Site Selection

The site was selected as the most suitable location for the development following a comprehensive site search exercise that prioritised brownfield and industrial land before moving onto greenfield sites.

A mapping exercise was then conducted to eliminate areas within historical and environmental designations as well as higher quality agricultural land (Grade 1 & 2).

Sites were then identified, assessed and scored against a number of standard technical criteria that enabled us to filter out the most unsuitable options and to identify the sites with the least impact on the local environment and communities.

Agricultural land classification

Throughout the site identification process we have prioritised lower quality agricultural land. A full agricultural land quality survey has been conducted by an independent surveyor which has determined the site is a mixture of Grade 3a and 3b land, which is considered good to moderate quality.

Landscape and Visual

Both the site selection and layout have been informed by ongoing landscape surveys and this has led to a site that is:

- Located away from densely populated areas.
- Located in the setting of an existing renewable energy complex, comprising a solar farm with associated infrastructure and wind turbines, as well as agricultural buildings.
- Provides limited direct public views from houses locally and vehicular views largely mitigated by existing tall hedges at the north.

The site does not lie within the Green Belt or National Landscape designations. A full landscape and visual impact assessment will be prepared and submitted with the application and will include photoreal photomontages of the proposed development from public sensitive viewpoints.

Noise

Our specialist acoustic consultant has undertaken background noise monitoring over a 7-day period to ensure we get the most accurate survey information to inform our noise modelling. This considers the topography, wind direction, physical aspects of the proposed equipment installed and other terrain characteristics.

It shows that no significant adverse noise effects will be created by the proposed development.

A Noise Impact Assessment will be submitted to demonstrate how noise would be mitigated for all properties.

Flood Risk and Drainage

The site is entirely located within Flood Zone 1, with no risk of Zone 2 or 3 nearby. We have carried out detailed assessments to better understand the local hydrology. This means we will be able to:

- Better understand and manage any risk of surface water flooding
- Ensure that any watercourses are not affected by the development
- Ensure that the BESS and its infrastructure are sited away from areas that could impact on flooding and drainage.

A Flood Risk Assessment and surface water drainage strategy, which will include sustainable drainage features, will be submitted with the planning application.

Fire Safety

The design integrates all of the recommended guidance from the National Fire Chiefs Council including site design and layout, an on-site emergency water supply, risk mitigation measures, and liaison with Kent Fire & Rescue Service (KFRS).

Each self-contained battery unit will have built-in suppression measures to prevent fire from spreading to other units, using advanced fire detection and suppression technology.

As battery technology continues to evolve, we will determine the specific units closer to the build phase. However, we are committed to using the most advanced technology – including fire suppression technology – available at the time. Where water-based suppression is used, a sustainable drainage system will be in place to safely contain, test, and responsibly manage any run-off, ensuring no risk to the environment.

Safety is our top priority, and our design incorporates multiple layers of risk mitigation to ensure that incidents are both highly unlikely and well-managed if they do occur. We will work closely with KFRS and specialist fire safety advisors to develop a comprehensive disaster mitigation plan. This includes collaboration with KFRS, comprehensive safety planning and training and preparedness.

Heritage and Archaeology

There are no known heritage assets within the site, with Shurland Castle located more than 600m north east of the site. The site does not lie within a Conservation Area, nor is it in close proximity to one.

An assessment of the archaeological value of the site will form part of a full Heritage Impact Assessment, which will be submitted as part of our planning application. We have consulted with the county archaeologist to ensure they approve of our methodology.

Grid Connection

- The proposed development will connect to a new National Grid substation.
- The connection to the wider electricity network will likely be through an underground cable, though the exact route and construction method are yet to be decided.
- The cable route itself is not part of this proposal and will require a separate planning application.
- NatPower has received a valid grid connection of 1GW.

Ecology

We have been conducting a full programme of ecological surveys on the land to ensure that impacts on existing habitats and wildlife will be kept to a minimum.

Our ecological consultants have confirmed that the habitats within the site provide very limited opportunities for biodiversity, with only small amounts of semi-natural vegetation. There were no signs of legally protected or notable species on the site.

The hedgerows provide foraging and commuting habitat for bats, however there are no buildings or mature trees that could provide suitable roosting habitat. The ditches are shallow and have heavily managed banks and are therefore unsuitable for otter or water vole. The proposed development is not likely to result in any effect on The Swale Ramsar site, SPA or SSSI. There is limited suitable habitat present onsite for designated features and the nature and scale of the development mean there is limited potential for indirect effects. We will submit an Ecological Impact Assessment to confirm the impacts and any mitigation required to address them.

Given the agricultural nature of the field, and anticipated requirement for further screening, it is calculated that the project can deliver a Biodiversity Net Gain in excess of 30%. This is above the minimum 10% legal requirement, as calculated using Natural England's Biodiversity Matrix.

Transport

We have chosen the site due to its good access to the strategic road network via the A2500 and A249.

Construction vehicles will arrive at (and depart from) the site via the A249, either from the mainland or from London Medway port. From the A249, vehicles will then route along the A2500 Lower Road and onto the B2231 where they will exit the public highway at the existing Old Rides Farm access, before entering the site via a new access road connecting to the road located within the Old Rides Farm.

The construction of the proposed BESS facility will be undertaken over a 12-to-18-month period. During this time, approximately 10-17 construction vehicles will enter the site per day, however the frequency will vary during different periods of construction. A maximum of 34 construction vehicles per day are expected during a short period when batteries are delivered to the site.

Once the site is fully constructed there will be very little vehicle activity to and from the site as the BESS facility is operated remotely. It is expected that only 2 to 3 cars (or small vans) per week access the site to undertake maintenance.

A Framework Construction Traffic Management Plan (CTMP) is being prepared to support the planning application which will outline measures for the construction team to mitigate the impact of vehicles on local roads during construction.

NatPower