17 February 2026

Matt Clark
Manager Transpower and Gas
Commerce Commission
44 The Terrace
WELLINGTON

Dear Matt

Submission – Draft decision on Upper South Island Stage 1 Major Capex Project

1. Introduction

1. Orion welcomes this opportunity to provide feedback on the Commerce Commission's (Commission) consultation, '*Transpower's Upper South Island (USI) major capex project proposal*'.

2. No part of this submission is confidential.

3. Orion owns and operates the electricity distribution infrastructure in Central Canterbury, including Ōtautahi Christchurch city and Selwyn district. Our network is both rural and urban and extends over 8,000 square kilometres from the Waimakariri River in the north, to the Rakaia River in the south; from the Canterbury coast to Arthur's Pass. We deliver electricity to more than 230,000 homes and businesses and are New Zealand's third largest Electricity Distribution Business (EDB).

2. Transpower Engagement

4. Orion would like to take this opportunity to acknowledge the degree to which Transpower has engaged with Orion on its USI major capital project (MCP) proposal. We thank Transpower for the significant time and effort taken to answer our many questions, including meeting with us to explain the MCP in detail, and to investigate non-traditional solutions.

3. Support

5. Orion provides in-principle support to Transpower's USI MCP. The need case is clear and foreseeable, and Transpower has, in our view, undertaken a robust options analysis and selected the option with the greatest net benefit.

6. Transpower has demonstrated that there is an emerging need for growth-related investment in the transmission circuits supplying the USI. The requirement, under the grid reliability standard, to maintain n-1 reliability, and the emerging voltage stability constraints caused by increasing load and the long supply route from the Waitaki Valley, makes the need for future investment likely.

Orion New Zealand Ltd
565 Wairakei Road
PO Box 13896
Christchurch 8141
+64 3 363 9898
oriongroup.co.nz

7. While accepting the need for the upgrade, we have residual concerns over timing – specifically, how soon the USI MCP is required, as noted in section 4, below. Actual demand has been significantly lower than forecast, indicating a strong likelihood that the USI MCP can be reasonably delayed from its current projected timing.

8. Our concerns do not mean that the USI MCP should not be approved. Transpower has nominated a wide approval window that expires at the end of 2040, noting that this allows for "…*both demand fluctuations and the potential use of NTS. In addition, a major generation announcement post-approval but before we have committed to expenditure could defer the need for some of the grid outputs for Stage 1 for several years.*".[1]

9. Our concerns are also not a criticism of Transpower's forecasting approach to support MCP approval under the capex input methodologies. We understand that the relative risks of investing too late versus too early, and that these risks are likely to be asymmetric (with the economic cost of investing too late likely to outweigh investing too early).

10. However, a planning forecast used for regulatory approval is not the forecast that we expect Transpower would use to support internal business case approval and a decision to proceed. The magnitude of the difference between actual and forecast demands for 2025 suggests that the current proposed commissioning timeframes are earlier than necessary. Our expectation is that Transpower doesn't commit to the USI project unnecessarily early.

11. Had it not been for the deep collaboration by USI distributors in forming the USI load management group in 2009, it is possible that the MCP would have already been needed. This underscores the significant benefit to electricity consumers in exploring all reasonable avenues for deferral, including carefully monitoring actual demand out-turn, and procurement of non-transmission solutions (NTS).

12. Orion recommends, as a condition of project approval, that Transpower be required to monitor USI demand growth and provide regular updates to stakeholders on the impact of actual USI demand out-turn on project timing, as well as on progress on securing an NTS. This could be achieved by a supplementary information disclosure requirement, or similar.

13. For the avoidance of doubt, Orion explicitly supports Transpower's proposed approach to developing a NTS that could potentially defer the MCP.

4. Demand Forecasting

14. In Figure 13 of Attachment 2[2], Transpower shows the key factors that makes up the expected demand growth between 2025 and 2050. There are four key factors that are increasing demand in the USI, according to Transpower's forecasts: step loads, fixed EV charging, base demand growth and electrified heat. Additionally, a ~6-7% prudency band has been added to allow for demand variations due to weather or other system fluctuations. Other factors are also accounted for by Transpower; however, they are minor compared to the forecast for these main factors.

[1] Transpower. (2025). *Upper South Island Upgrade Stage 1: Major Capex Proposal: Overview*. August 2025. Footnote 5, p6.
[2] Transpower. (2025). *Upper South Island Upgrade Stage 1: Major Capex Proposal Attachment 2: Need, Demand and Generation Scenarios*. August 2025. Figure 13, p26.

15. We set out our observations on the current demand forecast, below, which we consider provides reasonable grounds to pause, and evaluate whether the proposed timing of the MCP commissioning should not be delayed.

4.1. Base

16. In Table 2 of Attachment 2, Transpower's 2025 base winter demand forecast for its preferred Environmental scenario is stated to be 1,224.9MW, with additional forecast demand of 102.4MW contributed by steps, electric vehicles, photovoltaics, batteries and process heat conversions.[3] Transpower notes that these additional contributions are stated on an individual basis and not coincident with the USI peak.

17. Table 2 states a forecast winter peak for 2025 of 1,326.9 MW, which presumably accounts for the contribution of forecast additional demand on a coincident basis; however, it does not appear to include the ~6-7% additional contingency ('prudency' adjustment).

18. Actual USI winter peak demand in 2025 was 1,171 MW, around 156 MW (-12%) less than Transpower's expected forecast, and around 230 MW lower than the prudent demand level used to calculate the need for investment. The peak of 1,171 MW excludes all generation in the USI at the time of peak, so the actual demand on the lines supplying the USI was lower.

19. The size of the difference between actual USI demand and the expected forecast (-12%) is unlikely to be explained by normal variance alone (the difference could be as high as 230 MW (-16%) if the prudent allowance is considered). This level of variance from forecast in the first year is concerning, as the first year is expected to have the greatest level of certainty across the forecast period.

20. This highlights the value of delaying the USI MCP as far as reasonably practicable to enable the list of expected step loads to be firmed up, and to allow time to gather more information on the accuracy of the forecasts.

4.2. Step Changes

21. We observe that the step changes set out in Table 4 of Attachment 2 remain unchanged from those outlined in Transpower's "*Further consultation on our short-list for upper South Island upgrades*" (further consultation) undertaken in May-June 2025.[4]

22. We note Transpower's explanation, that:

> *"We are aware that some steps have reduced in likelihood (e.g., Cook Strait ferry electrification). However, based on the latest feedback we have had from EDBs and large users in the USI, expectations around new step loads in the near to medium term remain strong, such that we consider our current assumptions remain reasonable."*.[5]

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[3] *Ibid*. Table 2, p16.
[4] Transpower. (2024). *Upper South Island: Major Capex Proposal short-list consultation - Attachment 1: Need for investment, demand and generation scenarios*. December 2024. Table 4, p17.
[5] *Ibid*. Section 3.1.2, p20.

23. In our view, this reads as saying that certain step changes that are no longer valid or cannot be adequately evidenced will be retained as a hedge against as yet unknown steps (i.e., retained as a further contingency). Orion considers that Transpower should incorporate the most recently available data into its MCP planning. We cannot support inclusion of step changes that are no longer valid or cannot be adequately evidenced.

24. In Table 2 of Attachment 2, Transpower forecast increased demand of 90.3 MW in 2025 from step changes and process heat. Given the 156 MW difference between expected and actual peak demand in 2025, we would be interested to understand whether any of the anticipated steps have materialised, whether it is known that certain steps are delayed until later in the forecast period, or have subsequently been re-categorised as unlikely. It would also be useful to understand whether the demand assumptions for any steps have varied materially.

25. We note Commission's draft decision that "*Transpower argue that, while it is true that the 2024 demand was less than it had forecast, this was largely due to forecast step load decisions being delayed rather than cancelled*"[6], and that the same position has been repeated in 2025. We consider it unlikely that deferred steps will reappear simultaneously, such that it will necessitate the MCP to maintain its current timing. The impact of deferred steps compounds every year that actual demand comes in below forecast. Eventually, a point is reached where accommodating deferred step changes becomes undeliverable if they re-emerge at the same time.

26. In our view this again highlights the value of NTS providing firming for the system while further investigations into the commitments of step changes are made, with a reasonable expectation that this will allow the timing of the upgrade to be delayed as more step changes are delayed or removed from the list.

4.3. Prudency

27. Transpower states that the prudent demand is added to account for variation in weather and system conditions that could be expected year-to-year. The method in section 3.1.7 of Attachment 2[7] describes analysis of variance to an expected value calculated from regression analysis. This variance will include both weather variation and any error due to factors not used in the regression.

28. We do not see evidence that would support a 7% addition to peak demand for prudency. Peak demand in winter has barely fluctuated outside of a 7% band across the last 15 years and annual demand hasn't fluctuated by more than 5% year-on-year, before taking account of growth or any other factors. It is hard to see how a model calculating an expected value for each year could have variance of more than 7% from observed values.

29. Orion normalises forecasts for weather variability based on modelling the relationship between peak load and weather to calculate 10% and 50% probability of exceedance values. The difference between PoE50 and PoE10 calculated for our network is around 4%. We would expect weather related variance to be lower across the USI due to the greater diversity of load and weather conditions across the USI.

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[6] Commerce Commission. (2025). *Transpower's Upper South Island (USI) major capex project proposal: Draft decision and reasons paper - Attachments A to D*. 18 December 2025. Paragraph B52, p63.

[7] *Ibid*. Section 3.1.7, p25.

30. This indicates that a significant proportion of the prudency adjustment is applied to other, unknown factors causing fluctuations from Transpower's modelled expected values. We are concerned that some of the factors causing variation between the expected values and observed values (e.g., step changes and process heat conversions) could also be included in the modelling, leading to an effective double counting. It is unclear from the material provided what is and isn't included in the regression analysis.

31. Overall, this means Orion would expect the prudent amount to be significantly less than calculated by Transpower. The prudent amount accounts for nearly 50% of the expected load growth between 2025 and 2030 and therefore drives most of the need case. If the prudent amount is set too high, it artificially brings the need case forward.

4.4. Consumer Energy Resources

32. Consumer energy resources have the potential to suppress demand growth when faced with an adequate price signal and can be used actively if aggregated and integrated into a flexibility offering (e.g., NTS).

33. Transpower's EV charging forecast ('environmental' scenario) assumes that 60% of EVs will charge off-peak. Orion's trials, and the current products offered by retailers, have shown that most customers charge their EVs at off-peak times, when they are rewarded with lower electricity prices.

34. Orion considers there is potential for high uptake of household solar and batteries in the USI. The USI is well placed for solar and battery uptake to occur, given the large residential housing areas, high sunshine hours, and relatively high incomes. Additionally, there is large rural demand from irrigation where on-farm solar and battery systems are well suited.

35. While these factors may not change the need timing in a prudent forecast, they potentially raise the value of deferring upgrades, in that more support would be available to reduce peak load in the future.

4.5. Demand Forecasting Implications

36. Overall, we consider that Transpower has applied a conservative demand forecast. As prudent asset managers, we agree that such a planning approach, which leads to investment approval appropriately ahead of time, is reasonable to avoid the risk of significant unserved demand.

37. While we understand that Transpower must be conservative, we consider with the benefit of understanding the 2025 actual demand presented by the USI, that the current level of conservatism, if left unaddressed, may result in electricity consumers paying for an upgrade that is not required for several years.

38. We reiterate that our concerns do not mean the MCP should not be approved. However, we consider that our observations highlight:

    38.1. the utility of a NTS to further defer investment;

    38.2. the need for Transpower to actively pursue a NTS, including moving to a grid support contract RFP as soon as practicable;

    38.3. that the proposed approval expiry of 31 December 2040 is reasonable, to account for timing issues and to support appropriate deferral.

38.4. that a project disclosure mechanism is required to provide stakeholders with assurance that the timing of USI MCP execution is being optimised.

5. Ground Clearances

39. In our submission to Transpower on its further consultation, we noted concern over the cost treatment of existing ground clearance violations.[8] We are pleased to note that Transpower has since developed a framework for treating ground clearance costs; however, it is not clear to us how this applies in practice. We note the even allocation and cost sharing arrangement for Category E/F violations (existing irrigator violations), but the Category C/D allocations (existing ground clearance violations) seem to be heavily biased toward the MCP.

40. Despite this lack of clarity, we note that the Commission is assured that Transpower's under-clearance cost allocation approach is reasonable.[9]

6. Major Capex Incentive

41. Orion supports the Commission's draft decision to set the incentive rate for Transpower's major capex incentive for this project at 7.5%. Given Transpower's demonstrated track record of delivering projects well under forecast[10], we consider that this is a reasonable decision that appropriately moderates the impact of any forecast bias while providing an adequate incentive for Transpower to pursue efficient delivery of the MCP.

42. The Commission has proposed to categorise project cost contingencies totalling $13.7 million (nominal) and the proposed $7.0 million ($2025) recoverable cost for establishing a NTS, as exempt major capex to which the major capex incentive will not apply. The effectively creates a 'deadband' below the Major Capex Allowance (MCA) to which the incentive rate does not apply. Orion considers this to be an appropriate approach and agrees that Transpower should not be exposed to penalties or rewards for managing costs associated with uncertain activities.

7. Pricing Impact

43. We note that Transpower has provided estimates of the indicative starting allocations, as determined using the peak BBI (benefit-based investment) method. Orion's indicative starting allocation is estimated at 57.73% of the MCP's covered cost. This results in an estimated $13.74 million increase (nominal) in Orion's benefits-based transmission charges in 2044/2045.

44. We have not undertaken any analysis of Transpower's price impact estimates. The Transmission Pricing Methodology (TPM) is an esoteric document, and we do not have the internal capability and resources to review Transpower's estimates without engaging specialists to assist. We note that Transpower has advised that the TPM requires it to consult on the starting allocations, and it will do so after the MCP is approved by the Commission, and if Transpower decides to proceed with the investment. We may seek expert advice on the pricing impacts at that time.

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[8] Instances where conductors are closer to the ground, or to farming implements like pivot irrigators, than specified in NZECP34 "New Zealand Electrical Code of Practice for electrical Safe Distances".

[9] Commerce Commission. (2025). *Transpower's Upper South Island (USI) major capex project proposal: Draft decision - Reasons paper*. 18 December 2025. Paragraph 3.33, p18.

[10] *Ibid*. Table C3, p46.

45. We note that Transpower chose to use 2044/2045 prices as its basis for articulating the projected 'headline' increase in annual transmission charges at each grid exit point (GXP). Transpower said it used that period because it is when it expects the covered cost of the MCP to peak. We think that Transpower should, in future projects, focus on estimating near-term price impacts (e.g., post commissioning).

46. As a passthrough cost, Orion's consumers bear the ultimate burden of transmission investments, and it is incumbent on Orion to try and convey those impacts in our various pricing and consumer engagement documents, and a 'headline' number nearly two decades distant has little relevance. Fortunately, through the combination of the indicative starting allocation and time series of indicative covered costs, Transpower has provided sufficient information for the near-term pricing impacts to be calculated.[11]

8. Closing

47. In closing, Orion reiterates its in-principle support for the Commission approving Transpower's USI (Stage 1) MCP. The long-term need for an upgrade to maintain n-1 reliability, address emerging voltage stability constraints, and ensure that the USI is served by a resilient transmission backbone is clear. We acknowledge the extensive engagement Transpower has undertaken throughout the development of this proposal and recognise the robustness of its options analysis and overall investment case.

48. At the same time, our analysis of the 2025 actual demand out-turn, combined with our observations on step load uncertainty, prudency allowances and, to a lesser extent, the evolving impact of consumer energy resources, highlights that the timing of the proposed investment merits additional scrutiny. The gap between forecast and actual peak demand is material and persistent (2024 and 2025), and current indications are that the commissioning timeframe can reasonably and prudently be delayed without compromising system reliability or consumer outcomes. A delay would also provide greater clarity on step load commitments, reduce forecasting uncertainty, and enable more informed decisions about the feasibility of procuring NTS.

49. We emphasise that these concerns do not weaken the underlying need case nor our broader support for the MCP. Rather, they reinforce the importance of flexible and evidence-based implementation sequencing - particularly given that transmission investments of this scale impose long-lasting cost consequences for consumers. Approving the MCP while ensuring that Transpower continues to monitor demand closely, integrate new information, and transparently report on changes that affect project timing would help balance the need for prudent planning with the obligation to avoid premature investment.

50. We also strongly support Transpower's proposed development of an NTS to provide interim support to the USI, which may defer the investment need. The earlier that an NTS can be procured, the more impactful it is likely to be in terms of delaying the need for investment.

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[11] Transpower. (2025). *Upper South Island Upgrade Stage 1: Major Capex Proposal Attachment 9: Indicative Pricing Impacts*. August 2025. Table 3 (p10) and Figure 2 (p8), respectively.

51. For these reasons, Orion recommends that the Commission approve the MCP subject to a condition requiring Transpower to provide regular reporting on USI demand trends, step load status, and NTS procurement progress. The existing approval window through to 31 December 2040 provides appropriate flexibility for Transpower to optimise investment timing, and we expect that transparent monitoring and disclosure will help ensure that commissioning proceeds only when clearly required.

52. Ultimately, our position seeks to strike the right balance between reliability, prudence, and consumer value. The USI MCP is a necessary long-term investment in New Zealand's transmission network, and approval now provides certainty for strategic planning. However, the evidence strongly suggests that implementation should be delayed until further demand data confirms the need date, minimising the risk of consumers funding an upgrade earlier than necessary. With appropriate conditions and active exploration of deferral options, we consider this approach will deliver the best outcomes for USI electricity consumers.

Yours sincerely

Alec Findlater
Regulatory Lead – Commerce Commission