STATERA
BALANCING THE GRID

Exeter Storage Scheme
Frequently Asked Questions

WHAT TIMEFRAME IS STATERA PLANNING FOR?

It is our intention to submit planning permission for the Battery Storage scheme to East Devon District Council in February 2023. We would expect the planning application to reach determination in Q4 2023 but this might get delayed. Works would be likely to start in 2026 with the scheme going live in 2027.

WILL FOOTPATHS BE AFFECTED?

There are no public rights of way crossing the site. We are planning to provide a permissive path around the ecological enhancement area which can be enjoyed by members of the public during the life of the scheme.

WHAT ARE THE IMPACTS ON WILDLIFE?

We have conducted ecological studies to ensure that we not only protect existing habitats where possible, but we also enhance the offering.

The battery development will include an area for landscaping and biodiversity enhancement which will help minimise impact on wildlife and provide a biodiversity net gain.

WILL THE PROJECT BE NOISY?

A full noise impact assessment has been carried out and will be submitted with the application. The noise emitted from the proposed development will not exceed EHO standards. Battery storage plants do require a large number of inverters in a relatively small area of land and there is noise from having to cool the battery containers, but this noise can be mitigated to an acceptable level.

WHAT HAPPENS AT THE END OF THE SCHEMES OPERATIONAL LIFE?

It is a common misconception that once a battery scheme comes to an end, that the land becomes 'brownfield'. If planning permission is granted, it is temporary, usually up to 40 years. Once this time has lapsed, the land reverts to its original use, in this case agricultural. The land will not be classed as previously developed.

WILL THE DEVELOPMENT CAUSE FLOODING?

The battery storage site will include adequate drainage and attenuation ponds to collect rainwater runoff from the site.

It should also be noted that all site access tracks will be rolled stone (or similar) and are permeable as a result.

HOW DOES THE PROJECT INCREASE THE CHANCE FOR THE UK TO BE NETZERO BY 2050?

The scheme would materially help Devon meet its renewable energy target and would also assist in meeting national targets for both energy supply and low carbon energy development. The project displaces over 275,000 tonnes of CO2 per year (assuming the project displaces a 40% gas generator) and the scheme can fulfil the annual electricity need of about 340,000 UK households (assuming an average annual usage of 2,900 kWh per household).

WHY ARE THERE SO MANY RENEWABLE ENERGY APPLICATIONS GOING IN IN THIS PART OF THE COUNTRY?

Amid the ongoing war in Ukraine and volatile gas prices, there is serious need for homegrown renewable energy to power the country. The UK also has a target of a clean energy grid by 2035, which means it is necessary to increase the land allocated to renewable energy developments.

The presence of the existing National Grid substation near Broadclyst provides a rare opportunity to connect schemes like this and with Government relying on the private sector to bring scheme forward, it follows that companies like Statera will want to promote scheme like this one.

HOW MUCH TRAFFIC WILL THERE BE?

During construction there will be an average of 8 deliveries per day associated with the battery development. These movements will be conducted following a strict management protocol and a number of mitigations measures will be put in place.

IS THERE A FIRE RISK?

There is some fire risk associated with BESS due to thermal runaway. Our batteries will be compliant with industry standards and we have designed the scheme to mitigate this risk by spacing the batteries further apart and will carry out regular maintenance.

Fire protection consists of two key systems:

Cooling systems maintain battery temperatures within safe limits. Historically, these have been air cooled units (HVAC), but future projects are likely to utilise liquid cooling which brings cooling to the cells within battery modules.

Battery managements systems with multiple levels of safety protection, including the following at both pack and cell level: over voltage, under voltage, over temperature, under temperature and communication fault. These typically have 3 different levels of response of increasing intervention:

a. Level 1 – report a warning

b. Level 2 – reduce charge / discharge power by 50 %

c. Level 3 – reduce power to 0% and open the electrical contactor

The batteries are containerised to suppress any fire breakout. Previous systems we have built use gas fire suppression system initiated on temperature and / or smoke detection.

HOW WILL THE COMMUNITY BENEFIT?

A Community Benefit Deed and/or Community Foundation Partnership can be established to provide funding to help deliver new and existing projects and support charities in the community. Funding can be distributed throughout the lifetime of the project and the applicant will involve the community in designing and delivering these projects.

As part of the proposed site layout, we have included a Community Orchard and permissive path which the applicant will commit to establish.