Competition in metering and related services – rule change

Stakeholder workshop 6

Thursday 22 January 2015

AUSTRALIAN ENERGY MARKET COMMISSION

Outline for the workshop

1. Minimum services specification
   - Governance
   - Services (presentation by AEMO)
2. Opt out arrangements
3. Access to Metering Coordinator services
4. Remote provision of disconnection and reconnection services
5. Network security issues related to load control
6. Stakeholder views on timeframes for implementation

Session 1

Minimum services specification

Summary – governance of the minimum services specification

Policy question: What should be the governance arrangement for the minimum services specification?

	Policy option 1	Policy option 2	Policy option 3
Initial proposals	AEMO sets out minimum services specification and related procedures. Amendments made by AEMO in accordance with rules consultation procedures	NER to include minimum services specification. AEMO to develop detailed service levels and performance standards. Amendments to specification require rule change and changes to procedures	NER to include the minimum services specification including supporting technical requirements. Any changes to services or supporting requirements would require a rule change.
Revised proposal	Policy option 2		

Summary – minimum services specification

Policy question: Which services should be included in the minimum services specification?

	Minimum services specification
Proposal	The “primary services” set out by AEMO in its advice to the COAG Energy Council, i.e.: • De-energisation • Re-energisation • Meter read – on demand • Meter read – scheduled • Meter installation enquiry • Meter reconfiguration

Governance – stakeholder views

There were divergent stakeholder views on the best approach. Some of the considerations raised by stakeholders included:

- The speed in which the minimum services specification could be amended (having fast and flexible arrangements).
- How much detail needs to be included in the NER under option 2 to provide sufficient clarity on the scope of the services that a meter must be capable of providing.
- Whether a more democratic decision making process was preferred for deciding on the minimum services specification (eg. an industry body with voting rights).
- Ensuring thorough consideration of the NEO and consultation with a broad range of stakeholders in decision making. (Noting that both AEMC and AEMO have requirements regarding consultation and considering the NEO.)
- Consistency with governance of other metering procedures, which generally set out basic requirements in the NER and detail in AEMO procedures.

Governance – proposal

- The NER will include the list of minimum services (option 2). These will be described in sufficient detail to provide certainty of the nature and scope of the services that a meter is required to be capable of providing.
- AEMO will be required to develop procedures to specify the minimum service levels and performance standards for each of the services in the minimum services specification.
- Amendments to the minimum services specification would require a rule change and subsequent amendments to AEMO's procedures.
- The minimum services specification will apply to all new meters installed for all small customers (as defined in the NERR).
  - Large customers can currently negotiate for advanced metering services.
- Whenever a new meter is installed for a small customer the Metering Coordinator must ensure that the meter meets the minimum services specification.

Governance – rationale

- Developing the minimum services specification requires assessing the costs and benefits of various services across the supply chain.
- Under the proposal, any person is able to propose a change to the minimum services specification through the well defined rule change process, assessed against the NEO.
  - While this may take more time than if the minimum services specification was maintained in AEMO procedures, we do not envisage the minimum specification changing frequently.
- AEMO is better placed than the AEMC to develop more detailed performance levels and standards.
- This approach is consistent with other governance arrangements whereby higher level principles and frameworks are set out in the NER and the technical details are set out in procedures.

Minimum services specification – proposal

- The minimum services specification will include those services recommended by AEMO as primary/mandatory services. These are:
  - Re-energisation (turn electricity supply on remotely)
  - De-energisation (turn electricity supply off remotely)
  - Meter read – on demand (obtained remotely as required by a retailer, customer or other authorised party)
  - Meter read – scheduled (obtained remotely as per contracted dates and times)
  - Meter installation enquiry (remotely obtaining energy information, meter status and usage data)
  - Meter reconfiguration (to remotely enable access to new tariffs and new arrangements, such as solar connections and energy demand tariffs.

Minimum services specification – rationale

- These services are expected to deliver benefits to the majority of consumers at a relatively low cost.
  - Having a relatively low minimum services specification allows customers to determine and pay for the services that they want at a price that they're willing to pay.
- In practice we expect most meters will exceed this requirement. For example, meters typically provide a number of services in addition to those specified, such as load control.
- Future technology developments may mean that many services can be provided outside of the meter.
  - Providing a lower specification avoids the risk of locking in outdated technology.
- We also note that anyone can submit a rule change request to seek to change the minimum service specification.

Meeting the minimum services specification

- To meet the minimum services specification, the metering installation must be capable of providing the services prescribed in the NER without a subsequent site visit to upgrade the hardware.
  - That is, a meter must include any components necessary to provide the services (such as a communications module).
- However, there is no requirement on the Metering Coordinator to *provide* the advanced services, consistent with our proposal for no access regulation.
- Where an MC does agree to provide those services, they must comply with AEMO's service level procedures.
- MCs will, however, be required to provide scheduled meter reads, which are required to support a functioning market. We will separately consider how best to support scheduled meter reads, bearing in mind that establishing a communications network may be cost prohibitive where there is low penetration of advanced meters or in remote areas.

Services in the minimum services specification

(Presentation by AEMO)

MINIMUM SERVICES SPECIFICATION

22 January 2015

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AEMO
AUSTRALIAN ENERGY MARKET OPERATOR

AGENDA

1. Background
2. Services vs Functions
3. Regulation of Services
4. Core / Minimum Services
5. Secondary Services
6. Other Considerations

1. BACKGROUND

- COAG Requested AEMO provide advice on a Minimum Functionality Specification with the purpose of:

  - Ensuring meter and related functionality and market protocols in the NEM support competition in the provision of electricity and demand side services to consumers.

  - Delivering the greatest net benefit to consumers.

2. SERVICES VS FUNCTIONS

- In order to address COAG's request and define any required 'Functions' AEMO, in conjunction with industry, identified:
  - The 'Services' required of a meter;
  - Service levels and performance standards to meet the desired service; and
  - The business outcomes required.
- This approach allowed AEMO and industry to review whether meter functions actually needed a specification of their own.
  - The conclusion of the analysis was to recommend a Services Specification, rather than a Functional Specification, as all meter functions were clearly understood or captured under other instruments (i.e. Standards Australia)

3. REGULATION OF SERVICES

- AEMO noted that some regulation of Services may be required as a result of a *Market Led* Roll-Out.
- This is primarily due to the fact that inefficiencies could be created as a result of lack of regulation of minimum services. For example:
  - Where remote disconnection occurs, an incoming Retailer must be able to remotely re-connect. Thus both the reconnection and disconnection services must be mandated.

- A core/minimum set of Services has been recommended for regulation.

4. CORE/MINIMUM SERVICES

- AEMO, in consultation with industry groups, identified the following key advanced metering services to be considered the minimum services for regulation:

  - De-Energisation (turn off electricity supply remotely)
  - Re-Energisation (turn on electricity supply remotely
  - Meter Read - on demand (remotely)
  - Meter Read – scheduled (remotely)
  - Meter Installation enquiry (remotely)
  - Meter Re-Configuration – remote changes for tariff/solar

5. SECONDARY SERVICES

- Where there were no inefficiencies identified as a result of the introduction of a service, the Service was considered a secondary service that did not require regulation.

  - It is expected that there will be other market forces that drive efficiencies and outcomes for these services.

6. OTHER CONSIDERATIONS

- As a result of the introduction of a Services Specification it is expected that the following key areas will require further consideration.

  - There may be a need to expand the Meter Data File Format (MDFF) base data set on implementation of advanced metering and advanced services.

  - Standards Australia to consider any standards to be introduced or modified as a result of the Services Specification or Advanced Metering. Standards Australia first met on 27th November 2014 to commence this activity.

Session 2

Opt out arrangements

Summary – opt out arrangements

Policy question: Should small customers be provided with an ability to opt out of receiving a meter that meets the minimum services specification in situations where a new meter is to be installed?

	Retailer deployment of meters	New and replacement meters
Current arrangements	No opt out.	No opt out.
Initial proposal	No opt out, but retailer must notify the small customer.	No opt out.
Revised proposal	Retailers must notify small customers of 'deployment' and provide them with the ability to opt out.	No opt out.

Situations where a new meter will be installed

The Commission envisages five scenarios under the new regulatory framework where a small customer would have a new meter installed:

1. Consumer chooses a product or service (e.g. load control) that requires a more advanced meter to be installed.

2. Retailer manages a ‘deployment’ of advanced meters (possibly funded by a distribution network business or ESCO) to achieve business efficiencies.

3. Retailer initiates a ‘routine replacement’ of existing meters where sample testing indicates that they should be replaced.

4. An existing meter needs to be replaced because it is found to be faulty or otherwise non-compliant with the rules.

5. A new house or development is built and a meter needs to be installed to enable connection to the network.

Proposal

- All new meters installed after the commencement of the new rules, i.e. in all five scenarios, must meet the minimum services specification.
- In scenario 1, the consumer has requested the product or service and, in turn, the installation of a new meter to enable that product or service.
- The Commission's position on opt out arrangements distinguishes between scenarios where the existing meter is still functional and scenarios where it needs to be replaced.
- Small customers will be able to opt out of receiving a meter that meets the minimum services specification in deployment situations only (scenario 2).
  - In this situation, the existing meter is functional and would not otherwise need to be replaced.
- Small customers will not be provided with the ability to opt out in new and replacement situations (scenarios 3-5).
  - In these situations, the existing meter does need to be replaced, i.e. for data integrity and safety of the metering installation.

Rationale behind the proposal

- A single minimum services specification will support competition and efficiency benefits (through consistency and lower costs) across the NEM.
- The proposed arrangements for new and replacement situations represent a continuation of current arrangements whilst recognising advances in technology.
- Introducing an ability to opt out in these scenarios is neither practical nor appropriate, and may lock in old technologies that are of no long term benefit to consumers or the market.
- More onerous regulation would be required for consumers to opt out in a way that made it a meaningful and enforceable choice.
  - e.g. providing an opt out in fault scenarios would introduce a time delay between the fault occurring and a new meter being installed. This would likely result in more estimated meter reads, which could increase the financial risk to the retailer and lead to higher costs for consumers.
- A better way to protect consumer choice is through consumers' ability to choose whether to take up any products and services enabled by the advanced meter, rather than the meter itself.

Opt out arrangements for a deployment

- The proposal would allow retailers to deploy meters that meet the minimum services specification at the connection point of its small customers where it sees a business case to do so.
- The retailer will be required to notify customers of a proposed deployment and provide them with the ability to opt out and retain the existing meter.
  - This includes where the deployment is funded (in full or in part) by another party, e.g. the distribution network business.
- Under the proposal, the retailer is only required to follow the notification process if it has not otherwise obtained explicit informed consent from the customer for the deployment under an existing retail contract.
  - Note: the implementation of ‘explicit informed consent’ is currently under legal review.

Minimum notification requirements

- The retailer must send at least two prior written notices to its customer:
  - The first at least 20 business days before the proposed installation, and the second at least 10 business days before the proposed installation.
  - At least the first notice must be sent separately to the customer's bill.
- The customer can opt out at any time after receiving the first notice, up until the date specified in the notification.
- Each written notice must contain at least the following content:
  - How customers can opt out.
  - The last day and time at which the customer can opt out, which must be no more than three business days before the proposed installation date.
  - Any upfront charges to the customer as a result of the installation.
  - The expected date and time of the installation.
  - The retailer's contact details.

Session 3

Access to Metering Coordinator services

Summary – access to services

Policy question: Should access to Metering Coordinator services be regulated to address concerns about possible competition issues?

	Policy option 1	**Policy option 2**
Initial proposal	Monitor and review	Light regulation from market start
Revised proposal	Policy option 1: Monitor and review 3 years after rule commencement	

Competition concerns

- Any MC, regardless of its ownership structure, has an incentive to charge high prices for the provision of metering services to third parties and will have some degree of market power over parties that seek access to its metering services, including:
  - Retailers
  - ESCOs
  - Distribution businesses
- An MC owned or otherwise affiliated with a retailer may have an incentive to discriminate against third parties with which the retailer may compete, including:
  - Other retailers competing in the retail market
  - ESCOs competing in the energy services market

Proposal

- The Commission does not propose to regulate access to Metering Coordinator services at the start of the market.
- The Commission considers that it would be prudent to review and assess the state of competition once the market has had time to evolve.
- Under the proposal, the Commission would recommend that the need for regulating access to metering and related services be reviewed three years after the commencement of the rule change.
- DNSPs will be able to retain their existing network devices or install new ones.

Rationale behind the proposal (1)

- There are a range of factors that are likely to mitigate competition concerns, including:
  - **Low barriers to entry**: a large number of potential metering business have been active participants in this rule change process and there are a number of businesses operating in international metering markets such as New Zealand and the UK. Low barriers to entry should help promote a competitive market for metering services.
  - **The risk of asset stranding for MCs**: if MCs do not provide the services that customers, and therefore retailers, want, they risk having their asset stranded since the retailer could switch MC.
  - **Risk of losing customers and market share on products and services that customers value**: customers will look for retailers (and so MCs) that can provide the services that they value. An MC may risk losing a customer if it cannot agree on reasonable terms and conditions with an energy management service provider, inducing customers to switch to retailer (and so MC) that will provide those services.

Rationale behind the proposal (2)

- For DNSPs, competition concerns may be mitigated by:
  - **Bargaining power of DNSPs as the only buyer of certain services**: There are a number of services that are unlikely to be of interest to other commercial parties, so an MC will have no alternative buyers. This should provide MCs with an incentive to negotiate with distribution businesses or miss out on available revenue.
  - **DNSPs may not need to access services at all connection points to operate their network effectively**: provided there are sufficient alternative MCs, DNSPs should be able to negotiate access at alternative premises if they cannot agree on reasonable terms and conditions with a particular MC.
  - **Businesses will have the option of retaining existing devices or installing new network devices**: this will provide a limit on the price an MC could charge.
- Finally, there is a risk that regulation will diminish incentives for private parties to invest in metering services in an emerging market:
  - The costs of introducing regulation from market start are therefore likely to outweigh the benefits

Session 4

Remote provision of disconnection and reconnection services

Summary – Remote disconnection and reconnection

Policy question: Should retailers be able to arrange disconnection and reconnection services directly with the Metering Coordinator?

	Manual disconnection and re-connection services	**Remote disconnection and re-connection services**
Initial proposal	Must be performed by the distribution business	Must be arranged through the distribution business
Revised proposal	Must be performed by the distribution business	Either distribution business or the retailer can arrange directly with the Metering Coordinator

Current requirements

- Disconnection refers to the disconnection of supply to a premises.
- Re-connection refers to the restoration of supply to a premises.
- Disconnection and re-connection services can be provided manually at the premises or remotely (usually by way of a smart meter).
- The NERR contains a number of consumer protections associated with the disconnection and re-connection of retail customer premises. These services are currently performed by the distribution business.
- Jurisdictions have also introduced regulations with respect to disconnection and re-connection at the premises of retail customers.

Safety concerns

- Advanced metering services such as remote disconnection and re-connection have the potential to reduce costs for retailers, and therefore consumers.
- These benefits may not be fully realised if retailers can only arrange these services with the distribution network business, rather than arranging them directly with the Metering Coordinator.
- However, allowing retailers to arrange disconnection and re-connection directly with the Metering Coordinator could lead to safety concerns when:
  - checking whether premises have life support equipment prior to disconnection; and
  - ensuring premises are safe prior to re-connection following alterations at the premises or a long period of disconnection.

Proposal

- No change to the existing arrangements where distribution businesses exclusively perform manual disconnection and re-connection services.
- Retailers can arrange remote disconnection or re-connection of consumers' premises directly through the Metering Coordinator, subject to the jurisdictional safety requirements.
- Before a retailer can arrange to remotely disconnect a consumer’s premises directly with the Metering Coordinator, it must confirm with the distribution business that the premises is not registered as having life support equipment.
- The retailer would no longer be required to maintain its own register of premises with life support equipment.
- The jurisdictional safety regulators may revise these obligations to allow for retailers arranging these services directly.

Rationale behind the proposal

- Manual disconnections and re-connections will continue to be performed by the distribution businesses, or under their direction, as:
  - they are best placed to manage the associated safety risks.
  - their equipment performs the disconnection (fuse or switch at premises).
- Allowing retailers to arrange remote disconnections and re-connections:
  - Is likely to lower costs for retailers (and therefore consumers) if they negotiate directly with the Metering Coordinator.
  - Allows retailers to better manage their commercial risks for non-payment and when a customer moves in or out of the premises.
  - Allows quick restoration of supply following disconnection or when a customer moves in or out of the premises.
- Requiring the retailer to check the life support status with the distribution business is likely to reduce the safety risks of multiple life support registers.

Session 5

Network security issues related to load control

Summary – Network security issues with load control

Policy question: Should any restrictions be imposed on the operation of direct load control via advanced meters in order to manage the security of distribution networks?

	Policy 1	**Policy 2**
Initial proposal	Development of a network load management protocol.	No action specific to this rule change.
Revised proposal	Not proposing a protocol specific to advanced meters. Note that the COAG Energy Council is considering the broader issue of the impacts of load control on network security.	

Rationale behind the proposal

- Large changes to the loads in a network can potentially impact on the security of that network.
- The issues caused by large changes of loads are not isolated to direct load control through advanced metering technology.
  - Similar issues associated with a high penetration of other technologies providing load control, solar PV, electric vehicle charging and potentially with distributed battery storage.
- It is not possible to predict the proportion of direct load control that will be performed by advanced meters. Therefore, we don't consider it appropriate to impose restrictions on direct load control via advanced meters.
- The COAG Energy Council is considering the broader issue of the impacts of load control on network security.

Session 6

Stakeholder views on timeframes for implementation

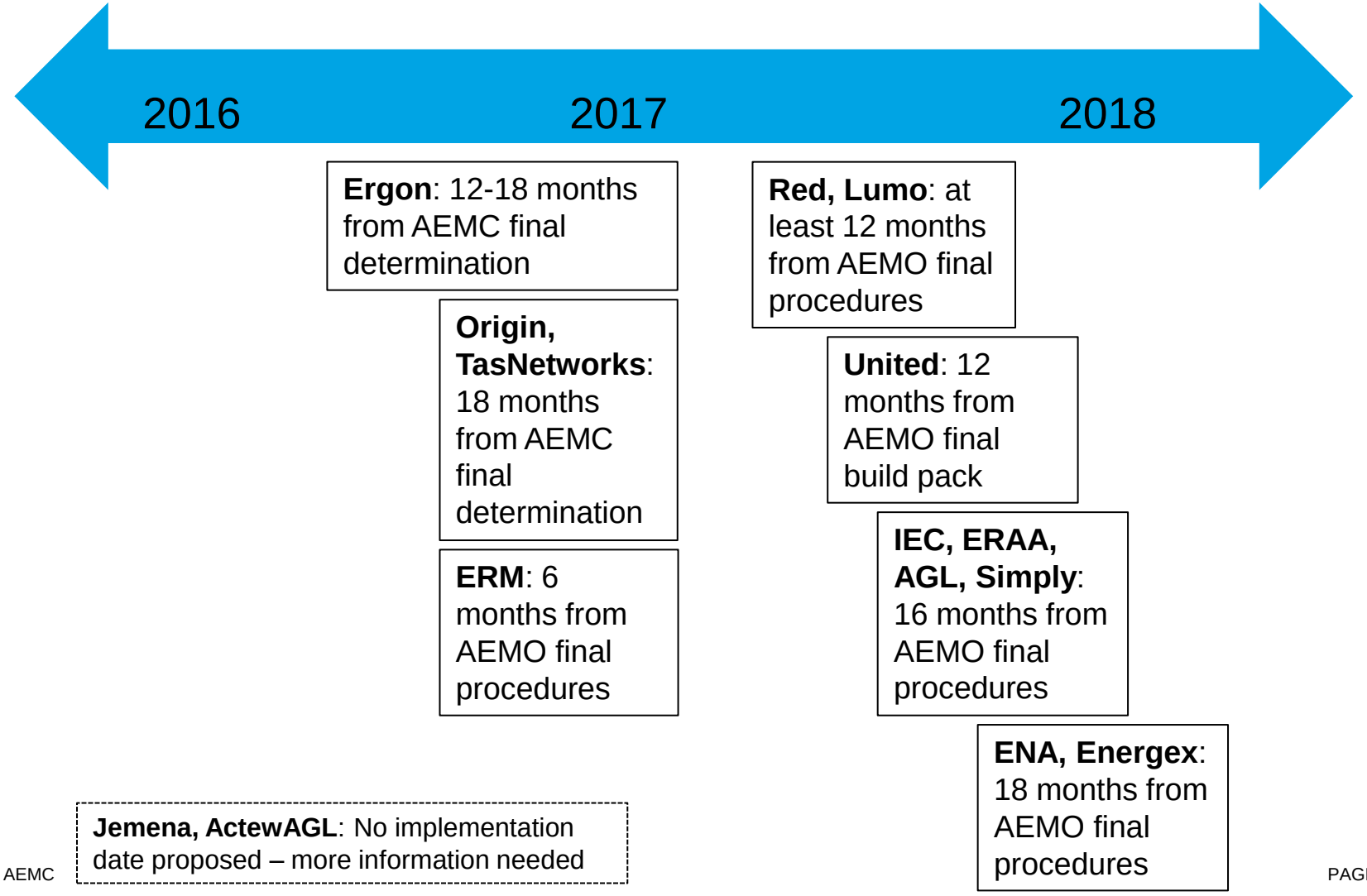
Implementation timeline

Item	Date
Workshop 6 – Outstanding policy issues	22 January 2015
Publication of draft determination and draft rule	26 March 2015
Public forum and workshop(s) on draft determination and draft rule	April-May 2015
Close of submissions to draft determination	21 May 2015
Publication of final rule and final determination	2 July 2015
AER makes networks ring-fencing guidelines	2016 (exact date TBC)
AEMO develops/amends procedures	2016 (exact date TBC)
New rules commence	TBC

Overview of stakeholder submissions on implementation timeframes

- We sought submissions on how long businesses would need to make changes to their systems and process before the new rules commence
- Most stakeholders commented that they could not assess firm implementation timeframes until the draft determination was published and more information was available on the details of the proposed new rules
- Views were mixed on how long would be required, and whether businesses should start work on changes to their systems/processes before AEMO publishes its final procedures and system build packs
- IEC and several other stakeholders proposed a coordinated implementation of PoC reforms, with metering competition, shared market protocol, embedded networks and COAG's NECF consumer protection rule changes implemented together. MTRs and DRM should be implemented together at a later date if those rule changes are made.

Overview of submissions on commencement date for new rules



Summary of the IEC's proposed implementation timetable

*Note: IEC proposes that AEMC extends the timeframes for its final determination until from July to Oct 2015

Attachments

Core elements of the rule change