

July 2024

EV Charging Connections to Petrol Filling Stations

There has been an ENA 'EREC G94 – Multiple points of supply' working group established to provide national guidance on providing multiple supplies to individual sites, which is focussing on Electric Vehicle (EV) chargers. This group (which includes a representative from Northern Powergrid) is still agreeing the contents of the guide, however some initial work has highlighted some further considerations that should be undertaken at Petrol Filling Stations. This brief is therefore to be considered in conjunction to the brief published in October 2023 titled '*Applications for Electric Vehicle (EV) charging installations on sites with existing supplies*' and sets out additional considerations that need to be taken, until the ENA 'EREC G94 – Multiple points of supply guidance document is published.

There is an APEA (petrochemical industry best practise association) guidance document commonly referred to as the 'Blue Book', where guidance is given about the requirements and considerations that need to be taking when adding EV Chargers to petrol filling stations. The 'Blue Book' states all electrical supplies to the site must be connected to a common TT earthing system at petrol filling stations, and all supplies must be controlled by the forecourt emergency switching system. When considering what constitutes a site, the petrol filling station will be classified as one site unless there is 10m or more segregation between the fuel filling station earthing system or electrical system, and the vehicle charging earthing system or electrical system. This is the case regardless of the lease / ownership of the parcels of land within the petrol filling station curtilage.

Should an EV charging installation supply to a petrol filling station which is one site (i.e. does not have 10m segregation) be required, one of the following connection arrangements must be used to provide the capacity for the EV chargers:

- Upgrade the existing supply to cater for the capacity of the filling station, and the EV charging installation.
- Move the existing filling station supply on to the new proposed IDNO network. The IDNO would then determine how they would like to arrange their network (as they would be the sole Distribution Network Operator on the site, and responsible for how they run their network).
- Provide a communal metering location, for both the filling station and the EV chargers to provide two metering points. In this option both supplies would either need to be supplied by Northern Powergrid, or the proposed IDNO.

If you are considering a project of this type, we encourage you to speak to our team before making an application. Once we have received and assessed your application, your single point of contact will be in touch to explain what is involved and the information we need to progress with your connection.

For questions relating to this briefing or any new connection enquiries, in the first instance, please contact our dedicated connections team on **0800 011 3433** Mon - Fri: 8am - 8pm and Sat: 9am - 5pm.