Locked Bag 14051
Melbourne City Mail Centre
Victoria 8001 Australia
T: 1300 360 795
www.ausnetservices.com.au

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Mr Sebastian Roberts
General Manager
Australian Energy Regulator
GPO Box 520
Melbourne VIC 3001

By email: sebastian.roberts@accc.gov.au
Cc: adam.petersen@aer.gov.au
david.chan@aer.gov.au

Dear Sebastian,

AusNet Services Transmission Revenue Reset 2023-27: Submission to Preliminary Framework and Approach

AusNet Services is pleased to provide this submission to the Australian Energy Regulator (AER) on its preliminary Framework and Approach (F&A) paper for the transmission determination for the regulatory control period commencing 1 April 2022.

We generally support the approaches and positions set out in the preliminary F&A Paper. However, we remain concerned that the current version of the Service Target Performance Incentive Scheme is no longer providing appropriate incentives and, therefore, should be reviewed prior to the commencement of AusNet Services' next regulatory period. We support the ENA submission lodged with the AER today on the urgent need for a review of the STPIS. The attached submission also addresses this issue, and provides our views on some other aspects of the preliminary F&A.

Should the AER wish to discuss the contents of this letter or require any further information, please contact Rob Ball, Senior Economist, on 03 9695 6281.

Sincerely,

C. Eddy

Charlotte Eddy
Manager, Economic Regulation
AusNet Services

Submission on preliminary Framework and Approach paper

Service Target Performance Incentive Scheme

The closure of thermal generation (e.g. Hazelwood Power Station) and the dramatic increase in renewable generation (particularly in North-Western Victoria) are having substantial implications for how AEMO manages system security and, consequently, our ability to respond to the Market Impact Component of the Service Target Performance Incentive Scheme (STPIS). Similar wholesale market changes in other NEM jurisdictions are making the MIC equally difficult to manage for the TNSPs in those jurisdictions. Given the next round of determinations will lock in the existing incentives until the late 2020s, a review is required now to ensure the Market Impact Component is appropriate, given the major changes in the transmission system that are expected over the next decade. We support the ENA submission lodged with the AER today on the need for an urgent review of the STPIS.

The most recent review of the transmission STPIS was carried out in 2015, as the AER identified some improvements that could be incorporated ahead of the next regulatory control periods for AusNet Services and Powerlink. These improvements were relatively mechanical in nature and did not materially change the incentives that were applied to transmission businesses. Prior to the 2015 review, the transmission STPIS was reviewed in 2011 (when the Market Impact Component was established), 2012 and 2014. These reviews occurred during a period of relative stability in the transmission system. Given the preconditions that have led the AER to initiate a review of the STPIS in the past, the unprecedented change occurring in the transmission system suggests that a review of the scheme is urgently warranted. Otherwise, AusNet Services will be subject to the 2015 version of the scheme for 12 years.

In this context, our letter requesting that the F&A be amended sought clarification as to whether the AER intends to review the current version of the STPIS.[1] AusNet Services also provided further information to the AER outlining the issues with the current MIC.[2] Subsequent, informal exchanges with the AER have indicated that it does not consider a review of the MIC scheme appropriate at this time. Furthermore, the preliminary F&A outlines the AER's intention to apply version 5 of the STPIS for AusNet Services' 2023-27 regulatory period and does not refer to any MIC issues that may warrant further investigation or a review of the scheme.[3]

We understand the primary reasons for the AER's position not to review the STPIS to be:

- The potential changes to the MIC identified by the AEMC as part of its COGATI review[4] mean that a separate review of the scheme is not warranted.
- Performance issues with the current scheme will be addressed by the performance target for the next regulatory period being 'rebased' to reflect the current circumstances.

The AER has also requested data or other information demonstrating the market changes that are undermining the operation of the MIC. Each of these matters is discussed further below.

[1] AusNet Services, Letter to the AER re: AusNet Services Transmission Revenue Determination 2023-27 Framework and Approach Initiation, 30 July 2019
[2] Email from Rob Ball to Adam Petersen, 26 November 2019
[3] AER, *Preliminary framework and approach – AusNet Services*, December 2019, p.9
[4] These changes, which are intended to "sharpen" the scheme's incentive properties, would result in market impact being determined with reference to dynamic regional pricing signals that reflect congestion, rather than the current, broad-based $10/MWh threshold

The COGATI review

Because of the uncertainty and delays surrounding the implementation of the COGATI reforms, deferring a review of the MIC until such time as it is warranted by these reforms will result in inappropriate incentives applying during the next regulatory period. Indeed, on 18 December 2019, the AEMC released an update paper setting out a significantly extended implementation timeframe for the new access model. The AEMC stated:[5]

> *The update paper revises the date for the implementation of the access model to being at least four years after the time that any rule change to deliver the access model is finalised. This will allow the implementation to be aligned and better coordinated with other reforms, including those under the Energy Security Board's post-2025 market design project.*

The revised COGATI timeframes mean that any rule change stemming from COGATI that requires the AER to develop a new MIC scheme will come far too late to address the significant issues presented by the current version of the MIC. We remain of the view that a separate AER review, independent of COGATI, is urgently needed to identify and address issues with the MIC prior to the commencement of the next round of transmission regulatory periods.

Whether another review is subsequently needed closer to the implementation of the COGATI reforms, which is expected to align with changes resulting from the post-2025 market design project, depends on whether the access reforms are ultimately accepted by industry and other stakeholders. This remains an open question.

Target rebasing

The AER has suggested that the rebasing of the target at the start of the next regulatory period will address the issues that are making the MIC difficult to actively manage. This is not an adequate solution to the problem, due to the outlook for continued long-term growth in renewable generation and the potential for further, unforeseen changes to the way system security is managed.

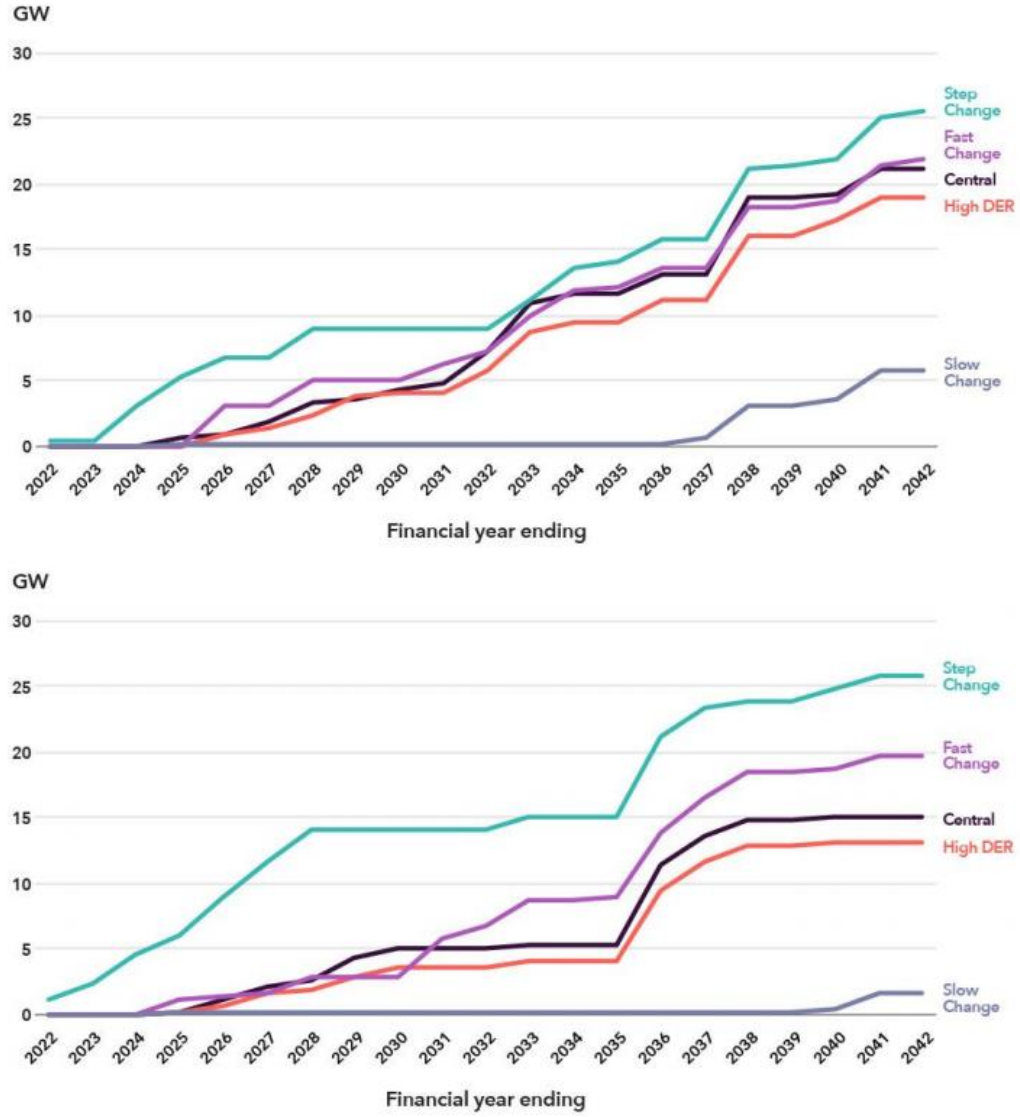
The wholesale market changes that the scheme has failed to keep pace with are expected to continue, and accelerate, over the coming decades. AEMO's Draft 2020 Integrated System Plan shows that generation capacity will more than double over the next 20 years, with thermal generation being displaced by a mixture of wind, solar and storage. This includes the deployment of an additional 30-47 GW of variable renewable generation (VRE), which comprises utility-scale solar, wind, battery and other energy resources, up from the 6 GW of VRE currently installed.[6]

The charts shown below, which have been copied from the draft 2020 ISP, show the extent and pace of renewable generation uptake projected by AEMO over the next two decades.

[55] https://www.aemc.gov.au/news-centre/media-releases/coordination-generation-and-transmission-investment-review-update

[6] AEMO, *Draft 2020 ISP*, December 2019, p.40

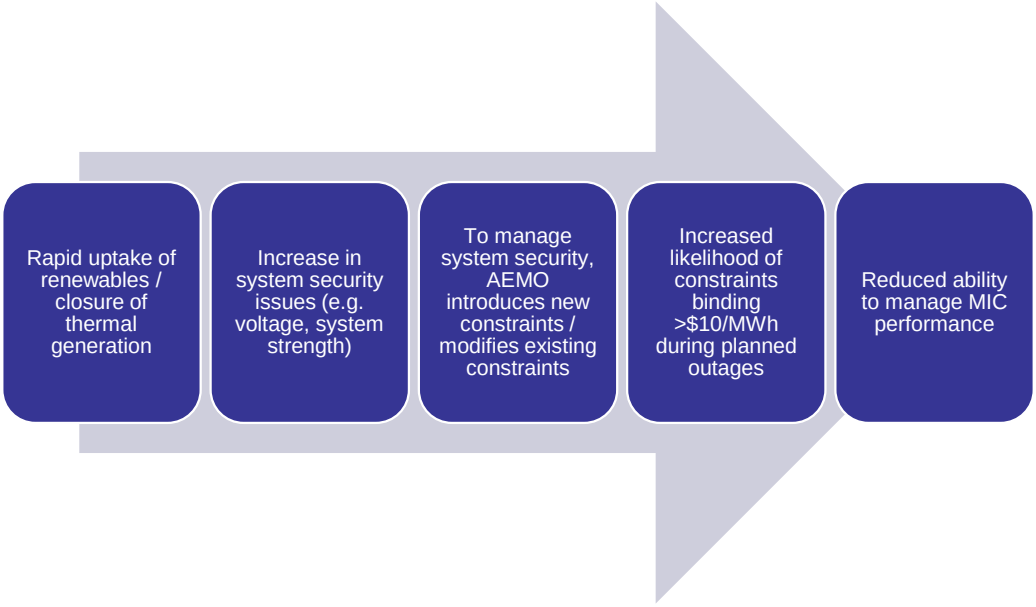
Figure 1: New variable renewable generation, solar (top) and wind (bottom)



Source: AEMO, *Draft 2020 ISP*, December 2019, p.41

The uptake of renewable generation directly impacts TNSPs' ability to actively manage the MIC. This is illustrated by the figure below.

Figure 2: How the rapidly changing generation mix directly impacts the ability to manage the MIC



Relying on the rebasing of the target at each determination to ameliorate the impacts of a rapidly changing generation mix is unlikely to be effective, and risks the target continually lagging the changes themselves. This is demonstrated in the ENA submission lodged today, in the context of Powerlink's target for the forthcoming regulatory period.

We encourage the AER to adopt a more prudent approach and review the design and operation of the scheme now. This will ensure it is fit for purpose for the market conditions that will prevail in the next regulatory period.

Data demonstrating the market changes

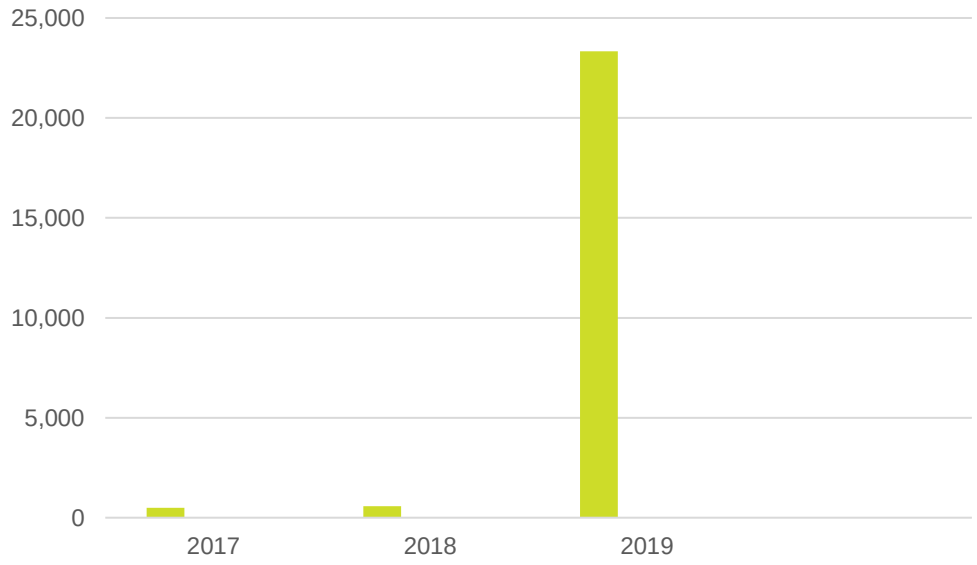
While the AER has requested data or other information demonstrating the market changes that are undermining the operation of the MIC, we question whether such detailed data is needed to establish that a MIC review is warranted. There is considerable evidence that the energy system is undergoing unprecedented transformation, including changes at the wholesale level that directly affect transmission network's ability to actively manage their market impact.

Nonetheless, as an example of a recent, significant change, in contrast to its historical practices AEMO has been applying individual generator constraints on occasions when the level of intermittent generation is causing system security issues, e.g. an outage on the Ballarat Terminal Station to Waubra Terminal Station line can constrain 13 individual generators. As these (renewable) generators do not as actively bid in the market (they tend to play "a set and forget" bid), a 1 day outage on this line (e.g. for delivery of crucial NCIPAP projects) has the potential to result in the maximum penalty being reached in a single day. These circumstances demonstrate that the scheme has become unworkable and unable to keep pace with market changes.

The figure below shows the sharp uptake in recent years of binding DIs (>$10/MWh) associated with individual generator constraints (before exclusions). The sharp increase in 2019 is

representative of the way in which the transforming energy system is directly impacting the way AEMO manages system security and, therefore, the MIC. While we employ sophisticated planning and operational measures, the unprecedented system security impacts of this transformation, which are outside of our control, significantly limit our ability to respond to the MIC.

Figure 3: Dispatch intervals associated with individual generator constraints



This is further evidenced by AEMO's release in December 2019 of a technical update on power system limitation in North West-Victoria / South West New South Wales. The report demonstrates that the significant uptake in renewable generation is having major implications for the way AEMO manages power system security, including the application of constraints.

The AEMO report states:[7]

> *The rapid scale and pace of inverter-based renewable generator connections in remote areas of the National Electricity Market (NEM) is resulting in unprecedented technical issues impacting grid performance and operational stability. The nature, extent and causes of these issues are only becoming apparent with the advanced and very detailed modelling capability that is now essential for technical assessments in weak areas of the grid.*
>
> *The area of the Victorian and NSW power system bounded by Ballarat, Dederang, and Darlington Point (referred to as 'West Murray') has attracted significant investment in grid-scale solar and wind generation, despite being a remote and electrically weak part of the NEM. Put simply, the transmission infrastructure in this part of the network is insufficient to allow access to all the generation that is seeking to connect, and is capable of construction in a matter of months.*

[7] AEMO, Power System Limitations in North Western Victoria and South Western New South Wales, December 2019, p.4

> *Transmission infrastructure investments to progressively address these issues have been identified, but will take a number of years to proceed through regulatory approval processes, procurement and construction.*

Importantly, AEMO has also declared a system strength gap in north-west Victoria. This is just the third system strength gap identified for the NEM, following South Australia and Tasmania in October 2017 and November 2019, respectively. Again, this signals that the changing wholesale market is putting considerable pressure on AEMO's ability to manage system strength, necessitating a range of short-term and longer-term solutions, including increased application of existing and new constraints. These changes are expected to continue to occur throughout future regulatory periods.

Other STPIS matters

We note that the preliminary F&A describes how the performance target and measure would be calculated under version 4, rather than version 5, of the MIC.[8]

Small-scale incentive scheme

As noted in the preliminary F&A, we are yet to develop, in conjunction with our customers, a proposal for an electricity transmission small-scale incentive scheme (SSIS). This is distinct from our electricity distribution network, where we and the Customer Forum have proposed a new customer service incentive scheme, and reflects the different characteristics of transmission networks relative to distribution networks, including the small number of customers and very high levels of reliability that are natural features of transmission networks.

Nonetheless, our experience and research to date demonstrate that customer experience is of key importance to transmission customers. For this reason, the transmission regulatory framework should remain open to evolution to ensure the incentive regime appropriately recognises the value placed on customer experience.

Demand management innovation allowance

We welcome the AER's intent to apply the DMIA in its draft decision. This will provide important funding to pursue innovative projects that have the potential to provide long-term customer benefits.

[8] AER, *Preliminary framework and approach – AusNet Services*, December 2019, p.10