

Melksham substation upgrade

Frequently asked questions



The Project

Where is Melksham substation?

Melksham substation is to the north of the town of Melksham, Wiltshire, and between the villages of Whitley and Beanacre.

What is a substation?

Substations are an integral part of the UK electrical transmission system. It provides a connection point for generators to input power to the network or can connect the main transmission network to the distribution networks that supply homes and businesses.

Substations contain electrical equipment to transform the voltage to lower or higher voltages, switching equipment to connect and disconnect circuits, and protection equipment to ensure the network operates safely and reliably.

We upgrade existing substations to connect additional power generation or to meet increased demand from business and domestic consumers primarily in large towns and cities. These substation upgrades can be extensions of existing sites or can be new substations built alongside existing substations.

Why do you need to extend Melksham substation?

We need to extend Melksham substation so we can safely connect new sources of low carbon energy generation and energy storage to our network, whilst also maintaining secure electricity supplies for homes and businesses in the local area and beyond.

This work will install what is known as a supergrid transformer, as part of an innovative approach called a 'grid park'. It enables us to connect multiple generation sources to the network at the same point, saving time and money, all of which bring benefits to energy users locally and nationally.

Is this related to other National Grid work at Melksham substation?

There are several National Grid projects planning to carry out work in and around Melksham substation in the coming years, as part of the biggest upgrade of the national transmission network in a generation. We're working closely with them to co-ordinate our work.

As you may already be aware, there's a separate project working on-site to install a new shunt reactor within the substation. We anticipate this work will be complete by June 2025.

We're also upgrading a section of our existing overhead line that runs between our substations at Melksham and Bramley in Hampshire. This work near to, and into, our Melksham substation is planned to take place between June and November 2025, and scaffolding will be erected to ensure this can be carried out safely. If you have any further questions, you can find out more about this work at: nationalgrid.com/bramley-melksham or contact the team directly at Bramley-Melksham@nationalgrid.com for more details.

National Grid has also submitted a planning application to Wiltshire Council for an extension to the west of the existing substation site for the installation of a new shunt reactor. A shunt reactor helps efficiently manage and regulate the complex movement of reactive power and voltage levels on the network. It is currently expected that this work will take place towards the end of 2026 or early 2027. We will keep you updated as these proposals progress.

Separately and unrelated to National Grid activity, construction of a solar farm is also taking place to the north of Westlands Lane, on land directly opposite the Melksham substation entrance.

What size will the extension be?

The work will create a new small compound of (750m²), next to the existing substation's northern boundary and south of Westlands Lane. You can view a map of the proposals on our project website: nationalgrid.com/electricity-transmission/network-and-infrastructure/infrastructure-projects/melksham-substation

What permissions do you have to carry out the work?

We are undertaking much of our work under National Grid's permitted development rights for essential national infrastructure. This means it does not require an application for planning permission. We must meet environmental licences as we carry out our activity, and we'll make sure all our work is done carefully and considerately.

We do require planning permission to improve the bellmouth at the entrance to Westlands Lane, to make it wider and safer for larger vehicles to enter and exit safely. An application for planning permission will be submitted to Wiltshire Council for this work.

Are you keeping people up to date on what you are doing?

Yes, we are sending local residents regular update letters, and our project website will be kept up to date with the latest work. We are also regularly updating stakeholders and elected representatives to ensure they receive the latest information about the project.

We also have a dedicated email address and project phonenumber for our project:

- Email us at: box.melksham@nationalgrid.com
- Call us on: **0800 138 5541**

Who is involved in the project?

National Grid works with a number of contract partners to deliver its crucial projects. This project is being led by Morrison Energy Services, a service provider that works with the national energy network and publicly owned organisations to repair, renew, refurbish and maintain the country's gas, electricity and green energy infrastructure, with a key focus on decarbonisation to support the transition to a net zero economy.

Our work

What does your work involve?

This work will install what is known as a supergrid transformer, as part of an innovative approach called a 'grid park'. It enables us to connect multiple generation sources to the network at the same point, saving time and money, all of which bring benefits to energy users locally and nationally.

What is bellmouth widening?

Bellmouth widening is the widening of access roads at entrances and exits. Our work will involve improvements to the bellmouth at the entrance of our site on Westlands Lane to ensure equipment can safely and efficiently enter and exit the new substation site.

What is a work compound and why is it needed?

We are creating a temporary work compound in an area within our site. This will include areas for the safe storage of construction materials, welfare facilities for staff, and space for our vehicles to safely park and turn around in. The compound will be largely concealed as it is set well back from the road and will be partially screened by existing trees and vegetation.

When will the work be taking place?

Work began on 24 February 2025 and is expected to finish in summer 2028. We'll continue to write to residents with the latest project updates, and our project website will be kept up to date with the latest information about our work.

What are your working hours?

We will complete the work inside our normal working hours, between 7am and 6pm Monday to Friday. However, we may need to work outside these hours for certain activities, or when circumstances such as poor weather affect our schedule.

Impacts on the local community

How will you manage traffic and road safety?

We have developed a detailed traffic management plan to carefully control our vehicle movements locally.

This dictates that all our vehicles should arrive and leave along Westlands Lane to the west via the B3353, avoiding the railway bridge, Beanacre and the A350. Vehicle movements are also restricted to between 8:30 am and 4:30 pm Monday to Friday. Vehicles will bring people and materials to site and take away spoil.

A Temporary Traffic Restriction Order (TRRO) is in place on the full length of Westlands Lane to reduce the speed limit to 20 mph. This will help keep residents and other road users safe, and ensure our vehicles can safely enter and exit the site.

To provide permanent access to the new substation area, we will need to widen the bellmouth of the gated entrance next to the existing National Grid site entrance on Westlands Lane. We are applying for planning permission for this and anticipate that, if granted, this will take place in late 2025.

How are you enforcing your traffic management plan?

We're aware of ongoing traffic issues on Westlands Lane caused by vehicles travelling through the village of Beanacre and over the railway bridge.

We've reiterated our expectation that vehicles should enter and leave site via the B3353 from the west to all delivery companies, and have asked other developers in the area to do the same. We will consider action against any of our drivers or companies not following our agreed traffic management plan.

We've also put additional signage on the A350 to help direct vehicles to follow the correct traffic route, and will monitor movements closely.

Will there be any road or footpath closures?

We do not anticipate a need for road or footpath closures. If this needs to change for any reason, we'll make sure local people are informed in advance.

How are you managing construction noise?

Our work will create some noise. We will ensure that noise levels are kept to a minimum and regularly monitored. National Grid will always use the construction methods that best minimise disruption to local people and the surrounding environment.

Will there be lighting used?

You may notice additional lighting as we work, particularly on shorter winter days. We will turn this off when we have finished our activity each day. The lighting levels will return to how they were before once we've completed our construction work.

Will the extension have an impact on people's homes and land?

All the work is happening directly around our existing substation on land already owned by National Grid, so the expanded substation won't have an impact.

How can local people benefit from this project?

Every year National Grid supports charities and non-profit organisations by awarding community grants. We fund all types of projects run by charities and community groups that provide a range of social, economic and environmental benefits in areas where National Grid's work has an impact on local people. Local groups and organisations near this project could be eligible for support. A successful project could receive a grant of up to £10,000.

The application process consists of submitting an application, which will then be reviewed by National Grid. To find out more, and to learn about the application process and eligibility criteria, please visit: nationalgrid.com/responsibility/community/community-grant-programme

Impacts on the environment

Will wildlife be affected by this work?

We have carried out ecological surveys to understand what we need to do to protect local wildlife and biodiversity. We'll ensure any vegetation clearance is kept to an absolute minimum. All this work will be carried out under the supervision of a licensed ecologist.

National Grid have committed to providing a 10% Biodiversity Net Gain (BNG) in environmental value on all construction projects.

Contact us

If you have any questions about the project or would like any more information, please contact our Community Relations Team.

You can do this by:

Email: box.melksham@nationalgrid.com

Telephone: **0800 138 5541**

This line is available from **9am to 5:30pm, Monday to Friday**. If prompted, please leave a message with your name and contact number and we will get back to you as soon as we can.