



Build Pack Change Request 18

Notice of Proposed Changes

13 September 2019



It's ON

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2. Notice

13 September 2019

To Electricity Industry Code Participants,

In accordance with section 5.3(a) of the SWIS Communication Rules, the following advises of Western Power's intention to make changes to its Build Pack documentation and upgrade its market facing systems. This Notice will be referenced here within as Change Request #18.

NOTICE

Under Change Request #18, Western Power intends to implement changes to the Build Pack to contemplate advanced meters (AMI) and associated B2B transactions.

Western Power plans to publish a new version of the Build Pack on the 29 November 2019 and implement the changes on 29 June 2020.

Code Participants will have until the 31 October 2019 to provide comment on the Build pack amendments if no response is received by the 31 October 2019 under Clause 5.3 (c) of the SWIS Communication Rules, Western Power will consider the change to be agreed and will proceed to schedule the release according to CR#18 notice.

In accordance with section 5.4(a) of the SWIS Communication Rules, all Code Participants will have the ability to test the proposed change in Western Power's test environment from Monday 30 March 2020 through to Friday 1 May 2020.

Code Participants will need to indicate their intention to test by 17:00 WST Thursday 31 October 2019 and work with Western Power to ensure that the necessary communications and system connectivity for testing is in place by 16:00 WST Friday 23 March 2020.

All Code Participants are encouraged to review the detail of this notice and investigate how the changes will / may impact their systems.

The following schedule is proposed for Change Request #18:

	Responsibility	13th Sept 19	14th Oct 19	31st Oct 19	3rd Feb 20	4-Mar-20	30-Mar-20	13-Apr-20	1-May-19	1-Jun-20	22-Jun-20	29-Jun-20	6-Jul-20
Week Commencing													
Change Request First Notice to Market Participants	WP												
Reminder Notice to Market Participants	WP												
Review & Comments by Market Participants	MP												
Confirm Intention to Test	MP												
Western Power Test Schedule	WP												
Notice for Testing to Market Participants	WP												
Market Participant Testing	MP												
Reminder Notice to Market Participants Test Closure	WP												
Notice to Market Participants Test Closure	WP												
Market Participant Testing Acceptance	MP												
Implementation Notice	WP												
Implementation Notice Reminder	WP												
Implementation	WP												
Implementation Notice (Confirmation Go Live)	WP												
Post Implementation Acceptance	MP												

Western Power will be available to meet if requested to discuss questions that individual Code Participants may have.

Code Participants are invited to submit written comments on the proposed changes to metering.systems.support@westernpower.com.au by no later than 16:00 WST Thursday 31 October 2020.

3. Change Request #18

Change Request #18 proposes amendments to Build Pack documentation to contemplate advanced meters (AMI) and associated B2B transactions.

Western Power has proposed amendments to support:

- Access to interval data from AMI meters
- Processes for remote de-energisation, re-energisation and reconfiguration services
- New metering installation types
- Installation and removal of communications links

Proposed amendments are detailed in sections 4 of this Notice.

4. Proposed Amendments

4.1 Service Order Process

18.1	Section	2.1 Process Overview		Amendment Type	Change
	Description	Update the Service Order Table to insert new Descriptions for remote services.			
	Proposed Amendment				
	Service Order Type	Description	Typical Triggers	Obsolete Terminology	
Re-energisation	Retailer requests a Service Provider to arrange for a Connection Point to be re-energised. Methods include: <ul style="list-style-type: none"> • Insert Fuse • Remote re-energise (AMI) • Main switch • Meter connection • Connection at pole or pillar or pit • Remove sticker 	Energisation of a new supply where a previous new connection ServiceOrderRequest required the Site to be left de-energised. Re-energisation of a Site following a request to de-energise. A need to re-energise a Connection Point arises where a Customer: <ul style="list-style-type: none"> • is moving into a premise; or • has previously requested that a supply be temporarily de-energised and now 	Turn-on Move in Reconnection Energisation Insert Fuse Remove Sticker		

			wishes the supply restored; or <ul style="list-style-type: none"> • has been disconnected for non-payment. 		
	De-energisation	<p>Retailer requests Service Provider to arrange for a Connection Point to be de-energised.</p> <p>Methods include:</p> <ul style="list-style-type: none"> • Remove Fuse • Remote de-energise(AMI) • Turn off main switch and sticker • Turn off main switch • Meter Disconnection • (meter wire disconnection or turn meter) • Disconnection at pole top, pillar box or pit 	<p>A need to de-energise a Connection Point can arise in these situations:</p> <ul style="list-style-type: none"> • where the Retailer has grounds to proceed with a De-energisation for non-payment (where the Customer has failed to meet their obligations under jurisdictional rules). • the Customer requires a temporary disconnection of supply because the Site is to be left vacant for a time; or • the Customer is moving out of a premise and no new tenant has requested supply at the same address. 	<p>Turn-off Disconnection Remove Fuse Apply sticker Move out</p>	
	Special Read	<p>Retailer requests a Service Provider to perform a Special Read of a manually read meter.</p> <p>This is a reading not associated with a Re-energisation or a De-energisation.</p>	<p>A need to obtain a Special Read (rather than a scheduled read) arises for manually read metering where an out of cycle reading is required.</p>	<p>Check Read Final read Start read Opening read</p>	

18.2	Section	2.6.1 Service Orders Requiring Customer Consultation	Amendment Type	Addition
	Description	New clause relating to customer consultation following remote re-energisation and arming of an AMI meter.		
	Proposed Amendment			
	c. For AMI meters, where the Service Provider has successfully completed a Re-energisation 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, at the site. This action may be performed by the retailer, customer or by the Service Provider under a service level agreement.			

18.3	Section	2.12.8 Meter Reconfiguration	Amendment Type	Addition
	Description	Addition of clauses relating to installation or removal of a communication link, with change to data register coding details.		
	Proposed Amendment			
<ul style="list-style-type: none"> a. The Retailer must specify the required configuration in the SpecialInstructions field of the ServiceOrderRequest. b. The Retailer must use a Miscellaneous service for the request to install or remove communications. The ServiceOrderRequest can be used for the installation or removal of a communication device. The Retailer must specify in the SpecialInstructions field of the ServiceOrderRequest. "Install Communication" or "Remove Communication". c. The Network Operator will then apply an Adds And Alts service order to complete the field work required. d. The Retailer once the Miscellaneous service order is complete can request a reconfigure for a basic to interval configuration if not requested in the first instance. e. The Network Operator will reconfigure the meter to a configuration requested by the Retailer. f. The Build Pack List of Codes and Key to codes describes how to identify an AMI meter. g. The Network Operator will provide a Standing Data Update, when an AMI capable meter (e.g. 'BASIC') begins to communicate with the communication network. A meter install code will be provided according to the Build Pack List of Codes document to identify the AMI meter (e.g. 'AMIBASIC'). 				

18.4	Section	2.12.13 Miscellaneous	Amendment Type	Addition
	Description	Additional clause relating to the installation or removal of a communication link, with no change to data register coding details.		
	Proposed Amendment			
<ul style="list-style-type: none"> b. The Retailer must use a Miscellaneous service for the request to install or remove communications. The ServiceOrderRequest can be used for the installation or removal of a communication device. The Retailer must specify in the SpecialInstructions field of the ServiceOrderRequest. "Install communication" or "Remove communication". 				

18.5	Section	2.12.3 Explanation Use of Exception Codes Table	Amendment Type	Addition
	Description	Additions to table under existing exception code values, to contemplate remote metering services.		
	Proposed Amendment			
	Value	Definition	Used with Service Order Status	Special Notes
	Metering Problem	Metering problem preventing completion of remote service	Not Completed	Communications Problem
	Metering Problem	Metering problem preventing completion of remote service	Not Completed	Communication Ok Metering Problem
	No Supply	Supply Not Available	Not Completed	Remote site already De-energised
Retailer Cancellation	Retailer cancellation (any charges for work partially completed should be indicated by appropriate <i>Product Codes</i>).	Not Completed	Failed to Cancel. Remote De-energise already performed	
Retailer Cancellation	Retailer cancellation (any charges for work partially completed should be indicated by appropriate <i>Product Codes</i>).	Not Completed	Failed to Cancel. Remote Re-energise already performed	
Unsafe	Deemed unsafe to complete Request.	Not Completed	Load side voltage detected on remote Re-energise	

18.6	Section	2.12.6 (g) Re Energisation	Amendment Type	Addition
	Description	Additional clauses relating to the remote re-energisation process.		
	Proposed Amendment			
<ul style="list-style-type: none"> j. For AMI meters, where the Service Provider has successfully completed a Re-energisation 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 the Service Provider under a service level agreement. Retailers should provide suitable advice to the Customer regarding the re-energisation process. k. For AMI meters, the Re-energisation <u>ServiceOrderResponse</u> advises of the successful completion of the Re-energisation. That is, that the meter is in an armed state. l. A subsequent Standing Data Update notification advises that the button on the meter has been pushed enabling electricity flow and that the status of the NMI has moved from de-energised to energised. m. For failed remote Re-energisations, see 2.12.3. Where a Metering Problem exception code value is returned, the Service Provider will attend the site to return electricity supply to the Customer. n. If the Retailer receives an Unsafe exception code value, this means a load side voltage has been detected. The Service Provider will not re-energise the Site until the appropriate actions have been taken to rectify the unsafe condition. Retailers should provide suitable advice to the Customer regarding the re-energisation process. 				

<p>18.7</p>	<p>Section</p>	<p>2.12.8 De-energisation Re-energisation standing data flow</p>	<p>Amendment Type</p>	<p>Addition</p>	
	<p>Description</p>	<p>Add table detailing the flow of the standing data for remote de-energisation and remote re-energisation.</p>			
	<p>Proposed Amendment</p>				

The diagram illustrates the following scenarios:

- Service Order Remote De-energise Request:**
 - Successful:** Retailer Participant sends "Standing data status 'Energised'". Gateway forwards to Network Operator MBS (Validate). MBS forwards to Network Operator HES. HES sends "Success De-energise" to Network Operator AMI Meter. Meter status becomes "Not Energised".
 - Failed:** Retailer Participant sends "Standing data status 'Energised'". Gateway forwards to Network Operator MBS (Validate). MBS forwards to Network Operator HES. HES sends "Failed De-energise" to Network Operator AMI Meter. Meter status remains "Energised".
- Service Order Remote Re-energise Request:**
 - Successful:** Retailer Participant sends "Standing data status 'Not Energised'". Gateway forwards to Network Operator MBS (Validate). MBS forwards to Network Operator HES. HES sends "Success Re-energise" to Network Operator AMI Meter. Meter status becomes "Not Energised".
 - Customer Contact:** Retailer contacts customer. Customer pushes button. Meter status becomes "Not Energised".
 - Failed:** Retailer Participant sends "Standing data status 'Not Energised'". Gateway forwards to Network Operator MBS (Validate). MBS forwards to Network Operator HES. HES sends "Failed Re-energise" to Network Operator AMI Meter. Meter status remains "Not Energised".

4.2 Meter Data Process

18.8	Section	1.9.1 Terminology	Amendment Type	Change
	Description	Contemplate interval data for Type 6 metering installations and remove reference to Type 7 metering installations.		
	Proposed Amendment			
	2. The term “Interval Meter Data” refers to meter consumption data and/or demand for time periods (i.e. data from a Types 1-5 6, or 7 metering installation).			

18.9	Section	3.2.2 a. Timing Requirement for normal Meter Data Notification Process	Amendment Type	Change
	Description	Include Type 6 as a meter type under NEM12 market transaction.		
	Proposed Amendment			
	Meter Type – 1- 5 6 Market Transaction (NEM12)			

4.3 Customer Transfer and Standing Data Procedure

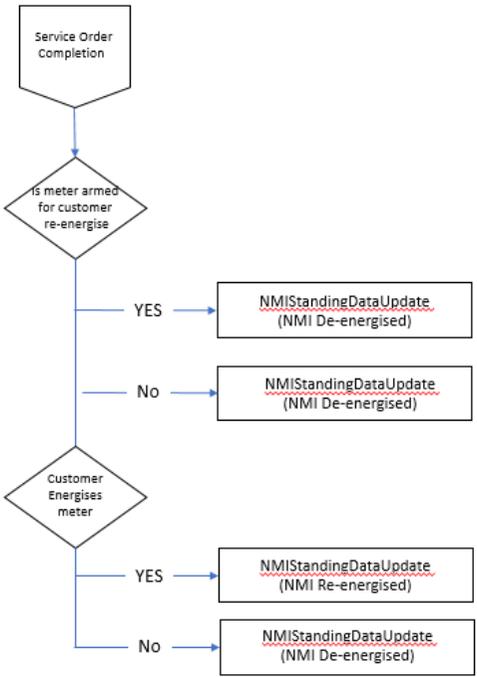
18.10	Section	2.3.2.1 Content of Full NMI Standing Data Update Notification transaction	Amendment Type	Addition
	Description	Addition of reference to new metering installation code which supports remote collection of accumulation data.		
	Proposed Amendment			
	5.Time of Day Part of Register Detail data. This is used for basic meters (i.e. this will not be published unless the Meter Installation Code is "BASIC" or BASICAMI).			

18.11	Section	3.3 Meter Exchange 3.3.1 Overview	Amendment Type	Addition
	Description	Addition to describe how Retailers can identify when a meter is capable of AMI services.		
	Proposed Amendment			
	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 capable ('BASIC') meter connects to a communications network, the communications signal is verified for stability. Upon completion of verification, Retailers will receive a Standing Data Update advising that the meter install code has changed to 'BASICAMI'.			

18.12	Section 3.3.3.1b Process Diagram	Amendment Type Addition
Description Process diagram detailing the communication verification process.		
Proposed Amendment		
Figure 10a: AMI meter exchange <pre> graph TD A[Adds & Alts Service Order] --> B[Exchange meter] B --> C[Close Service Order] C --> SDU1[Full SDU] C --> D{Is meter existing AMI} D -- No --> E[New AMI meter remains basic] D -- Yes --> F[New AMI meter remains communicating] E --> G{Is Communication Stable} F --> G G -- No --> E G -- Yes --> H[AMI Meter communicates basic] H --> SDU2[Full SDU] SDU2 --> I[Retailer reconfigures to interval] I --> J[Retail has notification of AMI meter install code] </pre>		

18.13	Section	3.5 De-energisation 3.5.2 Business Rules	Amendment Type	Addition
	Description	Contemplate a combination of manual and remote metering at a single premise.		
	Proposed Amendment			
	<p>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.</p>			

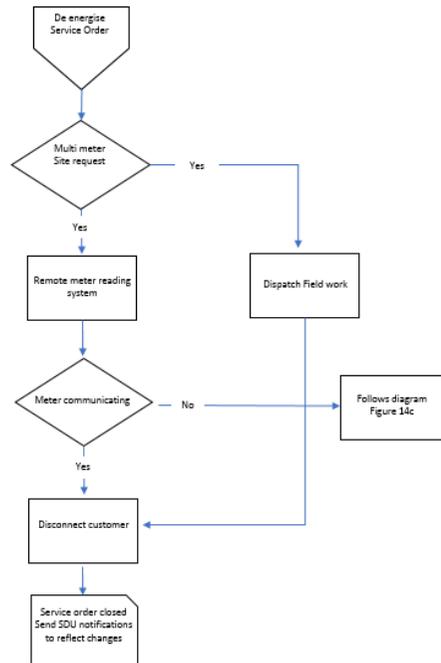
18.14	Section	3.5 De-energisation 3.5.3.2 AMI Process Diagram	Amendment Type	Addition
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Description	Contemplate NMI standing data updates associated with de-energisation and re-energisation services.
Proposed Amendment	
<p>3.5.3.2 AMI Process Diagram</p>  <pre> graph TD Start[Service Order Completion] --> D1{is meter armed for customer re-energise} D1 -- YES --> B1[NMIStandingDataUpdate (NMI De-energised)] D1 -- No --> B2[NMIStandingDataUpdate (NMI De-energised)] B1 --> D2{Customer Energises meter} B2 --> D2 D2 -- YES --> B3[NMIStandingDataUpdate (NMI Re-energised)] D2 -- No --> B4[NMIStandingDataUpdate (NMI De-energised)] </pre>	

18.15	Section	3.5 De-energisation 3.5.3.2 AMI Process Diagram	Amendment Type	Addition
	Description	Detail process for de-energisation on a multi metered site.		

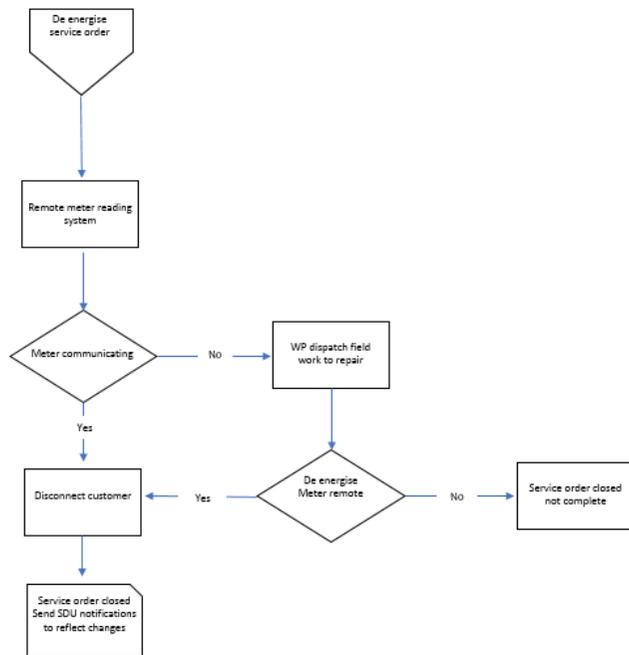
Proposed Amendment

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



18.16	Section	3.5 De-energisation 3.5.3.2 AMI Process Diagram	Amendment Type	Addition
	Description	Detail process for a failed de-energisation, for example if communication has failed to connect to a meter.		
	Proposed Amendment			

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



18.17	Section	3.5 De-energisation	Amendment Type	Addition
	Description	Add clarity to current market process that an interval meter cannot provide a partial day of readings when a meter is de-energised.		
	Proposed Amendment			
	<p>3.5.5.1 Related Transactions</p> <p>Where the meter is an interval meter 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.</p>			

18.18	Section	3.6 Re-energisation	Amendment Type	Addition
	Description	NMI standing data updates associated with de-energisation and re-energisation services.		
	Proposed Amendment			
3.6.1 Overview				
<p>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.</p> <p>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 10 triggered by the earlier Partial SDUs. When the Service Order closes, no additional Full SDU is published.</p> <p>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:</p> <ol style="list-style-type: none"> 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. <p>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.</p> <p>For AMI meters, where the network operator has successfully completed a Re-energisation 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. Retailers should provide suitable advice to the Customer regarding the re-energisation process.</p> <p>For AMI meters, the <u>Re-energisation Service Order Response</u> advises of the successful completion of the Re-energisation. That is, that the meter has been placed in an armed state.</p>				

As result of the de-energisation, the NMI will have a meter status of “D” Current and associated Registers will have a status of “R” Removed. The NMI status will remain as De-energised 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.

18.19	Section	3.6 Re-energisation 3.6.3.2 AMI Process diagram	Amendment Type	Addition
	Description	Remote re-energisation service process diagram.		
	Proposed Amendment			
<p>Figure 17a: NMI Standing Update notification process – AMI Meter De-energisation Status from a Re-energisation Request</p> <pre> graph TD A[Service Order Completion] --> B{Is meter armed for customer re-energise} B -- YES --> C[NMIStandingDataUpdate (NMI De-energised)] B -- No --> D[NMIStandingDataUpdate (NMI De-energised)] C --> E{Customer Energises meter} D --> E E -- YES --> F[NMIStandingDataUpdate (NMI Re-energised)] E -- No --> G[NMIStandingDataUpdate (NMI De-energised)] </pre>				

18.20	Section	3.6 Re-energisation 3.6.3.2 AMI Process diagram	Amendment Type	Addition
	Description	Remote re-energisation NMI standing data update notification process diagram.		
	Proposed Amendment			
<p>Figure 17b: AMI Meter Re-energisation request - NMI Standing Data Update notification process</p> <pre> graph TD Start{{Re-energise Service Order}} --> Step1[Remote meter reading system] Step1 --> Dec1{Meter Communicating} Dec1 -- No --> Step2[Network Operator dispatch's field resource] Dec1 -- Yes --> Dec2{Safe to reconnect} Dec2 -- No --> Step3[Service order request closed not completed] Step3 --> Step4[Network Operator & or retailer action] Step4 --> Dec2 Dec2 -- Yes --> Step5[Meter Armed] Step5 --> Step6[Service order request closed] Step6 --> Step7[Retailer contacts customer] Step7 --> Step8[Customer pushes meter button for re-energise] Step8 --> Step9[Meter energised] Step9 --> Step10[Standing data received energised] Step10 --> Step11[Service order request closed] </pre>				

18.21	Section	3.6 Re-energisation 3.6.3.2 AMI Process diagram	Amendment Type	Addition
	Description	Remote re-energisation on a multi meter site NMI standing data update notification process diagram.		
	Proposed Amendment			
<p>Figure 17c: AMI Meter Re-energisation request Multi Meter Site - NMI Standing Data Update notification process</p> <pre> graph TD Start{{Re-energise Service Order}} --> Step1[Remote meter reading system] Step1 --> Dec1{Meter Communicating} Dec1 -- No --> Step2[Network Operator dispatch's field resource] Dec1 -- Yes --> Dec2{Safe to reconnect} Dec2 -- No --> Step3[Service order request closed not completed] Step3 --> Step4[Network Operator & or retailer action] Step4 --> Dec2 Dec2 -- Yes --> Step5[Meter Armed] Step5 --> Step6[Service order request closed] Step6 --> Step7[Retailer contacts customer] Step7 --> Step8[Customer pushes meter button for re-energise] Step8 --> Step9[Meter energised] Step9 --> Step10[Standing data received energised] Step10 --> Step7 </pre>				

18.22	Section	3.6 Re-energisation 3.6.4.1 NMI Standing Update Notification	Amendment Type	Addition																			
	Description	Addition clause for AMI meters to define the triggers and preconditions for a remote re-energisation.																					
	Proposed Amendment	<p>Step 1a – One (1) Partial SDU per register to notify of change in register status to Current for AMI meter Re-energisation process</p> <table border="1"> <tr> <td>Transaction Definition</td> <td>NMIStandingDataUpdateNotification</td> </tr> <tr> <td>Trigger</td> <td>Change in register status.</td> </tr> <tr> <td>Pre-conditions</td> <td>A NMI is assigned to a current retailer. Customer pushes button on armed meter.</td> </tr> <tr> <td>Post-conditions</td> <td>The retailer is able to update their system on the basis of the information provided by the network operator.</td> </tr> <tr> <td>Transaction acknowledgement-specific event codes</td> <td>Refer to Appendix A</td> </tr> </table> <p>Step 2a – One (1) Partial SDU to notify of change in meter status to Current for AMI meter Re-energisation process.</p> <table border="1"> <tr> <td>Transaction Definition</td> <td>NMIStandingDataUpdateNotification</td> </tr> <tr> <td>Trigger</td> <td>Change in meter status.</td> </tr> <tr> <td>Pre-conditions</td> <td>A NMI is assigned to a current retailer. Customer pushes button on armed meter.</td> </tr> <tr> <td>Post-conditions</td> <td>The retailer is able to update their system on the basis of the information provided by the network operator.</td> </tr> <tr> <td>Transaction acknowledgement-specific event codes</td> <td>Refer to Appendix A</td> </tr> </table>			Transaction Definition	NMIStandingDataUpdateNotification	Trigger	Change in register status.	Pre-conditions	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	Transaction Definition	NMIStandingDataUpdateNotification	Trigger	Change in meter status.	Pre-conditions	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
Transaction Definition	NMIStandingDataUpdateNotification																						
Trigger	Change in register status.																						
Pre-conditions	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.																						
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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 3a – One (1) Partial SDU to notify of the status of the NMI is Active **for AMI meter Re-energisation process.**

Transaction Definition	NMIStandingDataUpdateNotification
Trigger	Customer pushes button on armed meter.
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

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

Transaction Definition	NMIStandingDataUpdateNotification
Trigger	Customer pushes button on armed 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

18.23	Section	3.6 Re-energisation 3.6.5.2 Subsequent Transactions	Amendment Type	Addition
	Description	Addition to improve clarity of existing process.		
	Proposed Amendment			
	Where the meter is an interval meter the Meter Data Notification (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.			

18.24	Section	3.7 Change Read Route and NSRD 3.7.1 Overview	Amendment Type	Change
	Description	Updated to contemplate route changes resulting from a change in data type (accumulation/interval) and to reflect additional automation.		
	Proposed Amendment			
<p>This multi-step process reflects the activities that take place when a meter read route is changed with a possible ensuring change to the Next Schedule Read Date (NSRD). Note, remotely read interval meters do not contain a NSRD.</p> <p>A Meter Read Route change may occur under the following circumstances:</p> <ol style="list-style-type: none"> 1. New Connection – either: <ol style="list-style-type: none"> a. auto-allocation of route immediately after the New Connection service order is completed, but as a separate process (i.e. within minutes of the new connection being completed overnight transaction); or b. 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. 2. 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 20082018. 3. Change of read method. For example, when the method changes from from MVRS to self read card. Please refer to the WA B2B Procedures – Customer and Site Details Process document for more information on this business process. <ol style="list-style-type: none"> a. manually read to a self-read; or b. manually read to remotely read. 4. Change of data type. For example, where an accumulation meter is changed to an interval meter. 				

18.25	Section	3.7. Change Read Route and NSRD 3.7.3.1 Process Diagram	Amendment Type	Addition
	Description	Add note to provide clarity that, as per current market process, a next schedule read date is not provided for remotely read interval meters.		
	Proposed Amendment			
	NSRD will not be provided for remotely read interval meters.			

18.26	Section	3.7. Change Read Route and NSRD 3.7.5.1 Preceding Transactions	Amendment Type	Change
	Description	Update to include reference to new read method, UIQ.		
	Proposed Amendment			
	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.			

18.27	Section	3.10 Meter Reconfiguration 3.10.3 Process Breakdown	Amendment Type	Change
	Description	Update process diagram to contemplate remote reconfiguration.		
	Proposed Amendment			
	<p>3.10.3.1 Process diagram</p> <pre> graph TD Start{{"Meter Reconfig Change Network Tariff service order"}} --> Process1[Make changes to registers field or back office] Process1 --> Decision{Are all register required to be sent to market} Decision -- No --> EndNo[Changes not sent to market] Decision -- Yes --> Process2[Change Network Tariff & send standing data to market] </pre>			

18.28	Section	3.10 Meter Reconfiguration 3.10.1 Overview Preceding Transactions	Amendment Type	Addition
	Description	Process diagram for removal of a communication device.		
	Proposed Amendment			
<p>Figure 29a AMI Remove Communication Device via Reconfigure</p> <pre> graph TD A{Retailer option to reconfigure interval} -- Yes --> B[/Full SDU/] A -- No --> C[Miscellaneous service order remove communications] C --> D[Network Operator internal Adds & Alts] D --> E[Remove communication device] E --> F[Complete field work] F --> G[Close service orders Adds & Alts & Miscellaneous] G --> H{Is meter basic} H -- Yes --> I[/Full SDU/] H -- No --> J[Network Operator reconfigure interval to basic if requested] J --> K[/Full SDU/] I -.-> A </pre>				

18.29	Section	3.10 Meter Reconfiguration 3.10.1c Process Diagram	Amendment Type	Addition
	Description	Process diagram for the installation of a communication device.		
	Proposed Amendment			

Figure 29b AMI Install Communication Device via Reconfigure.

```

graph TD
    Start[Standing data AMI meter install received] --> Step1[Miscellaneous service order install communications]
    Step1 --> Dec1{Is meter AMI ready}
    Dec1 -- No --> End1[Reject service order request]
    Dec1 -- Yes --> Step2[Network Operator internal Adds & Alts]
    Step2 --> Step3[Complete field work]
    Step3 --> Dec2{Customer rejects install}
    Dec2 -- Yes --> End2[Service order closed not completed]
    Dec2 -- No --> Step4[Close service order Meter is basic]
    Step4 --> End3[Full SDU]
    End3 --> Dec3{Retailer option reconfigure to interval}
    Dec3 --> Step1
    
```

18.30	Section	3.13 New Connections 3.13.1 Overview	Amendment Type	Addition
	Description	Overview of process for advising Retailer a meter has connected to a communication network and is AMI service ready.		
	Proposed Amendment			
	<p>AMI meter connectivity</p> <p>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 capable ('BASIC') meter connects to a communications network, the communications signal is verified for stability. Upon completion of verification, Retailers will receive a Standing Data Update advising that the meter install code has changed to 'BASICAMI'.</p> <p>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.</p>			

<p>18.31</p>	<p>Section</p>	<p>3.13 New Connection 3.13.3.1 Process Diagram</p>	<p>Amendment Type</p>	<p>Addition</p>
	<p>Description</p>	<p>Process diagram of verification process to determine stability in the communication network before advising a meter is AMI service ready.</p>		
	<p>Proposed Amendment</p>			
<p><i>Figure 38a:AMI New Connection Process</i></p> <pre> graph TD SO[Service Order created] --> NMI[NMI allocation] EIN[Electrical Installation Notice] --> NMI NMI --> MI[Meter installed (de-energised)] MI --> MR[Meter Re-energised] MR --> CSO[Close Service Order] CSO -.-> FSU1[Full SDU] CSO --> IS{Is Communication Stable} subgraph Verification [Verification period of time Network Operator disgression] IS -- Yes --> UIC[Update install code] UIC -.-> FSU2[Full SDU] end IS -- No --> MRB[Meter remains basic] </pre>				

18.32	Section	Table 4 Standing Data transaction elements for current retailers	Amendment Type	Change
	Description	Provide guidance that the Meter Install Code field should be used to identify an AMI meter.		
	Proposed Amendment			
	<p>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.</p> <p>The Meter Install Code can also be used to identify an AMI meter.</p>			

4.4 Participant Build Pack – Tranche 1

18.33	Section		Table 4-31: ase: <i>WAElectricityServiceOrderDetails</i> Data	Amendment Type	Change
	Description		The amendment is to include remote accumulated reading service for type 6.		
	Proposed Amendment				
	Type:		ase: <i>WAElectricityServiceOrderDetails</i>		
	aseXML Schema		B2B Procedure		
Element	Mandatory/Optional	No changes		Definition & Usage	
<i>MeteringType</i>	0			Code indicating new type of metering required for Basic Metered, and MRIM and BASICAMI Sites (Types 5 and 6) only. If “Other” used then further details must be provided as <i>ase:SpecialInstructions</i> .	
				Mandatory if type of meters is 5 or 6. Not used for a “Cancel” ase:ServiceOrderRequest.	
				Mandatory if type of metering required known to the Retailer. Not used for a “Cancel” ase:ServiceOrderRequest.	

18.34	Section	Appendix A. Data Dictionary A.1. – Transaction Data Elements		Amendment Type	Addition	
	Description	Addition of new Installation Type Codes (Meter Installation Codes).				
	Proposed Amendment					
	aseXML Element/Attribute Name	aseXML Element Name/ Local Path	B2B Procedure Element Name(s)	Definition	aseXML Data Type	B2B Procedure Format
	<i>InstallationTypeCode</i>	<i>NMIStandingData/MeterRegister/Meter/MeterInstallationTypeCode</i>	MeterInstallCode	Code indicating the type of installation at the meter.	xsd:string maxLen = 8	CHAR(8)
						<ul style="list-style-type: none"> ▪ BASIC ▪ BASIC AMI ▪ MRIM ▪ MRIM5 ▪ MRIM6 ▪ COMMS1 ▪ COMMS2 ▪ COMMS3 ▪ COMMS4 ▪ COMMS5 ▪ COMMS5A ▪ COMMS6 ▪ COMMS6A

4.5 Web Portal User Guide (Metering Service Centre User Task Manual)

18.35	Section	2.1 Terminology	Amendment Type	Addition
	Description	Add definition of AMI meter		
	Proposed Amendment			
	<p>AMI Meter means a meter connected to a telecommunications network, with capability activated for two-way communication between the meter and the Network Operator, configured for the upload and download of data, commands and provision of advanced metering services from a remote locality.</p>			

18.36	Section	2.1 Terminology	Amendment Type	Change
	Description	Add reference to a remote de-energisation.		
	Proposed Amendment			
	<p>De-energisations A service order type raised to instigate the process of disconnecting a customer from the electricity network. A De-energisation service order request is raised to remove the ability of energy to flow through a meter. This may be achieved by removing the meter's fuse or remotely via an AMI meter. Service orders can be raised in the Metering Service Centre (See Metering Service Centre on page 5)</p>			

18.37	Section	2.1 Terminology	Amendment Type	Change
	Description	Add reference to identifying an AMI via a meter installation code.		
	Proposed Amendment			
	<p>Meter Install Code</p> <p>A Meter Install Code is applied to every installed meter. the code is expressed as a particular type. The type Meter Install Code is used to determine whether the meter is interval or basic, whether it has remote communications and or AMI capabilities as well as the consumption rating annual energy throughput level. For example: A Type 1 COMMS1 meter is an interval meter with communications with a rating an annual throughput of 1000 GWh and above. a Type 7 meter refers to un-metered supplies such as street lights. The Meter Install Code can be viewed in the Standing Data Details page in the Metering Services Centre. (See Viewing Standing Data on page 28)</p>			

18.38	Section	2.1 Terminology	Amendment Type	Change
	Description	Add reference to remote re energisation.		
	Proposed Amendment			
	<p>Re-Energisation</p> <p>A service order type raised to instigate the process of reconnecting a customer to the electricity network. A Re-energisation service order request is raised to restore the ability of energy to flow through a meter. This may be achieved by replacing the meter's fuse or remotely via an AMI meter. Service orders can be raised in the Metering Service Centre (See Metering Service Centre on page 5).</p>			

4.6 Key to Codes Used in the Build Pack

18.39	Section	Meter Models	Amendment Type	Addition
	Description	Add AMI meter model to Meter Model Table.		
	Proposed Amendment			
	<ul style="list-style-type: none"> • Add new meter model for AMI meters. • Add column 'AMI capable' (Yes/No) 			

4.7 Glossary

18.40	Section	2 Glossary	Amendment Type	Addition	
	Description	Add definition for AMI.			
	Proposed Amendment				
		Term	Definition		
		Advanced Metering Infrastructure	An integrated system of meters, telecommunications networks and data management systems that enable two-way communication between meters and the Network Operator for the upload and download of data, commands and the provision of advanced metering services from a remote locality.		

18.41	Section	3 Acronyms	Amendment Type	Addition	
	Description	Add AMI.			
	Proposed Amendment				
		Acronym	Definition		
		AMI	Advanced Metering Infrastructure		

4.8 List of Codes

18.42	Section	2.16 Meter Installation Codes (InstallationTypeCode)	Amendment Type	Change
	Description	New meter installation codes.		
	Proposed Amendment			
	Code		Description	
	COMMS1		Type 1 Interval Meter Installation with Communications Annual throughput 1000 GWh and above	
	COMMS2		Type 2 Interval Meter Installation with Communications Annual throughput 100 GWh to but not including 1000 GWh	
	COMMS3		Type 3 Interval Meter Installation with Communications Annual throughput 750 MWh to but not including 100 GWh	
	COMMS4		Type 4 Interval Meter Installation with Communications Annual throughput 300 MWh to but not including 750 MWh	
COMMS5		Interval Meter Installation with Communications Annual throughput 50 MWh to but not including 300 MWh		
COMMS5A		Interval Meter Installation with Communications - AMI capable Annual throughput 50 MWh to but not including 300 MWh		

COMMS6	Interval Meter Installation with Communications Annual throughput less than 50 MWh
COMMS6A	Interval Meter Installation with Communications – AMI Capable Annual throughput less than 50 MWh
MRIM5	Type 5 Manually Read Interval Meter Annual throughput 50 MWh to but not including 300 MWh
MRIM6	Manually Read Interval Meter Annual throughput less than 50 MWh
BASIC	Type 6 Manually Read Accumulation Basic Meter Annual throughput less than 50 MWh
BASICAMI	Accumulation Meter Installation with Communications – AMI Capable Annual throughput less than 50 MWh

18.43	Section	2.33 Meter Read Method	Amendment Type	Addition			
	Description	Addition of new meter read method to table.					
	Proposed Amendment						
	<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="width: 15%; text-align: center;">Code</th> <th style="text-align: center;">Description</th> </tr> </thead> <tbody> <tr> <td style="color: red;">UIQ</td> <td style="color: red;">Remotely read AMI meter</td> </tr> </tbody> </table>				Code	Description	UIQ
Code	Description						
UIQ	Remotely read AMI meter						

18.44	Section	2.54 Meter Models	Amendment Type	Addition
	Description	Addition of AMI capability indicator to Meter Model Table.		
	Proposed Amendment			
	<p>New column in Meter Model Table - AMI Capable (Yes or No)</p> <p>(Yes or No)</p>			