

30 September 2015

Australian Energy Market Commission PO Box A2449 SYDNEY SOUTH NSW 1235

Submitted online at: www.aemc.gov.au

Re: Project number: ERC0169

Expanding competition in metering and related services - additional consultation on specific issues

SA Power Networks appreciates the opportunity to comment on specific issues relating to the proposed National Electricity Amendment (Expanding competition in metering and related services) Rule change, raised in the 17 September 2015 consultation paper released by the Australian Energy Market Commission (AEMC).

SA Power Networks notes and appreciates the extensive consultation opportunities that the AEMC has already undertaken on this important topic, including:

- the 17 April 2014 consultation paper issued by the AEMC discussing issues raised by the Rule change request;
- a series of stakeholder workshops held between June 2014 and January 2015;
- the consultation on the draft determination and draft Rule published on 26 March 2015;
 and
- a 16 July 2015 workshop discussing a number of operational issues raised in response to the draft Rule released in March.

The 17 September 2015 consultation paper advises that the AEMC is giving further consideration to a range of issues and specifically seeks input on seven issues. This submission provides comments and sets out SA Power Networks' position on these issues for the AEMC's consideration, in Attachment 1.

While the consultation paper described the AEMC's position on each of these issues, the proposed drafting to give effect to the AEMC's intentions has not been provided in all cases. SA Power Networks would welcome the opportunity to review and comment on proposed drafting prior to the AEMC finalising the Rule change.

SA Power Networks welcomes the fact that several of the amendments proposed in the consultation paper seek to address key concerns raised by Distribution Network Service Providers (DNSPs) with the original drafting. We are very concerned, however, with the new proposal to allow the Metering Coordinator (MC) to remove a network device without the DNSP's consent in some circumstances. In our view such a provision seriously undermines the intent of the network



device both in preserving existing consumer benefits (most generally load control, but also other services such as outage detection currently available in Victoria) and in providing a credible bypass option to DNSPs to counteract, at least to some extent, the disproportionate market power of MCs in negotiating for the provision of network services. We strongly oppose this change, and have proposed an alternative approach to dealing with the practical issue of space restrictions on meter boards in our submission.

We also make comment on two issues, not canvassed in the consultation paper, which are of material concern to SA Power Networks. These issues are:

- A. the market power of the MC with respect to the provision of services to DNSPs and demand-side service providers other than the Financially Responsible Market Participant (FRMP). We remain concerned that the competitive framework as proposed in the draft Rule change establishes the MC as an effective monopoly provider of such services; and
- B. the narrow minimum services specification and lack of obligations on the MC to supply services. The current specification omits load control and other network services commonly supported by smart meters in Victoria, and provides no guarantee of ongoing or long-term availability of any smart meter services offered by the MC.

In combination, the above issues create material commercial and technical risks for DNSPs seeking to engage with MCs to implement initiatives that rely on smart meters to improve network efficiency, or even to retain the significant benefits already achieved across the NEM through load control. SA Power Networks understands that the AEMC appreciates these issues and is working to address them in the final Rule change. We urge the AEMC to keep in mind the fact that the cost of supplying distribution services accounts for 30 - 50% of a retail customer's bill, whereas the cost of metering is typically less than 5%. If the ultimate outcome of increasing competition in metering is only to provide for basic remote meter reading at an efficient price, the opportunity for real long term benefits to consumers envisaged in the *Power of Choice* review, including those derived from more efficient network services, will have been lost.

Please find our specific comments enclosed. Should the AEMC require further clarification of any of our comments, please contact Mark Vincent, Manager Network Investment Strategy, on (08) 8404 5284.

Once again, thank you for the opportunity to have further input on these important reforms.

Yours sincerely

Wayne Lissner

A/General Manager Corporate Strategy

Encl.



SA POWER NETWORKS COMMENTS

1. Arrangements for accessing energy and metering data

SA Power Networks welcomes the AEMC's intention to clarify the rights of parties to receive metering data and/or have access to the metering and metering data services databases, and to strengthen the delineation in the drafting between discretionary and regulatory obligations.

We are concerned, however, with the proposed new drafting which appears to imply a fundamental change in the way data is provided to authorised parties. Under the new drafting proposed, the Meter Data Provider (MDP) is required to provide access to the *metering data services database* to all authorised parties. This is not what happens today. Under current procedures the MDP provides *data* from the *metering data services database* to authorised parties via the B2B hub, but does not allow other parties direct access to its database.

The proposed new drafting would imply significant changes to procedures and IT systems for a DNSP:

- In its role as network service provider, it would have to establish new processes and systems to securely access the metering data services databases of all MDPs operating in its service area and aggregate the data to perform network billing and other operational functions, rather than receiving the data automatically via the B2B hub as it does today; and
- In its role as MDP for type 5, 6 and 7 meters it would have to establish new facilities to allow third-parties to access its metering data services database, and to manage all associated authorisation, access control and data security requirements.

SA Power Networks recommends that redrafting is required for the clauses included in Appendix A of the AEMC consultation paper to clarify that the MDP's obligation is the provision of data to authorised parties, not the provision of access to its metering data services database.

In our 21 May 2015 submission on the draft Rule change, we noted that the retrieval of any alarms logged within the meter should be part of the service definition for regular remote meter reading, as it is in the Victorian AMI specification¹, the NSMP National Minimum Functionality Specification² and smart meter specifications in other jurisdictions such as the UK³.

It is our view that alarms that are captured as part of the regular meter read cycle should be stored in the *metering data services database*, and access to this alarm data should be provided to the distributor as part of the access to which they are entitled under the Rules.

SA Power Networks notes that the proposed drafting changes included in Appendix A of the consultation paper do not address this specific issue. We reiterate our previous recommendations on this issue, namely:

SA Power Networks recommends that the draft service specifications in Table S7.5.1.1 (c) and (d) for the remote meter reading services be amended by:

1. In the Description, replacing the words "the remote retrieval of metering data and the provision of such data to the requesting party" with "the remote retrieval of metering data

³ Updated draft Communications Hub Technical Specifications (November 2014), UK Department of Energy & Climate Change



¹ Advanced Metering Infrastructure Minimum AMI Functionality Specification (Victoria) v1.1, Department of Primary Industries, 2008, section 3.3 (e) (5) and Appendix A

² NSMP Smart Meter Infrastructure Minimum Functionality Specification, version 1.3, section 7.2.1

and meter alarms, storage of such data and alarms in the metering data services database, and the provision of such data to the requesting party"

- 2. Adding the following bullet point to the Description of these services:
 - "meter alarms recorded in the meter log (or logs) including over- and undervoltage alarms, power failure alarms, tamper detection alarms, reverse energy flow alarms, meter temperature alarms and other alarms as required by the procedures made under clause 7.8.3".

SA Power Networks recommends that the draft service specification in Table S7.5.1.1 (e) for the metering installation enquiry service be amended as follows:

- 3. The service definition should be amended to make it clear that the voltage, current, power and frequency measurements referred to in the Description must be available separately for each phase for a multi-phase metering installation
- 4. The final bullet point in the Description should be replaced with:
 - "the contents of the meter log (or logs) including over- and under-voltage alarms, power failure alarms, tamper detection alarms, reverse energy flow alarms, meter temperature alarms and other alarms as required by the procedures made under clause 7.8.3".

SA Power Networks recommends that the draft service specification in Table S7.5.1.1 (f) for the advanced meter reconfiguration service be amended as follows:

- 5. The third bullet point in the Description should be replaced with:
 - "thresholds and other parameters required to configure the alarms referred to in clauses \$7.5.1.1 (c) to \$7.5.1.1 (e); and"

2. Supply interruptions for the purpose of installing or maintaining a meter

SA Power Networks largely supports the proposed changes to the National Energy Retail Rules (NERR) to allow a Retailer to interrupt a customer's supply without the involvement of the Local Network Service Provider (DNSP) for the purposes of installing, maintaining repairing or replacing equipment, provided that the Rules require this to be undertaken in accordance with <u>all</u> jurisdictional safety and technical requirements. However, we have the following two concerns with the proposed drafting:

- the time period for Retailers notifying DNSPs of retailer planned interruptions is unclear; and
- the information required to be provided by Retailers to DNSPs associated with retailer planned interruptions does not explicitly include NMI and site address details of affected customers.

In the drafting of NERR 99A (1) (b), Retailers must notify DNSPs of such interruptions "within the same period" as the Retailers are required to notify customers. This phrase is open to interpretation and could be interpreted to be less than the four (4) days notice that Retailers must give customers (NERR 59C (2)). We propose that it be made explicit that Retailers also give DNSPs at least four (4) business days notice to enable DNSPs to prepare for potential "no-supply" calls that could be received arising from retailer planned interruptions.

In drafting the proposed NERR 99A (3), specific premises information is to be provided to the distributor only after a request from the distributor and if it is readily available. We recommend it be made clear that Retailers <u>must</u> provide the distributor with the National Metering Identifier (NMI) and address details of each customer that is the subject of a retailer planned interruption at least four (4) business days prior to the retailer planned interruption. It is not sufficient to simply provide the "area" (NERR 99A(2)) in which the retailer planned interruption will occur. DNSPs will need this information to respond to potential "no-supply" calls they receive from affected customers.

We also note that the new subrule 99A is not identified as a civil penalty provision for the purposes of the *Law*, unlike the corresponding subrule 99. We assume that this omission will be corrected in the final drafting; as the impact on the customer (loss of supply) is clearly the same regardless of whether there is a *distributor planned interruption* or a *retailer planned interruption*, the penalty provisions must be the same in both cases to preserve the same level of customer protection as exists today.

Finally, we note that the proposed drafting of NERR clause 91A(b) still requires the distributor to "provide such assistance as the *metering coordinator* may reasonably require to enable the *metering coordinator* to carry out the installation, maintenance, repair or replacement of *metering* equipment." Beyond the work required to interrupt and restore supply to the premises, it is not clear what other assistance a commercial MC could reasonably require from the distributor in order to install or maintain their meter, or on what basis a regulated distributor would recover any costs associated with rendering such assistance. Moreover we are concerned that this clause may conflict with the distributor's other obligations (e.g. to use best endeavours to restore supply to the premises as soon as possible) or with jurisdictional technical and safety requirements. This part of Rule 91A(b) would seem superfluous in any event as the intent (that there should be reasonable cooperation between distributor and MC) is also expressed in 91A(c).

In summary, SA Power Networks supports Retailer/MC initiated interruptions provided that the Rules require this to be undertaken in accordance with \underline{all} jurisdictional safety and technical requirements. We recommend that:

- 1. it be made explicit that Retailers must give DNSPs at least four (4) business days notice to enable DNSPs to prepare for potential "no-supply" calls that could be received arising from retailer planned interruptions.
- 2. In NERR 99A(2) it be made clear that Retailers must provide the distributor with the National Metering Identifier (NMI) and address details of each customer that is the subject of a retailer planned interruption at least four (4) business days prior to the retailer planned interruption. It is not sufficient to simply provide the "area" in which the retailer planned interruption will occur.
- 3. Subrule 99A should be a civil penalty provision for the purpose of the Law.
- 4. the AEMC replace draft NERR clause 91A(b) with "The distributor must effect the interruption; and".

3. Customer consent for provision of network-related metering services

SA Power Networks welcomes the proposed approach to ensure MCs are not required to obtain customer consent prior to DNSPs providing network-related services to ensure the safe, secure and reliable operation of the network.

We agree with the AEMC's view that the exception should be a general one that relates to the purpose of the service, as "including a prescriptive list of services in the NER that require/do not require the customer's consent would not be appropriate, as available services may change over time."

SA Power Networks would appreciate the opportunity to review and comment on proposed drafting, prior to the Rule change becoming final.

4. Network devices

In this section of the consultation paper the AEMC has signalled a material change in position on 'network devices' from when it published the draft Rule.

The draft Rule, issued in March 2015, recognised the importance of network devices and provided that DNSPs may install network devices at or adjacent to a metering installation and that MCs could not remove, damage or render inoperable a network device except with the DNSP's consent. The ability to install network devices alleviated the market power held by MCs which could otherwise inhibit the efficient delivery of network services.

However, in situations where space on the customer's meter board may be limited, the AEMC is now of the view that the Rules should support "the retention of an *existing* network device (only) if there is space on the meter board to accommodate both it and a new meter" and that "if there is insufficient space on a meter board to house both a meter and a network device, the meter should have priority".

Of particular concern to SA Power Networks is that the AEMC is now advocating that if the MC considers that there is insufficient space on the meter board, "then the Metering Coordinator or Metering Provider (MP) may remove a network device to install the meter without the DNSP's consent".

SA Power Networks' need for network devices is two-fold:

- Approximately 300,000 <u>existing</u> devices are used to control customer loads (primarily hot
 water loads but also other loads such as underfloor heating). Controlling load in this way
 reduces peak demands on the distribution network thereby deferring the need for network
 augmentation and is, therefore, in the long-term interest of all (South Australian) customers;
 and
- there is a growing need to improve monitoring of our low voltage (LV) network, particularly with the high penetration of solar photo-voltaic rooftop generation which can cause significant voltage fluctuations on parts of our LV network. We envisage increasing the number of network devices to provide us with the data we need to manage this issue, particularly given that the new minimum specification of Type 4 meters does not provide the requisite functionality to monitor such network parameters.

The network device is part of the network infrastructure we deploy in order to meet our statutory obligations under the National Electricity Retail Law (NERL) to provide customer connection services, including management of network peak demand to prevent supply interruptions, and maintenance of customer voltage within standards.

Removal of, or interference with, a network device undermines our capability to meet these obligations, and may constitute a breach of Section 84 of the SA Electricity Act:

84 – Unlawful interference with electricity infrastructure or electrical installation

(1) A person must not, without proper authority –



- (a) attach an electrical installation or other thing, or make any connection, to a transmission or distribution network; or
- (b) disconnect or interfere with a supply of electricity from a transmission or distribution network; or
- (c) damage or interfere with electrical infrastructure or an electrical installation in any other way.

Consequently we strongly oppose the stated position of a MC or MP being able to remove our network device without our consent.

We remind the AEMC that even in the original October 2013 Rule change request, the value of existing DNSP load management facilities was recognised and it was explicit that, when a meter is replaced, the MC must retain this functionality⁴:

"There are existing load management DSP options that already operate in a number of the distribution networks in the NEM. A typical example is off peak hot water. This option allows the DNSP to limit supply to residential hot water heaters during certain times such as peak periods. This has been a feature of the market for some decades and helps to reduce:

- the size of the peak demand at a location in the network (or the network as a whole) and hence the capital and operating costs of maintaining a reliable supply, and
- the costs of energy at times of peak demand.

Such options have been justified under previous regulatory arrangements and generally still provide benefits through reduced energy generation and network costs. In some instances these schemes may be reducing the peak demand by hundreds of megawatts. Should the option cease to operate, there may be a need for additional capital expenditure to serve this load.

This rule change request proposes that the functionality of such existing load management options will be retained if a meter is replaced. That is, if the load management scheme operates through additional functionality in the existing metering installation, an upgraded or replacement metering installation should include equivalent functionality which is activated and operational at the time of the upgrade or replacement, in order to preserve the benefits of the scheme.

In the proposed arrangements, the Metering Coordinator must ensure that existing functionality remains operational."

The proposed arrangements do not uphold this clear requirement.

In our view neither the DNSP nor the MC/MP may remove, damage or render inoperable another party's meter or network device without that party's prior consent. In cases where the MC or MP identifies a situation where there is insufficient space to install a new meter and retain the existing network device, we propose that the MC must first provide the DNSP with reasonable notice and then both parties must enter into negotiations to provide an equivalent facility.

⁴Introducing a new framework in the National Electricity Rules that provides for increased competition in metering and related services -Rule change request, Standing Council on Energy and Resources, October 2013, Page 12



If it is agreed that the network device will be removed by the MC, then the MC must ensure that the upgraded or replacement metering installation includes equivalent functionality to that provided by the existing network device, eg load management, network monitoring etc, which is activated and operational at the time of the meter upgrade or replacement. This equivalent functionality is to be provided at no cost to the DNSP. The DNSP may also enter into commercial negotiations with the MC to provide additional advanced services from the upgraded or replacement meter.

If it is agreed that the DNSP wishes to retain the existing network device, then both parties must enter into negotiations to provide an equivalent facility, with each party bearing their own proportionate share of costs to install their equipment in the space available.

Finally, SA Power Networks welcomes the removal of the original draft clause 7.8.6(c) (2) which served to prohibit the DNSP from using a network device to disconnect or reconnect supply remotely. Some of the most important capabilities from a network operational perspective are those that involve disconnection and reconnection of supply, including limiting supply capacity in emergency situations and load shedding.

5. Alterations to type 5 and 6 metering installations to make them capable of remote acquisition

The AEMC is proposing to amend the draft Rule to allow type 5 and 6 installations to be capable of remote acquisition, when:

- the MC requires the installation to be capable of remote acquisition to overcome operational difficulties; and
- where the MC is also the DNSP, to assist the DNSP to provide a safe, secure and reliable network. In this situation, if the DNSP ceases to be the MC, the installation would cease being deemed as type 5 or type 6.

SA Power Networks supports these amendments.

As noted in our 21 May 2015 submission to the draft Rule determination, the original draft Rule proposed to replace "type 4 metering installation" with "type 4 or 4A metering installation" in clause 7.8.9 (c). This particular change appears to be unwarranted, as we understand that a type 4A metering installation is, by definition, incapable of *remote acquisition* and hence an alteration of the kind contemplated in 7.8.9 (b) could not be expected to alter the classification of the metering installation to a type 4A.

SA Power Networks would appreciate the opportunity to review and comment on proposed drafting, prior to the Rule change becoming final.

6. <u>Metering Coordinator obligations where a customer refuses to have a metering installation that</u> meets the minimum services specification installed

SA Power Networks has no specific comments to make on this issue.

7. Application of the framework to transmission connection points.

SA Power Networks has no specific comments to make on this issue.

Further issues not canvassed in the consultation paper

A. The market power of the Metering Coordinator

In our submission to the AEMC's initial consultation paper, dated 29 May 2014⁵, SA Power Networks noted that:

"Under the proposed model, Metering Coordinators (MCs) compete to provide services to the retailers who appoint them, while DNSPs must rely on whatever network services are offered by the retailer-appointed MC. Competition will drive MCs to offer the services that retailers value at an efficient price, but, once appointed, MCs will have no competitive pressure in relation to the provision of services to the DNSP."

We remain concerned with the market structure proposed under the draft Rule, which:

- (a) does not require the MC to offer any service to any party, even those services in the minimum services specification that its meters are required to support; and
- (b) requires the DNSP and other access seekers to negotiate commercial terms for access to services with each incumbent MC who, having been appointed by the retailer, enjoys an effective monopoly as metering service provider for the premises.

An overarching goal of the Power of Choice reforms is to establish a competitive market for demandside products and services. Increased competition in metering is a vehicle to drive greater adoption of the smart meters required to enable new demand-side services, and to enable new efficiencies in the distribution and exchange of energy. From the consumer's perspective, competition in metering is not an end in itself.

We note that EnerNOC, invited to comment on the draft Rule change from the perspective of a demand-side services provider, devoted their presentation at the AEMC Public Forum on 30 April 2015 entirely to their concern that the new Rules may actually impede, rather than facilitate, efficient access to the meter by demand-side service providers, because the MC has a commercial incentive to charge above the efficient cost for access and is not constrained by competition or regulation.

In terms of customer value, DNSP costs account for 30 - 50% of a customer's bill, whereas the cost of metering is less than 5%. There is a potential opportunity to achieve material long-term cost reductions for customers through network initiatives that make use of smart meter data and services to facilitate more active and efficient management of the distribution network, in particular as the network evolves and becomes more dynamic to accommodate increasing use of distributed energy resources such as solar PV.

DNSPs and others will only invest in systems and capabilities that rely on access to the meter if they are confident that they can secure access to the data and functions they require at the customer's premises on an ongoing basis on reasonable commercial terms. If the new market does not enable this, then the opportunity to unlock network benefits from smart meters, and to enable a healthy competitive market for demand-side services, may be lost.

⁵ SA Power Networks' submission to AEMC's 2014 Consultation Paper on the proposed Rule change, 29th May 2014

SA Power Networks considers that some form of light-handed regulation will be required to address the issue of market power of the MC. This could be through the inclusion of a Rule to the effect that when an authorised party other than the FRMP requests access to meter services, such access shall not be unreasonably withheld, and the MC and that party must negotiate in good faith to arrive at commercial terms that are fair, reasonably reflect the cost to the MC to provide access, and do not have the effect of unreasonably discriminating between parties seeking access to meter services⁶.

DNSPs and other parties could then rely on the dispute resolution provisions in Rule 8.2 of the National Electricity Rules (NER) in the event of a dispute (noting that the definition in 8.2.1 (a1) and the substituted definition of Registered Participant in Chapter 10 would have to be amended to include parties seeking access to metering services in the deemed definition of Registered Participants for the purpose of Rule 8.2).

B. <u>The narrow minimum service specification and lack of obligation on the Metering Coordinator to supply services.</u>

SA Power Networks supports a national minimum services specification for meters. We consider, however, that the narrow specification proposed in the draft Rule change is not consistent with the National Electricity Objective (NEO).

Of most concern is the fact that the proposed national specification omits load control, a service that is currently delivered via the metering installation at millions of customer premises across all National Electricity Market (**NEM**) jurisdictions today, upon which networks rely on a daily basis for the efficient utilisation of network assets, and which offers considerable potential for greater community benefits in the future.

In the draft Rule change the right of the DNSP to retain an existing load control device as a network device was advanced as the key safeguard to ensure that existing capability would not be eroded, and to give networks a viable bypass option if they are required to enter into commercial negotiation with MCs to transition load control functions to new smart meters. As noted above, the most recent changes proposed to the drafting undermine this key aspect of the draft Rule by giving the MC the right to remove a network device without the DNSP's consent.

SA Power Networks considers that a national specification that omits load control and other network services commonly supported by smart meters and already in use in Victoria could result in a fragmented approach to the use of smart metering across the NEM, putting at risk key outcomes in network efficiency and ultimately denying the community a significant portion of the potential future value from its investment in a national transition to smart metering. This was recognised in the AEMC's Power of Choice review, which recommended a national specification consistent with the Victorian specification for a market-led smart meter rollout.

SA Power Networks has put its position on the set of services that could be included in a national specification in detail in previous submissions to the AEMC and the Australian Energy Market Operator, and we do not restate these here. However, should the AEMC wish to re-engage or seek clarity on those previous submissions and recommendations, we would be pleased to do so.

⁶ Note that this would be similar to existing provisions in the Rules regarding the provision of type 7 metering services in clause 7.6.4 (e) (using the new numbering in the draft Rule change)

