DISTRIBUTION CONNECTION PRICING PROPOSED CODE & NETWORK CONNECTIONS PROJECT – STAGE ONE

We appreciate the opportunity to provide feedback on the Electricity Authority's consultation documents titled Network connection project: stage one amendments and Distribution connection pricing proposed Code amendment. This submission from bp is written as a Charge Point Operator (CPO). Since 2022, bp charge has been operating nationally and has currently installed 190 EV charge points across New Zealand.

bp supports the government target of 10,000 public charge points by 2030. We see this as a target that will be increasingly hard to reach as time progresses unless there are changes to market conditions. Changes to Electricity Authority policy, standards and settings applying to Electricity Distribution Businesses (EDBs) could help faster EV Charger deployments but action needs to be taken to implement and measure changes as soon as possible.

Network data

Access to network capacity data and connection pipelines is required to assist in knowing where capacity is in the network. The data should be made available to all parties wanting to get power connections. Having access to this information may reduce costs for applicants and EDBs as applications will not be made where there are low power and limited options to increase capacity. This will enable more efficient EV charging network deployment.

It would also be beneficial to understand the EDBs pipeline for network expansion into new areas or large upgrades to existing areas, including projected timings. EV locations may be attractive within these areas and opportunities to get sufficient capacities installed may be lost and additional costs may be incurred to expand network capacity at a later stage.

National consistency

Consistency in the processes, application timelines, equipment standards and contract basics applied by EDBs would create efficiencies for all applications across the country. It would also be beneficial if there is more contestability of contractors as costs are very inconsistent across the country.

Applications

A finite time range for the applications processes is required. Including a tight range for response times for all EDBs across the various stages of an application for a connection. We fully support the idea of fast-track applications. Feedback from EDBs is required if applications are held up for any reason and will not meet the suggested mandatory guidelines.

Without some performance monitoring of the standardisation features proposed for the EDBs it's unlikely that the proposed ideas will be fully deployed, or deployed consistently. The Authority needs to establish an acceptable benchmark and have routine reporting in place to measure progress of the EDBs against the benchmark, which should be reported publicly.

Pricing

We support the intention to standardise pricing structures. Currently pricing across the EDBs is highly varied (see Table 1), complex and hard to understand for newcomers as the processes and cost buildups are different in every EDB. The Authority should be promoting standardised pricing structures across all EDBs for connection costs and lines/demand fees so that comparisons are possible at a broken-down component cost level.

Table 1. Examples of cost of connections showing a high level of variability (2022-2024)

Five quotes for a 125A connection across four EDBs.
• High: $120k
• Low: $6k
• Average: $41k
• Median: $25k
11 quotes for connections greater than 300A, across seven EDBs:
• High: $338k
• Low: $75k
• Average: $168k
• Median: $140k

Connection fees

As seen in Table 1, our experience of fees for connections of similar amperage range hugely by EDB and each application made. This makes building business cases for charging locations difficult to predict before these costs are known. Connections will have different costs in different locations but there is a low level of transparency on the costs and how they are calculated. Some standardisation of these cost buildups is required to enable clear, transparent and truly cost reflective pricing that have less variation across regions. bp has experienced a number of applications that we have not been able to pursue due to the high cost of connections.

Ongoing fees

Lines or demand fees vary greatly across the EDBs, (see Table 2), and it is complex to understand all of the types of fee buildups in the market. Some use capacity, some use peak demand and some use average demand. This is an area that requires some standardisation across the EDBs.

The least favourable model for EV charging is tariffs based predominantly on capacity. The load profile of EV chargers requires significant connection sizes which will sit idle for large periods

of time. Most other connections of our size have a constant or predictable load profile which the pricing tariffs are based around.

The most preferrable structure for EV charging is demand charging. This structure aligns with the /kWh tariffs that we use to sell to our customers. The Authority needs to look for a way to create a standardised demand fee for EV chargers to encourage high connection sizes but offer some flexibility on pricing as the market grows and the EV chargers achieve higher utilisation levels. This will reduce the need to increase connection sizes in the future and encourage more EV Chargers to be deployed.

Table 2 – Examples of Line fees showing high variability across EDBs (2022-2024)

	Monthly Lines fees	Est Annual Lines fees
EDB 1	$1,572	$18,864
EDB 2	$1,968	$23,616
EDB 3	$5,501	$66,018
EDB 4	$1,006	$12,081
EDB 5	$3,257	$39,091

Capital contribution

Outcome required is access to clear policies in plain English with guides and worked examples. The aim must be to get to consistent pricing structures across the EDBs. We feel that it is a possible outcome that the cap of 47% capital contribution could become the standard that all EDBs move to, apart from the ones that the Authority is exempting, and this is of concern as cost from EDBs become less predictable in the short term as pricing structures are adjusted. This makes planning capital for a multi-year rollout very unpredictable. An efficient pricing formula model with a guideline from the Authority is required to create clear, transparent and truly cost reflective pricing that has less variation across regions.

Pioneer schemes

Pioneer schemes are not attractive to us as they create uncertainty in the economics of a project. Economics will be calculated on the worst-case scenario of receiving nothing back from EDBs as there is no guarantee when or if other users will take capacity and the full costs are carried by the first mover until another user comes along.

If Pioneer schemes are implemented, then the EDBs should be taking most of the risk associated with the cost of the power installations not the first customer / mover. If a standard Pioneer scheme model is not created and adopted by all EDBs then more complexity will be created in dealing with EDBs as they develop their own variations of Pioneer schemes.

Performance monitoring and timing

Without some form of monitoring, any guidelines and standards requested by the Authority are likely to fail or create more complexity for applicants. National reporting, monitoring and benchmarking of connection cost and lines fees is required.

Timing of any proposed changes to guidelines or standards is unclear. The Authority needs to publish agreed timelines for any changes that EDBs are to implement.

[redacted]