

## BLACKHILLOCK BESS

Blackhillock 349 MW Battery Energy Storage System Site - Gibston Farm



## ABOUT SHIRES STABILITY



#### Who We Are

Shires Stability Ltd is the owner of Blackhillock Flexpower and will be responsible for the development of the Blackhillock BESS site.



### In Partnership with Equinor

Shires Stability Ltd is a wholly owned subsidiary of Noriker Power Ltd and is partnered with Equinor, a global energy company.



#### **Net Zero**

Shires Stability's projects support the Scottish Government's drive for net zero.





Origination



**Construction Management** 

### What We Do

Shires Stability Ltd develops and operates Battery Energy Storage System (BESS) sites, supporting the transition to a fully renewable energy grid and supplying essential support and stability services to the national grid.



Project Commissioning



Asset
Optimisation
and Trading



### Technology

Our BESS sites contain battery racks which charge from the National Grid during times of low demand and release their energy into the grid in high demand.

#### **Batteries**

The batteries used on our sites are Lithium Ion Batteries which charge via a connection to the National Grid or locally generated, renewable sources during times of low demand. This energy is stored and released back into the National grid when the demand for the energy increases.



#### **Connections**

Our sites connect directly in to National Grid substations in either the distribution or transmission networks. Our sites operate in DC at much lower voltages than the National grid and use a combination of transformers and inverters to make this connection successful.



#### **Site Services**

Our sites provide stability services to the National Grid, supplying energy as required and maintaining frequency and stability. Our larger projects are capable of powering more than 100,000 homes with renewable, zero-emission (battery) power for a whole day.

# OUR PREVIOUS PROJECTS

#### **Blandford Road**

A 25 MW site in the South of England, Blandford Road is our first site developed alongside Equinor and is our most recently commissioned.





### **Byers Brae**

Our first site built in Scotland, just outside of Livingston,
Byers Brae is a 30 MW site that was commissioned in 2021.

#### Kilmarnock South

The largest and most recent Noriker Project, Kilmarnock South, a 350 Megawatt BESS, is currently undergoing development.



# BLACKHILLOCK 349 MW BESS INFORMATION



**Block Layout** 



Landscaping Layout

## BLACKHILLOCK BESS PLANNING CONTEXT

The site is within an area identified in the **Moray Local Development Plan (2020)** as a Remote Rural Area. There are no other spatial policy designations covering the site

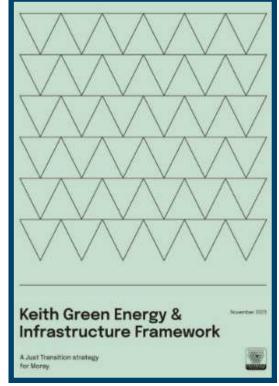
Moray Council have produced a **Green Energy & Infrastructure Framework** for the local area. The document intends to develop a strategic framework for Blackhillock and Keith North East (NE) in order to clearly guide development proposals for grid infrastructure and energy systems/storage associated with renewable energy to the most appropriate locations in and around Keith. As such, this will be a key document in guiding the proposals at this site and will be closely reviewed in the preparation of any planning application

**The National Planning Framework (NPF4)** is the national planning policy that sets the priorities for development and land use in Scotland. The most relevant policies are summarised below:

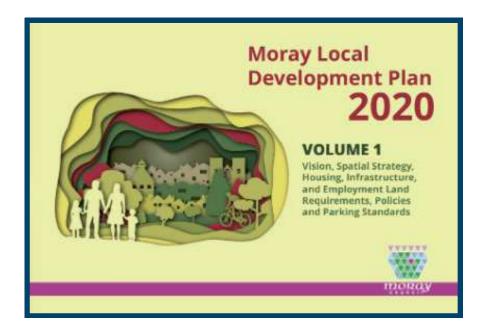
**Policy 1** (Tackling the climate and nature crises) seeks that development should given significant weight to the climate and nature crisis.

**Policy 11** (Energy) seeks to encourage, promote and facilitate all forms of renewable energy development and specifically identifies energy storage as a renewable energy form.

**Essential Infrastructure**: The NPF4 glossary in turn identifies renewable energy forms as essential infrastructure.









The application, as it exceeds 50 MWh of storage capacity, will be submitted to and determined by the Energy Consents Unit (ECU) (Scottish Ministers).

## PLANNING ACTIONS

The steps we have already undertaken and the next Planning Actions planned for the Blackhillock 349 MW BESS Project.



We have entered into a pre-application enquiry with Moray Council Officers and continue to engage with them.



We have submitted a Screening Opinion (ref: ECU00004836) to the ECU who has agreed that the proposed development would not require an Environmental Impact Assessment (EIA).

## PUBLIC CONSULTATION INFORMATION

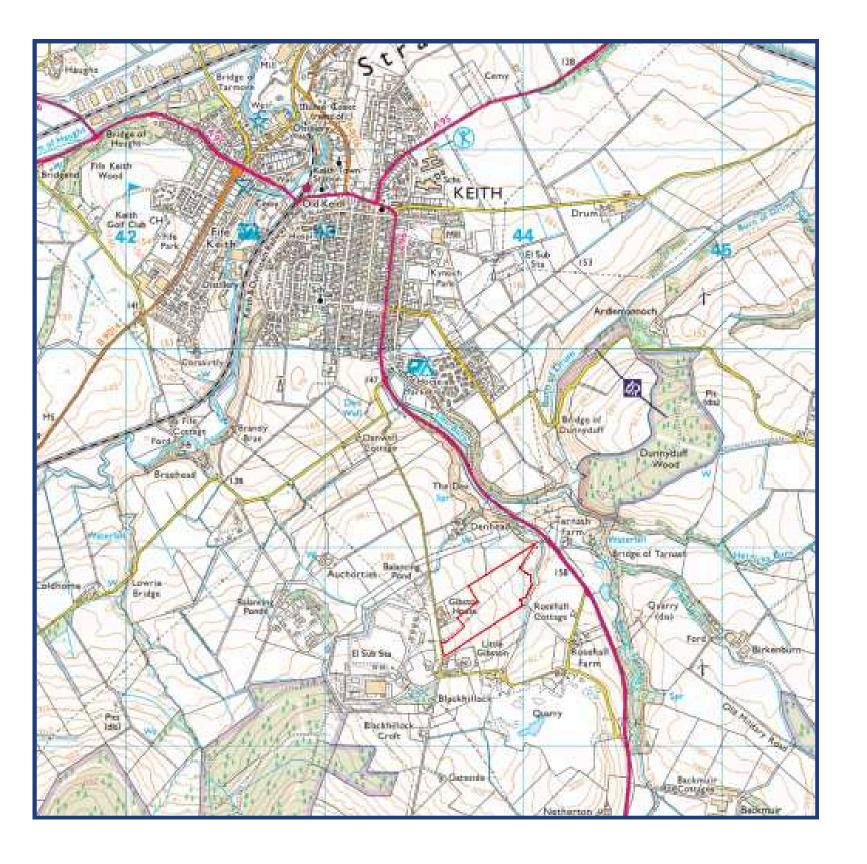
PUBLIC CONSULTATION EVENTS
WERE HELD ON THE 21ST OF MARCH
AND 18TH OF APRIL 2024 FROM
1500 – 1900 AT KEITH SPORTS AND
COMMUNITY CENTRE.

#### <u>Note</u>

Any comments submitted to this consultation are NOT representations to the Planning Authority (Energy Consent Unit). There will be further opportunity to make formal representations when a planning application is made.



### Site Location







### Technical Information

### Blackhillock 349 MW BESS

### **Battery Units**

Our current layout contains 208
Battery containers - each
battery container is a 20-foot
shipping container.

## Inverters and transformers

From current designs, there will be 52 Inverter and Transformer Skids which will step down the voltage from the grid to the batteries and invert the power from AC to DC and vice versa.

### Size and Connection

The project is expected to utilise around 21 Acres and will be connected via an underground cable to the Blackhillock substation at 400 kV.



Concerns over the visual impact from the A96 and the Southern Boundary.



We have updated the layout to reduce the size of the equipment at the high point of the site by moving to Gas Insulated Switchgear.

Additionally, we have increased the planting on the Eastern, Northern and Western boundaries to better blend the site. The evolution of the site is shown on the next slide.

We are in the process of having photomontages produced and will publish those when they are available.



Original Layout with Landscaping



Updated Layout following feedback from the 1st and 2nd Public Consultation.



How are we mitigating fire risk?

There is a lot of misconception around BESS fires and actually, BESS sites are very unlikely to catch fire.

To minimise any risk, we use proven suppliers in the market who comply with UL9540 requirements.

We space our battery units at a minimum of 3 metres, which is a proven safe distance to prevent propagation. Additionally, our units are located in blocks of approximately 10 batteries, which are spaced at greater distances to prevent further propagation.

The site will contain a dry riser system for fire suppression and each container is fit with it's own suppression system.



What will the noise impact be? Is there any Light Pollution?

The site will produce some noise.

However, the BESS site will adhere to both local and national noise guidelines which are strictly imposed by the ECU and the Local Planning Authority. The full noise report is still evolving and will be published when a full Planning Application is submitted.

We use multiple methods on-site to reduce the noise impact, including Acoustic Fencing, Planting and/or the use of attenuators.

The site will not be lit in the night and will produce no light pollution.



Is there any benefit for the local community?

Alongside supporting National Infrastructure, wherever possible the site will use materials sourced locally and the contractors on-site will reside locally. Additionally, the planting of the project helps to increase local biodiversity.

We are currently having a Socio-Economic Assessment produced which will detail the effects of the project on the local area. This will be published when the full planning application is submitted.



What happens at the end of the Project?

We put in place a full decommissioning strategy which will then be secured by a financial guarantee.

At the end of the project, we will reinstate the land to its original condition or the local authority can call upon the guarantee for reinstatement.



## Reports we are currently developing with consultants

We are working with consultants on the following reports and studies.

- Landscaping and Visual Impact Improvements and Updates
- 3D Renders and Photomontages To show how the site will look from various viewpoints
- Habitat Management and Ecology Reports are still being developed
- Noise Ongoing work to make the site as quiet as possible
- Socio-Economic Report Analysing the economic effects of the site on the local area
- Traffic Management Plan Managing construction routing and traffic to cause minimal disruption

## CONTACT US



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