(https://electricmiles.com)

Public CPOs & Demand Side Flexibility

Prakhar Singh(https://electricmiles.com/author/prakhar/)
August 17, 2022(https://electricmiles.com/2022/08/17/)

B2B blogs (https://electricmiles.com/category/b2b-blogs/), News (https://electricmiles.com/category/news/)

Is there a growing need to expand the role of public Charge Point Operators (CPO), beyond the obvious? Many analysts believe that as much as 80% of EV charging will be done at home, meaning that only 20% of EV charging will be accessible to corporate/enterprise chargers and/or public chargers. This begs the question, what proportion of that 20% can a single CPO (Charge

Point Operator) target, and is that going to be enough to sustain the huge investments that the CPO business model demands? Or is there a need for another compelling role for the public CPO to play?

The replacement of ICE vehicles with EVs is inextricably linked to the reduction of CO2 emissions, especially in the context of UK/global Net Zero objectives. In that regard, the CPO plays an extremely critical role, as it not only connects EVs to the grid for charging, but it also defines and controls how each EV accesses grid energy resources. Notably and even more significantly, it is the CPO's potential future role to influence how and when EVs contribute power back to the grid as a distributed energy resource (DER) that is compelling. You see, the CPO charge point is the de facto for EV drivers away from home; it provides the physical connection point, through which EV batteries can be aggregated to create large and significant Virtual Power Plants (VPP). With that VPP creation capability, the CPO can provide a host of enhancing power generation services, as well as energy arbitrage opportunities to complement increasingly nondeterministic renewable generation. The Demand-Side Flexibility (DSF) market provides a ready market for the CPO to exercise that demand-side leverage. That leverage is the commercialisation of the CPO's capacity to orchestrate EV energy consumption in defined periods to deliver the "peak-shifting" or "peak-shaving" that support and maintain supply-side capacity margins as defined by energy players. That is a real and tangible business value that is forecast to drive >£4bn of cost savings from the energy value chain, and therefore a compelling market for energy players. Moreover, the EV VPP opens unprecedented DSF opportunities through energy arbitrage, between EV drivers via the grid.

I believe that EV DSF will quickly become an anchor revenue stream for CPOs, especially as the energy ecosystem evolves to enable EVs to "charge and shift" surplus grid energy or "harvest and trade" domestically generated energy, e.g., solar, especially during peak demand periods in the DSF marketplace. Therefore, the number of charge points and their distribution define the CPO's capacity to aggregate EVs into multiple commercial cloud based VPPs across spatial and temporal dimensions. As a convenient daytime charge point, where EV drivers away from home can plug into the DSF market, the CPO derives enormous leverage over the transactional value of DSF. However, it is worth noting, that while the CPO has that first line aggregation role to play, it is the collective aggregation of multiple CPOs that will unlock their true leverage, as well as their capacity to differentiate and commercialise EV DSF to create shareholder value. This means that the CPO will become a new anchor tenant of energy security with ESG responsibilities, that are visible and public.

With the above in mind, is EV DSF emerging as a key and compelling role for the CPO? Will we see a growing focus from CPOs to encourage EV drivers to trade and arbitrage their surplus charge? And therefore, in dimensioning their networks, does the CPO now need to factor in both, EV drivers wanting to charge and EV drivers wanting to participate in the DSF market? If these questions are real and pertinent, then what new KPIs must be illuminated in the emerging CPO business model? Clearly, there are many questions to answer, but I think one thing is obvious, the future of the CPO is not just about charging! Significantly, the CPO's future is increasingly about 24×7 EV aggregation and leverage; and therefore, strategically a multi-CPO DSF platform will be crucial, as it will expand CPO leverage and frame the commercialisation that will be necessary to facilitate high volume EV energy arbitrage.

What an exciting future!

Please reach out with your thoughts to alvin@electricmiles.co.uk (mailto:alvin@electricmiles.co.uk)

Product Guides

Electric Miles Guide(https://electricmiles.com/wp-content/uploads/2025/07/Normal-EM-Guide.pdf)

Installer Miles Guide(https://electricmiles.com/wp-content/uploads/2025/07/Normal-IM-Guide-.pdf)

Solution for Business(https://electricmiles.com/wp-content/uploads/2025/07/Solution-for-Business.pdf)

Contact Us

For Sales & Accounts

sales@electricmiles.com(mailto:sales@electricmiles.com)

For Support

support@electricmiles.com(mailto:support@electricmiles.com)

Visit Us

167-169 Great Portland Street, 5th Floor,
London, W1W 5PF
Company No. 10975715

Electric Miles Inc.
2261 Market Street STE 85412 San Francisco, CA 94114

Terms and Conditions (https://electricmiles.com/terms-2/) | Privacy Policy (https://electricmiles.com/privacy/)