



Your Ref: ERC0332

23 September 2021

Tom Meares
Australian Energy Market Commission
GPO Box 2603
Sydney NSW 2000
Submitted online to: www.aemc.gov.au

Dear Tom

Submission: National Electricity Amendment (Updating Short Term PASA) Rule 2021

CS Energy welcomes the opportunity to provide a submission to the Australian Energy Market Commission's (**AEMC's**) *Consultation Paper – National Electricity Amendment (Updating Short Term PASA) Rule 2021 (Consultation Paper)*. CS Energy is strongly supportive of ensuring processes such as the Short Term Projected Assessment of System Adequacy (**ST PASA**) that are critical to the effective and efficient management of delivering secure and reliable energy now and into the future are agile and fit for purpose.

About CS Energy

CS Energy is a Queensland energy company that generates and sells electricity in the National Electricity Market (**NEM**). CS Energy owns and operates the Kogan Creek and Callide B coal-fired power stations and has a 50% share in the Callide C station (which it also operates). CS Energy sells electricity into the NEM from these power stations, as well as electricity generated by other power stations that CS Energy holds the trading rights to.

CS Energy also operates a retail business, offering retail contracts to large commercial and industrial users in Queensland, and is part of the South-East Queensland retail market through our joint venture with Alinta Energy.

CS Energy is 100 percent owned by the Queensland government.

Key recommendations

The NEM is changing and will continue to do so as it transitions to a market with more variable renewable energy (**VRE**) and an overall lower carbon footprint. The ability to effectively and efficiently manage power system security and reliability against this evolving landscape is paramount, and CS Energy supports the need to develop flexible and adaptive market and regulatory frameworks to ensure processes such as ST PASA meet the requirements of the NEM from both an AEMO and Market Participant perspective.

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CS Energy notes that the current prescriptive approach to the administration of ST PASA in the National Electricity Rules (**Rules**) has arguably served its purpose since the commencement of the NEM to the current time, and a review of the arrangements is valid. Prior to considering the details of AEMO's proposal, this review needs to consider:

- The definition of system adequacy; and
- The appropriate governance and consultation processes.

(a) Definition of system adequacy

CS Energy observes that while the term 'system adequacy' is utilised in the Rules in Chapter 3 (Market Rules), Chapter 4 (Power System Security) and the Glossary, it is not defined. The absence of a definition for the term dilutes the purpose and obligations that are required from the ST PASA process. This oversight has the potential to compromise AEMO executing its obligations as specified in the Rules¹ in administering ST PASA if a principles-based approach is adopted. This may also affect AEMO's ability to properly inform Registered Participants on power system security and reliability prospects that may require them to respond or manage their exposure in the market.

Furthermore, clause 3.7.1 (d) specifies an overarching goal where '*AEMO must use its reasonable endeavours to ensure that it publishes sufficient information to allow the market to operate effectively with a minimal amount of intervention by AEMO*'. This goal cannot be achieved in the absence of either a prescription of the information to be published in ST PASA or a principles-based approach that is wedded to a clear definition of system adequacy. This is increasingly important as the power system transforms, with the market experiencing greater system security challenges, some of which have led to interventions by AEMO.

To date, system adequacy has primarily focussed on reliability encompassing energy adequacy. It is an imperative that system adequacy is defined in the context of ST PASA to ensure that power system security parameters including but not limited to inertia, reactive power and system strength are detailed to the market alongside *capacity reserve* (energy) and Frequency Control Ancillary Services (**FCAS**) referred to as *contingency capacity reserves* in the Rules.

CS Energy has structured its submission in the expectation that 'system adequacy' is defined and integrated into the future arrangements in the Rules in relation to ST PASA.

(b) Governance and consultation

CS Energy is receptive to a principles-based framework in the Rules conditional on an associated governance process for the development of the principles and subsequent development and changes to the AEMO ST PASA procedures.

AEMO currently consults on the *Reliability Standard Implementation Guidelines (RSIG)* procedure and the *Reserve Level Declaration Guidelines (RLDG)* procedure, both of which are utilised in ST PASA to forecast *capacity reserve* over a six-day period. However, AEMO procedure SO_OP 3703 *Short Term Reserve Management* and the *ST PASA Process Description* procedures are not presently consulted on. This is an opportunity to consolidate the ST PASA procedures and incorporate them into an agreeable consultation framework.

¹ Clause 3.7.1 of the Rules

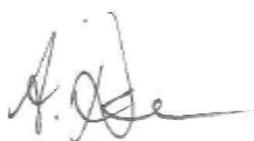
The governance process must incorporate a two-stage consultation process rather than the one stage consultation proposed by AEMO given the importance of ST PASA for market participants. The framework should also specify the timeframe over which consultations are open to allow sufficient time to respond while balancing the need for agility and flexibility. If an appropriate governance framework is not forthcoming then CS Energy supports retaining the current prescriptive approach.

Responses to the specific questions

CS Energy's responses to the specific questions in the Consultation Paper are set out in the Attachment.

If you would like to discuss this submission, please contact Henry Gorniak (Market and Power System Specialist) on 0418 380 432 or hgorniak@csenergy.com.au.

Yours sincerely

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

Alison Demaria
Market Policy Manager

ATTACHMENT A

Question 1: Assessment Framework

CS Energy is generally supportive of the proposed assessment framework qualified by the need to define 'system adequacy' in the ST PASA process. This requirement is critical in determining whether the Rule change does promote reliability and system security at the lowest cost.

The proposed 'principles' approach in lieu of the existing prescriptive approach in the Rules is conditional on a governance and Rules consultation process for the suite of ST PASA procedures. The 'principles' approach is assessed as a more efficient facilitation process of the expected reform process and expected developments in the NEM.

Improved information may result in more efficient use of reliability and security interventions by AEMO, particularly in relation to Reliability and Emergency Reserve Trader (**RERT**) and directions. However, the overarching objective is to allow the market to operate effectively with a minimal amount of intervention by AEMO as stated in clause 3.7.1 (d).

Question 2: Current Arrangements in the rules in relation to ST PASA

In lieu of a governance and Rules consultation process for the ST PASA process, the only alternative is to have a prescriptive process for ST PASA. A key oversight in the Rules is the lack of a definition of 'system adequacy'.

The only identified ambiguity is the assumption that PASA availability is utilised in the ST PASA process when the input is Maximum Availability.

Question 3: The Rules would provide an Objective for ST PASA

CS Energy notes that while the Rules do not explicitly provide a stated Objective for ST PASA, it is evident when clauses 3.7.1 (b) and 3.7.1 (d) are read in conjunction with each other, this effectively forms the Objective for ST PASA. If necessary and in the interest of clarity, CS Energy would support the consolidation of these two clauses to clearly represent the Objective for ST PASA. AEMO's proposed objective appears to dilute the requirements in these two clauses.

CS Energy agrees on the removal of references to the reserve trading provisions.

Question 4: Require AEMO to develop and publish Procedures to describe Inputs, Outputs and a Methodology

Yes, the suite of ST PASA and associated procedures referred to in the Recommendations should be consolidated into a ST PASA directory.

Question 5: Single Stage Consultation Process

CS Energy does not support this principle. AEMO must undertake a two (2) stage consultation process if the prescriptive approach is replaced with the principles-based approach. Registered Participants must have confidence in a process that protects their interests, and this is not delivered by a single stage consultation.

Question 6: Require AEMO to publish ST PASA at least daily

CS Energy notes the requirement and current AEMO practice is the publication of ST PASA every two hours. In the interests of providing AEMO and Registered Participants with up to date information in the increasingly dynamic power system, it would be desirable to publish ST PASA every thirty minutes. Furthermore, it would minimise the duration that contract trading is suspended for a Registered Participant(s) pending the release of an update to ST PASA in the public domain. If AEMO is unable to provide thirty-minute updates of ST PASA, CS Energy seeks the retention of the current two-hour frequency of publishing ST PASA.

Question 7: Require AEMO to prepare various ST PASA inputs

CS Energy supports AEMO's proposal to specify ST PASA inputs at a high level in the Rules. This support assumes that AEMO would conduct a thorough consultation to determine these inputs to ensure that the current ST PASA rules and requirements are not diluted. Inputs however, must also reflect system security parameters.

Replacing the current PASA availability with a recall time that would be included in the ST PASA process would enhance the accuracy of the ST PASA process. The modified PASA availability would need to replace the current Maximum Availability input to ST PASA to give effect to the improved accuracy. Recall time must be defined such that it is not a sliding timescale.

Question 8: Replace references to Scheduled Generator and Market Participant with the Generic Term, Registered Participant

Agree.

Question 9: Require AEMO to publish ST PASA information to reflect the Objective, including some specific information.

Further requirements are likely to emerge when 'system adequacy' is defined, however, CS Energy provides the following comments:

- AEMO need to demonstrate how they have incorporated the requirements of the RSIG and LRDG procedures into the ST PASA process;
- The low reserve condition (**LRC**) applies to MT PASA and not ST PASA;
- Maintain the current suite of Probability of Exceedance (**POE**) demands, 10, 50 and 90 POE and not introduce % confidence factors for demand;
- CS Energy is concerned with the potential of layering of requirements and cumulative accommodation of error, such as the Forecast Uncertainty Measure (**FUM**) coupled with other measures proposed by AEMO will distort the ST PASA outputs; and
- It is important to ensure that ST PASA does not conflate system reliability and network reliability. Network reliability can be managed in the outage assessment process that can include an assessment on the suitability of utilising RERT to manage an identified system security issue.

Question 10: Definition Changes

Further consultation is required on the definition of energy constraints to determine what the term 'in a specified period' means in the context of ST PASA.

CS Energy does not support the removal of the ambient temperature derating requirement. This is a contradiction of AEMO's position in requesting actual capability arising from increasing ambient temperature conditions that is also a Rule obligation.

As previously noted, CS Energy supports redefining PASA availability being changed to reflect actual recall time (provided not a sliding timescale) and be included in the ST PASA process.

Question 11: Introduction of a Principle-Based approach to ST PASA in the Rules

CS Energy has stated its position of conditional support in its Key Recommendations to a principle-based approach provided there is a governance process including a two (2) stage consultation process for the principles and the suite of ST PASA procedures.

The 'principles' approach is assessed as a more efficient facilitation process of the expected reform process and expected developments in the NEM.

Question 12: Specification of ST PASA being published over seven days in the Rules

CS Energy does not support amalgamating or overlaying ST PASA with pre-dispatch or pre-dispatch PASA. Each application has a specific utility for participants, and if there is ambiguity in the Rules then this should be addressed

Question 13: Publication of Generator Availability on a DUID level

CS Energy supports the publication of the generation availability information on a per unit, or dispatchable unit identifier (**DUID**), level. This is a logical extension of the recent implementation of the feature in MT PASA. Based on the value and experience over the last twelve months where DUID values in MT PASA have been published, CS Energy is not aware of any anti-competitive behaviour arising from this initiative or concerns raised by the Australian Energy Regulator in their compliance reports.