

25 October 2018

Mr. John Pierce
Chair
Australian Energy Market Commission
PO Box A2449
Sydney South NSW 1235

Level 22
530 Collins Street
Melbourne VIC 3000

Postal Address:
GPO Box 2008
Melbourne VIC 3001

T 1300 858724
F 03 9609 8080

By online submission

Dear Mr Pierce

Global Settlement Draft Rule and Determination – AEMO Submission

AEMO welcomes the opportunity to provide input to the Commission's draft determination on the rule change proposal related to global settlement and market reconciliation.

AEMO is the independent National Electricity Market (NEM) and Western Australian Wholesale Electricity Market (WEM) market and systems operator, and the NEM National Electricity Transmission Planner. This role is undertaken within the legislated policy and market frameworks of the day and in adherence to the national gas and electricity objectives and rules.

AEMO is the global settlement rule change proponent and will be tasked with the management of global settlements in the NEM under chapter 3 of the National Electricity Rules. AEMO is also managing the implementation of the Rule to introduce five-minute settlement.

In this context, AEMO's attached submission provides views on the Commission's proposed more preferable rule in relation to the calculation of unaccounted for energy (UFE), implementation process and timing, and rule drafting.

For further information on the AEMO submission, please do not hesitate to contact myself or Violette Mouchaileh, Group Manager Market Enhancement on (03) 9609 8551.

Yours sincerely



Peter Geers
Executive General Manager, Markets

ATTACHMENT – AEMO SUBMISSION ON DRAFT RULE DETERMINATION

GLOBAL SETTLEMENT AND MARKET RECONCILIATION RULE

1. Allocation of UFE

In the original Rule change proposal and submission to the AEMC's consultation paper, AEMO proposed that the transmission node (TNI) should be the point at which calculation and allocation of UFE should occur.

Having considered AEMO's initial proposals and submissions from a range of interested parties, in particular from distribution network service providers, the AEMC has identified a number of disadvantages that would flow from the allocation of UFE at TNI level. The AEMC's more preferable rule proposes instead to allocate at the local area level, allowing for the continued use of virtual transmission nodes (VTNs) where appropriate. AEMO understands and supports the AEMC's conclusions in this regard.

2. Calculation and publication of UFE

Despite the AEMC's conclusion that UFE should be allocated at the local area level rather than at each TNI, the Draft Rule still requires AEMO to calculate and publish UFE at a TNI level.

The draft determination states that this requirement will improve the transparency and accuracy of settlements.

To facilitate this the Draft Rule requires that:

- distribution network service providers (DNSP) allocate a TNI to all current and future connection points associated with a virtual transmission node (VTN); and
- AEMO's Market Settlement and Transfer Solution (MSATS) procedures and system are amended to facilitate this allocation.

Provision has been made for AEMO to exempt a DNSP from the requirement to map connection points to TNIs where AEMO determines that an exemption is consistent with the national electricity objective. The Draft Rule sets out the factors AEMO is to take into account when considering a request for an exemption.

To provide a meaningful understanding of UFE at TNI level, AEMO will need to know which TNI every load and source of generation is physically connected to. This work will include treatment of connection points allocated to VTNs, the treatment of unmetered loads and cross border supplies. If the work required to align each connection point with each TNI is not performed, it is unlikely that the information will be useful to participants and may instead be misleading.

Calculating UFE accurately for each TNI requires the following critical steps:

- Assignment of each connection point to a TNI, including for connection points assigned to a VTN as considered by the Draft Rule.
- Assignment of type 7 loads to each TNI.
- Assignment of all unmetered non-type 7 connections to each TNI.
- Publication of all TNI level data without exception (to account for cross border flows).

The work required to determine each of these requirements is not insubstantial and is likely to be costly and time-consuming. If the exemption facility in the Draft Rule is retained, it is reasonable to expect that several DNSPs will approach AEMO for an exemption from the requirement to assign each NMI to a TNI. Given the factors AEMO must consider, and that the benefits of UFE calculation at the TNI are relatively limited when allocation is to occur at the local area level, it is likely that their applications would be successful.

Any benefit of calculating and publishing at the TNI level is in the ability to compare UFE with neighboring TNIs, and therefore consider the potential for NMIs to have been incorrectly allocated, or cross border supplies to have been unaccounted for across TNIs. As soon as a distributor is exempt from the allocation requirement for any given TNI, that benefit is invalidated. At worst, the information produced could be highly misleading.

As the cost of implementing TNI calculation would be significant for both AEMO and DNSPs, AEMO considers that this requirement, and related provisions such as UFE thresholds, should not be included in the Rule. Reporting of UFE at any point within the local area is not critical to the implementation of global settlement and should be decoupled from the Rule change. AEMO could explore options to enhance UFE reporting following commencement of global settlement. For example, an assessment of calculation at TNI level could be trialed in an area that does not operate a VTN for settlement and has a stable TNI to NMI relationship.

3. Implementation and transition

The Draft Rule proposes that implementation of global settlement is aligned with the design and build activities for five-minute settlement; with commencement of global and five-minute settlement being 1 July 2021.

The transitional provisions of the Draft Rule indicate that AEMO should calculate and publish UFE data for a period of 12 months prior to commencement to facilitate a lead-in to global settlement (commencing 1 July 2020). Accordingly, the Draft Rule requires several activities to be completed and data to be delivered in a timeframe sufficient to meet this UFE publication start date.

AEMO has previously articulated the benefits of aligning the development and implementation of the five-minute and global settlement Rules. The benefits include:

- Single system change program (AEMO consider that the changes to adopt global are principally within AEMO systems), aligning configuration and release management;
- Coordinated suite of procedure changes and industry consultation (there is a risk of mis-alignment within industry working groups if the two rule changes are progressed on different schedules);
- One set of system environments can be created to develop, test and deploy both rule changes;
- Co-ordinated internal test phase – AEMO’s internal end-to-end test phase is four months and is to begin when all development has concluded. It would be the same set of business resources completing User Acceptance Testing on both rule changes;
- Single market trial phase – AEMO recommends a six-month period of market trials encompassing both 5MS and GS functionality;
- System deployments will align to ensure both components are implemented together;
- Single go live heightened support phase;
- Single workstream and program management teams covering both rule changes;

Considerable test, deployment and management overheads will be required if AEMO cannot align the relevant system development lifecycle changes within the program. There is also a significant impact on industry if two separate sets of focus groups, procedure change consultations, market trials and cutover plans are required ahead of separate go live dates.

To capture the benefits and minimize disruption, it is critical to align timeframes. To that extent, AEMO supports the timing in the Draft Rule for the publication of AEMO Procedures (1 December 2019). However, having commenced the implementation project for five-minute settlement and considered the requirements of the Draft Rule, AEMO does not consider it feasible to commence the calculation and publication of UFE by 1 July 2020. The delivery of data and amendment to systems

required to facilitate this calculation and publication would need to be fast-tracked, and feedback provided to AEMO from market participants is that the proposed timeframe is impractical. AEMO considers that an alternate approach is required to ensure the successful implementation of both Rules.

AEMO considers that the publication of UFE for a period prior to implementation of global settlement is important as it provides retailers with a period to understand how their settlement statements will appear at the point of global settlement implementation. Given the approach taken in the more preferable rule, AEMO considers a lead-in period of 6 months is sufficient. The 12-month period previously proposed by AEMO assumed allocation of UFE would be applied at the TNI and that any material anomalies would need to be identified and if necessary, treated. As the allocation of UFE is to be applied at the local area, local distortions as a result of incorrect allocation of NMI to TNI, incorrect allocation of type 7 and other unmetered loads, etc., are no longer relevant.

AEMO recommends that the publication of UFE commences at the same time as the implementation of five-minute settlement (1 July 2021), with global settlement implementation occurring at a later point in time, for example after a lead-in period of 6 months, with global settlement formally commencing on the earliest practical date in the first calendar quarter of 2022.

4. Rule drafting

AEMO has identified some drafting aspects of the more preferable rule that may warrant further consideration for simplicity and clarification. These are outlined at a high level below, but AEMO would welcome the opportunity to discuss these in more detail with the AEMC.

Local Retailer (LR)

The Draft Rule retains the concept of local retailer (LR). The ongoing applications for the LR appear to have been reduced to one - treatment of non-type 7 unmetered loads that do not currently enter AEMO settlement systems. The draft determination notes that to avoid these loads being allocated to UFE it will be necessary to allocate a NMI and load profile to them.

If AEMO's understanding of the purpose for retaining the LR is correct, it may be possible to remove the term from the Rules and remove the link to the legacy settlement process.

Jurisdictional regulation can continue to designate a retailer to fulfil traditional functions of the LR role for 'franchise customers'.

However, if the definition of Local Retailer is to be retained, the definition itself should be amended to remove parts 1 and 3, retaining only part 2 (see below). In particular, AEMO should have no role in designating the local retailer who is to be responsible for selling energy to 'franchise customers'.

Local Retailer

In relation to a local area, the Customer who is:

- ~~1. a business unit or related body corporate of the relevant Local Network Service Provider; or~~
- ~~2. responsible under the laws of the relevant participating jurisdiction for the supply of electricity to franchise customers in that local area; or~~
- ~~3. if neither 1 or 2 is applicable, such other Customer as AEMO may determine.~~

Customer definitions

The reduced application of the LR requires a reassessment of the current definitions of first-and second-tier load. For example, the definition of first-tier load is:

first-tier load

Electricity purchased at a *connection point* directly and in its entirety from the *Local Retailer* and which is classified as a *first-tier load* in accordance with Chapter 2.

In theory, this could be any load supplied by the retailer currently designated as the LR, whether in its capacity as the LR or not. AEMO consider that the definition (alongside a corresponding change for the term *second-tier load*) may work better if amended as follows:

first-tier load

Electricity purchased at a connection point **by a franchise customer directly and in its entirety** from the Local Retailer and which is classified as a first-tier load in accordance with Chapter 2.

A simpler alternative might be to rename first tier load as 'non-market load', which more accurately describes what it will encompass after global settlement is introduced. Second tier load is equivalent to market load.

Non-market generators

AEMO's rule change proposal suggested allowing a generator to classify its system as non-market where a market customer was financially responsible for the load at the same connection point, provided that market customer's local area load exceeded its total non-market generation in that local area.

AEMO understands the intent of the Draft Rule is to require registration of non-exempt generators as market generators if any generation may be sent out (supplied into the network) at the connection point.

However, it is not clear that the proposed drafting of clause 2.2.5 (and the corresponding amendment to clause 2.2.4) will have this effect. Any financially responsible market participant who agrees to buy the output of generation co-located with a load is potentially a '*Customer* located at the same *connection point*' who is purchasing the sent out generation in its entirety. AEMO considers that more fundamental drafting changes may be necessary.

Settlement Calculations

AEMO notes that the AEMC has redrafted the settlement algorithms from AEMO's proposed draft rule, primarily to accommodate the draft determination to allocate UFE at the local area level.

Noting that the calculation and allocation of UFE remains under consideration, AEMO has not commented on those algorithms at this stage, but would appreciate the opportunity to liaise with the AEMC in finalising the algorithms to ensure that they are consistent with the intended outcomes of the AEMC's final determination.