#### **Congestion management Technical Working Group**

### Staff working paper - Revised objectives and assessment criteria

#### 1. Context

We have refined the TAR objectives and assessment criteria, considering recent feedback from the technical working group in both 18 February and 1 March. The technical working group's comments on the previous versions, and our corresponding changes, are set out in attachments 1 and 2.

# **Revised access objectives**

The objectives below seek to guide the assessment of transmission access reform, to be implemented by 2025 on an enduring basis:

# **Investment timeframes**

Goal: Level of congestion in the system is consistent with the efficient level.



# 1. Investment efficiency (locational signals):

Better long-term signals for generators, storage and scheduled loads to locate in areas with available transmission capacity — including, but not necessarily limited to, REZs delivered in line with the ISP and state government policies — where they can provide the most benefit to consumers, taking into account the impact on overall congestion.



#### 2. Manage access risk:

Address elements of the current market design that have the effect of amplifying investor risk above what would occur in a natural competitive market. The intent is to achieve a level playing field that balances investor risk with the continued promotion of new generation and storage entry that contributes to effective competition, reliability and system security in the long-term interests of consumers.



Goal: When congestion occurs, we dispatch the efficient (constraint-adjusted) combination of resources.



### 3. Operational efficiency (dispatch signals):

Remove incentives for non-cost reflective bidding to promote better use of the network in operational timeframes, resulting in more efficient dispatch outcomes and lower costs for consumers.





# 4. Providing the right signals for alleviating congestion:

Establishing a framework that incentivises technologies that can help to alleviate congestion (e.g. storage and demand-side resources) to locate where they are needed most and operate in ways that benefit the broader system.

# **Revised assessment criteria**

	Criteria	Description	
1	Efficient market outcomes – investment	Better incentivises for generators, storage such as batteries, and load such as hydrogen electrolysers to locate in efficient areas. In the case of generation, this is most likely where there are low congestion levels, such that transmission assets are better utilised. In the case of storage and load, these may be areas congested to help alleviate that congestion and use otherwise wasted renewable electricity that could not reach the load.	
2	Efficient market outcomes - dispatch	Better incentives for generation, storage such as batteries, and load such as hydrogen electrolysers to bid in a fashion that best reflects its underlying costs, resulting in more efficient dispatch outcomes and reducing fuel costs across the NEM. In turn, this may also reduce emissions.	
3	Appropriate allocation of risk	Risk arising due to congestion in the NEM should be allocated, to the extent possible, to the party that is best placed to manage or otherwise bear that risk, noting the practical limitations on exposing parties to risk without appropriate mitigation tools and measures.	
4	Manage access risk	Address the current market design features that amplify access risk to market participants above what would occur in a natural competitive market. Facilitate market participants' ability to manage access risk. Managing the risk arising from regulatory change, i.e. consider whether there are strategies to mitigate the impact of the changes on market participants.	
5	Effective wholesale competition	Any changes should promote an effectively competitive wholesale market by avoiding creating barriers to new entry; any additional costs associated with the transmission connection of new entrants is commensurate with the benefits received.	
6	Implementation considerations	Cost and complexity: cost and complexity of implementation, including the impact of the system's physical complexities and ongoing regulatory and administrative costs to all market participants, consumers and market bodies, compared to the expected benefits of the option.  Timing and uncertainty: uncertainty of outcome, the likely timing of benefits versus costs.	
7	Integration with jurisdictional REZ schemes	<ul> <li>As requested by Ministers, the proposed rules must provide flexibility such that differences between jurisdictions' access schemes, including those without REZ schemes, can be appropriately integrated.</li> </ul>	

Attachment 1 – Changes to objectives made in response to TWG feedback

TWG comments	Change to objectives			
Feedback from Session 3:				
Noted that the current arrangements have some desirable characteristics that should be preserved – particularly the incentive for projects to avoid locations that contribute to constraints.	Updated objective 1 to make explicit that we seek to promote incentives for a new generation to locate in areas that provide most benefits to customers, taking into account the impact on overall congestion.			
Much discussion around how to accurately and appropriately define "inefficient generation" for objective 2.	Updated objective 2.			
Further drafting improvements may ensure the objectives capture all relevant considerations, including system security.	In addition to the above changes, have added text to objective 2 to reflect that the new generation can also contribute to system security and reliability (as per the NEO).			
Avoid language that implies we're rewarding particular technologies (for example, storage).	Updated objective 4 to make the language more technologically neutral and focus instead on incentives for technologies to alleviate congestion			
Feedback from Session 2:				
Mention the timeframes we are targeting and the longevity of what we are trying to achieve.	Additional line to introduce the objectives, which specifies the timeframe for implementing the reform and intended to be enduring.			
Any planning around congestion should align with central planning under the ISP.	<ul> <li>Addition to objective 1 to specify that signals to reflect transmission capacity align with the ISP and state government policies.</li> </ul>			
The market should be responsible for coming up with risk management tools. Policy makers should only be considering how to protect investments against inefficient generators, subsequently colocating and constraining incumbents.	<ul> <li>Amended objective 2 to replace the reference to risk management tools with promoting investor confidence.</li> <li>Made further edits objective 2 to clarify what is meant by subsequent inefficient connections.</li> </ul>			
Separate the objectives into "allocating" and "solving" congestion.	<ul> <li>Added a supplementary table to demonstrate which objectives meet operational timeframes (i.e., allocate congestion) and meet investment timeframes congestion (that is, solve congestion).</li> </ul>			

Attachment 2 – Changes to assessment criteria made in response to TWG feedback

TWG comment	Change to assessment criteria
Feedback from Session 3:	
Make explicit that new TAR arrangements, if they have a general application, should not create a barrier to the new entry. New arrangements should not impose a higher access cost than incumbents unless that cost is commensurate with the benefits received.	New criterion added (see criterion 4), which captures consideration of whether the reform promotes effective competition, including avoiding barriers to the new entry.
Parties who are best placed to manage risk refers to both treating risk and bearing risk.	Criterion 3 amended to note this explicitly
Feedback from Session 2:	
Concern that criteria 3 and 4 can conflict; do not consider the allocation of transmission costs the primary goal of this access reform.	<ul> <li>Removed the previous criterion 4 because it is beyond the scope as currently drafted.</li> <li>[Note: The previous criterion 4 was included in recognition of the opportunity for commercial investors to fund transmission investment to release new capacity and receive access rights in return. However, the drafting did not convey this intent, which in any case is already addressed by criteria 1 and 3.]</li> </ul>
Regarding criterion 3, confusion around what is meant by efficiently allocating risk. Risks should be allocated to the party best placed to manage them.	Updated criterion 3 to replace references to efficiently allocating risk with the notion of allocating risk to the party that is best placed to manage them.
Flesh out the points in criterion 6 to consider system complexities and appropriate mitigation strategies in implementation.	<ul> <li>Amended criterion 6 to clarify that implementation complexity should account for the impact of the physical complexities of the system.</li> <li>Further edits to capture consideration of whether the option can mitigate disruption for market participants.</li> </ul>
Regarding timing and uncertainty (criterion 6), the costs versus the proposal's benefits should be considered.	Updated criterion 6 to specify that the costs of each option be assessed against its benefits.
Add "achievability" as a part of the implementation to capture whether a solution is likely acceptable to consumers and governments.	The ESB team initially reflected this in an additional bullet point to criterion 6, however we subsequently removed it on grounds that we should be aiming to recommend to Ministers the objectively best model, considering stakeholder feedback, rather than trying to anticipate the model that Ministers will best respond to.