Consultation Response

Technical Review Document for Electric Vehicle Charging Infrastructure

INTRODUCTION

The HBF is the principle trade federation for the housebuilding industry, representing over 300 companies ranging from large, multi-national housebuilders, through to smaller regionally based companies and smaller, local housebuilders. On average, our members build approximately 80% of all new dwellings in England and Wales every year.

As the main trade association for the UK's house building industry our members constitute one of the largest bodies of customers who will be affected by the outcome of this consultation. As such, we trust that considerable qualitative and quantitative weight will be afforded to our comments.

This response to the consultation received is based on feedback from our members at various meetings held around the country and specifically at the HBF dedicated National Technical and Sustainability Committee (NTSC) and has been provided in addition to the formal consultation response on "Electric Vehicle charging in Residential and Non-Residential Buildings" which opened in July 19 and closed on October 7th 2019.

CONSULTATION RESPONSES & QUESTIONS TO OLEV DRAFT DOCUMENT:

1. **Capacity within existing and new networks** – there is no mention within the briefing document as to who is expected to pay for the uprating or additional electrical capacity within the existing network to provide either Active or Passive charging points. Is the expectation that the uprating of networks and reinforcement is to be paid for by the developer for this increased load to the network and not government subsidy or the utility companies? The automotive and energy industries appeared to have benefited from govt. subsidies and grants historically when looking to innovate in this area, is it the intention that Developers will benefit from the same govt. grant? If not this would seem unreasonable not least because the utility companies will receive the benefit from the consumers and not the developers. In any event this must be factored into any regulatory impact assessment. The question here is how 'in consequence' increases in network capacity will be determined and/or paid for on a fair, equitable and proportionate basis. In addition to this we are hearing anecdotally that some utility providers are suggesting that if the capacity originally secured to provide EV charging points to developments is not drawn/utilised within a 12 month period then the capacity can be re-allocated by the DNO according to their demand profile for the network. This is particularly concerning when the average time for a development to progress from the acquisition stage through planning and onto first legal completion is over 12 months. This would therefore require intervention by Government to insist that utility companies allocate and hold the capacity within a network once a contract is signed until the development is completed. If this is not policed, there could be widescale negative publicity towards developers who have not been able to secure and install network capacity despite having previously paid for it, this is something the industry can ill afford. Importantly, what is agreed must respect and have synergy with the planning and development process.

Home Builders Federation
HBF House, 27 Broadwall, London SE1 9PL
Tel: 0207 960 1600
Email: info@hbf.co.uk Website: www.hbf.co.uk Twitter: @HomeBuildersFed

Furthermore on point 1, if network providers in an attempt to avoid falling short of capacity and thus future revenue, choose to over inflate the actual requirements of the network without an upper limit then there is a very realistic scenario where developers are being charged for significant amounts of unused capacity within the network as the upper limit of capacity requirement has not been policed/restricted. We would therefore ask that the government gives active consideration to introducing appropriate and effective controls to ensure that any additional costs that may result for developers are fair and proportionate and provide confidence to home builders that the capacity they need will be available to them once they have undertaken to make any payment entailed.

2. **Definition and requirements of provision requires further clarification**. Currently Active charging i.e. on plot charge points, ready to plug into, are working on Mode 3 Type 2 Socket requirements using household Domestic metering and 230 voltage. By installing passive charging i.e. provision of cabling in order to accommodate future charging points this could avoid the potential scenario whereby technology and requirements become obsolete (in what appears to be a fast moving technology industry) before the units are even occupied. Again by thinking ahead here and futureproofing the technology, or at least the capacity, it could avoid another negative industry perception that a purchaser's brand new home is now out of date thereby limiting their ability to charge their brand new car! In essence we would recommend that developers provide the means in which the customer can later arrange and install a physical car charging point suitable for their vehicle and in line with the latest technologies.

   In addition to this, we have recently heard that new homes post 2025 are likely to be built with non-fossil fuel methods of heating or at least low carbon heating under the proposed Future Homes Standard and Revisions to Part L and F. This is likely to mean that new, greener technologies that still require an electrical supply are likely to become more prevalent particularly when considering the need to comply with the EPBD, demonstrated through the use of SAP 10.1 and SAP 11. Therefore, in addition to required capacity for EV charging the electrical network is also likely to require further capacity in order to power electric hobs, ovens, air source heat pumps and other domestic electrical supply requirements. This will therefore impact on the actual load diversity and demand required to power housing developments. The potential impact on existing networks and the increased frequency of secondary and conceivably primary sub-stations should not be under-estimated. The latter also have significant environmental and therefore timing implications under existing planning policy. With the government also having set an Industrial Strategy challenge to reduce energy use by at least 50% in new buildings by 2030, there is a strong need for government to work with industry to agree a properly coherent, joined up strategy to realise all relevant objectives in a practical, consumer-friendly way. We would wish any changes relating to EV charging to be considered in this wider context.

3. **Customer/freedom of Choice** – Currently some meter providers and capacity providers are locking customers into a solus supply agreements for certain types of apparatus (albeit this is being communicated anecdotally). Historically these type of arrangements attract negative press and the industry would be looking to have a universal supply arrangement allowing purchasers to shop around for a new supplier in the same way they do for electricity or gas supply or indeed allow a consumer to utilise their existing electricity supplier without being 'locked in' in perpetuity.

4. **Universal fitment of charging points** – it is also imperative that there are universal standards applied to the charging apparatus to ensure that any car can be charged in a uniform way across all makes of car and charging network/energy supplier. Again housebuilders will be inundated with all kinds of very technical

queries relating to purchasers ability to charge their electric vehicles which they may not necessarily be best prepared to answer and in addition to this, due to commercial pressures, contracts for installation during build may be sought and procured which could preclude universal fitments and supply and therefore lead to unintended additional costs due to alterations further down the line to facilitate the demands of prospective purchasers.

5. **Arrangements for the supply of communal areas** is a key consideration. In a communal car park serving a block of apartments for example, it needs to be fully understood how the proposed wiring arrangements will work and how these arrangements fit into the leasehold ownership of the block, especially when it comes to metering arrangements. i.e. where the charging points are wired back to and who pays for the upkeep and maintenance of the meters/supply units? Typical distribution and wiring diagrams will be crucial, including how routes are protected both from a practical and legal perspective. In the latter case, the prospect of having to create several wayleave agreements and how the narrative of these agreements will need to be constructed. I would also note that as an industry we do not want to add further burden to customers in utilising management companies to manage the infrastructure moving forward.

6. **Arrangements for the supply of non - communal but off-plot areas -** How charging at remote parking bays that are separated from the dwelling curtilage but which are owned by the home owner also needs better defined ducting/wiring arrangements – typical layouts and diagrams would greatly assist any future consideration on this. The consultation appears a little quiet on this but yet this is a common scenario on most new housing developments.

7. **Aesthetics** – this is a key consideration. Currently technology and product development is moving at pace, however improvements should be sought in the subtlety of the units themselves. Historically Local planning authorities have pushed developers to ensure utility meter boxes are hidden from sight on principal elevations and recessed with garages and cupboards, particularly since the introduction of smart metering on a mass scale. It is highly likely that the same resistance and challenge will be experienced in relation to EV charging points too. In addition to this how EV charging will interact with smart metering arrangements requires due consideration, especially if there is any intention of differing energy tariffs. In addition, consumer metering will need more thoughtful consideration, similarly, provisions to prevent energy theft.

8. **Construction** - The construction specification for most parking courts is often part of the approved surface water/SuDS drainage strategy. The current proposals for EV charging in these locations will have an impact on how we design, construct and maintain permeable paved parking courts. Similarly, the potential impact on the EVC infrastructure in a potentially saturated below-ground environment.

SUMMARY

We trust that you find our submission helpful and constructive. In the event that you may have any follow-up questions please do not hesitate to contact us. Please be reassured that we are committed to making sure that EV charging is implemented on a national scale, however it is also important to fully consider the complexities and challenges with doing so. We therefore strongly urge government to consider a passive provision of EV charging to new dwellings which allows the infrastructure and capacity to exist in advance of the owner/occupier of the property

being identified and subsequently approaching the market upon purchase of the property and obtaining current and relevant charging apparatus for their vehicle.

Kieran Walker

Technical Director