

Power of Choice Procedures Working Group

3 and 4 February 2016 Workshop

Meeting notes

38 Attendees

Name	Company
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David Ripper	AEMO
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Shaun Cupitt	Acumen Metering
Kate Reid	AEMC
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Stephen Zok	Ausgrid
Jackie Krizmanic	Ausnet Services
Peter Ellis	Ausnet Services
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Douglas Miles	Energex
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Peter Van Loon	Meridian Energy
Charles Coulson	Metropolis
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Kam Vessali	Power and Water Corporation NT
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Important note

The intent of this document is to capture the commentary in summary form, from the POC Procedures Working Group (POC-PWG) workshop held over 3rd and 4th February 2016. The topics under discussion were led by the slides provided for the day and were presented by AEMO representatives. The information on the slides is not reproduced here, nor are the comments provided to the slides from the presenter, save for comments provided to summarise a discussion or in direct response to a question from an attendee.

Please note that procedure changes must be made in accordance with the NER Rules consultation procedures and therefore, all matters discussed at workshops and other meetings will be considered by AEMO and will assist in AEMO forming a position on various subjects but should not be taken as a representation, warranty or agreement, express or implied, as to the final procedure changes.

General items

Timing of AEMO determinations

Participants:

- Participants would like to have information regarding AEMO's decisions/positions on key issues in advance of the formal consultation, and would like AEMO to provide specific dates on when decisions will be made. This is to facilitate discussions and planning within participants' businesses.
- There should be a record of how the AEMO's positions have changed and a trail of what allows AEMO to arrive at a decision.
- AEMO should make a straw man of its considerations available to participants, waiting until 22 April (formal consultation start date) would be too late.

AEMO:

- AEMO's notes will capture participants' feedback which will assist in AEMO forming a position on the various subjects under discussion and on the requirements of the rule changes.
- AEMO will endeavour to provide industry with information as positions are formed prior to the formal publication of consultation documents, As many of the topics for consideration are inter-related and will have impacts on various procedures, it may not be possible to provide further information prior to the formal publication of consultation documents.
- AEMO noted that the procedure changes are subject to the NER rules consultation requirements, which specify the process and the timeframes that AEMO will work to. These requirements include the opportunity for interested parties to engage with AEMO and provide formal submissions as procedures develop.
- Participants are invited to provide feedback that will inform AEMO's procedure development any time prior to the formal consultation - either during or after the workshop sessions.
- AEMO will consider the suggestion to maintain a straw man of its considerations.

Procedure discussions

Topics:

1. Type 4 Meter Identification
2. Type 4 Metrology Requirements
3. Distributor Sample Metering
4. Network Device Management Requirements
5. Reconnection, Disconnection
 - a) Site Identifier
 - b) Provision of Services
 - c) NMI Status
6. Emergency Priority Procedures
7. Meter Churn

Please refer to workshop discussion topics handout for context.

Topic 1: Type 4 Meter Identification

1. Should the market be able to identify different type 4 metering installations?

Yes. Benefits:

- Support retailer quoting process: identification of different subsets of type 4 metering installations would allow retailers/incoming retailers to determine the services they offer to customers, noting that there is also a commercial overlay that retailers will need to consider i.e. availability of services will be dependent on commercial agreement with the MC.
- Support distributors in determining the services they can access at a site.
- Support site configuration: e.g. sites with a current transformer will not have remote reconnection and remote disconnection.
- Allow the market to differentiate technologies at different sites, for example: a site with old technologies would not be able to meet the requirement to have register read included interval metering data.
- The rule requirement to identify type 4A would result in the need to change participant systems. This presents an opportunity to add in identification of the various type 4 subsets.

No – keep changes at a minimum, keep the identifications of current 1-4 metering installations as they are and provide additional options to be used after 1 December 2017. Reasons:

- A simpler implementation.
- Having too many classifications would result in overheads of keeping a translation table for the characteristics of each classification.
- Having too many classifications would impact system performance.

2. What are the potentially useful different type 4 categories?

- Suggested categories:
 - Existing type 4 (potentially further broken down by: current transformer/whole current, 3 phase/single phase)
 - Type 4 advanced whole current (small or large)

- Type 4 advanced current transformer (small or large)
 - Type 4A (potentially further broken down by: 4A no communications network or 4A customer refusal)
 - VIC AMI
 - Prepaid meters (noting that prepaid is not considered in the rules or procedures nor the subject of the rule changes at hand)?
 - Load control?
 - Network device?
- The differentiation of 'type 4 advanced' into subsets of (i) whole current and (ii) current transformer was primarily considered to be useful in identification of the baseline services available to participants (noting that the minimum services requirements in the NER vary between these two connection types).
 - Should type 4 minimum specification metering installations installed before 1 December 2017 have a separate classification and be transferred to the appropriate classification after 1 December 2017?
 - No, as the relevant service providers will need to go through the required accreditation process.
 - Yes, the provider can update them providing they have the capability to provide minimum specification services
3. How to identify different type 4 categories?
- Options:
 - Use one level of identification – add additional options to the existing metering installation type code field (e.g. COMMS4, ADV4CT, MRAM, etc.) to identify the different subsets of type 4 metering installations. This field is currently an 8-character alpha numeric field which will allow for different combinations of numbers and letters.
 - Use a combination of fields to identify different subsets of type 4 metering installations, a similar set up to VIC AMI meters which are identified by the metering installation type code (COMMS) and meter read type code (RWD) field. The next level of granularity is identified in a separate field.
 - Meter information can be identified through commercial negotiations.
4. Summary of discussions – key points of note:
- A general view was established that the MSATS meter installation type code was a field that could be used to accommodate new metering installation type descriptions/identifiers.
 - Having too many complex classifications at the top level (e.g. meter installation type code) could make the market too complicated and messy. If required, there is an alternate approach that could be taken - to look at the next, lower level of detail (e.g. single phase/three phase), in a different field.
 - Information on the type 4 classifications would only be useful if participants are mandated to populate the required field/s using the specific codes.
 - NMI discovery function in MSATS should include the different type 4 categories. As MPs and MDPs do not have access to NMI discovery, this identification should also be captured in C7

report. Knock-on effects on other market transactions and reports will also need to be considered.

Topic 2: Type 4 Metrology Requirements

1. Can stakeholders provide substantive reasons for modifications of metrology requirements for sub-sets of Type 4 metering installations for AEMO to consider?

Type 16 “Agreed Method” of substitution

- Consider modifying the Metrology procedure to allow MDPs to determine the appropriate substitution method for periods greater than 7 days, reverting to Type 16 “Agreed Method” only if substitution figures are challenged by relevant parties.
- The expected increase in the number of type 4 metering installations in the market would make Type 16 manual process unmanageable and current experience shows that the majority of the time, the FRMP, LNSP and LR would agree with the substitution method used by the MDP.
- Relevant parties should be given a period in which to object the substitution figures. After this period, the data become final. This is to prevent information from being unnecessarily held up. The objection period should be sufficient to allow any errors in substitution figures to be corrected. Incorrect substitution figures can have significant impact on wholesale settlement.

Differentiating type 4 metering installations based on large/small classification

- Metrology procedure should differentiate a type 4 small from a type 4 large. Sites with greater throughput pose greater risks to the market therefore should be subject to more complicated validation and substitution rules. Sites with lower throughput, although classified as type 4, should not bear the same costs of applying complicated rules.
- Metrology procedure should consider differentiating sites based on metering throughput rather than Jurisdiction-based customer classifications where there is a disparity in the upper consumption thresholds (i.e. 160, 100). This would make the market simpler.
- Victoria has been applying type 5 metrology to AMI meters (which are equivalent to type 4 min. spec metering installations) without issues.
- If all processes are automated then applying the same rules to large and small type 4 metering installations should not pose a problem, why then is there a need to differentiate between large and small?
- The risk of delineating between large and small is that the site classification/consumption could change.

Differentiating type 4 metering installations based on Current Transformer (CT), Whole Current (WC) and High Voltage (HV)

- Metrology should delineate sites based on CT, WC and HV. This delineation is already applied to type 5 meter registration i.e. for a CT site: a load check is required, WC: power outage check is required. It is recommended that the market applies the same requirements to type 4.

- Delineation should go further into CT 3 phase and single phase.
 - There needs to be a review of the significant alarm list if metrology is to apply delineation on meter types.
 - High Low validation should be reviewed.
 - Any changes to metrology should also be presented to the MDP working group.
2. Summary of discussions – key points of note:
- Considered that a broader discussion regarding substitution types was required at an MDP forum – type 16 details to be captured for that forum to consider
 - Generally considered a sound approach to look at Metrology requirements differently, using the connection type as the point of difference (i.e. whole current metering installations verses current transfer connected metering installations).
 - Metrology Procedure requirements for AEMO to consider regarding whole current metering installations:
 - Load check requirements
 - Significant alarm list
 - Power outage notifications

Topic 3: Distributor Sample Metering

1. Current practices and potential impact of Metering Competition rule change:
- Scenarios which could result in a change to network's sample of meters:
 - Customer switching to solar
 - Customer installing interval meter
 - Network currently examines metering data and proceeds to install a sample meter at a new site if a current site is no longer suitable. The challenge after 1 December 2017 is that the MC/MP will have the responsibility of installing meters that meet the minimum services specification and will be classified as type 4 metering installations at that point.
 - Sample metering needs to be representative of type 6 metering installations and therefore any new type 4 metering installation is unsuitable by definition.
 - The risk of not keeping the management of sample meters with Network is that the time-switch on the sample meters is not randomised, leading to an incorrect Net System Load values. Network would need to call up MPs to ensure time switch is randomised.
 - After 1 December 2017, as basic meters are replaced with interval meters, the number of sites suitable for sample metering would be reduced and eventually there will not be a requirement to perform profiling – however, it was noted that this could be some considerable time away.
2. Summary of discussions – key points of note:
- If the procedure requirements are unchanged, the Network could take one of the following approaches when a new sample site is required:
 - Install a meter as a check meter, leaving the metering installation intact and remaining as type 6;

- Install a check meter as a network device, leaving the metering installation intact and remaining as type 6;
- Where the network is no longer the initial MC, and the use of data from a type 4 metering installation is permissible, obtain data from new MC, either through a specific agreement to do so, or by use of metering data provided by the MDP to the LNSP, as is current market practice.
- Engage FRMP & MC to install meters with requirements specific for sample metering, providing the use of data from a type 4 metering installation is permissible.

Topic 4: Network Device Management Requirements

1. Removal and return of obsolete network assets:

- Network asset should only be returned where required under the rules or through commercial negotiations, AEMO procedures should not mandate return of network assets.
- Where a network device that provides a control service is made obsolete as a result of a meter churn, the issue with network tariff needs to be resolved and the network device needs be returned to the owner as it is part of the metering installation being changed.
- Where a network device that provides a time switch service and is used for the purpose of changing the register, it is part of the type 6 metering installation and should be returned, providing it is no longer required.
- It is a good practice that the MP removes redundant devices, however the removal of these devices would add to expense, complexity and risks.
- Consider a scenario where a network asset has been made obsolete for a long time and is not currently connected to anything, is it still considered as a network device?
- If a network asset has been made obsolete prior to the new meter being installed, why should the MP be responsible for removing it and potentially making the installation good (e.g. filling up the hole on the wall) when the distributor would have disconnected and left it on site previously?
- There is no rectification mechanism when a network asset has been removed in error. There should be a rule that allows this to be rectified.
- Retailer and Network should look at sites with zero consumption and be proactive in determining a method to abolish the tariff and arrange for removal of obsolete devices.
- Obsolete devices pose safety risks if still connected to the electrical installation.

2. Identification of network device:

- The requirement to identify all devices would be an overkill, if there is enough space at the site then there is no need for the new MP to remove a network device.
- Costs of identifying the network devices would outweigh the benefits.
- Network could identify obsolete network devices in MSATS, MPs should remove these devices if they are identified. This practice would allow the market to keep the sites clean; settle on real, non –zero data and customer not having to incur additional costs (should they want the meter removed).

3. Summary of discussions – key points of note:

- General view that a network asset such as a timeclock that is being disconnected as a result of new metering being installed and is no longer required, should be returned alongside the meter device(s) as is current practice.
- General view that old disconnected devices should remain untouched if found in a disconnected state, unless they require removal in order to accommodate the new metering or where an agreement has been established for the MC/MP to remove and return to the distributor.
- A default arrangement for identification of a network asset appears preferable to any requirement for the distributor to provide or publish identification information. For example, a network asset is considered to be a network device unless:
 - The MC and distributor have made an agreement to the contrary, or
 - The network asset is a component of the metering installation which is made obsolete as a result of new metering being installed.
- There would be an opportunity for retailers, distributors and other related parties to consider the removal of obsolete devices that are fortuitously discovered either at the time of performing metering changes, or prior upon investigation of metering data (e.g. a dedicated hot water supply at an installation where the electric hot water system has been removed), noting that any such changes may result in an alteration to the supply agreement with the customer and would need to be treated accordingly. This does not appear to be a matter for AEMO procedures at this time.

Topic 5: Disconnection & Reconnection

1. Indicator in MSATS to identify nature of disconnection:

- Many stakeholders consider there to be a need for indicators to identify the nature of a disconnection (remote or physical) so that the method of reconnection could be determined.
- Views were also expressed that the party who performed the disconnection should be in MSATS also.
- The requirement to identify the party that performed the disconnection does not exist today as the Network is the only party that can carry out disconnections currently. Post 1 December 2017, the retailer will be able to request the MC to perform disconnections. A position was put forward that if the party who performed the disconnection was identifiable, the retailer would know who to contact to get a reconnection performed.
- It was proposed by AEMO that an indicator of the method of disconnection would not allow any party to be certain on the method that would need to be employed for a reconnection (as there are various reasons why a site visit would be required to reconnect regardless of whether the disconnection was performed remotely). There were no arguments presented to the contrary.
- AEMO discussed the potential scenarios for disconnection were the retailer would only need to identify the metering coordinator to determine who to send a request to:
 - Initial metering coordinator is the metering coordinator – reconnection request will always be sent to the MC/MP/MDP

- Contestable metering coordinator is the metering coordinator (and the site has not been disconnected by the distributor) – reconnection request can be sent to the MC/MP/MDP and it will be actioned either remotely or at the meter
- Contestable metering coordinator is the metering coordinator (and the site has been disconnected by the MC at the request of the distributor) – reconnection request can be sent to the MC/MP/MDP and it can be actioned either remotely or at the meter subject to the agreement between the retailer, distributor and MC
- AEMO identified one scenario where the retailer would not necessarily be able to obtain a reconnection simply by requesting the MC perform the service:
 - Contestable metering coordinator is the metering coordinator (and the site has been disconnected by the distributor, without any action being performed by the metering coordinator) – in this case a reconnection request could either:
 - Be sent on from the MC/MP/MDP to the distributor on behalf of the retailer (providing an agreement has been reached to perform such a process between the parties concerned)
 - Be rejected back to the retailer with an appropriate rejection code that informs the retailer of the need to contact the distributor to facilitate the reconnection.

2. Identification through NMI status and meter status:

- Consider the option of using the NMI status code to indicate a disconnection performed by the Network and the meter status to indicate a disconnection performed by the MP. These fields would need to be NMI discoverable.
- Some participants would require NMI status code to indicate a disconnection regardless of who performed the disconnection. This is because NMI status is used to drive back end processes such as substitution and validation, service charges, assigning tariff etc.
- Having a flag at meter level would allow MC to identify when individual meters have issues.
- Indicator should not be at the meter level as a site could have up to 24 meters, updating the statuses of all 24 meters would not be an ideal solution, on the other hand, this option would provide information at a more granular level.
- If a single field is used then multiple parties would need to be able to update the same field, this could lead to conflicting actions, finger pointing etc.
- Post 1 December 2017, it is reasonable to expect that MCs and service providers in the market would have processes/contracts in place to facilitate the transfer of required operational information from one service provider to another in the case that a service provider has performed a disconnection and a new service provider is charged with performing a reconnection – regardless, it appears that this is not a matter for AEMO procedures.
- Any new fields may require associated service levels to be stated regarding the updating of those fields and potentially the notification to other parties of an update. Alternatively, the obligation to update MSATS could also be dictated by commercial agreements between parties.

3. Who performs remote services?

- Consider the possibility of remote services being performed by all three parties: MC, MP and MDP? – It was noted that the MP and MDP are the only parties accredited to perform

services while the MC will be a registered participant and will not be required to have any form of accreditation.

- Position proposed that the MP does fieldwork, MDP does remote communications so logically MDP should perform reading and remote reconnections and disconnections.
 - Accreditation process could be made complicated if multiple parties are responsible for delivering one service.
 - While it is reasonable to expect MDP to perform remote disconnections and reconnections, the requirements of safety regulators need to be considered. In Victoria, end to end system is required to gain accreditation. Service providers rely on the function of the meter (MP's asset) for reconnections and disconnections. Once the MP's system has been accredited, the MDP may be accredited to perform disconnections and reconnections in the form of a sub-contract type relationship.
 - MDP's responsibility is to collect data, MDP is not responsible for changing the meter on site. Remote disconnections and reconnections should be performed by the MP.
 - Only one party, the MP, should be accredited to perform this function as it is the MP's asset. Should the MP require the services of the MDP to perform this function, it can be arranged by the MP through internal/commercial negotiations.
 - MP is currently providing remote disconnections and reconnections in the type 4 and Vic AMI space, it is reasonable to expect the MP to continue perform this function but MP should not be expected to be able to send meter readings through B2B transactions.
 - When designing a solution in MSATS (flag/notification for a remote reconnection or disconnection), be cognisant of the fact that MP updates registers, MDP updates the meters, MP might not have access to update the relevant flags unless changes are made to accommodate.
 - Provision of remote disconnections and reconnections is optional, how does this fit into the requirement to gain accreditation for MPs and MDPs? How do the requirements in the Network's safety management scheme interact with AEMO's accreditation process? – AEMO is currently reviewing whether there needs to be accreditation in respect of these services and whether there are impacts on service level procedures. Accreditation procedures are due to be published by March 17.
 - Decision as to who should be accredited should be based on who has control – the use of sub-contractors is standard in the today's business operations.
 - Need to consider all aspects when determining solution: obligations to update MSATS, current practice/requirements in B2B, contractual relationships between parties.
 - If accreditation is for end-to-end service, rather than capability of the meter, then industry would need to be involved in determining appropriate service levels in the Minimum Services Specification Procedure. AEMO expects to discuss the Minimum Services Specification, including service levels in upcoming workshops.
4. Meter reading requirements with respect to remote disconnection?
- A meter reading is not required prior to a remote disconnection as the meter is still 'live' and the remote disconnection does not disable the ongoing process to retrieve data, therefore no specific requirements need to be stipulated for the retrieval of data upon a remote disconnection.

- Retailer's service order ID needs to be included in provision of metering data – this could be considered in commercial agreement between the retailer and MC if necessary.

Topic 6: Emergency Priority Procedures

1. Criteria for determining when an emergency is present:

- Procedure relates to management of bandwidth – how messages/services are to be prioritised in an emergency.
- There should already be existing processes to manage emergency events and Emergency Priority Procedure would be to support existing processes.
- Scenarios for an emergency event: fire, flood, storm, outage, network constraints, terrorism etc... Events that cannot be managed by BAU processes.
- Categorising events into flood, fire etc.... is going in the wrong direction, network knows when there is a problem, network will declare an emergency (and send notifications) when one is present. In an emergency, network may look to perform load shedding, emergency supply capacity control, outage management. Services required in these events include 'pinging' meters (NMI enquiry), disconnecting and reconnecting connection points at different levels (feeder or more granular level).
- Network currently can perform all required services to manage emergencies without metering services, what is the point of the Emergency Priority Procedure?
- Network would need to have existing contracts with service providers to request services in an emergency and would need to have these contractual relationships in place as part of their emergency management plan.
- Need to consider equity issues. e.g. the same customers might be disconnected or reconnected in an emergency because their service providers have a contractual relationship with the Network or provide those services at lowest costs.
- Need to address service providers' other market obligations such as provision of data for market settlement during an emergency. Should these obligations be relaxed in an emergency? There would be a number of implications if that were to be the case.
- Would MSATS NMI status need to be updated when meters are disconnected/reconnected in an emergency event? Consider the consequences when market is flooded with notifications.
- Notifications are required to declare both the start and the end of an emergency.

2. Summary of discussions – key points of note:

- There was a general view expressed that the distributor should be in control of determining the start and end of an emergency priority event.
- Such events are published by distributors today – AusNet Services website was used as an example where outages of various descriptions are published and maintained for public access and review.
- The types of services that the distributor may want to access that are listed in the Minimum Services Specification are:
 - Remote disconnection and reconnection
 - NMI enquiry

- Priority access to these services would still be subject to commercial agreements between parties.
- AEMO to consider whether the provision of metering data would need to be provided when an emergency priority event is called.

Topic 7: Meter Churn

1. Summary of discussions - key points of notes:

- Consider including a substitution method that can be applied when churn data is not supplied to incoming MDP, one that is not based on historical data – to be carried into MDP forum for further discussion.
- AEMO – the meter churn requirements are likely to be revisited once the AEMC have published the final Meter Replacement Process rule change, which is expected in March. The slides provide a summary of the rule requirements for meter churn following the publication of the competition in metering services and embedded networks rule changes. If the rules for meter churn do not change as a result of the pending rule change, it is likely that the meter churn procedures would be smaller and simpler than the current document.