

To interested parties

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Open letter on regulatory arrangements for independent distribution network operators

In this letter we outline some recent developments in the activities of independent distribution network operators (IDNOs). These developments have contributed to our view that the benefits of competition from IDNOs in extra high voltage (EHV) connections (including those directly connected to the transmission network) may need to be reviewed. We are publishing this letter now to signal to relevant parties that we are considering reviewing these arrangements. We also invite views from stakeholders on these developments ahead of initiating any review.

Background to the independent network operators' regime

Distribution Network Operators (DNOs) are licensed companies that own and operate the network which distributes electricity to homes and businesses in GB. There are 14 geographically defined regions for electricity distribution, each with its own licensed DNO. DNOs recover the costs of running their network by charging Distribution Use of System (DUoS) charges.

There are some smaller networks connected to the DNO network, which are owned by licensed distribution network operators (LDNOs). A LDNO can be either an IDNO or a DNO operating outside of its own region.

Historically, LDNOs have provided the 'last mile' of the distribution network, linking the existing DNO network to new, typically domestic, consumers (for example, in newly built housing developments). In 2004, we issued the first licences under the IDNO regime. In the same year, we consulted on the appropriate long term regulatory regime for IDNOs; the main aim of the review was to develop sufficiently robust long-term arrangements to

protect the interests of consumers.¹ We noted at the time that ‘potential IDNOs will operate electricity distribution networks which will predominantly be network extensions connected to existing distribution networks, e.g. to serve new housing developments on both greenfield and brownfield sites.’

That review introduced the ‘relative price control’ regime in 2006. The DUoS charges that the LDNOs pay to the respective DNOs to operate within their regions are discounted to reflect the fact that the LDNO provides the ‘last mile’ of the distribution network. Under their licence, LDNOs may charge their domestic customers no more than the equivalent DNO tariff. The potential margin available to an LDNO is dependent on the difference between the equivalent DNO tariff and the discounted LDNO tariff.

In the intervening years, the role of LDNOs has evolved, including serving a more diverse range of customers, beyond domestic demand, to incorporate larger loads as well as generation, and at higher voltages.

The way in which DNOs calculate their DUoS tariffs for Low Voltage (LV) and High Voltage (HV) connected customers is governed under the Common Distribution Charging Methodology (CDCM). These charges, and the models that produce them, are published annually, providing transparency of tariffs for different customer types at LV and HV voltage levels, for each of the 14 DNO areas in GB.

While only domestic charges are regulated by the IDNO licence, the obligation on IDNOs to avoid discrimination,² and their requirement to publish a charging methodology, meant that we considered that the arrangements provided some protection to non-domestic customers.³ In practice, IDNOs tend to mirror the host DNO’s charges for all LV and HV customers.

The Independent Networks Association (INA) has identified a number of benefits of the IDNO regime, which now serves c.1.5 million customers in GB, with 70-80% of new connections adopted by IDNOs. To demonstrate its agile approach to resolve issues, the INA cites its LV design standard for new housing developments, covering advancements in energy efficiency and low carbon technologies (such as EVs and heat pumps).⁴

¹ [Regulation of Independent Electricity Distribution Network Operators - consultation paper | Ofgem](#)

² SLC 19. Prohibition of discrimination under Chapters 4 and 5.

³ [Regulation of Independent Electricity Distribution Network Operators | Ofgem](#)

⁴ [Low Voltage Design Standard - Independent Networks Association \(ina.org.uk\)](#)

Recent developments in LDNO arrangements

In the past few years, some LDNOs have started connecting EHV customers where there is limited opportunity for relative price control. This is because the EHV Charging Methodology (EDCM) provides site-specific charges using a model that is not publicly available owing to commercial confidentiality. The LDNO is not able to mirror the host DNO's equivalent charges if it does not know what they are.

Instead, those LDNOs have produced their own charging methodologies to calculate charges for EHV customers. The total charges faced by customers are a combination of the boundary tariff (charged to the LDNO for use of the DNO network) plus the charges calculated by the LDNO's own methodology for use of the LDNO network.

In addition, in the past few months, we have been made aware of LDNOs seeking to connect directly to the transmission network rather than the original intention of being embedded within an existing DNO network. In such instances, there is neither a host DNO, nor a set of DNO equivalent charges to mirror.

With a growing number of EHV customers potentially connecting to LDNOs (either via a host DNO or directly to the transmission network), we are concerned about the appropriateness of the existing regulatory arrangements.

Proposed EHV methodologies that do not have a reference point for calculating charges (or a host DNO in the case of a direct transmission connection) may be more akin to DNO price controls but without the same level of scrutiny or output regulation. This is because there is no relative cap on revenues. In some respects, such connections may be more akin to a licence exempt distribution network (commonly referred to as private networks).

Without a reference point for setting tariffs, we are also concerned that connecting customers may be exposed to undue risk where long term contracts are agreed under these arrangements.

In addition, we have particular concerns for IDNOs seeking to connect directly to the transmission network:

- Some connection configurations may not be as shareable or economic and efficient as other options, and significant differences between DNO and LDNO solutions may give rise to higher overall whole system costs.
- Fair recovery of shared network costs among all customers may not be possible. We understand that the proposed arrangements are partly driven by the potential opportunity for reduced network charges for connecting customers.

We understand from the LDNOs that are seeking such transmission connections that they consider that there is nothing in their licences or associated industry regulations that prevents this activity from taking place.

Potential impacts on speed of connections

We understand that one of the reasons that LDNOs are exploring these higher voltages is in an attempt to expedite the connection of their prospective customers. Earlier this year, we published an open letter setting out our core objective for reform and our plans to review connection arrangements, alongside government and industry.⁵

Currently, there are different options for connection across the distribution and transmission networks. For example, for 'contestable' activities at the distribution level there are Independent Connection Providers ('ICPs') and LDNOs providing competition to DNOs.⁶ At transmission, customers can self-build their last 2km of connection asset, to then be adopted by the TO. In addition, our proposed Competitively Appointed Transmission Owner (CATO) regime is seeking to introduce competitive pressures into the delivery of large, new transmission infrastructure.⁷

We have encouraged effective competition for connections at the distribution level as we believe it can be a more effective way of delivering improvements in customer service and efficiency. To help ensure it is operating effectively, we have undertaken periodic reviews of competition in the electricity distribution connections market.⁸ A key consideration for us now is to understand the potential costs and benefits of a greater role for independent network operators for connections to the transmission network.

Potential upcoming review of regulatory arrangements

In light of the evolving nature of the LDNO arrangements, and the recent developments relating to serving EHV customers and connecting directly to the transmission network in particular, we are considering a review of the benefits of competition from LDNOs in EHV connections (including those directly to the transmission network).

While we note some of the benefits that the LDNO regime has brought,⁹ we consider that a consideration of these benefits now could be timely. The regime was originally introduced around 20 years ago and the energy system has changed radically since then and continues

⁵ [Open letter on future reform to the electricity connections process | Ofgem](#)

⁶ When providing a connection to the electricity distribution network, there is some work that must be undertaken by a DNO. These are referred to as 'non-contestable' activities. This reflects the nature and complexity of work required to ensure it interfaces safely and efficiently with the DNO's wider network.

⁷ [Onshore transmission project delivery | Ofgem](#)

⁸ For example, [Decision on the review of competition in the electricity distribution connections market | Ofgem](#).

⁹ For example, [Case Studies and Testimonials - Independent Networks Association \(ina.org.uk\)](#)

to evolve as we move towards Net Zero. Indeed, our original decision on the regulation of LDNOs indicated our intention to consider regulatory arrangements from 2016 onwards, in 2011.¹⁰ The full scope of any such review is yet to be determined, and will be informed by the responses we receive to the questions at the end of this letter.

We are issuing this open letter to alert parties, in particular current and prospective LDNOs and their EHV customers, that the existing regulatory arrangements may evolve to reflect the changing role of LDNOs. This was always our intention when setting up the regime and it means that any arrangements in place now may not be enduring.

We would seek to ensure that any such review improves arrangements in terms of our principal objective and statutory duties. We are also aware of the value of innovation and competition in seeking to meet government's ambitious Net Zero targets.

We will communicate further on this matter in due course. In the meantime, we would welcome initial thoughts on the questions below. Please send your responses to electricitynetworkcharging@ofgem.gov.uk, by 1 December 2023.

Questions

1. What do you consider to be the pros/cons of IDNOs connecting EHV customers embedded within distribution networks?
2. What do you consider to be the pros/cons of IDNOs connecting directly to the transmission network?

¹⁰ [Regulation of Independent Electricity Distribution Network Operators | Ofgem](#)