



10 June 2022

Energy Security Board

Submitted via email: info@esb.org.au

Transmission Access Reform – Consultation Paper

Alinta Energy welcomes the opportunity to respond to the ESB's Transmission Access Reform consultation paper. As an active investor in energy markets across Australia with an owned and contracted generation portfolio of nearly 3GW and more than 1.2 million electricity and gas customers, we have a keen interest in the development of new transmission to support the NEM's transition.

We acknowledge that this transition carries the risk that new generation may connect in areas of the grid which may be inefficient, increasing congestion across specific transmission lines and potentially displacing cheaper or better incumbent sources. While a healthy level of congestion is both acceptable and necessary as a tradeoff to unnecessary increased costs, we agree that the scale of generation and transmission build predicted by the draft 2022 Integrated System Plan (ISP) poses significant challenges and an increased probability of congestion and dispatch inefficiency if not addressed.

Alinta Energy therefore supports the ESB's position that a whole-of-system solution to transmission access reform is needed to address these likely grid and system pressures as well as ensuring that the existing but different approaches taken by NEM Jurisdictions are coordinated to protect Renewable Energy Zone (REZ) and non-REZ investment decisions. We also support the ESB's decision to move away from a single Congestion Management Model (CMM) approach, and towards a package of reforms targeted towards investment and operational timeframes. We believe this step will remove some of the complexity and risks presented by the former approach.

Having analysed the four high level options presented in the Consultation Paper, we note that it is difficult to form a firm view on the right approach in the absence of further operational details, quantitative data on market impacts, and greater certainty on implementation costs. We welcome the ESB's effort to address these policy gaps as the project progresses.

In our view, we believe there is merit in further exploring the development of congestion zones with connection fees and the creation of a congestion relief market (CRM). These models combined with additional upfront information provision at the point of connection¹, will address the ESB's primary objectives of investment efficiency, management of access risk, operational efficiency and suitable congestion relief.

On this basis, Alinta Energy does not support further work on the transmission queuing and CMM with universal rebates models.

¹ Implemented via AEMO's Connection and Registration frameworks

Investment Timeframe Options

While neither operational timeframe model perfectly addresses the ESB's objective and assessment criteria, we consider the development of congestion zones with connection fees hits closest in delivering a clearer, simpler, longer and fairer investment signal for new generation and storage seeking access. As outlined in the Consultation Paper, this model could work relatively seamlessly with the existing transmission planning framework, the ISP and existing Jurisdiction REZ policy.

However, we note that both models appear overtly forward facing and therefore do not clearly articulate how incumbent redevelopment projects or modifications/extensions to existing projects would be treated. For example, would an existing plant owner seeking to redevelop its site to renewables and storage be required to renegotiate its position? Additionally, what level of materiality triggers an incumbent to be treated as a new generator and what test will exist to examine the merits of a redevelopment/extension project against a new development when allocating transmission capacity?

Specifically, with respect to the congestion zones with connection fees model, we believe key to making this approach workable will be to design a simple methodology explaining:

- how connection fees are established, predictably revised and at what time frequency;
- the 'value' that participants obtain in making a payment for deep connection; and
- providing clarity on the time period that value is retained.

Alinta Energy believes that the concept of 'generator value' should equate to a physical commitment by the transmission operator that output will not be constrained for a defined period of time. To balance and incentivise a diverse range of technologies within a region, the length of access could follow the NSW REZ approach, where the type and duration of an access right is linked to the technology classification category. Similarly, 'consumer value' is equally important – we support using revenues paid by generators to offset consumer costs in the most efficient way. Transmission businesses are best placed to determine how generator revenues should be used to benefit consumers, as long as their actions are transparent, justifiable and captured by reporting obligations.

We also agree that the system strength framework provides good broad structure for the development and selection of congestion charges. Implementing a centrally determined congestion zones in consultation with stakeholders will provide the necessary rigor and transparency required to ensure stakeholder confidence. Where multiple generators seek access to a limited amount of hosting capacity, we believe the model should obligate transmission businesses and AEMO to assess and determine the connection of projects. This must be a technology agnostic assessment which considers projects only on their merits, including a project's ability to contribute to broader system stability. In the instance where multiple projects are deemed equal, project owners should have the opportunity to partner with each other to split transmission augmentation costs and secure additional hosting capacity (as necessary), particularly where their output profiles maximise utilization of the transmission line. Alternatively, a simple closed auction could be used to determine project selection.

Alinta Energy does not support the proposed transmission queuing arrangement model. If implemented, we believe this approach would not incentivise or enable the most efficient projects from being built because their priority status may limit their construction. The model places 'application speed' at the expense of a 'strong business case' and would ultimately work against the ESB's objectives of congestion management and efficient dispatch.

Operational Timeframe Options

As above, at this early stage Alinta Energy supports a further assessment of the CRM model. The ability to co-optimize and co-ordinate energy, ancillary services (frequency) and congestion

relief voluntary is attractive from a trading and portfolio management perspective. It enables market participants to retain control of its interaction with the market without the indirect risks of a zonal model. In addition, the CRM can conceptually address both congestion and dispatch inefficiency by creating a more targeted value proposition for energy storage. Paired with the congestion zones with connection fees arrangement, and with specific targeted design to encourage storage in the areas they are needed most (including as suggested by waiving connection fees or offsetting transmission hosting costs) energy storage can be used effectively to soak excess generation and minimize interconnection congestion.

However, we note that the high-level CRM design appears complex. Further thought is necessary to simplify it further, while ensuring that it incentivises demand and supply sources, and operates seamlessly in dispatch with other NEM markets. It will also be necessary to explore key model risks such as how the CRM operates at times without a supply/demand balance, how real time co-optimisation works with new ancillary services in the future², and how arbitrage risk (i.e. particularly between generators) is addressed. As an initial step, we encourage the ESB to look to gas markets, where a comparable arrangement has been implemented (i.e. a pipeline capacity price³), albeit infrequently used. Targeted, quantitative analysis will also be important to demonstrate the financial benefits of the model, including to revise the implementation costs.

Alinta Energy acknowledges the proposed changes made to the congestion management model to enable universal rebates as a way of managing some basis risk. However, we remain concerned that the rebate size would not sufficiently address the increased level of volume risk for contracted projects. In addition, it is not clear how generators would be able to forecast congestion charges or manage ancillary market bids with confidence, without further detail on the charging mechanism. We note that forecasts are likely to be particularly challenging for renewables noting that historical trends may not necessarily provide a true reflection because of their intermittent nature. Similarly, the single bid for energy and congestion markets could result in rebid difficulties to adjust ancillary bidding strategies quickly when accounting for changes to market congestion signals.

We welcome further discussion with the ESB as it works towards its final report. Please contact Dan Mascarenhas on 0475 943 365 or at Dan.Mascarenhas@alintaenergy.com.au in the first instance.

Yours sincerely

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² Such as an inertia spot market.

³ Refer to "capacity charges and payments" on page 107 of AEMO's [Technical Guide to the STTM](#).