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Gridlocked

Homeowners with solar panels can't use them for months as they wait for one signature. Emanuele Midolo reports

Steve Benison bought 16 solar panels last autumn, spending more than £13,000 on the panels, batteries and installation work.

Yet the IT engineer from Milton Keynes has been unable to use them — missing the hottest June on record too because his local energy operator would not sign off the paperwork he needed to complete the installation.

"What I didn't know is that you can't just bash solar panels in and turn on the electricity. You've got to get approval from the grid," Benison, 60, says.

"I first signed the contract to get the solar panels installed in September last year. My request was sent in November and should have been approved within six weeks, but it wasn't approved until mid-May. That's six months just to get the approval."

The panels were eventually installed at the end of June and Benison had the scaffolding removed from his house this week.

Benison is one of 86.000 homeowners in the UK who have installed solar panels on their properties this year almost double the number of installations compared with the same period last year — in order to combat rising energy prices and take advantage of the warmer summers.



However, chronic administrative delays mean thousands must wait months before they can start benefiting from the panels. Many have lost out on precious days of sunshine, costing them hundreds of pounds, sometimes thousands, in extra energy bills. Maddeningly, all these applicants need to get up and running is a single signature.

There are two forms that homeowners need to fill in if they want to connect their solar panels to the National Grid: G98 or G99. An application is submitted to a distribution network operator (DNO), which is the local network responsible for distributing electricity from the grid to our homes. In the

UK these networks are managed by six companies. Homeowners need to notify the DNO about their solar panels to ensure that the energy grid is protected against potential faults and blackouts.

Whether you apply for G98 or G99 approval depends on the size of your distributed generation (DG) equipment and the amount of energy that it is able to generate (see panel). In theory, the process is straightforward. Small-scale systems that generate less than 3.68kW per phase require a G98 form, while anything over that voltage requires a G99.

With a G98 form, applicants can install solar panels and batteries first and then notify

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addressed urgently."

The application process in Britain is complicated compared with other countries, such as in Scandinavia. "We're missing a trick here," says Siobhan Meikle, managing director UK and Ireland of Eaton Corporation, a power-management company and supplier. "[Nordic countries] have been doing it for longer but it's a very simple process there, especially in Norway."

The other problem, she argues, is that in the UK, batteries are classified as generators, and are therefore subject to greater checks. "We don't believe that should be the case. We're talking about small batteries here, not even the size of a fridge. And they are mostly used for storing energy rather than exporting it."

Meikle points out that there are limits to the amount of energy consumers can sell back to the grid. "It's such a small amount and what you get back [in money] is such a low amount that generally most people are not doing it for that reason, but rather for their own use. That's why we need to simplify the rules, regulations and application process."

There is little that applicants can do themselves to speed up the process. The easiest win is to opt for a 3.68kW inverter (the component in a solar panel system that charges the electricity) instead of a 4kW one, which only requires a G98 form with no pre-approval.

Other than that, even those applications submitted in a timely manner can be caught up





Dunelm, a refurbished four-bedroom bungalow near York, is on sale for £750,000 with Dacre, Son & Hartley ELEANOR SIMS

in delays, particularly as the trade body Solar Energy UK is expecting a record number of applications this year.

"We're expecting something north of 200,000 installations this year," says Gareth Simkins, senior communications adviser at Solar Energy UK.

Simkins says that last year saw a combination of "supply chain upsets" due to the war in Ukraine and lockdowns in China as well as rising demand, which left many people waiting for weeks for orders to be fulfilled. "That was a blip but waiting times for stock have dropped markedly this year," he adds.

Simkins admits, however, that G98 and G99 delays are "a topic of concern" for the industry. "We recognise it's a problem and are seeking to resolve it."

Need to know

Which form do I need to apply to my DNO?

- **G98:** Small-scale systems of up to 16A (3.68kW) per phase. Homeowners can install the system then notify the grid within 28 days.
- **G99:** Large-scale systems above 16A (3.68kW) per phase. Approval for installation should take no more than 45 working days but can take months.

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the DNO within 28 days of the installation. However, for the G99 form applicants need preapproval from the DNO before they can even begin the installation. The G99, commonly known as "apply to connect", should take no more than 45 working days to be processed.

Crucially, G99 approval is required for any energy storage facility, such as a battery, even if the applicant is not looking to sell surplus energy to the grid. In this case, applicants can ask for a fast-track application that should take only ten working days — but the process varies depending on which DNO is managing a network.

Benison bought his panels using a turnkey solution offered by Otovo, a marketplace for residential solar installations. They also dealt with his G99 paperwork. But after his application was sent to the National Grid, the DNO never confirmed that they had received it. Otovo says they chased the DNO five times, mostly without a response. Benison's application was finally approved on May 10, or 122 working days after the application was sent.

The delay is likely to have cost him hundreds if not thousands of pounds, as the solar panels will not be as effective after the summer months. Benison says he spent more than £3,000 on electricity last year and expects to pay almost £4,000 this year, as he bought an electric car in December. With six solar panels on the roof of his northeast-



A three-bedroom bungalow in the South Hams, Devon, is on the market for £700,000 through Marchand Petit

facing house, plus another ten panels on his garage roof, he was hoping to capture the sun as it goes over his property for at least six months of the year.

"If I can get back part of my electricity costs and charge my EV during the day then [the panels] would be worth it," Benison says. "But they haven't actually been up and running [until now], so I'm not sure whether I'd be able to get what I'm expecting."

Despite the long delay, Benison is upbeat about the prospect of a functioning solarpowered home. "Hopefully it's going to work. In any case it's the right thing to do, both from an energy security perspective and from a climate change one."

Waiting times can vary massively between DNOs, creating a lottery for those applying via a G99. Garfield Gibson, 52, a doctor who lives in Farnborough, Hampshire, bought 12 solar panels and a battery — also from Otovo — at the start of the year. His G99 application was sent mid-March and approved three months later. "I was hoping to get them up and running before the

summer but it looks like I won't have them installed before the end of July," Gibson says. "They [the DNO] didn't tell me why it took so long. It would be good to know why."

Jina Kwon, UK general manager at Otovo, says grid operators had failed to adapt to regulatory changes, introduced last November, which should have allowed residential applications to qualify for fast-track processing, "leaving consumers wrongly burdened with delays instead of being fast-tracked".

Plus, she adds, many DNOs have not automated their processes despite soaring demand for solar panels, so applications are still dealt with in paper format. The exception to the rule, Kwon says, is UK Power Networks, which has an accessible online portal.

"Each of the six grid operators has slightly different application methods and some are very manual," Kwon explains. "We have to use decades-old, outdated processes from the 1990s, leading to human errors and significant delays. We've even had lost applications where grid operator employees have gone on holiday without handing over projects to a colleague in their absence."

Understaffing is another serious issue. Kwon denounces a chronic lack of investment "in the people and processes that our grid is so reliant upon".

She adds: "If we are serious about making it easy for consumers to switch to solar, these delays need to be

