UNDERSTANDING

G99 & G100

APPLICATIONS

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WHY GRID APPROVAL MATTERS

Every commercial solar project must connect safely and reliably to the local electricity network. This is governed by specific engineering and safety standards that protect both your solar installation and the wider electricity grid.

Most commercial systems require a G99 application, while larger or more complex projects may also need a G100 application. These applications ensure your system meets all the technical requirements for safe grid integration.

It is important to understand that these processes are not just regulatory, they also have practical commercial implications.

Grid approval can influence project timelines, system design, export capacity, and in some cases, overall project feasibility. By considering grid connection requirements early in the planning stage, you can avoid unexpected delays, additional costs, and redesigns later on.

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WHAT IS A G99?

A G99 application is required for any generation system that operates in parallel with the electricity grid and exceeds 3.68kW per phase.

In practical terms, that includes almost all commercial solar installations.

The purpose of G99 is to ensure that new generation equipment does not compromise the safety or stability of the local network. The relevant Distribution Network Operator, or DNO, assesses whether the grid in your area can accommodate the proposed system and under what conditions.

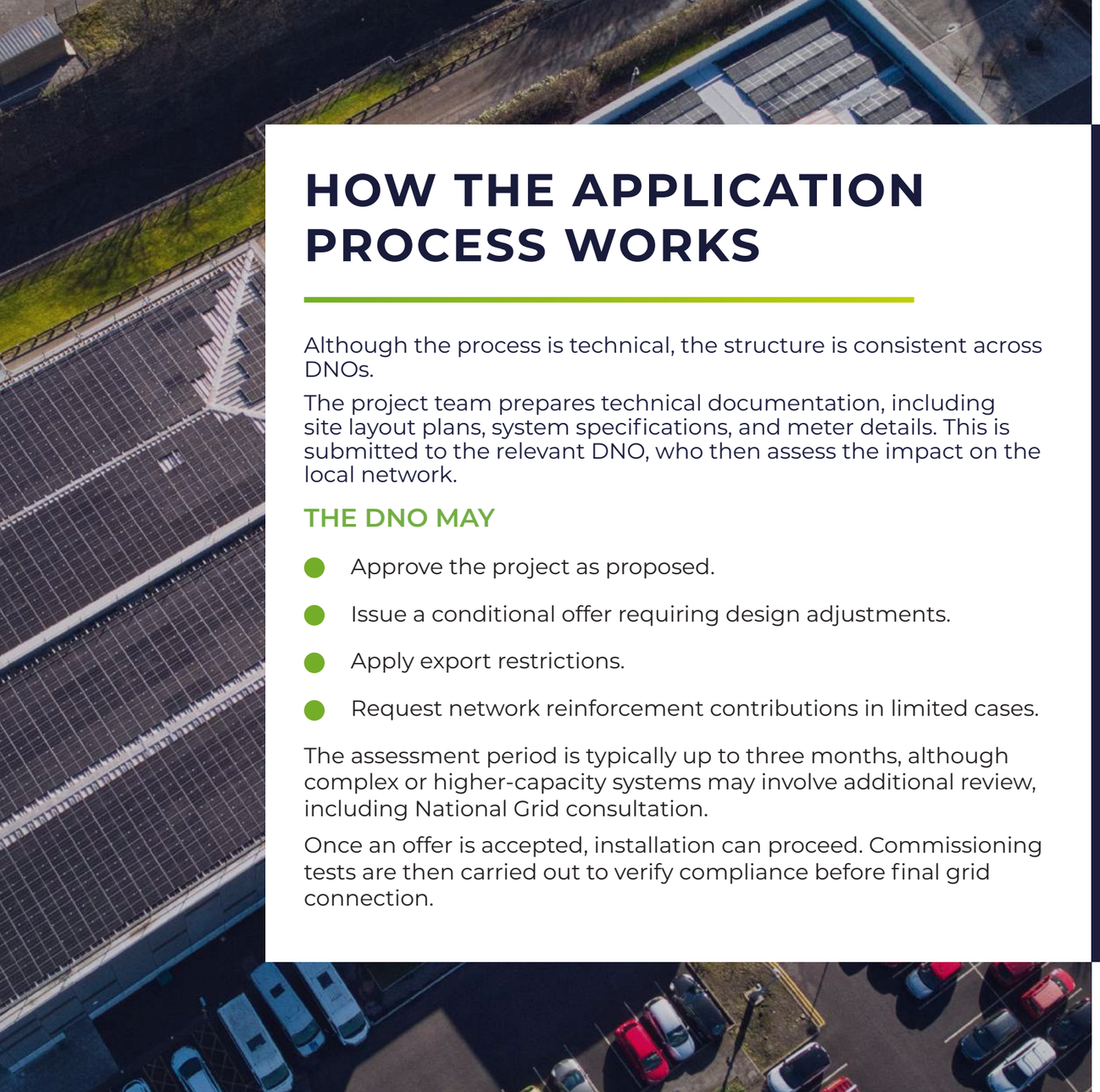
This assessment protects the wider network while enabling renewable generation to be integrated responsibly.

WHAT IS A G100?

In some locations, the local network may have limited capacity to accept exported electricity.

If the G99 assessment identifies this constraint, a G100 application may be required. G100 allows the system to operate with export limitation controls in place, ensuring that the amount of electricity exported to the grid does not exceed agreed thresholds.

This may require additional equipment and can influence project timelines and costs. However, in many cases, export limitation enables projects to proceed in areas where full export would not be permitted.



HOW THE APPLICATION PROCESS WORKS

Although the process is technical, the structure is consistent across DNOs.

The project team prepares technical documentation, including site layout plans, system specifications, and meter details. This is submitted to the relevant DNO, who then assess the impact on the local network.

THE DNO MAY

- Approve the project as proposed.
- Issue a conditional offer requiring design adjustments.
- Apply export restrictions.
- Request network reinforcement contributions in limited cases.

The assessment period is typically up to three months, although complex or higher-capacity systems may involve additional review, including National Grid consultation.

Once an offer is accepted, installation can proceed. Commissioning tests are then carried out to verify compliance before final grid connection.

THE COMMERCIAL IMPACT

Grid approval is not simply a formality. It can affect:

- **PROGRAMME TIMING**
- **SYSTEM SIZING**
- **EXPORT CAPABILITY**
- **INFRASTRUCTURE REQUIREMENTS**
- **FINANCIAL MODELLING**

For multi-site or portfolio projects, early grid strategy is particularly important.

Variations between regions and DNOs can influence phasing and rollout sequencing.

When approached proactively, grid compliance becomes an integrated part of project planning, informing design, sequencing and investment decisions rather than acting as a reactive late stage constraint. This enables smoother delivery, and a more scalable pathway for portfolio growth.

HOW WE MANAGE THE PROCESS

01
Assess

Shawton Energy starts every project by carefully assessing the local electricity network to identify potential grid constraints as early as possible.

By understanding regional capacity, existing limitations, and potential bottlenecks, we can plan proactively, helping to prevent delays, unnecessary redesigns, and unexpected challenges later in the project.

02
Design

We design solar systems that fully align with local network capacity and technical standards.

This ensures your installation operates safely and efficiently while remaining compliant with all regulatory requirements.

By considering local conditions and future network changes, we can create a design that maximises energy generation and long-term reliability.

03
Submit

Our team manages the entire G99 and G100 application process, preparing all necessary documentation.

With extensive experience working daily with Distribution Network Operators across the UK, we keep approvals on track and minimise the administrative burden on our customers.

This hands-on approach ensures the submission process is thorough, accurate, and as fast as possible.

04
Integrate

Once grid approvals are confirmed, we integrate the outcomes into wider project planning. This includes considering system performance, export capacity, timelines, and commercial modelling, ensuring that all aspects of the project are informed by the realities of your network connection.

By doing this early, we can adjust project schedules and investment plans to maintain efficiency and avoid surprises later on.

05
Optimise

By proactively managing the grid connection process, Shawton Energy reduces the risk of delays or redesigns. Grid compliance becomes a seamless, predictable part of the overall delivery programme, providing customers with clear timelines, confidence, and a smoother project experience.

This helps ensure that every project is delivered on time, on budget, and fully aligned with both technical and commercial goals.

MOVING FORWARD WITH CONFIDENCE

G99 and G100 applications are essential components of any commercial solar project. They ensure safety, protect network stability, and enable renewable generation to integrate effectively into the UK grid.

With the right expertise, the process is straightforward and manageable.

If you are exploring solar for your organisation and would like clarity on grid capacity, timelines, or application requirements, Shawton Energy would be happy to support that discussion.

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