

AEMO SECURITY ENABLEMENT PROCEDURES - CONSULTATION PAPER

8 MAY 2025

INTRODUCTION

The Energy Users' Association of Australia (EUAA) is the peak body representing Australian commercial and industrial energy users. Our membership covers a broad cross section of the Australian economy including significant retail, manufacturing, building materials and food processing industries. Combined our members employ over 1 million Australians, pay billions in energy bills every year and in many cases are exposed to the fluctuations and challenges of international trade.

Thank you for the opportunity to make a submission under the AEMO Security Enablement Procedures - Consultation Paper.

We understand that the security enablement procedures set out:

- a methodology for how AEMO will determine the minimum system security requirements
- a methodology for how AEMO will enable the system security requirements in accordance with the principles set out in clause 4.4A.4, and
- how AEMO determines and enables system strength services to support the level of stable voltage waveform requirements.

In developing these procedures, AEMO has focused on developing a framework that allows enablement of security services in a transparent fashion and evolution over time. This includes:

- the application of limits advice through constraints in the same way as other power system limits
- the assessment of security service needs over the pre-dispatch timeframe and any impact of enablement on pre-dispatch outcomes.

This consultation will also result in amendments to the following AEMO operating procedures and process;

- SO_OP_3708 Non-market Ancillary Services (including the Guide to Ancillary Services in the NEM)
- SO_OP_3704 Pre-Dispatch Procedure
- SO_OP_3718 Outage Assessment, and
- SO_OP_3715 Power System Security Guidelines
- Spot market operations timetable

Unfortunately, we believe that the proposed rule change and procedure will not result in unbundling of the essential system services but will continue to rely exclusively on AEMO's continued use of regional generation

bundles. This means that the provision of dispatch of additional market services such as ramping reserves, headroom and foot room and ancillary services headroom and foot room as well as MNBPR headroom and foot room will not be transparent in the market.

Similarly, the essential system services are poorly defined and are “whatever is reasonably considered necessary by AEMO to maintain the power system in a secure operating state”, which appears to be a catch-all statement that doesn’t require AEMO to justify its actions.

Looking at the proposed Security Enablement procedure in detail, **we believe it will result in significant additional costs to consumers.**

OUR FEEDBACK ON THE PROPOSED SECURITY ENABLEMENT PROCEDURES

Minimum System Security Requirements

We are concerned with the apparent total discretion that the proposed Security Enablement Procedures provide AEMO without defining the breadth and limits of that discretion:

“Any other power system security requirements that AEMO determines from time to time are necessary to maintain the power system security standards”

and

“To be determined based on type of security need being addressed.”

This in effect provides complete discretion to AEMO to do whatever it determines may be required with respect to Security Enablement. Additionally, the procedure sets out no context regarding how this requirement or the identified need are determined. The Security Enablement Procedure should set out in detail how any “other power system security requirement” will be determined including the need for the requirement and importantly how this requirement will be communicated to the Market, including any financial impacts and ex-post review to ensure the actions were justified.

System Security Services Enablement

We are unclear from the proposed Security Enablement Procedure as to the provision of power system security services from a resource connected to the grid via a grid forming inverter when energised.

The procedure should be clear regarding the provision of power system security services by a resource connected via a grid forming inverter which is energised to the power system consistent with the way a synchronous generating unit which is synchronised to the grid with regards to the provision of power system security services from that resource. That is, the procedure should not simply conclude that power system security services from a grid forming connected resource is unavailable unless the resource is enabled for the provision of a power system security service.

Automated system security services enablement

The proposed Security Enablement Procedures for automated system security services enablement:

- do not include provision for an AEMO market notice to advise the Market that a power system security shortfall exists and the latest time at which AEMO intends to enable dispatch of the required essential system service.
- suggest that AEMO will implement a 4-hour minimum notice period for enablement of a power system security service provider but have not provided details of whether this is the most effective or efficient timeframe for notice.
- Whilst AEMO suggests it will use the automated system security services enablement process for the enablement of “Any other power system security requirements that AEMO determines from time to time are necessary to maintain the power system security standards” it’s unclear as to how the automated process could be used for an unknown and undefined service.

Manual system security services enablement

Similar to the automated system security services enablement, this section should contain provision for communication to the Market of a shortfall in power system security services and the latest time that AEMO intends to enable dispatch of a power system security service(s).

- **Fallback enablement mechanism**

While we agree that this is a required procedure in the event of automated system security services enablement failure, it should ensure that AEMO do not need to enable dispatch of “just in case” or “post contingency” power system security services prior to a contingency event. Where AEMO use this feature due to AEMO’s determination that automated system “*fails to provide a solution that addresses the security services gap*”, then AEMO must provide details of the cause of failure in the AEMO automated system in a timely manner prior to enablement to the Market, followed by a thorough investigation and incident report to the Market.

One area of concern is the proposed “*Cancel erroneous enablement instruction*”, how this will be determined and the timeliness of the notification. The Security Enablement Procedure should set out details regarding how and when cancelling erroneous enablement instructions will be determined, the timeliness of notification to the Market and how said cancellations will impact the Market.

Enablement principles

- **Closest system security service enablement time**

We have concerns with AEMO’s proposal that “*Providers can be sent updated enablement instructions up to 5 minutes in advance to cancel, update or amend an enablement instruction*”. The Security Enablement Procedure fails to define what is meant by update or amend an enablement instruction and the cancellation of an enablement instruction with 5 minutes notice has the potential for significant Market disruption where other participants commitment or dispatch decisions have been based on the dispatch of the power system security service provider

in the pre-dispatch forecast. Such an outcome has the real potential to increase spot market outcomes with flow on impacts to the financial contracts market.

There should be a 60-minute notice period for the cancellation, updating or amending of an enablement instruction to allow for reasonable time for the updating of the pre-dispatch schedule. This is consistent with AEMO's view that the market needs a reasonable time period of notice that a power system security service has been enabled.

- **Minimum system security service intervention**

DUID with multiple generating units – where an aggregated DUID has multiple physical units, the proposed Security Enablement Procedure indicate an intention to “*assume the worst-case scenario*”. Whilst this is not unreasonable, it may result in the unnecessary dispatch of other power system security services. We propose that AEMO amend the Procedure to such that the first priority requires AEMO to receive or obtain direct information from the Participant regarding the number of physical units that will be in-service. The use of the “worst case scenario” should be the fallback position where information can't be obtained.

Grid forming batteries – the proposed Security Enablement Procedure imply that AEMO will assume that a resource connected to the grid by a grid forming inverter when energised is operating in grid following operational mode unless stated otherwise. This proposed procedure maximises the need for AEMO intervention rather than the preferred minimum intervention. The Security Enablement Procedure should set out what steps AEMO intend to employ to ensure that they have the current status of grid-forming BESS, without using the assumption that the battery is in grid following mode. Again, the grid-forming assumption should be the fallback position where information can't be obtained. This will ensure that unnecessary enablement of a power system security service does not occur.

Private Synchronous Condensers - the Security Enablement Procedure should set out what steps AEMO intend to employ to ensure that they have the current status of private synchronous condensers which are a power system security service provider. AEMO have also indicated that where a synchronous condenser is not a registered provider and is not controlled by a TNSP, AEMO will assume the synchronous condenser is not on-line. We recommend that AEMO open up the Provider Interface so that non registered providers may also provide information regarding intended operation status of a synchronous condenser. This will ensure that unnecessary enablement of a power system security service does not occur.

Spot market operation and enablement – It's unclear why AEMO intends to treat a grid forming battery differently to a synchronous generating unit in this area. Whilst it is not unreasonable to consider that a grid forming battery will provide the service simply because it is energised to the grid, the same outcome applies for a synchronous generator following synchronisation to the grid. In this case, a battery should be treated the same as any other generator when generating active energy output into the grid, but it would not be unreasonable to continue to be paid the enablement payment when consuming energy from the grid which would be consistent with the treatment of other scheduled loads in the market, including load consumed by a private synchronous condenser.

- **Variable operational parameters required to be restated**

The procedure should indicate over what time period this information is required to be provided. Would it only need to be provided within the pre-dispatch period, or the pre-dispatch and short-term projected assessment of

system adequacy periods. It is unclear how the information would be of relevance for this procedure outside the pre-dispatch time periods given that enablement of the dispatch for power system security services is restricted to a maximum of 12 hours ahead of *dispatch*.

TNSP System Security Services Agreements

We believe that the requirements of AEMO with respect to TNSP system security service agreements is an over-reach. These contractual obligations exist between the TNSP and the Service Provider and whilst AEMO needs to be aware of the costs at any time, AEMO should not seek to take precedent in determining what costs should and shouldn't be covered by the contract(s) it is not a party to. Assessing the prudent and efficient provision of these services is a role for the AER, not AEMO.

Stable Voltage Waveform Requirements Enablement process

Power system strength services to meet stable voltage waveform requirements should only be dispatched where dispatch of the service will result in additional dispatch from an inverter connected resource which would result in a reduction in the value of the total costs to the market at dispatch, otherwise market customers will simply incur the additional cost of the dispatch of the power system strength service for a negative benefit. The first dot point in this section should be amended by the addition of the word "additional" in the nominated area.

*"Receive limits advice from the relevant TNSP that articulates which system strength services should be considered for enablement, and which IBR units' **additional** dispatch is supported by the enablement of such system strength services"*

AEMO's process should include the provision that the enablement process of power system security services to meet stable voltage waveforms requirements should not simply result in the transfer of active energy output between inverter connected resources as this would be inefficient. We suggest an additional dot point between the first and second dot points as follows;

"Determine if dispatch of additional active energy output from the identified IBR unit(s) will result in an overall cost benefit to the market including the costs of dispatching the power system security service."

Enablement Delegation

Whilst it is not unreasonable that TNSP's may be delegated the control of enablement and dispatch of power system security services, we suggest that rather than this section focusing narrowly on dispatch based on the lower cost dispatch of the power system security service(s), it should instead require that the TNSP demonstrate the ability to calculate lowest market cost overall. The second dot point in this section should be amended to;

*"The relevant TNSP can demonstrate a process for enabling system security services under contracts to meet requirements at lowest **overall** cost **to Market Customers**."*

and

“AEMO is satisfied that TNSP enablement is an efficient outcome for the market overall.”

CONCLUDING REMARKS

The EUAA supports the design of rules, legislation and procedures that achieve efficient, cost effective and equitable outcomes for networks, developers and consumers. In the energy sector under most circumstances, this is best achieved through a national approach and a sharp focus on the NEO. Unfortunately, at this stage the proposed Security Enablement Procedures do not meet the requirements for the EUAA to support at this stage.

The EUAA welcomes further discussions around the issues raised in this submission.

Do not hesitate to be in contact with EUAA Policy Manager Dr Leigh Clemow, should you have any questions.



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