

Welcome to our exhibition

Thank you for showing your interest in coming to our event about SSE's proposed battery storage facility, held in conjunction with our planning consultant Pegasus Group. We hope you will find the information interesting and informative.



We all need to get to net zero quicker. The spiralling costs of imported gas and the knock-on effects on our energy bills has highlighted the need for cheaper, cleaner, and secure homegrown energy.

A key part of the transition to a net zero future will be our ability to store excess green power produced by offshore wind turbines when demand is low; to be discharged back to the Grid for use later when demand is high. Battery storage systems are mission critical on our path to net zero.

Storing energy is especially important as we increasingly rely on weather dependent generators such as wind or solar panels.

Batteries are green technology enablers and produce no emissions or pollution during normal operation - so we all have enough electricity whatever the weather.

In addition to the batteries, the proposed facility will require its own substation to manage the voltage for safe and reliable transmission to connect to the existing Staythorpe National Grid substation.

We have set out in greater detail the site location plan with its proposed boundaries. Because the design of the scheme is at an early stage, we want to hear your views on our plans.

You can give us your feedback by filling out the forms we have with us today.

About SSE

SSE is a FTSE-100 company whose purpose is to provide the energy needed today, while building a better world of energy for tomorrow. SSE is a leading generator of renewable electricity and one of the largest electricity network companies in the UK.

SSE has nearly 80-years' experience of energy generation in the UK and Ireland. It develops, owns and operates low carbon infrastructure to support net zero. This includes onshore and offshore wind, hydro power, electricity transmission and distribution grids, and efficient gas-fired generation.

SSE is a UK listed company, employing 10,000 talented and skilled people and real Living Wage and Fair Tax Mark accredited. Today SSE is the UK's largest generator of renewable energy, in keeping with our historic aim to provide safe and reliable electricity for all.

SSE is committed to investing £25bn by 2030 in the low carbon infrastructure we need to help us get to net zero. In doing so it will create 1,000 green jobs a year through the development, construction, and operation of world-class renewable power assets.



SSE can trace its renewable energy heritage back over 80 years – here bringing hydro power to Scotland in the 1940s at Pitlochry Dam.



Today SSE is building more offshore wind energy than any other company in the world right now.

SSE Net Zero
Acceleration
Programme

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Why this site?



The UK Government has set a target to achieve a Net Zero Electricity System in the UK by 2035. National Grid estimate that 13GW of batteries are required to ensure that energy generated by renewables can be stored when it is not needed, and then used when it is.

This battery project will help unlock progress on local as well as national net zero targets. For example, Newark and Sherwood District Council declared its own climate emergency in 2019 (see QR code link here to Carbon Reduction Action Plan) and has set a target of becoming a carbon neutral organisation by 2035.

The Staythorpe National Grid substation is located at a point in the network where

renewable generation, including battery storage, can deliver the power quality and resilience we need. This means the battery storage facility at Staythorpe can act as both an importer and an exporter of energy, providing a source of reliable and resilient energy. Locating the project close to the existing National Grid Staythorpe Substation ensures a cost effective and viable connection at this important point on the National Grid network.

Carbon
Reduction
Action Plan

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What is being proposed?

The main part of the proposal will entail a number of battery storage units arranged in rows which will be surrounded by trees and hedges to ensure they are less obtrusive.

The batteries are enclosed in painted steel containers up to 3m high that contain cooling, control and safety systems. There will also be a transformer substation which contains some equipment which is 12m high protected by a safety and security fence, screened by the same planting as the batteries.

Poles up to 5m high will be installed to support movement sensors and cameras for site security. The proposal consists of the construction and operation of a battery storage facility and substation. Access to the site will be taken from Main Road or the A617. The associated equipment would comprise:

- Battery Storage Units – Battery units arranged in rows up to 20m in length, circa 5.5m wide, and up to 3m in height;
- Inverters and transformers local to the batteries will be up to 4m in height
- Transformer Substation – With some items extending up to 12m in height.
- Water Storage Tanks - 10m diameter, and up to 2m in height;
- Single story operational buildings, switchroom, workshop and stores.
- Site Fencing, Access Gate and CCTV - 2.4m security mesh fence with access gates, CCTV and light poles to be up to 5m high;
- Landscaping, biodiversity enhancements around the site will include tree and hedgerow planting focusing on the northern and eastern side in particular.



About battery storage

Battery storage is a proven technology which provides the flexibility needed to integrate more renewable generation and future-proof our electricity system. A battery storage system can be charged by electricity generated from renewable energy, like wind and solar power and then released to the Grid when needed the most - to ensure supply matches demand.

The battery element of the unit is like a far more advanced version of the rechargeable batteries you keep at home for your TV remote or children's toys. We use computer technology and algorithms to calculate when the battery's energy reserves should be kept or released to the Grid.

Our battery units are simple to install and run without the need for much maintenance. They are weatherproof and safe for passing people or pets – though the area is obviously fenced off and clearly signed for additional community safety.

SSE's team of remotely based engineers will always monitor the performance of the battery units to ensure they are running smoothly and safely.

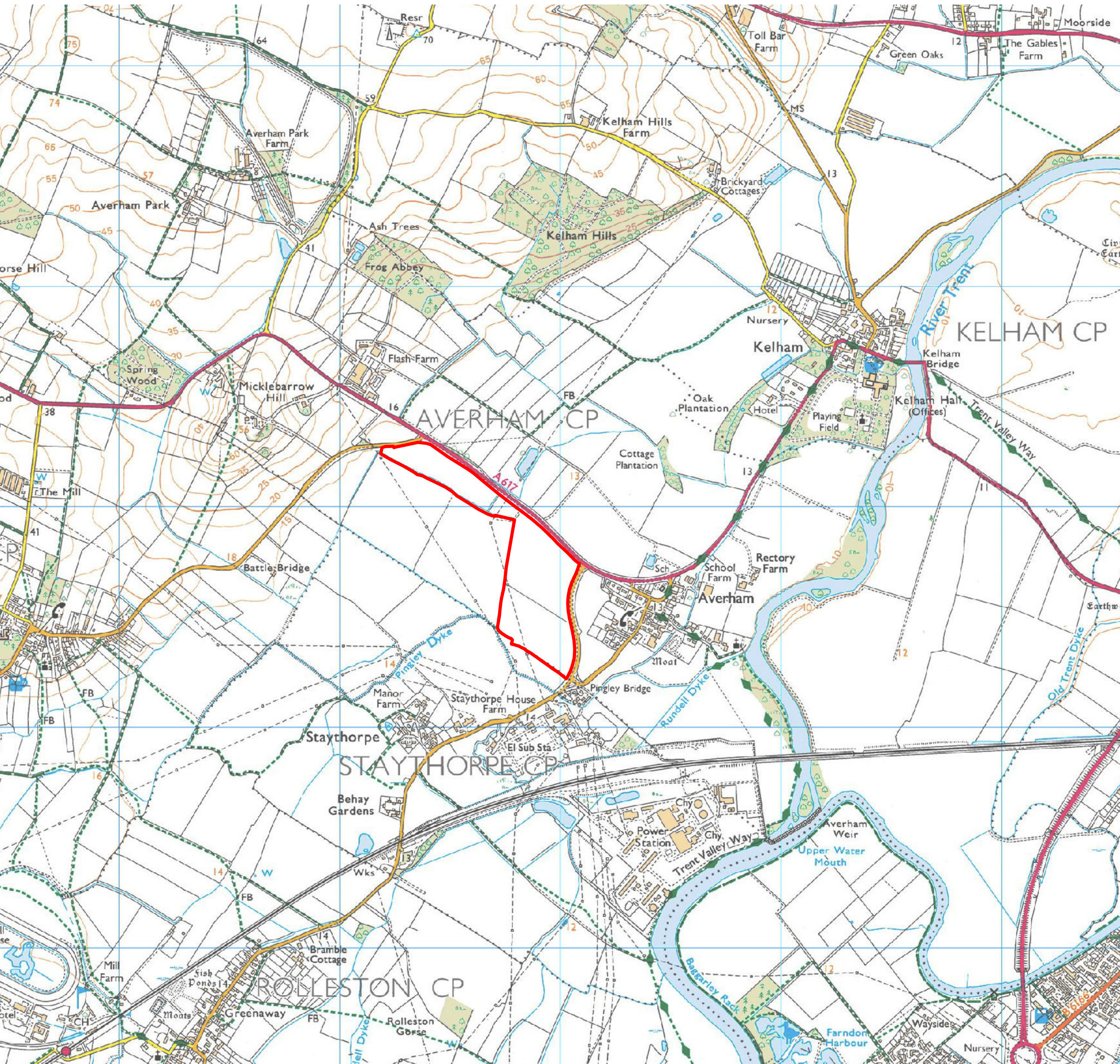


Proposals Plan



Our location

The site is made up of three fields that are currently used for growing crops which have a total area of about 18.2 hectares - though only a part of the field will be taken up by the site.



Site analysis findings

The following works will be undertaken to support any future planning application on this site, and inform the final design of the scheme:

Heritage and Archaeology

There are a number of listed buildings within Rolleston to the southwest of the site and a scheduled monument exists within proximity to the site. The appropriate visual impact and heritage reports will be provided to assess the potential impact of the development of these assets.

Ecology

A number of surveys are being undertaken to assess the ecological potential of the site and establish if any protected species are present. SSE is committed to delivering biodiversity net gain targets within all their developments and exceed them if practical. This will be achieved through the inclusion of appropriate planting and mitigation measures, including biodiversity zones on site for flora and fauna.

Landscape and Visual Impact

A landscape and visual impact assessment will be undertaken. This will assess a range of views of the battery storage facility and will consider potential effects for this temporary development on the surrounding landscape and visual receptors.

Access

Primarily, construction access will be taken from the Main Road to the north west of site. A Construction Traffic Management Plan will be submitted with any future application to manage the construction process appropriately. Following the construction of the site, it is anticipated any trips will be associated with site maintenance. Access for which will be taken from either Main Road or the A617.

Agricultural Land Classification

Agricultural Land is classified into five grades. Grade 1 is best quality and Grade 5 is poorest quality. Grades 1 to 3a are classified as the Best and Most Versatile land. A survey will be undertaken to determine the agricultural land classification of the site.

Flood Risk and Drainage

The site is identified as being located predominantly in Flood Zone 1 and at the lowest risk of flooding. It is acknowledged that there is an area of Flood Zone 2 and 3. Within this area of site infrastructure will be raised where necessary. An attenuation pond will be created on site to offset potential increases in runoff associated with the development, as such the development will not increase the risk of flooding on site or in the local area.

Next steps

Thank you for taking the time to visit. Do please let us have your feedback as your comments will help to inform the planning application that we will make by the end of 2022.

We would like to invite members of the community to make suggestions for local initiatives they would like to see in the area and send them to us using the comments sheet provided. Alternatively, you can view the information provided today on our project website <https://www.staythorpebatterystorage.co.uk> and provide your comments online.

All responses from today's exhibition will be carefully considered, and we welcome all feedback. Our intention is to examine all

comments received and record them as part of our consultation process prior to submitting an application to Newark and Sherwood Council.

All comments are gratefully received by 19th December 2022.

Project Website

Scan Here



Key dates:

