



22 August 2012

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Dear Sir/Madam,

**AEMC Draft Rule Determination “National Electricity Amendment (Small Generation Aggregator Framework) Rule 2012**

Ausgrid welcomes the opportunity to respond to the AEMC Draft Rule Determination for a “Small Generation Aggregator Framework” proposed by the AEMO. The framework proposed by the Rule change seeks to introduce a new market participant that can aggregate multiple small generating units without having to register each one. Ausgrid understands AEMO’s intention in proposing the new arrangements is to reduce registration costs for generators and therefore provide the ability for the generation output from smaller generators to receive payment through the settlement process for the National Electricity Market (NEM).

Ausgrid supports reducing barriers to the more efficient use of and investment in small generators however we are not convinced that the AEMC has sufficiently assessed the costs imposed on NEM participants or customers. The Rule Change creates the potential for subsidiary processes developed by AEMO to impose significant obligations on Registered Participants such as network service providers which have no clear foundation in the Rules. Fundamental market issues (such as the type of metering and the party responsible for the provision, maintenance and installation of such meters, and the collection, processing and delivery of metering data) should be dealt with in the Rules because those obligations impose costs on Registered Participants and customers. Determining these key roles and responsibilities should not be left to AEMO to determine as part of the Procedural changes to market systems (MSATS), however this is the likely implication of the proposed Rule Change.

Furthermore, the consideration by the AEMC on how the proposed framework is likely to lead to more efficient investment in and use of generation in the NEM and contribute to the National Electricity Objective does not appear to:

- Substantiate comments about reduced costs and that there will be no additional costs placed on Market Participants or customers;
- Consider alternative, and potentially more cost effective options to the administrative burden presented by existing market processes; or
- Demonstrate that the proposed changes will deliver an improved outcome for the NEM or in the long term interests of consumers.

Ausgrid maintains that (as a minimum) the AEMC needs to include clearly defined responsibilities of Registered Participants in relation to metering as part of the Rule change. We also propose that the cost benefit analysis being considered by AEMO needs to be completed prior to making any Rule decision. We provide more detailed comments on the Draft Rule Determination in the Attachment to this letter.

If you have any queries or wish to discuss this matter in further detail please contact Keith Yates, Acting/Executive Manager Regulation and Pricing on (02) 9269 4171.

Yours sincerely

A handwritten signature in black ink, appearing to read 'P. Birk', written in a cursive style.

Peter Birk  
Executive General Manager System Planning and Regulation

Attachment: Ausgrid's more detailed comments on the AEMC Draft Rule Determination "National Electricity Amendment (Small Generation Aggregator Framework) Rule 2012.

## **Attachment**

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Ausgrid's more detailed comments on the AEMC Draft Rule Determination National Electricity Amendment (Small Generation Aggregator Framework) Rule 2012

### **1. Metering and the relationship with National Metering Identifiers (NMI)**

Ausgrid considers there is uncertainty around the intent of the changes relating to metering and that this may impose substantial costs on DNSPs. Commentary provided by the AEMC associated with the draft Rule around the roles of the Responsible Person, FRMP, metering and NMIs acknowledges some of the issues, but the AEMC have concluded that resolving these issues is outside the scope of the Rule Change.

Ausgrid is concerned that unless obligations and responsibilities are clear, not only is it possible for significant cost implications of the Rule change not being considered, it also raises questions around the AEMC's and AEMO's assessment of the "way in which the proposed rule will or is likely to contribute to the NEO". Our concerns include:

#### **(a) Metering Type and Responsible Person (RP)**

The rule changes associated with establishing the Small Generation Aggregator Framework do not appear to introduce any specific arrangements for metering of these systems. The draft Rule provides that a Market Small Generator Aggregator (MSGGA)<sup>1</sup> must comply with the metering installation requirements under clause 7.3.1(i). Primarily these requirements require that the metering installation must be capable of separately registering and recording flows in each direction and be capable of recording interval energy data. There does not appear to be an explicit requirement for a separate meter or a requirement for remote communications.

However, AEMO's Small Generation Aggregator White Paper states that "the proposed rule change will:..... consider small generators to be: (a) NMIs with type 1 to 4 meters, (b) maximum capacity below 5 MW, and exempted between 5 MW and 30 MW".

#### **If Metering Type for the Generating Unit is a minimum Type 5**

If Ausgrid assumes that the AEMC's Draft Rule reflects the policy intent (and not AEMO's in the current White Paper), then a generating unit that seeks to aggregate their generation output with an SGA/MSGGA requires as a minimum a Type 5 capable interval meter. This in turn places an obligation for DNSPs to be the RP for these Type 5 metering installations connected to the DNSP's network.

Type 5 meters do not have remote communications and therefore are not read daily or weekly. In order to support market settlements, the DNSP will be responsible for forward estimating generator data until the meter is read (up to 12 weeks later). In addition, it is likely that a majority of over 47,000 existing PV generators connected within the Ausgrid network who have a Type 5 meter already installed for the generating unit will seek to aggregate their generation output with an SGA/MSGGA. The processing and cost impact of transitioning these installations into the NEM is covered in Section 2(a) below.

#### **If Metering Type for the Generating Unit is a minimum Type 4**

If the metering type for the generating unit is specified as a Type 4 or better meter by the Rules, then the FRMP/MSGGA will either be the RP or appoint the LNSP as the RP and those costs are paid by the MSGGA.

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<sup>1</sup> AEMC's draft rule includes a Registered Participant which is the Small Generator Aggregator (SGA) and a Market Participant which is the MSGGA. The AEMC does not expect that there will be an SGA that is not an MSGGA (see page 12)

Further to the comments above regarding metering type and RP, as identified by the AEMC<sup>2</sup>:

*...the draft rule separates the role of the MSGA and the role of the retailer (for any associated load). Therefore each entity would be the FRMP for their respective meters. In situations where a load and small generator are on the same premises [i.e. one connection point to the distribution network], the MSGA would be the FRMP for the small generating unit's metering installation, while the retailer would separately be the FRMP for the load's metering installation. ....the MSGA and the retailer will each be required to measure energy sent out and energy consumed, respectively.*

*However, the rule change may make the situation where multiple FRMPs use the same metering installation more likely. Depending on the physical arrangements of the premises and the type of metering installation, there may be multiple information flows through a single metering installation with two respective FRMPs. Where this occurs a single RP must be nominated. This creates the potential for conflicts where the direct Market Participants cannot agree on a RP to nominate.*

*Resolving this issue is outside the scope of this rule change request.*

The AEMC correctly concludes that where a load and small generator are on the same premises the AEMC envisages that there could be two meters at the one connection point; or alternatively a "dual element" single meter which measures energy input and output to the premises. Regardless of the scenarios (one meter or two meters), the result is a connection point with a corresponding National Metering Identifier (NMI) that has potentially two FRMPs and potentially two RPs.

It is unclear how the AEMC can consider the issues above poses to the market to be out of the scope of the Rule change when it is the rule change itself which creates the potential conflict and uncertainty. The Draft Rule change will, for the first time, create the situation where multiple participants can be party to the one NMI. By failing to do so, the AEMC is creating uncertainty around the roles and responsibilities of market participants. Furthermore, market systems and DNSPs IT systems don't currently support this multiple relationship for one NMI. We outline this in more detail in 1(b) below.

Alternatively, if the AEMC intends that a "parent – child" relationship be established between the load and the customer, as raised in previous submissions to the AEMC and AEMO the whole framework around this is insufficiently defined in terms of obligations and is not supported by the Rules.

#### (b) National Metering Identifiers (NMIs)

Since inception the NMI has been the identifier in the NEM from which many other aspects relating to the premises are linked. As stated in AEMO's National Metering Identifier Procedure<sup>3</sup>:

*"The National Metering Identifier (NMI) provides a unique identifier for each connection point within the National Electricity Market. It provides an index against which other essential data can be managed and is crucial to the accurate management of customer registration, customer transfer, connection point change control and data aggregation and transfer."*

The NMI forms the basis of IT systems across the NEM. However, in the AEMC's Draft Rule Determination it is stated that "each generating unit has its own connection point. These provisions are necessary and consequential on the creation of the SGA and MSGA"<sup>4</sup>. We are unclear what is meant by this.

Regardless of this lack of clarity, if the existing NMI relationship was changed, (for example, the ability to have multiple NMIs at the one premises connection point, one meter at multiple NMIs and multiple

<sup>2</sup> Page 25, AEMC Draft Rule Determination National Electricity Amendment (Small Generation Aggregator Framework) Rule 2012

<sup>3</sup> AEMO document dated August 2009

<sup>4</sup> Page 11, AEMC Draft Rule Determination National Electricity Amendment (Small Generation Aggregator Framework) Rule 2012

FRMPs for one NMI), this would fundamentally change the basis of DNSPs IT systems and would result in a rebuild of the fundamental basis of IT systems of Market Participants across the NEM.

## **2. AEMC's/AEMO's consideration of the way in which the proposed rule will or is likely to contribute to the NEO**

The reasons provided by the Commission for concluding that the proposed framework is likely to lead to more efficient investment in and use of generation in the NEM were;

- Reduction in costs incurred by AEMO and no major costs incurred by market participants and customers;
- Lowers the costs incurred by small generators in preparing the required documentation; and
- Allows participants that are not familiar with the NEM to participate through a more experienced agent.

We respond to each of these considerations outlined by the AEMC below.

### **a. Reduction in the costs incurred by AEMO and no major costs incurred by market participants and/or customers**

AEMC considers that the costs primarily fall on AEMO and that there does not appear to be any additional costs imposed on other Market Participants or consumers. It is unclear how this conclusion has been reached as we understand that AEMO have not yet completed a CBA on the options.

Ausgrid is also unclear how the AEMC has been able to assess the impacts, given the potential implications of metering costs and the lack of clarity around impacts on DNSPs IT systems and processes. We note that AEMO is considering requirements for system changes and the costs are not yet assessed. Ausgrid questions an approach where the AEMC may reach a Final Rule Determination in the absence of an adequate cost-benefit assessment.

As outlined in Section 1(a), there is also the potential for a significant majority of all existing PVs generator installations (more than 47,000 in Ausgrid's network and over 100,000 in NSW) seeking to aggregate with a MSGA(s). As was experienced by NSW DNSPs in the recent Solar Bonus scheme this may have significant impact on data collection and processing costs for DNSPs as well on the ability for DNSPs to meet timeframes required by the NEM, MSGAs and FRMPs. The costs of this will need to be recovered from all customers through NUoS.

As recognised by the AEMC it is unlikely that the impact of small generator outputs will, at least in the short term, result in substantial deferral in capital expenditure by DNSPs and therefore have little impact on network prices. It is questioned whether the additional costs borne by all customers is outweighed by the benefits accrued to the generator owners, MGSAs and the NEM in the long term.

### **b. Lower the costs incurred by small generators in preparing the required documentation**

As AEMC notes "much of the information collected from small generations in [the registration] process is of limited purpose for maintaining network security" and the costs of "market entry for small generators ... does not serve any administrative purpose or help to achieve system security"

We agree with comments made by the National Generators Forum (NGF) in response to the AEMC's earlier consultation paper<sup>5</sup>. If the registration process collects unnecessary information then the process should be redesigned. The response by the AEMC in the

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<sup>5</sup> AEMC Consultation Paper "National Electricity Amendment (Small Generation Aggregator Framework) Rule 2012, 15 March 2012

Draft Determination to the NGF's comments appears to dismiss the intrinsic link between the reason the AEMO proposed the Rule change and concerns regarding the unnecessary administrative burden of the registration process. We are perplexed about the AEMC's conclusion that "...this should be considered in a different forum".

**c. Allow participants that are not familiar with the NEM to participate through a more experienced agent.**

As noted by AEMO "currently there is an option for a small generator that qualifies for exemption from registration to not participate in the NEM and instead contract directly with a retailer or market customer at the same connection point". Hence the existing arrangements seem to already provide for participants that are not familiar with the NEM to participate through a more experienced agent. In the material provided, the AEMC has not demonstrated any deficiency in this regard. The value/benefit of the Rule change is questioned given the AEMC's summary that "...the framework will not lead to a marked increase in small generation due to the existence of other barriers".

**3. AEMO estimates [that the Rule change] may lead to fifty extra small generators entering the market over the next three years.**

Currently Ausgrid has in excess of 400 MW of embedded generation (EG) connected to Ausgrid's network. PV installations make up over 47,000 of those EG connections totalling in the order of 97 MW.

In addition to PVs, there is approximately 70 other EGs connected to the Ausgrid network, totalling more than 300 MW. There are more than 60 additional EG negotiations / serious inquiries in the pipeline. Some of these will intend to be registered generators but the outcome of this Rule change process is likely to have an impact.

Regardless, Ausgrid considers that AEMO is substantially under-estimating the volume of generators that may seek to aggregate their generation output. Volumes are relevant in terms of the costs incurred by market participants in relation to metering installation, data handling and administration costs.

**4. Demonstrating a failure in the existing rules**

AEMO considers that the registration process acts as an unnecessary barrier to small generators as their costs for applying are high relative to potential returns. AEMO also note however, that "currently there is an option for a small generator that qualifies for exemption from registration to contract directly with a retailer or market customer.... "

The AEMC explain that "the payment agreement between a small generator and retailer is subject to negotiation and may not fully reflect the spot price". The AEMC considers that the proposed Rule change "may put pressure on retailers to offer more attractive contracts for those small generators that choose not to participate in the market."

We agree with comments made by the NGF regarding the equal treatment of larger generators and we note the NGF's concerns that AEMO is seeking measures to decrease price volatility for the sake of delivering short term benefits to some customers.

We do not consider that AEMO has demonstrated a failure in the existing rules or that the proposed Rule changes will deliver improved outcomes in the long term for the NEM or for customers.

**5. Allowing AEMO to begin changes to their procedures and systems prior to the AEMC's final determination so as to allow the rule to begin operation as rapidly as possible**

We raised our concerns regarding this in our previous submission. However the AEMC responded by stating that "...Registered Participants, such as Ausgrid, who are concerned about

potential consequences of [the ] proposal, are able to raise their concerns with AEMO through the standard consultation procedures.

Our concerns remain that the Rule Change has not adequately considered cost and benefits prior to undertaking market and procedural changes. We are aware from information received by AEMO officers attending the B2B and MSATS Reference Group (BMRG) that regardless of the outcomes of the CBA being undertaken by AEMO the market and procedural changes will be implemented.

## **6. No major network or system security concerns raised by the Draft Rule**

We agree that there are no new issues in relation to network and system security that are posed by the Draft Rule change.

Existing arrangements that require DNSPs to consider the impacts of a generator connection on the DNSPs obligations to provide a safe and reliable electricity supply remain unaffected by these Rule changes.

Whilst an MGSA may seek to aggregate the generation output capacity of a small generator, this will remain dependant on the connection agreement being in place between the DNSP and the generator. This is because of site specific constraints that may be necessary (and agreed) in relation to the export capability (and potentially other requirements) as a result of the network configuration in the area of the installed generator.

For many existing generators connected to the Ausgrid network, the terms for operation of the generator it has been agreed that the generation system would operate at limited times (e.g. network outages). If such a site negotiates with a SGA/MSGSA to instead run in parallel with the network, an obligation must be placed on the customer and SGA/MSGSA to notify the LNSP to enable an assessment of possible system, safety and technical impacts due to this change.

## **7. Correction of fact**

The AEMC have misquoted Ausgrid is stating that we “do not consider that there will be a reduction in distribution infrastructure spending as a result of this rule change”. This misrepresents the views of Ausgrid in relation to the potential role of embedded generators in avoiding network costs. In our previous submission to the AEMC we noted that:

“The Rule change proposed by AEMO will incentivise small generators to operate at times of peak pool price. Periods of peak pool price can align with peak network demands across some parts of the distribution network and some network constraints, however this is not always the case. Any benefits that arise from distributed generation in avoiding network costs will be locational and time-specific. Experience to date indicates that any benefits are likely to be small as the output of small generators has not usually been able to offset the need for network upgrades. However, the potential for location and time-specific benefits (and costs) may increase as more generation is installed and arrangements between DNSPs and generators are put in place”.