

From: [REDACTED]
Sent: Friday, 21 May 2021 1:32 PM
To: [REDACTED]
Cc: [REDACTED]
Subject: AEMO feedback to Tranche two regulations to support the Electricity Infrastructure Roadmap issues paper

Hi [REDACTED]

As discussed this morning please find feedback to the issues paper on Tranche two regulations to support the Electricity Infrastructure Roadmap.

Bearing in mind, AEMO is likely to be the Energy Security Target Monitor and calculate the firming requirements, this should ensure that inputs to derive the requirements are internally consistent with the inputs to derive the ESOO and ISP publications. However, the feedback has been structured in a way that does not pre-empt this decision.

The attached link highlights key questions and potential issues. Happy to discuss these with you to inform finalisation of the Regulations.

Some key feedback are:

1. Agree that there should be separate derating factor for wind and solar. It is preferable for the regulations to provide principles that the Energy Security Target Monitor is to consider when developing derating factors. This would allow necessary flexibility to modify the derating factors over time due to technology changes. Consideration should be given to considering derating based on winter outputs as there is a possibility NSW could be winter peaking in the future.
2. AEMO agrees the Energy Security Target Monitor should maintain discretion to include other information it considers is relevant for the Monitor Report.

Regards
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Preamble

Bearing in mind, AEMO is likely to be the Energy Security Target Monitor and calculate the firming requirements, this should ensure that inputs to derive the requirements are internally consistent with the inputs to derive the ESOO and ISP publications. However, the feedback has been structured in a way that does not pre-empt this decision.

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NSW Government Electricity Infrastructure Roadmap

Tranche 2 Regulations

Assumptions

- AEMO will take on the role of the Energy Security Target (EST) Monitor and Consumer Trustee (CT)
- AEMO will be consulted on Draft Regulations (Tranche 2) before finalisation – confirmation that Regulations (tranche 2) will only address areas identified as per Figure 2 of the issues paper. Does Figure 2 need to be updated to reflect classes of REZ network infrastructure (i.e. section 31(4) and section 32(5) of the EII Act)?
- Tranche 3 Regulations will be considered separately, including Regulations to prescribe matters the CTs' rules must be consistent with.

Principles (to be tested)

- The roadmap should align with and reference existing NEM rules/guidelines/processes/definitions wherever possible to deliver the legislated investment requirements, with least distortionary impact and duplication of effort
- Departures from the national framework set out in regulations should be minimised, and justification for departures clear, per the objectives of the EII Act

- NSW requirements for AEMO data and processes should not impact AEMO BAU operations and should be coordinated for maximum efficiency (e.g. not relying on AEMO's early release of data and documentation, and ensuring adequate time for the CT and EST monitor roles to meet respective obligations taking into account AEMO timeframes)
- The Regulations should provide flexibility where possible, rather than being too prescriptive (e.g. as EST Monitor, AEMO may prefer to develop derating factor, taking account of principles set out in the Regulations rather than a derating factor methodology being prescribed in regulation).

Key Questions/Potential Issues

Regulations T2 under the Act	Issue Type	Questions/Potential Issues	Action to Resolve
Part 3 - Energy Security Target	Governance, structure	<ul style="list-style-type: none"> • How will AEMO's role as EST Monitor be structured and governed? For example: <ul style="list-style-type: none"> ○ Will AEMO provide the functions as 'service' to the NSW Department? ○ Does AEMO have sufficient resourcing to fulfil the role of EST Monitor or will AEMO provide oversight only and outsource the function? ○ How will the cost of taking on this role be funded / recovered? 	<ul style="list-style-type: none"> • AEMO executive discussions to establish internal preference. • AEMO-DPIE discussions to agree approach.
	Operational issues	<ul style="list-style-type: none"> • Energy Security Target Monitor is required to publish annual EST report by 30 October each year, which must include a range of information specified under the Act. • To what extent does the information required differ to the information that AEMO includes in its ESOO? For example, the ESOO doesn't currently provide an assessment of firm capacity for NSW or whether it will meet the EST. • Can AEMO's forecasting models accommodate these requirements or would separate forecasting tools/models need to be developed? • If AEMO does not take on the EST Monitor role, the Monitor will be required to consult with AEMO in preparing the report – how will this process be managed? • How will any discrepancies/inconsistencies/alternative conclusions between the ESOO and the Energy Security Target Monitor report be managed? Will there be an expectation for AEMO to explain differences in views? 	

	Technical issues	<ul style="list-style-type: none"> Is the EST more stringent than interim reliability measure (0.0006% - max unserved energy in a region) – essentially planning to a higher standard in NSW and how can inefficiencies be mitigated? Is the EST only used to trigger construction of firming infrastructure? Would it be useful to define firming infrastructure? Is the derating factor approach preferred by the Department consistent with AEMO's approach to calculating derating factors? Reserve margin (component of Energy Security Target) is defined as the sum of the capacity of two largest generator units under the Act, however regulations can prescribe a different amount. <ul style="list-style-type: none"> Should Regulations prescribe a different margin to the Act? E.g. would a lower reserve margin better align with the reliability standard? Do differences indicate inefficiencies in NSW reserve planning that should be addressed through the regulations? Department intends to prescribe reliability standard under the Act to be interim reliability standard under NER. In principle, AEMO would support this. 	<ul style="list-style-type: none"> Consult with ESOO and ISP Subject Matter Experts (SME) to understand differences and therefore operational impacts on AEMO to deliver.
Part 5 – Network Infrastructure Projects	Governance, structure	<ul style="list-style-type: none"> Not applicable 	<ul style="list-style-type: none"> Not applicable
	Operational issues	<ul style="list-style-type: none"> Is there a need for further classification of network infrastructure (1 network infrastructure, 2 REZ network infrastructure – Regulated, 3 REZ network infrastructure – unregulated) in regulations? 	
	Technical issues	<ul style="list-style-type: none"> Noting that of the 5 REZs identified in the NSW Govt Roadmap, 3 appear on the optimal development path in the ISP and only one, Central West Orana, is identified as “actionable”, will the NSW Govt Roadmap become an input to the ISP in future? 	<ul style="list-style-type: none"> Consult ISP SMEs as to how roadmap might inform ISP 2022
Part 6 – Electricity Infrastructure Investment Safeguard	Operational issues	<ul style="list-style-type: none"> Framework to deliver the investment objectives (set out in the Act) – what happens if the 20-year development pathway is inconsistent with the ISP? Do the electricity infrastructure investment objectives become an input to the ISP? Do the infrastructure investment objectives align with the objectives of the ISP/optimal development path? 	<ul style="list-style-type: none"> Consult ISP SMEs as to interactions between roadmap and ISP

	Technical issues	<ul style="list-style-type: none"> • What are the incremental tasks, and departures in ISP methodology required to prepare the Infrastructure Investment Objectives Report? • Are there any lead times associated with building capability or methodologies? 	
	Governance, structure	<ul style="list-style-type: none"> • Not applicable 	<ul style="list-style-type: none"> • Not applicable
Part 9 (Miscellaneous) and Dictionary	Operational issues	<ul style="list-style-type: none"> • Not applicable 	<ul style="list-style-type: none"> • Not applicable
	Technical issues	<ul style="list-style-type: none"> • Definitions seem broadly consistent with the NEL/NER and appear to reference NEL/NER where possible, with new terms seeming to have been introduced for roadmap-relevant issues 	<ul style="list-style-type: none"> • Not applicable