

19 December 2023 Ben Woodham Electricity Distribution Manager Commerce Commission PO Box 2351 Wellington 6140 By email to infrastructure.regulation@comcom.govt.nz

Dear Ben,

# Alpine Energy Limited's submission on the Commerce Commission's issues paper on the default price-quality path for electricity distribution businesses

## **Overview**

- Alpine Energy Limited (Alpine Energy, we, our) would like to thank the Commerce Commission (the Commission) for the opportunity to submit on the issues paper regarding Default price-quality paths for electricity distribution businesses (EDBs) from 1 April 2025, dated 02 November 2023 (the Issues Paper).
- 2. Our submission does not include any confidential information and we do not require any redaction (including signatures) before publication by the Commission.
- 3. Alpine Energy supports, in general, the Electricity Networks Aotearoa's (ENA) submission on the Commission's Issues Paper. We strongly support the ENA's submission on Chapter 5: Setting revenue allowances. We have highlighted specific areas of additional concern/ interest to Alpine Energy in our submission below.
- 4. We look forward to further engagement with the Commission as it develops the next DPP for EDBs, which will take effect from 01 April 2025.

## ALPINE ENERGY LIMITED

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# Context

- 5. The New Zealand Energy sector, and particularly the regulated EDBs, are at a crucial point where the sector is actively witnessing rapid change driven by electrification to decarbonise the New Zealand Economy. As acknowledged in the Issues Paper, regulated EDBs also need an appropriate level of network resilience to mitigate a range of risks and to innovate and respond to advances in technology.
- 6. The changes in customer behaviour driven by wanting more energy choices coupled with unprecedented cost pressures are placing significant operational and financial pressure on the delivery of the services. The scale and magnitude of the changes that we are currently experiencing is the basis for our 2023 Asset Management Plan (AMP) and the changes to our 2023 AMP, as it will be explained in out s53ZD submission.
- 7. As a mid-size EDB in the South Canterbury region, the challenges mentioned in the Issues Paper are amplified for Alpine Energy given our regional network and the economic environment we operate in. As mentioned in our AMP, South Canterbury is uniquely diverse and complex in its electricity needs:
  - a. **Diverse land use and economic activities**: Dairy, sheep and beef, and crop farming, significant food processing and other industrial operations, and high tourism activity in the Mackenzie District.
  - b. **Diverse energy demand**: Significant industrial process heat requirements combined with seasonal demand driven by irrigation.
  - c. **Diverse geography and climate**: Stretching from the Alpine village of Aoraki/Mt Cook to the temperate coast at the Waitaki River.
  - d. **Diverse population spread**: One significant urban centre (Timaru) and many smaller towns and rural settlements throughout the region.
  - e. Seven Grid Exit Points.
- 8. As a result, our network, and how we plan and manage it, must address increased complexities in balancing supply with demand in real-time to ensure the quality and reliability of supply; greater peaks and troughs in demand, for example, from the mass uptake of electric vehicles (EVs), small and large-scale solar generation, and process heat conversion (decarbonisation through electrification); distributed generation (DG) increasing two-way flows of electricity, creating new safety and technical issues; and the need for greater resilience to address the potential impacts of climate change and an Alpine Fault rupture on our assets.

- 9. We have developed our AMP work programmes from the ground up, considering customer requirements and feedback, independent engineering advice, network health, and resource availability. Alpine Energy is fully committed to providing our customers a secure and reliable electricity supply to both home and business in a cost-efficient manner, whilst balancing future needs and network changes. Our ability to innovate and deliver on customer requirements over the DPP4 regulatory period greatly depends on the extent to which our AMP forecasts are accepted by the Commission.
- 10. Overall, whilst we acknowledge the low-cost nature of the DPP process, it would be inefficient for the end customers and EDBs to proceed along the route of DPP re-openers or CPPs to secure additional allowances. This would be massively disruptive, costly, and counterproductive. We are also concerned that the Commission will not have the capacity to process multiple reopeners and / or CPPs in a single year which causes concerns that the benefit from successful applications will not be timely.

## **Forecasting input costs**

11. Input cost escalation is a major issue for the EDBs, including Alpine Energy.

For example:

- a. Currently, the labour market conditions are such that we are paying a premium to attract and retain personnel with the right skills and capabilities. In preparing our 2023 AMP we determined that 36% of the labour costs increases we forecasted were in relation to inflation, resizing adjustment for current roles, and introducing addition employee benefits (including medical insurance) to retain staff.
- b. Further, global electrification to decarbonise is driving network equipment costs higher (e.g., cables, transformers, switchgear etc.), with longer supplier lead times for network equipment. This is further amplified for the likes of Alpine Energy given our location and relatively smaller size. Given, supply chain uncertainties we are compelled to hold higher stock levels for network spares and equipment which is translating to higher working capital pressures.
- 12. As the Commission correctly identifies regarding capex input cost pressures, the increase in cost structure is one of the primary reasons for the step change in the forecast cost over the DPP4 regulatory period. Therefore, whilst the capital goods pricing index might have been relevant and appropriate in the past, we believe the Commission should consider a customised index, which is more reflective of actual and expected cost pressures currently witnessed.

13. Like capex, on opex input cost pressures, we are experiencing cost increases well above LCI, PPI and CPI. These cost pressures are amplified for Alpine Energy given size and network location. Therefore, we would encourage the Commission to develop a customised sector specific index to counter any under estimation of opex allowances. We will submit a more detailed paper on this as part of the DPP4 process.

## Historical expenditure is unlikely to reflect EDB DPP4 capex needs

- 14. We are encouraged by the Commission's acknowledgement of the significant challenges faced by regulated suppliers and the resulting step change in spend required to address critical network needs. We are also positively encouraged that the Commission will consider the AMP24 as part of the final DPP4 decision and the Commission's collaborative approach in general.
- 15. However, we note, that while the Commission has indicated the AMPs would be the starting point in its capex forecasting approach, the comparisons and adjustments are expected to be in relation to historical spend levels. Given the structural changes all regulated EDBs are currently witnessing, we do not believe that past expenditure is a relevant indicator or predictor of future expenditure profiles.
- 16. Further, whilst the Commission acknowledges that the EDBs are in the best position to understand customer needs, asset health, identify and manage the risks in delivering safe reliable electricity, the Commission's initial views on assessing future spend relative to past performance are somewhat contradictory. While there is a degree of uncertainty in any forecast, setting a cap and/or adjusting future capex allowance relative to historic spend levels would significantly constrain our ability to deliver on customer needs and increase risk of under investment in the network. This would have significant long-term effects, resulting in even higher capital needs in the future.
- 17. We believe the Commission's Incremental Rolling Incentive Scheme (IRIS) provides the required balance and incentive for regulated EDBs to operate effectively and share efficiency gains with end customers. Thereby, managing any over or underspend relative to the capex allowance.

- 18. Alpine Energy put in significant effort compiling the 2023 AMP, which was reflective of the best information to hand on current customer requirements and network asset condition data. During the year we have spent significant time reviewing our planning assumptions, improving our asset data analysis, undertaking targeted engagement with large commercial and industrial customers, and receiving an independent review from DETA to refine our demand and expenditure forecasts. This work has confirmed that key areas on our network is at capacity (e.g. Washdyke) and we are therefore certain that a step change in capacity is required to meet customer demands in the next five years.
- 19. We would therefore urge the Commission to rely on our 2024 AMP update to set capex allowances with limited reliance on past spend levels, which were based on just-in-time investment. Our AMP is constructed on a bottom- up granular basis, and we are happy to provide any other supporting information/assumptions to the Commission and its engineering consultants on a confidential basis.
- 20. Our 2024 AMP update will also reflect the significant work we have undertaken to forecast resilience expenditure, which were not included in our 2023 AMP. During the current year we had undertaken a strategic work programme to develop our resilience strategy and our forecasts will be reflected in our 2024 AMP and in our s53ZD submission. We encourage the Commission to use these forecasts instead of historic, significantly understated, expenditure forecasts for resilience.
- 21. Whilst we are supportive of the flexibility offered via DPP re-openers and CPPs, we believe these options are intended for unavoidable/extreme situations. It would be counterproductive if the Commission restricts capex allowances, thereby forcing EDBs to seek alternative solutions. This would be highly disruptive and costly for mid-size EDBs costs which will eventually be passed through to consumers. The Commission's internal resources and capacity to manage this workload is also a concern.

## **Deliverability constraints**

- 22. We appreciate the Commission's concerns about the challenges in delivering increased programmes of work given current labour market, supply chain and economic challenges in New Zealand and we share the same concerns.
- 23. As mentioned above, the step change in the AMP work programmes is guided by network asset lifecycle, asset conditions and customer requirements. As part of the AMP process, we have analysed and prioritised projects with a view to balance work programmes and schedules with the available resources. Hence, Alpine Energy is confident that we will be able to deliver on our AMP.
- 24. The amalgamation of Alpine Energy and NETcon Limited (the formerly wholly owned subsidiary of Alpine Energy delivering most of the network programmes on our network annually) further strengthens our ability to secure the resources to deliver our work programmes. This also allows us to better streamline our processes and increase field crew utilisation to enable us to deliver more projects with similar resources. Initial work performed estimates that we will be able to deliver a 15% increase in utilisation in the next 2 years.
- 25. We have also already diversified our delivery capacity through securing additional external resource to enable us to deliver our forecast work programmes. We can share further information on this with the Commission as part of the DPP4 process.

## Potential changes in capital contributions policies

26. As part of a wider review of our pricing methodology, we are reviewing our capital contribution policies. Our capital contribution policies will be amended in the next 12 months, and we will provide details to the Commission once these have been finalised.

#### Large connection contract and investment decision making process

27. Alpine Energy was generally supportive of the Commission's Large Connection Contract (LCC) mechanism proposed via the draft Input Methodologies (IM). However, we did express concerns that any changes to the IM on this matter should be region/EDB specific with the maximum capacity being representative of the specific network capacity and demand. The Commission's final IM decision to set the LCC eligibility at 5MW of generation capacity as a blanket across the EDB, with no regard to region or network size, is disappointing. At this stage, it is very unlikely that Alpine Energy would meet this eligibility criteria, aside for one potential contract. We are yet to fully understand the wider implication of this on capex allowances and DPP washup mechanisms and we request the Commission to provide clear guidance via the DPP determinations and working examples.

#### Views on the approach to forecasting opex

- 28. Alpine Energy is generally supportive of the Commission's base-step-trend approach used to forecast opex allowance. We also think it is logical for the Commission to use the penultimate year of DPP3 as the base year for DPP4. As network maintenance spend is largely driven by maintenance standards, we believe base-step-trend is a logical approach. Whilst we encourage consistency in approach, we strongly believe the approach needs to be adapted to reflect current and future workload and cost structures.
- 29. Given the importance of opex and its direct impact on regulated revenues, we urge the Commission to carefully consider its approach to limit forecasting errors. Whilst we agree with the Commission that forecasts can be uncertain, we would like to stress that any forecasting errors would have material impact on our ability to maintain the network. Forecasting errors would have negative cascading effects over the subsequent DPP periods via the IRIS. Therefore, we urge the Commission to carefully consider its approach to forecasting opex allowance.

#### Scaling factors for network opex

30. Alpine Energy is of the view that if scaling trend factors are carefully selected it would be a reasonable predictor of network maintenance spend. Whilst we are supportive of the Commission's use of ICPs and network length to predict network maintenance, we believe that the Commission should use alternative scaling factors such as peak capacity and volume conveyed to account for recent structural changes in the energy sector. We will submit a more detailed paper on alternative approaches in determining scaling factors, and its application, as part of the DPP4 process.

- 31. We are currently experiencing a rise in uptake of technologies such as solar PV, battery storage and EVs that creates new load on our network driven by changes in customer behaviour wanting more energy choices. This means we are presented with new challenges which need to be addressed in a timely manner to maintain network reliability and resilience. Scaling network opex purely by ICPs and network length would, therefore, underestimate the network opex, negatively impacting our ability to maintain the network at optimal levels. Therefore, we strongly encourage the Commission to consider alternate scaling factors such as peak load and/or electricity volume as a scaling factor when setting network opex.
- 32. Further, we are seeing an increase in demand for grid scale solar generation within our region. In addition to the increase in connections to our LV network, DG presents both benefits and complexities which requires adaptation of technologies for demand response, energy storage and greater LV network monitoring. These changes are structural in nature and not transitional and hence, the Commission should ensure that the network opex spend is not underestimated over the DPP4 regulatory period. In addition, given the structural changes we are currently witnessing, the Commission should carefully consider the relevance of historical data and time periods used to inform the scaling factors. In our view, past data might be a good predictor of future spend in a steady state environment but might be unreliable in an environment that is experiencing structural change, and where historical data also has an inherent structural change due to the pandemic
- 33. As highlighted previously, our AMP has been constructed on a bottom-up basis considering our estimated growth in ICPs, line length, peak capacity, volume conveyed through our network, overall asset health condition etc. Therefore, the Commission should consider the wider implications and/or dependencies on total forecast spend when generating specific assumptions. For instance, if the Commission projects a different trajectory for ICP growth for its scaling factors from that built into our AMP, this will have perverse outcomes on network opex and capex plans and might not be consistent with the overall opex and capex plans.

#### Non-network opex

34. Alpine Energy is of the view that the Commission should follow a more granular approach in estimating the non-network opex in line with the AMP. Data plays a vital role in optimally managing our network and we are taking a holistic approach to data with a strong focus on digitisation. The increased focus on data and digitisation has signalled the need to introduce new capabilities and skills (and therefore tools and people) into our business which have not historically been needed in a traditional EDB.

35. With most digital services provided on a Software-as-a-Service (SaaS) approach, the Commission should consider alternate approaches to forecasting non-network opex to the extent the Commission does not rely on the AMP. Based on Generally Accepted Accounting Principles (GAAP), most of the costs to implement a SaaS solution will be opex in nature and we will therefore see a significant increase in non-network opex as we replace legacy, on-premise systems with cloud-based solutions. We will submit a more detailed response on this as part of the DPP4 process.

## Appropriate step-change criteria

36. Our initial view on the Commission's approach to assessing step changes is that it is logical but highly theoretical. Given our AMP is constructed bottomup on a driver-based approach, we are happy to provide the relevant supplementary information on a confidential basis that demonstrates the significance of the step change to cover the essential costs and the process we have followed to estimate the costs. However, we are unlikely to be able to provide rationale as to why a particular step change might be relevant across all EDBs. Given the importance of this matter, we would suggest that the Commission provide an appropriate template, including the precise artefacts the Commission would seek to review as part of its decision-making process to meet the proposed criteria. We believe this would avoid any potential ambiguity and provides us with the clarity of the Commission's standardised approach.

# Our take on digitalisation, cyber security, insurance premiums and other items in general

- 37. We are already seeing the effects of decarbonisation via our customer and other stakeholder engagements with imminent process heat conversion projects. Whilst we agree with the Commission that constructing the new assets would be capex in nature, the ongoing maintenance of the newly created assets would certainly be opex in nature. The Commission needs to ensure that the opex allowances set are reflective of the incremental opex requirements.
- 38. In an environment where we are witnessing massive changes in customer behaviour and expectations, we would like to understand the Commission's rationale to set allowances based on the historical spend levels. As indicated elsewhere, past trends would be a reasonable predictor of future spend in a steady state environment and not in an environment where we are witnessing a fundamental structural change in the operating environment. When setting the opex allowances we would urge the Commission to take a disaggregated view of expenditure categories to understand the underlying drivers as opposed to calculating allowances at an aggregated baseline level. Alpine Energy is more than happy to provide any further clarifications.

- 39. The Commission's notion that costs relating to digitalisation and data is discretionary in nature is surprising given the changes we are currently witnessing. Distributed energy resources (DER) and its impact on networks and network solutions/technology has evolved significantly since pre-GFC, with more solutions requiring digital overlay to be able to manage the hardware. Further, with the rise of cloud computing and annual subscription/capacity-based charging mechanisms, gone are the days of purchasing perpetual licenses where the cost is precisely known. Hence, being a mid-sized EDB located in South Canterbury, we have limited control of being able to influence pricing of some of these digital services (which are largely provided by large multinationals). We understand the Commission's concerns of not wanting to double count the impact of step changes and we remain supportive to provide additional information to assist the Commission in refining its forecasting process. Therefore, we urge the Commission to take a more relevant and pragmatic approach when setting step changes relating to digital spend in the opex allowances.
- 40. Alpine Energy is of the view that cyber security should be an expenditure category on its own given its increase in importance as network solutions are currently delivered and managed with a software overlay. We consider safety and security of our network as paramount to being able to deliver services to our customers in a secure and reliable manner. Whilst regulations relating to cyber security might be currently evolving, we do not want to be in a situation where network security is compromised. Figure 1 below shows our actual cyber security costs for 2019 to 2023 and the forecast cyber security costs for 2024 to 2029. Therefore, we request the Commission pay particular attention to this matter and we remain committed in providing additional information.



#### Figure 1: Annual Cyber Security Costs 2019 - 2029

- 41. We have also witnessed a significant rise in insurance premiums over the last few years. Based on information provided by Marsh during our 2023 / 2024 insurance renewal process, 2022 was globally one of the costliest years on record for insured natural disasters according to Munich Re. with events such as Hurricane Ian in the US and floods in Australia and Pakistan contributing. Even prior to the recent NZ weather events, significant uncertainty in the global reinsurance market resulted in 1 January 2023 reinsurance renewals with double digit increases to insurers, and high-risk natural catastrophe zones faring worse. Increased reinsurance costs do get passed on to insureds through premium rate increases.
- 42. New Zealand Insurance (NZI) as the lead insurer indicated that premiums could continue to increase by up to 20% annually. The year-on-year increase for Alpine Energy from 2023 to the 2024 is 84%.
- 43. Please see Figure 2 below that shows the increases in insurance premiums since 2016. Our strong view is that insurance premiums should be forecasted on a region-specific basis. We are having constant dialogue with our insurance advisors, and we can expect further rises during the DPP4 regulatory period. Therefore, we would like to ask the Commission to pay close attention when setting insurance premium allowances via opex allowance.





#### Year-on-year change in insurance cost

## Length of regulatory period

44. Alpine Energy is of the view that the length of the DPP4 regulatory period should remain 5 years. Changing the length of the regulatory period would greatly increase the uncertainly of the regulatory regime disrupting our ability to efficiently manage and deliver projects in the cost-efficient manner. We see it as unwarranted and adding further complications to an already complex regulatory regime, including the flow-on impact on aspects such as IRIS, financeability and revenue recovery over the regulatory period.

## **Rates of change**

- 45. We would welcome more clarity on how the Commission would apply its judgement to inform rates of change as part of the DPP4 process. We also welcome the Commission's proposed approach to consider distribution revenue including recoveries but excluding Transpower and other pass-through costs (rates and levies) when specifying the rate of change. Transpower costs, and rates and levies are beyond the control EDBs, and it would be a much-welcomed, overdue change.
- 46. We do also acknowledge that there is significant judgement involved in setting a smooth revenue path and would request the Commission to consider the impacts on overall financeability when delaying the recovery of cashflows. Acknowledging that there is a lag between when forecast revenue from prices are set and wash-up balances are determined, the Commission needs to ensure the revenue recovery is largely completed during the regulatory period (DPP4) with minimal carryover to the following regulatory period (DPP5).
- 47. We note that the IM's final decision is to leave it up to the business to address financeability issues. Our view is that, in principle, the building block model should ensure that the regulated business remains financeable over the life of its DPP period. We note revenue smoothing is an NPV-neutral solution to address short-term issues, if applied appropriately. However, the tension between mitigating price shocks to consumers and avoiding financial hardship for suppliers remains. It would be inconsistent with the long-term benefit of end users if financeability of Alpine is negatively impacted. If this is the case, the following may occur:
  - a. Delaying or abandoning investment programmes that are of benefit to consumers and society.
  - b. Debt becomes more expensive, and this will over time result in higher prices.
  - c. If EDBs cannot recover these cost increases from consumers, this increases the risk that suppliers will underinvest, and future consumers will effectively pay for the higher financing costs, or alternatively, receive a lesser level of service.

## Conclusion

48. We hope our submission is helpful to the Commission and we are happy to discuss our views with you further if you would find it useful to do so or provide any additional information to further support our views.

Yours sincerely,

Marisca MacKenzie Chief Regulatory Officer