

26 October 2010

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

By online submission

Level 22 530 Collins Street Melbourne VIC 3000

Postal Address: **GPO Box 2008** Melbourne VIC 3001

Γ 1300 858724 F 03 9609 8080

Dear Mr Pierce

Amendments to PASA-related Rules - ERC0107

Thank you for the opportunity to comment on the draft Rule regarding the Amendments to PASA-related Rules.

AEMO supports the draft Rule, subject to the AEMC addressing issues with the following proposed changes:

- 1. Items [15], [29]: Published information is not limited to PASA "outputs"
- 2. Items [18], [33]: Published Aggregate Capacity Information is ambiguously defined
- 3. Item [26]: STPASA Unit Availability Definition is too prescriptive
- 4. Item [45]: Notice Period for PASA Availability is ambiguously defined

Further details of these issues and AEMO's suggested changes are in the attached submission.

If you would like to discuss any matters raised in this submission, please contact Ross Gillett on 02 9239 9114.

Yours sincerely

Terry Grimwade

Executive General Manager, Market Performance

cc:

Attachments: AEMO submission

AEMO SUBMISSION TO DRAFT RULE - AMENDMENTS TO PASA-RELATED RULES - ERC0107 .DOCX Australian Energy Market Operator Ltd ABN 94 072 010 327

www.gemo.com.gu info@gemo.com.gu



AEMO Submission to Draft National Electricity Amendment (Amendments to PASA-related Rules) Rule 2010

AEMO supports the AEMC's draft Rule, subject to addressing the issues below.

1. Published Information is not limited to PASA "outputs"

(Draft Rule: Schedule 1, Items [15], [29])

Draft Rule

In clause 3.7.2(f), after "information", the AEMC proposed to insert "as *medium term PASA* outputs":

(f) AEMO must prepare and *publish* the following information as *medium term* PASA outputs in respect of each day (unless specified otherwise in clauses 3.7.2(f)(1) to 3.7.2(f)(6)) covered by the *medium term PASA* in accordance with clause 3.13.4:

<u>Issues</u>

AEMO considers that the inserted reference to "*medium term PASA* outputs" is not strictly correct as the list of information published by AEMO under clause 3.7.2(f) is a mix of inputs to, and outputs from, the MTPASA.

Of the information to be published, only the items in sub-paragraphs (5A),(5B) and (6) are MTPASA outputs calculated as part of the MTPASA optimisation process.

AEMO also considers that the reference to "short term PASA outputs" in existing clause 3.7.3(h) is incorrect, as only the items in sub-paragraphs (4AA),(4AB) and (5) are STPASA outputs calculated as part of the STPASA optimisation process.

As a minor issue, AEMO also considers that the reference in clause 3.7.2(f) to publishing "in accordance with clause 3.13.4" is more correctly a reference to clause 3.13.4(a), consistent with the reference in clause 3.7.3(h) to publishing "in accordance with clause 3.13.4(c)".



Suggested Rule

AEMO suggests the following changes to the draft Rule:

MTPASA Clause 3.7.2(f):

(f) AEMO must prepare and publish the following information as medium term PASA outputs in respect of each day (unless specified otherwise in clauses 3.7.2(f)(1) to 3.7.2(f)(6)) covered by the medium term PASA in accordance with clause 3.13.4(a):

STPASA Clause 3.7.3(h):

(h) AEMO must prepare and publish the following information as short term PASA outputs for each trading interval "(unless specified otherwise in clauses 3.7.3(h)(1) to 3.7.3(h)(5)) in the period covered by the short term PASA in accordance with clause 3.13.4(c):

2. Published Aggregate Capacity Information is ambiguously defined

(Draft Rule References: Schedule 1, Items [18], [33])

Draft Rule

Currently, AEMO does not publish the aggregate generating unit availability information that is listed in clauses 3.7.2(f)(5) and 3.7.3(h)(4).

To address this issue the AEMC proposed amendments to clause 3.7.2(f)(5) so that AEMO must separately publish the MTPASA information in sub-paragraph (ii) that relates to "an allocation of *generation* that cannot be *generated* continuously at the full offered *PASA* availability of the scheduled generating units for the period covered due to specified weekly energy constraints". The AEMC proposed to move this reporting item into a new clause 3.7.2(f)(5B) with the remaining reporting items from sub-paragraphs (i) and (iii) moved into a new clause 3.7.2(f)(5A). These reporting items are all outputs from the MTPASA optimisation and represent the amount of capacity dispatched after allowing for the impact of network constraints.

¹ In the MMS data model, this item is called "Constrained Capacity" in the MTPASA_RegionSolution table. The summation of the remaining items previously in sub-paragraphs (i) and (iii) of clause 3.7.2(f)(5) is called "Unconstrained Capacity".



The "aggregate *generating unit PASA availability*" information that remains in proposed clause 3.7.2(f)(5) becomes a separate reporting item that represents the sum, for all units in the region, of the PASA availability submitted by the relevant participant and input to the MTPASA.

Similarly, the AEMC proposed amendments to clause 3.7.3(h)(4) so that AEMO must separately publish the STPASA information in sub-paragraph (ii) that relates to "an allocation of *generation* that cannot be *generated* continuously at the full offered availability of the *scheduled generating units* for the period covered due to specified daily *energy constraints*".² The AEMC proposed to move this information into a new clause 3.7.3(h)(4AB) with the remaining information from sub-paragraphs (i) and (iii) moved into a new clause 3.7.3(h)(4AA).

<u>Issues</u>

AEMO agrees with all of the above changes, as they align with the current reporting practice.

However, AEMO considers that further changes are required³ to new clauses 3.7.2(f)(5A),(5B) and 3.7.3(h)(4AA),(4AB) to clarify the "processed" nature of the aggregate capacity information therein and to avoid confusion with, and to differentiate against, the "raw" aggregate generating unit availability information in amended clauses 3.7.2(f)(5) and 3.7.3(h)(4). This clarification more accurately aligns with the current reporting practice.

Without these clarifications, the draft Rule infers that AEMO should only report the "raw" capacity as submitted, rather than the allocation from that capacity which PASA calculates, which may be lower than the "raw" capacity owing to network constraints and which is used to determine reserve adequacy.

AEMO also considers that "available capacity" in new clause 3.7.3(h)(4AA)(i) should be italicized to make use of the existing glossary definition. As this definition refers to both unit availability and price band availability, AEMO agrees that it is necessary to qualify which is relevant. However, AEMO considers that the AEMC's inclusion of "as notified to AEMO under clause 3.8.4" incorrectly refers to the unit availability profile submitted for use in predispatch, rather than submitted for use in the STPASA in accordance with clause 3.7.3(e)(1).

-

² In the MMS data model, this item is called "Constrained Capacity" in the STPASA_RegionSolution table. The summation of the remaining items previously in sub-paragraphs (i) and (iii) of clause 3.7.3(h)(4) is called "Unconstrained Capacity".

³ Not part of AEMO's original Rule request.



As a minor issue, AEMO also considers that the existing references to "full offered" availability in new clauses 3.7.2(f)(5A)(i),(5B) and 3.7.3(h)(4AA)(i) are unnecessary as it is already understood by the market that the availability is offered by the relevant participant for dispatch up to the full amount.

Suggested Rule

AEMO suggests the following changes to the draft Rule:

MTPASA Clauses 3.7.2(f)(5A) and (5B):

- (5A) aggregate capacity for each *region*, after allowing for the impact of *network* constraints, that can be *generated* continuously, calculated by adding the following categories:
 - (i) the capacity of *scheduled generating units* in the *region* that are able to operate at the *full offered-PASA availability*; and
 - (ii) the forecast *generation* of *semi-scheduled generating units* in the <u>region</u> as provided by the *unconstrained intermittent generation* forecasts;
- (5B) aggregate capacity for each region, after allowing for the impact of network constraints, that cannot be generated continuously at the full offered PASA availability of the scheduled generating units in the region due to specified weekly energy constraints; and

STPASA Clauses 3.7.3(h)(4AA) and (4AB):

- (4AA) aggregate capacity (excluding the relevant aggregated MW allowance referred to in subparagraph (4B)) for each *region*, after allowing for the impact of network constraints, that can be generated continuously, calculated by adding the following categories:
 - (i) the available capacity of scheduled generating units that are able to operate at the full offered availability as notified to AEMO under clause 3.7.3(e)(1)3.8.4; and
 - (ii) the forecast *generation* of *semi-scheduled generating units* as provided by the *unconstrained intermittent generation forecasts*;



(4AB) aggregate capacity (excluding the relevant aggregated MW allowance referred to in subparagraph (4B)) for each *region*, after allowing for the impact of network constraints, that cannot be *generated* continuously at the <u>available</u> capacity availability referred to in subparagraph (4AA)(i) due to specified daily energy constraints; and

3. STPASA Unit Availability Definition is too prescriptive

(Draft Rule Reference: Schedule 1, Item [26])

Draft Rule

In clause 3.7.3(e)(1), after "expected *market* conditions", the AEMC proposed to insert "taking the ambient weather conditions forecast at the time of the 10% probability of exceedence *peak load* into account in the manner described in the procedure prepared under clause 3.7.3(j)".

AEMO notes that the AEMC justified this change in section 7.3 of its Draft Determination, by referring to the AEMC's final report from its "Review of the Effectiveness of NEM Security and Reliability Arrangements in light of Extreme Weather Events" which states that AEMO is taking action to improve procedures for requiring participants to update equipment availability when extreme temperatures are forecast.

Issues

AEMO considers that the existing reference to "expected market conditions" is sufficiently broad to allow the participant the flexibility to assess what determining factors are most relevant to them in forecasting the availability of their units.

It is appropriate for the draft Rule to prescribe that "ambient weather conditions at the time of the 10% probability of exceedence (PoE) peak load" as a determining factor for unit availability in MTPASA, as weather conditions over its two year outlook are largely unpredictable and hence assumed to be adverse (that is, forecast to result in relatively high peak load) for any day of the period.

However, AEMO considers the draft Rule should not over-emphasise ambient weather conditions as a determining factor for unit availability in STPASA over its seven day outlook because:



- there are often more relevant determining factors involved, such as energy source limitations or desired economic outcome.
- the participant is better able to assess the relative probability of these determining factors, given there is relatively greater confidence in weather forecasts over the next seven days, and those forecasts are generally not 10% PoE.

AEMO also considers that "availability" in amended clause 3.7.3(e)(1) is equivalent to the existing glossary definition "available capacity" and the clause should instead refer to the existing definition.

Finally, AEMO considers that the reference to "peak" load is incorrect, as STPASA demand forecasts are half hourly.

Suggested Rule

AEMO suggests deleting the reference to accounting for "ambient weather conditions forecast at the time of the 10% probability of exceedence *peak load*" and deleting the reference to the "procedure prepared under clause 3.7.3(j)" in taking those conditions into account.

AEMO also suggests replacing "availability" with the existing glossary definition "available capacity".

STPASA Clause 3.7.3(e)(1):

- (e) The following short term PASA inputs must be submitted by each relevant Scheduled Generator and Market Participant in accordance with the timetable and must represent the Scheduled Generator's or Market Participant's current intentions and best estimates:
 - (1) <u>available capacity</u> availability of each scheduled generating unit, scheduled load or scheduled network service for each trading interval under expected market conditions taking the ambient weather conditions forecast at the time of the 10% probability of exceedence peak load into account in the manner described in the procedure prepared under clause 3.7.3(j);



4. Notice Period for PASA Availability is ambiguously defined

(Draft Rule Reference: Schedule 1, Item [45])

Draft Rule

The AEMC proposed amendments to the glossary definition of PASA availability in Chapter 10, so that:

- in determining the physical plant capability, the relevant participant must take into account ambient weather conditions in the manner described in the MTPASA and STPASA procedures prepared under clauses 3.7.2(g) and 3.7.3(j) respectively
- the physical plant capability is that which can be made available by the relevant participant if given 24 hours' or less notice

Issues

While AEMO agrees that ambient weather conditions are a dominant factor in determining the PASA availability over the MTPASA timeframe, as discussed under Issue 3 this is not the case for PASA availability over the STPASA timeframe.

AEMO also considers that PASA availability is the physical plant capability that can be made available by the relevant participant if given exactly 24 hours' notice - no less, and no more.

Inclusion of the words "or less" after "when given 24 hours' notice" could be incorrectly interpreted by the participant as the capability that can be made available when, for example, only one hours' notice is given, thereby excluding additional capability that could otherwise be made available given the full 24 hours' notice.

Suggested Rule

AEMO suggests the following changes to the amended definition:

PASA availability

The *physical plant capability* (taking ambient weather conditions into account in the manner described in the procedure prepared under clause 3.7.2(g)-or clause 3.7.3(j)) of a *scheduled generating unit*, *scheduled load* or *scheduled network service* available in a particular period, including any *physical plant capability* that can be



made available during that period, when given 24 hours' notice or less that it is required.