Drive Electric (CPO subgroup) submission on Commerce Commission Issue Paper – Default price-quality paths for electricity distribution businesses from 1 April 2025

19 December 2023

Introduction

1. This is the submission of Drive Electric's Charge Point Operator (CPO) subgroup on the Commerce Commission Issues Paper on Default price-quality paths for electricity distribution businesses from 1 April 2025, published on 2 November 2023 (Issues Paper). Drive Electric is appreciative of the opportunity to provide feedback to the Commerce Commission (Commission) on this consultation. We are providing this submission representing CPOs as customers of EDBs and providers of charging services to end public consumers. In our experience, private sector investment into public charging networks is being seriously hampered because of the costs and processes associated with network connections. This puts at risk New Zealand's progress in decarbonising transport.
2. The Drive Electric CPO subgroup has been engaging with regulators, policy makers and the Government for some time now on these matters. Our most recent submission interaction with the Commission and the Electricity Authority has been on the topic of network connection arrangements for public EV chargers and the regulatory oversight and incentives on Electricity Distribution Businesses (EDBs) to facilitate efficient connection of charging infrastructure to the local electricity networks. We refer in this paper to some of our previous submissions, but we are not repeating the substantive content of those submissions.
3. New Zealand is on the cusp of a transformation in our transport system, as we transition away from being fossil fuel powered. This change is already occurring and will rapidly accelerate over the next ten years – the terms of DPP4 and DPP5.[1] New Zealand needs a network of public charging stations to underpin this change in transport. At present there are significant barriers to establishing public charging stations with the cost and processes associated with network connections. In short, the users of e-mobility in New Zealand (eventually all New Zealanders) need a regulatory system for network businesses that supports CPOs to invest in and deploy charging infrastructure to meet current and future market demand.

[1] https://www.climatecommission.govt.nz/our-work/advice-to-government-topic/advice-for-preparation-of-emissions-reduction-plans/2023-draft-advice-to-inform-the-strategic-direction-of-the-governments-second-emissions-reduction-plan-april-2023/

4. The concerns that we expressed in previous submissions about network access remain. We are still trying to make connection arrangements with 29 EDBs who each have their own way of going about both the process and how they charge for connection services. Paragraphs 27 to 36 of this submission evidence the situation we face. We are also concerned that the regulatory arrangements regarding network connections are too light-handed here in New Zealand which will likely contribute to the inefficient and expensive outcomes for CPOs.

5. The purpose of this submission is to share our views on how to address key aspects of the network related barriers to the roll-out of EV charging infrastructure and to provide the Commission with recommendations on specific aspects of the EDB regulatory arrangements as set out in the Issues paper.

6. Drive Electric's subgroup recognises that DPP4 is only one component of the wider policy and regulatory environment that EDBs and CPOs need to operate within. Specifically, we want the Commission to ensure that when it takes decisions on DPP4 it gives full consideration to the broader policy and regulatory environment that will need to evolve over the term of DPP4 and DPP5 which together span the forecast period for the roll-out of public EV charging infrastructure. The work of the Electricity Authority on access for network load connections and distribution pricing are particularly important. We consider that the different components of the electricity network ecosystem need to be fully connected to each other so that New Zealand EV users can have a network of public charging infrastructure available in a timely fashion and at reasonable prices. The Commission, the Government and its policy advisors play an important role, as does the Electricity Authority who, we understand, is also actively looking at what it needs to do now and in the near term to contribute to a successful roll-out of public EV chargers.

Who is Drive Electric

7. Drive Electric is an apolitical, not-for-profit organisation. We engage with government, media, industry and individuals to continually promote the benefits of making e-mobility mainstream and encourage accelerated electric vehicle uptake across the country. Our board, member network and research partners are at the forefront of the electric vehicle movement. We are proud to instigate change and impart expertise in the key conversations bringing New Zealand closer to a fully electric future.

8. Drive Electric represents a member base comprising new car manufacturers and retailers, used car importers and distributors, infrastructure organisations (electricity generators, distributors and retailers, electric vehicle service equipment suppliers), e-bike/scooters, heavy vehicle importers, finance, fleet leasing and insurance companies, along with electric vehicle users. We have more than 70 members from across the e-mobility ecosystem.

9. Drive Electric has established a subgroup of Charge Point Operators to specifically focus on the barriers to investment in public charging infrastructure in New Zealand. This group comprises Tesla, Meridian, Jolt, ChargeNet, Z Energy (Z), and BP. All these businesses provide a range of charging services to New Zealanders and have significant private capital to deploy in further building out New Zealand's charging network.

Government Strategy on Public EV charging

10. The Government has recognised the need for a coordinated and strategic approach to rapidly scale up public charging in New Zealand. In October 2023, the Government release 'Charging our Future'[2], a National EV Charging Strategy.

11. This strategy sets a vision for: "Aotearoa New Zealand's EV charging infrastructure supports an equitable transition to a low-emissions transport system in which accessible, affordable, secure, and reliable charging infrastructure is available to everyone who needs it."

    The strategy sets out a range of outcomes and some targets:
    - We will have a journey charging hub every 150 – 200km on main highways by 2028; and
    - To support the installation of at least 600 EV charging stations in rural locations by 2028.

12. Outcome 4 of the strategy is that Aotearoa's "EV charging market functions effectively, can adapt and evolve over time, and is attractive to users, operators and investors." Regulatory settings need to be considered in this light to enable investment in and deployment of charging infrastructure. Without addressing these evident challenges, the Commission risks limiting or undermining effective and efficient electricity markets for current and future customers This strategy outcome specifically foresees a role for the Commerce Commission.

13. In Budget 2023, the Government allocated $105 million to expand EV charging infrastructure in support of its strategic direction. The incoming coalition Government has followed this up with a policy commitment to have at least 10,000 public EV charger points established by 2030, with investment of $257m.[3]

Public EV charging

14. The importance of public EV charging infrastructure is well described in the IEA Global EV Outlook publication from April 2023.[4] A key message is that:

    Deployment of public charging infrastructure in anticipation of growth in EV sales is critical for widespread EV adoption. In Norway, for example, there were around 1.3 battery electric LDVs per public charging point in 2011, which supported further adoption. At the end of 2022, with over 17% of LDVs being BEVs, there were 25 BEVs per public charging point in Norway. In general, as the stock share of battery electric LDVs increases, the charging point per BEV ratio decreases. Growth in EV sales can only be sustained if charging demand is met by accessible and affordable infrastructure,

[2] https://www.transport.govt.nz/assets/Uploads/EV-Charging-Strategy.pdf

[3] https://www.national.org.nz/evinfrastructure

[4] https://www.iea.org/reports/global-ev-outlook-2023

either through private charging in homes or at work, or publicly accessible charging stations.

15. This publication also illustrates how EV users in New Zealand are poorly served with public charging infrastructure. New Zealand has the lowest rate of EVs to public charging points amongst comparable countries. Drive Electric's State of the Nation report examines New Zealand's public charging uptake.[5]

16. There appears to be a direct link between an enabling regulatory environment and successful electrification projects, in particular those projects where local distribution networks play an important role. We refer here to the recent work that Baringa advisors undertook for MBIE which compared the approaches to network connections for electrification projects in the UK, Australia and New Zealand. Their work described how the UK and Australia have regulated for a more consistent approach to customer connections while having far fewer EDBs all of which has resulted in a much better EV charging density. We believe that a similar regulatory environment is required in New Zealand. We observe that those countries that score well in the IEA review of public charging all have higher levels of regulatory involvement, rather than the light-handed approach that we have in New Zealand

Our interest in DPP4

17. In previous submissions to the Commission, we recognised that the needs of electrification across the economy are putting increasing pressure on network businesses as demand for connections grows, and that we have sought to overcome the network connection issues through direct engagement with both individual EDBs and with the Electricity Network Association. The indications we have received from these organisations are that the regulatory environment constrains their ability to support charging connections at pace and scale. We believe that this in turn impacts their ability to respond appropriately to public demand for public EV charging connections.

18. The provisions that we want the Commission to include in the DPP4 reset are targeted at resolving three of the issues that CPOs are currently facing:

- the costs of distribution networks connections.
- the processes (and time) associated with those connections; and
- the divergence in cost and process between EDBs

19. The DPP4 revenue reset will be the regulatory platform for EDBs to work from over the next six years of public EV charging roll-out. This is why it is so important to us. We submit that, in combination with the new Government, officials and especially with the Electricity Authority, the Commission has a unique opportunity in front of it to adjust the regulatory environment so that it is more supportive of the decarbonisation outcomes that Kiwi consumers are wanting to see, particularly with respect to transport electrification and public charging.

[5] https://driveelectric.org.nz/state-of-the-nation-report/

20. Public EV charging is fundamental to the uptake of e-mobility and the electrification of transport. With the new Government, we now have a commitment to a target of 10,000 chargers by 2030. Because network connections are one of the vital components of successfully meeting this target, we believe that the EDB regulatory environment needs to facilitate supportive network connection arrangements.

EDB regulation and incentives

21. In our previous submission to the Commission on its targeted Information Disclosure review we set out the requirements for EDB network transparency that would immediately assist CPOs to identify cost-effective sites for charger installation. In our submission on the 2024 Input Methodologies Review, we described the provisions that we felt should be included to reduce (preferably eliminate) the negative incentives for EDB to provide connection growth that was not forecast when the price-quality path was set.

22. The current provisions in the IMs, and in the current DPP3, regarding forecasting risks for EDBs appear to us to be acting as a disincentive for new connections. This is not sustainable going forward, if New Zealand is going to try and meet decarbonisation objectives (e.g. the country's emissions budgets and transport specific targets) and is a particular disincentive for CPOs as they try to roll out charging infrastructure.

23. Our submission on the Commission IM Review earlier this year set out that we need:

> "*A well-formed regulatory policy position on EDB risk management as it impacts network connections, capital contributions and other growth charges. We are aware that two options have been considered to de-risk EDBs connection and growth capex:*
>
> *a. Lowering (or removing) the IRIS incentive rate for connections – this weakens the reward for outperforming forecasts (including through efficiency gains) but also reduces the cost recovery risk should connections outpace forecast. This would soften what we see as a key driver for EDB capital contribution policies.*
>
> *b. Include a connection cost reopener – that is, the Commission could provide for connection allowances to be reopened if connection demand is stronger than forecast. This is a more administrative and 'by exception' way to address cost recovery risk.*[6] "

24. Paragraphs 27 to 34 of that submission set out the core of the policy position and high-level tools that we felt the final decisions of the IM Review needed to include. In this submission we set out our views on the specific issues that are identified by the Commission (or not identified as the case may be) and further describe the remedies that we feel are appropriate for DPP4.

[6] We note that the Commission has included a wash-up mechanism for new connections that only applies under a CPP regime. EDBs tell us that this is a step in the right direction for CPOs, but it misses an opportunity by restricting it to use under a CPP – it should apply under the DPP as well.

The Issues Paper

25. We have specific feedback on the following parts of the issues Paper:

    a. Chapter 2 Context and challenges

    b. Chapter 3 Enabling investment to meet consumer demands

    c. Chapter 4 Incentivising efficiency and innovation

    d. Attachment C IM Review decisions

    e. Attachment E Forecasting capital expenditure

Chapter 2

26. Our reading of Chapter 2 is that it does not appropriately engage with the nature and pace of electrification and consequently it underestimates the changes that are required in the regulatory environment if we are to achieve the desired outcomes. The coalition Government has committed to delivering various policy outcomes that, in our view, could be drawn together in a public statement of government position, to provide clarity, reduce uncertainty and allow both the Commission and EDBs to respond in a more dynamic manner to market demand for the electrification of transport.

Chapter 3

27. It seems to us that the "foundational" DPP settings that are referred to in this chapter, and that are currently available, will remain unlikely to provide EDBs with the confidence to deal with investment and forecasting risks. For instance, we acknowledge that while the CPP option is available to EDBs, CPPs are simply uneconomic for all but the largest EDBs. DPP reopener rules and processes result in expensive and intense pieces of work for only small improvements. It would be prohibitive for EDBs to seek a reopener for discrete connections that were not forecast.

28. We consider that simple low-cost tools are needed to deal with the risks around both forecasting (demand and capex) and with the EDB incentive arrangements that flow from these risks. The Commission AMP audit/review is an important part of the understanding of the risks we all face because it will shed light on EDB capex forecasting risk and uncertainty, which will help in the development of additional, simple, risk management tools.

29. We share the Commission concerns regarding EDB ability to deliver the additional capex work programs (new connections) that the 2023 AMPs contain. Hopefully the AMP audit will also shed light on this issue.

30. We consider that the Commission's concerns regarding the capital contributions policies of EDBs are also well founded and this whole area needs to be reviewed as a matter of urgency with the needed changes implemented promptly. Our own recent review of EDB capital contributions, network development and network extension charges revealed that at the operational level there are, in effect, 29 different approaches to connections across the EDBs.

31. At a policy level, almost all EDBs require connecting customers to contribute to the capital costs of providing the connection, and they all publish detailed policies as to how they assess the customers contribution and how their policies align with the Authority pricing principles. At a working level, the methodology that they each apply is quite diverse but can be grouped into three types:

    a. Case by case basis where a capital contribution is charged based on the nature of the connection and the contribution policy of the EDB, both of which can vary considerably.

    b. Published standard charge where the EDB publishes a standard dollar amount of contribution per standard residential connection, or they publish a methodology by which all connection charging components are identified.

    c. Published standard formula where the EDB has an economic costing/recovery approach to contributions. This is usually based on the NPV of incremental revenues less incremental capital costs but excluding costs that are recovered through use of system charges (mostly opex).

32. Eleven of the 29 EDBs charge a separate 'network development contribution' either as an explicit charge or as a component of the capital contribution charge that is not labelled as network development. Those that charge development contributions set out their approach in their connection policies – generally on their websites.

33. Half of the 29 EDBs have a separate charge for new connection customers where the new connection requires a network (11kv feeder) extension and a new transformer. The basis for the charge does vary, however - some EDBs will fund the capital cost of the transformer but charge full feeder costs while others have a capped EDB contribution, and the customer is charged the balance. A couple of EDBs charge the full network extension cost to the connecting customer.

34. CPO preferences here are that the risks and incentives around connection capex be carried by the party that is best placed to manage them. If capital contributions are retained as part of the network connection landscape, however, then the approach to their estimation should be consistent across EDBs, reflect efficient costs and account for the revenue contribution that the connecting customer will make into the future. This is the 'standard' approach employed under the regulatory systems in Australia and the UK.

35. We also share the Commission's concerns regarding just-in-time network investment versus investing to meet future demand in an efficient and least cost manner. Changes to the current approach would make a big difference to the ability of EDBs to respond to demand for network access for electrification projects.

36. It is also important that we put on record our disagreement that the Commission's default position on quality standards is to retain the basic SAIDI/SAIFI measures from DPP3 and not include other measures of real customer service that matter. For CPOs quality metrics should also cover connection application and installation timeframes as well as service levels offered.

Chapter 4

37. CPOs, as EDB customers, have firsthand understanding of EDB reluctance to go beyond the traditional DPP incentives. We consider that the narrow baseline incentives that are currently in place do not encourage the EDBs to respond to customer requirements in an innovative manner. We observe that the enhanced incentives for EDB innovation that were included in DPP3 did not attract a successful application, suggesting to us that the wider EDB incentives require an urgent and complete review. In our view EDBs are coming under increasing pressure from electrification projects to make trade-offs between projects and across different priorities within their business. This means that the incentive arrangements for EDBs need to be considered as a "whole" so that they make the right decisions for their customers. This must be done for DPP4.

Chapter 5

38. In our submission on the 2023 IM Review, we provided feedback to the Commission on EDB financeability issues. Without repeating that material, we highlight that this remains an important issue for CPOs as it drives EDBs to seek to recover wider network growth capex via capital contributions from those customers that are asking for new connections. This approach acts as a disincentive to connecting customers and will likely have an impact on the roll-out of EV charge points for the next six years. It needs to be addressed for DPP4.

Attachment C - IM Review decisions

39. We note the Commission comments in Attachment C regarding its unwillingness to make further changes to the 2023 Draft IMs, but we support the Commission's open mindedness that it retains the ability to make further IM changes under section 52X if the need arises during DPP4.

Attachment E - Forecasting capital expenditure

40. We note the Commission approach to setting capex forecasts for DPP4 that is described in para E13, and we encourage the Commission to take a detailed interest in the ***Assess*** phase because this is where the forecasting risks (for connections and capacity) will become visible and where capex projects are identified as missing from the AMP forecasts. It is important that there is a wider consultation with EDB customers through this process.

Summary of consultation questions

We have only provided answers to questions where we have specific interest.

Number	Request for comment or responses on initial views	Page
Chapter 2 – Context and challenges		
1	**We are interested in your views on whether we have properly understood the changing industry context as it relates to the DPP4 reset.** Have we properly understood and represented the changing industry context and are there other implications for the DPP4 you believe we should consider?	18
1 Response: CPOs are struggling to provide EV charging infrastructure at scale right now, let alone meet increased demand, and they require a more supportive regulatory environment and incentives on EDBs to work with CPOs to make this happen. While the Commission has a general understanding of the changes that electrification will have but acknowledgement of the nature and pace of transport electrification is absent from Chapter 2. As we set out earlier in this submission, our core concerns are with the processes, the costs and the diverse arrangements across EDBs with regard to connections.		
Chapter 3 – Forecasting capital expenditure		
2	**We are proposing to adapt our approach to capex for DPP4 based on feedback from EDBs, that past expenditure is not a good starting point for considering future spend.** Do you have any particular concerns or issues with our proposed approach? If so, how could these concerns or issues be resolved? What alternative data and external sources should we use to support our consideration of capex forecasts, beyond the information in 2023 Asset Management Plans (AMPs), responses to section 53ZD notices and 2024 AMPs, and why should these be used?	27
2 Response: Yes – we consider that an alternative approach to previous DPPs is essential if EV charging infrastructure is to be successfully delivered to meet the government target of 10,000 public EV charge points by 2030. The proposed audit of the 2023 AMPs is a good starting point as this should shed light on the quality of the forecasting contained in the AMPs and thereby provide some understanding of the various risks that we all face over the period of the AMP forecasts.		

Number	Request for comment or responses on initial views	Page
4	**We have concerns about the challenges in delivering increased programmes of work given current labour market, supply chain and economic challenges in New Zealand.** How should our capex forecast take into account potential sector-wide deliverability constraints?	27
4 Response: Sector wide constraints is a fundamental issue for the DPP4 reset - understanding the quality of capex forecasts (Q2 above) and the risks around delivery that EDBs and their customers face from these forecasts, is but one part of the larger problem that CPOs face.		
6	**We would like to understand how potential changes in capital contributions policies could be accommodated in DPP4.** How could changes to capital contributions policies, either in advance of or within the regulatory period, be accommodated within our capex forecasts for DPP4?	27
6 Response: CPOs have previously submitted to both the Commission and the Authority regarding the need for a structured access regime for network connections. We consider that, at a minimum, the processes, timeliness and cost-based charges should be regulated for consistency and that there should be transparency around the availability of network capacity. This type of environment should deliver a more efficient and standardised capital contributions policies across EDBs.		
7	**We are interested to understand if EDBs are assessing investments driven by expected pace of change which may not be consistent with choices otherwise made under a least cost lifecycle basis.** Are there specific investment decisions being considered due to concerns on delivering increased scale of investment in limited time which are not consistent with a least cost lifecycle basis assessment; for example, areas where EDBs are intending to build well in advance of forecast need or for demand or generation that are only speculative? On what basis are these investments being assessed?	27

Number	Request for comment or responses on initial views	Page
7 Response: It seems to us that this is an important issue for the Commission to investigate as it develops DPP4 reset. Just-in-time network investments compound the difficulties that connecting customers face and a great outcome to this issue would be for CPOs to be able to make investment decisions in an efficient and timely manner.		
Chapter 3 – Quality standards		
15	**Our initial view is to not introduce new additional quality of service measures.** Do you agree we should not introduce other quality of service measures beyond those currently required within DPP3?	38
15 Response: No, we do not agree that quality metrics should be the same as for DPP3 – just SAIDI and SAIFI. CPOs consider that there are other aspects of customer services that need to be measured and included in the regulatory regime to incentivise EDBs to respond to market demand – quality metrics should cover connection application and installation timeframes as well as service levels.		
17	**Section 53M(5) allows us to reduce the regulatory period if this would better meet the purposes of Part 4 of the Act. We are considering whether we should reduce the regulatory period from five to four years.** What particular challenges do you perceive may arise from shortening the regulatory period? What are the potential benefits to consumers from maintaining or shortening the length of the regulatory period?	40
17 Response: In our view, there is a set of circumstances coming into play that may combine to thwart delivery of the outcomes from DDP4 – some of these are acknowledged in the Commissions Issues paper, but there are outcomes for customers in markets that are more important. The level of uncertainty that we all face is increasing, and we consider that the ability of the Commission to manage this in a regulatory sense is limited under current IMs. It may make good sense to shorten the regulatory period so that the Commission has the additional flexibility that such a move would bring.		
Chapter 4 Innovation		

Number	Request for comment or responses on initial views	Page
22	**The regime's baseline incentives may be insufficient to support innovation, such that we consider it is appropriate to have an innovation (and/or non-traditional solutions) incentive scheme.** Do you agree with our understanding of the regime's baseline incentives to support innovation, and the need for an innovation and/or non-traditional solutions scheme? Would you be interested in participating in a targeted workshop, and if so, are there any topics you consider should be covered?	47

22 Response: Yes, we consider that additional incentives are needed to encourage EDBs to be more open and active with the provision of 'non-traditional' customer services rather than expensive network builds. We are aware that the regulatory environment in Australia and the UK actively encourages network distributors to be innovative about the way they provide services to customers and how they charge for these services.

Yes, we consider that a targeted workshop to consider what regulatory incentives would be appropriate in the future decarbonisation environment.