

TRANSMISSION ACCESS REFORM

TECHNICAL WORKING GROUP
INVESTMENT SUBGROUP

15 SEPTEMBER 2022





AGENDA

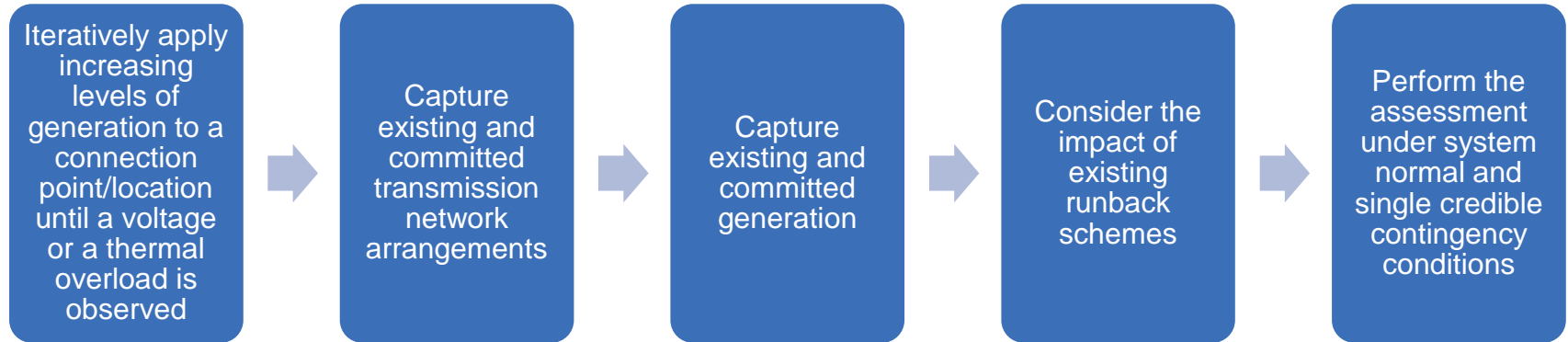
Time	Topic
2:00	Welcome, objectives and agenda
2:05	Congestion zones – discussion of working paper
2:45	Connection fees – discussion of working paper
3:15	Managing access risk
3:45	Next steps

CONGESTION ZONES



CALCULATING INDICATIVE HOSTING CAPACITY

- Team's preliminary thinking for discussion: use an approach modelled on Powerlink's Generator Connection Guide:



- The output will be an indicative maximum generation capacity that could be connected at each connection point, or in each zone, without breaching existing line and transformer ratings.
- To reflect diversity, there could be multiple indicative values to represent the supportable capacity under different weather and demand scenarios. E.g. ESOO applies:
 - summer peak
 - summer typical
 - winter reference.



QUESTIONS FOR DISCUSSION – CALCULATING INDICATIVE HOSTING CAPACITY

Do you support an approach to calculating transmission hosting capacity modelled on ElectraNet's TAPR and Powerlink's GCG?

Should we account for diversity by providing investors with multiple assessments using a selection of pre-determined operating conditions (e.g. ElectraNet's TAPR)?

Should the indicative hosting capacity assessment focus on thermal constraints, given that security constraints can be resolved by other means?

How should load and storage be reflected in the assessment of hosting capacity?

How often should assessments be conducted?



QUESTIONS FOR DISCUSSION – ACCOMPANYING INFORMATION

What information should accompany indicative hosting capacity values to assist investors?

Are you aware of helpful examples of information provision (in the NEM or elsewhere) that the ESB should learn from?

Are the classifications for planned projects applied in AEMO's GenInfo page an appropriate basis for forecasting congestion?

Are existing interactive mapping tools an appropriate basis for developing a central portal?

Should we overlay indicative hosting capacity values with a traffic light signal system?

CONNECTION FEES



QUESTIONS FOR DISCUSSION

What metric should be used as the basis for calculating connection fees?

Reminder – 3 options

1. Long run incremental cost of transmission
2. Forecast congestion affecting project
3. Grid-wide congestion caused by the project

Should projects be subject to a bespoke connection fee that reflects the characteristics of their project, or is a more rough and ready approach preferable?

What should a “standard project” look like (for the purpose of providing a guide to expected fees)?

At what stage in the connection process should the connection fee be calculated?

Should parties connecting in accordance with a jurisdictional REZ scheme be exempt from connection fees?

MANAGING ACCESS RISK



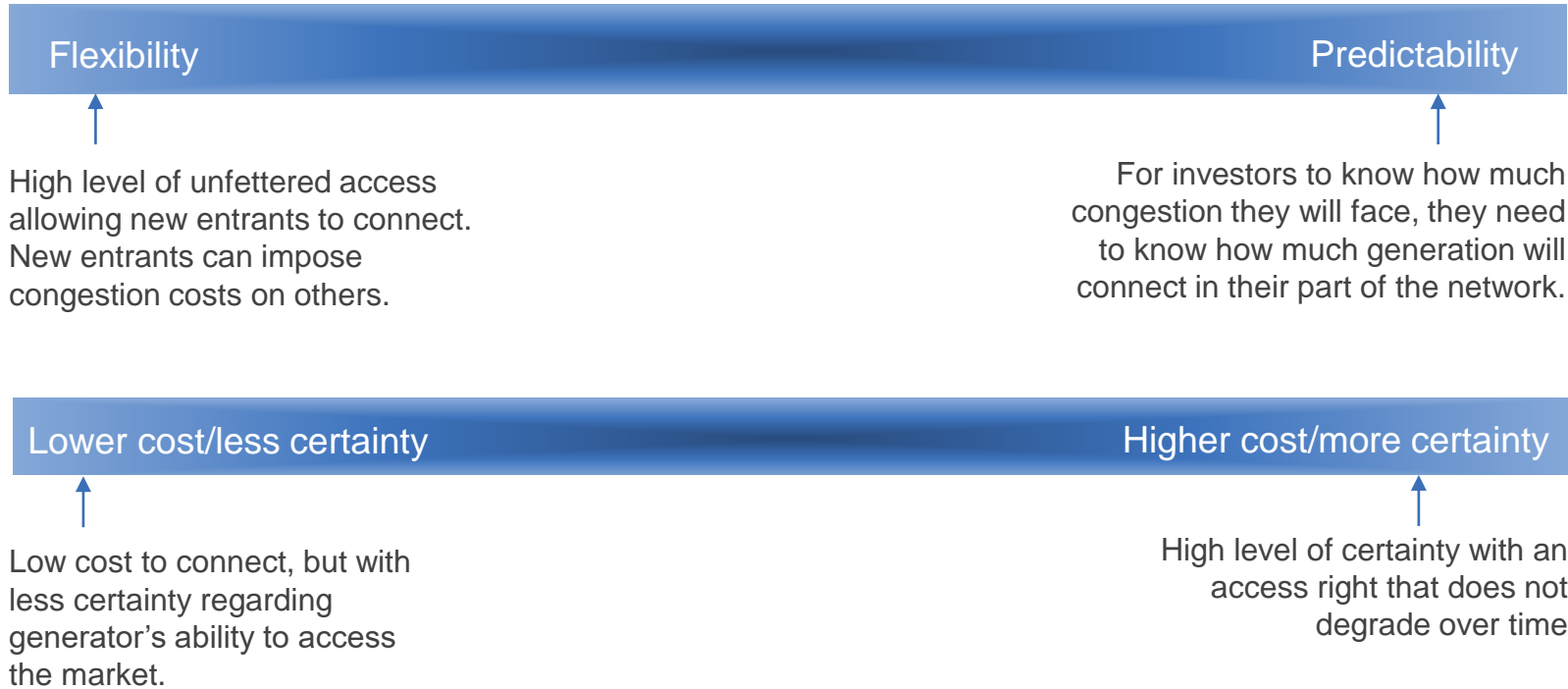
MANAGING ACCESS RISK IS ONE OF THE ESB'S CORE ACCESS OBJECTIVES

Objective 2

- 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.



MANAGING ACCESS RISK REQUIRES TRADE-OFFS





WHAT IS THE RIGHT BALANCE?

- Under the connection fee model, the risk of inefficient curtailment is lower than at present, because the market signals are designed to align profitable investment decisions with the efficient outcome.
- However, project proponent may still have their access cannibalised by a deep-pocketed successor that chooses to pay a high connection fee.
- “Winner takes all” characteristics remain
- Working paper outlines a hybrid model that attempts to provide more investment certainty in a way that does not create inefficient barriers to entry.

- Do connection fees which escalate as the network becomes more congested provide sufficient revenue certainty for investors?

- Should the access model include features that provide more certainty to investors?

- If we can get it to work, does the hybrid model with queue-based access have potential to strike an appropriate balance between investment certainty and supporting efficient new entry?

NEXT STEPS



NEXT STEPS

Date	Investment	Operational	Description
21 September 2022		<input checked="" type="checkbox"/>	Workshop: interconnectors (access allocation, inter-regional settlement residue and settlement residue auction)
29 September 2022	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	Review outputs of NERA modelling Focus area 2 & 3 working papers (as necessary)
6 October 2022		<input checked="" type="checkbox"/>	Workshop: follow up discussion on energy storage and scheduled load
<i>October 2022</i>			<i>Draft report (date to be confirmed)</i>

Note change of date to accommodate public holiday on 22 September

APPENDIX

Objectives and assessment criteria

For reference



ACCESS OBJECTIVES

Investment timeframes

The level of congestion in the system is consistent with the efficient level.

Operational timeframes

When congestion occurs, we dispatch the least cost combination of resources that securely meets demand.

1. Investment efficiency: Better long-term signals for generators, storage and scheduled loads to locate in areas where they can provide the most benefit to consumers, taking into account the impact on overall congestion.

2. Manage access risk: Establish a level playing field that balances investor risk with the continued promotion of new entry that contributes to effective competition in the long-term interests of consumers.

3. Operational efficiency: 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. Incentivise congestion relief: Create incentives for 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.



ASSESSMENT CRITERIA

	Criteria	Description
1	Efficient market outcomes – investment	Better incentivises for generators, storage such as batteries, and load such as hydrogen electrolyzers to locate in efficient areas.
2	Efficient market outcomes - dispatch	Better incentives for market participants 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.
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	Avoid creating barriers to new entry.
6	Implementation considerations	Cost, complexity, uncertainty of outcome, the likely timing of benefits versus costs.
7	Integration with jurisdictional REZ schemes	As requested by Ministers, the proposed rules must provide flexibility such that differences between jurisdictions' access schemes, including those without REZ schemes, can be integrated.