </FlatOrUnit>
                                         <HouseNumber>298</HouseNumber>
                                      </House>
                                      <Lot>
15
                                         <LotNumber>25300</LotNumber>
                                      </Lot>
                                      <Street>
                                         <StreetName>MARINE</StreetName>
<StreetType>TCE</StreetType>
20
                                   </Street>
</WAStructuredAddress>
                                   <SuburbOrPlaceOrLocality>Geraldton</SuburbOrPlaceOrLocality>
<StateOrTerritory> WA</StateOrTerritory>
<PostCode>6530</PostCode>
25
                                </Address>
<Status effectiveDate="2008-02-12">A</Status>
                                <DistanceFromSubstation xsi:nil="true"></DistanceFromSubstation>
<Voltage>HV</Voltage>
                             30
                             <RoleAssignments>
<RoleAssignment effectiveDate="2007-12-17">
                                   <Party description="Synergy Energy">WPRTL</Party>
<Role>LR</Role>
35
                                </RoleAssignment>
                                40
                                 </RoleAssignment>
                                <RoleAssignment effectiveDate="2007-12-17">
<Party description="Synergy Energy">WPRTL</Party>
<Role>RP</Role>
                               RoleAssignment>
RoleAssignment effectiveDate="2007-12-17">
Party description="Synergy Energy">WPRTL</Party>
Role>ROLR</Role>
45
                                </RoleAssignment>
                                <Role Assignment effectiveDate="2007-12-17">
<Party description="Western Power Networks">WPNTWRKS</Party>
50
                                    <Role>LNSP</Role>
                                   /RoleAssignment>
                             </RoleAssignments>
<DataStreams>
<DataStream>
55
                                   <Suffix>E2</Suffix>
<ProfileName>NOPROF</ProfileName>
                                   AveragedDailyLoad>0x/AveragedDailyLoad>

OataStreamType>Interval
/DataStreamType>

Status effectiveDate="2008-01-15">A
/Status>
60
                                </DataStream>
                                   DataStream>

Suffix>Q2</Suffix>

ProfileName>NOPROF</ProfileName>

AveragedDailyLoad>0</AveragedDailyLoad>
OztaStreamType>Interval</DataStreamType>

Status effectiveDate="2008-01-15">A</Status>
65
                                </DataStream>
<DataStream>
                                   Datastream:

Suffix> 12
Suffix> 12
ProfileName>NOPROF
ProfileName>
AveragedDailyLoad>
AveragedDailyLoad>
Status effectiveDate="2008-01-15">A

70
75
                                </DataStream>
                                 <DataStream>
                                   <Suffix>E1</Suffix>
```



```
<ProfileName>NOPROF</ProfileName>
<AveragedDailyLoad>0</AveragedDailyLoad>
                                                                                                          <DataStreamType>Interval</DataStreamType>
<Status effectiveDate="2008-02-12">A</Status>
         5
                                                                                                   </DataStream>
                                                                                                 <DataStream>
<Suffix>Q1</Suffix>
                                                                                                          Surinx>QI
ProfileName>NOPROF
ProfileName>
AveragedDailyLoad>0
DataStreamType>Interval
DataStreamType>
Status effectiveDate="2008-02-12">A
Status
 10
                                                                                                   </DataStream>
                                                                                                 <DataStream>
<Suffix>T1</Suffix>
                                                                                                          <suiIIX> 11
ProfileName>NOPROF
ProfileName>NOPROF
AveragedDailyLoad>0
AveragedDailyLoad>10
DataStreamType>Interval
DataStreamType>
Status

ChatastreamType>
ChatastreamType>
 15
                                                                                                    </DataStream>
 20
                                                                                          </DataStreams>
<MeterRegister>
                                                                                                   <WAMeter>
                                                                                                          <SerialNumber>0295000181
<NextScheduledReadDate>2008-04-24

NextScheduledReadDate>2008-04-24

25
                                                                                                          <Ivexists incurrent and research as a feet of the control of th
                                                                                                            <Use effectiveDate="2006-08-09">REVENUE</Use>
 30
                                                                                                          <Point>02</Point>
<Manufacturer xsi:nil="true"></Manufacturer>
                                                                                                          <Model>E312</Model>
<TransformerLocation xsi:nil="true"></TransformerLocation>
                                                                                                            <TransformerType xsi:nil="true">
/TransformerType xsi:nil="true">
/TransformerRatio xsi:nil="true">
/TransformerRatio
 35
                                                                                                            <Constant>.005</Constant>
                                                                                                         <Constant>.005/Constant>
LastTestDate xsi:nil="true">/LastTestDate>
<TestResultAccuracy xsi:nil="true">/TestResultNotes xsi:nil="true">/TestResultNotes xsi:nil="true">/TestResultNotes>
<TestPerformedBy xsi:nil="true">/TestPerformedBy>
/MeasurementType>EQ/MeasurementType>
<ReadTypeCode>
RemotePhoneNumber>0417080634/RemotePhoneNumber>
Communications Functoring and These Observations Functoring Functoring
 40
                                                                                                            <CommunicationsEquipmentType>96</CommunicationsEquipmentType>
<CommunicationsProtocol xsi:nil="true"></CommunicationsProtocol>
 45
                                                                                                          <DataConversion>0.2</DataConversion>
<DataValidations xsi:nil="true"></DataValidations>
<Status effectiveDate="2008-01-15">C</Status>
                                                                                                            <Program xsi:nil="true"></Program></additionalSiteInformation>Ship loading facility. Geraldton Port Authority.</additionalSiteInformation></additionalSiteInformation></additionalSiteInformation>
 50
                                                                                                          <EstimationInstructions xsi:nil="true"></EstimationInstructions>
<UserAccessRights xsi:nil="true"></UserAccessRights>
                                                                                                            <Password>11111111</Password>

/ TestCalibrationProgram= MV Post Connect
/ TestCalibrationProgram= MV Post Connect
/ TestCalibrationProgram= MV Post Connect
/ ReadingInstructions xsi:mil="true">
/ ReadingInstructions

/ CustomerFundedMeter xsi:mil="true">
/ CustomerFundedMeter>
/ MeterRequirementForTransfer xsi:mil="true">
/ MeterRequirementForTransfer xsi:mil="true">
/ MeterRequirementForTransfer
/ MeterRequire
 55
                                                                                                             <RegisterConfiguration>
 60
                                                                                                                            Multiplier>10000
65
                                                                                                                            <DialFormat>6.2/DialFormat>
<Suffix>E2</Suffix>
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 70
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- RegisterID>02</RegisterID>

- RegisterID>02</RegisterID>

- NetworkTariffCode effectiveDate="2007-12-19">HVMD</NetworkTariffCode>

- UnitOfMeasure> KVARH</UnitOfMeasure>

- Wultiplier>
- DialFormat>6.2</DialFormat>
 75
```



```
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      5
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    UnitOfMeasure> KVAH
    UnitOfMeasure
    Multiplier> 10000
    Multiplier>
    DialFormat>
    Suffix>T2
    Suffix>
    ControlledLoad>

 15
                                                                                              </
                                                                                 </Register>
</RegisterConfiguration>
 20
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<WAMeter>
                                                                                WAINTER:

SerialNumber>0295000191</SerialNumber>

NextScheduledReadDate xsi:nil="true"></NextScheduledReadDate>

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/Route>
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                                                                                 <Point>01</Point>
                                                                                <Manufacturer xsi:nil="true"></Manufacturer:
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 30
                                                                               <Modeb=E312</pre>/Modeb
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/TransformerRatio xsi:nil="true">/TransformerRatio>
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Last Test Date xsi:nil="true">/Constant>

/TestResultAccuracy xsi:nil="true">/TestResultAccuracy>
/TestResultAccuracy xsi:nil="true">/TestPerformedBy xsi:nil="true">/TestPerformedBy

/MeasurementType>

/MeasurementType>

 35
 40
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<CommunicationsEquipmentType>96</CommunicationsEquipmentType>
                                                                                <CommunicationsProtocol xsi:mil="true"></CommunicationsProtocol</p><DataConversion>0.2/DataConversion>
 45
                                                                                <Data Validations xsi:nil="true">

Status effectiveDate="2008-02-12">C
/Program xsi:nil="true">
/Program>
                                                                                50
                                                                                CTestCalibrationProgram>Post Connect</TestCalibrationProgram>

KeyCode xsi:nil="true"></KeyCode>

ReadingInstructions xsi:nil="true"></ReadingInstructions>
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65
                                                                                              <Sutfus=E1</pre>
Sutfus=E1
Status effectiveDate="2008-02-12">C
Status=ConsumptionType>
Status=ConsumptionType>
ConsumptionType>
Status=ConsumptionType>
ConsumptionType>
Status=ConsumptionType>
ConsumptionType>
ConsumptionType>
Status=ConsumptionType>
ConsumptionType>
Status=ConsumptionType>
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ConsumptionType>
ConsumptionType>
ConsumptionType>
ConsumptionType>
ConsumptionType>
ConsumptionType>
ConsumptionType>
ConsumptionType>
ConsumptionType>
ConsumptionType>
<p
 70
                                                                                       </Register></Register>
                                                                                              <RegisterID>02</RegisterID>
                                                                                             <kegusterID>U></kegusterID>
NetworkTariffCode effectiveDate="2007-12-19">HVMD</NetworkTariffCode>
</nitOfMeasure>
KVARH</nitOfMeasure>
</nitIpplier>
10000</nitIpplier>
OlalFormat></nitOfMeasure>
</nitIpplier>
</nitIpplier
 75
```



Step 1 - Full SDU to reflect changed standing data at existing NMI

Transaction Definition	NMIStandingDataUpdateNotification
Trigger	Network operator makes off-market changes to an existing NMI's standing data.
Pre-conditions	A NMI is assigned to a current retailer.
Post-conditions	The retailer is able to update their systems to reflect the new standing data.
Transaction acknowledgement-specific event codes	Refer to Appendix A

# Step 2 - Full SDU on creation of the new NMI

Transaction Definition	NMIStandingDataUpdateNotification
Trigger	Network Operator creates a NMI and associates with it some standing data that previously belonged to another NMI.
Pre-conditions	A NMI is assigned to a current retailer.
Post-conditions	Retailer is able to update their systems to reflect the new standing data.
Transaction acknowledgement-specific event codes	Refer to Appendix A

5

# **Transaction Data Elements**

The attributes of the NMIStandingDataUpdateNotification are defined in Appendix C.

#### **Transaction Schema Definition**

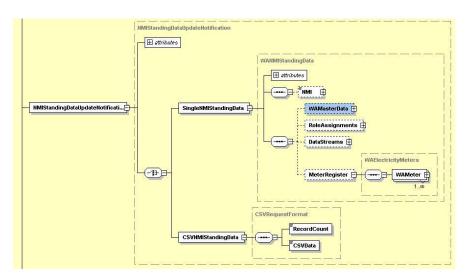


Figure 5756: NMI Standing Data Update notification schema definition

# Step 1 Sample XML - Full SDU to reflect changed standing data at existing NMI

```
/?xml version = '1.0' encoding = 'ISO-8859-1'?>
<ase:aseXML xmlns:ase="urn:aseXML:r17:WA:r2.00" xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
xsi:schemaLocation="urn:aseXML:r17:WA:r2.00</pre>
10
             http://www.westernpower.com.au/aseXML/schemas/r17/WA:r2.00/aseXML_r17_WA_r2.00.xsd">
                <Header>
                  Header>

From description="Western Power Networks">WPNTWRKS</From>

To description="Synergy Energy">WPRTL</To>

MessageID>WPNTWRKSMSG-15831933</MessageID>

MessageDate>2008-05-23T09:03:50+08:00</MessageDate>
15
                  <TransactionGroup>NMID</TransactionGroup>
<Priority>Medium</Priority>
<Market>WAELEC</Market>
20
               </Header>
</rr>
</rr>
</rr>
                  TransactionS>

<Transaction transactionID="WPNTWRKS-0000a-21926640" transactionDate="2008-05-23T09:03:51+08:00">
<NMIStandingDataUpdateNotification version="r9">
<SingleNMIStandingData>
<NMI checksum="4">8002021310</NMI>
<WAMasterData>

25
                           30
35
                                <FlatOrUnitNumber>A
                                 </FlatOrUnit>
</House>
```



```
<HouseNumber>298</HouseNumber>
                                                                     </House>
                                                                    <Lot>
<LotNumber>25300</LotNumber>
     5
                                                                     </Lot>
                                                                     <Street>
                                                                          <StreetName>MARINE</StreetName>
                                                                          <StreetType>TCE</StreetType>
                                                                       </Street>
10
                                                                </WAStructured Address
                                                                V W AStructured Address>
<SuburbOrPlaceOrLocality>Geraldton</SuburbOrPlaceOrLocality>
<StateOrTerritory>WA</StateOrTerritory>
                                                           <PostCode>6530</PostCode>
</Address>
15
                                                          Status effectiveDate="2008-02-12">A</status>
ObstanceFromSubstation xsi.nil="true">
DistanceFromSubstation>
                                                          <Voltage>HV</Voltage>
<PropertyType>Commercial</PropertyType>
<PoleNumber xsi:nil="true"></PoleNumber>
20
                                                       </WAMasterData>
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                                                          <RoleAssignment effectiveDate="2007-12-17">
<Party description="Synergy Energy">WPRTL</Party>
                                                               <Role>LR</Role>
                                                         Role Assignment by Carlot Symposium of the Assignment of the Color 
25

    </
30
                                                                <Role>RP</Role>
                                                            </RoleAssignment>
                                                          35
                                                          </RoleAssignment>
</RoleAssignment effectiveDate="2007-12-17">
                                                               <Party description="Western Power Networks">WPNTWRKS</Party>
<Role>LNSP
Role>
40
                                                    </RoleAssignment>
</RoleAssignments>
<DataStreams>
                                                          <DataStream>
<Suffix>E2</Suffix>
45
                                                              Suthrx=E2x/Suffix>
ProfileName>NOPROF</profileName>
<AveragedDailyLoad>0x/AveragedDailyLoad>
DataStreamType>Interval
DataStreamType>Status effectiveDate="2008-01-15">A
Status effectiveDate="2008-01-15">A
Status
50
                                                           </DataStream>
                                                          <DataStream>
<Suffix>Q2</Suffix>
                                                               <ProfileName>NOPROF</ProfileName>
                                                               <a href="AveragedDailyLoad"></a> <a href="AveragedDailyLoad">AveragedDailyLoad</a> <a href="DataStreamType">DataStreamType</a> <a href="Total">Interval</a> <a href="DataStreamType">DataStreamType</a>
55
                                                            <Status effectiveDate="2008-01-15">A</Status>
</DataStream>
                                                          <DataStream>
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<ProfileName>NOPROF</ProfileName>
60
                                                               <Status effectiveDate="2008-01-15">A</Status>
                                                            </DataStream>
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                                                     </DataStreams>
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<WAMeter>
                                                               <SerialNumber>0295000181</SerialNumber>
<NextScheduledReadDate>2008-04-24</NextScheduledReadDate>
                                                               70
75
                                                               <Point>02</Point>
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<Model>E312</Model>
```



```
<TransformerLocation xsi.nil="true"></TransformerLocation>
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</TransformerRatio xsi.nil="true"></TransformerRatio>
</TransformerRatio>

      5
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TestResultNotes xsimil="true"> TestResultNotes>

TestPerformedBy xsimil="true"> TestPerformedBy>
MeasurementType>EQ
MeasurementType>EQ
MeasurementType>QeadTypeCode>
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 10
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                                                                         15

 20
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 25
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**RegisterID>01</r>
**RegisterID>01</r>
**NetworkTariffCode effectiveDate="2007-12-19">HVMD<//r>
**NetworkTariffCode>

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**UnitOfMeasure>
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/Multiplier>
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                                                                                 </Register>
 40
                                                                                     *RegisterID>02</RegisterID>
<NetworkTariffCode effectiveDate="2007-12-19">HVMD</NetworkTariffCode>
<UnitOfMeasure>KVARH</UnitOfMeasure>
                                                                                     Multiplier>10000/Multiplier>
- Validiformat>6.2</br>
- Validiformat>6.2
    Validiformat>6.2

 45
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<Status effectiveDate="2008-01-15">C</Status>
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/DirectionIndicator>
 50
                                                                               </Register></Register>
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 55
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                                                                            </Register>
</RegisterConfiguration>
65
                                                                    </WAMeter>
                                                         </MeterRegister>
</SingleNMIStandingData>
                                                   </NMIStandingDataUpdateNotification>
                                               /Transaction>
 70
                              /ase:aseXML>
```

Step 2 Sample XML - Full SDU on creation of the new NMI

```
</xml version = '1.0' encoding = TSO-8859-1'?>
<ase:aseXML xmlns:ase="urn:aseXML:r17:WA:r2.00" xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"</pre>
                              5
                                      <Header>
                                            \(\text{Archive}\) \(\text{Archi
 10
                                            <TransactionGroup>NMID</TransactionGroup>
<Priority>Medium</Priority>
<Market>WAELEC</Market>
                                       </Header>
                                     <Transactions>
                                            15
 20
                                                                    <JurisdictionCode>WA</JurisdictionCode>
<NMIClassificationCode>>5.7KW</NMIClassificationCode>
                                                                   NVILL absulucation Lode>>>.1/K W</MNILL lassification Code>
<TransmissionNodeIdentifier effectiveDate="2007-12-17">WUNK</TransmissionNodeIdentifier>
DistributionLossFactorCode effectiveDate="2008-05-23">WRT2</DistributionLossFactorCode>
ParentEmbeddedNetworkIdentifier xsi:nil="true"></ParentEmbeddedNetworkIdentifier>
<ChildEmbeddedNetworkIdentifier xsi:nil="true"></ChildEmbeddedNetworkIdentifier>
<Address>
Whthe control is the control of the control of
 25
                                                                          <WAStructuredAddress>
<FlatOrUnit>
                                                                                      <FlatOrUnitNumber>A</FlatOrUnitNumber>
 30
                                                                                </FlatOrUnit>
                                                                                <House>
                                                                                        <HouseNumber>298</HouseNumber>
                                                                                  </House>
                                                                                <Lot>
 35
                                                                                         <LotNumber>25300</LotNumber>
                                                                                </Lot>
                                                                                <Street>
<StreetName>MARINE</StreetName>
                                                                                        <StreetType>TCE</StreetType>
 40
                                                                                      /Street>
                                                                            </WAStructuredAddress>
                                                                          SuburbOrPlaceOrLocality>Geraldton
SuburbOrPlaceOrLocality>
StateOrTerritory>WA
StateOrTerritory>
                                                                           <PostCode>6530</PostCode>
 45
                                                                     </Address>
                                                                    Status effectiveDate="2007-12-17">A</status>
ClistanceFromSubstation xsi.nil="true"></DistanceFromSubstation>
Voltage>HV
Voltage>
                                                                    <PropertyType>Commercial</PropertyType>
<PoleNumber xsi:nil="true"></PoleNumber>
 50
                                                               </WAMasterData>
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<RoleAssignment effectiveDate="2007-12-17">
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                                                                      </RoleAssignment>
                                                             </RoleAssignments>
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```



```
<AveragedDailyLoad>0</AveragedDailyLoad>
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                                       </DataStream>
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                                          <Status effectiveDate="2008-02-12">A</Status>
                                      <DataStream
                                         <Suffix>T1</Suffix>
<ProfileName>NOPROF</ProfileName>
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                                          <AveragedDailyLoad>0</AveragedDailyLoad>
OataStreamType>Interval
/DataStreamType>
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                                   </DataStream>
20
                                   <MeterRegister>
<WAMeter>
                                         SerialNumber>0295000191</SerialNumber>
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25
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<InstallationTypeCode effectiveDate="2007-12-19">COMMS4</InstallationTypeCode>
                                         <Route effectiveDate="2008-04-09">034DOW01</Route>
<Use effectiveDate="2006-08-09">REVENUE</Use>
                                          <Point>01</Point>
30
                                         <Manufacturer xsi:nil="true"></Manufacturer:
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TransformerLocation xsi:nil="true">/TransformerLocation>
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/TransformerRatio xsi:nil="true">/TransformerRatio>
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Last Test Date xsi:nil="true">/TestResultAccuracy xsi:nil="true">/TestResultAccuracy>
/TestResultAccuracy xsi:nil="true">/TestPerformedBy xsi:nil="true">/TestPerformedBy

MeasurementType>EQ/MeasurementType>

ReadTynefOde>

ReadTynefOde>
35
40
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                                         <CommunicationsProtocol xsi:mil="true"></CommunicationsProtocol</p><DataConversion>0.2</DataConversion>
45
                                         <Data Validations xsi:nil="true">

Status effectiveDate="2008-02-12">C
/Program xsi:nil="true">
/Program>
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50

<EstimationInstructions xsi:nil="true"></EstimationInstructions>
<UserAccessRights xsi:nil="true"></UserAccessRights>
<Password>111111111</Password>

                                         <Password>11111111/Password>
TestCalibrationProgram>Post Connect/TestCalibrationProgram>
<keyCode xsi:nil="true"></keyCode>
<ReadingInstructions xsi:nil="true"></ReadingInstructions>
<CustomerFundedMeter xsi:nil="true"></CustomerFundedMeter>

MeterRequirementForTransfer xsi:nil="true"></MeterRequirementForTransfer>

PacietesConfiguration>
55
                                          <RegisterConfiguration>
60
                                             <Register>
                                                RegisterID>01</RegisterID>
<RegisterID>01</RegisterID>
<NetworkTariffCode effectiveDate="2007-12-19">HVMD</NetworkTariffCode>
<UnitOfMeasure>
KWH</UnitOfMeasure>
                                                  Multiplier>10000
65
                                                <DialFormat>6.2</DialFormat>
<Suffix>E1</Suffix>
<ControlledLoad>No</ControlledLoad>
                                                 <ConsumptionType> Actual/ConsumptionType>
<Status effectiveDate="2008-02-12">C</Status>
<DirectionIndicator>Export/DirectionIndicator>
70
                                                /Register>
                                             <Register>
                                                RegisterID>02</RegisterID>
RegisterID>02
NetworkTariffCode effectiveDate="2007-12-19">HVMD
NetworkTariffCode>
UnitOfMeasure>
KVARH
UnitOfMeasure>
Multiplier>10000
Multiplier>
75
                                                <DialFormat>6.2</DialFormat>
```



## 3.19.5 Related Transactions

30 3.19.5.1 Preceding Transactions

None.

3.19.5.2 Subsequent Transactions

None.



# 3.20 Bulk Standing Data process

# 3.20.1 Overview

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The Bulk Standing Data Request Process is the mechanism by which a retailer may obtain all of the standing data that is held by the Network Operator for all of the NMIs where it is the current retailer.

#### 3.20.2 Business Rules

#### **Submission rules**

 A retailer or generator may submit a Bulk Standing Data Request to the network operator at any time, provided that either;

- a. it is at least three months since they last submitted a Bulk Standing Data Request;
   or
- b. the data is required to help facilitate data recovery in the event of a failure of the participant's systems.
- 2. A Bulk Standing Data Request must specify the reason for the request, if it is less than three months since the previous request.

## Validation

The network operator may reject a Bulk Standing Data Request, if it is less than three months since the previous request and the requesting participant has not provided reasonable justification for the request.

## Response

- 4. If the network operator rejects a Bulk Standing Data Request, then it must notify the requesting participant of this fact by COB on the business day following the request day. The notification must include the reason for the rejection of the request.
- 5. If the Bulk Standing Data Request is not rejected, then the network operator must:
  - By COB on the business day following the request day, notify the participant that their request has been accepted.
  - b. Provide the participant with a Bulk Standing Data Notification for all connection points for which they are currently the FRMP within a timeframe that is agreed between the participant and the Network Operator.
- 6. Upon receipt of a Bulk Standing Data Notification from a network operator, the retailer must acknowledge receipt within one (1) business day.



#### 3.20.3 Process Breakdown

# 3.20.3.1 Process diagram

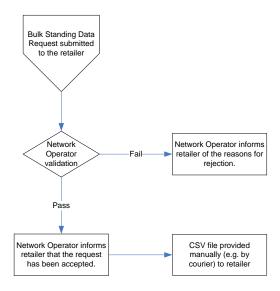


Figure 5857: Bulk Standing Data process

# 3.20.3.2 Transactional Diagram

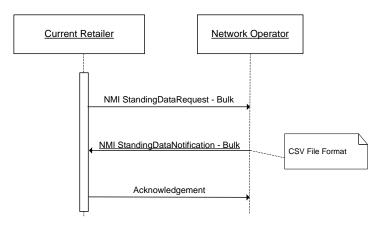


Figure 5958: Bulk Standing Data Process



5

## 3.20.3.3 Timing Requirements

					i e
Transaction	Transaction Group	Version	Sender	Receiver	Timing
Manually transmitted data	N/A	N/A	Network Operato r	Retailer	Within the number of Business Days from the Request Day as specified in Retailer's service agreement with the Network Operator.
Manual acknowledgement	N/A	N/A	Retailer	Network Operator	By end of next Business Day.

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#### 3.20.4 Transactions

The Bulk NMI Standing Data transaction is CSV file type. It contains all of the NMIs for the retailer where that retailer is the 'FRMP' as at the date/time that the query is executed in the Network Operator's systems — i.e. it is a 'snapshot' of the current production environment. The retailer should expect, for each NMI, the same standing data that would be received if they performed a NMIStandingDataRequest on one of their own NMIs.

## **Transaction Data Elements**

The records of the Bulk NMI Standing Data file are as defined below. Retailers will receive a CSV file that can be loaded into their systems using an upload program. The following format is presently used.

# Header row - Master Data

20 Master Data – NMI 1

Master Data - NMI 2

Master Data – NMI n

# **Header row - Role Assignment**

RoleAssignment - Role 1 - NMI 1

RoleAssignment – Role 2 - NMI 1



RoleAssignment - Role 3 - NMI 1

RoleAssignment - Role 4 - NMI 1

RoleAssignment - Role 5 - NMI 1

RoleAssignment – Role 1 - NMI n

5 RoleAssignment – Role 2 - NMI n

## Header row - DataStream

DataStream - NMI 1

DataStream - NMI n

## Header row - Meter Register

10 MeterRegister – NMI 1 – Meter Register 1

MeterRegister - NMI 1 - Meter Register 2

MeterRegister – NMI 1 – Meter Register n

MeterRegister – NMI x – Meter Register 1

MeterRegister – NMI x – Meter Register 2

15 MeterRegister – NMI *x* – Meter Register *n* 

# **Trailer record**

20

"TLR",<<RECORD\_COUNT>>\*

\* Please note that the RECORD\_COUNT value excludes the count of header rows and excludes the trailer record itself.



# Sample output

Row	Content
Master Data header	Master Data, NMI, CheckDigit, Jurisdiction Code, NMI Classification Code, Transmission Node Identifier, Distribution Loss Factor Code, Parent Embedded Network Identifier, Child Embedded Network Identifier, Flat Or Unit Type, Flat Or Unit Number, Floor Or Level Type, Floor Or Level Number, Building Or Property Name, Location Descriptor, Location Number, House Number, House Number Suffix, Lot Number, Street Name, Street Type, Street Suffix, Postal Delivery Type, Postal Delivery Number Prefix, Postal Delivery Number Value, Postal Delivery Number Suffix, Suburb Or Place Or Locality, State Or Territory, Post Code, DPID, Status, Distance From Substation, Premise Type, Pole Number, Voltage,,
Master Data content	MasterData,8111111111,1,WA,>5.7KW,WTTX,QRT9,,,,,,180,,,PLANET  EXPRESS,ST,,,,,CARWASH,Western Australia,6141,,A,1.73,Commercial,,LV,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,
Role Assignment header	Role Assignment,NMI,CheckDigit,Market Participant,Party,Role,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,
Role Assignment content  DataStream header	RoleAssignment,8111111111,1,Retailer,Electric Light Co,Financially Responsible Market Participant,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,
	Stream Type, Status,,,,,,
DataStream content  Meter Register header	DataStream,8111111111,1,136005555,1,E1,NOPROF,0,I,A,
Meter Register content	MeterRegister,81111111111,1,136005555,,UN,,COMMS4,014DOM01,REVENUE,1,,E308,,,,4-Feb-03,,,,,EQ,RT1,439919777,96,,,,A,,,111111111,,MKL,Box On Ground On Blockhouse.,N,,1,TOUL,KWH,,1,62,E1,N,S,A,E,
	MeterRegister,81111111111,1,136005555,,UN,,COMMS4,014DOM01,REVENUE,1,,E308,,,,4-Feb-03,,,,EQ,RT1,439919777,96,,,A,,,111111111,,MKL,Box On Ground On Blockhouse.,N,,2,TOUL,KVARH,,1,62,Q1,N,S,A,E,



MeterRegister,8111111111,1,136005555,,UN,,COMMS4,014DOM01,REVENUE,1,,E308,,,,,4-Feb-03,,,,,EQ,RT1,439919777,96,,,,A,,,,111111111,,MKL,Box On Ground On  ${\sf Blockhouse.,N,,3,TOUL,KVAH,,1,62,0,N,S,A,E}$ MeterRegister,8111111111,1,136005555,,UN,,COMMS4,014DOM01,REVENUE,1,,E308,,,,,4-Feb-03,,,,,EQ,RT1,439919777,96,,,,A,,,,111111111,,MKL,Box On Ground On Blockhouse., N, 4, TOUL, KW,, 1, 62, 0, N, S, A, EMeter Register, 8111111111, 1, 136005555,, UN,, COMMS4, 014DOM01, REVENUE, 1,, E308,,,,, 4-Februse, Community of the commun03,,,,,EQ,RT1,439919777,96,,,,A,,,,111111111,,MKL,Box On Ground On Blockhouse.,N,,5,TOUL,PF,,1,14,G1,N,S,A,E MeterRegister,8111111111,1,136005555,,UN,,COMMS4,014DOM01,REVENUE,1,,E308,,,,,4-Feb-03,,,,,EQ,RT1,439919777,96,,,,A,,,,111111111,,MKL,Box On Ground On Blockhouse.,N,,6,TOUL,KW,DMI,1,62,61,N,S,A,E MeterRegister,8111111111,1,136005555,,UN,,COMMS4,014DOM01,REVENUE,1,,E308,,,,,4-Feb- $03,,,,, \mathsf{EQ}, \mathsf{RT1}, 439919777, 96,,,, \mathsf{A},,,, 111111111,, \mathsf{MKL}, \mathsf{Box} \ \mathsf{On} \ \mathsf{Ground} \ \mathsf{On}$ Blockhouse.,N,,7,TOUL,KW,DMA,1,62,71,N,S,A,E Trailer record TLR,3579



## 4 Customer Transfer Interfaces

#### 4.1 Successful Customer Transfer

#### 4.1.1 Overview

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4.1.1.1 Standard Customer Transfer (Variation 1)

The Standard Customer Transfer process, which runs to completion, is initiated by an incoming retailer submitting a Customer Transfer Request (CTR). Assuming that the incoming CTR is a valid message, the network operator's systems will then generate a Customer Transfer Response to the incoming retailer – a transaction that contains the Request ID.

The network operator will then review the CTR and respond with a Transack to indicate that the CTR has passed validation. Alternatively, a TransNAK is sent detailing the error code (see the business process for an Invalid CTR in section 4.2).

Closely following this will be Customer Transfer Notification to both the current retailer and the incoming retailer that a pending transfer is in place (with a nominated transfer date).

If the CTR specifies that a meter change is required, the network operator will initiate an internal service request to undertake the work. The transactions related to this are the same as the transactions related to a meter exchange or the change of other details on the meter (ie SDUs). These are published to the current Retailer and not the incoming retailer.

20 If a meter change is not requested, but is required for transfer, the Network Operator will contact the requestor directly via email or telephone to gain agreement for the meter change required and allow the transfer to proceed. If no agreement is reached, the incoming retailer will be requested to withdraw the transfer request.

If the meter change takes place **before** the Actual Change Date, the incoming retailer will not be sent any transactions that notify them of the metering work done by the Network Operator. These will be sent to the current retailer. If the meter change takes palce **after** the Actual Change Date, by which point the incoming retailer will be the current retailer, then this retailer will receive the expected SDUs.

When the work is completed, the network operator sends a Customer Transfer Notification with a Completed status to both the incoming retailer (who has become the current retailer from the Actual Change Date) and the current retailer (who, from the Actual Change Date, is no longer the current retailer).

The network operator then sends out Standing Data Update notifications to entitled market participants. This will include the following standing data:

- 35 1. the update of the FRMP role to reflect the new current retailer,
  - 2. the update of the RP role to reflect new current retailer, and
  - 3. Full SDU sent as a result of the CTR being closed.

It should be noted that if there are any other standing data items that have changed, these will also be sent prior to the Full SDU.



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#### 4.1.1.2 Customer Transfer with changed transfer date (variation 2)

The Customer Transfer with changed transfer date process, which runs to completion, is similar to the Standard Customer Transfer seen above. This variation 2 process differs slightly insofar as there are additional transactions that are published to the market between the initial notification of the Pending transfer and the Completion of the transfer.

If the network operator does not feel able to meet the nominated transfer date, it will work with the incoming retailer off market to establish a new proposed transfer date. If this new proposed transfer date is not accepted by the incoming retailer, then this should be handled in accordance with section 4.10(1)(d) of the Customer Transfer Code.

If the incoming retailer accepts the new proposed transfer date, the network operator will send a 'Pending' Customer Transfer Notification to both the incoming retailer and current retailer. Thereafter, the process continues as per variation 1.

## 15 **4.1.2 Business Rules**

#### Submission rules

- An incoming retailer may submit a standard transfer request to the network operator at any time on any business day, up to a limit of 20 requests (unless otherwise agreed with the Network Operator) on any business day.
- 2. Standard transfer requests must be submitted for each NMI separately.
- 3. An incoming retailer needs verifiable consent from the customer to submit a standard transfer request. The incoming retailer must retain a copy of the verifiable consent for 2 years after the date the verifiable consent was given.<sup>1</sup>
- 4. A standard transfer request must specify the following mandatory fields:
  - a) NMI;
  - b) NMI checksum;
  - c) nominated transfer date;
  - d) whether a new meter is required for the transfer;
  - e) estimated annual consumption for the exit point in kWh;
  - f) the name of the access contract to which the standard transfer request is proposed to relate;
  - g) the preferred network tariff and, where required, the proposed CMD in units applicable to the network tariff.

<sup>&</sup>lt;sup>1</sup> Refer to section 3.9 of the Electricity Industry Customer Transfer Code 2004.



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- 5. A standard transfer request may specify the name and phone number of a contact for the contestable customer. Whilst not mandatory, it is beneficial to provide these details especially in regards to Direct Connect Metering, as it expedites the meter change process.
- 5 6. The nominated transfer date in a standard transfer request, must be:
  - a) for <u>connectionexit</u> points in the metropolitan area <u>and where no site visit is required by</u> Western Power for example the customer already has a meter installation of either <u>'Type 1', 'Type 2', 'Type 3' or 'Type 4'</u>, at least 3 business days after the request date and no more than 50 business days after the request date;
  - b) for <u>connectionexit</u> points—net in the metropolitan area\_<u>and where a site visit is required</u> <u>by Western Power for example the customer only has a meter installation of either 'Type 5' or a contestable 'Type 6', at least 58 business days after the request date and no more than 50 business days after the request date;</u>
  - c) for connection points in a non-metropolitan area and where no site visit is required by Western Power for example the customer already has a meter installation of either 'Type 1', 'Type 2', 'Type 3' or 'Type 4', at least 5 business days after the request date and no more than 50 business days after the request datea business days;
  - d) for connection points in a non-metropolitan area and where a site visit is required by Western Power for example the customer only has a meter installation of either 'Type 5' or a contestable 'Type 6', at least 15 business days after the request date and no more than 50 business days after the request date;

<del>c)</del>e) a business day.

7. An incoming retailer may not submit more than 20 standard transfer requests with the same nominated transfer date, unless otherwise agreed with the Network Operator.

## Validation

- 8. The network operator must reject a standard transfer request, when any of the following apply:
  - a) the NMI checksum is not correct for the requested NMI;
  - b) no connection exit point exists in the Metering Registry for the requested NMI;
  - c) the requested connection exit point does not have a status of active or de-energised;
  - d) the requested **connection** exit point is not contestable;
  - e) the incoming retailer is already the current retailer for the connection exit point;
  - the nominated transfer date does not satisfy the requirements specified for nominated transfer dates above;
  - g) the incoming retailer has already submitted more than the permitted number of standard transfer requests with the same nominated transfer date;



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- h) the incoming retailer has already submitted more than the permitted number of standard transfer requests with the same submitted date
- i) the request does not specify an estimated annual consumption greater than 0 kWh;
- j) the request does not specify a valid access contract, applicable to the incoming retailer;
- k) the request does not specify a valid network tariff;
- a CMD is required for the requested network tariff, but the request does not specify a valid CMD.
- m) a pending customer transfer request exists for the exit point;
- n) the request has been submitted on a non-business day.

#### Response

- 9. If the network operator rejects a standard transfer request, then it must notify the incoming retailer of this fact by COB on the business day following the submitted date by publishing a TransNack and a Customer Transfer Response. The TransNack must include the reason for the rejection of the request.
- 10. If the standard transfer request is not rejected, then the network operator must, by COB on the business day following the submitted date:
  - a) advise the incoming retailer that their request has been accepted;
  - b) provide the incoming retailer with a unique request id for the standard transfer request;
  - c) provide the incoming retailer with a notification of the pending transfer, that includes the NMI, NMI checksum, request id and nominated transfer date;
  - d) provide the current retailer with a notification of the pending transfer that includes the NMI, NMI checksum, request id and nominated transfer date.
- 25 11. If any metering changes are necessary to effect a standard transfer then:
  - a) the network operator must use all reasonable endeavours to ensure that the required work is completed on or before the nominated transfer date;
  - b) the network operator must charge the incoming retailer for the metering work in accordance with the Metering Code;
  - c) if the metering changes will interrupt the supply of electricity to the exit point and the incoming retailer has specified customer contact details (not mandatory), then the network operator will use all reasonable endeavours to consult with the customer contact, to ensure that the impact of the metering work on the customer's business is minimised.
  - 12. The network operator must use all reasonable endeavours to ensure that either a scheduled meter read or a special meter read, as applicable, is conducted for the contestable customer on the nominated transfer date. If a special read is required, then



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the network operator may charge the incoming retailer for the special read in accordance with the Metering Code. Initial meter readings will be received via a normal MDN. The MDN will not contain a reference to the Customer Transfer.

The incoming retailer is not sent a transaction notifying them of metering work done by the Network Operator.

- 13. If the network operator considers that it is unlikely to be able to meet the nominated transfer date, then it must, by COB on the second business day following the receipt of the transfer request, notify the incoming retailer, via email, with the following details:
  - a) NMI;
  - b) request id assigned to the standard transfer request;
  - c) nominated transfer date;
  - d) reasons why the nominated transfer date is unlikely to be met; and
  - e) a proposed new nominated transfer date in accordance with the rules for nominated transfer dates.
- 14. If the incoming retailer agrees with the new nominated transfer date proposed by the network operator under point 13, then the incoming retailer must, by COB on the next business day, notify the network operator, also via email, of this fact.
  - 15. If the network operator receives a notification from the incoming retailer under point 14, then the network operator must, by COB on the next business day:
    - a) provide the incoming retailer with a 'Pending' Customer Transfer Notification of the new nominated transfer date, that includes the NMI, NMI checksum, request id and new nominated transfer date;
    - provide the current retailer with a notification of the new nominated transfer date that includes the NMI, NMI checksum, request id and new nominated transfer date.
  - 16. If the network operator does not receive agreement from the incoming retailer to the proposed new nominated transfer date under point 14, then the network operator must, acting in good faith and in accordance with good electricity practice, endeavour to enable the standard transfer to occur on the retailer's nominated transfer date.
  - 17. For a standard transfer to occur, the network operator must, on the nominated transfer date, read the meter(s) at the exit point to obtain actual or final substitute readings covering the period up to the start of the trading day of the transfer date.
  - 18. If the meter(s) of the exit point are not read in accordance with point 17, then the network operator must, by COB on the business day following the nominated transfer date:
    - work with the incoming retailer to set a new nominated transfer date, which should be
      as close as practicable to the original nominated transfer date unless, subject to point
      6, the incoming retailer requests a later date;
    - b) provide the incoming retailer with a notification that includes the NMI, NMI checksum, request id and the new nominated transfer date;



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- c) provide the current retailer with a notification that includes the NMI, NMI checksum, request id and the new nominated transfer date.
- 19. If a new nominated transfer date is agreed for a standard transfer request then points 17 and 18 also apply to the new nominated transfer date.
- 5 20. If the meter(s) of the exit point are read in accordance with point 17, then the transfer occurs at the start of the trading day on the nominated transfer date, and the network operator must:
  - a) by COB on the second business day after the transfer date, provide the current retailer and the incoming retailer with a notification of the completion of the transfer, that includes the NMI, NMI checksum, request id and actual transfer date;
  - b) by COB on the second business day after the transfer date, provide all entitled market participants (i.e. the current retailer and the IMO) with standing data update notifications that reflect the new standing data for the NMI;
  - c) provide the current retailer with meter readings for the period up to the transfer time, in accordance with the Metering Code (refer to Section 6 of that document for further details);
  - d) if the connection point is an embedded network parent, update the Metering Registry to make any embedded network children extinct, effective from the transfer date.



### 4.1.3 Process Breakdown

### 4.1.3.1 Process diagram

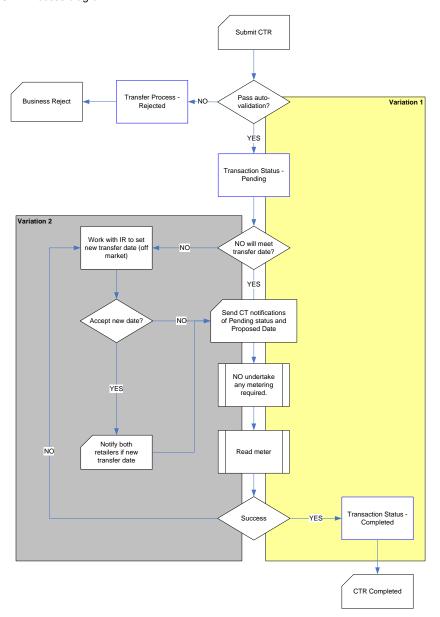


Figure 6059: Standard customer transfer



# 4.1.3.2 Transactional Diagram

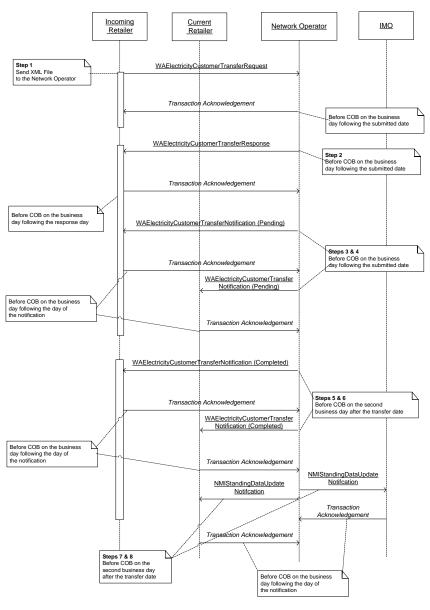


Figure 6160: Standard Customer Transfer (Variation 1)



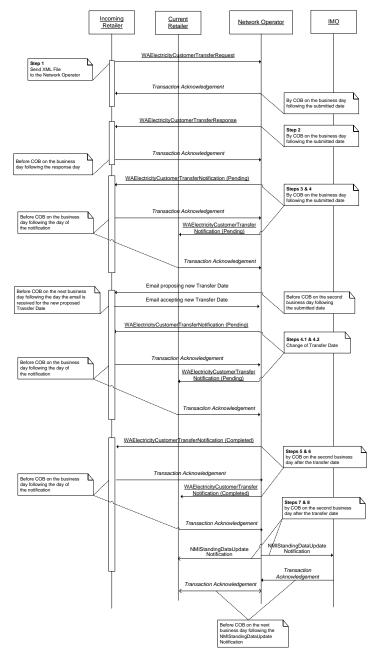


Figure 6261: Customer Transfer with Changed Transfer Date (Variation 2)



# 4.1.3.3 Timing Requirements - Standard Customer Transfer (Variation 1)

		1	1				
Step	Transaction	Transaction Group	Version	Sender	Receiver	Timing	
1	WAElectrictyCustomer TransferRequest	CATS	r17	Incoming retailer	Network operator	None. This is the submitted of	date.
2	WAElectrictyCustomer TransferResponse	CATS	r17	Network operator	Incoming retailer	Before COB on the business following the submitted date.	day
3	WAElectrictyCustomer TransferNotification (PEND)	CATS	r17	Network operator	Incoming retailer	Before COB on the business following the submitted date.	day
4	WAElectrictyCustomer TransferNotification (PEND)	CATS	r17	Network operator	Current retailer	Before COB on the business following the submitted date.	day
5	WAElectrictyCustomer TransferNotification (COMP)	CATS	r17	Network operator	Incoming retailer	Before COB on the second business day following the transfer day.	
6	WAElectrictyCustomer TransferNotification (COMP)	CATS	r17	Network operator	Current retailer	Before COB on the second business day following the transfer day.	
7	NMIStandingDataUpdateNotif ication	NMID	r9	Network operator	IMO	Before COB on the second business day following the transfer day.	
8	NMIStandingDataUpdateNotif ication	NMID	r9	Network operator	Incoming retailer	Before COB on the second business day following the transfer day.	

# 4.1.3.4 Timing Requirements - Customer Transfer with Changed Transfer Date (Variation 2)

Step	Transaction	Transaction Group	Version	Sender	Receiver	Timing
1	WAElectrictyCustomer TransferRequest	CATS	r17	Incoming retailer	Network operator	None. This is the submitted date.
2	WAElectrictyCustomer TransferResponse	CATS	r17	Network operator	Incoming retailer	Before COB on the business day following the submitted date.

3	WAElectrictyCustomer TransferNotification (PEND)	CATS	r17	Network operator	Incoming retailer	Before COB on the business day following the submitted date.
4	WAElectrictyCustomer TransferNotification (PEND)	CATS	r17	Network operator	Current retailer	Before COB on the business day following the submitted date.
4.1	WAElectrictyCustomer TransferNotification (PEND)	CATS	r17	Network operator	Incoming retailer	Before COB on the business day following the submitted date.
4.2	WAElectrictyCustomer TransferNotification (PEND)	CATS	r17	Network operator	Current retailer	Before COB on the business day following the submitted date.
5	WAElectrictyCustomer TransferNotification (COMP)	CATS	r17	Network operator	Incoming retailer	Before COB on the second business day following the transfer day.
6	WAElectrictyCustomer TransferNotification (COMP)	CATS	r17	Network operator	Current retailer	Before COB on the second business day following the transfer day.
7	NMIStandingDataUpdateNotif ication	NMID	r9	Network operator	IMO	Before COB on the second business day following the transfer day.
8	NMIStandingDataUpdateNotif ication	NMID	r9	Network operator	Incoming retailer	Before COB on the second business day following the transfer day.

### 4.1.4 Transactions – Standard Customer Transfer (Variation 1)

# 4.1.4.1 Step 1: Customer Transfer Request

Transaction Definition	WAElectrictyCustomerTransferRequest
Trigger	Incoming retailer wishes to transfer customer.
Pre-conditions	Incoming retailer has valid customer consent.
Post-conditions	Network operator is able to read and validate the contents of the message.
Transaction acknowledgement-specific event codes	{Please see Appendix A for a full list of the event codes that are relevant to this transaction.}

### **Transaction Schema Definition**

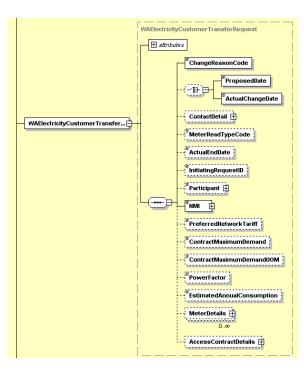


Figure 6362: Customer Transfer Request aseXML schema definition

### 4.1.4.2 Step 2: Customer Transfer Response

Transaction Definition	WAElectrictyCustomerTransferResponse
Trigger	Receipt of a Customer Transfer Request
Pre-conditions	Customer Transfer Request must be a valid transaction.
Post-conditions	Network operator is able to read and validate the contents of the message.
Transaction acknowledgement-specific event codes	None.

# **Transaction Schema Definition**



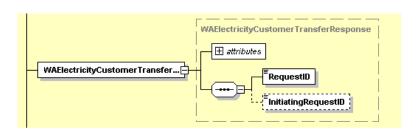


Figure  $\underline{\textbf{6463}}\text{: Customer Transfer Response aseXML schema definition}$ 

# 4.1.4.3 Step 3: Notify incoming retailer of pending CTR

Transaction Definition	WAElectricty Customer Transfer Notification
Trigger	{Background process in network operator's system}
Pre-conditions	Customer Transfer Request must pass business rule validation.
Post-conditions	Incoming retailer is able to update their systems.
Transaction acknowledgement-specific event codes	None.

# **Transaction Schema Definition**



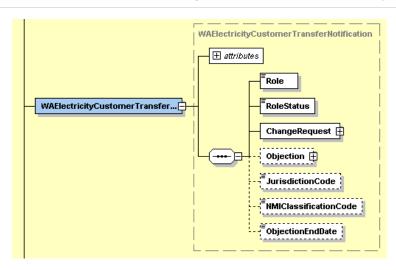


Figure 6564: Customer Transfer Notification aseXML schema definition

# 4.1.4.4 Step 5: Notify incoming retailer of Completed CTR

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Transaction Definition	WAElectrictyCustomerTransferNotification
Trigger	Completion of a CTR within the network operator's systems.
Pre-conditions	Customer Transfer Request must be a valid transaction.
Post-conditions	Incoming retailer is able to update their systems.
Transaction acknowledgement-specific event codes	None.

# 4.1.4.5 Step 4: Notify current retailer of Pending CTR

Transaction Definition	WAElectrictyCustomerTransferNotification
Trigger	{Background process in network operator's system}
Pre-conditions	Customer Transfer Request must be a valid transaction.

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Post-conditions	Current retailer is able to update their systems.
Transaction acknowledgement-specific event codes	None.

### 4.1.4.6 Step 6: Notify current retailer of Completed CTR

Transaction Definition	WAElectrictyCustomerTransferNotification
Trigger	Completion of a CTR within the network operator's systems.
Pre-conditions	Customer Transfer Request must be a valid transaction.
Post-conditions	Current retailer is able to update their systems and commence final billing process.
Transaction acknowledgement-specific event codes	None.

# 4.1.4.7 Step 7: Notify the 'incoming' retailer, who is now the current retailer, of standing data

It should be noted that this step is executed in the form of single Partial Standing Data Update Notifications for each piece of standing data that changes, plus a Full SDU to reflect the entire, current set of standing data. Details on the standing data can be found in section 3.

Transaction Definition	NMIStandingDataUpdateNotification
Trigger	Customer transfer process makes changes to NMI standing data (participant roles).
Pre-conditions	Customer Transfer Request must be a valid transaction.
Post-conditions	Current retailer is able to update their systems.
Transaction acknowledgement-specific event codes	None.

### 4.1.4.8 Step 8: Notify IMO of standing data

It should be noted that this step is executed in the form of single Partial Standing Data Update Notifications for each piece of standing data that has changed, plus a Full SDU to reflect the entire, current set of standing data. Detail on the standing data can be found in section 3.

Transaction Definition	NMIStandingDataUpdateNotification
Trigger	Customer transfer process makes changes to NMI standing data (participant roles).
Pre-conditions	Customer Transfer Request must be a valid transaction.
Post-conditions	IMO is able to update their systems.
Transaction acknowledgement-specific event codes	None.

#### **Transaction Data Elements**

Please see Appendix B for these attributes.

<n:aseXML xmlns:n="urn:aseXML:r17:WA:r2.00" xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"</p>

### 10 Sample XML: Step 1 – Customer Transfer Request

```
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  45
```

</n:aseXML>

### Sample XML: Step 2 - Customer Transfer Response

```
</xml version="1.0" encoding="ISO-8859-1"?>
<ase:aseXML xmlns:ase="urn:aseXMLx17:WAx2.00" xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"</pre>
     5
                               xsischemaLocation="urnaseXML:r17:WA:r2.00" http://www.westempower.com.au/aseXML/schemas/r17/WA:r2.00/aseXML_r17_WA_r2.00.xsd">
http://www.westempower.com.au/aseXML/schemas/r17_wA:r2.00/aseXML_r17_wA:r2.00/aseXML_r17_wA:r2.00/aseXML_r17_wA:r2.00/aseXML_r17_wA:r2.00/aseXML_r17_wA:r2.00/aseXML_r17_wA:r2.00/aseXML_r17_wA:r2.00/aseXML_r17_wA:r2.00/aseXML_r17_wA:r2.00/aseXML_r17_wA:r2.00/aseXML_r17_wA:r2.00/aseXML_r17_wA:r2.00/aseXML_r17_wA:r2.00/aseXML_r17_wA:r2.00/aseXML_r17_wA:r2.00/aseXML_r17_wA:r2.00/aseXML_r17_wA:r2.00/aseXML_r17_wA:r2.00/aseXML_r17_wA:r2.00/aseXML_r17_wA:r2.00/aseXML_r17_wA:r2.00/aseXML_r17_wA:r2.00/aseXML_r17_wA:r2.00/aseXML_r17_wA:r2.00/aseXML_r17_wA:r2.00/aseXML_r17_wA:r2.00/aseXML_r17_wA:r2.00/aseXML_r17_wA:r2.00/aseXML_r17_wA:r2.00/aseXML_r17_wA:r2.00/a
                                      <Header>
10
                                         <From description="Western Power Networks">WPRETAIL
                                         <To description="Retail">RETAIL</To>
                                         <10 description= Retail > RETAIL > 10>
<MessageID>WPNTWRKSMSG-14887071
/MessageDate>2008-04-29T10:54:27+08:00
/MessageDate>
                                         <TransactionGroup>CATS</TransactionGroup>
<Priority>Low</Priority>
15
                                         <Market>WAELEC</Market>
                                       </Header>
                                     <Transactions>
                               <Transaction transactionID="WPNTWRKS-0000-20515557" transactionDate="2008-04-29T10:54:28+08:00" initiatingTransactionID="CTR0011399">
20
                                              <WAElectricityCustomerTransferResponse version="r17">
<RequestID>3308</RequestID>
                                               </WAElectricityCustomerTransferResponse>
                                            </Transaction>
25
                                     </Transactions>
                                </ase:aseXML>
```

### Sample XML: Step 3 - Notify Incoming Retailer of Pending CTR

```
30
                                        <?xml version="1.0" encoding="ISO-8859-1"?>
<ase:aseXML xmlns:ase="urn:aseXML:r17:WA:r2.00" xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"</pre>
                                       xsi:schemal.ocation="urn:aseXML:r17:WA:r2.00 http://www.westempower.com.au/aseXML/schemas/r17/WA:r2.00/aseXML_r17_WA_r2.00.xsd">
http://www.westempower.com.au/aseXML_r17_wA_r2.00.xsd">
http://www.westempower.com.au/aseXML_r17_
                                             <Header>
                                                   <From description="Western Power Networks">WPRETAIL</From>
<To description="Retail">RETAIL</To>
 35
                                                   <MessageID> WPNTWRKSMSG-14902183</MessageID> 
<MessageDate>2008-04-29T14:51:10+08:00
/MessageDate>
                                                   <TransactionGroup>CATS</TransactionGroup>
<Priority>Low</Priority>
 40
                                                   <Market>WAELEC</Market>
                                             <Transactions>
                                       < Transaction ID="WPNTWRKS-0000-20533537" transaction Date="2008-04-29T14:51:10+08:00" initiating Transaction ID="CTR0011399">- CTR0011399">- CTR0011399">
 45
                                                        <WAElectricityCustomerTransferNotification version="r17">
<Role>FRMP</Role>
<RoleStatus>N</RoleStatus></ri>
                                                             <ChangeRequest>
<Participant description="Retail">RETAIL</Participant>
 50
                                                                  <RequestID>3308</RequestID>
<ChangeStatusCode>PEN</ChangeStatusCode>
                                                                  <ChangeData>
<ChangeReasonCode>1000</ChangeReasonCode>
<ProposedDate>2008-05-07</ProposedDate>
 55
                                                                        <NMI checksum="2">8001654321</NMI>
<PreferredNetworkTariff>LVMD</PreferredNetworkTariff>
                                                                        <EstimatedAnnualConsumption>262400</EstimatedAnnualConsumption>
60
                                                                              <MeterSerialNumber>0180654321
/MeterSerialNumber>
                                                                              <MeterChangeRequired>No</MeterChangeRequired>
<MeterInstallationType>BASIC
/MeterInstallationType>
                                                                              <CustomerFundedMeter>No</CustomerFundedMeter>
                                                                          </MeterDetails>
65
                                                                       <AccessContractDetails>
                                                                              ContractName>Generic Access Agreement
ContractDate>2003-07-25
ContractDate>
                                                                   </AccessContractDetails>
</ChangeData>
```



```
</ChangeRequest>
</WAElectricityCustomerTransferNotification>
</Transaction>
</Transactions>
</ascaseXML>
```

### Sample XML: Step 4 - Notify current retailer of Pending CTR

```
10
                            <?xml version = '1.0' encoding = 'ISO-8859-1'?>
                            <ase:aseXML xmlns:ase="urn:aseXML:r17:WA:r2.00" xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance" xsi:schemaLocation="urn:aseXML:r17:WA:r2.00</p>
                            http://www.westernpower.com.au/aseXML/schemas/r17/WA:r2.00/aseXML\_r17\_WA\_r2.00.xsd"> r17/WA:r2.00/aseXML\_r17\_WA\_r2.00.xsd"> r17/WA:r2.00/aseXML\_r17_WA=r2.00.xsd"> r17/WA:r2.00/aseXML\_r17_WA=r2.00.xsd"> r17/WA:r2.00/aseXML\_r17_WA=r2.00.xsd"> r17/WA:r2.00/aseXML\_r17_WA=r2.00.xsd"> r17/WA:r2.00/aseXML_r17_WA=r2.00.xsd"> r17/WA:r2.00/aseXML_r17_WA=r2.00.xsd"> r17/WA:r2.00/aseXML_r17_WA=r2.00/aseXML_r17_WA=r2.00/aseXML_r17_WA=r2.00/aseXML_r17_WA=r2.00/aseXML_r17_WA=r2.00/aseXML_r17_WA
15
                                       <From description="Western Power Networks">WPRETAIL
                                        <To description="New Retail">NEWRTL</To
                                         <a href="mailto:MessageID">< MessageID</a>> WPNTWRKSMSG-14902184</a>/MessageID>
                                       <MessageDate>2008-04-29T14:51:11+08:00</MessageDate><TransactionGroup>CATS/TransactionGroup>
20
                                        <Priority>Low</Priority>
                                         <Market>WAELEC</Market>
                                   </Header>
                                  <Transactions>
                                       <Transaction transactionID="WPNTWRKS-0000-20533540" transactionDate="2008-04-29T14:51:11+08:00">
25
                                             <WAElectricityCustomerTransferNotification version="r17"</p>
                                                  <Role>FRMP</Role>
<RoleStatus>C</RoleStatus>
                                                <RoleStatus>
<ChangeRequest>
Participant/>
<RequestID>3308
<RequestID>
<ChangeStatusCode>PEN
ChangeStatusCode>
30
                                                       <ChangeData>
                                                             <ChangeReasonCode>1000</ChangeReasonCode>
<ProposedDate>2008-05-07</ProposedDate>
35
                                                              <NMI checksum="2">8001654321</NMI>
                                                          </ChangeData>
                                                  </ChangeRequest>
                                             </WAElectricityCustomerTransferNotification>
                                         </Transaction>
40
                            /ase:aseXML>
```

# Sample XML: Step 5 – Notify Incoming Retailer of Completed CTR

```
<
```



</ase:aseXML>

```
<Participant description="Retail">RETAIL</Participant>
<RequestID>3308</RequestID>
<ChangeStatusCode>COM</ChangeStatusCode>
<ChangeData>
  5
                        ChangeData*
ChangeReasonCode>1000</ChangeReasonCode>
ActualChangeDate>2008-05-07
ActualChangeDate>
NMI checksum="2">8001654321
/NMI>
                        10
                        <MeterDetails>
                          MeterSerialNumber>0180654321
/MeterSerialNumber>
                          <MeterChangeRequired>No</MeterChangeRequired>
<MeterInstallationType>BASIC</MeterInstallationType>
<CustomerFundedMeter>No

CustomerFundedMeter>
15
                        </MeterDetails>
<AccessContractDetails>
                        <ContractName>Generic Access Agreement</ContractName>
<ContractDate>2003-07-25</ContractDate>
</AccessContractDetails>
20
                     </ChangeData>
</ChangeRequest>
                  </WAElectricityCustomerTransferNotification>
</Transaction>
               </Transactions>
25
             </ase:aseXML>
```

### Sample XML: Step 6 - Notify current retailer of Completed CTR

```
30
                                                             <?xml version = '1.0' encoding = 'ISO-8859-1'?>
<ase:aseXML xmlns:ase="urn:aseXML:r17:WA:r2.00" xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
xsi:schemaLocation="urn:aseXML:r17:WA:r2.00</pre>
                                                                http://www.westernpower.com.au/aseXML/schemas/r17/WA:r2.00/aseXML\_r17\_WA\_r2.00.xsd"> http://www.westernpower.com.au/aseXML_r17\_wA\_r2.00.xsd"> http://www.westernpower.com.au/aseXML_r17\_wA_r17\_wA_r17_wA_r17_wA_r17_wA_r17_wA_r17_wA_r17_wA_r17_wA_r17_wA_r17_wA_r17_wA_r17_wA_r17_wA_r17_wA_r17_wA_r17_wA_r17_wA_r17_wA_r17_wA_r17_wA_r17_wA_r17_w
                                                                            <Header>
35
                                                                                         <From description="Western Power Networks">WPRETAIL
                                                                                         <From description="Western Power Networks">WPRETAIL
To description="New Retail">NEWRTL
<MessageID>WPNTWRKSMSG-15223953
MessageID>
MessageDate>2008-05-08T23:02:19+08:00

CATS

TransactionGroup>

</p
40
                                                                                           <Priority>Low</Priority>
<Market>WAELEC</Market>
                                                                            </Header>
</rr>
<Transactions:</p>
                                                                                       .transactions>

<TransactiontransactionID="WPNTWRKS-0000-21011766" transactionDate="2008-05-08T23:02:19+08:00">

<WAElectricityCustomerTransferNotification version="r17">

<Role>FRMP=/Role>

<RoleStatus>C</RoleStatus>

<ChangeRequest>

<Particinant/>

<Particinant/>

</Pre>
  45
                                                                                                                           50
                                                                                                                              <Change Data>
<Change Reason Code>1000</Change Reason Code>
                                                                                                                                          <a href="https://documents.com/schange/decastricode/"><a href="https://documents.com/schange/decastricode/">https://documents.com/schange/decastricode/<a href="https://d
55
                                                                                                                                </ChangeData>
                                                                                                          </ChangeRequest>
</WAElectricityCustomerTransferNotification>
                                                                                              </Transaction>
60
```



10

15

### Sample XML: Step 7 – Notify incoming<sup>2</sup> retailer of standing data

Details on the publication of NMI standing data can be found in section 3 above. Notifications for this step will include, at a minimum:

- a Partial SDU to reflect that the Incoming Retailer is the new FRMP as of the effective date
- a Partial SDU to reflect that the Incoming Retailer is the new RP as of the effective

### Sample XML: Step 8 - Notify IMO of standing data

These transactions contain the same information as the transactions referenced in the above step.

#### 4.1.5 Transactions - Changed Transfer Date (Variation 2)

The transactions for Steps 1-4 in the Variation 2 process are the same as for Variation 1.

# 4.1.5.1 Step 4.1: Notify Incoming Retailer of Pending CTR

20 This step contains the new proposed transfer date

Transaction Definition	WAElectrictyCustomerTransferNotification
Trigger	{Background process in network operator's system}
Pre-conditions	Customer Transfer Request must pass business rule validation.
Post-conditions	Incoming Retailer is able to update their systems.
Transaction acknowledgement-specific event codes	None.

<sup>&</sup>lt;sup>2</sup> It should be noted that at this point, because the transfer has been completed, the 'incoming' retailer has become the current retailer. This is evidenced by them receiving the Standing Data Update Notifications.



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### 4.1.5.2 Step 4.2: Notify current retailer of Pending CTR

This step contains the new proposed transfer date

Transaction Definition	WAElectrictyCustomerTransferNotification
Trigger	{Background process in network operator's system}
Pre-conditions	Customer Transfer Request must be a valid transaction.
Post-conditions	Current retailer is able to update their systems.
Transaction acknowledgement-specific event codes	None.

5

15

#### 4.1.6 Related Transactions

### 4.1.6.1 Preceding Transactions

None.

### 10 4.1.6.2 Subsequent Transactions

No subsequent transactions are procedurally **tied** to a customer transfer. However, subsequent to the customer transfer completion, the outgoing and current retailers will receive MDNs that will include all the readings for the date of the transfer (as the WA market executes transfers effective from 8am on the transfer date). It should be noted that retailers are only entitled to bill for the period that is appropriate to them.

### 4.2 Invalid Customer Transfer Process

#### 4.2.1 Overview

5

10

15

The invalid customer transfer business process relates to a scenario where the network operator rejects a Customer Transfer Request through publishing a TransNack to the incoming retailer.

This will be done either automatically, in which case no Customer Transfer Response will be received by the submitting retailer, or manually.

Automatic validation is performed upon receipt of the CTR. This validation looks at the content of the transaction and assesses it against the business rules. If any of these fail, a TransNack (Business Reject) is sent to the retailer that submitted the CTR, and this message will include the appropriate Event Code (see Appendix A).

If the CTR passes this validation, a Customer Transfer Response is sent to the retailer that submitted the CTR. The content of the request is then assessed manually by the network operator (checking Access Contract and contract quantities). If this fails validation, a TransNack is sent to the retailer that submitted the original CTR.

#### 4.2.2 Business Rules

The business rules that relate to an invalid customer transfer are covered in section 4.1.2.



#### 4.2.3 Process Breakdown

# 4.2.3.1 Process diagram

5

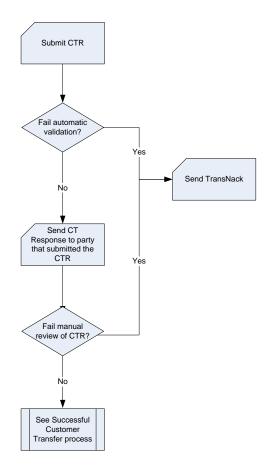


Figure 6665: Invalid Customer Transfer process

### 4.2.3.2 Transactional Diagram

10

The following diagram illustrates the transactions that are involved in the business process where an invalid customer transfer is rejected by the network operator. Depending on when the validation failure on the original CTR occurs, the incoming retailer can expect to see either one or two messages.

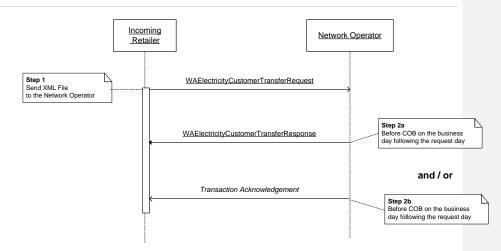


Figure 6766: Invalid Customer Transfer transactions

# 4.2.3.3 Timing Requirements

Q	Transaction	Transaction Group	Version	Sender	Receiver	Timing	
1	WAElectrictyCustomer TransferRequest	CATS	r17	Incoming retailer	Network operator	None. This is the submitted d	date.
2a	WAElectrictyCustomer TransferResponse	CATS	r17	Network operator	Incoming retailer	Before COB on the business of following the submitted date.	day
2b	Transaction Acknowledgement with a non-zero Event Code.	CATS	r17	Network operator	Incoming retailer	Before COB on the business of following the submitted date.	day

### 4.2.4 Transactions

10

Details for the transactions seen in the Invalid Customer Transfer business process can be found in Appendix D.



Some sample rejection TransNacks have been included in this section to provide an illustration of the kind of information that a participant will see when they submit an invalid CTR.

### 5 Step 1 - Sample XML: Invalid CTR submitted to network operator

```
<n:aseXML xmlns:n="urn:aseXML:r17:WA:r2.00" xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"</p>
             xsi:schemaLocation="urn:aseXML:r17:WA:r2.00
            http://www.westernpower.com.au/aseXML/schemas/r17/WA:r2.00/aseXML\_r17\_WA\_r2.00.xsd"> r17/WA:r2.00/aseXML\_r17\_WA\_r2.00.xsd"> r17/WA:r2.00/aseXML\_r17\_WA\_r2.00.xsd"> r17/WA:r2.00/aseXML\_r17\_WA\_r2.00.xsd"> r17/WA:r2.00/aseXML\_r17\_WA\_r2.00.xsd
10
              <Header>
                From description="RETCO">RETCO</From>

<To description="WPNTWRKS">WPNTWRKS</To>

<MessageID>WP-MSG-000-000-000-001-308-878</MessageID>
                <MessageDate>2008-04-28T10:28:05.605+08:00/MessageDate<TransactionGroup>CATS/TransactionGroup>
15
                <Priority>High</Priority>
<SecurityContext/>
<Market>WAELEC</Market>
               </Header>
20
              <Transactions>
                <Transaction initiatingTransactionID="CTR1308877" transactionDate="2008-04-28T10:28:05.605+08:00" transactionID="CTR1308877" 
<WAElectricityCustomerTransferRequest version="r17"><</p>
                   <ChangeReasonCode>1000</ChangeReasonCode>
<ProposedDate>2008-05-01</ProposedDate>
<NMI checksum="8">8887654321</NMI>
25
                   PreferredNetworkTariff>AEB</ri>
PreferredNetworkTariff>
EstimatedAnnualConsumption>5000
EstimatedAnnualConsumption>
                   30
                    <ContractDate>2006-07-01</ContractDate>

AccessContractDetails></WAElectricityCustomerTransferRequest>

                 </Transaction>
              </Transactions>
35
            </n:aseXML>
```

### Step 2 - Sample XML: Customer Transfer Response sent to Incoming Retailer

```
<?xml version="1.0" encoding="ISO-8859-1"?>
<ase:aseXML xmlns:ase="urn:aseXML:r17:WA:r2.00" xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"</pre>
40
            xsi:schemaLocation="urn:aseXML:r17:WA:r2.00 http://www.westernpower.com.au/aseXML/schemas/r17/WA:r2.00/aseXML_r17_WA_r2.00.xsd">
               <Header>
                -From description="Western Power Networks">WPNTWRKS</From>
-To description="New Retail Co">RETCO</To>
-MessageID>WPNTWRKSMSG-14836070
-MessageDate>2008-04-28T10:28:25+08:00
-MessageDate>2008-04-28T10:28:25+08:00
45
                 <TransactionGroup>CATS<Priority>Low</priority><Market>WAELEC/Market>
50
               </Header>
               <Transactions>
                 Transaction transactionID="WPNTWRKS-0000-20423561" transactionDate="2008-04-28T10:28:26+08:00"
             initiatingTransactionID="CTR1308877"
55
                 <WAElectricityCustomerTransferResponse version="r17">
<RequestID>3307</RequestID>
</WAElectricityCustomerTransferResponse>
               </Transaction>
</Transactions>
60
             </ase:aseXML>
```

### Sample XML: TransNack sent to Incoming Retailer (Duplicate CTR)



```
<?xml version="1.0" encoding="ISO-8859-1"?>
<ase:aseXML xmlns:ase="urn:aseXML:r17:WA:r2.00" xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"</pre>
                             xsi:schemaLocation="urn:aseXML:r17:WA:r2.00 http://www.westernpower.com.au/aseXML/schemas/r17/WA:r2.00/aseXML_r17_WA_r2.00.xsd">
      5
                                  <Header>
                                     <From description="Western Power Networks">WPNTWRKS</From>
<To description="New Retail Co">RETCO</To>
<MessageID>WPNTWRKSMSG-14846628
<MessageID>
<MessageDate>2008-04-28T13:51:09+08:00
/MessageDate>
 10
                                      <TransactionGroup>CATS</TransactionGroup>
<Priority>High</Priority>
<Market>WAELEC</Market>
                                 </Header>
<Acknowledgements>
                            *ACMINOWEQUEINENTS
*CTRIANGE UP ALIGNETISTS
*CTRIANGE UP ALIGNETISTS
*CTRIANGE UP ALIGNETISTS
*CTRIANGE UP ALIGNETISTS
*CODE 2012**CODE 
 15
 20
                                              <Context>Duplicate Customer Transfer Request.</Context>
<Explanation>Duplicate Customer Transfer Request.</Explanation>
                                        </Event>
</TransactionAcknowledgement>
                             </Acknowledgements>
</ase:aseXML>
25
                              Sample XML: TransNack sent to Incoming Retailer (Nominated Date too Soon)
```

```
<?xml version="1.0" encoding="ISO-8859-1"?>
<ase:aseXML xmlns:ase="urn:aseXML:r17:WA:r2.00" xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"</pre>
30
          xsi:schemaLocation="urn:aseXML:r17:WA:r2.00
http://www.westernpower.com.au/aseXML/schemas/r17/WA:r2.00/aseXML_r17_WA_r2.00.xsd">
            <Header>
             <From description="Western Power Networks">WPNTWRKS</From>

<To description="Retail">RETAIL

35
             MessageID>WPNTWRKSMSG-13496674</MessageID>

<a href="MessageDate">MessageDate</a>>

<a href="MessageDate">MessageDate</a>>
             <TransactionGroup>CATS</TransactionGroup>
<Priority>High</Priority>
40
             <Market>WAELEC</Market>
            </Header>
            <Acknowledgements>
          45
                <KeyInfo>8001017449</KeyInfo>
                <a href="context">Context</a> Nominated Transfer Date = 05-MAR-08</a>/Context>
<a href="cxplanation">Cexplanation</a>> Date not within allowed number of days</a>/Explanation>
             </Event>
</TransactionAcknowledgement>
50
           </Acknowledgements>
</ase:aseXML>
```

### 55 4.2.5 Related Transactions

### 4.2.5.1 Preceding Transactions

None.

### 4.2.5.2 Subsequent Transactions

None.



### 4.3 Standard Customer Transfer Withdrawal Process

#### 4.3.1 Overview

5

The Standard Customer Transfer Withdrawal process relates to the business scenario where a incoming retailer cancels a submitted CTR by submitting a Customer Transfer Cancel Request transaction to the network operator and this request is accepted.

The network operator, after setting the status of the original CTR to Cancelled, send a Customer Transfer Notification to the current retailer. No such notification is sent to the incoming retailer. This feature of the market has been included on the list of defects.

#### 10 4.3.2 Business Rules

#### **Submission rules**

The Customer Transfer Cancel Request must include the original Request ID.

The request may only be submitted by the retailer that submitted the original CTR.

#### 15 Validation

The Transfer Status of the CTR for the request id must not be Completed, Cancelled or Rejected.

#### Response

There is no Customer Transfer Notification or Customer Transfer Response sent to the initiating retailer after the submission of a Customer Transfer Cancel Request. The TransAck should be considered to be acceptance by the Network Operator of a valid cancellation request.



#### 4.3.3 Process Breakdown

# 4.3.3.1 Process diagram

5

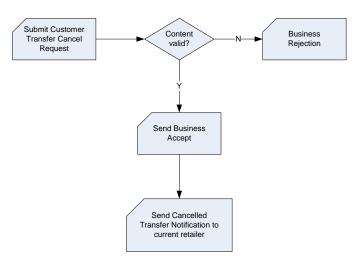


Figure 6867: Customer Transfer Withdrawal process

### 4.3.3.2 Transactional Diagram

In the below transaction diagram, a standard customer transfer is underway. The incoming and current retailers have both been informed

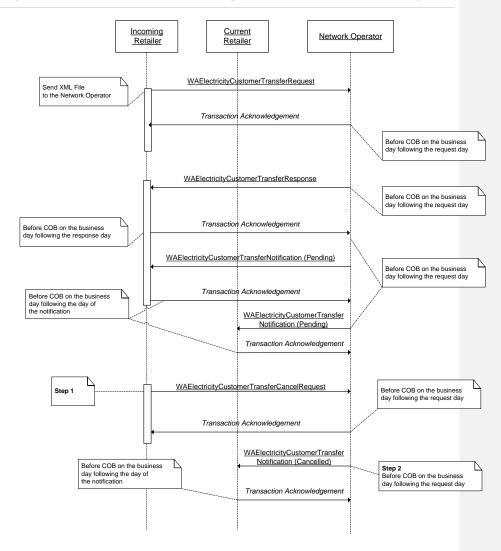


Figure 6968: Standard Customer Transfer Withdrawal transactions

## 5 4.3.3.3 Timing Requirements

The following table documents the transactions that will be seen in a Standard Customer Transfer Withdrawal business scenario. It should be noted that this section does not cover the transactions that relate to the original CTR.

Transaction 1 is sent by the party that submitted the original CTR.



Transaction 2 is published to the originator of the CTR (when the CTR is in a status of Requested) or to both the current and incoming retailer if the CTR has a status of PENding.

<b>□</b>	Transaction	Transaction Group	Version	Sender	Receiver	Timing
1	WAElectricityCustomer TransferCancelRequest	CATS	r17	Retailer	Network operator	
2	WAElectrictyCustomer TransferNotification (CAN)	CATS	r17	Network operator	Current Retailer	Before COB on the business day following the submitted date.

5

### 4.3.4 Transactions

### 4.3.4.1 Customer Transfer Cancel Request

Transaction Definition	WAElectricityCustomerTransferCancelRequest
Trigger	None.
Pre-conditions	CTR may not have a status of Completed, CANcelled or REJected.
Post-conditions	The network operator responds with an ACK or NAK.
Transaction acknowledgement-specific event codes	Please see Appendix A for the event codes that are specific to this transaction.

10

### **Transaction Data Elements**

The attributes of the WAElectricityCustomerTransferCancelRequest are defined in Appendix D.

# 15 Transaction Schema Definition



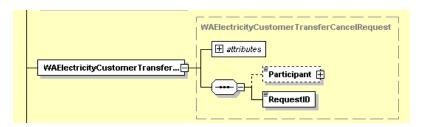


Figure 7069: Customer Transfer Cancel Request aseXML schema definition

### 4.3.4.2 Customer Transfer Notification

5

Transaction Definition	WAElectricityCustomerTransferNotification
Trigger	Receipt of a Customer Transfer Cancel Request.
Pre-conditions	Must be a valid customer transfer cancel request.
Post-conditions	Participant(s) are notified that the CTR has been cancelled.
Transaction acknowledgement-specific event codes	Please see Appendix A for the event codes that are specific to this transaction.

### **Transaction Data Elements**

The attributes of the WAElectricityCustomerTransferCancelNotification are defined in Appendix B.

### 10

20

### **Transaction Schema Definition**

This is defined in Figure 65Figure 64.

#### Step 1 - Sample XML: Incoming Retailer submits Customer Transfer Cancel Request 15

 $\label{lem:constraint} $$ \underline{-} < n:ase XML xmlns:n="urn:ase XML:r17:WA:r2.00" xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance" xsi:schemal.ocation="urn:ase XML:r17:WA:r2.00 http://www.westernpower.com.au/ase XML/schemas/r17/WA:r2.00/ase XML_r17_WA_r2.00.xsd">$ the properties of the properties$ 

- tttp://www.westeripowei.com.au/aseAvid\_statemas11/1/RAEAs/au/statemas11/1/RAEAs/au/statemas11/1/RAEAs/au/statemas11/1/RAEAs/au/statemas11/1/RAEAs/au/statemas11/1/RAEAs/au/statemas11/1/RAEAs/au/statemas11/RAEAs/au/statemas11/RAEAs/au/statemas11/RAEAs/au/statemas11/RAEAs/au/statemas11/RAEAs/au/statemas11/RAEAs/au/statemas11/RAEAs/au/statemas11/RAEAs/au/statemas11/RAEAs/au/statemas11/RAEAs/au/statemas11/RAEAs/au/statemas11/RAEAs/au/statemas11/RAEAs/au/statemas11/RAEAs/au/statemas11/RAEAs/au/statemas11/RAEAs/au/statemas11/RAEAs/au/statemas11/RAEAs/au/statemas11/RAEAs/au/statemas11/RAEAs/au/statemas11/RAEAs/au/statemas11/RAEAs/au/statemas11/RAEAs/au/statemas11/RAEAs/au/statemas11/RAEAs/au/statemas11/RAEAs/au/statemas11/RAEAs/au/statemas11/RAEAs/au/statemas11/RAEAs/au/statemas11/RAEAs/au/statemas11/RAEAs/au/statemas11/RAEAs/au/statemas11/RAEAs/au/statemas11/RAEAs/au/statemas11/RAEAs/au/statemas11/RAEAs/au/statemas11/RAEAs/au/statemas11/RAEAs/au/statemas11/RAEAs/au/statemas11/RAEAs/au/statemas11/RAEAs/au/statemas11/RAEAs/au/statemas11/RAEAs/au/statemas11/RAEAs/au/statemas11/RAEAs/au/statemas11/RAEAs/au/statemas11/RAEAs/au/statemas11/RAEAs/au/statemas11/RAEAs/au/statemas11/RAEAs/au/statemas11/RAEAs/au/statemas11/RAEAs/au/statemas11/RAEAs/au/statemas11/RAEAs/au/statemas11/RAEAs/au/statemas11/RAEAs/au/statemas11/RAEAs/au/statemas11/RAEAs/au/statemas11/RAEAs/au/statemas11/RAEAs/au/statemas11/RAEAs/au/statemas11/RAEAs/au/statemas11/RAEAs/au/statemas11/RAEAs/au/statemas11/RAEAs/au/statemas11/RAEAs/au/statemas11/RAEAs/au/statemas11/RAEAs/au/statemas11/RAEAs/au/statemas11/RAEAs/au/statemas11/RAEAs/au/statemas11/RAEAs/au/statemas11/RAEAs/au/statemas11/RAEAs/au/statemas11/RAEAs/au/statemas11/RAEAs/au/statemas11/RAEAs/au/statemas11/RAEAs/au/statemas11/RAEAs/au/statemas11/RAEAs/au/statemas11/RAEAs/au/statemas11/RAEAs/au/statemas11/RAEAs/au/statemas11/RAEAs/au/statemas11/RAEAs/au/statemas11/RAEAs/au/statemas11/RAEAs/au/statemas11/RAEAs/au/statemas11/RAEAs/au/statemas11/RAEAs/au/statemas11/RAEAs/au/statemas11/RAEAs/au/statemas11/RA



### 15 Step 2 - Sample XML: Network operator notifies <u>current</u> retailer of the Cancelled CTR

```
20
                                               <Header>
                                                     Header>

From description="Western Power Networks">WPNTWRKS</From>

To description="New Retail Co">RETCO</To>

MessageID>WPNTWRKSMSG-7486172</MessageID>

MessageDate>2007-07-13T09:18:12+08:00</MessageDate>
25
                                                      <TransactionGroup>CATS</TransactionGroup>
<Priority>Low</Priority>
<Market>WAELEC</Market>
                                                 </Header>
30
                                              <Transactions>
                                                       <Transaction transactionID="WPNTWRKS-0000-8927448" transactionDate="2007-07-13T09:18:12+08:00">
<WAElectricityCustomerTransferNotification version="r17">
                                                                    <Role>FRMP</Role>
<RoleStatus>C</RoleStatus>
35
                                                                    <ChangeRequest>
<Participant/>
<RequestID>1581</RequestID>
                                                                            <ChangeStatusCode>CAN</ChangeStatusCode>
<ChangeData>
40
                                                                                  <a href="https://doi.org/10.00/"></a> (ChangeReasonCode> 1000</a> (ChangeReasonCode> <a href="https://doi.org/10.00/"></a> (ProposedDate> <2007-08-01</a> (ProposedDate> <a href="https://doi.org/10.00/"></a> (NMI checksum="1"><a href="https://doi.org/10.00/"><a href="https://doi.org/10.00/">><a href="https
                                                                     </ChangeData>
</ChangeRequest>
45
                                                              </WAElectricityCustomerTransferNotification>
                                                         </Transaction>
                                             </Transactions>
```

### 50 4.3.5 Related Transactions

</ase:aseXML>

### 4.3.5.1 Preceding Transactions

None.

### 4.3.5.2 Subsequent Transactions

55 None.



#### 4.4 Correction Customer Transfer Process

#### 4.4.1 Overview

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The Correction Customer Transfer process relates to the business process that seeks to reverse a successfully-completed, though erroneous, CTR by submitting a new CTR transaction with a specific Change Reason Code of 1025. This can be initiated by either the incoming retailer or the current retailer – and the transaction flows differ subtly depending on who initiates the transaction.

Once a Correction CTR is received by the network operator, a response is automatically generated with a Request ID. Then the network operator validates the received transaction. If it is accepted, the network operator processes the changes and sends a Customer Transfer Notification to the requesting retailer as well as the other retailer (either the current or the incoming retailer depending on which party requested the Correction CTR). These notifications will both stipulate that the CTR has moved to completion as there is no Pending status for CTRs with a CR Code of 1025.

Following the transfer's completion, the network operator sends the relevant standing data to the party that is now the current retailer as is the case in the standard customer transfer (section 4.1.1.1). This is the party that was originally the current retailer before the original, erroneous CTR was carried out. Meter readings for days since the erroneous transfer, which would have gone to the erroneous retailer, are then sent out to current (correct) retailer through the standard MDN process.

#### 4.4.2 Business Rules

### Submission rules

An incoming retailer may submit a correction transfer request to the network operator at any time. (Note: the incoming retailer is the retailer who has mistakenly lost an exit point to another retailer by an erroneous transfer and who wants to get the exit point back).

A current retailer may submit a correction transfer request to the network operator at any time. (Note, the current retailer is the retailer who has mistakenly gained an exit point by an erroneous transfer and who wants to return the exit point to the previous retailer.)

Correction transfer requests must be submitted for each NMI separately.

The retailer that submits the Correction CTR must ensure (if necessary in consultation with the contestable customer) that the contestable customer was transferred in error, before submitting a correction transfer request.

A correction transfer request must specify the:

- (b) NMI;
- (c) NMI checksum;
- (d) actual transfer date of the erroneous standard transfer to be reversed.

The CR code in the submitted transaction should be 1025.



#### Validation

Validation will be applied on the Correction CTR by the network operator. The Correction CTR will be rejected, and a TransNAK published, if any of the following apply:

- 5 (a) the NMI checksum is not correct for the requested NMI;
  - (b) no exit point exists in the Metering Registry with the requested NMI;
  - (c) a standard transfer of the NMI to the current retailer did not occur on the actual transfer date specified;
  - (d) the standard transfer specified is not the most recent completed transfer for the NMI;
  - (e) a pending standard transfer request exists for the NMI;
  - (f) NMI has a status of Extinct;
  - (g) a pending supply abolishment request service order exists for the NMI.

#### Response

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15 If the network operator rejects a correction transfer request, then it must notify the current retailer of this fact by COB on the business day following the submitted date. The notification must include the reason for the rejection of the request.

If the correction transfer request is not rejected, then the network operator must, by COB on the business day following the submitted date:

- (h) advise the current retailer that their request has been accepted;
- (i) provide the current retailer with a unique request id for the correction transfer request;
- (j) reverse the erroneous transfer in the Metering Registry;
- (k) provide the incoming retailer and the current retailer with a notification of the completion of the transfer reversal that includes the NMI, NMI checksum, request id and actual transfer date of the erroneous transfer and the IMO with a standing data update notification.

[The transfer request will be exceptioned by the Metering Registry and will be accepted or rejected by the network operator. If the request has been accepted, the transfer will reverse the erroneous transfer and inform the participants with a completion notice.]

If the correction transfer request is not rejected, then the network operator must, by COB on the second business day following the submitted date:

- provide the incoming retailer with the standing data for the exit point in accordance with the Metering Code;
- (m) provide the incoming retailer with the meter readings (if any) that the incoming retailer would have received, had the erroneous transfer not occurred.



### 4.4.3 Process Breakdown

# 4.4.3.1 Process diagram

5

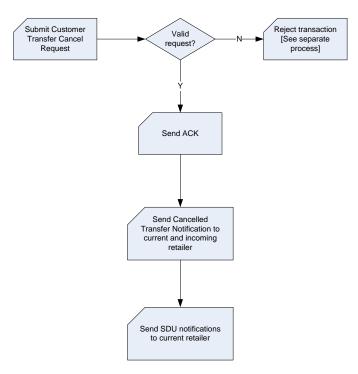
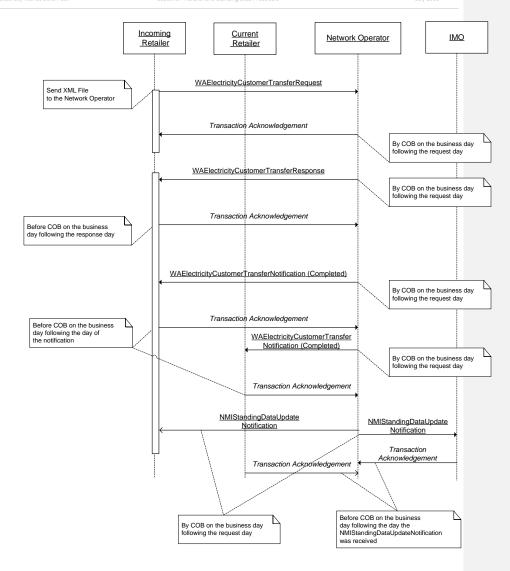


Figure 7170: Correction Customer Transfer process

### 4.4.3.2 Transactional Diagram

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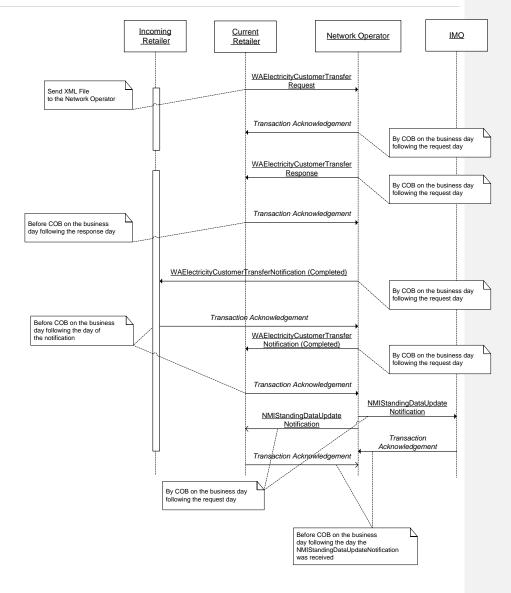


Figure 7372: Correction Customer Transfer Withdrawal transactions (current retailer initiated)

### 4.4.3.3 Timing Requirements

The following table documents the transactions that will be seen in a Correction Customer Transfer Withdrawal business scenario.



Transaction 1 is sent by the either of the incoming retailer or the current retailer as at the time of the transaction.

Transaction 2 is published to the sender of Transaction 1.

О	Transaction	Transaction Group	Version	Sender	Receiver	Timing
1	WAElectrictyCustomer TransferRequest	CATS	r17	Incoming or current retailer	Network operator	
2	WAElectrictyCustomer TransferResponse	CATS	r17	Network operator	Incoming or current retailer	Before COB on the business day following the submitted date.
3	WAElectrictyCustomer TransferNotification (COMP)	CATS	r17	Network operator	Incoming retailer	Before COB on the second business day following the transfer day.
4	WAElectrictyCustomer TransferNotification (COMP)	CATS	r17	Network operator	Current retailer	Before COB on the second business day following the transfer day.
5	NMIStandingDataUpdateNotif ication	NMID	r9	Network operator	IMO	Before COB on the second business day following the transfer day.
6	NMIStandingDataUpdateNotif ication	NMID	r9	Network operator	Current <sup>3</sup> retailer	Before COB on the second business day following the transfer day.

### 5 4.4.4 Transactions

# 4.4.4.1 Step 1: Correction Customer Transfer Request

Transaction Definition	WAElectrictyCustomerTransferRequest
Trigger	Incoming retailer wishes to transfer customer that has been erroneously transferred.
Pre-conditions	Incoming retailer has valid customer consent.

<sup>&</sup>lt;sup>3</sup> NMI Standing Data Update Notifications are always only ever sent to the current retailer and the IMO.



Post-conditions	Network operator is able to read and validate the contents of the message.
Transaction acknowledgement-specific event codes	{Please see Appendix A for a full list of the event codes that are relevant to this transaction.}

### **Transaction Data Elements**

The attributes of the WAElectricityCustomerTransferRequest can be seen in Appendix B.

### 5 Transaction Schema Definition

This is the same as for a standard Customer Transfer Request.

# 4.4.4.2 Step 2: Customer Transfer Response

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Transaction Definition	WAElectrictyCustomerTransferResponse
Trigger	Receipt of a Customer Transfer Request
Pre-conditions	Customer Transfer Request must be a valid transaction.
Post-conditions	Network operator is able to read and validate the contents of the message.
Transaction acknowledgement-specific event codes	None.

# **Transaction Data Elements**

The attributes of the WAElectrictyCustomerTransferResponse can be seen in Appendix D.

### 15 Transaction Schema Definition

This is the same as for a standard Customer Transfer Request.

# 4.4.4.3 Step 3: Notify incoming retailer of Completed CTR

Transaction Definition	WAElectrictyCustomerTransferNotification
Trigger	Completion of a CTR within the network operator's systems.
Pre-conditions	Customer Transfer Request must be a valid transaction.
Post-conditions	Incoming retailer is able to update their systems and resumes financial responsibility for the NMI.
Transaction acknowledgement-specific event codes	None.

### **Transaction Data Elements**

The attributes of the WAElectrictyCustomerTransferNotification can be seen in Appendix D.

# **Transaction Schema Definition**

5

15

10 This is the same as for a standard Customer Transfer Request.

# 4.4.4.4 Step 4: Notify current retailer of Completed CTR

Transaction Definition	WAElectrictyCustomerTransferNotification
Trigger	Completion of a CTR within the network operator's systems.
Pre-conditions	Customer Transfer Request must be a valid transaction.
Post-conditions	Current retailer is able to update their systems and is no longer financially responsible for the NMI.
Transaction acknowledgement-specific event codes	None.

# **Transaction Data Elements**



The attributes of the WAElectrictyCustomerTransferNotification can be seen in Appendix

#### **Transaction Schema Definition**

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25

This is the same as for a standard Customer Transfer Request.

#### 4.4.4.5 Step 5: Notify current retailer of standing data

It should be noted that this step is executed in the form of single Partial Standing Data Update Notifications for each piece of standing data that changes, plus a Full SDU to reflect the entire, current set of standing data. Details on the standing data can be found in section 3.

Transaction Definition	NMIStandingDataUpdateNotification
Trigger	Customer transfer process makes changes to NMI standing data (participant roles).
Pre-conditions	Customer Transfer Request must be a valid transaction.
Post-conditions	Current retailer is able to update their systems.
Transaction acknowledgement-specific event codes	None.

#### **Transaction Data Elements**

The transaction data elements for the NMI Standing Data Update Notification can be found in section 3.

## **Transaction Schema Definition**

20 Please see section 3.

## 4.4.4.6 Step 6: Notify IMO of standing data

It should be noted that this step is executed in the form of single Partial Standing Data Update Notifications for each piece of standing data that changes, plus a Full SDU to reflect the entire, current set of standing data. Detailer on the standing data can be found in section 3.

Transaction Definition	NMIStandingDataUpdateNotification
Trigger	Customer transfer process makes changes to NMI standing data (participant roles).
Pre-conditions	Customer Transfer Request must be a valid transaction.
Post-conditions	IMO is able to update their systems.
Transaction acknowledgement-specific event codes	

#### **Transaction Data Elements**

The transaction data elements for the NMI Standing Data Update Notification can be found in the section 3.

5

#### **Transaction Schema Definition**

Please see section 3.

10

#### Step 1 - Sample XML: Retailer submits Correction Customer Transfer Request

```
<n:aseXML xmlns:n="urn:aseXML:r17:WA:r2.00" xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"</p>
                                  xsi:schemaLocation="urn:aseXML:r17:WA:r2.00 http://www.westempower.com.au/aseXML/schemas/r17/WA:r2.00/aseXML_r17_WA_r2.00.xsd"> http://www.westempower.com.au/aseXML/schemas/r17/WA:r2.00/aseXML_r17_WA_r2.00.xsd"> http://www.westempower.com.au/aseXML/schemas/r17/WA:r2.00/aseXML_r17_WA_r2.00.xsd"> http://www.westempower.com.au/aseXML/schemas/r17/WA:r2.00/aseXML_r17_WA_r2.00.xsd"> http://www.westempower.com.au/aseXML/schemas/r17/WA:r2.00/aseXML_r17_WA_r2.00.xsd"> http://www.westempower.com.au/aseXML/schemas/r17/WA:r2.00/aseXML_r17_WA_r2.00.xsd"> http://www.westempower.com.au/aseXML/schemas/r17/WA:r2.00/aseXML_r17_WA_r2.00.xsd"> http://www.westempower.com.au/aseXML/schemas/r17_WA:r2.00/aseXML_r17_WA_r2.00.xsd"> http://www.westempower.com.au/aseXML/schemas/r17_WA:r2.00/aseXML_r17_WA_r2.00.xsd"> http://www.westempower.com.au/aseXML/schemas/r17_WA:r2.00/aseXML_r17_WA_r2.00.xsd"> http://www.westempower.com.au/aseXML/schemas/r17_WA:r2.00/aseXML_r17_WA_r2.00.xsd"> http://www.westempower.com.au/aseXML/schemas/r17_WA_r2.00.xsd"> http://www.westempower.com.au/aseXML/schemas/r17_wA_r2
 15
                                       20
                                             <SecurityContext/>
<Market>WAELEC</Market>
25
                                           </Header>
                                           <Transactions>
                                              <Transaction initiatingTransactionID="CTR1255699" transactionDate="2008-03-11T14:29:24.483+08:00" transactionID="CTR1255699">
                                                  \tansaction initiating transactionID= CTM255099 \tansactionDate=
\text{WAElectricityCustomerTransferRequest version="r17">
\text{ChangeReasonCode>1025<\text{ChangeReasonCode>}
\text{ProposedDate>2008-02-26<\text{ProposedDate>}
\text{MI checksum="5">\text{8887654321<\text{NMI}>}
\text{StimatedAnnualConsumption>0<\text{EstimatedAnnualConsumption>}
\text{StimatedAnnualConsumption>}
\text{VIIII}
30
                                                        <MeterDetails>
<MeterSerialNumber>0136002271</MeterSerialNumber>
35
                                                           <MeterChangeRequired>Yes</MeterChangeRequired>
<MeterInstallationType>COMMS4</MeterInstallationType>
<CustomerFundedMeter>No</CustomerFundedMeter>

    MeterDetails></WAElectricityCustomerTransferRequest>

40
                                         </Transaction>
</Transactions>
                                    </n:aseXML>
```



30

<?xml version="1.0" encoding="ISO-8859-1"

#### Step 2 - Sample XML: Network operator publishes responds with Request ID

```
<?xml version="1.0" encoding="ISO-8859-1"?>
  5
            <ase:aseXML xmlns:ase="urn:aseXML:r17:WA:r2.00" xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
            xsi:schemaLocation="urn:aseXML:r17:WA:r2.00
            http://www.westernpower.com.au/aseXML/schemas/r17/WA:r2.00/aseXML_r17_WA_r2.00.xsd">
              <Header>
               From description="Western Power Networks">WPNTWRKS</From>
<To description="Retail">RETAIL</To>
<MessageID>WPNTWRKSMSG-13726673</MessageID>
10
               <MessageID>WPN1WKKSMSG-157266/3/MessageDate>2008-03-11T14:30:33+08:00/MessageDate>/TransactionGroup>/Priority>Low/Priority>

15
              </Header>
              <Transactions>
                Transaction transactionID="WPNTWRKS-0000-18540176" transactionDate="2008-03-11T14:30:33+08:00"
           initiatingTransactionID="CTR1255699">

<WAElectricityCustomerTransferResponse version="r17">
20
                  <RequestID>2858</RequestID>
</WAElectricityCustomerTransferResponse>
                </Transaction>
           25
```

# Step 3 - Sample XML: Network operator notifies incoming retailer of Completed Correction transfer

```
<ase:aseXML xmlns:ase="urn:aseXML:r17:WA:r2.00" xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"xsi:schemaLocation="urn:aseXML:r17:WA:r2.00" xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"xsi:schema-instance"xsi:schema-instance"xsi:schema-instance"xsi:schema-instance"xsi:schema-instance"xsi:schema-instance"xsi:schema-instance"xsi:schema-instance"xsi:schema-instance"xsi:schema-instance"xsi:schema-instance"xsi:schema-instance"xsi:schema-instance"xsi:schema-instance"xsi:schema-instance"xsi:schema-instance"xsi:schema-instance"xsi:schema-instance"xsi:schema-instance"xsi:schema-instance"xsi:schema-instance"xsi:schema-instance"xsi:schema-instance"xsi:schema-instance"xsi:schema-instance"xsi:schema-instance"xsi:schema-instance"xsi:schema-instance"xsi:schema
                                       http://www.westernpower.com.au/aseXML/schemas/r17/WA:r2.00/aseXML\_r17\_WA\_r2.00.xsd"> http://www.westernpower.com.au/aseXML_r17\_wA\_r2.00.xsd"> http://www.westernpower.com.au/aseXML_r17\_wA\_r2.00.xsd
                                              <Header>
<From description="Western Power Networks">WPNTWRKS</From>
 35
                                                  <To description="Retail">RETAIL</To>
<MessageID>WPNTWRKSMSG-13736226</MessageID>
                                                  <MessageDate>2008-03-12T05:00:46+08:00
/MessageDate>
<TransactionGroup>CATS
<Priority>Low
/Priority>
 40
                                               <Market>WAELEC</Market>
</Header>
                                             <Transactions>
                                      <Transaction transactionID="WPNTWRKS-0000-18553968" transactionDate="2008-03-12T05:00:46+08:00" initiatingTransactionID="CTR1255699">
 45
                                                       «WAElectricityCustomerTransferNotification version="r17">
Role>FRMP
                                                            <RoleStatus>C</RoleStatus>
                                                            <ChangeRequest>
50
                                                                <Participant description="Retail">RETAIL</Participant>
<RequestID>2858</RequestID>
<ChangeStatusCode>COM</ChangeStatusCode>
                                                                  <ChangeData>
<ChangeReasonCode>1025</ChangeReasonCode>
55
                                                                       <ActualChangeDate>2008-02-26</ActualChangeDate>
<NMI checksum="5">8887654321</NMI>
                                                                       <\!\!Estimated Annual Consumption \!\!>\!\! 0 \!\!<\!\! / Estimated Annual Consumption \!\!>\!\! 
                                                                       <MeterDetails>
<MeterSerialNumber>0136002271
60
                                                                            <MeterChangeRequired>No</MeterChangeRequired>
<MeterInstallationType>COMMS4</MeterInstallationType>
                                                                            <CustomerFundedMeter>No</CustomerFundedMeter>
                                                                  </MeterDetails>
</ChangeData>
65
                                                           </ChangeRequest>
</WAElectricityCustomerTransferNotification>
                                                    </Transaction>
                                              </Transactions>
```



</ase:aseXML>

5

45

50

# Step 4 - Sample XML: Network operator notifies current retailer of Completed Correction transfer

```
<?xml version = '1.0' encoding = TSO-8859-1'?>
<ase:aseXML xmlns:ase="urn:aseXML:r17:WA:r2.00" xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"</pre>
                                 xsi:schemaLocation="urn:aseXML:r17:WA:r2.00
                                http://www.westernpower.com.au/aseXML/schemas/r17/WA:r2.00/aseXML\_r17\_WA\_r2.00.xsd"> http://www.westernpower.com.au/aseXML_r17\_wA\_r2.00.xsd"> http://www.westernpower.com.au/aseXML_r17\_wA_r17\_wA_r17\_wA_r17_wA_r17_wA_r17_wA_r17_wA_r17_wA_r17_wA_r17_wA_r17_wA_r17_wA_r17_wA_r17_wA_r17_wA_r17_wA_r17_wA_r17_wA_r17_wA_r17_wA_r17_wA_r17_wA_r17_w
 10
                                       <Header>
                                            15
                                            <Priority>Low</Priority>
<Market>WAELEC</Market>
                                      </Header>
<Transactions>
20
                                              Transactions transactionID="WPNTWRKS-0000-18553966" transactionDate="2008-03-12T05:00:46+08:00">

<WAElectricityCustomerTransferNotification version="r17">
<Role>FRMP</Role>

                                                        <RoleStatus>N</RoleStatus>
<ChangeRequest>
25
                                                               Participant/>
<RequestID>2858</RequestID>
<ChangeStatusCode>COM</ChangeStatusCode>
                                                               <ChangeData>
                                                                    <ChangeReasonCode>1025</ChangeReasonCode>
 30
                                                                     <ActualChangeDate>2008-02-26</ActualChangeDate>
<NMI checksum="5">8887654321</NMI>
                                                                </ChangeData>

 35
                                      </Transaction>
                                </ase:aseXML>
```

## 40 Sample XML: Step 5 – Notify current retailer of standing data

(Details on the publication of NMI standing data can be found in section 3. Notifications for this step will include, at a minimum:

- a Partial SDU to reflect that the Incoming Retailer is the new FRMP as of the effective date
- a Partial SDU to reflect that the Incoming Retailer is the new RP as of the effective date.})

## Sample XML: Step 6- Notify IMO of standing data

(These transactions contain the same information as the transactions referenced in the above step 5.)

## 4.4.5 Related Transactions

## 4.4.5.1 Preceding Transactions

None.

10

## 5 4.4.5.2 Subsequent Transactions

No subsequent transactions are procedurally **tied** to a correction customer transfer process. However, subsequent to the customer transfer completion, the outgoing and current retailers will receive MDNs that will include all the readings for the date of the transfer (as the WA market executes transfers effective from 8am on the transfer date). It should be noted that retailers are only entitled to bill for the period that is appropriate to them.



# APPENDIX A LIST OF EVENT CODES

## Codes

The list of codes that are used in the WA market is published in the List of Codes published as a part of the Build Pack.

#### **Events**

## **Event Class Codes**

Investigation Code	Business Rules
Message	The message class covers validation of the aseXML message structure. Examples of errors at this level include inconsistent header elements, unsupported transactions and unsupported transaction versions.
Application	(default) this class covers application level validation. Events of this class will normally only appear in <transactionacknowledgement> elements or in response transactions.</transactionacknowledgement>
Processing	The processing class covers environmental issues. An example might be the long-term unavailability of target applications or the corruption of a database.

# **Event Severity Codes**

Code	Business Rules
Information	Processing is unaffected by the contents of the event.
Warning	Processing may proceed by application of overriding processing rules e.g. substitution of a default value for a missing optional element.
Error	An error is present that must be corrected. Processing may still continue e.g. an invalid meter data record that is unrelated to the remainder of the records presented for processing.
Fatal	The nature of the event is such that further processing is not possible.

# Invoking Transactions for Event Codes

1	ase:WAElectricityCustomerTransferRequest
2	ase:WAElectricityCustomerTransferResponse
3	ase:WAElectricityCustomerTransferNotification
4	ase:WAElectricityCustomerTransferCancelRequest
5	ase:NMIDiscoveryRequest
6	ase:NMIDiscoveryResponse
7	ase:NMIStandingDataRequest
8	ase:NMIStandingDataResponse
9	ase:NMIStandingDataUpdateNotification
10	All



Event Code	Event Description	Severity	Transaction Group	Invoking transaction	Notes	
0	Accept	Informati	All	10		
	Success	on				
1	Not well formed	Error	All	10	Message level event code.	
2	Schema validation failure	Error	All	10	Message level event code.	
3	Transaction not supported within Transaction Group	Error	All	10	Message level event code.	
4	Transaction version not supported	Error	All	10	Message level event code.	
5	Uncompression failure	Error	All	10	Message level event code.	
6	Message too big	Error	All	10	Message level event code.	
7	Header mismatch	Error	All	10	Message level event code.	
8	Incorrect Market	Error	All	10	Message level event code.	
9	Unknown Transaction Group	Error	All	10	Message level event code.	
101	Database update error, typically the result of data integrity rule violation	Error	N/A	10	Message level event code.	
102	Database system error, typically due to major database problem	Error	N/A	10	Message level event code.	
200	Record(s) not found	Error	N/A	Not applicable.	Application level event code, as are all of the codes listed below.	
201	Data missing. Details provided in Explanation	Error	All	10	Requires explanation	
202	Access Contract not verified	Error	CATS	1	Access Contract not verified: Expl Reqd=Y	
202	Contract Maximum Demand Units supplied with no Contract Maximum Demand	Error	CATS	1	Contract Maximum Demand Units supplied with no Contract Maximum Demand: Expl Reqd=Y	
202	Customer Transfer – Access contract not verified	Error	CATS	1	Expl Reqd=Y	



Event Code	Event Description	Severity	Transaction Group	Invoking transaction	Notes
202	Customer Transfer – Errors in meter requirements details	Error	CATS	1	Expl Reqd=Y.
202	Customer Transfer – Estimated annual consumption	Error	CATS	1	Expl Reqd=Y.
202	Customer Transfer – Exceeded number of requests for transfer date	Error	CATS	1	Expl Reqd=Y.
202	Customer Transfer – Exceeded number of requests submitted on date	Error	CATS	1	Expl Reqd=Y.
202	Customer Transfer – Network tariff fields	Error	CATS	1	Expl Reqd=Y.
202	Customer Transfer – Network tariff fields	Error	CATS	1	Expl Reqd=Y
202	Customer Transfer – NMI is not Contestable	Error	CATS	1	Expl Reqd=Y. Expl Reqd=Y
202	Customer Transfer – NMI not in correct status for transfer	Error	CATS	1	Expl Reqd=Y
202	Customer Transfer – NMI Status is Extinct	Error	CATS	1	Expl Reqd=Y
202	Customer Transfer – Participant is already responsible for NMI	Error	CATS	1	Expl Reqd=Y
202	Customer Transfer – Request submitted on or for a non business day	Error	CATS	1	Expl Reqd=Y.
202	Duplicate Customer Transfer Request.	Error	CATS	1	Expl Reqd=Y.
202	Exceeded number of requests for transfer date	Error	CATS	1	Exceeded number of request for transfer date: Expl Reqd=Y
202	Exceeded Number of requests submitted on date	Error	CATS	1	Exceeded Number of requests submitted on date: Expl Reqd=Y
202	Exceeded Number of Requests submitted on the date	Error	CATS	1	Exceeded Number of Requests submitted on the date: Expl Reqd=Y



Event Code	Event Description	Severity	Transaction Group	Invoking transaction	Notes
202	Invalid Contestable Site	Error	NMID	5	
202	Invalid Contract Maximum Demand Units	Error	CATS	1	Invalid Contract Maximum Demand Units: Expl Reqd=Y
202	Invalid Customer Transfer Meter Type	Error	CATS	1	Invalid Customer Transfer Meter Type: Expl Reqd=Y
202	Invalid data. Details provided in Explanation	Error	All	10	Expl Reqd=Y
202	NMI and Meter Mismatch	Error	CATS	1	Meter is not associated with this NMI: Expl Reqd=Y
202	NMI not Contestable	Error	CATS	1	NMI not Contestable: Expl Reqd=Y
202	NMI not in correct status for transfer	Error	CATS	1	Invalid NMI status for transfer: Expl Reqd=Y
202	NMI Standing Data: NMI is not contestable	Error	NMID	7	
202	NMI Status is Extinct	Error	NMID	5	
202	Participant already responsible for NMI	Error	CATS	1	Participant already responsible for NMI: Expl Reqd=Y
202	Participant not current or previous Retailer for the NMI	Error	CATS	1	Participant not current or previous Retailer for the NMI as at the transfer date: Expl Reqd=Y
202	Proposed Change Date incorrect	Error	CATS	1	Last transfer did not occur on the actual date dd/mon/yyyy: Expl Reqd=Y
202	Submit date is not a business day	Error	CATS	1	Submit date is not on business date: Expl Reqd=Y
202	Submit date is not a business day	Error	CATS	1	Submit date is not on business date: Expl Reqd=Y
202	Transfer date is not a business day	Error	CATS	1	Transfer date is not on business date: Expl Reqd=Y
202	Transfer rejected by Network Operator	Error	CATS	1	Retrieved from Explanation on screen: Expl Reqd=Y



Event Code	Event Description	Severity	Transaction Group	Invoking transaction	Notes
206	Recipient did not initiate request	Error	All	2, 6, 8	Requires explanation. Can only be used following submission of a Request transaction.
207	Unrecognised Event Code	Error	All	10	Requires explanation. Can only be used following submission of a Request transaction.
999	Unexpected Error	Error	All	10	
1113	Recipient is not responsible for the supplied NMI	Error	All	2,3,6,8,9	Requires explanation. Can only be used following submission of a Request transaction.
1114	NMIChecksum invalid	Error	All	10	
1116	Invalid Change Request Code	Error	CATS	1	Invalid Change Request Code: Expl Reqd=N
1152	CTR request can only be withdrawn by the initiator of the CTR	Error	CATS	4	
1156	Check Digit invalid	Error	All	10	Check Digit invalid: Expl Reqd=
1157	CTR not found or is not in correct status for a withdrawal request	Error	CATS	4	
1160	Date not within allowed number of days	Error	CATS	1	Expl Reqd=No
1164	Initiating Participant is not the same as the initiating Participant of the Original Request	Error	CATS	4	Expl Reqd=
1167	Transfer already in progress	Error	CATS	1	Transfer already in progress: Expl Reqd=No
1170	Proposed Date must be provided	Error	CATS	1	Proposed Date must be provided: Expl Reqd=No
1403	NMI Discovery. No Access Rule for Jurisdiction Code	Error	NMID	5	
1404	NMI Discovery – No Data Found	Error	NMID	5	



Event Code	Event Description	Severity	Transaction Group	Invoking transaction	Notes
1404	NMI Discovery / NMI Standing Data / Historical Data Process – NMI is not Contestable	Error	NMID	5	
1404	NMI Discovery / NMI Standing Data / Historical Data Process – NMI Status is Extinct	Error	NMID	5	
1404	NMI Discovery / NMI Standing Data / Historical Data Process – No Data Found	Error	NMID	5	
1410	More data available. Current search exceeds jurisdictional limit	Error	NMID	5	
1411	Locality or Postcode required	Error	NMID	5	
1412	No State (State required)	Error	NMID	5	
1451	Invalid checksum digit	Error	NMID	5, 6, 7, 8	
1452	NMI Standing Data – No Access rule	Error	NMID	5, 7	
1453	No jurisdiction	Error	NMID	5, 7	
1454	NMI does not exists	Error	NMID	5, 7	
1923	NMI not found	Error	CATS	1	NMI not found: Expl Reqd=N



July 2008

## APPENDIX B NMI STANDING DATA SCHEMA DEFINITION

Each of the NMIStandingDataUpdateNotification and the NMIStandingDataResponse transactions contains the standing data for a NMI. This will be provided in a NMIStandingData element.

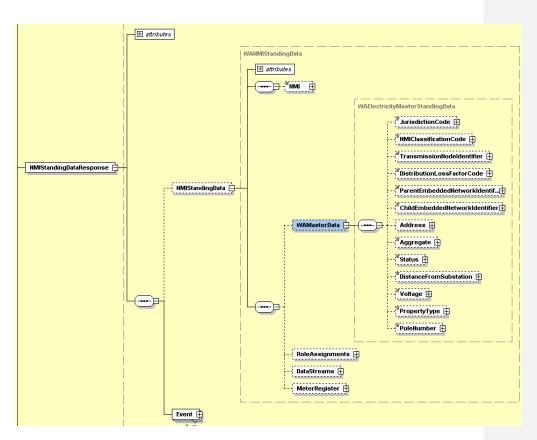


Figure 7473: NMI Standing Data schema definition – WA Master Data

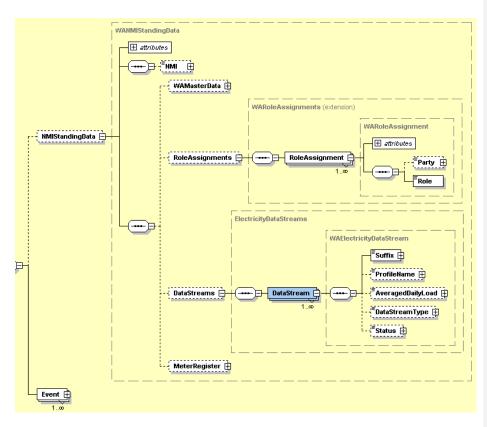


Figure <u>75</u>74: NMI Standing Data schema definition – Role Assignments & DataStreams

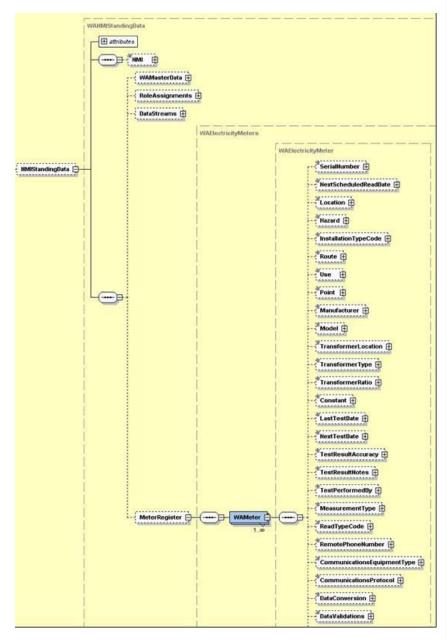


Figure 7675: NMI Standing Data schema definition – Meter (part 1)

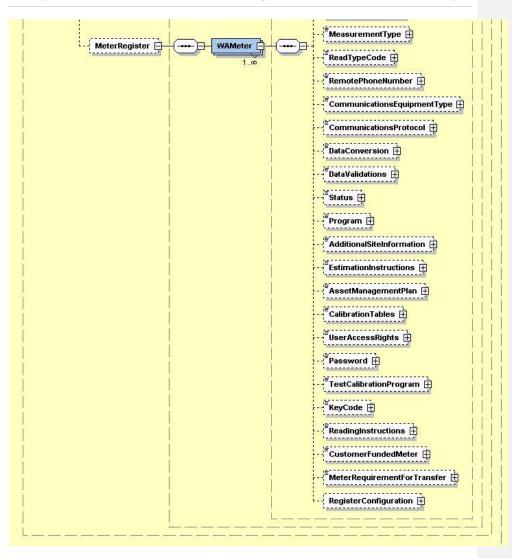


Figure 7776: NMI Standing Data schema definition – Meter (part 2)

## APPENDIX C STANDING DATA TRANSACTION ELEMENTS

This section shows the transaction data elements that are available for Standing Data notifications.

Table 3Table 3 shows the identifier elements that will be published along with the changed elements of the NMI's standing data. These identifier elements are the "keys" that ensure the current retailer is able to accurately interpret which piece of standing data has changed. For example, to ensure that the changed network tariff is assigned to the correct register, the Partial SDU will publish the new network tariff along with the NMI, the meter serial number and the register ID.

Table 4Table 4 shows the elements that can be seen in Full Standing Data Update notifications and NMI Standing Data responses where the recipient is a current retailer

Table 5Table 5 show the elements that can be in a Standing Data response where the recipient is **not** a current retailer.



Table 3: Identifying elements for Partial SDU notification transactions

	1. If the changed piece of standing data is in the following container  ↓							
2then the following identifying keys will be provided in addition to the changed piece of standing data	Master Data  Role Assignments  DataStream Meter*  Re							
NMI	✓	✓	✓	✓	✓			
Checksum	×	×	×	×	*			
Suffix	×	×	✓	×	*			
Meter Serial #	×	×	×	<b>√</b> *	✓			
Register ID	×	×	×	<b>x</b> *	✓			

 $<sup>^{\</sup>star}$  - providing that the changed standing data is  $\underline{\text{not}}$  a part of the Register container

Table 4: Standing Data transaction elements for current retailers

Field	Format	Use	Definition/Comments	Occurs	Element Path	Data Type		
Master Data								
NMI	Char (10)	М	Unique National Metering Identifier.	Type: Element Occurs: 1 Default: None	NMI	xsd:string		
NMI Checksum ()	Numeric (1)	М	The Checksum of the NMI calculated using standard NEM algorithm.	Type: Attribute Occurs: 0-1 Default: None	NMI/@Checksum	xsd:integer		
Jurisdiction Code	Varchar2 (3)	R	Jurisdiction code to which the NMI belongs. This code defines the jurisdictional rules, which apply to the transfer of this NMI.	Type: Element Occurs: 1 Default: "WA"	WAMasterData/JurisdictionCode	xsd:string maxLength "3" default to WA		
NMI Classification Code	Varchar2 (8)	R	A code that identifies the nature of the flow of electricity at a connection point relating to the volume of energy consumed.	Type: Element Occurs: 1 Default: None	WAMasterData/NMIClassification Code	xsd:string either <5.7KW or >5.7KW		



Field	Format	Use	Definition/Comments	Occurs	Element Path	Data Type
Transmission Node Identifier	Varchar2 (4)	R	The Transmissions Node identifier. The TNICode entry in the lookup table provides the substation name specified in CTC 4.1(c)	Type: Element Occurs: 1 Default: None	WAMasterData/ TransmissionNodeIdentifier	xsd:string e.g. WALB WAMT (Full list see document List of Codes)
Distribution Loss Factor Code	Varchar2 (4)	R	Distribution Loss Factor Code.	Type: Element Occurs: 1 Default: None	WAMasterData/ DistributionLossFactor	xsd:string e.g. WRT1 WRT2 (Full list see document List of Codes)
Parent Embedded Network Identifier	Varchar2 (10)	R	If the NMI is the child of an embedded network, this field is set to the NMI of the master meter's connection point.	Type: Element Occurs: 0-1 Default: None	WAMasterData/ ParentEmbedded NetworkIdentifier	xsd:string
Child Embedded Network Identifier	Varchar2 (10)	R	If the NMI is the master of an embedded network, in WA this field is set to "Master-Sub". Otherwise, it is empty.	Type: Element Occurs: 0-1 Default: None	WAMasterData/ ChildEmbedded NetworkIdentifier	xsd:string
Site Address	ADDRESS	0	An aseXML compliant structured address is required. As defined in the Australian Standard AS4590-1999.	Type: ComplexType Occurs: 1 Default: None	WAMasterData/Address	Complex Type



Field	Format	Use	Definition/Comments	Occurs	Element Path	Data Type
Flat or Unit Type	Varchar2 (4)	0	Specification of the type of flat or unit, which is a separately identifiable portion within a building/complex. This value must correspond to a valid Flat Type Code in the Flat Type Codes reference table	Type: Element Occurs: 1 Default: None	WAMasterData/Address/ StructuredAddress/FlatorUnit/ FlatorUnitType	Enumerated List xsd:string APT CTGE The list is part of the schema (for full list see document List of Codes)
Flat or Unit Number	Varchar2 (7)	0	Specification of the number of the flat or unit, which is a separately identifiable portion within a building/complex.	Type: Element Occurs: 1 Default: None	WAMasterData/Address/ StructuredAddress/FlatorUnit/ FlatorUnitNumber	xsd:string
Floor or Level Type	Varchar2 (2)	0	Floor Type is used to identify the floor or level of a multistorey building/complex. This value must correspond to a valid Floor Type Code in the Floor Type Codes reference table at the end of this document.	Type: Element Occurs: 1 Default: None	WAMasterData/Address/ StructuredAddress/FloororLevel/ FloororLevelType	Enumerated List xsd:string B FL The list is part of the schema (for full list see document List of Codes)



Field	Format	Use	Definition/Comments	Occurs	Element Path	Data Type
Floor or Level Number	Varchar2 (5)	0	Floor Number is used to identify the floor or level of a multi- storey building/complex.	Type: Element Occurs: 1 Default: None	WAMasterData/Address/ StructuredAddress/FloororLevel/ FloororLevelNumber	xsd:string
Building or Property Name	Varchar2 (30)	0	A free text description of the full name used to identify the physical building or property as part of its location.	Type: Element Occurs: 0-2 Default: None	WAMasterData/Address/ StructuredAddress/ BuildingorPropertyName	xsd:string
Location Number	Varchar2 (6)	0	Location reference – a WA- specific identifier. NB the word "LOC" is not required in the field value.	Type: Element Occurs: 1 Default: None	WAMasterData/Address/ StructuredAddress/ LocationNumber	xsd:string
House Number	Number (5)	0	The numeric reference of a house or property. Specifically the house number.	Type: Element Occurs: 1 Default: None	WAMasterData/Address/ StructuredAddress/House/ HouseNumber	xsd: nonNegativeInteger Max: 99999
House Number Suffix	Varchar2 (1)	0	The numeric reference of a house or property. Specifically the single character identifying the house number suffix.	Type: Element Occurs: 1 Default: None	WAMasterData/Address/ StructuredAddress/House/ HouseNumberSuffix	xsd:string
Lot Number	Varchar2 (6)	0	The lot reference number allocated to an address prior to street numbering. The word 'LOT' is not required.	Type: Element Occurs: 1 Default: None	WAMasterData/Address/ StructuredAddress/Lot/LotNumbe r	xsd:string



Field	Format	Use	Definition/Comments	Occurs	Element Path	Data Type
Street Name	Varchar2 (30)	0	Records the thoroughfare name.	Type: Element Occurs: 1 Default: None	WAMasterData/Address/ StructuredAddress/Street/ StreetName	xsd:string
Street Type	Varchar2 (4)	0	Records the street type abbreviation. This value must correspond to a valid Street Type Code in the Street Type Codes reference table	Type: Element Occurs: 1 Default: None	WAMasterData/Address/ StructuredAddress/Street/ StreetType	Enumerated List xsd:string ACCS ALLY The list is part of the schema (for full list see document List of Codes)
Street Suffix	Varchar2 (2)	0	Records street suffixes. This value must correspond to a valid Street Suffix Code in the Street Suffix Codes reference table	Type: Element Occurs: 1 Default: None	WAMasterData/Address/ StructuredAddress/Street/ StreetSuffix	Enumerated List xsd:string CN E The list is part of the schema (for full list see document List of Codes)



Field	Format	Use	Definition/Comments	Occurs	Element Path	Data Type
Suburb	Varchar2 (46)	R	The full name of the general locality containing the specific address.	Type: Element Occurs: 1 Default: None	WAMasterData/Address/ SuburbOrPlaceOrLocality	xsd:string
State	Varchar2 (3)	R	Defined State or Territory abbreviation. Values permitted include: ACT, NSW, QLD, SA, VIC, WA, TAS, NT, AAT (Aus Antarctic Territory)	Type: Element Occurs: 1 Default: "WA"	WAMasterData/Address/ StateorTerritory	Enumerated List;xsd:string;AAT;AC T;;The list is part of the schema; (for full list see document List of Codes)
Post Code	Varchar2 (4)	R	The descriptor for a postal delivery area, aligned with locality, suburb or place.	Type: Element Occurs: 1 Default: None	WAMasterData/Address/ PostCode	xsd:string
Delivery Point Identifier	Number (8)	0	Delivery point identifier - the numeric descriptor for a postal delivery point, which is equal to a physical address.	Type: Element Occurs: 1 Default: None	WAMasterData/Address/ DPID	xsd:nonNegativeInteg er Min: 10000000 Max: 99999999
Status	Char (1)	R	Code used to indicate the status of the NMI.	Type: Element Occurs: 1 Default: None	WAMasterData/Status	xsd:string Can be: A (active) X (extinct) (for full list see document List of Codes)



Field	Format	Use	Definition/Comments	Occurs	Element Path	Data Type
Distance From Substation	Number(7,3)	0	Distance from the substation, in kilometers.	Type: Element Occurs: 1 Default: None	WAMasterData/ DistanceFromSubstation	xsd:decimal format mask: 9999.999
Voltage	Varchar2(10)	0	Indicator of whether the connection point is high voltage or low voltage.	Type: Element Occurs: 1 Default: None	WAMasterData/Voltage	Enumerated List xsd:string EHV HV LV (for full list see document List of Codes)
Customer Type	Varchar2(20)	0	The type of property, where available.	Type: Element Occurs: 1 Default: None	WAMasterData/PropertyType	Enumerated List xsd:string Commercial Domestic, Industrial, Farm, Un-metered Supply (this is the full list see document List of Codes)



Field	Format	Use	Definition/Comments	Occurs	Element Path	Data Type		
Pole Number	Varchar(40)	0	Pole number of nearest pole to the property	Type: Element Occurs: 1 Default: None	WAMasterData/PoleNumber	xsd:string max length: 40		
Role Assignments	Role Assignments							
Party	Varchar2 (50)	0	The participant identification code	Type: Element Occurs: 0-1 Default: None	RoleAssignments/Party	xsd:string		
Role	Varchar2 (4)	R	The type of role. For a list of the associated codes refer to section 2.44 in the List of Codes document.	Type: Element Occurs: 1-Many Default: None	RoleAssignments/Role	xsd:string {see List of Codes }		
Datastreams	•							
Suffix	Varchar2 (2)	М	Metering data stream identifier (for MDM). Refer to WA NMI Allocation Rules for more information on structure.	Type: Element Occurs: 1 Default: None	DataStreams/Suffix	xsd:string length: 2		



Field	Format	Use	Definition/Comments	Occurs	Element Path	Data Type
Profile Name	Varchar2 (10)	R	The profile name is a code that would identify the name of the algorithmically derived shape that is used to allocate a data stream's consumption to trading intervals. Profiles are not currently used in WA.	Type: Element Occurs: 1 Default: None	DataStreams/ProfileName	xsd:string
Average Daily Load (AveragedDailyLoad)	Number (10)	R	The electrical energy delivered through a connection point or metering point over an extended period normalised to a "per day" basis (kWh).	Type: Element Occurs: 1 Default: None	DataStreams/AveragedDailyLoad	Xsd:integer
Data Stream Type	Varchar2 (12)	R	Indicates the type of data that the data stream will report includes interval and basic. Profile data meters are: 1.) For registering sample meters used for the calculation of profile shapes where the NMI & Datastream are not used for settlement. 2.) For providing external profile shapes into MDM (external PPS).	Type: Element Occurs: 1 Default: None	DataStreams/DataStreamType	{Enumerated List} xsd:string 'Interval' 'Non-Interval' 'Consumption' 'Profile' {see List of Codes }
Status	Char (1)	R	Code used to indicate the status of the suffix. This value must correspond to a valid StreamStatusCode in the Stream	Type: Element Occurs: 1 Default: None	DataStream/Status	xsd:string



Field	Format	Use	Definition/Comments	Occurs	Element Path	Data Type		
Meter Register								
Meter Serial (SerialNumber*)	Varchar2 (12)	М	The meter serial number uniquely identifies a meter for a given NMI. Maximum 12 Characters (alpha numeric). Unique for NMI. Except for UMCP and logical, MeterSerial should be displayed on physical device. (Also known as property number)	Type: Element Occurs: 1 Default: None	MeterRegister/WAMeter/SerialNumber	xsd:string		
	Date (YYYY- MM-DD)	0	Indicates the scheduled next read date for the meter. Optional if Remotely read otherwise is Required.	Type: Element Occurs: 1 Default: None	MeterRegister/WAMeter/ NextSchReadDate	xsd:date		
Meter Location	Varchar2 (50)	0	Free text descriptive material, which identifies the relationship between the electrical location of the metering point and the connection point.	Type: Element Occurs: 1 Default: None	MeterRegister/WAMeter/ Location	xsd:string		
Meter Hazard (Hazard)	Varchar2 (12)	0	Code to identify hazards, associated with reading the meter. (E.g. BD)	Type: Element Occurs: 1 Default: None	MeterRegister/WAMeter/ Hazard	xsd:string (for list of applicable codes please see the Codes document)		



Field	Format	Use	Definition/Comments	Occurs	Element Path	Data Type
Meter Install Code (InstallationTypeCode)	Varchar2 (8)	R	The Metering Installation type indicates whether or not the installation has to be manually read, which has consequences for the transfer transaction process flow because if a meter has to be manually read, then the metering provider must supply the actual meter change date before the transaction is completed. If a manual read is not required the transaction can be completed as of the requested transfer date.  The Meter Install Code can also be used to identify an AMI meter and its functionality.	Type: Element Occurs: 1 Default: None	MeterRegister/WAMeter/ InstallationTypeCode	xsd:string BASIC COMMS1 (for full list see document List of Codes)
Meter Route	Varchar2 (12)	0	The route identifier the meter is currently being read in	Type: Element Occurs: 1 Default: None	MeterRegister/WAMeter/ MeterRoute	xsd:string



Field	Format	Use	Definition/Comments	Occurs	Element Path	Data Type
Meter Use (Use)	Varchar2 (10)	R	A code identifying how the meter is used. Must correspond to a valid value in the Meter Use codes table.	Type: Element Occurs: 1 Default: None	MeterRegister/WAMeter/Use	xsd:string REVENUE CHECK (for full list see document List of Codes)
Meter Point (Point)	Varchar (2)	R	Metering point identifies the meter using the meter number protocol described in the NMI Procedures. 01 = first meter, 0Z = 34th meter. This will allow an audit trail when one meter is removed and a new meter is given the same MeterPoint value.	Type: Element Occurs: 1 Default: None	MeterRegister/WAMeter/ Point	xsd:string
Meter Manufacturer (Manufacturer)	Varchar2 (15)	0	Free text field to identify the manufacturer of the installed meter.	Type: Element Occurs: 1 Default: None	MeterRegister/WAMeter/ Manufacturer	xsd:string
Meter Model (Model)	Varchar2 (12)	0	Free text field to identify the meter manufacturer's designation for the meter model.	Type: Element Occurs: 1 Default: None	MeterRegister/WAMeter/ Model	xsd:string



Field	Format	Use	Definition/Comments	Occurs	Element Path	Data Type
Transformer Location	Varchar2 (30)	0	A free text field to identify the existence of instrument transformers and their location relative to the market connection point.	Type: Element Occurs: 1 Default: None	MeterRegister/WAMeter/ TransformerLocation	xsd:string
Transformer Type	Varchar2 (20)	0	An explanation of the type of transformation used;	Type: Element Occurs: 1 Default: None	MeterRegister/WAMeter/ TransformerType	xsd:string
Transformer Ratio	Varchar2 (20)	0	A statement of the available and applied transformer ratios;	Type: Element Occurs: 1 Default: None	MeterRegister/WAMeter/ TransformerRatio	xsd:string
Meter Constant (Constant)	Varchar2 (12)	0	The meter KE (intrinsic constraint of meter in Wh/pulse)	Type: Element Occurs: 1 Default: None	MeterRegister/WAMeter/ TransformerConstant	xsd:string
Last Test Date	Date	0	The date on which the installation was last tested or inspected by the network operator.	Type: Element Occurs: 1 Default: None	MeterRegister/WAMeter/ LastTestDate	xsd:date
Test Result Accuracy	Number (8,5)	0	The mathematical representation of the accuracy of the last meter test.	Type: Element Occurs: 1 Default: None	MeterRegister/WAMeter/ TestResultAccuracy	xsd:decimal



Field	Format	Use	Definition/Comments	Occurs	Element Path	Data Type
Test Result Notes	Varchar2 (50)	0	A statement of compliance indicating the standard of the test regime applied at the time of the last test.	Type: Element Occurs: 1 Default: None	MeterRegister/WAMeter/ TestResultNotes	xsd:string
Test Performed By	Varchar2 (20)	0	Identifying the technician responsible for conducting the last test. The technician is not to be named, but is to be identified by a number unique to the network operator.	Type: Element Occurs: 1 Default: None	MeterRegister/WAMeter/ TestPerformedBy	xsd:string
Measurement Type	Varchar2 (4)	O/R	Code based on the NMI Suffix codes, indicating the type of measurements available from the meter. Mandatory for interval meters.	Type: Element Occurs: 1 Default: None	MeterRegister/WAMeter/ MeasurementType	xsd:string



Field	Format	Use	Definition/Comments	Occurs	Element Path	Data Type
Meter Read Type (ReadTypeCode)	Varchar (4)	R	Code to denote the method and frequency of meter reading. First Character = Read method Remote (R), Manual (M) or Customer (C); Second Character = Mode T = Telephone W = wireless P = Powerline I = Infra-red V = Visual Third Character = Frequency of scheduled reads; 1 = Twelve times per year 2 = Six times per year 3 = Four times per year 4 = two times per year 5 = once per year D = Daily W = Weekly Fourth Character (optional) = Customer Read Method. (C) Card Read. (B) Bulk Read. (I) Internet. (P) Phone. (A) Provide Access. (R) Dial Card. (D) Digital Card.	Type: Element Occurs: 1 Default: None	MeterRegister/WAMeter/ ReadTypeCode	xsd:string
Remote Phone Number	Varchar2 (12)	0	The PSTN number to contact a remote site for metering data. Includes STD prefix and no spaces, 10 Char for landline, 9 char for mobile.	Type: Element Occurs: 1 Default: None	MeterRegister/WAMeter/ RemotePhoneNumber	xsd:string



Field	Format	Use	Definition/Comments	Occurs	Element Path	Data Type
Baud Rate (CommunicationsEquip ment Type)	Varchar2 (4)	0	Used to store baud rate for installed communication equipment in a code calculated by dividing by 100 the baud rate of the installed communication equipment.	Type: Element Occurs: 1 Default: None	MeterRegister/WAMeter/ CommunicationsEquipmentType	xsd:string
Communications Protocol	Varchar2 (50)	0	Used to provide details of access through switch units (if installed). Data to include Switch Unit, Dial Pkg, Port, userid, password.	Type: Element Occurs: 1 Default: None	MeterRegister/WAMeter/ CommunicationsProtocol	xsd:string
Data Conversion	Varchar2 (50)	0	Actual Pulse Multipliers	Type: Element Occurs: 1 Default: None	MeterRegister/WAMeter/ DataConversion	xsd:string
Data Validations	Varchar2 (50)	0	Free text description of data validations.	Type: Element Occurs: 1 Default: None	MeterRegister/WAMeter/ DataValidation	xsd:string
Meter Status (Status)	Char (1)	R	A code to denote the status of the meter	Type: Element Occurs: 1 Default: None	MeterRegister/WAMeter/ Status	Enumerated List xsd:string 'R' 'C' 'D' {this is the full list }



Field	Format	Use	Definition/Comments	Occurs	Element Path	Data Type
Program	Varchar2 (30)	0	Free text field providing a description of the program used to initialise the installed meter.	Type: Element Occurs: 1 Default: None	MeterRegister/WAMeter/ Program	xsd:string
Additional Site Information	Varchar2 (100)	0	In WA, this field will only contain free text describing site access details for meter reading and energisation changes. This is slightly different to the NEM usage.	Type: Element Occurs: 1 Default: None	MeterRegister/WAMeter/ AdditionalSiteInformation	xsd:string
Estimation Instructions	Varchar2 (50)	0	Estimation instructions.	Type: Element Occurs: 1 Default: None	MeterRegister/WAMeter/ Estimation Instructions	xsd:string
User Access Rights	Varchar2 (50)	0	Details of any end use customer access to the metering installation, examples include pulse outputs, interfaces to customer load management system, or customer directly accessing data in meter through special equipment.	Type: Element Occurs: 1 Default: None	MeterRegister/WAMeter/ UserAccessRights	xsd:string
Password	Varchar2 (20)	0	Read & Time Passwords separated by a space	Type: Element Occurs: 1 Default: None	MeterRegister/WAMeter/ Password	xsd:string



Field	Format	Use	Definition/Comments	Occurs	Element Path	Data Type
Test Calibration Program	Varchar2 (50)	0	Test & Calibration program. Free test - to be developed	Type: Element Occurs: 1 Default: None	MeterRegister/WAMeter/ TestCalibrationProgram	xsd:string
Key Code	Varchar2 (8)	0	Key required to access the meter	Type: Element Occurs: 1 Default: None	MeterRegister/WAMeter/ KeyCode	xsd:string
Reading Instructions	Varchar2 (100)	0	This is a WA-specific free-text field containing special access instructions for a person reading the meter. There is not a distinct field for this information in the NEM.	Type: Element Occurs: 1 Default: None	MeterRegister/WAMeter/ ReadingInstruction	xsd:string
Customer Funded Meter	Varchar(3)	R	It indicates whether the customer has funded the purchase of the meter as per the Customer Transfer Code.	Type: Element Occurs: 1 Default: None	MeterRegister/WAMeter/ CustomerFundedMeter	YesNo Allowed values: Yes No
Register						

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Field	Format	Use	Definition/Comments	Occurs	Element Path	Data Type
Meter Requirement For Transfer	Varchar(50)	М	This field indicates whether new meter (or communications) required before transfer.	Type: Element Occurs: 1 Default: None	MeterRegister/WAMeter/ MeterRequirementForTransfer	xsd:string no new meter or comms required new meter required (for full list see document List of Codes)
Register Id	Varchar2 (10)	R	The RegisterId is used to identify a data source that is obtained from the meter. A single meter may provide multiple data sources.	Type: Element Occurs: 0-1 Default: None	MeterRegister/WAMeter/Register Configuration/Register/ RegisterID	xsd:string
Network Tariff Code	Varchar2(10)	R	The Network Tariff code is a free text field required by the CTC rules. The text must match the network tariff codes supplied and published by the network operator. Validated against WA Network Tariff Codes table. This is at NMI level in WA, not at register level as in the NEM	Type: Element Occurs: 1 Default: None	MeterRegister/WAMeter/Register Configuration/Register/ NetworkTariffCode	xsd:string AER AEB (for full list see document List of Codes)



Field	Format	Use	Definition/Comments	Occurs	Element Path	Data Type
Unit Of Measure <sup>4</sup>	Varchar2(5)	R	Code to identify the unit of measure for data held in this register.	Type: Element Occurs: 1 Default: None	MeterRegister/WAMeter/Register Configuration/Register/ UnitOfMeasure	xsd:string KWH KVA (for full list see document List of Codes)
Time Of Day	Varchar2(10)	R	Industry developed Codes to identify the time validity of register contents.	Type: Element Occurs: 1 Default: None	MeterRegister/WAMeter/Register Configuration/Register/ TimeOfDay	xsd:string
Multiplier	Number (13,5)	R	Multiplier required to take a register value and turn it into a value representing billable energy. The multiplier is determined by an algorithm used by the Network Operator.	Type: Element Occurs: 1 Default: None	MeterRegister/WAMeter/Register Configuration/Register/ Multiplier	xsd:decimal



<sup>&</sup>lt;sup>4</sup> Values for this field should be derived as follows:

If this is a basic meter (via interrogation of the meter model), then set the value to "New meter required"

If the NMIClass is greater than a given size (includes NMI Classes 5MW, 1MW, 230kW, 34kW, and 18.3kW), then comms are also required before transfer (could result in either "comms required" or "new meters and comms required"

If an interval meter is installed (via interrogation of the meter model), but it is being read as a BASIC meter (via installcode) then set the value to "Program change required"

If an interval meter and comms are already installed, set the value to "No new meter or comms required"

If an Access Arrangement is defined for the meter (any access arrangement), then comms are also required.

NB: Given comms are also required when access is restricted or the site is in predefined areas (geographic areas, generally described as country areas), comms may also be defined as required when a access agreement is requested by the Retailer. We will need to define these rules with the Retailers.

Field	Format	Use	Definition/Comments	Occurs	Element Path	Data Type
Dial Format	Number (4,2)	R	Describes the register display format. First number is the number of digits to the left of the decimal place, and the second number is the number of digits to the right of the decimal place.	Type: Element Occurs: 1 Default: None	MeterRegister/WAMeter/Register Configuration/Register/ DialFormat	xsd.decimal
Register Suffix (Suffix)	Varchar2(2)	0	Must be a valid suffix for this NMI and is active for this date range. Suffix defined will be one of those used in the MDFF file at individual meter level.	Type: Element Occurs: 1 Default: None	MeterRegister/WAMeter/Register Configuration/Register/ Suffix	xsd:string
Controlled Load	Varchar2(100)	R	Would indicate whether the energy recorded by this register is created under a controlled load regime There are no controlled loads in WA.	Type: Element Occurs: 1 Default: None	MeterRegister/WAMeter/Register Configuration/Register/ ControlledLoad	xsd:string
Act Cum Ind (ConsumptionType)	Char(1)	R	Actual/Subtractive Indicator. Actual implies volume of energy actually metered between two dates. Cumulative indicates a meter reading for a specific date. A second meter reading is required to determine the consumption between those two read dates.	Type: Element Occurs: 1 Default: None	MeterRegister/WAMeter/Register Configuration/Register/ ConsumptionType	Enumerated list: xsd:string Allowable values: Actual, Cumulative



Field	Format	Use	Definition/Comments	Occurs	Element Path	Data Type
Register Status (Status)	Char(1)	R	Code to indicate the status of the register, if register is active.	Type: Element Occurs: 1 Default: None	MeterRegister/WAMeter/Register Configuration/Register/ Status	Enumerated list. xsd:string 'C' 'R'
Direction Indicator	Char(6)	R	Indicates the flow of energy through the meter register	Type: Element Occurs: 1 Default: None	MeterRegister/WAMeter/Register Configuration/Register/ DirectionIndicator	Enumerated list: xsd:string Allowable values: Import, Export



Table 5: Standing Data transaction elements for non-current retailers

Field	Format	Use	Definition/Comments	Occurs	Element Path	Data Type		
Master Data								
NMI	Char (10)	М	Unique National Metering Identifier.	Type: Element Occurs: 1 Default: None	NMI	xsd:string		
NMI Checksum ()	Numeric (1)	М	The Checksum of the NMI calculated using standard NEM algorithm.	Type: Attribute Occurs: 0-1 Default: None	NMI/@Checksum	xsd:integer		
Jurisdiction Code	Varchar2 (3)	R	Jurisdiction code to which the NMI belongs. This code defines the jurisdictional rules, which apply to the transfer of this NMI.	Type: Element Occurs: 1 Default: "WA"	WAMasterData/Jurisdiction Code	xsd:string maxLength "3" default to WA		
NMI Classification Code	Varchar2 (8)	R	A code that identifies the nature of the flow of electricity at a connection point relating to the volume of energy consumed.	Type: Element Occurs: 1 Default: None	WAMasterData/NMIClassifi cationCode	xsd:string either <5.7KW or >5.7KW		



Field	Format	Use	Definition/Comments	Occurs	Element Path	Data Type
Transmission Node Identifier	Varchar2 (4)	R	The Transmissions Node identifier. The TNICode entry in the lookup table provides the substation name specified in CTC 4.1(c)	Type: Element Occurs: 1 Default: None	WAMasterData/ TransmissionNodeIdentifier	xsd:string e.g. WALB WAMT (Full list see document <i>List of</i> Codes)
Distribution Loss Factor Code	Varchar2 (4)	R	Distribution Loss Factor Code.	Type: Element Occurs: 1 Default: None	WAMasterData/ DistributionLossFactor	xsd:string e.g. WRT1 WRT2 (Full list see document List of Codes)
Parent Embedded Network Identifier	Varchar2 (10)	R	If the NMI is the child of an embedded network, this field is set to the NMI of the master meter's connection point.	Type: Element Occurs: 0-1 Default: None	WAMasterData/ ParentEmbedded NetworkIdentifier	xsd:string
Child Embedded Network Identifier	Varchar2 (10)	R	If the NMI is the master of an embedded network, in WA this field is set to "Master-Sub". Otherwise, it is empty.	Type: Element Occurs: 0-1 Default: None	WAMasterData/ ChildEmbedded NetworkIdentifier	xsd:string



Field	Format	Use	Definition/Comments	Occurs	Element Path	Data Type
Site Address	ADDRESS	0	An aseXML compliant structured address is required. As defined in the Australian Standard AS4590-1999.	Type: ComplexType Occurs: 1 Default: None	WAMasterData/Address	Complex Type
Flat or Unit Type	Varchar2 (4)	0	Specification of the type of flat or unit, which is a separately identifiable portion within a building/complex. This value must correspond to a valid Flat Type Code in the Flat Type Codes reference table	Type: Element Occurs: 1 Default: None	WAMasterData/Address/ StructuredAddress/FlatorU nit/ FlatorUnitType	Enumerated List xsd:string APT CTGE The list is part of the schema (for full list see document List of Codes)
Flat or Unit Number	Varchar2 (7)	0	Specification of the number of the flat or unit, which is a separately identifiable portion within a building/complex.	Type: Element Occurs: 1 Default: None	WAMasterData/Address/ StructuredAddress/FlatorU nit/ FlatorUnitNumber	xsd:string



Field	Format	Use	Definition/Comments	Occurs	Element Path	Data Type
Floor or Level Type	Varchar2 (2)	0	Floor Type is used to identify the floor or level of a multistorey building/complex. This value must correspond to a valid Floor Type Code in the Floor Type Codes reference table at the end of this document.	Type: Element Occurs: 1 Default: None	WAMasterData/Address/ StructuredAddress/FloororL evel/ FloororLevelType	Enumerated List xsd:string B FL The list is part of the schema (for full list see document List of Codes)
Floor or Level Number	Varchar2 (5)	0	Floor Number is used to identify the floor or level of a multistorey building/complex.	Type: Element Occurs: 1 Default: None	WAMasterData/Address/ StructuredAddress/FloororL evel/ FloororLevelNumber	xsd:string
Building or Property Name	Varchar2 (30)	0	A free text description of the full name used to identify the physical building or property as part of its location.	Type: Element Occurs: 0-2 Default: None	WAMasterData/Address/ StructuredAddress/ BuildingorPropertyName	xsd:string
Location Number	Varchar2 (6)	0	Location reference – a WA- specific identifier. NB the word "LOC" is not required in the field value.	Type: Element Occurs: 1 Default: None	WAMasterData/Address/ StructuredAddress/ LocationNumber	xsd:string



Field	Format	Use	Definition/Comments	Occurs	Element Path	Data Type
House Number	Number (5)	0	The numeric reference of a house or property. Specifically the house number.	Type: Element Occurs: 1 Default: None	WAMasterData/Address/ StructuredAddress/House/ HouseNumber	xsd: nonNegativeInteg er Max: 99999
House Number Suffix	Varchar2 (1)	0	The numeric reference of a house or property. Specifically the single character identifying the house number suffix.	Type: Element Occurs: 1 Default: None	WAMasterData/Address/ StructuredAddress/House/ HouseNumberSuffix	xsd:string
Lot Number	Varchar2 (6)	0	The lot reference number allocated to an address prior to street numbering. The word 'LOT' is not required.	Type: Element Occurs: 1 Default: None	WAMasterData/Address/ StructuredAddress/Lot/LotN umber	xsd:string
Street Name	Varchar2 (30)	0	Records the thoroughfare name.	Type: Element Occurs: 1 Default: None	WAMasterData/Address/ StructuredAddress/Street/ StreetName	xsd:string



Field	Format	Use	Definition/Comments	Occurs	Element Path	Data Type
Street Type	Varchar2 (4)	0	Records the street type abbreviation. This value must correspond to a valid Street Type Code in the Street Type Codes reference table	Type: Element Occurs: 1 Default: None	WAMasterData/Address/ StructuredAddress/Street/ StreetType	Enumerated List xsd:string ACCS ALLY The list is part of the schema (for full list see document List of Codes)
Street Suffix	Varchar2 (2)	0	Records street suffixes. This value must correspond to a valid Street Suffix Code in the Street Suffix Codes reference table	Type: Element Occurs: 1 Default: None	WAMasterData/Address/ StructuredAddress/Street/ StreetSuffix	Enumerated List xsd:string CN E The list is part of the schema (for full list see document List of Codes)
Suburb	Varchar2 (46)	R	The full name of the general locality containing the specific address.	Type: Element Occurs: 1 Default: None	WAMasterData/Address/ SuburbOrPlaceOrLocality	xsd:string



Field	Format	Use	Definition/Comments	Occurs	Element Path	Data Type
State	Varchar2 (3)	R	Defined State or Territory abbreviation. Values permitted include: ACT, NSW, QLD, SA, VIC, WA, TAS, NT, AAT (Aus Antarctic Territory)	Type: Element Occurs: 1 Default: "WA"	WAMasterData/Address/ StateorTerritory	Enumerated List;xsd:string;AA T;ACT;;The list is part of the schema; (for full list see document List of Codes)
Post Code	Varchar2 (4)	R	The descriptor for a postal delivery area, aligned with locality, suburb or place.	Type: Element Occurs: 1 Default: None	WAMasterData/Address/ PostCode	xsd:string
Delivery Point Identifier	Number (8)	0	Delivery point identifier - the numeric descriptor for a postal delivery point, which is equal to a physical address.	Type: Element Occurs: 1 Default: None	WAMasterData/Address/ DPID	xsd:nonNegativel nteger Min: 10000000 Max: 99999999
Status	Char (1)	R	Code used to indicate the status of the NMI.	Type: Element Occurs: 1 Default: None	WAMasterData/Status	xsd:string Can be: A (active) X (extinct) (for full list see document List of Codes)



Field	Format	Use	Definition/Comments	Occurs	Element Path	Data Type		
Distance From Substation	Number(7,3)	0	Distance from the substation, in kilometers.	Type: Element Occurs: 1 Default: None	WAMasterData/ DistanceFromSubstation	xsd:decimal format mask: 9999.999		
Voltage	Varchar2(10)	0	Indicator of whether the connection point is high voltage or low voltage.	Type: Element Occurs: 1 Default: None	WAMasterData/Voltage	Enumerated List xsd:string EHV HV LV (for full list see document List of Codes)		
Role Assignments								
Datastreams								

Meter Register



Field	Format	Use	Definition/Comments	Occurs	Element Path	Data Type
Meter Serial (SerialNumber*)	uniquely identi given NMI. M. Characters (al Unique for NM UMCP and log should be disp device. (Also k		The meter serial number uniquely identifies a meter for a given NMI. Maximum 12 Characters (alpha numeric). Unique for NMI. Except for UMCP and logical, MeterSerial should be displayed on physical device. (Also known as property number)	Type: Element Occurs: 1 Default: None	MeterRegister/WAMeter/Se rialNumber	xsd:string
Next Scheduled Read Date	Occurs: 1		MeterRegister/WAMeter/ NextSchReadDate	xsd:date		
Meter Install Code (InstallationTypeCode)	The Metering Installation type indicates whether or not the installation has to be manually read, which has consequences for the transfer transaction process flow because if a meter has to be manually read, then tallationTypeCode)  Varchar2 (8)  R		Type: Element Occurs: 1 Default: None	MeterRegister/WAMeter/ InstallationTypeCode	xsd:string BASIC COMMS1 (for full list see document List of Codes)	



Field	Format	Use	Definition/Comments	Occurs	Element Path	Data Type
Meter Model (Model)	Varchar2 (12)	0	Free text field to identify the meter manufacturer's designation for the meter model.	Type: Element Occurs: 1 Default: None	MeterRegister/WAMeter/ Model	xsd:string
Meter Read Type (ReadTypeCode)	Varchar (4)	R	Code to denote the method and frequency of meter reading.  First Character = Read method Remote (R) ,Manual (M) or Customer (C);  Second Character = Mode T = Telephone W = wireless P = Powerline I = Infra-red V = Visual  Third Character = Frequency of scheduled reads;  1 = Twelve times per year 2 = Six times per year 3 = Four times per year 4 = two times per year 5 = once per year D = Daily W = Weekly  Fourth Character (optional) = Customer Read Method.  (C) Card Read. (B) Bulk Read. (I) Internet. (P) Phone. (A)  Provide Access. (R) Dial Card. (D) Digital Card.	Type: Element Occurs: 1 Default: None	MeterRegister/WAMeter/ ReadTypeCode	xsd:string



Field	Format	Use	Definition/Comments	Occurs	Element Path	Data Type
Meter Status (Status)	Char (1)	R	A code to denote the status of the meter	Type: Element Occurs: 1 Default: None	MeterRegister/WAMeter/ Status	Enumerated List xsd:string 'R' 'C' 'D' {this is the full list }
Customer Funded Meter	Varchar(3)	R	It indicates whether the customer has funded the purchase of the meter as per the Customer Transfer Code.	Type: Element Occurs: 1 Default: None	MeterRegister/WAMeter/ CustomerFundedMeter	YesNo Allowed values: Yes No
Register						
Meter Requirement For Transfer	Varchar(50)	М	This field indicates whether new meter (or communications) required before transfer.	Type: Element Occurs: 1 Default: None	MeterRegister/WAMeter/ MeterRequirementForTrans fer	xsd:string no new meter or comms required new meter required (for full list see document List of Codes)



Field	Format	Use	Definition/Comments	Occurs	Element Path	Data Type
Network Tariff Code	Varchar2(10)	R	The Network Tariff code is a free text field required by the CTC rules. The text must match the network tariff codes supplied and published by the network operator. Validated against WA Network Tariff Codes table. This is at NMI level in WA, not at register level as in the NEM	Type: Element Occurs: 1 Default: None	MeterRegister/WAMeter/Re gisterConfiguration/Registe r/ NetworkTariffCode	xsd:string AER AEB (for full list see document List of Codes)



### APPENDIX D CUSTOMER TRANSFER TRANSACTION ELEMENTS

This section shows the data elements seen in the customer transfer transactions.

## **Customer Transfer Request**

Table 6: Customer Transfer Request transaction elements

Field	Format	Use	Definition/Comments	Occurs	Element Path	Data Type
Change Reason Code	Char(4)	М	The Reason for the Transfer (1000 – customer transfer req; 1025 – reverse erroneous transfer)	Type: Element Occurs: 1 Use: Mandatory Default: None	ChangeReasonCode	Enumerated List xsd:string maxLength "4" 1000 1025 (for full list see document List of Codes)
Nominated Transfer Date	Date	М	The nominated transfer date	Type: Element Occurs: 1 Use: Mandatory Default: None	ProposedDate	xsd:date

Customer Contact Name and Phone number are structured as follows:

Field	Format	Use	Definition/Comments	Occurs	Element Path	Data Type
Person Name Type <sup>1</sup>	Char(3)	О	Define the types of people's names as per Australian Standard AS4590	Type: Element Occurs: 1 Use: Optional Default: None	ContactDetail/PersonName/PersonNameT ype	Enumerated List xsd:string maxLength "3" LGL MDN (for full list see document List of Codes)
Name Title	Char(12)	0	Define a person's title as per Australian Standard AS4590	Type: Element Occurs: 1 Use: Optional Default: None	ContactDetail/PersonName/NameTitle	xsd:string
Given Name	Char(40)	0	Define a person's given name as per Australian Standard AS4590	Type: Element Occurs: 1 Use: Optional Default: None	ContactDetail/PersonName/GivenName	xsd:string
Family Name	Char(40)	0	Define a person's family name as per Australian Standard AS4590	Type: Element Occurs: 1 Use: Optional Default: None	ContactDetail/PersonName/FamilyName	xsd:string
Name Suffix	Char (12)	0	Define a person's name suffix as per Australian Standard AS4590	Type: Element Occurs: 1 Use: Optional Default: None	ContactDetail/PersonName/NameSuffix	xsd:string



Field	Format	Use	Definition/Comments	Occurs	Element Path	Data Type
Service Type	Char (11)	0	Define Australian telephone service types Detail - AS4590 indicates that service types need to be agreed between exchanging parties.	Type: Element Occurs: 1 Use: Optional Default: None	ContactDetail/PhoneNumber @ServiceType	Enumerated List xsd:string maxLength "12" Fixed Voice Fax (for full list see document List of Codes)
Prefix	Char (4)	0	Define Australian telephone number prefix as per Australian Standard AS4590	Type: Element Occurs: 1 Use: Optional Default: None	ContactDetail/PhoneNumber/Prefix	xsd:string
Number	Char (15)	0	Define Australian telephone number as per Australian Standard AS4590	Type: Element Occurs: 1 Use: Optional Default: None	ContactDetail/PhoneNumber/Number	xsd:string
Service Comment	Char (40)	0	Define Australian telephone service comment as per Australian Standard AS4590	Type: Element Occurs: 1 Use: Optional Default: None	ContactDetail/PhoneNumber/ ServiceComment	xsd:string
NMI	Char (10)	М	The National Metering Identifier (NMI)	Type: Element Occurs: 1 Use: Mandatory Default: None	NMI	Xsd:string
NMI Checksum	Numeric (1)	0	The Checksum of the NMI	Type: Attribute Occurs: 1 Use: Optional Default: None	NMI@Checksum	xsd:number



Field	Format	Use	Definition/Comments	Occurs	Element Path	Data Type
Preferred Network Tariff	Char (8)	M/O		Type: Element Occurs: 1 Use: Mandatory Default: None	PreferredNetworkTariff	Enumerated List xsd:string maxLength "8" AEB AER (for full list see document List of Codes)
Contract Maximum Demand	Numeric (10)	M/O	ha loft blank	Type: Element Occurs: 1 Use: Optional Default: None	ContractMaximumDemand	xsd:number
Contract Maximum Demand Unit of Measure	Char (3)	M/O	mandatory, otherwise it must be	Type: Element Occurs: 1 Use: Optional Default: None	ContractMaximumDemandUOM	xsd:string maxLength "3" KW KVA (for full list see document List of Codes)
Estimated Annual Consumptio n	Numeric (10)	M/O	ieverse an en oneous transier,	Type: Element Occurs: 1 Use: Optional Default: None	EstimatedAnnualConsumption	xsd:number
MeterDetails	s					
Meter Number	Char (12)	0	currently connected to the NMI	Type: Element Occurs: 1-many Use: Optional Default: None	MeterDetails/MeterSerialNumber	xsd:string



Field	Format	Use	Definition/Comments	Occurs	Element Path	Data Type
Meter Change Required	Char (3)	0	needs to be changed	Type: Element Occurs: 1-many Use: Optional Default: None	MeterDetails/MeterChangeRequired	xsd:string
Meter Install Type	Char (12)	0	Meter Installation Type provides the retailer information if the meter is (remotely) interval read or basic.	Type: Element Occurs: 1-many Use: Optional Default: None	MeterDetails/MeterInstallationType	xsd:string
AccessCont	tractDetails					
Contract Name	Char (50)	R/O	The name of the access contract of the retailer. Optional if the transfer is to reverse an erroneous transfer, otherwise it is required	Type: Element Occurs: 1 Use: Optional Default: None	AccessContractDetails/ContractName	xsd:string maxLength "50"
Contract Date	Date	R/O	The date of the access contract of the retailer.  Optional if the transfer is to reverse an erroneous transfer, otherwise it is required	Type: Element Occurs: 1 Use: Optional Default: None	AccessContractDetails/ContractDate	xsd:date

<sup>&</sup>lt;sup>1</sup> If Person Name Type is populated, Name Title, Given Name and Family Name are mandatory.

### **Customer Transfer Response**

The attributes of the  $\underline{WAElectricityCustomerTransferResponse}$  are as below:



 $<sup>^{\</sup>rm 2}$  If Service Type is populated, Prefix and Number are mandatory.

Table 7: Customer Transfer Response transaction elements

Field	Format	Use	Definition/Comments	Occurs	Element Path	Data Type
RequestID	Number (10)	М	network operator to the	Type: Element Occurs: 1 Use: Mandatory Default: None	RequestID	xsd:positiveInteger

#### **Customer Transfer Notification**

The attributes of the WAElectricityCustomerTransferNotification are as below:

Table 8: Customer Transfer Notification transaction elements

Field	Format	Use	Definition/Comments	Occurs	Element Path	Data Type
Role	Char (4)	М	The role of the participant	Type: Element Occurs: 1 Use: Mandatory Default: None	Role	xsd:string
Role Status	Char (1)	М	Identification whether the participant is the new or existing participant	Type: Element Occurs: 1 Use: Mandatory Default: None	RoleStatus	Enumerated List xsd:string N C (for full list see document Codes)



Field	Format	Use	Definition/Comments	Occurs	Element Path	Data Type
Participant		М	Identification of the market participant.	Type: ComplexType Occurs: 1 Use: Mandatory Default: <i>None</i>	ChangeRequest/Participant	xsd:string
RequestID	Number (10)	М	identification assign by network operator to the customer transfer request	Type: Element Occurs: 1 Use: Mandatory Default: None	ChangeRequest/RequestID	xsd:string
Change Status Code	Char (4)	М	The Status of the Transfer	Type: Element Occurs: 1 Use: Mandatory Default: None	ChangeRequest/ ChangeStatusCode	Enumerated List xsd:string maxLength "4" PEN CAN COM (for full list see document List of Codes)
Change Reason Code	Char (4)	М	The Reason for the Transfer (1000 – customer transfer req; 1025 – reverse erroneous transfer)	Type: Element Occurs: 1 Use: Mandatory Default: None	ChangeRequest/ ChangeData/ChangeReasonCode	Enumerated List xsd:string maxLength "4" 1000 1025 (for full list see document List of Codes)
Proposed Transfer Date <sup>1</sup>	Date	R	The nominated transfer date (This will only be populated by pending or cancel notification)	Type: Element Occurs: 1 Use: Optional Default: None	ChangeRequest/ ChangeData/ProposedDate	xsd:date



Field	Format	Use	Definition/Comments	Occurs	Element Path	Data Type
Actual Transfer Date <sup>1</sup>	Date		The actual transfer date (This will only be populated by completion notification)	Type: Element Occurs: 1 Use: Optional Default: None	ChangeRequest/ ChangeData/ActualChangeDate	xsd:date
NMI	Char (10)	М	The National Metering Identifier (NMI)	Type: Element Occurs: 1 Use: Mandatory Default: None	ChangeRequest/ ChangeData/NMI	xsd:string
NMI Checksum	Numeric (1)	0	The Checksum of the NMI	Type: Element Occurs: 1 Use: Mandatory Default: None	ChangeRequest/ ChangeData/ NMI@ Checksum	xsd:number

<sup>&</sup>lt;sup>1</sup> The proposed transfer date or the actual end date must be populated. The proposed transfer date is provided when the transfer notification is Pending or Cancelled, while the actual end date must be provided on the Completed notification.



# Customer Transfer Cancel Request

The attributes of the WAElectricityCustomerTransferCancelRequest are as below:

Table 9: Customer Transfer Cancel Request transaction elements

Field		Format	Use	Definition/Comments	Occurs	Element Path	Data Type
Reque	estID	Number (10)	М	Identification assigned by the network operator to the customer transfer		WAElectricityCustomerTransferResponse/ RequestID	xsd:positiveInteger

