Sent by email to connections@ofgem.gov.uk

15 June 2023

Open letter on future reform to the electricity connections process

Dear Ofgem

We welcome reform to speed up the connection of renewable generation to the electricity network. We encourage Ofgem to consider how the electrification of heat will interact with the electricity connections process.

Space and hot water heating demand can make the best use of renewable generation throughout the year and particularly during winter because of space heating demand. This requires electric heating systems to consider flexibility, either through using the thermal mass of the building or dedicated smart thermal storage.

Without actively considering and valuing flexibility, there is a risk that increasing electricity demand for heating will exacerbate constraints on the distribution network. Indeed, it is possible that local network constraints could become a problem during the timeframe of RIIO-ED2. To avoid any delay in decarbonising heat and buildings, we recommend that those who use heat flexibly are rewarded for that flexibility.

We broadly agree with the approach set out by Ofgem in the open letter. We agree with Ofgem's overarching principles to guide the review of electricity connections arrangements. In particular, we welcome the principle that "reforms accelerate progress towards net zero" and that this principle includes "enabling more access to low carbon technologies and increasing flexibility". We encourage Ofgem to specifically consider the increasing electricity demand from heating and the potential for heat flexibility when taking forward this principle.

We recommend that any changes to the connection process and the management of the network encourage more transparency. Given the public interest in achieving net zero and transforming the energy system cost effectively, we recommend that all stakeholders have ready access to information about grid use and constraints. This data helps businesses target the deployment of renewable generation and flexible demand products such as heat pumps and smart thermal storage. This data is important for deciding on investment in transmission and distribution networks and the interface between the two. We agree with Ofgem on the importance of improving coordination across the transmission-distribution interface.

We note the focus of the ESO's 5-point plan on Battery Energy Storage System (BESS), reflecting the focus on connections at transmission and distribution. We encourage Ofgem to consider the role of a wide range of storage options, including smart thermal storage connected to the distribution system at the low voltage level.

We support Ofgem’s decision in RIIO-ED2 to allow distribution networks to build ahead of investment need. This is contingent on Ofgem ensuring that the regulatory regime rewards the flexibility provided by distributed energy resources, including electric heating.

We welcome the funding in RIIO-ED2 to improve network monitoring at all voltage levels. At the moment, the extent of distribution network constraints are unclear, particularly at the low voltage level. Improving monitoring and understanding will enable the effective roll-out of electric heating.

We separately welcome the government amending the Energy Bill to give Ofgem a net zero duty. This duty will inform and steer Ofgem’s work on network connections, valuing heat flexibility and decarbonising heat and buildings.

This response is not confidential and may be published on the Ofgem website.

Best wishes

Tom Lowe

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