



ERM Power Limited
Level 3, 90 Collins Street
Melbourne VIC 3000
ABN 28 122 259 223

+61 3 9214 9333
ermpower.com.au

Tuesday, 18 August 2020

Ms Samantha Christie
Manager Network Planning System Design and Engineering
Australian Energy Market Operator
Level 22, 530 Collins St
Melbourne VIC 3000

Dear Ms Christie

RE: Network Support and Control Ancillary Services (NSCAS) Description and Quantity Procedure Review

ERM Power Retail Pty Ltd (ERM Power) welcomes the opportunity to respond to the Australian Energy Market Operator's (AEMO) draft determination on the Network Support and Control Ancillary Services (NSCAS) Description and Quantity Review.

About ERM Power

ERM Power (ERM) is a subsidiary of Shell Energy Australia Pty Ltd (Shell Energy). ERM is one of Australia's leading commercial and industrial electricity retailers, providing large businesses with end to end energy management, from electricity retailing to integrated solutions that improve energy productivity. Market-leading customer satisfaction has fuelled ERM Power's growth, and today the Company is the second largest electricity provider to commercial businesses and industrials in Australia by load¹. ERM also operates 662 megawatts of low emission, gas-fired peaking power stations in Western Australia and Queensland, supporting the industry's transition to renewables.

<http://www.ermpower.com.au>

<https://www.shell.com.au/business-customers/shell-energy-australia.html>

General comments

The changes and AEMO's responses to issues raised in submissions to the Consultation are complex in nature, we are concerned that AEMO allowed only the minimum period of 10 business days as required by the rules consultation procedure for stakeholders to review and develop replies to the draft determination and report. We recommend that where matters under consultation involve more complex issues that AEMO allow more than the bare minimum requirements for stakeholders to develop replies.

Generally, ERM Power supports the shift to the new categories of NSCAS: Market Benefits Ancillary Services (MBAS) and Reliability and Security Ancillary Services (RSAS). However, it does appear from the proposed framework that some services may fit into both categories. While this may not be an issue it will be important to examine how a single provider may be able to be contracted for the two separate services, or alternatively, how a provider seeking to provide services under both may only be awarded a contract for a single service, but is then dispatched for either.

¹ Based on ERM Power analysis of latest published information.



In this regard, we consider that the NSCAS description should also include details of the process to be observed by AEMO for the transparent reporting of NSCAS procurement and dispatch. The NSCAS description could for example cross reference an AEMO process document for NSCAS tendering and procurement and for dispatch, set out the methodology by which AEMO intends to inform the market that NSCAS has been dispatched and for which NSCAS service.

Contingencies to be modelled when assessing security and reliability services

Rather than modelling system normal conditions out to five years with management of a single credible contingency from system normal state (a pure N-1 contingency probably modelled over a single dispatch interval), AEMO proposes to model services necessary to return the power system to a *secure* operating state, as defined by clause 4.2.4 of the National Electricity Rules (NER) within 30 minutes of a credible contingency event, consistent with clause 4.2.6 of the NER which specifies the 30 minute interval.

We note that the analysis undertaken under the proposed description and quantity procedures will include analysis of credible contingency events and protected events. While it is generally accepted as not economic to protect a power system against every potential sequence of non-credible contingencies, many of which would represent high impact low probability events, NSCAS contracts should target a *secure* operation state for the power system with a reasonable margin over 'system normal' conditions in order to be fit-for-purpose. In this regard, we believe AEMO's annual NSCAS analysis for reliability and security ancillary service (RSAS) should consider each double circuit transmission line in the NEM as a potential contingency event, not just double circuit transmission lines that are subject to routine reclassification as a credible contingency under a range of prevailing weather conditions.

We recommend that the description and quantity procedure also set out a requirement that AEMO will transparently report to stakeholders and request feedback of all identified transmission system security and reliability issues under section 3.2.1 before proceeding to the power system simulation studies to determine the RSAS need as set out in section 3.2.3.

In addition, Section 3.2.3 of the revised description and quantity procedure also states: "Appropriate margins will be added when assessing NSCAS quantities to account for uncertainties in the power system simulation studies."

ERM Power considers that "appropriate" is too vague and requires additional clarification when applied in order to improve transparency. We recommend that AEMO publish in a reasonable level of detail its reasons to justify which additional "margins" are applied so that market participants are able to conceive non-network projects that are of the highest value to the consumer.

The proposed shift to a 30-minute interval makes sense given how the Rules and the Operating Procedure for System Security are written. Failing to specify this would likely mean that any NSCAS solution modelled may not adequately cater for resilience in the technical response of the contracted service.

Constraints to be investigated under NSCAS process

ERM Power acknowledges that the draft determination recognizes the important role that market participants can play in identifying NSCAS gaps. AEMO also indicates that it will create a mechanism to allow market participants to recommend network issues or constraints to be addressed and provide details of potential solutions to these identified issues. However, no firm timeframes or transparency provisions are detailed in Section 3 of the revised description and quantity procedure.

Instead, AEMO proposes to delay developing a mechanism that will be suitable for considering participant input in the future to the Energy Security Board's (ESB) post-2025 NEM review. This seems to be an unnecessary delay to a concept that AEMO acknowledges could lead to benefits. We urge AEMO to



reconsider its approach and instead to design, as part of this review of the NSCAS procedures, a model that will allow market participants in addition to proposing network issues or constraints for AEMO consideration but also to propose solutions to these. Allowing market participants to propose solutions can have benefits regardless of the outcomes of the post-2025 NEM review.

Not only would this potentially lead to earlier provision of economic benefits to consumers as well as a more secure and reliable power system, but it could help to alleviate the potential workload on AEMO following the release of the post-2025 NEM review final design. Given the scale of the ESB's post-2025 NEM review, AEMO could well have a large volume of procedures to review and amend to implement the full suite of market changes.

Failure to enact functional input from market participants and their proposals to implement projects that are designed to solve constraints with significant commercial impacts (rather than security impacts) represents a huge lost opportunity given the extraordinary level of high cost transmission investments under consideration for commencement between now and 2025. ERM Power wishes to see a commitment from AEMO that it will actively consider market participant proposals. To this end, it would be logical to extend this consultation process from merely nomination of constraints that could be considered by AEMO to a process where a participant can propose a constraint for assessment, along with a nominated non-network option that can be considered as a possible solution.

The framework should contain mandated timeframes and obligations for AEMO to publish – the draft determination only requires AEMO to 'consider' estimates of costs and benefits – information about how a market participant's proposed constraint/ and solution is assessed, how its cost benefit is calculated and why any Transmission Network Service Provider (TNSP) led network solution is preferable on both technical and economic grounds. ERM Power considers that AEMO should be obliged to accurately represent the market participant's non-network option instead of assuming costs. The procedure suggests that AEMO will use the technology cost curves from the Integrated System Plan and the CSIRO GenCost reports which only represent a 'point in time' analysis rather than a more accurate assessment of what a participant is able to achieve in the market.

When providing feedback on non-network options, we also consider that AEMO should include a list of benefits and costs not accounted for in its analysis. While we recognise that AEMO explicitly states in the draft determination that certain benefits such as capital deferral and reductions in ancillary service costs will not be considered, we believe that including them on a qualitative basis can give important context to consideration of non-network options.

Modelling for NSCAS assessment

ERM Power is disappointed that AEMO has rejected our prior suggestion to ground NSCAS assessment in a specific forecasting methodology for cost benefit assessment. Instead, AEMO argues:

"An overly detailed and prescriptive methodology risks leaving some constraints outside defined assessment processes and therefore outside consideration, or risks having benefit analysis that consumes a material portion of the potential economic benefits of constraint alleviation."²

We consider that this misrepresents the detail of our submission and fails to address the substance of our recommendation.

² AEMO, Network Support and Control Ancillary Service Description and Quantity Procedure Review – Draft Report and Determination, August 2020. p 13.



ERM Power recommended a specific and detailed methodology to improve transparency of AEMO's process, rather than the originally proposed "set of higher-level modelling principles". The submission did not indicate any proposal to reduce AEMO's flexibility as indicated by AEMO in the Draft Determination and Report.

Further, the methodology set out in Appendix A of the draft determination only sets out an obligation for AEMO to consult with TNSPs, and not consult with market participants that have proposed constraints and non-network options. In addition, AEMO is not proposing a complete disclosure of relevant assumptions and methodologies but will provide more on request. For transparency purposes, all of this information should be published in a timely fashion.

The proposed amendments to the NSCAS descriptions appear reasonable, but the new framework must provide some visibility and accountability on:

- Which constraints are assessed and how?
- Which solutions are considered suitable?
- Which solutions were discarded and why?
- Non-network options; and,
- The results of the cost-benefit assessment.

Consultation with market participants proposing constraints and non-network options should be included in AEMO's process. Currently this is limited only to TNSPs. ERM Power notes AEMO's preference for 'principles of assessment' over an assessment methodology. We consider that this will be suitable provided that there is a high degree of transparency on inputs to AEMO's process, including explicit and accurate modelling of proposed non-network options and clarity on what the technical impacts of the various options are on the power system. This would mean publishing the results of power system studies described in Section 3.2.3 and 3.3.3 of the procedures.

Conclusion

AEMO and TNSPs need not be the 'gatekeepers' of NSCAS needs. Market participants can play a crucial role in identifying constraints and proposing non-network options that can achieve the same benefits (or greater) at lower cost. Ultimately this will improve outcomes for all consumers. We contend that a fair and transparent process to allow consideration of such options should be a central part of the proposed and future NSCAS description and quantity procedure, irrespective of the results of the post-2025 NEM Review.

Please contact me if you would like to discuss this submission further.

Yours sincerely,

[signed]

David Guiver
Executive General Manager – Wholesale Energy Markets
07 3020 5137 – dguiver@ermpower.com.au