

Network Standard

NETWORK

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ES12 METERING CONTESTABILITY



ISSUE

For issue to all Ausgrid, electricity Retailers, Metering Coordinators, Metering Providers and Metering Data Providers staff involved with the provision of metering services in the Ausgrid Network area and is for reference by field, office, technical and engineering staff.

Ausgrid maintains a copy of this and other Network Standards together with updates and amendments on www.ausgrid.com.au.

Where this standard is issued as a controlled document replacing an earlier edition, remove and destroy the superseded document.

DISCLAIMER

As Ausgrid's standards are subject to ongoing review, the information contained in this document may be amended by Ausgrid at any time. It is possible that conflict may exist between standard documents. In this event, the most recent standard shall prevail.

This document has been developed using information available from field and other sources and is suitable for most situations encountered in Ausgrid. Particular conditions, projects or localities may require special or different practices. It is the responsibility of the local manager, supervisor, assured quality contractor and the individuals involved to make sure that a safe system of work is employed and that statutory requirements are met.

Ausgrid disclaims any and all liability to any person or persons for any procedure, process or any other thing done or not done, as a result of this Standard.

All design work, and the associated supply of materials and equipment, must be undertaken in accordance with and consideration of relevant legislative and regulatory requirements, latest revision of Ausgrid's Network Standards and specifications and Australian Standards. Designs submitted shall be declared as fit for purpose. Where the designer wishes to include a variation to a network standard or an alternative material or equipment to that currently approved the designer must obtain authorisation from the Network Standard owner before incorporating a variation to a Network Standard in a design.

External designers including those authorised as Accredited Service Providers will seek approval through the approved process as outlined in NS181 Approval of Materials and Equipment and Network Standard Variations. Seeking approval will ensure Network Standards are appropriately updated and that a consistent interpretation of the legislative framework is employed.

Notes: 1. Compliance with this Network Standard does not automatically satisfy the requirements of a Designer Safety Report. The designer must comply with the provisions of the Workplace Health and Safety Regulation 2011 (NSW - Part 6.2 Duties of designer of structure and person who commissions construction work) which requires the designer to provide a written safety report to the person who commissioned the design. This report must be provided to Ausgrid in all instances, including where the design was commissioned by or on behalf of a person who proposes to connect premises to Ausgrid's network, and will form part of the Designer Safety Report which must also be presented to Ausgrid. Further information is provided in Network Standard (NS) 212 Integrated Support Requirements for Ausgrid Network Assets.

2. Where the procedural requirements of this document conflict with contestable project procedures, the contestable project procedures shall take precedent for the whole project or part thereof which is classified as contestable. Any external contact with Ausgrid for contestable works projects is to be made via the Ausgrid officer responsible for facilitating the contestable project. The Contestable Ausgrid officer will liaise with Ausgrid internal departments and specialists as necessary to fulfil the requirements of this standard. All other technical aspects of this document which are not procedural in nature shall apply to contestable works projects.

INTERPRETATION

In the event that any user of this Standard considers that any of its provisions is uncertain, ambiguous or otherwise in need of interpretation, the user should request Ausgrid to clarify the provision. Ausgrid's interpretation shall then apply as though it was included in the Standard, and is final and binding. No correspondence will be entered into with any person disputing the meaning of the provision published in the Standard or the accuracy of Ausgrid's interpretation.

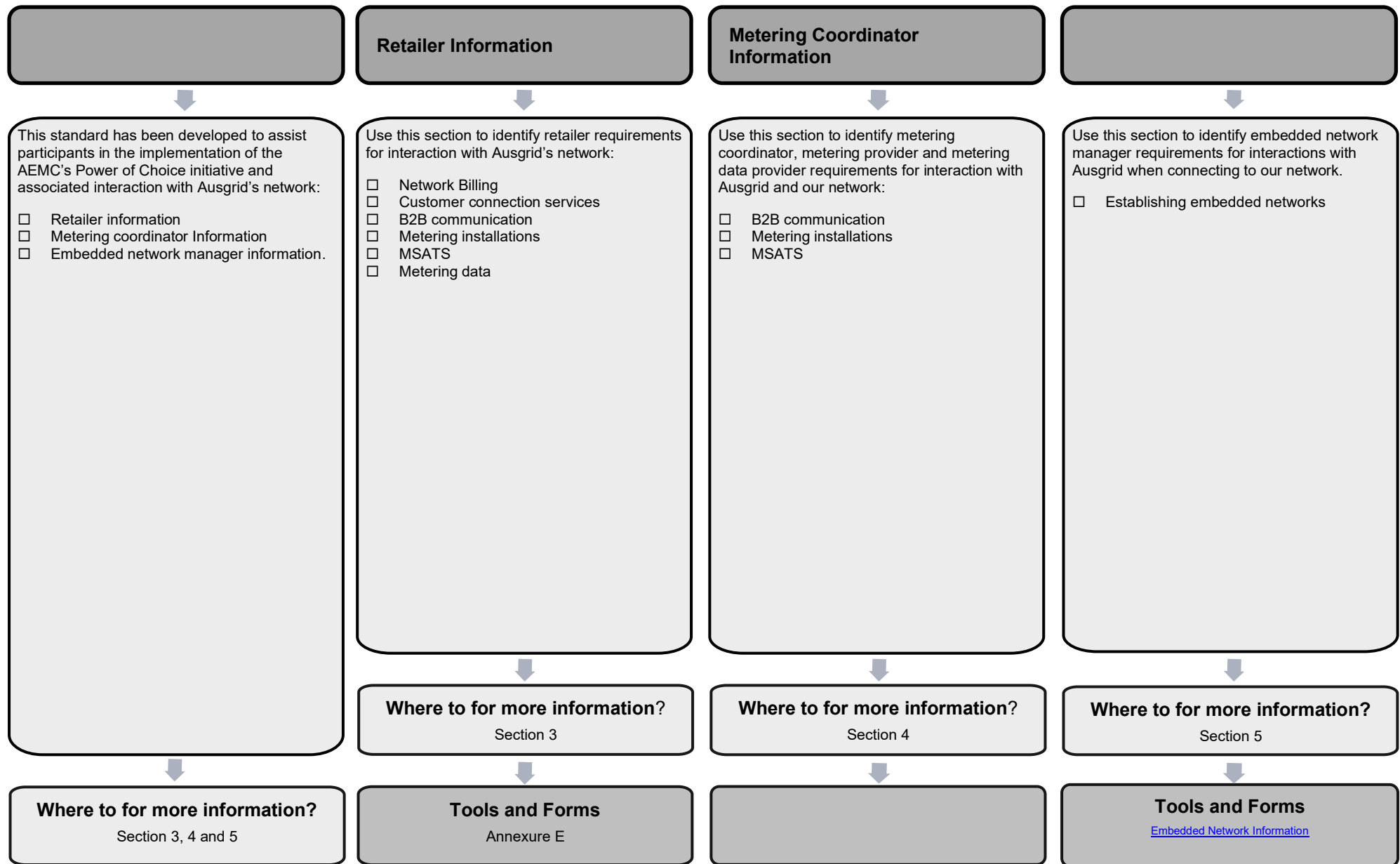
KEYPOINTS

This standard has a summary of content labelled "KEYPOINTS FOR THIS STANDARD". The inclusion or omission of items in this summary does not signify any specific importance or criticality to the items described. It is meant to simply provide the reader with a quick assessment of some of the major issues addressed by the standard. To fully appreciate the content and the requirements of the standard it must be read in its entirety.

AMENDMENTS TO THIS STANDARD

Where there are changes to this standard from the previously approved version, any previous shading is removed and the newly affected paragraphs are shaded with a grey background. Where the document changes exceed 25% of the document content, any grey background in the document is to be removed and the following words should be shown below the title block on the right hand side of the page in bold and italic, for example, Supersedes – document details (for example, "Supersedes Document Type (Category) Document No. Amendment No.").

KEY POINTS OF THIS STANDARD



Network Standard ES12 Metering Contestability

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1.0 INTRODUCTION

This electrical standard has been developed to assist Financially Responsible Market Participants (FRMPs), Metering Coordinators (MCs), Metering Data Providers (MDPs), Metering Provider Accreditation B (MPBs) and Embedded Network Managers (ENMs) working in Ausgrid's network area.

Any questions should be referred to ausgrid_metering@Ausgrid.com.au, if there is no specific email address referenced to the query.

This document may be updated as national, jurisdictional and company policies and requirements change. It is the responsibility of the reader to reference the latest version of the document.

Ausgrid does not accept any responsibility for:

- the design, operation or failure of any metering installations not managed by Ausgrid or any electrical installation work;
- any loss or damage occasioned to any person or property; or
- non-compliances to any regulatory obligations, commercial contracts or customer contracts

Any reference to 'MC' includes their appointed metering provider(s), metering data provider(s) and any sub-contractors.

In this document the terms 'we', 'our' or 'us' means Ausgrid.

Regulatory instruments and documents that are authorised by a regulatory instrument shall prevail for the extent of any inconsistencies with this document.

Italicised words are definitions in the NER, AEMO or B2B Procedures.

2.0 PROCEDURES FOR RETAILERS AND FINANCIALLY RESPONSIBLE MARKET PARTICIPANTS

2.1 General

This section applies to all retailers who are operating, or intending to, in Ausgrid's network area.

In this section the term 'you' or 'your' means retailer or financially responsible market participant (FRMP).

2.2 Network Invoicing for NUoS and Ancillary Services

2.2.1 Cycles for Issuing Invoices

Invoices for NUoS will be issued weekly unless agreed otherwise.

Invoices for ancillary services and any other non-related NUoS charges will be issued once per month.

A calendar detailing precise dates for the issuance of invoices and their subsequent payment will be issued to all retailers in June for the following financial year and is available on request from nbilling@ausgrid.com.au

2.2.2 Billing Periods for NUoS

For Type 6 metered sites the bill period will be quarterly unless a non-routine read occurs, e.g. move out read.

Type 5 metered sites as per Type 6 except where the site is on a tariff with a capacity component. In this case the bill period will be monthly.

Type 1 to 4 and 7 the billing period will be calendar month.

Note: Where a Type 1-4 meter is installed and is replacing a Type 5 or 6 meter the billing period will be monthly.

2.2.3 Queries regarding charging

For questions about the charges please direct to nbilling@ausgrid.com.au

2.2.4 Issues with Charges

Disputes are to be raised as per the NSW B2B Network Billing standard.

Issues with the quantity being charged, amount of consumption or the capacity value applied, we request that within the dispute the quantity or value you expected to be noted in the reason field along with version of data you are using.

In circumstances where you have been invoiced but not received the meter data you must not dispute; if so they will be automatically rejected. It is expected that a *Provide Meter Data* B2B request will be raised by the FRMP to the MDP.

2.2.5 Network tariffs

The retailer may change the network tariff provided it complies with rules published in ES7 - Network Pricing Guide. A copy of our Network price list is available on Ausgrid's website:

[Network prices - Ausgrid](#)

It is your responsibility to provide the MC or their appointed MP with the network tariff to be populated in MSATS when you request for a meter change or meter reconfiguration.

NUOS will be applicable for all metering installations that are energised. If the NMI status is active then NUOS will be charged to the retailer unless the meter register status code is D.

Arrangements for small customers

We expect network tariff changes for small customers to be managed between you and your MC. You are responsible for informing the MC of the new network tariff and ensuring that the metering details, including the new network tariff, are correctly updated in MSATS.

Upon notification of a network tariff change from MSATS we will validate the network tariff complies with our Network Price List. Where an invalid network tariff was used then we will revert the network tariff to what it was previously or apply the default network tariff. Where the proposed network tariff complies with our price list we will accept the nominated network tariff.

For existing *small customer* connections, any tariff change to or from EA302 will be rejected. Customers wishing to move on or off EA302 will require our approval by submitting a Network Tariff and Threshold Change Application Form. This form can be found in Appendix A of ES7 – Network Pricing Guide.

Arrangements for large customers

Prior approval is required for network tariff changes for all existing or intending large customers, or customers that do not meet the criteria to be a small customer. Approval can be sought by submitting a Network Tariff and Threshold Change Application Form. This form can be found in Appendix A of ES7 – Network Pricing Guide.

Upon receipt of a Network Tariff and Threshold Change Application Form, we will validate the proposed network tariff complies with our Network Price List. Where a request for network tariff change does not meet the requirements of ES7 the request will be rejected. Where the proposed network tariff is approved the request will be accepted and we will update MSATS with the network tariff code.

Note that a condition of network tariff approvals is that the installed metering installation must be able to support the requested network tariff.

2.2.6 Changes to the network controlled load tariff

If a retailer wishes to change a customer controlled load tariff the retailer must raise a *Metering Service Works Meter Reconfiguration*. We expect you to provide the proposed network off peak tariff in the field called *Proposed Tariff*. If the proposed tariff code is the same as the current tariff code, the SO will be rejected. The response to this service order will depend if Ausgrid equipment is controlling the switching of the controlled load circuit, as specified below.

Where our controlled load equipment is installed

After the submission of the *Metering Service Works Meter Reconfiguration* B2B service order, we will arrange for our technicians to visit the site and reconfigure the load control to suit the customer's request. We will notify you when the works are complete. Note that a regulated fee applies for this work.

You must ensure that the tariff change request is only requested on the meter which the controlled load tariff applies otherwise the service order will be rejected.

As outlined in ES7 Network Pricing Guide, only one change is permitted to a controlled load tariff in a 12 month period. Any requests from a retailer to change a controlled load tariff more than one in a 12 month period will be declined by Ausgrid.

Where our controlled load equipment is not installed

Our response to the *Metering Service Works Meter Reconfiguration* B2B Service Order will be that the retailer must arrange with the MC for the settings to be changed in the meter (in accordance with the requirements of ES7) and for the new network controlled load tariff to be updated in MSATS.

As outlined in ES7, only one change is permitted to a controlled load tariff in a 12 month period. Any requests from a retailer to change a controlled load tariff more than one in a 12 month period will be declined by Ausgrid.

At the completion of the tariff change update in the meter, your MP should submit an appropriate CR30XX updating the network tariff to the new controlled load tariff code.

2.2.6.1 Eligibility for Controlled load tariffs

To be entitled to the controlled load tariffs you must comply with the relevant clauses of Ausgrid's standards ES3 and ES7. This means that the load must only be wired to the secondary tariff meter element via a load control device that belongs to us, or to a meter that belongs to an MC who has an agreement with us to use that meter as a load control device.

2.3 Customer connection services

If you are arranging a new connection or upgrading an existing connection for your customer then you need to determine which customer connection services are required and submit the relevant application to connect or alter a connection to our network. More detail can be obtained from our connecting to the network page on our website. Note that in some circumstances our electrical infrastructure may need to be extended or upgraded to accommodate your customer's additional electrical load. If this is the case, you may be required to arrange for and contribute to the costs involved.

A Permission to Connect (PTC) notification from us is required before any new metering installation is allowed to be connected to our network or for any alteration to the connection point. The PTC notification can be obtained by following our Connection of Load process. More details of this process and the forms can be found on our connecting to the network page on our website. Note that a valid connection application is required before a NMI and/or PTC is issued to the connection applicant.

In NSW most connection and service works are provided under a contestable scheme called the Accredited Service Provider (ASP) scheme. It is your responsibility to engage the appropriate ASP for the connection and service works that you require.

Details of what notification is required to us can be found in Annexure D.

2.3.1 New connection point

To arrange a new connection, either temporary or permanent supply, in Ausgrid's network area the following activities must be completed:

- (a) Submit a valid relevant connection application form;
- (b) Where the connection application form has been processed by Ausgrid, we will issue a NMI to the connection applicant;
- (c) The connection applicant must provide the connecting customer with the NMI and inform them that an electricity retail contract must be entered into with an electricity retailer.
- (d) Once a retail contract has been agreed, the retailer must submit a Supply Service Works Allocate NMI transaction as per the B2B Service Order Procedure. The NMI MUST be provided in this transaction. See clause 3.4.1.
- (e) A PTC notification will be sent to the connection applicant stating the NMI has been approved to be connected to our network.
- (f) Engage an ASP for service work installation and connection. A Class 2B ASP must be used for underground service works and a Class 2C ASP must be used for overhead service works.
- (g) Engage the MC to install the metering installation. Note that any installation of Ausgrid's control load equipment must be by explicit agreement with Ausgrid and only be completed by a Class 2D ASP as required by the NSW ASP Scheme.
- (h) We will update the NMI to "Active" in MSATS when we receive the CR3XXX series change request and NEM12 file for your MDP. The NOSW and NOMW are to be submitted within 2 business days of when the work is completed. A CCEW is also required as electrical work has been conducted at the new connection.

A high level new connection diagram is included as Annexure F.

2.3.2 Removal of connection point (supply abolishment)

To arrange the removal of the connection point at an existing site in Ausgrid's network area the following activities must be completed:

- (a) Submit a permanent disconnection request form to Ausgrid.
- (b) Once processed a permission to disconnect notification will be provided to the connection applicant;
- (c) Engage an ASP for service work removal. A Class 2B ASP must be used for underground service works and a Class 2C ASP must be used for overhead service works. Note that any removal of Ausgrid's control load equipment must only be completed by a Class 2D ASP as required by the NSW ASP Scheme;
- (d) Engage the MC to remove a type 1-4 metering installation; or
- (e) Engage a Class 2D ASP to remove a type 5 or 6 metering installation.

We will extinct the NMI in MSATS when the ASP submits their NOSW (where required) and the MP submits their NOMW where a Type 1-4 meter is removed. For Type 1-4 NMIs we will also accept a Supply Service Works – Supply Abolishment B2B Service order from the current retailer (see section 2.4.2 for further details). We will extinct the NMI in MSATS when the ASP submits their NOSW where a Type 5 or 6 meter is removed. The NOSW and NOMW are to be submitted within 2 business days of when the work is completed.

2.3.3 Change a temporary supply to permanent supply

To change a temporary supply into a permanent supply at an existing site in Ausgrid's network area the following activities must be completed:

- (a) Follow the process for the removal of a connection point (if the point of common coupling is changing); and
- (b) Follow the process for a new connection point

Note that the NMI may be reused if the new connection point is energised on the same day the existing connection point is removed. If there is an overlap or gap in time of when the new connection

point is energised and when the existing connection point is removed then a new NMI is required for the new connection point. Where our Type 5 or 6 metering is installed on the temporary supply, the meters can only be relocated to the permanent supply where permitted by Clause 6.2.3 of ES3 Part A. If the conditions in clause 6.2.3 of ES3 Part A cannot be met, you must arrange for a Type 1-4 meter to be installed on the permanent supply.

2.3.4 Upgrade single phase to multi-phase at an existing site

To arrange an upgrade from single phase to multi-phase at an existing site in Ausgrid's network area the following activities must be completed:

- (a) Obtain a PTC notification using Ausgrid's connection application process;
- (b) Engage an ASP (if required) for service work installation and connection. A Class 2B ASP must be used for underground service works and a Class 2C ASP must be used for overhead service works;
- (c) Engage the MC to upgrade the metering installation. Note that any installation of Ausgrid's load control equipment must be by explicit agreement with Ausgrid and only be completed by a Class 2D ASP as required by the NSW ASP Scheme;
- (d) Update MSATS with CR3XXX series change requests where metering has changed and send NEM12 as per the procedures;
- (e) Submit NOSW/NOMW/CCEW as applicable. See Annexure D.

A high level connection alteration diagram is included as Annexure E.

2.3.5 Installation of generation at an existing site

To arrange the installation of generation at an existing site in Ausgrid's network area the following activities must be completed:

- (a) Obtain a PTC notification using Ausgrid's connection application process;
- (b) Engage an ASP (if required) for service work installation and connection. A Class 2B ASP must be used for underground service works and a Class 2C ASP must be used for overhead service works.
- (c) Engage the MC to upgrade the metering installation. Note that any installation or alteration of Ausgrid's control load equipment must only be completed by a Class 2D ASP as required by the NSW ASP Scheme;
- (d) Update MSATS with CR3XXX series change requests and send NEM12 as per the procedures;
- (e) Submit NOSW (if required)/NOMW/CCEW (CCEW from solar installer for installation of solar system is mandatory).

A high level connection alteration diagram is included as Annexure E.

2.3.6 Upgrade generation for larger capacity at an existing site

To arrange the upgrade of generation to a larger capacity at an existing site in Ausgrid's network area the following activities must be completed:

- (a) Obtain a PTC letter using Ausgrid's connection application process;
- (b) Engage (if required) an ASP for service work installation and connection. A Class 2B ASP must be used for underground service works and a Class 2C ASP must be used for overhead service works;
- (c) Engage the MC to upgrade the metering installation. Note that any installation or alteration of Ausgrid's control load equipment must only be completed by a Class 2D ASP as required by the NSW ASP Scheme;
- (d) Update MSATS with CR3XXX series change requests where metering has changed and send NEM12 as per the procedures;
- (e) Submit NOSW/NOMW/CCEW as applicable. See Annexure D.

2.4 B2B communications

2.4.1 Allocate NMI

Ausgrid does not offer contestable metering services under the participant id of ENERGYAP. This participant id must not be nominated as the MC when raising a *Supply Service Works Allocate NMI* B2B Service Order, otherwise the service order will be rejected.

The retailer must not object to being nominated as the FRMP when the NMI is created in MSATS as a result of the *Supply Service Works Allocate NMI* B2B Service Order.

NOTE: To ensure that the majority of Allocate NMI Service Orders are automatically processed, it is mandatory that the FRMP raising the Service Order include the NMI number in the Special instructions (Ausgrid preference) or NMI field. Ausgrid preference is that the NMI check sum is not required to be included in the transaction.

We will validate that all required roles are provided and the nominated participant IDs are valid, we will also utilise validation rules for the NMI and address. The street name in the address field and the NMI provided must match what is in our system otherwise the Service Order will be rejected.

There are occurrences where a retailer has incorrectly allocated a NMI to themselves. When this occurs, we will reject any further Allocate NMI service orders as the NMI has already been allocated. The retailer can contact connectionapplication@ausgrid.com.au to query why the service order has been rejected and we will provide the retailer with the NMI standing data to allow the retailers to resolve the incorrect NMI allocation issue. We expect the two FRMPs to coordinate with each other to get the roles updated in MSATS.

2.4.2 Supply Abolishment (for Type 1-4 NMIs ONLY) - Effective from 10 November 2021

To commence the supply abolishment process, Ausgrid's requires a NOMW to be submitted from the relevant MPB. In the event that a NOMW was not submitted by the MPB (due to MPB not being aware that their meters have been removed) the current retailer may alternatively submit a Supply Service Works – Supply Abolishment service order to request that the NMI be abolished. The following conditions apply:

1. Must be for Type 1-4 NMIs only;
2. Abolishment date must be retrospective and populated in the Customer Preferred Date field of the service order (the date provided in the mandatory Scheduled Date field will not be used to determine date of abolishment);
3. The date provided in the Customer Preferred Date field is the date we will use to abolish the NMI in MSATS.
4. We assume that you have confirmed with the MP that their metering has been removed from site and has been safely disconnected from the network
5. This service order is only a notification to us. There will be no field work conducted by us upon receipt of this service order.

Note: any service orders sent for supply abolishment of Type 5 or 6 NMIs will be rejected. A Meter Investigation Service order will need to be raised by the current retailer if they suspect the site has been abolished.

2.4.3 One In All In

Supply interruptions for a Type 5 or 6 NMI with a shared isolation point must be requested using the Supply Service Works Temporary Isolation Scoping Request Service Order (SSWTISR) transaction as per the IEC B2B Service Order Procedure.

This transaction is to be used where there are Type 5 or 6 meters associated with the shared fuse. If **only** Type 1-4 meters are connected to the shared fuse then a Supply Service Works Temporary Isolation-Group Supply (TIGS) Service Order should be raised. See Clause 2.4.4.

Once you have been notified by your MC that a shared fuse outage is required to be arranged by Ausgrid at a Type 5 or 6 NMI, you are required to raise a SSWTISR Service Order transaction. You must include your MCs participant ID in the 'Co-ordinating Contact Name' field of the service order, which identifies them as the "Original MC".

Ausgrid has arrangements with a number of MC to conduct Network Planned Outages on behalf of Ausgrid, these outages have been defined as Metering Coordinator Distribution Planned Outages (MCDPO). The customer outage notification obligations remain with Ausgrid, the MC is conducting the outage via a deed with Ausgrid.

Unless a site has been identified as complex by the Original MC (who has notified Ausgrid of this fact), any Supply Point (the connection point between the customer's electrical installation and Ausgrid's distribution network) which has six NMIs or less (regardless of meter Type) and no more than one Business NMI will be scheduled as a MCDPO. Ausgrid will not visit the site to scope or conduct outage and only notify customers of the outage through our outage management system.

Ausgrid will be conducting site visits to scope outage requirements for any Supply Point that has seven or more NMIs or there are more than two business/commercial NMIs.

Once Ausgrid has scoped the site or determined that a MCDPO will be used for the outage, we will raise a MFIN to all retailers associated with the outage.

The MFIN will be sent from ENERGYAP to the current retailer of the confirmed NMI(s) associated with the OIAI outage and will contain the following information:

1. Mandatory fields for OIAI
2. Start Date: (Planned Date)
3. Start Time: (Planned Start Time)
4. Duration: (Determined based on outage start time up to 16.00)
5. ReasonForChange: 'One In All In'
6. Notes -
Format as per below.
<OutageID>#<NumberOnConfirmedNMIsWithLegacyMeters>#<OriginalMC>#<LNSP
Message>#Resend Message>

Example: **NECF1234712-1#5#ORIGINALMC# This outage will be managed by the MC#**

Example: **NECF1234722-1#12#ORIGINALMC# Pole Top Outage#**

Pole top disconnections are going to be a significant cost. Retailers will be notified via the MFIN that a pole top disconnection is going to be used for this outage and will be identified in the <LNSPMessage> section of the MFIN. See example above.

Upon receipt of the MFIN the retailer must appoint its preferred MC in MSATS by raising a CR6300. In addition, the retailer should raise a SSWTIOIAI Service Order to Ausgrid and a Metering Service Works Install Meter Service Order to their appointed MC if they choose to participate in the OIAI outage.

If a NMI has a retailer churn after the MFIN has been sent, Ausgrid will retrigger a new MFIN to the new retailer and 'not complete' SSWTIOIAI Service order from the outgoing retailer. It is expected that the new retailer will raise a SSWTIOIAI Service to us and upon appointment of their preferred MC in MSATS a Metering Service Works Install Meter Service Order to their MC.

The SSWTIOIAI Service Order must contain the following information, else it will be rejected by Ausgrid:

1. Populate the coordination ID (OutageID contained in the MFIN that we sent) in the Form Number field of the service order.
2. populate the outage date (Outage Date contained in the MFIN that we sent) in the Scheduled Date field of the service order.

Ausgrid will be monitoring outage data before each outage to determine if:

1. The FRMP has allocated and MC; and
2. If the FRMP has sent the SSW OIAI SO to Ausgrid.
3. If either of these have not been completed, an MFIN will be resent on 15, 10 and 5 days from the outage day.
4. We will also be sending a notification to your MC 15 days out from the outage with information contained in the MFIN we sent you along with additional site specific data and the Participant ID of the party conducting the Distributor Planned outage.

Once the SSWTIOIAI Service Order is received we expect that your MC will attend site on the outage date and replace the meters associated with the NMI. Once the outage has been completed and the meter replaced, we will close out the SSWTIOIAI Service Order as completed and apply the appropriate product codes.

More information on the application of product codes and associated fees can be found at the following webpage. [Retailers - Ausgrid](#)

If we have received a SSWTIOIAI Service Order from you and your MC does not turn up on the outage day to replace the meter or install an MPD, you will still be charged for the outage.

We will use best endeavours to schedule all outages within normal business hours. Ausgrid will only be scheduling out of business hour outages for business/commercial customers. Where an out of normal business hours outage has been scheduled an incremental out of hours product code fee will be levied when completing the SSWTIOIAI Service Order.

If a outage need to be cancelled for any reason, the SSWTIOIAI will be cancelled and a SSWTISR Service Order will need to be re-raised by the retailer who initiated to OIAI request.

Any general enquiries on OIAI can be sent to oiai@Ausgrid.com.au.

2.4.4 Temporary isolation group supply

Supply interruptions for a NMI with a shared isolation point must be requested using the *Supply Service Works Temporary Isolation-Group Supply* (TIGS) transaction as per the B2B Service Order Procedure. You must supply us with an email address of your works scheduling group so we can inform you of the allocated appointment date and time (10AM).

This transaction is to be used where there are NO Type 5 or 6 meters associated with the shared fuse (ie. COMMSX meters only). If Type 5 or 6 meters are connected to the shared fuse then any TIGS SO will be rejected and that a *Supply Service Works Temporary Isolation Scoping Request Service Order* should be raised. See Clause 2.4.3.

To arrange a temporary supply interruption.

To arrange a temporary supply interruption for a site with a shared isolation point the following activities must be completed:

1. You must raise the *Supply Service Works Temporary Isolation-Group Supply* B2B transaction.

2. You must use the mandatory field called *Scheduled Date* to advise the date the interruption is required. The 10AM time will be automatically allocated by the first available appointment and cannot be requested by you.
3. As we require a minimum of 10 business days to scope the job and notify all the customers who will be affected by the power outage, if you nominate a date within this 10 business day period, we will allocate you the first available appointment time after the 10 business day period.
4. If the proposed date is more than 90 business days in the future the SO will be rejected with an event explanation of "*Scheduled date is greater than 90 days in the future. Please resubmit with amended date.*" If this occurs re-submit your request for an alternative date.
5. If the proposed date is more than 25 business days and less than 90 business days in advance of the date the service order is raised, we will assume that this date has been negotiated between you and the customer. We will use all practical endeavours to achieve this proposed date.
6. If the date nominated by you is between 10 – 25 business days, we will use all practical endeavours to achieve this proposed date. If we cannot achieve the date nominated by you, we will attempt to allocate a date and time for the next business day. If we have no spare appointments for that day we will try for the next business day, this attempt will be made up to the 25 business day maximum period. If no appointment times are available in this period we will reject the service order with an event explanation "*No available appointments within next 25 business days, please submit new S/O with alternative date*". If you receive this message, please contact service.orders@ausgrid.com.au.
7. Once a date and time (AM or PM) has been allocated we will respond to the service order by emailing you and the current MC identified in MSATS confirming the appointment date and whether it is an 10AM appointment.
8. If you do not want the allocated appointment date provided to you by us in the response email, you can cancel the service order and resubmit a new date.
9. You must provide a point of contact for the day of the scheduled interruption. We suggest that this be the MP's scheduler and not the meter technician. We will contact this person should there be any issues on the day.

See **Appendix H** for a **high level** process flow of the appointment scheduling and notification process.

Notification of interruption

We will notify impacted customers of the planned interruption being undertaken by us. This notification will only cover the length of time required for the MP to install the meter protection device (MPD).

You may separately notify the customer who is impacted by the meter change of the additional supply interruption required to install and commission the meter.

Interrupting the supply

We will be on site at **10AM** on the date and time specified in the notification email that was sent to you in response to the *Supply Service Works Temporary Isolation-Group Supply* B2B transaction. It is expected that the MP will be at the metering installation, have completed any necessary pre-work activities and is ready to install the meter protection device at **the appointed time**. If the MP is not on site by **15 minutes after the allocated appointment time**, then we will not perform the supply interruption. We will leave the site, close the service order as not completed and charge a 'no show fee' to you. You must raise a new service order request for a future date if the interruption to the supply is still required.

To minimise the length of the supply interruption to customers the MP must install the meter protection device first when the supply is isolated. This will allow us to restore the supply when the meter protection device is installed. The MP can then safely install and commission the meter at the

MP's own pace. It is recommended that you advise the customer that the MPD is now the responsibility of the customer to maintain.

A fee will be levied against the retailer for this service and allocation of product codes at the completion of service order will be as follows:

Table 1 Product Code Mapping for TIGS Service Orders.

Service Order Type	Service Order Sub - Type	Service	Product Code
Supply Service Works	Temporary Isolation-Group Supply	Initial site visit - no access	SSWTIGSNA
Supply Service Works	Temporary Isolation-Group Supply	MP no show/no access 2nd visit	SSWTIGSNC
Supply Service Works	Temporary Isolation-Group Supply	Complex (more than nine) complete	SSWTIGSCC
Supply Service Works	Temporary Isolation-Group Supply	Simple (up to nine) complete - excluding initial site visit	SSWTIGSSC
Supply Service Works	Temporary Isolation-Group Supply	Simple initial site investigation	SSWTIGSSI

Fees for these services will be levied in accordance with an approved AER pricing methodology.

A high level process diagram is included as Annexure G.

2.4.5 Remote disconnection/reconnection including notification requirements.

Once remote disconnection and reconnection is allowed for the Retailer and MC, it is expected that you will communicate and educate your customers about this method and to instruct the customers to first contact you for no supply enquiries. The communication should be included in any notices that may result in a remote disconnection, for example reminder notice for overdue payments. Once remote disconnection and reconnection is allowed for the Retailer and MC, you must notify us of all remote disconnections and remote reconnections. We only accept this notification via the Notified Party transaction as per the B2B Procedure. Should you want to use a different format or channel then prior written agreement is required.

The notification should be sent prior to and after the completion of the remote disconnection/reconnection and must contain the reason for the disconnection. It is expected that you will provide the proposed date that the remote disconnection/reconnection will occur when provided prior to the disconnection/reconnection or the actual date of the remote disconnection/reconnection if provided after the disconnection/reconnection.

It is expected that you will provide a new Notified Party transaction if the date of the proposed remote disconnection/reconnection changes. Where you fail to advise us of the remote disconnection, and a no supply call is received from a customer, we will attend the site, restore supply by bypassing the meter, issue a Meter Fault and Issue Notification transaction via B2B to you and charge you a fee.

Where you advise us of the remote reconnection, and a no supply call is received from a customer, we will refer the customer to you.

2.4.6 Meter fault and issue notification

When we identify that a metering installation requires replacement we will issue a *Meter Fault and Issue Notification* transaction, via B2B, to you. This may include metering installation defects that requires a meter change to resolve meter faults. Note that we will send the *Meter Fault and Issue Notification* transaction to you only and not to your MC or MP.

There is no fee associated with the raising of an MFN unless it is raised for a reason identified in 2.4.4 or 2.5.3.

It is expected that you will prioritise fault rectifications as follow:

Table 2 MFN Priority

Priority	Description	Value in Reason For Notice field in Meter Fault and Issue Notification transaction
1	Supply On is 'No'	Any
2	Theft or tamper has been detected at the metering installation	Theft/Tampering
3	The meter has been bypassed enabling customers to remain on supply	Meter Bypassed
4	The metering installation is classified as faulty	Malfunction
5	The Controlled load hot water relay or time switch is faulty	Time switch/Controlled Load Failure
6	The metering installation is declared to be statistically non-conforming	Meter Family Failure

The Meter Fault and Issue Notification transaction will be sent to you, as the FRMP, once only.

If a retail churn occurs and the meter has not been replaced, Ausgrid will send another MFN to the new retailer.

2.4.7 Planned Interruption Notification

You must notify us of a planned interruption. We only accept this notification via the *Planned Interruption Notification* as per the current AEMO one way notification B2B Procedure. Should you want to use a different format or channel then prior agreement is required.

If we receive the *Planned Interruption Notification* and later we receive an enquiry about no supply then we will refer the customer to you or provide details from the *Planned Interruption Notification*.

It is expected that you will provide a new *Planned Interruption Notification* if the date of the interruption changes

If we do not receive the *Planned Interruption Notification* or subsequent updates and receive an enquiry about no supply then we will attend to the site. A fee will be charged to you if the outage was caused by you or work done on behalf of yourself, this includes accidental interruptions.

2.4.8 Meter Investigation–Meter Test

We will provide the results of the meter test in the service order *Special Notes* field in the service order response transaction.

2.4.9 B2B services not offered

Ausgrid as participantID ENERGYAP does not offer the following B2B services:

Table 3 B2B services not offered by Ausgrid

Service Type	Service Sub Type	Comments
Supply Service Works	Supply Alteration	The retailer can engage a Class 2B or 2C ASP for this service

Service Type	Service Sub Type	Comments
Supply Service Works	Establish Temporary Supply	The retailer can engage a Class 2B or 2C ASP for this service.
Supply Service Works	Establish Temporary in Permanent	The retailer can engage a Class 2B or 2C ASP for this service.
Supply Service Works	Establish Permanent Supply	The retailer can engage a Class 2B or 2C ASP for this service,
Supply Service Works	Temporary Isolation	The retailer can engage a Class 2B or 2C ASP for this service.
Re-energisation	Remote	Ausgrid does not have any meter that has this functionality
De-energisation	Remote	Ausgrid does not have any meter that has this functionality
Metering Service Works	Exchange Meter	The retailer can engage their MC
Metering Service Works	Install Meter	The retailer can engage their MC
Metering Service Works	Move Meter	The retailer can engage their MC
Metering Service Works	Remove Meter	The retailer can engage their MC
Metering Service Works	Install Controlled Load	The retailer can engage their MC
Metering Service Works	Change Time switch settings	The retailer can use the Meter Reconfiguration sub type
Miscellaneous		Ausgrid does not provide this service

Note: The above B2B transactions will be rejected when Ausgrid is nominated as the recipient

2.5 Metering installations

2.5.1 Meter reversion

As per the Rules all new or replacement meters for a *small customer* must be a Type 4 or 4A meter, consequently once a Type 4 or 4A meter is installed Ausgrid cannot replace it with a Type 5 or 6 meter.

Once a Type 4 or 4A meter has been installed, any future metering requirements must be managed between the customer and the retailer.

It is the responsibility of retailers to support customers understanding of the process for installation, changes and removal of metering installations.

2.5.2 Physical disconnections and reconnections

Requests for physical disconnections will cause the MC's meter to become de-energised. It is expected that the retailer notifies the MC that a potential outage may occur due to a disconnection request.

Ausgrid will not disconnect using the meter load tail method on a meter that does not belong to us as the Local Network Service Provider.

An appropriately authorised MC can only perform remote disconnection or reconnection, and you must continue to request local manual disconnection/reconnection from Ausgrid.

If the sub type of the *De-energisation Service Orders* is *Recipient Discretion* then Ausgrid will use the De-energisation Reason to determine the method of disconnection and will charge the corresponding fee. The table below defines the disconnection method when the subtype of Recipient Discretion is raised:

Table 4 Disconnection method when the subtype of recipient discretion is raised

De-energisation reasons	Disconnection method
Customer Requested	Main Switch / Remove Fuse
Move Out	Remove Fuse (preferred) / Main Switch
Non-Payment (DNP)	Remove Fuse where possible, otherwise Main Switch
Unauthorised Usage (DNI)	Remove Fuse (preferred) / Main Switch
Illegal Usage	Remove Fuse where possible, otherwise Main Switch
No Access	Remove Fuse (preferred) / Main Switch
Safety	Remove Fuse (preferred) / Main Switch
Defect	Remove Fuse (preferred) / Main Switch
Site Works	Reject Service Order. We do not provide this service.
Breach Of Contract	Remove Fuse (preferred) / Main Switch
Other	Remove Fuse (preferred) / Main Switch

Note:

Ausgrid will only attempt the disconnection using one method. If the disconnection cannot be completed because the customer's installation does not allow for the disconnection method then the service order will be closed as Not Completed and a site visit fee will be charged. If the retailer still wants a different disconnection method to occur then a new service order needs to be raised. We will use reasonable endeavours to disconnect by the method nominated in the service order sub type, if this is not possible we will disconnect at the main switch if possible. If this main switch disconnection does not meet your disconnection needs you will need to raise a disconnection, sub type local meter disconnection.

Note: Where a Pole Top / Pit / Pillar disconnection method is requested by you, you must raise the service order at least 3 weeks in advance so the appropriate investigation and safe work procedures can be followed.

2.5.3 No Supply

We are committed to providing a safe and reliable power supply at all times. However for various reasons – both planned and unplanned – power for some customers can be interrupted.

If we receive a no supply call we will check for a *Planned Interruption Notification* or *Notified Party* transaction for a remote disconnection.

If we received a *Planned Interruption Notification* or *Notified Party* transaction and the interruption date is the same day as the customer call, we will refer the customer back to you. If we are unable to determine the actual date of the interruption or disconnection (eg. a date range was provided in the notification) we will respond by visiting the site and if necessary bypassing the electricity meter

to restore supply to the customer in which case we will send a meter fault and issue notification to you. A service fee will be levied to you in these situations.

In cases where your MC/MP has caused the outage that is non-metering related, for example leaving a main switch off, if we attend site and rectify, a service fee may be levied to you in these situations.

The *Meter Fault and Issue Notification* can be used by you to make the necessary arrangements for the metering installation to be corrected and to have the metering data substituted accordingly.

The above process also applies to a Type 5 and 6 metering installation except that we will arrange to substitute the metering data. No fee will apply in this case.

Note that we will only by-pass meters. We will not install a network device as a temporary means to restore supply or bridge using the existing meter.

If we are unable to restore supply then the customer will be informed of the outcome of our investigation and if required to contact you or their electrical contractor. In addition, life support customers will be advised to make any necessary arrangements during the supply outage.

In an emergency situation (e.g. a customer switchboard fire where the existing metering has been destroyed/damaged) where a Type 1-4 meter is required to be installed and you cannot provide a meter in a suitable timeframe to restore supply, you may request via Ausgrid's contact centre that Ausgrid visit the site and restore supply to the customers via an unmetered supply. You should record this request in your system and notify your MC to visit the site to install a meter as soon as possible. Ausgrid will also raise an MFN to you once the Ausgrid officer completes the restoration works. A service fee may be levied to you in these situations. You will normally be notified of this problem by the customer's electrician or ASP.

2.5.4 Distributor planned interruptions

Ausgrid currently advises the FRMP of planned interruptions via its website. This notification method will continue from 1 December 2017.

2.5.5 Combination meter for controlled load services

When arranging for a new meter, you must engage a MC that has an agreement with us to use their meter as a controlled load device where our combination meter is installed. A combination meter is a meter that measures both general supply and controlled load services with inbuilt controlled load functionality. The combination meter must be removed when a Type 1-4 meter is installed.

2.5.6 No hot water complaints

Our controlled load device installed at site

We will attend the site and to restore hot water and if it is determined that Ausgrid's load control device has caused the problem we may replace the controlled load device.

Our control load device not installed at site

We will refer the customer to you where we determine that the control load device is not owned by us. If it is determined that there may be an issue with the MC's meter we will not rewire the cabling in the meter to the primary tariff or un-switched terminal of the meter. It is expected that you will have systems and procedures in place to manage these complaints.

2.5.7 Adding a new service for an existing Type 5 or 6 metering installation

The Rules do not allow for a metering installation to have a mix of meter types. If a new service is requested on an existing Type 5 or 6 metering installation, for example solar or controlled load, then the existing Type 5 or 6 meter must be replaced with a Type 1-4 meter.

2.5.8 Upgrading from single phase to three phase for an existing Type 5 or 6 metering installation

The Rules do not allow for a metering installation to have a mix of meter types. If the service is to be upgraded from single phase to three phases to an existing Type 5 or 6 metering installation then the existing Type 5 or 6 meter must be replaced with a Type 1-4 meter.

2.5.9 Replacing switchboards of Type 5 and 6 metering installations

Section 6.2 of ES3 Part A outlines the requirements for relocation of Ausgrid metering installations when switchboards are replaced. Where relocations are not permitted, the existing meter(s) must be replaced with a Type 1-4 meter by your nominated metering provider.

2.6 MSATS

2.6.1 Nominating Ausgrid as MC

Ausgrid does not offer contestable metering services under the participant id of ENERGYAP. Where you raise change requests nominating ENERGYAP as the MC where ENERGYAP is not the current participant for this role in MSATS you will be notified to rectify this error by us, a fee may be levied to you for this rectification process.

Where ENERGYAP are no longer the MC for a Type 5 or 6 metering installation we will only accept a reversion of the MC role back to us by agreement. Contact us as per section 2 requesting an agreement for reversion.

If you are completing a retail churn using a CR10XX on a site which has a NMI Classification of **NOT SMALL** (ie. LARGE, GENERATOR etc), and we are the existing RP (ENERGYAP) or you nominate us in the CR as the RP, you will be notified to rectify this error by us, a fee may be levied to you for this rectification process.. To ensure this error does not occur you will need to nominate your new RP who will conduct the meter churn to a compliant metering installation for the NMI.

2.6.2 Changing the MC, MP and MDP roles

The meter churn procedure, which is incorporated in the metrology procedure part A, only allows for meter churn to be initiated by the current MC. Our preference is for the retailer to comply with the process defined in the procedures. To support smooth operation of the market, we will not object to change requests from a retailer nominating a new MP and/or new MDP with a new MC in a single change request for a Type 5 or 6 metering installation.

2.6.3 Changing the MP or MDP roles

A prospective change request nominating a new MP or new MDP must not be raised while there is an installed Type 5 or 6 meter unless the retailer intends to replace the Type 5 or 6 meter.

A retrospective change request nominating a new MP or new MDP must not be raised while there is an installed Type 5 or 6 meter.

2.7 Metering Data

2.7.1 Substituting the final Type 6 meter read

The Service Level Procedure for MPs stipulates that the NOMW must be provided within 2 business days of the metering work. Ausgrid will temporary substitute the metering data on the meter removal date for a Type 6 meter. If the MP does not submit a valid NOMW via B2B within 30 calendar days from the meter change date then the substitution will be made final.

2.7.2 Substituting the final Type 5 meter read

Ausgrid will temporary substitute the metering data on the meter removal date for a Type 5 meter. If the MP does not return the Type 5 meter to Ausgrid as detailed in Clause 4.3.10 within 10 businesses days as required by the AEMO Metrology Procedure, the substitution will be made final.

3.0 PROCEDURES FOR METERING COORDINATORS

3.1 Introduction

This section applies to all metering coordinators who are operating, or intending to operate, in our network area. Any reference to MC includes your appointed MP, MDP and any sub-contractors.

In this section the term 'you' or 'your' means MC including your appointed MP, MDP and any sub-contractors.

3.2 B2B communications

3.2.1 Notification of works

You must send us the NOMW as defined in the AEMO one way notification B2B procedure for all new, altered or removed metering installations within two business days of completing the metering work. You must indicate on the NOMW details of our load control devices at the metering installation.

A NOSW is only required for service works and must be submitted by the ASP conducting any service works. Where works have been conducted on the customer electrical installation the electrical contractor must submit a CCEW to Ausgrid.

Details of what notification is required to us can be found in Annexure D.

3.2.2 NEM12 file format

As required by the AEMO meter data file format specification, the file must contain the face plate serial number for each installed meter and must align with the meter serial number in MSATS. This is important to allow tariffs to be correctly assigned and to allow Ausgrid to identify metering installations, via the meter number, for outage investigations and B2B service order requests.

3.3 Metering installations

3.3.1 NSW Department of Fair Trading

In addition to being accredited by AEMO, MPs must comply with NSW Department of Fair Trading's requirements before they are allowed to operate in NSW.

3.3.2 Removing network metering assets

Under the amendments to the Electricity Supply Act that became effective in July 2016, you and your contractors must be working under a safety management system approved by the Office of Fair Trading. You and your contractors may remove our metering assets without an Ausgrid Authorisation provided you are working in accordance with your approved safety management system.

3.3.3 Service and installation rules

You must comply with the Service and Installation Rules. A copy of the Service Installation Rules can be obtained from <http://www.resourcesandenergy.nsw.gov.au/energy-supply-industry/pipelines-electricity-gas-networks/network-connections/rules>

3.3.4 Adding a new service for an existing Type 5 or 6 metering installation

The Rules do not allow for a metering installation to have a mix of meter types. If you want to add a new service, for example solar or controlled load, to an existing Type 5 or 6 metering installation then the existing Type 5 or 6 meter must be replaced with a Type 1-4 meter.

3.3.5 Upgrading from single phase to multi-phase for an existing Type 5 or 6 metering installation

The Rules do not allow for a metering installation to have a mix of meter types. If you want to upgrade from single phase to multi phases to an existing Type 5 or 6 metering installation then the existing Type 5 or 6 meter must be replaced with a Type 1-4 meter.

3.3.6 Network devices

The following devices are deemed to be network devices in Ausgrid's network area:

- (a) Ripple receiver relays for controlled loads;
- (b) Times switches for controlled loads;
- (c) Sample meters;
- (d) Any Device labelled as a "network device".

This list of devices may change over time in line with Ausgrid's requirements or any relevant Rule requirements.

3.3.7 Sample meters

Under the Metrology Procedure we are obligated to have sample meters. These meters are interval meters that are remotely read with the interval metering data provided to AEMO only. The same meter is also read as an accumulation meter and the accumulation metering data is provided to AEMO and the retailer for the purpose of market settlement.

To arrange the removal of a sample meter, you must contact Ausgrid's Meter Data Provider on the MDP Hotline at 02 4951 9906 Monday to Friday (excluding public holidays) between 7am to 5pm immediately prior to the removal so that a final read can be obtained remotely.

You must also send us the NOMW with the final read of the removed meter.

3.3.8 Net solar installations

Where Type 1-4 meters are installed for a net solar installation then the metering must be configured to net the energy instantaneously and not average the energy over the half hour data interval. The net energy calculation must be done within the Type 1-4 meter i.e. the metering data from the meter cannot be adjusted outside the meter in a post data processing method.

3.3.9 Red seals disconnection for non-payment

We use red seals to identify sites which have been disconnected for non-payment. To avoid confusion you must not use red seals. You must not break a red seal or reconnect the meter.

3.3.10 Return of Ausgrid Type 5 meters

All our Type 5 meters must be returned within **10 business days** of removal to our Wallsend or Homebush Field operations depot and in the conditions outlined in clause 10 of ES3 Part A.

All our meters and load control units must be returned to us, wiped down clean and free of dust.

Non-Ausgrid metering assets must not be returned to our meter locations. These meters should be returned or disposed in accordance with the relevant MP requirements.

Where our metering assets have been returned not in accordance with Clause 10 of ES3 Part A, we will record the non-compliance and rectify the non-conformance where possible. The cost of this work may be charged to you or your retailer.

3.3.11 Type 6 Ausgrid metering assets

We do not require decommissioned Type 6 metering assets to be returned. This includes decommissioned load control devices. The MP should follow their own procedure for disposal as per the letter sent by us to all AEMO registered MPBs dated 27 January 2017. See Annexure C for copy of letter sent to AEMO MPBs.

3.3.12 Combination meter

A combination meter is a meter that measures both general supply and off peak services and has inbuilt controlled load functionality. When a Type 1-4 meter is installed the combination meter must be removed and the controlled load functionality must be provided by your meter.

3.3.13 Electricity theft or metering installation tamper

Where there has been suspected theft of electricity or suspected tampering of Ausgrid's meters, the MC **may** complete the meter change **but** must notify Ausgrid's revenue protection hotline, revenueprotection@pluses.com.au with the following information:

- NMI,
- full address of the site,
- Retailer you are working for,
- your name,
- your contact phone number,
- meter number,
- date issue identified,
- description of the issue and any other information that may help with the investigation

Note that when our controlled load device has been;

- bridged;
- neutral removed; or
- forced non-auto

then this is not considered a tamper . The customer will continue to be provided hot water at the off peak tariff. The existing status of the controlled load device is inconsequential to the metering works to be performed. The **external** controlled load device will be managed by us in due course.

3.3.14 Dangerous installations

If you determine that the customer's installation is dangerous to the customer's immediate safety then you must make the installation safe which may include disconnecting supply to the installation. You must notify the customer in writing that repairs are required. The MP must not leave any installation energised whilst it is in an unsafe condition.

If you de-energise any part of a customer's electrical installation, you must the customer to engage an electrical contractor or Accredited Service Provider to rectify the defect. Do not refer to customer to Ausgrid as we cannot rectify any customer related issued.

If you are unable to make the installation safe then you must notify us on 13 13 88 and take the necessary action to minimise any safety risk to the customer until our emergency service officer arrives. If you have disconnected all or part of a customer's electrical installation, you must notify us on 13 13 88.

If you use a personal danger tag to isolate suspected faults, we will not remove these tags as per *SafeWork NSW Code of Practice, Managing Electrical Risks in the Workplace*. If a fault involved a network related problem, you will need to return to remove danger tag and re-energise installation once the fault has been rectified.

If MPs discover an obsolete Zellweger ZE22/3 load control relay (see Annexure A of this document) is located onsite they must not remove the relay and must contact Ausgrid to arrange for removal. See Annexure B of ES3 Part A.

There are a number of other safety related issues that you may encounter whilst installing metering at installations in our network area. Please review the following information and incorporate into your procedures as applicable.

Network Standards Homepage:

<https://www.ausgrid.com.au/ASPs-and-Contractors/Technical-documentation/Network-Standards>

NS199: Safe Electrical Work on Low Voltage Underground Assets

<https://www.ausgrid.com.au/-/media/Documents/Technical-Documentation/NS/NS199.pdf>

NS211: Working with Asbestos Products

<https://www.ausgrid.com.au/-/media/Documents/Technical-Documentation/NS/NS211.pdf>

ASP Level 2 Installation and Service

<https://www.ausgrid.com.au/ASPs-and-Contractors/Installation-and-service>

Electrical Safety Rules

<https://www.ausgrid.com.au/ASPs-and-Contractors/Technical-documentation/ESR>

3.3.15 Locked meter boxes

If you encounter a locked meter box then please consult with the customer to arrange the appropriate access to their metering installation.

We will not unlock or remove locks that belong to the customer on request from you. This includes locks the customer may have purchased from us or our representatives because these locks are the customer's property. If you require access to Abloy master keys please contact ausgrid_metering@Ausgrid.com.au.

3.3.16 Seals

Where a seal is required to be removed, the person breaking the seal must reapply a seal as per your or our approved methods.

We will only break seals on the terminal cover of your meter when required during an emergency or no supply situation. We will reseal the meter using our approved sealing method.

3.3.17 Incorrect NMI standing Data

Where you suspect that a metering installation is incorrectly identified in MSATS or is metering the incorrect customer installation (eg. unit 1 is metering unit 2), then you must not complete the meter change.

You must contact the retailer who can raise a metering investigation service order. The service order should articulate clearly what the metering issue is. Upon completion of the service order the retailer can inform you that the meter change can proceed.

Where Type 1-4 metering is already installed or NEM12 data has been sent for the incorrect NMI, we will require an updated NEM12 file and a CR3XXX for the correct NMI(s) from your MP/MDP to rectify and allow rebilling.

3.3.18 Cross metering or wiring

Where it is suspected that a number of metering installations are potentially cross metered (eg. part of unit 1 is metered by unit 2 meter), you must contact the appropriate FRMP and MP of the other potentially affected metering installations to arrange a time and date for an onsite investigation. You must not complete the meter change.

You must contact the affected retailer(s) who can raise a metering investigation service order to the appropriate metering provider(s). The service order should articulate clearly what the metering issue is. Upon completion of the service order the retailer can inform you that the meter change can proceed.

Where Type 1-4 metering is already installed or NEM12 data has been sent for the incorrect NMI, we will require an updated NEM12 file and a CR3XXX for the correct NMI(s) from your MP/MDP to rectify and allow rebilling.

3.3.19 Certificate of compliance of electrical works

A certificate of compliance electrical works (CCEW) is not required to be submitted to us for installation of Type 1-4 metering. See Annexure D for when a CCEW must be submitted to us.

3.3.20 Fuses and switchboards with asbestos

Certain fuses may contain friable asbestos and customer switchboards may also contain asbestos. You must ensure that you manage friable asbestos and other potential asbestos containing material in accordance with the relevant work, health and safety legislation.

3.3.21 Current transformers

You may remove or continue to use current transformers that have been supplied by us. If the current transformer is removed then we do not require them to be returned. If the existing current transformer is to be used, then responsibility will transfer to you when the Type 1-4 metering is installed. However note that we will not supply any test or compliance certificate for the current transformers. We may provide an actual last test date if known.

3.3.22 Remote disconnection and reconnection

Once remote disconnection and reconnection is allowed you must notify us of all remote disconnections and remote reconnections by updating MSATS meter status as soon as possible to ensure no network callouts are received as this may incur a charge to the retailer.

3.3.23 Local manual disconnection and reconnection

You are not allowed to interrupt the supply of electricity on behalf of a retailer unless it is for the purpose of installing, maintaining, repairing or replacing a metering installation. It is expected that you have arrangements in place to confirm that the customer is notified of supply outages prior to you interrupting the supply.

You are not allowed to interrupt the supply of electricity if it will impact a customer who is not a customer of the retailer arranging the interruption, as per the National Electricity Retail Rules. If an outage is required in this situation the retailer must submit a B2B request in accordance with Section 2.4.2 of this document.

3.3.24 General approach to connection of controlled loads

To assist with the introduction of advanced metering and to help you simplify advance meter installation we have developed a load control strategy for use by MCs. For more information on this approval and the technical requirements see Appendix B of ES7 Network Pricing Guide. <http://www.ausgrid.com.au/Common/Industry/Regulation/Network-prices.aspx>

For a site, with Type 4 metering installed, to be eligible for a controlled load network tariff an agreement permitting your meter to switch the controlled load must exist between you and Ausgrid as per requirements of ES7. This agreement must be via written approval from us prior to applying this arrangement and must include a specification for approval outlining how your solution will comply with the requirements of Ausgrid's load control strategy, and your acceptance of these conditions.

If a metering installation has an Ausgrid load control device and the FRMP has indicated that they do not want a controlled load network tariff then the MC must remove the load control device.

If requested by your retailer to conduct a controlled load tariff change where the switching control is in your meter, at the completion of the tariff change update in the meter, you should submit an appropriate CR30XX updating the network tariff to the new controlled load tariff code in MSATS.

If you identify any load that is not wired to a control load device then this must be corrected by wiring the load to:

- if you have an agreement with us to use your meter as a controlled load device, then to your meter via the meter's control load functionality; or
- the general supply meter.

Where a multi pole load control device is controlling the switching of controlled load circuits for multiple customers, you must not remove the load control device if other poles of the load control device are still being utilised by other customer metering points.

If you arrive at a customer's installation and confirm with the customer that the controlled load functionality is no longer required (eg. customer has moved to gas hot water), you do not need to install metering for the secondary tariff. You should note on the NOMW that the controlled load service and meter was no longer required. The meter for the secondary tariff in this instance must be removed and returned to us if it is our meter, if required by clause 4.3.10.

Note: Big Blue Hot Water Systems are a legacy arrangement developed in the 90's in the retail area in competition to the uptake of gas HW systems. It allowed the top element to by-pass the relay and be connected to the off-peak meter and receive off-peak rates. We no longer allow the Big Blue to be connected in this fashion for new controlled load installations as outlined in ES7. However, if the MP is just changing the meter and not touching the Hot Water system we allow the customer to remain connected the same way.

3.3.25 Isolation point shared with multiple customers (Type 4 meters only)

Upon receipt of the *Supply Service Works Temporary Isolation-Group Supply* we will identify and notify impacted customers of the planned outage. The outage date will be specified by the retailer in the service order, see clause 2.4.4 for further information.

We will be on site at **the allocated appointment time (10AM)** for all *Supply Service Works Temporary Isolation-Group Supply* service orders. It is expected that you will be at the metering installation at the allocated appointment time on the date specified in the service order raised by the retailer. If you are not on site by 15 minutes after the allocated appointment time then we will not perform the supply interruption, will leave the site, close the service order as not completed and charge a 'no show fee' to the retailer. The retailer must raise a new service order request for a future date if the interruption to the supply is still required.

If you are unable to attend on the agreed or nominated date then you must inform your retailer so that they can cancel the existing service order and arrange for a new service order to be raised.

You should inform the retailer the date and time of the meter change to assist them in notifying the customer of the additional supply interruption period required to install and commission the meter and to respond to any customer enquiries.

You must not perform the supply interruption yourself. It is your responsibility to test and prove that the circuit or electrical equipment intended to be worked on or near is de-energised when the supply is isolated.

It is expected that you will complete the installation of the meter protection device as a priority and advise the customer that the MPD is now the customers responsibility to maintain. This approach minimises the length of the supply interruption to customers and allows for you to safely install and commission the meter at your own pace by using the meter protection device as the supply isolation point for the meter change. You must not perform the reconnection of the shared isolation point yourself.

3.3.26 Isolation point shared with multiple customers (One In All In)

Upon receipt of the *Supply Service Works Temporary Isolation Scoping Request Service Order (SSWTISR)* from a retailer, we may visit the site to identify and notify impacted customers of the planned outage. Where we do not visit the site we will still notify customers at the supply point that a network planned outage will be occurring for the purposes of replacing Type 5 and 6 legacy meters. Notification requirements will meet the requirements outlined in the National Electricity Retail Rules.

The outage date will be provided to the retailer via a MFIN, see clause 2.4.3 for further information.

MCs must not request a retailer to raise a SSWTISR Service Order if their initial visit has identified defects or other issues that will not allow the meter replacement to be successful. Where we visit a site and determine that an outage cannot go ahead and was not identified by the MC, we may levy a wasted visit fee to the retailer who submitted the SSWTISR Service Order.

Ausgrid has arrangements with a number of MC to conduct Network Planned Outages on behalf of Ausgrid, these outages have been defined a Metering Coordinator Distribution Planned Outages (MCDPO). The customer outage notification obligations remain with Ausgrid, the MC is conducting to outage via a deed with Ausgrid. For more information on the MCDPO deed, contact us at ausgrid_metering@Ausgrid.com.au.

Unless a site has been identified as complex by the Original MC (who has notified Ausgrid of this fact), any Supply Point (the connection point between the customers electrical installation and Ausgrid's distribution network) which has six NMIs or less (regardless of meter Type) or more than one Business customer NMI, this will be scheduled as a MCDPO. Ausgrid will not visit the site to scope or conduct outage and only notify customers of the outage through our outage management system.

Ausgrid will be conducting site visits to scope outage requirements for any Supply Point that has seven or more NMIs or there are more than two business/commercial NMIs.

Once Ausgrid has scoped the site or determined that a MCDPO will be used for the outage, we will raise a MFIN to all retailers associated with the outage.

Where an MC has identified that an outage at a site is complex, the MC must notify us as soon as practicable by contacting oiacomplex@Ausgrid.com.au and provide the relevant information to support the complex assessment.

15 business days prior to the outage we will send an email to a designated MC email address providing additional information about the outage and the participant ID of the business conducting the outage. MCs can opt in to a MFIN which will contain the same information as delivered by the email. An example of an email we will send to the MC is below.

Email Sender: OIAI@ausgrid.com.au
 Email Recipient: Stored MC email addresses
 Email cc: OIAI@ausgrid.com.au
 Email Subject: One In All In Outage Confirmation – NMI:XXXXXXXX – Outage ID: XXXXXXX – Outage Date XX/XX/XXXX

Dear Metering Co-ordinator

NMI: 4102XXXXX
 Address: UNIT 43 24-32 COUNCIL ST BONDI JUNCTION 2022

Ausgrid is pleased to confirm that a One In All In has been scheduled for the NMI at the above address. MSATS has identified that you have been nominated as the MC for this NMI, please see below details for information relating to the outage.

- Outage Date <MBS Outage Date>
- Start Time <MBS Outage Time>
- Duration <MBS Outage Duration>
- OutageID <NECF Outage ID>
- Participant performing outage <MBS Outage Participant>
- NMI count <MBS Legacy meter count>
- Outage Notes <MBS Outage Comment/LNSP Message>
- SiteAccessComments <MBS Outage Access comments> (if exists)
- MeterComment <MBS Outage Meter comments> (if exists)

Failure to attend this appointment may result in a charge to the Retailer and additional costs for any subsequent outages.

Kind Regards

B2B Experience and Operations
 Email: OIAI@ausgrid.com.au

Please do not respond to this email.

If an MC churns after this notification, we will retrigger a notification to the new MC.

To improve efficiency of meter replacements for MC field technicians, where possible we will schedule outages across multiple metering points (eg. floors in an apartment building) on the same day so that MC technician can work at multiple location at the same time. A unique outage ID will be allocated per meter point.

The MC are to provide a sign on form for us or an MC conducting a MCDPO on behalf of Ausgrid when ready for an outage isolation to occur. MC must sign on and off this form before we or an MC conducting an MCDPO will re-energise the supply to the MC MPDs. Attachment J outlines the metering isolation procedure that must be followed for every OIAI outage.

If an outage is cancelled, we will email you a notification of the cancellation to your nominated MC email address. If an outage is cancelled we will also cancel the SSWTIOIAI Service Order submitted

by the retailer for the NMI, the initiating retailer will then need to submit a new SSWTISR Service Order to arrange a new outage.

Any general enquiries on OIAI can be sent to oi.ai@Ausgrid.com.au.

3.3.27 Service Works

All service work, including new network connections, upgrades to the existing connection point and physical disconnections/reconnections at the connection point must be completed by an appropriate level 2 ASP. You are responsible for arranging these ASP services.

Upon completion of the service work a NOSW must be submitted by the ASP, within 2 business days of completing the work as required by Ausgrid's ES4 Service Provider Authorisation policy.

The NOSW cannot be combined with the NOMW.

Details of what notification is required to us can be found in Annexure D.

More information on the NSW Accredited Service Provider scheme can be found on the NSW Government website:

<https://energy.nsw.gov.au/government-and-regulation/legislative-and-regulatory-requirements/asp-scheme-and-contestable-works>

3.3.28 Identification of existing Ausgrid metering configurations in MSATS

To assist you in identifying the potential metering configuration onsite prior to attending, we have included a metering configuration ready reckoner as Annexure B. Using this Annexure and the data provided in MSATS you may be able to determine the existing metering configuration prior to visiting the site.

3.3.29 Network Service faults and neutral integrity

If you determine that there may be a service fault, eg., high volts, the MP must call the Ausgrid Emergency Services line 13 13 88.

If you determine that there may be a service fault, eg., high resistance neutral, you must call our Emergency Services line 13 13 88. If it is reported to us as a potential supply fault, your installer must remain onsite until we arrive to attempt to rectify the problem. In general if the installation is not in close proximity to the distribution substation, and if the active(s) to neutral fault loop impedance is greater than 0.4 Ohms with the MEN link disconnected, it must be reported to our Emergency Services line 13 13 88. Refer to NS 282 for information regarding service testing to Ausgrid's network.

3.4 MSATS

3.4.1 Changing the MC, MP or MDP roles

A prospective change request nominating a new MP or new MDP must not be raised while there is an installed Type 5 or 6 meter unless the retailer intends to replace the Type 5 or 6 meter.

A retrospective change request nominating a new MP or new MDP must not be raised while there is an installed Type 5 or 6 meter.

You must ensure that a CR1500 is not submitted to change the MC, MP or MDP roles while a metering installation is a Type 5 or 6 metering installation.

3.4.2 MSATS standing data for controlled load

We will use the MSATS "Controlled Load" field to determine the correct network tariff for each meter register. When populating MSATS, the value must be set to:

"YES" if the meter register is measuring a load that is controlled by a control load device which is contained in the MPBs meter;

“EXTERNAL” if the meter register is measuring a load that is controlled by a control load device which is one of our Network Devices;

“NO” if the meter register is not measuring a load that is controlled by a control load device, i.e. no controlled load tariff onsite.

3.4.3 Network tariffs

The retailer should provide you with the network tariff applicable for the NMI. You are responsible for correctly mapping the network tariff to the corresponding meter register in MSATS. To ensure that the network tariff aligns with the retailer’s tariff you must request the network tariff from the retailer if you do not have or you are unsure of the network tariff for the metering installation.

We will validate the network tariffs submitted in your change requests, if these do not match specific criteria which meets the requirements of ES7 - Network Pricing Guide, we will automatically update MSATS with valid tariff arrangements. If it is deemed that this update is incorrect the MPB or Retailer may resubmit another Change Request to update the network tariff.

4.0 PROCEDURES FOR EMBEDDED NETWORK MANAGERS

4.1 Introduction

This section applies to all embedded network managers who are operating, or intending to operate, in our network area.

In this section the term 'you' or 'your' means embedded network manager including their sub-contractors.

Any enquires regarding embedded networks in Ausgrid's network can be sent to embeddednetworks@ausgrid.com.au.

4.2 Establishing an embedded network connection

To establish a new connection for the incoming supply, a gate metering point for a brownfield conversion, or to carry out any subsequent upgrades to the incoming supply, you will need to lodge a preliminary enquiry application. This allows us to determine the method of supply and any specific terms and conditions of connection. More details of this process and the forms can be found on our website.

<https://www.ausgrid.com.au/Connections/Apply-for-a-connection/Embedded-network>

The establishment and operation of the network connection point for the embedded network is consistent with a single occupancy site, however the NMI will have an embedded network parent code registered with AEMO and if the embedded network operator has embedded customers wishing to have retailer of choice these will also have on-market child NMIs. We will register the embedded network parent code with AEMO. On-market child NMIs will be issued by you when requested by the retailer following registration and normal NMI allocation processes. On-Market child NMIs will be linked to the parent code NMI.

5.0 AUTHORITIES AND RESPONSIBILITIES

For this network standard the authorities and responsibilities of Ausgrid employees and managers in relation to content, management and document control of this network standard can be obtained from the Company Procedure (Network) – Production / Review of Engineering Technical Documents within document repository. The responsibilities of persons for the design or construction work detailed in this network standard are identified throughout this standard in the context of the requirements to which they apply.

6.0 RELATED DOCUMENTS

6.1 General

All work covered in this document shall conform to all relevant Legislation, Standards, Codes of Practice and Network Standards. Current Network Standards are available on Ausgrid's Internet site at www.ausgrid.com.au.

6.2 Ausgrid documents

- Customer Installation Safety Plan
- Electrical Safety Rules
- NS261 Requirement for Design Compliance Framework for Network Standards
- ES3 Part A - Metering Installations
- ES3 Part B – Metering equipment technical description for Type 5 and Type 6 metering installations
- ES4 Service Provider Authorisation
- ES7 Network Price Guide

6.3 Other standards and documents

- ENA Doc 001-2008 National Electricity Network Safety Code
- Service & Installation Rules of NSW
- AS62052.21 electricity Metering Equipment (ac) – General Requirements
- Code for safe installation of direct-connected whole current electricity metering in NSW (Minimum requirement for safety management systems of retailers and metering providers)

6.4 Acts and regulations

- NSW Electricity Supply Act
- NSW Electricity Supply (General) Regulation
- NSW Electricity Supply (Safety and Network Management) Regulation
- NSW Electricity (Consumer Safety) Act
- NSW Electricity (Consumer Safety) Regulation
- NSW Work Health and Safety Act and Regulation
- National Electricity Rules
- National Electricity Retail Rules

7.0 DEFINITIONS

ASP Accredited Service Provider. An individual or entity accredited by the NSW Department of Planning and Environment, Energy, Water and Portfolio Strategy Division, in accordance with the Electricity Supply (Safety and Network Management) Regulation (NSW).

Ausgrid Authorisation Authorisation is a method of ensuring that people who do work on our network have the necessary competency demonstrated by training,

qualifications, experience and knowledge to carry out their work in a safe manner

CCEW	Certificate of Compliance Electrical Works.
Document control	Ausgrid employees who work with printed copies of document must check the document repository regularly to monitor version control. Documents are considered "UNCONTROLLED IF PRINTED", as indicated in the footer.
ENM	Embedded Network Manager
FRMP	Financially Responsible Market Participant or a retailer who has nominated themselves as the Financially Responsible Market Participant for a NMI
MC	Metering Coordinator as defined in the Rules
MDP	Metering Data Provider as defined in the Rules
MP	Metering Provider as defined in the Rules
Network Standard	A document, including Network Planning Standards, that describes the Company's minimum requirements for planning, design, construction, maintenance, technical specification, environmental, property and metering activities on the distribution and transmission network. These documents are stored in the Network Category of the document repository.
NMI	National Metering Identifier as defined in the Rules
NOMW	Notification of Metering Work as defined in the B2B Procedure. This notification also includes network devices and is to be completed by the MP.
NOSW	Notification of Service Work. This notification is to be completed by the ASP when conducting service works.
NUOS	Network Use of System charge.
OIAI	One In All In
Original MC	The metering coordinator who identified a shared fuse situation at a site.
Review date	The review date displayed in the header of the document is the future date for review of a document. The default period is three years from the date of approval however a review may be mandated at any time where a need is identified. Potential needs for a review include changes in legislation, organisational changes, restructures, occurrence of an incident or changes in technology or work practice and/or identification of efficiency improvements.
Rules	National Electricity Rules, National Energy Retail Rules
Supply Point	The connection point between the customers electrical installation and Ausgrid's distribution network.
SSWTISR	<i>Supply Service Works Temporary Isolation Scoping Request Service Order</i>
SSWTIOIAI	<i>Supply Service Works Temporary Isolation One In All In Service Order</i>

8.0 RECORDKEEPING

The table below identifies the types of records relating to the process, their storage location and retention period.

Table 6 Recordkeeping

Type of Record	Storage Location	Retention Period*
Approved copy of the network standard	Document repository Network sub process Standard – Company	Unlimited
Draft Copies of the network standard during amendment/creation	Records management system Work Folder for Network Standards (HPRM ref. 2014/21250/215)	Unlimited
Working documents (emails, memos, impact assessment reports, etc.)	Records management system Work Folder for Network Standards (HPRM ref. 2014/21250/215)	Unlimited

* The following retention periods are subject to change eg. if the records are required for legal matters or legislative changes. Before disposal, retention periods should be checked and authorised by the Records Manager.

9.0 DOCUMENT CONTROL

Document Owner : Metering Compliance and Regulation Manager

Distribution Coordinator : Manager Asset Standards

Annexure A - Network devices

A1 Relays

All relays in Ausgrid's network area are deemed to be network devices. Below are examples of relays in Ausgrid's network area:



Figure A1: Ripple Receiver



Figure A2: Ripple Receiver



Figure A3: Ripple Receiver



Figure A4: Ripple Receiver

If Metering Providers discover an obsolete Zellweger ZE22/3 load control relay (example below – black device on right hand side of image) is located onsite they must not remove the relay and must contact Ausgrid to arrange for removal. See Annexure B of ES3 Part A.



Figure A5: Zellweger ZE22/3 Ripple Receiver

A2 Time switches

All time switches in Ausgrid's network area are deemed to be network devices. Below are examples of time switches in Ausgrid's network area:



Figure A6: Time Switch



Figure A7: Time Switch



Figure A8: Time Switch



Figure A9: Smart Time Switch

Annexure B – Meter Category Codes in MSATS

For Ausgrid owned Type 5 and 6 metering installations located in Ausgrid's network area the following MSATS fields are populated with information out the meters installed a particular NMI:

(a) **METER_MANUFACTURER** (b) **METER_MODEL**

Using this information in MSATS the Metering Provider in most cases will be able to determine the metering configuration at the site prior to attending.

NOTE: the information contained in this Annexure, Ausgrid's Systems and MSATS may not be a true reflection of what is actually installed onsite.

Table B1: Meter Hardware Configuration

Meter Group Category	Description
B1	Single Phase Single Element Direct Connected Accumulation Watt-hour Meter
B1a	Two Phase Single Element Direct Connected Accumulation Watt-hour Meter
B2	Single Phase Dual Element Direct Connected Accumulation Watt-hour Meter
B3	Three Phase Single Element Direct Connected Accumulation Watt-hour Meter
B4a	Single Phase Single Element Low Voltage Current Transformer Accumulation Watt-hour Meter
B4b	Three Phase Single Element Low Voltage Current Transformer Accumulation Watt-hour Meter
E1	Single Phase Single Element Direct Connected Load Profiling Watt-hour Meter
E1a	Single Phase Single Element Direct Connected Load Profiling Watt-hour Meter with Load Control
E1c	Single Phase Single Element Direct Connected Load Profiling Watt-hour Meter with disconnect contactor
E2	Single Phase Dual Element Direct Connected Load Profiling Watt-hour Meter
E2c	Single Phase Dual Element Direct Connected Load Profiling Watt-hour Meter with disconnect contactor
E3	Three Phase Single Element Direct Connected Load Profiling Watt-hour Meter
E3a	Three Phase Single Element Direct Connected Load Profiling Watt-hour Meter with Load Control
E3c	Three Phase Single Element Direct Connected Load Profiling Watt-hour Meter with disconnect contactor
E4	Three Phase Single Element Low Voltage Current Transformer Load Profiling Watt-hour Meter
E4a	Three Phase Three Wire High Voltage Single Element Load Profiling Watt-hour Meter
E4b	Three Phase Four Wire High Voltage Load Profiling Watt-hour Meter
E4c	Three Phase Three/Four Wire High Voltage Single Element Load Profiling Watt-hour Meter
E4d	Three Phase Three/Four Wire High/Low Voltage Single Element Load Profiling Watt-hour Meter

Table B2: MSATS Field Information

Manufacturer	Model	Meter Group Category
EMAIL	BAZ	B1
EMAIL	M2	B1
EMAIL	PRE-BAZ	B1
EMAIL	UNKNOWN	B1
EMMCO	AZ	B1
EMMCO	BAZ	B1
ISKRA	E89G2	B1
ITRON	ACE1000	B1
LANDIS&GYR	CL170XF3	B1
LANDIS&GYR	CL6F3	B1
LANDIS&GYR	CM170XHF6	B1
LANDIS&GYR	CM170XF15	B1
LANDIS&GYR	CM170XF6	B1
LANDIS&GYR	EM500	B1
LANDIS&GYR	NPP	B1
SANGAMO	HM	B1
SANGAMO	HMT	B1
WF-EC	UNKNOWN	B1
WF-EC	WF2	B1
WF-EC	WF3	B1
ZELWEGGER	UNKNOWN	B1
UNKNOWN	UNKNOWN	B1/B2/B3/B4a/B4b/E3
SANGAMO	UNKNOWN	B1/B3
EMAIL	UNKNOWN	B1/B3/B4a/B4b
LANDIS&GYR	UNKNOWN	B1/B3/B4b
EMAIL	M1	B1/B4a
EMAIL	M3	B1/B4a
EMAIL	A11B	B2
EMAIL	A11P	B2
NILSEN	2500	B2
GE	WX112	B2/B3
NILSEN	2100	B2/E2
NILSEN	2600	B2/E2
ELSTER	A1100	B3
EMAIL	NPR	B3
EMAIL	SDM	B3
EMMCO	SD	B3
LANDIS&GYR	Y2R	B3
SANGAMO	S203.1	B3
EMAIL	A1K	B3/B4b
EMAIL	A1R-AL	B3/B4b
LANDIS&GYR	EM3030	B3/E3
UNKNOWN	CB,DB80	B4a/B4b/E4
EMAIL	E1-R	B4b
EMAIL	NT	B4b
EMAIL	Q60H	B4b
GE	TMR92	B4b

Manufacturer	Model	Meter Group Category
ABB	A140	E1
EMAIL	P1	E1
GE	WX-110	E1
ISKRA	ME371	E1
ISKRA	ME372	E1
LANDIS&GYR	EM1000	E1
LANDIS&GYR	U1210	E1
EDMI	MK7C	E1/E1c
AMPY	EM1242	E1/E2
NILSEN	2610	E1/E2
SECURE/PRI	IC400	E1/E2
EDMI	MK7A	E1/E2c
AMPY	EM1210	E2
AMPY	EM1212	E2
EMAIL	A11L	E2
LANDIS&GYR	EM1210	E2
LANDIS&GYR	U1225	E2
NILSEN	2621	E2
SECURE/PRI	I-CREDIT	E2
AMPY	EM5100	E3
EMAIL	Q4A	E3
ISKRA	MT371	E3
ISKRA	MT372	E3
LANDIS&GYR	EM3332	E3
LANDIS&GYR	EM5100	E3
LANDIS&GYR	U3300	E3
SECURE/PRI	SPRINT	E3
SECURE/PRI	UNKNOWN	E3
EDMI	MK10D	E3/E3c
EDMI	MK10	E3/E4
EDMI	MK10A	E3/E4
EMAIL	Q3	E3/E4/E4a
EMAIL	Q4	E3/E4/E4a
EDMI	MK6	E3/E4c/E4d
ABB	A1R	E4
ELSTER	A1700	E4
EMAIL	CALMU	E4
LANDIS&GYR	EM5300	E4/E4a
ABB	AINRTL	E4a
SCHNEIDER	ION8800	E4c
EDMI	MK3	E4c/E4d
EDMI	MK6N	E4c/E4d
EDMI	MK111	E4d
EDMI	MK10E	E4d
EDMI	MK2	E4d
EDMI	MK6E	E4d

Annexure C – Sample Type 6 Disposal Letter



27 January 2017

Person's Name
Company
Street Name
City/Town State Postcode
Country

570 George Street
Sydney NSW 2000
All mail to GPO Box 4009
Sydney NSW 2001
T +61 2 131 525
F +61 2 9269 2830
www.ausgrid.com.au

Dear Metering Provider

Proposed agreement under clause 2.9.1 of AEMO NEM Metrology Procedure Part A.

I refer to your obligations as a Metering Provider in the National Electricity Market (NEM).

As you are aware, under the NEM Metrology Procedure Part A issued by the Australian Energy Market Operator there is an obligation on the new Metering Provider to return a decommissioned meter to its owner.

The relevant provision at clause 2.9.1 states that the Metering Provider undertaking the decommissioning work must ensure that:

"The ownership of the existing meter is ascertained and arrangements made for the meter to be returned to its owner within 10 business days unless otherwise agreed."

The purpose of this letter is to inform you that Ausgrid does not require decommissioned Type 6 metering assets that it owns to be returned to Ausgrid and is proposing for you, as the business responsible for decommissioning meters to dispose of the metering asset in a safe and appropriate manner rather than returning those assets to Ausgrid. As part of this proposal, Ausgrid requires that you obtain and store photographic evidence of the decommissioned Type 6 metering assets that depict the final consumption reads and meter asset serial number so that you can make that information available to Ausgrid on request.

We also draw your attention to the potential risk of exposure to asbestos and asbestos carrying material when handling and disposing of decommissioned meters. You should develop and act in accordance with your own policies and procedures which should, at a minimum, be compliant with relevant legislation, regulations and industry standards.

If you do not agree to taking responsibility for the disposal of the metering asset, please let us know by 10 February 2017, otherwise this letter will be taken to be an agreement for the purpose of clause 2.9.1 of the NEM Metrology which can be amended by either party by notice and mutual agreement.

If you would like to discuss this proposal in further detail, please contact Wayne Turner, Metering Compliance and Regulation Manager on (02) 4399 8133.

Regards,

Murray Chandler
General Manager Asset Management (Acting)

Annexure D – Notification requirements by the MC/MP/ASP/EC to Ausgrid.

Example works conducted where Type 1-4 metering is installed.*	CA	NOMW	CCEW	NOSW
Like for like replacement, no additional work.	No	Yes	No	No
Like for like meter replacement - re-routing existing wiring.	No	Yes	No	No
Like for like meter replacement - drilling mounting hole for new meter.	No	Yes	No	No
Like for like meter replacement - replacing wiring between service fuse meter or service fuse – customer main switch.	No	Yes	No	No
Replace plug in meter(s) with bottom connect at single NMI meter boards.	No	Yes	No	No
Replace plug in meter(s) with bottom connect at multi tenanted installations (due to potential meter board reconfiguration).	No	Yes	Yes	No
Like for like meter replacement - replacement of service fuse and/or service neutral link and/or customer main switch.	No	Yes	Yes	No
Like for like meter replacement - switchboard modifications or moving customer equipment (inc. service fuse or neutral link).	No	Yes	Yes	No
Any service mains work (inc. disconnection or reconnection).	Yes	Yes	Yes	Yes
New Installation.	Yes	Yes	Yes	Yes
Upgrade of installation (eg. add phases or generation).	Yes	Yes	Yes	Yes (not required where no service work was conducted (eg. add solar))
Permanent disconnection of supply.	No	Yes	No	Yes

***This list is not exhaustive.**

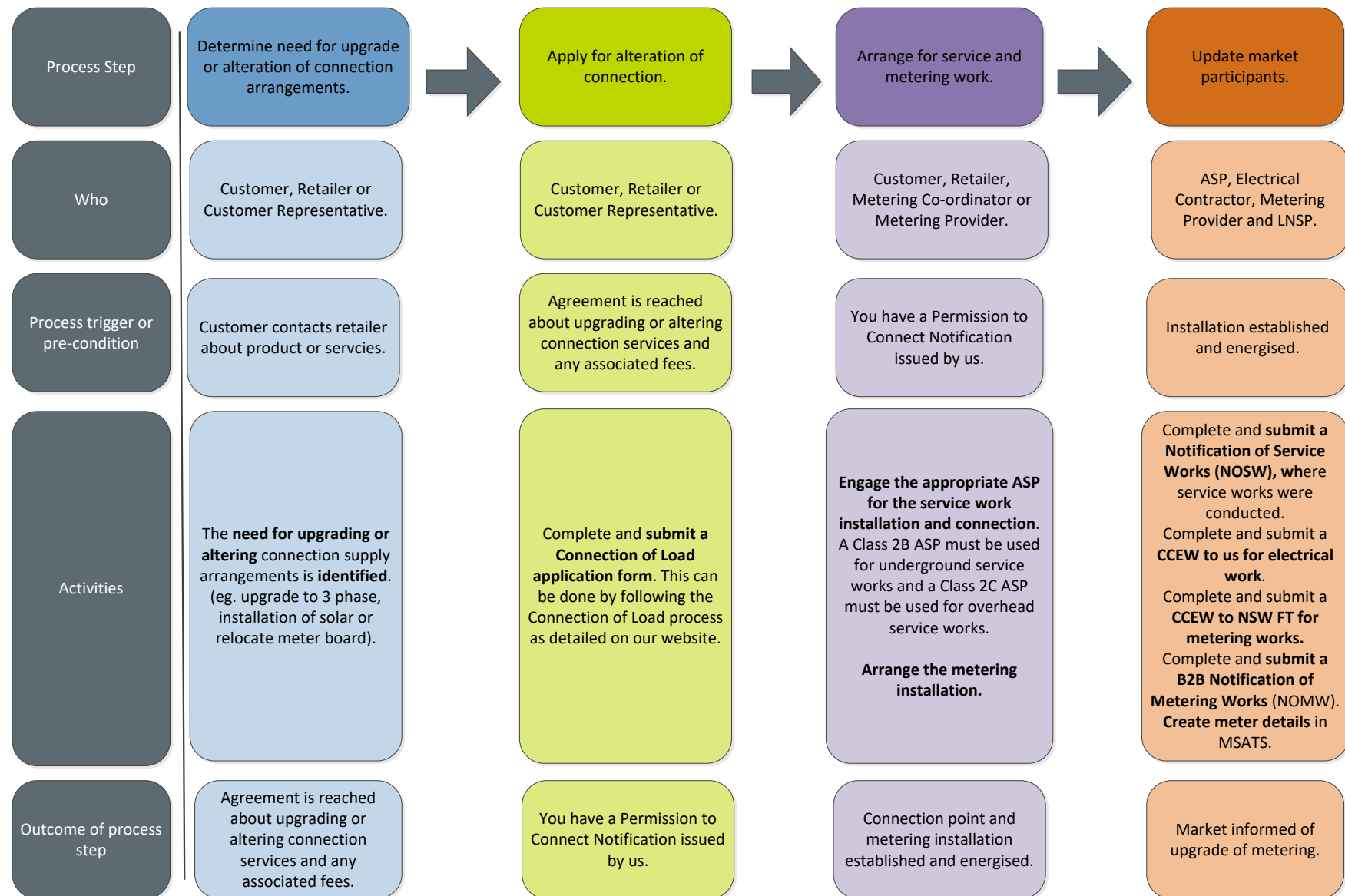
CA – Connection Application

NOMW – Notification of Metering Work

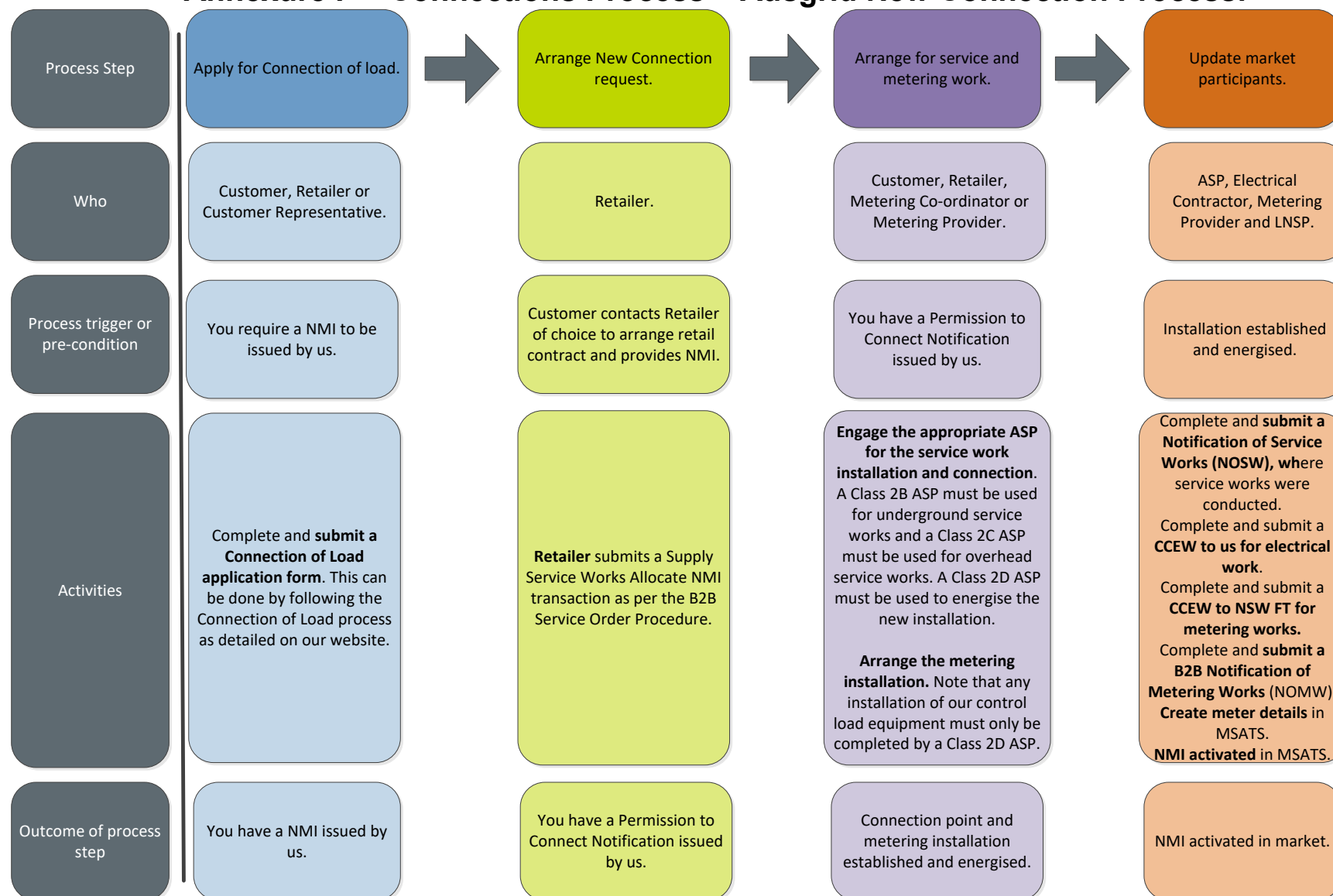
NOSW – Notification of Service Work

CCEW – Certificate of Compliance Electrical Works

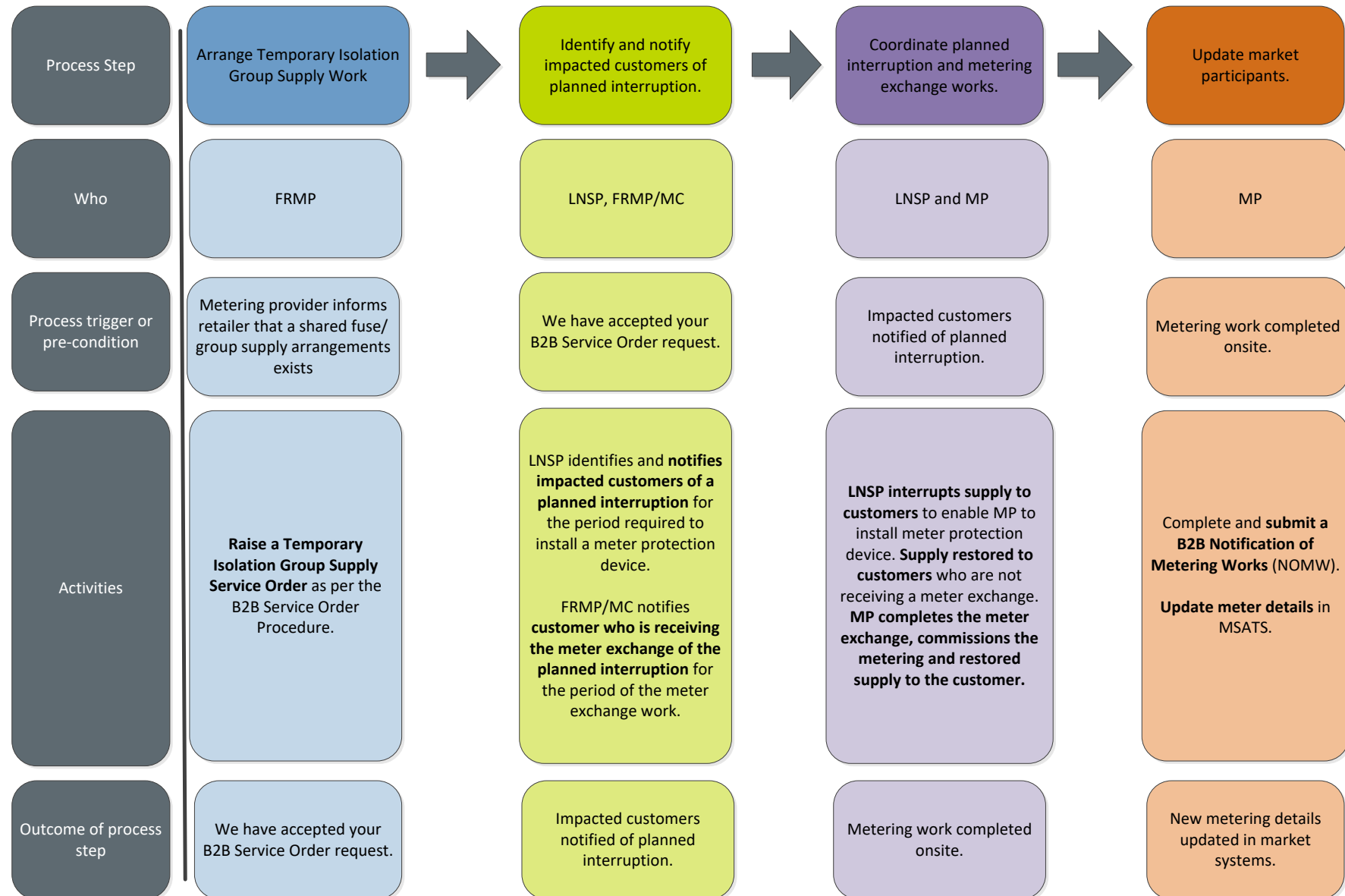
Annexure E – Connections Process – Ausgrid Connection Alteration Process.



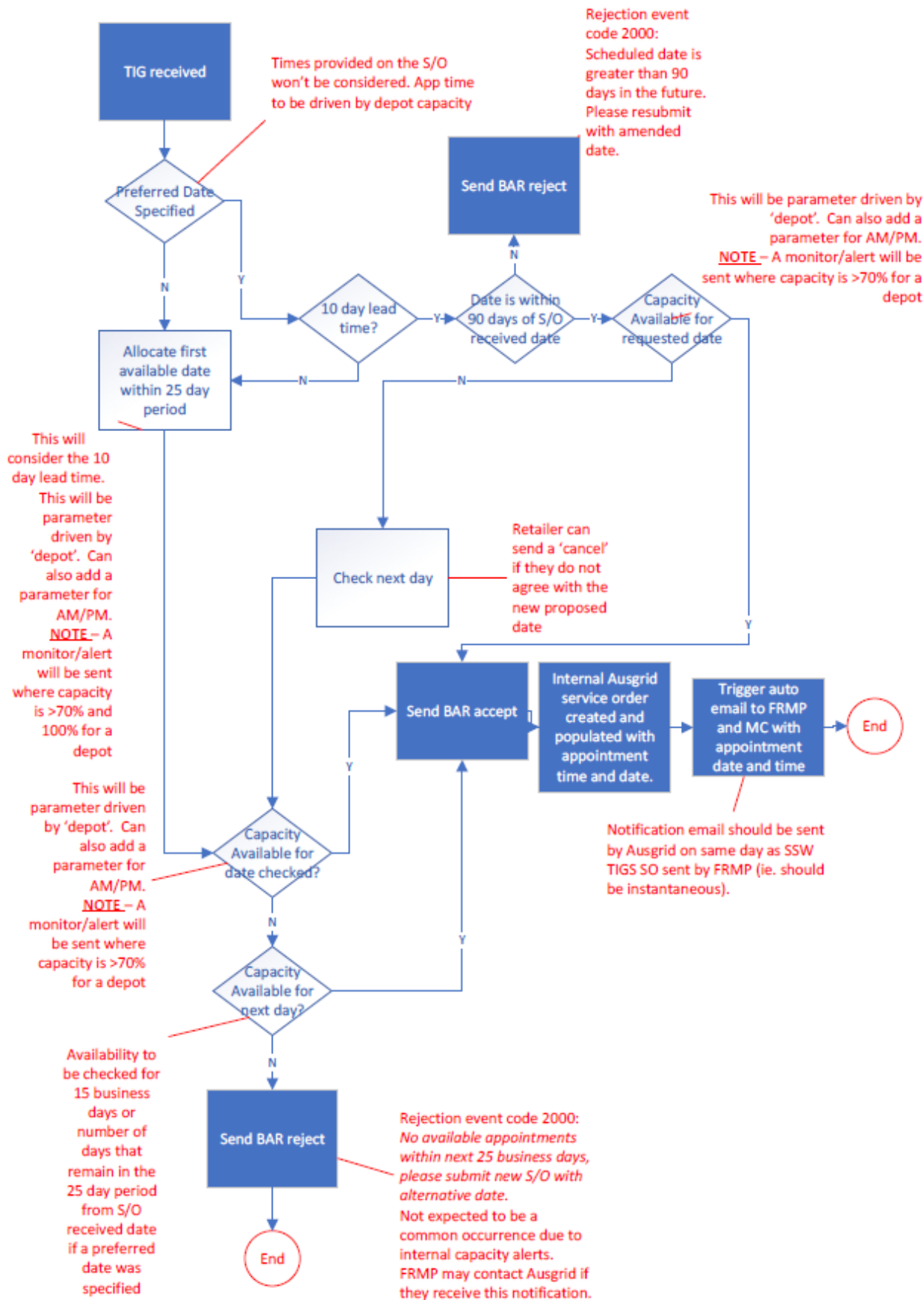
Annexure F – Connections Process – Ausgrid New Connection Process.



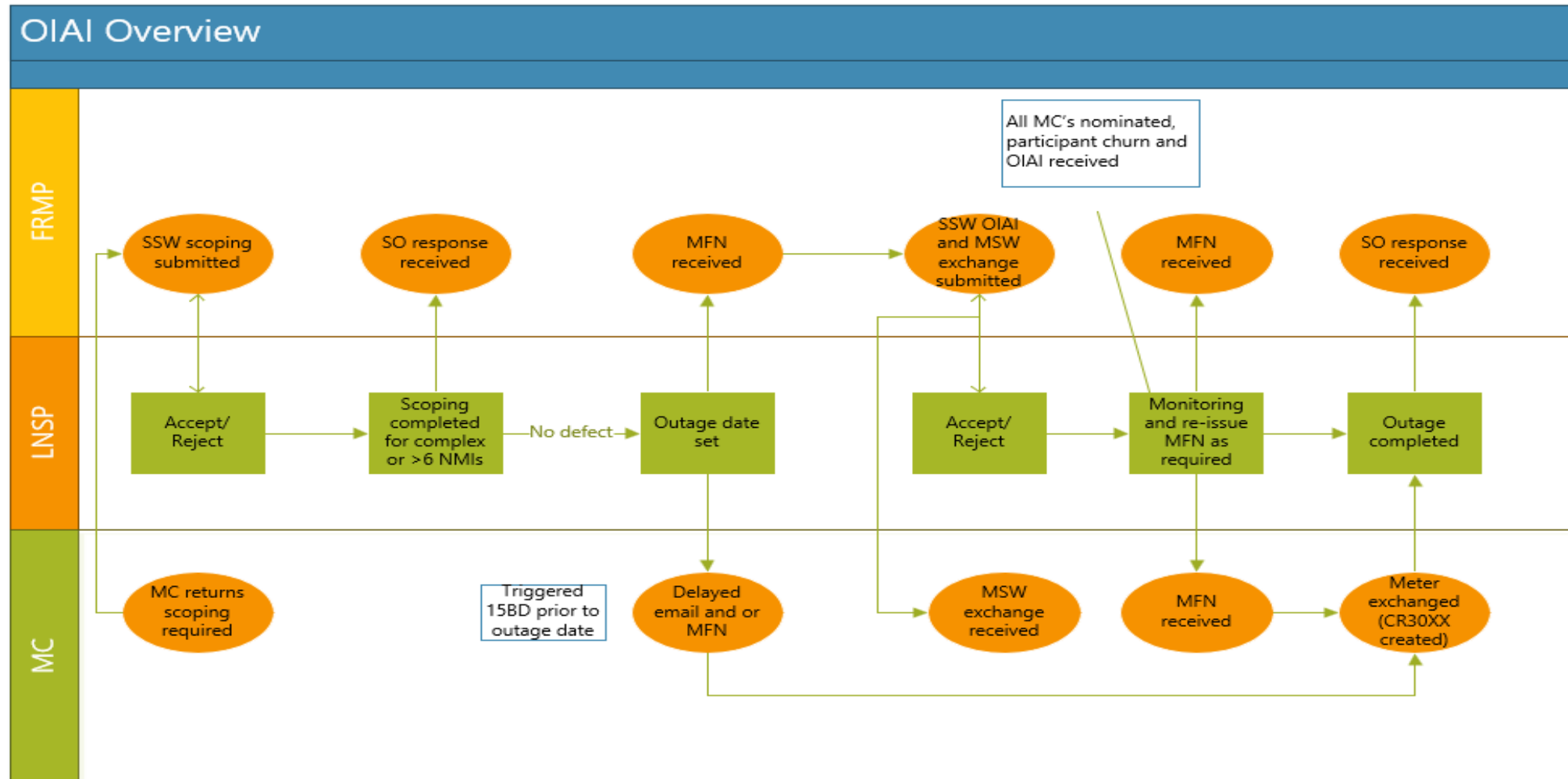
Annexure G – B2B Process – Temporary Isolation Group Supply Process.



Annexure H – B2B Process – Temporary Isolation Group Supply Appointment Process Flow.



Annexure I – B2B Process – One In All In Process Flow



Annexure J – Procedure - Metering Isolation for Smart Meters

Purpose

Provide the procedure to be followed to isolate a shared fuse isolation installation for the purpose of replacing legacy meters, on installations connected to the Ausgrid network, with smart meters.

Applies to

Ausgrid employees, contractors, Metering Coordinators (MCs) and Metering Technicians authorised to conduct Metering Coordinator Distribution Planned Outage (MCDPO).

Introduction

The National Electricity Rules requires Ausgrid as the Local Network provider, to isolate installations where multiple meters are supplied from the one shared isolation point, for the purpose of replacing, installing or repairing smart meters, where a retailer planned interruption cannot be conducted. This procedure is to be followed to carry out the isolation of the shared fuse installation. Where the isolation will be undertaken by a MC on behalf of Ausgrid, the MC company must also agree and comply with the MCDPO Deed (the Deed).

For further information regarding the full process refer to ES 12 – Metering Contestability. Any enquiries on the use of this procedure can be directed to Ausgrid_metering@ausgrid.com.au

1 Isolation Process

The installation can be isolated within the customer's installation or at network apparatus.

- Isolation within customer installation – This method should be used where the point of isolation is located on a switchboard within the Customer's Installation.
- Isolation at network apparatus – This method must be used where isolation within the customer's installation cannot be performed.

1.1 Isolation within Customer Installation

This method is to be followed to isolate the customer installation at a point of isolation located within the customer's installation.

1.1.1 Training and Authorisation

As the point of isolation is located within the customer's installation, this work is not within scope of Ausgrid's Electrical Safety Rules (ESR). The Deed and [Code for safe installation of direct-connected whole current electricity metering in NSW](#) set out the training and qualification requirements.

1.1.2 Isolation Process

Stage	Description
1.	<p>Confirm the point of isolation can be created within the customer's installation.</p> <p>Note: Situations where the isolation cannot be carried out at the customers installation are as follows:</p> <ul style="list-style-type: none"> • bolted fuses, • service cabinets, • barge board fuses, • active links, • Service Protective Device (SPD) located in network apparatus.
2.	Perform/confirm the isolation and secure the point of isolation.
3.	Apply danger tag(s) to point of isolation (refer to section 2.1 of Annexure J).
4.	Prove installation downstream of isolation is de-energised.
5.	Complete and return Isolation Record (refer to section 2.2 of Annexure J) to metering technician(s).

1.1.3 Re-energisation Process

Stage	Description
1.	Confirm all metering technicians have signed off the Isolation Record.
2.	Complete the re-energisation section of the Isolation Record.
3.	Remove the danger tag(s).

4.	Re-energise the installation. Note: Where any alterations have been made to any Active or Neutral conductors between the Point of Common Coupling (PCC) and the SPD/Service neutral link, carryout testing at the incoming neutral link to confirm the installation has an NS282 compliant neutral connection.
5.	Confirm there is not a hazardous voltage on earthed parts of the installation. For example, refer to NS282 section Voltage Between Customer's Neutral and Independent Earth.
6.	Maintain a copy of the Isolation Record.

1.2 Isolation at Network Apparatus

This method is to be followed to isolate the customer installation at network apparatus.

1.2.1 Training and Authorisation

As the isolation point will be located at Ausgrid's network apparatus, the ESR applies. The person carrying out/confirming the isolation must be electrically qualified (as defined by the ESR) and authorised to work on, near, or in the vicinity of the Ausgrid network. (As per the ESR, isolation of a service by an electrically qualified worker does not require an operating authority).

1.2.2 Isolation Process

Stage	Description
1.	Confirm the isolation has been created. Examples include SPD in network pillar, breaking service connections at network apparatus.
2.	Apply danger tag(s) to isolation point (Refer to section 2.1 of Annexure J).
3.	Prove installation is de-energised.
4.	Complete and return Isolation Record to the metering technician(s).

1.2.3 Re-energisation Process

Stage	Description
1.	Confirm all metering technicians have signed off the Isolation Record.
2.	Complete the re-energisation section of the Isolation Record.
3.	Remove the danger tag(s).
4.	Re-energise the installation, up to the line side of the Meter Protective Device(s) (MPDs). Note: Where service connections have been broken, carry out testing in accordance with NS282.
5.	Maintain a copy of the Isolation Record.

2 Recording and Documentation

This section contains the documentation requirements applicable for this procedure.

2.1 Danger Tag

The following danger tag must be secured at all isolation points associated with this procedure. All fields must be completed in a legible manner using black or blue pen.



The danger tags will be issued by Ausgrid to each MC who is approved to conduct MCDPOs by Ausgrid.

2.2 Isolation Record

The following must be recorded on a hardcopy form for each isolation:

- a. Installation address (and unit number, floor number, as appropriate).
- b. Name and signature of person who has carried out/confirmed isolation of the installation.
- c. Date and time the isolation has been conducted.
- d. Each metering technician is to confirm that, once the isolation is complete, and before commencing work, they will:
 - i. identify the limits of the isolation; and
 - ii. prove the conductors on which they intend to work are de-energised (using MC approved testing methods).
- e. Once all metering technicians are ready for the installation up to the line side of the MPDs to be energised, each metering technician is to sign the form confirming that:
 - i. they will regard the installation up to the line side of the MPDs as energised; and
 - ii. the parts of the installation on which they worked are safe to re-energise up to the line side of the MPDs.

- f. Name and signature of person who has, after confirming all metering technicians have signed off the form, carried out/confirmed the re-energisation of the installation, up to the line side of the MPDs.
- g. Date and time the installation, up to the line side of the MPDs, was re-energised.

Ausgrid, Authorised Ausgrid Contractor or MC approved to conduct MCDPO is responsible for the isolation and re-energisation in 2.2 c) and 2.2 g) of Annexure J.

3 Roles and Responsibilities

Role	Responsibility
Head of Customer & Commercial	Has the authority and responsibility for approving this procedure.
Head of Network Strategy & Future Grid	Has the authority and responsibility for endorsing this procedure.
Metering Compliance & Regulation Manager	Has the authority and responsibility for the maintenance of this procedure.

4 Definitions

Term	Definition
Contestable MC	MC
Deed	MCDPO Deed
Metering Coordinator (MC)	Australian Energy Market Operator approved Metering Coordinator
NS282	Network Standard 282 – Service Testing
PCC	Point of Common Coupling - refer to Service and Installation Rules of NSW

5 References

Ausgrid Electrical Safety Rules
 MCDPO Deed
 National Electricity Retail Rules
 Code for safe installation of direct-connected whole current electricity metering in NSW
 NS282 – Service Testing
 Service and Installation Rules of NSW