

Terms of reference for Net Zero Grid Pathways Scenario Development Panel

Introduction

1. Transpower has established a Net Zero Grid Pathways Scenario Development Panel (Panel). The Panel has been created as a forum for reviewing the Electricity Demand and Generation Scenarios (EDGS) and helping to consider whether adjustments are required to those scenarios in light of recent actual and possible changes to demand and generation. The Panel's work will be used to assist Transpower in deciding which reasonable variations to the EDGS are required for our Net Zero Grid Pathways (NZGP) project, including Phase One – Accessing Lower South Island Renewables (ALSIR).

Background

2. In Whakamana i Te Mauri Hiko we identified that the development of a long-term, transmission system plan would promote least regrets decisions in delivering the least-cost pathway towards greater renewable electricity generation and electrification of the wider economy. We are calling this plan Net Zero Grid Pathways. The aim is to ensure New Zealand has an integrated view of future power system investment needs – including what can be delivered by new renewable generation and distributed generation investors. Given the up to 10-year lead times for approving and consenting new transmission lines, generation investors need to know ahead of time that transmission will be in place for their investments.
3. Given the immediacy of investment opportunities and priorities resulting from announcement of the pending closure of the Tiwai point aluminium smelter, we have reframed our approach to our NZGP work and will complete it in two phases.
4. In Phase One we will focus on development of the transmission system after the smelter exit. This phase is our ALSIR investigation. In Phase Two we will continue our analysis out to 2050 and complete our NZGP project.
5. In order to undertake the analysis required, we need to develop a common set of demand and generation scenarios. An outcome of our ALSIR investigation may be the development of major capex proposals for the Commerce Commission.
6. In order to recover the costs of investing in the grid, the Commerce Commission require that Transpower consider the EDGS developed and published by the Ministry of Business Innovation and Employment. In the time since the last release of the EDGS in July 2019 significant changes have occurred in the New Zealand electricity landscape, including the announcement about pending closure of the Tiwai smelter.
7. We wish to engage with industry experts and other relevant stakeholders to review the existing EDGS, in order to decide whether they are suitable for both phases of our NZGP investigation.
8. We acknowledge there are still uncertainties regarding the nature of a smelter exit and its flow on effects across the electricity system and market. However, even with a delayed exit,

the lead times for transmission investment to enable access to renewable generation is still on the critical path, and this enforces our need to review the EDGS now.

9. These terms of reference have been adopted to guide the work of the Panel.

Purpose

10. The Panel's purpose is to provide views and feedback to Transpower on whether the assumptions driving each demand and generation scenario which comprise the EDGS are still relevant or should be varied for our ALSIR and longer term NZGP investigations.
11. The Commerce Commission allows Transpower to consider variations to the EDGS when Transpower is considering major capex proposals. Any variations must be reasonable variations.
12. We do not intend to review the underlying basis for each scenario included in the EDGS, but we do think the EDGS should:
 - a. reflect recent events and issues that affect the electricity industry
 - b. reflect current thinking around the future of electricity in New Zealand
 - c. provide a reasonable span of future uncertainty around electricity demand and generation.

Panel's role

13. The Panel's role is to provide input, views and feedback based on their own experience as an electricity industry member, current or future electricity consumer, or other relevant group or body.
14. Panel members (Members) are appointed as subject matter experts.
15. Members are expected to contribute their own individual expertise and views, not those of the organisation they work for or otherwise normally represent.

Transpower's role

16. Transpower will:
 - a. facilitate the effective operation of the Panel by providing appropriate support
 - b. make its expectations of the Panel and the Panel's work clear.
17. To facilitate effective operation of the Panel, Transpower will:
 - a. designate a staff member to coordinate the operation of the Panel (including meeting agendas, materials and facilitators) and manage Transpower's commitments with respect to the Panel;
 - b. provide secretariat services to the Panel. Secretariat services means general administrative support including organising meeting venues and facilities, receiving apologies, maintaining the Member interests register (if appropriate), supporting communications and document distribution, recording Panel meeting discussion and general IT support.
 - c. Provide an independent facilitator

Relationship between Transpower and the Panel

18. The Panel is an advisory body. Transpower will consider the Panel's input, views and recommendations in addition to any other advice or information available to Transpower, including its own analysis. Transpower is not bound to give effect to any Panel recommendations.
19. The Panel does not hold any delegations of authority from Transpower. The Panel is not authorised to speak for Transpower or make decisions or commitments on Transpower's behalf or bind Transpower to any obligations.

Panel membership

20. The Panel consists of up to ten Members appointed by Transpower. Appointment of Members is at Transpower's discretion.
21. Transpower appoints Members after considering applicants against the following criteria:
 - a. connection to a relevant sector of New Zealand electricity consumers, generators or other relevant group or body
 - b. ability to contribute to discussion from a relevant perspective and to represent alternative views in a balanced manner
 - c. ability to work with diverse individuals respectfully, cooperatively and in good faith
 - d. desire to improve electricity outcomes for New Zealand as a whole.
22. In addition, Transpower endeavours to ensure the Panel has an appropriate mix of individuals representing a diverse cross-section of New Zealand electricity interests.
23. Transpower may replace a Member who resigns or is removed from the Panel with a representative from a different organisation as Transpower sees fit to meet the purpose of the Panel.
24. The Panel is expected to be established for approximately 4 months until end of February 2021 . Subject to paragraphs 25 and 26, Members are appointed until the end of February 2021, or such longer period as agreed between a Member and Transpower if the duration of the Panel goes beyond the end of February 2021.
25. Members may resign at any time by notifying Transpower. Resigning Members must give as much notice as practicable.
26. Transpower may remove a Member at any time and for any reason by notifying the Member. Transpower will provide a summary of reasons for the removal if requested by the Member.
27. Transpower's General Manager Grid Development and General Manager Strategy approve all Member appointments and removals.

Panel member responsibilities

28. All Members must comply with the Panel Code of Conduct, which requires Members to:
 - a. Be actively involved
 - b. Behave ethically
 - c. Respect others

- d. Protect confidential information
- e. Communicate appropriately, and
- f. Manage conflicts of interest.

Appointment of Panel members and Panel member expectations

29. The Scenario Development Panel process will be run, as closely as possible, in accordance with the following schedule:

Date	Event
Oct 02	Invite applications for Panel membership
Oct 16	Applications for membership of the Panel close
Oct 23	Announce Panel membership
Nov 06	Online meeting 1 – 2 hours discussing assumptions/inputs
Dec 04	Online meeting 2 – 2 hours discussing draft of possible scenarios
Dec 18	Transpower publishes draft scenario variations for written submissions
Feb 12	Written submissions close
Feb 26	Transpower publishes responses to submissions
Feb 26	Panel role ends and Panel disestablished

- 30. All Panel applications will be acknowledged.
- 31. Transpower will appoint Members after considering applicants against the criteria described in the section “Panel membership”.
- 32. Successful and unsuccessful applicants will be advised no later than October 23, 2020.
- 33. Following appointment, Transpower’s expectation from Members in terms of time commitment is to:
 - a. complete pre-reading prior to two scheduled online meetings;
 - b. participate in the two scheduled online meetings with an independent facilitator; and
 - c. review scenario consultation documents.
- 34. Transpower estimates this will involve up to 20 hours between October 2020 and February 2021.

Independent Facilitator

- 35. Transpower will appoint an Independent Facilitator for the two online meetings.
- 36. The Independent Facilitator is not a Member.
- 37. The Independent Facilitator will:
 - a. facilitate and chair the online meetings
 - b. enable Panel members to contribute and encourage collaboration

- c. facilitate the creation of Panel meeting outputs (such as recommendations or messages) that can be considered by Transpower
- d. make decisions on how to manage Member conflicts of interest, and
- e. resolve any Member disputes and escalate Member disputes to Transpower if necessary.

Payment

- 38. Membership of the Panel is on a voluntary basis.
- 39. Transpower will reimburse Members' reasonable and legitimate expenses associated with membership of the Panel, in accordance with any guidelines issued by Transpower.

Disputes

- 40. Disputes between Members, or disputes between Members and Transpower relating to the Panel, will be referred to the Independent Facilitator.
- 41. The Independent Facilitator may escalate disputes between Members to Transpower.
- 42. Transpower's General Manager Grid Development (or nominee) and the Independent Facilitator will endeavour to resolve disputes between Members and Transpower and escalated disputes between Members.
- 43. Disputes about the meaning of these Terms of Reference are resolved by determination by Transpower's General Manager Grid Development (or nominee), whose decision is final.

Confidentiality

- 44. Members are not expected to disclose confidential information. Should any Member need to disclose confidential information they should contact the Independent Facilitator to consider whether the information needs to be disclosed and, if so, arrangements to be made to facilitate disclosure.

General

- 45. These Terms of Reference are to be interpreted and applied flexibly and pragmatically to achieve the purpose of the Panel.
- 46. The Panel may be disestablished or suspended at any time by resolution of Transpower's General Manager Grid Development.