

19 June 2023

Email to: connections@ofgem.gov.uk

Dear Ofgem,

Future Reform to the Electricity Connections Process

Only about five percent of the UK's 135,700 warehouses have solar panels on their rooftops. We are campaigning for a substantial increase in such installations. Ofgem can help by making Distribution Network Operators (DNOs) fully accountable for grid reinforcement works and streamlining the connections process.

The warehousing sector is one of the fastest growing in the UK. Combined with the wider logistics industry, it contributes £139 billion Gross Value Added (GVA) to the economy. The UK's warehousing footprint has grown significantly – perhaps by as much as 50 percent since 2015 – and it is estimated that one in ten workers in the private sector are employed in warehousing & logistics roles.

The UK Warehousing Association (UKWA) is the only dedicated trade association for the warehousing sector. We represent 1,000 member companies that together operate around 600 million square feet of warehousing and distribution space across thousands of locations.

Our 2022 *Investment Case for Rooftop Solar Power in Warehousing*¹ showed that warehouses account for approximately a third of all commercial roof space; easily sufficient for up to 15GW of new solar power, which would double the UK's solar capacity. This could meet National Grid's minimum requirements for solar expansion by 2030 according to their 2022 future energy scenarios (FES), producing up to 13.8TWh of electricity per year. Despite the potential for warehousing to become a net producer of renewable electricity, challenges such as grid constraints are holding back the transition to Net Zero.

We share the concerns raised in Ofgem's *Open letter on future reform to the electricity connections process*² and believe that these pose significant obstacles to meeting both industry and government decarbonisation targets. This letter sets out our response to the various points raised.

Section 1: The Challenge

¹ <https://www.ukwa.org.uk/wp-content/uploads/2022/09/Investment-Case-for-Rooftop-Solar-Power-in-Warehousing-August-2022.pdf>

² <https://www.ofgem.gov.uk/publications/open-letter-future-reform-electricity-connections-process>

UKWA agrees that the surge in connection applications has put pressure on existing systems and processes, leading to significant delays. Due to transport links and planning constraints, warehouses are often built in industrial clusters. UKWA members have witnessed inconsistency under the current system when attempting to access the grid. One company may be allowed to connect at no direct cost on a first come first served basis. If subsequent applicants exceed the remaining network capacity, they are expected to pay the DNO hundreds of thousands of pounds for grid reinforcement works – costs which cannot be amortised – and to delay their projects for years until permits are granted.

Solar project costs are already 80 percent ‘upfront’, so the additional advance costs for reinforcement works are limiting the opportunities for renewable energy in our sector. The UK must develop a better regulatory system for managing grid capacity to encourage and facilitate the deployment of renewable generation, or its net zero ambitions will not be met. We welcome Ofgem’s recent decision to reduce the contribution generators must pay to reinforcement works, but this should go further.

Landlords and occupiers of warehouses are already adopting sustainable practices such as improved lighting, electrification of forklift truck fleets and warehouse robotics. In time, further changes will be made: whether through direct electrification or hydrogen conversion, decarbonisation of just 25 percent of the UK’s HGVs would require up to 100 percent (14TWh) of the current annual electricity consumption of the whole warehousing sector. The logistics industry is forecast to continue growing throughout the next decade, to support the growth of e-commerce. Energy generation from solar panels on warehouse rooftops must be prioritised to help mitigate the sector’s growing demand for energy. With some connection delays exceeding a decade, however, projects are being put on hold or cancelled entirely. The UK economy is built upon supply-chains which rely on warehousing, so anything which inhibits our sector’s adoption of sustainable, affordable and secure energy should be a cause for alarm. For this reason we fully agree that network companies must “build *ahead* of investment need”.

Section 4: What you can expect from us

Most warehouses are already connected to the grid which can makes rooftop generation projects more straightforward than utility-scale ground-mounted schemes. Our sector would therefore be likely to benefit from “substantial changes to the current connections queue methodology”.

UKWA believes that Ofgem and central Government must provide clarity in delivering reform. It is also important for Ofgem to encourage local government to accelerate the process of coordinating local energy planning to achieve Net Zero. A systematic approach to local planning could help identify opportunities and build trust, unlocking significant private

investment. Prioritising commercial rooftop solar in coordinated Local Area Energy Plans would lead to better overall spatial planning, factoring in the supply of and demand for electricity, alongside other more traditional planning considerations. Ofgem’s references to “government” are ambiguous and we recommend drawing a distinction between the respective roles of national and local government.

Annex A: Proposed objective, outcomes and principles for reform

UKWA would particularly welcome “Transparent, consistent data giving applicants advance, granular insight into expected grid capacity and level of network investment needed”. This would allow developers to understand existing electricity grid availability, future plans and any capacity limitations. At present, there is a lack of readily available information, and our members report that it can take months (16+ weeks) to obtain this vitally important clarity for developers, with no consistency in the format of the data available from different DNOs. Earlier this year, UKWA responded to the National Planning Policy Framework consultation, advocating for transparent and consistent data.

We also support the proposed guiding principles. In respect of “fair prices for consumers” and “reliable supply for consumers” we wish to highlight the importance of achieving these aims for industrial customers as well as domestic consumers.

Annex B: Illustrative reform stages and options for consideration

In principle, we agree with the proposal to promote “mature projects closer to delivery above those that could be ‘blocking’ the queue” and support the four stages of reform.

Annex C: Key dependencies and longer-term outlook

We agree with the need to align connection arrangements with wider reforms. On locational signals, our recent response to REMA set out our position as follows:

Locational price signals might be favourable towards warehouse rooftop projects, which are likely to be near to demand. However, UKWA believes its Members’ wider interests will be best served by a robust approach to investing in the whole grid as a public good. Uncertainty about pricing has the potential to inhibit private investment. In any case (notwithstanding the limitations of the planning system) logistics companies site their warehouses optimally for a range of factors including access to freight transport networks and proximity to labour markets. Put simply, developers are not likely to be strongly influenced by locational pricing of electricity when choosing where to build warehouses. And any influence these signals might have, could lead to

unintended consequences, potentially increasing the carbon footprint of transport for the movement of freight to and from the facility.

Annex D: Support for Distribution Queue Optimisation

Ofgem's *RIIO-ED1 Network Performance Summary 2021-22* (Figure 4, page 11) appears to show DNOs have underspent on Network Reinforcement by almost £1billion. Ofgem now expects DNOs to manage progression milestones, "optimise capacity headroom" and "work closely with each other". This raises the question of how they can be incentivised to comply with such requirements, since they evidently do not have a history of prioritising network reinforcement.

There may be an argument for prioritising projects due to be delivered by contracting parties with a track record of success, including meeting their milestones.

Conclusions

UKWA has evidence that the current grid connection process is hindering the adoption of rooftop solar on warehouses. A better regulatory system for managing grid capacity could enable our sector to become a net producer of renewable electricity. We are committed to working collaboratively with Ofgem and Government, so please do not hesitate to contact us for further insights from our sector.

Yours sincerely,



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