

Industry Insights

Power and connection:

The importance of IDNO
partnerships for data
centre projects

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Introduction

As demand for power continues to increase across the UK, the conversation with data centre builders often turns to the roadblock posed by the grid connections process, and the changes resulting from recent reforms.

From our experience in the industry, we've seen that the most important part of data centre electrification is being able to navigate the connections system well: something that independent distribution network operators (IDNOs) like Leep have become highly experienced at.



With IDNO support, you can be as sure as possible of taking the right actions, at the right time. It's an approach that protects your investment, manages risk, and gets your site energised as smoothly as possible.

This guide is written for you if you're involved in – or interested in – power strategies for data centres. It's designed to cut through common myths and distractions, to focus on how IDNOs like Leep can push your project forward at speed.

And if you'd like any more information about anything we discuss, please don't hesitate to get in touch with us.

Simon

Simon Jewell, Head of Sales

The connection queue for demand-side projects grew from around 41GW in November 2024 to roughly 125GW by June 2025, with approximately 80GW of that tied to data centre developments.

(Ofgem, 2026)

Connection essentials for data centre developers

Grid capacity still matters, but recent government, National Energy System Operator (NESO) and Ofgem reforms have shifted the emphasis away from raw queue position and towards project credibility: readiness tests, financial commitments, and evidence of genuine progress through planning.

In practice, that means the developers who move fastest aren't necessarily the ones who applied first. They're the ones who can demonstrate they're serious, organised, and working with partners who understand how the system works.

For example, at Gate 1, you need to provide preliminary evidence of your project's viability. But at Gate 2 – which you need to achieve in order to receive a firm connection offer – you have to meet multiple conditions with detailed designs and a high level of consent and readiness, or you don't progress to timeslot allocation.

This is where the right connections partner earns their place on the team. It's less about us promising to unlock capacity that doesn't exist, and more about having the experience to ensure you can deliver a credible plan that meets the different demands of each gate.



The biggest change to grid connection in decades

NESO's shift from a first-come, first-served to a first-ready, first-connected approach represents the most significant overhaul of the grid connection process in years. Find out what today's new reality means for our extra-high voltage clients.

Read more at www.leeputilities.co.uk

"We have engaged Leep Utilities on a number of large power demand projects including data centres and other commercial developments. The Leep team bring excellent technical and commercial knowledge, but more than that: they are flexible, and expert at tailoring solutions to meet customer needs. Sometimes these customer needs can be challenging, so having Leep in the team is a huge benefit. During the delivery phase they are particularly helpful in solving problems and their proactive, collaborative approach makes a significant impact. I would, without hesitation, recommend them to others as a trusted IDNO network partner."

Gareth Spinner, Major Projects, Noveus

Key factors in successful data centre energisation

Site selection and metering strategy

Where and how a data centre site is metered is one of the more overlooked decisions in a project, and one worth getting right. The choice of metering point can significantly affect distribution use of system (DUoS) charge and transmission use of system (TUoS) charge, which in turn shape the client's ongoing bill and the long-term value of the network asset.

It's an important decision, in a technical and specialist area, and one where deep network expertise translates directly into commercial impact for the client. An experienced partner will model the available options and explain the trade-offs clearly, rather than defaulting to the simplest configuration.

Why the metering point matters

On a recent data centre project, Leap modelled alternative metering points to compare the expected DUoS and relevant TNUoS charges associated with each option. Our analysis showed that the most commercially efficient solution would change as the site's capacity increased, and would vary depending on the local distribution network. We helped identify the most commercially efficient metering arrangement for each data centre, in order to optimise ongoing network costs over the life of the connection.

Phased capacity

A data centre's full power requirement is rarely delivered in one go; capacity is typically released in phases rather than all on day one. The value an experienced IDNO brings here isn't just structuring the paperwork, it's the ability to lean into the project early and strategise with the client on how best to deliver that phasing, drawing on flexibility built from proven approaches and real-life experience elsewhere.

In practice, we find this often means agreeing an initial allocation, for example 10MVA, with a phased ramp-up over several years as the client's needs grow. This gives the developer a working connection sooner, with the IDNO managing the ongoing negotiation with the incumbent network for additional capacity as it's needed.

This approach to ramped and flexible connections is increasingly the direction regulators want the market to move in – so it's essential your IDNO can deliver this.

Programme and risk management

Data centre schemes carry legal and commercial complexity well beyond that of, e.g., a residential development, and it can quickly become one of the biggest sources of delay if your energisation partner doesn't understand this particular landscape properly from the outset.

An experienced IDNO partner has a thorough understanding of how those legal processes interact with delivery. They can advise early on what's realistic, and predict where issues are likely to surface later if they're not addressed at the outset, based on a solid portfolio of already-delivered projects.

In reality, you're looking for an IDNO with a compliance team that is not only capable and experienced, but also fully integrated with the rest of the business, so nothing gets missed.

The financial scale of data centre projects is also important. A credible IDNO partner needs the balance sheet strength, and direct access to senior decision-makers, to stand behind commitments of that size – not just the technical know-how to design the connection.

Confidence, trust and a partnership we can rely on

"We were introduced to Leep Utilities through our project consultant, who had a strong, positive relationship with them and full confidence in their ability to add maximum value while delivering on all agreed metrics.

From the outset, Leep proved to be easy to work with: flexible, agile, and entirely focused on successful delivery. The team's deep expertise and proactive approach stood out: they were highly knowledgeable, but also empowered to make decisions, and capable of mobilising the entire Leep organisation to keep the project on track.

Leep's commitment to innovation and continuous improvement was evident, as they introduced processes that we have since adopted as best-in-class practices.

Delivering data centres is a complex challenge, yet Leep made the process as seamless as possible, owning the complexity where needed, scaling resources as required, and leveraging their experience to ensure smooth execution.

We were so impressed by their approach that we now consider Leep as our UK power partner. We look forward to expanding our collaboration even further, confident in their role as a trusted, valued, and indispensable extension of our project team."

Owner, leading blue-chip data centre

The right IDNO delivers value

Specialist data centre expertise

An IDNO typically adopts and owns the regulated electricity network from an agreed point of connection through to the client's site, including substations, cabling, and associated infrastructure. But not every IDNO meets the requirements of a data centre connectivity partner.

Unlike most residential developments, where the connection model is fairly standardised, each data centre project is shaped heavily by the client's own requirements: what they want adopted, how they want it metered, and the voltage they're connecting at, whether it's 11kV, 33kV, up to 132kV, or above.

As a result, it's critical that you chose an IDNO with experience and a proven track record in data centre projects – not just a power infrastructure installation business – and with the ability to seamlessly become part of a highly specialist project team.

Experience delivering at scale

Data centre projects share a lot in common with other large, complex, multi-party infrastructure projects: the need to coordinate multiple contractors, manage phased delivery, adapt to changing requirements mid-programme, and keep legal and commercial structures aligned throughout.

Experience in data centre projects deliver this, of course, but so do other large-scale developments, whether it's extra-high voltage (EHV) projects, or major industrial and commercial projects of a similar scale. It's all experience that translates directly: the ability to flex a plan without saying no, or without starting again, when a client's requirements shift along the way.

Flexibility, without the risk

The larger and longer a project, the more you'll need to adapt your plans. So for data centre projects, it really is essential to have a partner with the right company experience and culture. Processes and playbooks sound great in principle, but the reality is having to quickly and successfully pivot to changing commercial imperatives without increasing risk.

Being a fully immersed partner in projects is what makes it possible for us to deliver on this, whether it's simply swapping kit for something more readily available if there's no compromise to quality, or recalculating our project approach based on a new imperative, e.g. a change in land usage from commercial to residential.

We provide an additional level of scrutiny, overlaid with our experience and relationships, to ensure that issues are identified before they cause material impacts on time, cost and quality of project delivery.

Checklist

Key questions every data centre builder should ask

Use this checklist to challenge a prospective utility partner, and to compare responses across the market.

1. How will my site be metered, and what strategies can you propose to optimise the commercials?
2. Will my connection be phased or ramped, rather than requiring full capacity from day one?
3. What experience do you have of the end-to-end legal process on data centre projects?
4. Will I get consistent, hands-on support throughout, boots on the ground, the same people from tender to energisation, and direct access to decision-makers when I need a fast answer?
5. Do you have the financial standing to commit to large upfront and asset value payments?
6. Is storage, flexible energy, or backup redundancy relevant to my site, now or in the future, and do you have proven experience in this area?
7. Do you have flexibility over the equipment and kit specified, so a delay or shortage on one specific item doesn't drag out the whole programme?
8. Do you have experience in related services, e.g. heat off-take, whether as a new revenue stream, or for environmental mitigation?

Conclusion

In summary: choose a partner, not just a connection

Grid capacity pressure is complex and difficult to manage. However, developers and consultants are in complete control of who they choose to manage that complexity on their behalf.

On paper, IDNOs appear similar. But in practice, the experience of working with one can be very different to working with another.

The right utility partner brings more than the infrastructure for an extra-high voltage connection. They bring technical expertise, commercial flexibility, the legal and financial strength to stand behind large commitments, and joined-up strategic sales and delivery teams that specialise in high-voltage, large-scale connections.

That combination, not a promise to solve the grid, is what actually reduces risk and protects value on a data centre project.





Let's continue the conversation

Whether you're ready to explore a new project, have questions about our adoption process, or just want to understand how we can support your utility infrastructure needs, we're here to help.

Already working with us?

Reach out to your **Leep Utilities Business Development Manager** directly, they'll be happy to guide you.

New to Leep Utilities?

No problem. Drop us an email at salesenquiries@leeputilities.co.uk and a member of our team will be in touch shortly.

Curious about what we do?

Visit leeputilities.co.uk to discover why we're the smart choice for multi-utility network adoptions.

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