

# **Planning Statement for Battery Energy Storage System (BESS) and Associated Infrastructure.**

**Land North of Rayleigh Spur Roundabout, Basildon.**

**On behalf of Renewable Energy Systems Ltd.**

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## Document Management.

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# 1. Introduction

1.1. This Planning Statement has been prepared by Pegasus Group on behalf of Renewable Energy Systems Limited (RES) (“the Applicant”). Planning permission is sought for the installation of a battery energy storage system (BESS) on Land North of Rayleigh Spur Roundabout, Basildon. The Site location is provided in the submitted Location Plan. ref. O556O-RES-MAP-DR-XX-001 Rev 1).

1.2. The proposal seeks to deliver a BESS and associated infrastructure. The description of development is as follows:

**“Installation of an energy storage facility including battery enclosures, power conversion units, transformers, substations, grid connection infrastructure, vehicular access and associated works.”**

1.3. Battery storage technologies are essential infrastructure in speeding up the replacement of fossil fuels with renewable energy. Battery storage systems will play an increasingly pivotal role to responding to electricity demands. Battery storage, or BESS, are devices that enables energy, excess to requirement, to be stored and then released when the power is needed most, rather than being lost.

## **The Applicant**

1.4. RES Ltd is one of the world’s leading independent renewable energy company with 40 years; experience development, constructing and operating renewable assets. RES has delivered more than 27GW of renewable energy projects across the globe and support an operational asset portfolio of over 41GW worldwide. RES has been working in the battery energy storage market for over a decade. Across the UK and Ireland, RES has developed over 850MW of battery energy storage projects and currently manage over 600MW of operational storage projects with 24/7/365 monitoring provided from our control centre in Glasgow.

1.5. The Group’s head office in Kings Langley, near London, is complemented by other offices across the UK including Glasgow, Gateshead, Truro, and Larne. Internationally, RES has overseas subsidiary offices in France, Scandinavia, Australia, New Zealand, Canada, Turkey, Germany, and across the USA. The RES Group employs 4,500 staff. RES is a privately-owned company that grew out of the Sir Robert McAlpine group, a family-owned firm with over 130 years of experience in the construction and engineering sector. RES has strong in-house engineering and technical capability and operates in five main technology areas: on/offshore wind, solar, storage, green hydrogen and transmission & distribution.

1.6. RES’s first battery storage facility in the UK was in constructed in 2016 and consisted of the 330kW Copley Wood Project. This was designed, constructed and operated by RES for Western Power Distribution and was integrated into the existing solar farm infrastructure. In 2018, RES successfully handed over the Broxburn Battery Storage facility (20MW), the Port of Tyne Battery Storage facility (35MW) and Tynemouth Battery Storage facility (25MW) which RES designed and constructed using Samsung batteries and SMA inverters with associated civil and electrical works. RES has been retained as both the Asset Manager and O&M service provider for the projects which has been successfully delivering frequency response services to National Grid since 2018.

- 1.7. Recently, RES undertook the development and construction of the 100MW Lakeside Project in North Yorkshire which at the time was the largest transmission-connected BESS in the UK. Between 2020–2024 RES has successfully developed, consented and secured investment for over 450MW of energy storage projects across the UK.

#### **Supporting Documentation**

- 1.8. The documents submitted in support of this application are detailed within the submitted Covering Letter (Ref L001vO).

#### **Statement Approach**

- 1.9. The development management issues relevant to the application proposal are discussed in this statement. The subsequent sections of this statement are divided into:
- Section 2 – Site Description and Planning History
  - Section 3 – National and Local Context
  - Section 4 – Proposed Development
  - Section 5 – Planning Policy
  - Section 6 – Design and Access Statement
  - Section 7 – Assessment of Development
  - Section 8 – Planning Balance
  - Section 9 – Conclusions
- 1.10. This statement outlines the context of the application site and surrounding area, and the need for the proposed development, including an assessment of how it accords with relevant national and local planning policies as well as material considerations.

## 2. Site Description and Planning History

- 2.1. The site is located on land north of Rayleigh Spur Roundabout, Basildon (Please refer to Site Location Plan – Reference O5560-RES-MAP-DR-XX-001 Rev 1). The site comprises approximately 18.27 hectares of predominantly agricultural land and an aerial image of the site can be seen below at Figure 1.



**Figure 1: Aerial Image of the Site**

- 2.2. The site lies outside of national landscape (National Park, National Landscape – formerly known as AONB) and lies outside of any locally designated landscapes. The site is located within the Green Belt.
- 2.3. It is acknowledged that the site is located within the Northern Thames Basin National Character Area (NCA). The NCA profile outlines that *“The Northern Thames Basin is an area rich in geodiversity, archaeology and history and diverse landscapes ranging from the wooded Hertfordshire plateaux and river valleys, to the open landscape and predominantly arable area of the Essex heathlands, with areas of urbanisation mixed in throughout.”*
- 2.4. There are no nationally designated areas within or adjacent to the proposed site. The Thundersley Great Common SSSI is approximately 1.9km to the east of the site.

- 2.5. The site is predominantly located within Flood Zone 1, an area identified as being at lowest risk of flooding with a section of land to the north of the site in Flood Zone 2 and Zone 3. It is also acknowledged that there is a drainage ditch intersecting the site and an area of surface water flooding on the northern boundary of the site
- 2.6. Natural England's Agricultural Land Classification (ALC) mapping identified that the land in the area was most likely to be Grade 3 agricultural land. An Agricultural Land Classification Survey has been undertaken on the site that has confirmed that the site comprises Grade 3a agricultural land..

#### **Planning History**

- 2.7. There is no relevant planning history on the site.
- 2.8. It is acknowledged that a scope of works are agreed in relation to the A127/A130 Fairglens Interchange.

### 3. National and Local Context

#### Need for Development

- 3.1. There is an explicit need for renewable energy generation, which is driven by a plethora of government legislation at both local and national level in the UK.
- 3.2. In June 2019, the UK became the first major economy to implement a legally binding net zero carbon emissions target by 2050. Decarbonising the power sector is integral to achieving this target and requires major investments into renewable technologies, which are supported by planning policy at both local and national levels.
- 3.3. The National Infrastructure Committee (NIC), official advisor to the Government on Infrastructure, has published a report (Net-Zero Opportunities for the Power Sector, March 20202) setting out the key infrastructure requirements needed to meet the UK's 2050 net-zero target, including the amount of renewable energy development that would need to be deployed. The NIC recommends that in meeting these targets, the UK's energy mix needs to be made up of around 90% renewables. The NIC recommends that across all scenarios, significant levels of solar, onshore wind and offshore wind will need to be deployed with between 129–237GW (gigawatts) of renewable energy capacity in operation by 2050. The Climate Change Act 2008 introduced the first legally binding target for 2050 to reduce greenhouse gases by 80%. This was further enhanced in 2019 with the UK Government amending the Act to a target of achieving net zero greenhouse gas emissions by 2050. Electricity demand is set to increase significantly as fossil fuels are phased out. In August 2021, the Intergovernmental Panel on Climate Change (IPCC) published their latest report on the global climate, Assessment Report 6 (AR6). The report overwhelmingly strengthens the scientific evidence of the human influence on the climate system. While there is a combination of climatic impact-drivers, fossil fuel emissions are a principal contributor to the climate crisis, so replacing gas and coal powered electricity generators with clean renewable technology is critical if we are to start to undo the decades of damage that has initiated climate change. Governments, local authorities, communities, and businesses all have a responsibility to play their part in addressing the climate emergency and this project aims to help achieve that.
- 3.4. The UK is moving towards a focus on greater renewable energy generation and a reduction in fossil-fuel based generation. From National Grid's point of view, that means more electricity storage and flexibility is required in the network to help stabilise supply and demand and manage the increasingly intermittent power generation mix. With greater support from demand-side storage and flexibility, mass energy black-out incidents can be reduced. National Grid's 'Future Energy Scenarios' forecast a minimum of 23.5 GW of storage is needed by 2050 to meet our net zero carbon goals.
- 3.5. In October 2024, it was also announced that a new strategic plan for the UK's renewable energy infrastructure is in the process of being developed. The Government announced at COP29 in Azerbaijan an ambitious new target to reduce greenhouse gas emissions by at least 81% by 2035 on 1990 levels.
- 3.6. Battery storage facilities are essential infrastructure to support the UK's climate change targets, in maintaining and balancing a continuous supply of energy generated from renewable sources. This flexibility approach adds resilience to energy supply and allows the



storage of energy until required through the electricity grid and before it is lost through un-use.

#### Clean Power 2030: Action Plan (December 2024)

- 3.7. Following the issue of the revised NPPF in December 2024, the Government also released the Clean Power 2030 Action Plan: A new era of clean electricity.
- 3.8. The Action Plan highlights that achieving clean power is now a broader goal and key to growing the economy and improving national security and standards of living. The document identifies urgency of enacting policy by “**Sprinting to clean, homegrown energy**”, placing delivering clean power by 2030 at the heart of one of the Prime Minister’s five missions and the Plan for Change.
- 3.9. The Action Plan outlines three major challenges as being “the need for a secure and affordable energy supply, the creation of essential new energy industries, supported by skilled workers in their thousands, the need to reduce greenhouse gas emissions and limit our contribution to the damaging effects of climate change.” There is a clear link made between the steps to address energy security and climate change and the potential economic benefits from employment and investment in the energy industry, assisting the national plan for growth. The document (at page 20) refers to the Clean Power 2030 action plan “Playing a key part in supporting hundreds of thousands of jobs, as part of the wider transition to net zero”.
- 3.10. The Government have indicated that a programme of investment worth around £40 billion per year for the next 6 years is on the horizon, and battery storage plays a crucial role in meeting the growth of electricity demand and maintaining a secure energy supply.
- 3.11. The Government have specifically stated their ambitious target of 23–27 GW of operational battery capacity before 2030 within the Action Plan. It is clear from this document that the Government acknowledges the importance of battery storage schemes such as the Proposed Development, and they are going to be increasingly more crucial for meeting national and international targets to reach net-zero.
- 3.12. In terms of the need to act immediately and take the opportunity for renewable energy where grid capacity is present, the Action plan states at page 50 “**There is particular urgency to accelerate the planning process across Great Britain for energy infrastructure since we do not have long for many clean power projects to begin construction if they are to be operational for 2030**”. In relation to existing network constraints and steps to deliver the decarbonised power system by 2030, the Action Plan states (at page 63) “**Wherever renewables can connect to the distribution network, this should be encouraged for reasons of speed and efficiency.**”

#### Climate Change Emergency

- 3.13. It is acknowledged that Basildon Council is now fully committed to developing an ongoing programme of greenhouse gas reduction measures, with an ambitious target to deliver zero carbon emissions across the borough by 2030, and net zero by 2050.

## 4. Proposed Development

4.1. The proposed development is a battery energy storage system (BESS) and associated infrastructure with a grid agreement of 150MW of export capacity. The proposed BESS will be able to absorb, store, and release energy from the electricity network; no electricity is generated on site. The system can supply energy to the network during times of peak demand or deliver frequency response services, alongside other services. The site layout is detailed on the enclosed Infrastructure Layout Sheets 1-3 (Drawing Number 05560-RES-LAY-DR-PT-001 Rev 3).

4.2. The site boundary for the application allows for all development associated with the proposed development, including connection to the grid and landscaping features.

4.3. The description of development is as follows:

**“Installation of an energy storage facility including battery enclosures, power conversion units, transformers, substations, grid connection infrastructure, vehicular access and associated works.”**

4.4. The development would consist of modified ISO-style shipping enclosures set on concrete foundations, with typical dimensions of 6.1m long, 2.4m wide and 2.9m high. Heating Ventilation and Air Conditioning (HVAC) units are located at each end of each enclosure. Other equipment required to support the development may include:

- Power Conversion Systems and Transformers (8.1m x 2.4m x 2.4m)
- BESS Substation Building (10m x 5m x 4.5m)
- DNO Substation Building (15m x 10m x 3.6m)
- Auxiliary Transformer (3.1m x 2.5m x 2.1m)
- Harmonic Filter (6.0m x 3.0m x 2.7m)
- Pre-Insertion Resistor (3.3m x 2.7m x 2.7m)
- Capacitor Bank (6.4m x 2.8m x 2.6m)
- LV Feeder Pillar and Aggregation Panel (2.3m x 1.1m x 2m)
- LV Switchgear Room (7m x 3.5m x 3m)
- Spare Container (12.2m x 2.4m x 2.9m)
- Security (incl provision of 4m CCTV cameras [only with coverage of the site area. Not externally facing])
- Security Fencing (up to 3m high)
- Acoustic Fencing (up to 4m high)

- 4.5. Access to the site will be obtained from the A1245 slip road to the A127 via the existing access which is to be modified and retained.

#### **Point of Connection**

- 4.6. A grid application for Fairgreen BESS was obtained in July 2024 following discussions with the Distribution Network Operator (DNO). The development will connect to the UKPN Distribution Network at the Rayleigh Main Substation via a 132kV OHL Tee-in to Tower and an approximately 1.5km interconnection from the Project Substation. The Grid connection and interconnection lies outside of this planning application.
- 4.7. , Transmission and distribution of electrical energy across longer distances naturally creates greater electricity losses in the system due to the increase of line impedance. Therefore, when designing new battery storage sites, extra effort must be taken to find land which is close to a suitable point of connection.

#### **Site Management**

- 4.8. Once operational, the facility will be predominantly unmanned with occasional maintenance and grounds keeping tasks being scheduled. Attending personnel will typically travel by car, van or light goods vehicle, to carry out regular inspections and routine maintenance. Parking for these visits will be accommodated on site.
- 4.9. It is possible that one or more medium or large components may require replacement during the operational life of the facility. The nature of the traffic associated with such works will be similar to that used in the construction phase of the project but will be present for a much shorter duration. Should the scale of the works be such that traffic management measures would be required to manage vehicle movements to and from the site, the necessary permissions shall be sought from the local authority in line with due process.

## 5. Planning Policy

### Legislative Background

- 5.1. This chapter summarises the planning policies and guidance relevant to the development proposed. Section 38(6) of the Planning and Compulsory Purchase Act 2004 requires that applications for planning permission must be determined in accordance with the adopted development plan unless material considerations indicate otherwise. The National Planning Policy Framework (the “Framework”) does not change the statutory status of the development plan as a starting point for decision making but states the importance of the existence of an up-to-date development plan.

### Local Policy Context

- 5.2. The current adopted Development Plan for Basildon Council comprises the Basildon District Local Plan Saved Policies (2007). The saved policies represent the local planning policies currently applied by the Council to inform the determination of planning applications in the Borough and enforce planning control. It is acknowledged that Basildon Council are in the process of preparing a new Local Plan for the period up to 2041. The new Local Plan is scheduled for adoption in winter 2026 but the Council have only recently carried out initial consultation (Regulation 18) meaning that the emerging Local Plan carries very little weight in the context of this proposal.
- 5.3. The adopted local planning policies applicable to this application are as follows:
- 5.4. Basildon District Local Plan Saved Policies September 2007:
- BAS GB1: The Definition of the Green Belt
  - BAS C1: Protected Areas – SSSI’s, SNIC’s & important wildlife habitats
  - BAS BE24: Crime Prevention

### National Planning Context

- 5.5. In June 2019, the UK became the first major economy to implement a legally binding net zero carbon emissions target by 2050. Decarbonising the power sector is integral to achieving this target and requires major investments into renewable technologies, which are supported by planning policy at both local and national levels.
- 5.6. The National Infrastructure Committee (NIC), official advisor to the Government on Infrastructure, has published a report (Net-Zero Opportunities for the Power Sector, March 2020) setting out the key infrastructure requirements needed to meet the UK’s 2050 net-zero target, including the amount of renewable energy development that would need to be deployed. The NIC recommends that in meeting these targets, the UK’s energy mix needs to be made up of around 90% renewables. The NIC recommends that across all scenarios, significant levels of solar, onshore wind and offshore wind will need to be deployed with between 129–237GW (gigawatts) of renewable energy capacity in operation by 2050.

- 5.7. Furthermore, the National Policy Statement for Renewable Energy Infrastructure (EN-3) acknowledges that electricity generation from renewable sources of energy is an essential element of the transition to net zero. Paragraph 2.9.26 of EN-3 states:

*“As the electricity grid sees increasing levels of generation from variable renewable generators such as offshore wind, onshore wind and solar power, there will be an increasing need for storage infrastructure to balance electricity supply and demand.”*

### **National Planning Policy Framework**

- 5.8. The National Planning Policy Framework (NPPF) (the “Framework”) was first published in 2012 and most recently revised in December 2024. The Framework sets out the UK Government’s planning policies for the planning system to ensure that it helps to achieve sustainable development, which Paragraph 7 cites to be the overall purpose of the planning system. The Framework forms a material consideration in the assessment of all planning applications. Paragraph 3 confirms the Framework should be read as a whole.
- 5.9. The NPPF states that the purpose of the planning system is to contribute to the achievement of sustainable development in its three dimensions; economic, social and environmental. Central to the NPPF is presumption in favour of sustainable development. For decision taking this means (paragraph 11):
- *approving development proposals that accord with an up-to-date development plan without delay; or*
  - where there are no relevant development plan policies, or the policies which are most important for determining the application are out-of-date, granting permission unless:
    - i. the application of policies in this Framework that protect areas or assets of particular importance provides a strong reason for refusing the development proposed; or
    - ii. any adverse impacts of doing so would significantly and demonstrably outweigh the benefits, when assessed against the policies in this Framework taken as a whole, having particular regard to key policies for directing development to sustainable locations, making effective use of land, securing well-designed places and providing affordable homes, individually or in combination.”
- 5.10. Paragraph 161 of the NPPF states that the planning system should support transition to a net zero by 2050. This involves taking full account of all climate impacts including overheating, water scarcity, storm and flood risks and coastal change, which should help to shape places in ways that contribute to radical reductions in greenhouse gas emissions, minimise vulnerability and improve resilience, encouraging the reuse of existing resources, including the conversion of existing buildings; and support renewable and low carbon energy and associated infrastructure.
- 5.11. Paragraph 164 of the NPPF states that new renewables development should be planned for in ways that:

- a) *avoid increased vulnerability to the range of impacts arising from climate change. When new development is brought forward in areas which are vulnerable, care should be taken to ensure that risks can be managed through suitable adaptation measures, including through incorporating green infrastructure and sustainable drainage systems; and*
- b) *can help to reduce greenhouse gas emissions, such as through its location, orientation and design. Any local requirements for the sustainability of buildings should reflect the Government's policy for national technical standards.*

5.12. Paragraph 166 outlines that when determining planning applications, local planning authorities should expect new development to:

- a) *comply with any development plan policies on local requirements for decentralised energy supply unless it can be demonstrated by the applicant, having regard to the type of development involved and its design, that this is not feasible or viable; and*
- b) *take account of landform, layout, building orientation, massing and landscaping to minimise energy consumption.*

5.13. Finally, Paragraph 168 states that, when determining planning applications for renewable and low carbon development, local planning authorities should:

- a) *not require applicants to demonstrate the overall need for renewable or low carbon energy, and give significant weight to the benefits associated with renewable and low carbon energy generation and the proposal's contribution to a net zero future;*
- b) *recognize that small-scale and community-led projects provide a valuable contribution to cutting greenhouse gas emissions;*
- c) *in the case of applications for the repowering and life-extension of existing renewable sites, give significant weight to the benefits of utilising an established site.*

5.14. In relation to Green Belt, the NPPF identifies the purposes of the Green Belt in Paragraph 144 and at 153 states that "Inappropriate development is, by definition, harmful to the Green Belt and should not be approved except in very special circumstances (VSC). Very special circumstances will not exist unless the potential harm to the Green Belt by reason of inappropriateness, and any other harm resulting from the proposal, is clearly outweighed by other considerations".

5.15. Paragraph 153 also states that substantial weight should be given to any harm to the Green Belt, including harm to its openness.

5.16. Paragraph 154 sets out the exceptions to inappropriate development in the Green Belt. Paragraph 155 also confirms other development which would not be inappropriate.

5.17. The proposed development does not fall into these exceptions and would be considered inappropriate development where VSC needs to be demonstrated.

5.18. In this regard, Paragraph 160 states:

*"When located in the Green Belt, elements of many renewable energy projects will comprise inappropriate development. In such cases developers will need to demonstrate very special circumstances if projects are to proceed. Such very special circumstances may include the wider environmental benefits associated with increased production of energy from renewable sources."*

Clean Power 2030:Action Plan (December 2024)

- 5.19. As detailed above, the Government have recently published their Clean Power 2030 Action Plan. It is noted that this document makes reference to a number of policy and guidance being outdated and needing to be brought up to speed with new policies.

## 6. Design and Access Statement

6.1. This section of the report seeks to demonstrate that the Applicant has fully considered the design and access issues as part of the comprehensive preparation of the scheme prior to the submission of the planning application. This section of the report covers the following matters:

- Use
- Amount
- Layout
- Scale
- Landscape
- Appearance; and
- Access

6.2. This section should be read in conjunction with the entire application submission in order to fully understand the development, its potential impacts and planning merits. The purpose of the proposed development is to support resiliency and sustainability objective at both the local and national level. The National Planning Policy Framework (NPPF), National Planning Practice Guidance (NPPG), and the saved policies of the Basildon Local Plan in principle support of the delivery of renewable energy infrastructure.

### Design

6.3. A considerable number of factors have contributed towards the design and layout of the proposed scheme. These are discussed against the various aspects of design highlighted within the former CABE's guidance document regarding the production of Design and Access Statements.

#### Layout

##### Scheme Evolution

6.4. A thorough constraints analysis was undertaken to inform the final scheme.

6.5. In proposing the general layout of the development, great consideration was given to the retention of the established perimeter planting of native hedgerows. This helps to ensure that the development is well contained both physically and visually. In addition, a number of other constraints were considered, and appropriate offsets applied where necessary. The constraints and their consideration as part of the design scheme are as follows:



Constraint		Consideration as Part of Design
1	Site Access	Access is to be taken from the existing agricultural access located on the A1245 slip road onto Southern Arterial Road A127. Construction vehicles will operate a one-way system leaving the site to the south onto the A1245, or the A130 or to the west onto the A127.
2	Trees and Hedgerows	A tree survey has been undertaken on the site and appropriate root protection zones have been accounted for within the scheme. Appropriate offsets have been given to hedgerow protection and ecological enhancements incorporated into the finalised scheme.
3	Surface Water Drainage	It is acknowledged that there are areas of the site susceptible to surface water flooding. All infrastructure has been located outside of these areas.
4	Utilities	It is acknowledged that there are a number of existing utilities within the site. Appropriate buffers have been applied to this infrastructure in the design and location of equipment within the site.
5	Noise	An Acoustic Impact Assessment has been undertaken, the result of which concluded that, in the context of the relevant assessment criteria (ie. BS 4142) any impact will be low, and can be considered 'present and not intrusive' in terms of government policy guidance.

#### Final Scheme

- 6.6. The final scheme as submitted is detailed on the Infrastructure Layout Sheets 1-3 (Drawing Number O5560-RES-LAY-DR-PT-001 Rev 3). The submitted plan outlines the positions of all infrastructure within the site and accompanying drawings set out their dimensions.
- 6.7. The battery storage enclosures and associated PCS and transformer units have been sited in close parallel rows to reduce the amount of cabling required between each unit and to condense the area required for the overall development. Space between the equipment on site and surrounding fence has also been left in order to provide sufficient space for a crane during construction and in case of repair and augmentation.

#### Scale

- 6.8. The scale of the development on site has been determined by the equipment necessary for efficient and viable energy storage. Further details of the individual components which make up the scheme, including their proposed size and scale are set out on the submitted plans. When viewed from nearby public vantage points, the scale of development will not be overbearing due to the enclosure of the development site and the proposed planting. This is detailed on the Screened Zone of Theoretical Visibility (SZTV) included within the Landscape and Visual Impact Assessment.

#### Biodiversity

- 6.9. The supporting Preliminary Ecological Appraisal Report outlines the biodiversity net gains that can be achieved on site. The delivered net gain is in excess of the required net gain of 10%. This equates to a 23.66% net gain in area habitats, a 11.39% net gain in hedgerow habitats and a 10.19% net gain in watercourse units as a result of the proposed development.

- 6.10. Appropriate offsets from existing features on site have been reflected within the design of the scheme. It is considered that necessary mitigation has been reflected in the scheme. Where necessary a Construction Environment Management Plan (CEMP) can be conditioned to any planning consent.

#### Landscape

- 6.11. A mitigation/enhancement plan has been submitted which takes account of the identifies areas of sensitivity. Additional screening in the form of infilled hedgerow and new native woodland planting which would mitigate any potential impacts further.
- 6.12. Further consideration of the landscape and visual effects are contained within the LVA.

#### Use

- 6.13. The proposal is for the installation of a Battery Energy Storage System (BESS) on land north of Rayleigh Spur Roundabout, Basildon. The description of development is:

*"Installation of an energy storage facility including battery enclosures, power conversion units, transformers, substations, grid connection infrastructure, vehicular access and associated works."*

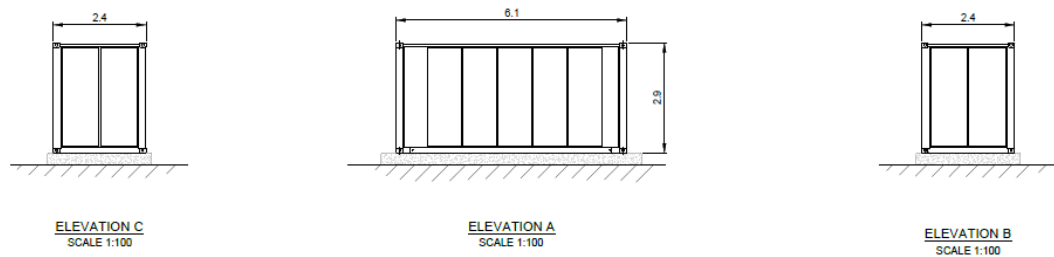
- 6.14. The site comprises approximately 18.27 hectares and is shown on the enclosed Site Location Plan (Drawing Reference 04875-RES-MAP-DR-XX-001 Rev 4). The proposed system utilises proven lithium-iron phosphate battery technology which RES has deployed at multiple projects and locations including England, Scotland, Ireland, the USA and Canada. The majority of the infrastructure detailed below will be housed on an area of hardstanding enclosed within a compound by appropriate fencing.
- 6.15. Due to the land requirement for such projects, these will generally need to be located outside of urban areas and within the countryside where the capacity to accommodate such development exists. At the end of the 40-year period all elements of the development will be removed and the site will be decommissioned and restored in accordance with a decommissioning strategy. Following decommissioning the land will not be considered 'brownfield' or previously developed land.

#### Amount and Fabrication

- 6.16. The extent of the proposed development has been refined and finalised having consideration of potential environmental effects. A thorough constraint analysis has been undertaken for the site and informed the final layout. The detailed plans for the site are submitted alongside this Planning, Design and Access Statement. The associated equipment on the site comprises:

#### Battery Containers

- 6.17. Approximately 168 battery storage enclosures would be installed to provide approximately 150MW of capacity. The battery enclosures will be one of two types depending on the final choice of supplier. The first type is shown on Drawing Reference O5560-RES-BAT-DR-PT-001 Rev 1 and is simply modified ISO-style shipping containers set on concrete foundations, with typical dimensions of 6.1m long, 2.4m wide and 2.9m high. Heating Ventilation & Air Conditioning (HVAC) units are located at each end of each container.



*Figure 6a – Battery Storage Enclosure*

- 6.18. The second type are modular battery enclosures, also set on concrete foundations, which are 'packed' together to form similar dimensions to that of the container mentioned above.

#### Substations

- 6.19. Five substation buildings could be required. these would comprise:
- 4no. BESS Substation (10m long x 5m wide x 4.5m high) (Drawing Reference O5560-RES-SUB-DR-PT-005 Rev 1)
  - 1no. DNO Substation (15m long x 10m wide x 3.6m high) (Drawing Reference O5560-RES-SUB-DR-PT-006 Rev 1)
- 6.20. These units would be set on a concrete foundation.
- 6.21. The substation compound is shown on drawing reference O5560-RES-DR-PT-009 Rev 1. The compound is 127m long, 62m wide with a maximum height of minor elements to a maximum height of 8m.

#### Power Conversion Systems (PCS) and Transformers

- 6.22. Approximately 42 PCS's and transformers would be required with typical dimensions of 8.1m long x 2.4m wide x 2.4m high (Drawing Reference O5560-RES-PCS-DR-PT-001 Rev 1). These units would be set on a block foundation.

#### Auxiliary Transformer

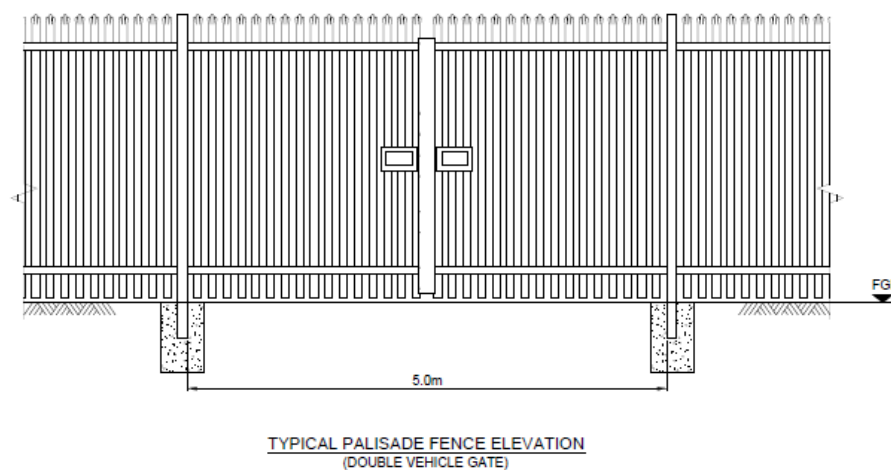
- 6.23. Two auxiliary transformers would be required with typical dimensions of 3.1m long x 2.5m wide x 2.1m high (Drawing Reference O5560-RES-SUB-DR-PT-001 Rev 1). These units would also be set on foundations.

#### Spares Container

- 6.24. Six additional ISO-style shipping containers will be located adjacent to the battery enclosures with typical dimensions of 12.2m long x 2.4m width x 2.9m high. It would likely be finished in a shade of white, grey or green (Drawing Reference 05560-RES-BLD-DR-OT-001 Rev 1).

#### Security

- 6.25. CCTV cameras will be installed on site. The CCTV cameras are mounted on galvanised steel posts (or similar) measuring up to approximately 4m high and set in concrete foundations. The cameras may have pan, tilt and zoom functions. They will be located adjacent to the security fencing around the edge of the energy storage compound (see drawing 00560-RES-SEC-DR-PT-003 Rev 1) and will be facing into the development only. They will not be facing out of the compound.
- 6.26. Security fencing will be installed around all edges of the energy storage compound. The fencing will either be palisade security fencing or weld mesh up to 4m in height (see drawings 05560-RES-SEC-DR-PT-001 Rev 1 Sheet 1 and 2).



*Figure 6b – Palisade Security Fencing*

- 6.27. Lighting is provided for occasional operational and maintenance use in the hours of darkness. These lights will be directed/shielded to prevent glare and light spill onto public highways and nearby woodland. The operation and maintenance activities shall normally be limited to the hours of daylight to minimise use of artificial lighting. Lighting is only used for operational and maintenance activities.

#### Grid Connection

- 6.28. A grid application for Fairgreen BESS was obtained in July 2024 following discussions with the Distribution Network Operator (DNO). The development will connect to the UKPN Distribution Network at the Rayleigh Main Substation via a 132kV OHL Tee-in to Tower and an approximately 1.5km interconnection from the Project Substation. The Grid connection and interconnection lies outside of this planning application.

### **Access**

- 6.29. Access to the site will be obtained from the A1245 slip road to the A127 via the existing access to be modified and retained. Construction vehicles will operate a one-way system leaving the site to the south onto the A1245, or the A130 or to the west onto the A127 subject to Highways agreement.

### **Other Matters**

#### **Fire Risk and Management**

- 6.30. It is proposed to use Lithium-ion phosphate battery technology which has already been deployed on multiple storage projects across the UK and in a wide range of other uses including electric vehicles to smartphones.
- 6.31. The fire risk associated with lithium iron phosphate battery technology known as 'Thermal Runaway' which is a self-perpetuating chain reaction in which excessive heat keeps creating more heat, potentially resulting in fire. There is, however, significant control measures in place to reduce risk considerably. These include:
- Battery technology must pass an industry test standard (U L9540A) which ensures there is no likelihood of explosion, fire would be contained within the affected battery rack and wall surfaces around the affected battery rack would not reach temperatures 60 degrees above existing temperature.
  - All RES-designed battery systems must also comply with a European Standard (IEC 62485-5:2020) containing tests to ensure no external fires are allowed outside of the affected battery rack.
  - Fire suppression systems fitted on each battery enclosure.
  - 24/7 monitoring from an offsite control centre.
  - Battery enclosures would have a fire rating of a minimum of 90 minutes
  - Any battery failures are repaired offsite with a new sealed module to replace the faulty module.
  - A fire management response plan will be prepared in conjunction with the battery supplier and the local Fire Service, if the scheme is consented.

### **Summary and Conclusions**

- 6.32. The Design and Access arrangements of the proposed development have been assessed. It is considered that due to the appearance of the scheme and the natural screening afforded to the site alongside the landscape and ecological enhancements proposed, the development proposals will not have an unacceptable adverse effect on the visual amenity value of the wider countryside.
- 6.33. The site and extent of development have been carefully selected. It is naturally screened and supplemented by additional planting which will result in only limited views of the site being possible.

- 6.34. Overall, the proposals are appropriate in terms of design and access and the development represents a necessary step towards meeting the UK's legally binding climate change and renewable energy obligations. It is therefore considered that the application before Basildon Council is to be supported, and Planning Permission granted.

## 7. Assessment and Development

- 7.1. This section of the Statement contains a detailed analysis of the proposal against the policies of the Development Plan, the NPPF and NPPG. These considerations have been derived from an understanding of the site and its surroundings and the policy analysis of the previous section.

### **General Principle of Development**

- 7.2. The application seeks permission for a Battery Energy Storage System (BESS) on land north of Rayleigh Spur Roundabout, Basildon.

### The National Need for the Proposal

- 7.3. There is a clear need for the development of renewable energy, which is driven by numerous government legislation at both a local and national level in the UK. These are discussed broadly within Section 2 of this Report. It considered that the defining documents that demonstrate a national need for renewable energy generation include, but are not limited to:

- Climate Change Act 2008;
- Climate Change Act (2050 target amendment) Order 2019
- Clean Growth Strategy published by the Department for Business, Energy and Industrial Strategy (BEIS) in October 2017
- UK Parliament declaration of an Environmental and Climate Change Emergency in May 2019
- Energy White Paper: Powering our Net Zero Future published in December 2020
- UK Government press release of acceleration of carbon reduction to 2035, dated April 2021
- 'Achieving Net Zero' published by the National Audit Office in December 2020
- Net Zero Strategy: Build Back Greener, dated October 2021
- British Energy Security Strategy, dated 7 April 2022
- The latest version of the 'Digest' of United Kingdom Energy Statistics, July 2022
- 'Powering up Britain', dated March 2023

### Social, Economic and Local Community Benefits

- 7.4. RES seeks to be a power for good in the communities that neighbour its projects by working openly and constructively to ensure meaningful local benefits. The proposed development would generate social, economic and local community benefits, these include but are not limited to:

- Increased renewable energy generation.
- Reduction in carbon emissions has a consequential positive effect upon public health, via the reduction in greenhouse gases and associated improvements to air quality.
- Economic benefits associated with investment and support of jobs during the construction and decommissioning phase of development. RES encourage contractors to source construction materials locally and to use local transport and plant hire companies where possible, in addition to local services and amenities.
- Appropriate biodiversity and landscape enhancements via increased boundary planting and species-rich grassland.

7.5. The above outcomes associated with the scheme progressing, and associated Local Plan support for renewable energy generation, are considered to cumulatively represent very substantial benefits and as such are material consideration which weigh greatly in favour of planning permission being granted.

7.6. It is considered that the general principle of the development is acceptable. The proposed development provides a real opportunity to make a meaningful contribution to the UK's renewable energy and climate change target as well as providing opportunities to enhance local economic development. The site is sustainably located as it is considered to meet the requirements of national policy.

#### General Principle

7.7. As outlined in the National Planning Policy Framework (NPPF, Paragraph 161):

*'The planning system should support the transition to net zero by 2050 and take full account of all climate impacts including overheating, water scarcity, storm and flood risks and coastal change. It should help to: shape places in ways that contribute to radical reductions in greenhouse gas emissions, minimise vulnerability and improve resilience; encourage the reuse of existing resources, including the conversion of existing buildings; and support renewable and low carbon energy and associated infrastructure.' (my emphasis)*

7.8. Furthermore, Paragraph 168 outlines:

*'When determining planning applications for all forms of renewable and low carbon energy developments and their associated infrastructure, local planning authorities:*

- a) Not require applicants to demonstrate the overall need for renewable or low carbon energy, and give significant weight to the benefits associated with renewable and low carbon energy generation and the proposal's contribution to a net zero future.'*

7.9. In the absence of up to date policies on renewable energy generation within the current adopted Local Plan, the principle of development will need to be assessed against the policies contained within the National Planning Policy Framework.



## Grey Belt

- 7.10. Following the publication of the updated National Planning Policy Framework (NPPF) in December 2024, the designation of land as 'grey belt' has been introduced. Grey Belt is defined at NPPF Annex 2 as:

*'For the purpose of plan-making and decision-making, 'grey belt' is defined as land in the Green Belt comprising previously developed land and/or any other land that, in either case, does not strongly contribute to any purposes (a), (b) or (d) in paragraph 143. 'Grey belt' excludes land where the application of the policies relating to the areas or assets in footnote 7 (other than Green Belt) would provide a strong reason for refusing or restricting development.'*

- 7.11. The policy exclusions within footnote 7 (other than Green Belt) relate to habitats sites (and those sites listed in paragraph 189) and/or designated as Sites of Special Scientific Interest; Local Green Space, a National Landscape, a National Park (or within the Broads Authority) or defined as Heritage Coast; irreplaceable habitats; designated heritage assets (and other heritage assets of archaeological interest referred to in footnote 75); and areas at risk of flooding or coastal change. None of these matters would provide a strong reason for refusal, therefore it is considered that footnote 7 matters do not negate consideration of the site as Grey Belt.
- 7.12. With respect to the contribution of the site to the purposes of the Green Belt, the following points are relevant:
- (a) **Unrestricted sprawl** – The development site lies outside of any large built up area, and would not result in the sprawling of an existing built up area. The development therefore complies with this purpose.
  - (b) **Merging of neighbouring towns** – The development scheme does not adjoin any of neighbouring towns and it will not result in the merging of neighbouring towns. The development therefore complies with this purpose.
  - (c) **To assist in safeguarding the countryside from encroachment** – It is acknowledged that the development will result in a degree of encroachment. Within the context of Basildon Borough Council, the 17.9ha development proposal represents only 0.26% of the approximately 6,950 hectares of Green Belt that covers the Basildon Borough<sup>1</sup>. It is also relevant that the site is naturally landscaped from and annexed off by the heavily trafficked roundabout. Furthermore, the temporary nature of the proposal means that any encroachment into the Green Belt arising would not be permanent.
  - (d) **Preserve the setting and special character of historic towns** – The development does not offend either the setting or special character of a 'historic town' and therefore complies with this requirement and does not harm this purpose.
  - (e) **Encourage the recycling of derelict and other urban land** – Due to the large scale and specific grid connection requirements of the development, there are no derelict or other

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<sup>1</sup> [https://www.basildon.gov.uk/media/12047/Basildon-Green-Belt-Study-Final-Report-2023/pdf/Basildon\\_Green\\_Belt\\_Study\\_Final\\_Report.pdf?m=1724236070813](https://www.basildon.gov.uk/media/12047/Basildon-Green-Belt-Study-Final-Report-2023/pdf/Basildon_Green_Belt_Study_Final_Report.pdf?m=1724236070813)

urban land sites available. This is also demonstrated within the submitted Alternative Sites Assessment. Therefore, there is no conflict with this purpose.

- 7.13. In light of the site not contributing strongly to any of purposes (a), (b) or (d) in paragraph 143 of the NPPF and the factors in footnote 7 not providing strong reason for refusal, it is concluded that the site falls within the definition of Grey Belt.
- 7.14. Paragraph 155 of the NPPF outlines that development of homes, commercial and other development in the Green Belt should also not be regarded as inappropriate where all of the following apply:
- a) *The development would utilise grey belt land and would not fundamentally undermine the purposes (taken together) of the remaining Green Belt across the area of the plan;*
  - b) *There is a demonstrable unmet need for the type of development proposed;*
  - c) *The development would be in a sustainable location, with particular reference to paragraphs 110 and 115 of the Framework; and*
  - d) *Where applicable the development proposed meets the ‘Golden Rules’ requirements set out in paragraphs 156–157.*
- 7.15. With respect to part (a) of paragraph 155, it is clear that the development can be considered to utilise grey belt land. This criterion requires that the development would not fundamentally undermine, the purposes, when taken together, of the remaining Green Belt across the area of the plan. As noted above the site only impinges on purpose (c) encroachment, the effect of encroachment is restricted to the immediate site and the degree of temporary encroachment is negligible in terms of the extent of wider green belt. As the proposal is not considered to conflict with the remaining 4 purposes even at the site level, the wider effect on the remaining green belt and its purposes is also acceptable. The site does not make a strong contribution to the purposes and the wider function of the Green Belt remains, with the purposes not fundamentally undermined.
- 7.16. When considering criterion (b) of paragraph 155, and the unmet need for the type of development, whilst it is not required that the need for renewable energy much be demonstrated it is evident from recent national publications that there is a clear direction of travel towards a greater reliance on renewable energy generation. As discussed within the submitted Planning Statement, following the issue of the revised NPPF in December 2024, the Government also released the Clean Power 2030 Action Plan: A new era of clean electricity. The Government have specifically stated their ambitious target of 23–27GW of battery capacity before 2030 within the Action Plan. It is clear from this document that the Government acknowledges the importance of battery storage schemes such as the Proposal Development, and they are going to be increasingly more crucial for meeting national and international targets to reach net-zero. It is therefore evident from recent national publications that there is a clear direction of travel towards a greater reliance on renewable energy generation. The NPPF at Paragraph 168 (a) confirms that LPAs should:
- “not require applicants to demonstrate the overall need for renewable or low carbon energy, and give significant weight to the benefits associated with renewable and low carbon energy generation and the proposal’s contribution to a net zero future”*

7.17. With regards to part (c) of paragraph 155, transport sustainability, there are no objections from statutory consultees; accordingly the Council accepts that the proposal is satisfactory in this regard. Paragraph 110 of the NPPF states that:

*'The planning system should actively manage patterns of growth in support of these objectives. Significant development should be focused on locations which are or can be made sustainable, through limiting the need to travel and offering a genuine choice of transport modes. This can help to reduce congestion and emissions, and improve air quality and public health. However, opportunities to maximise sustainable transport solutions will vary between urban and rural areas, and this should be taken into account in both plan-making and decision-making.'*

7.18. The site itself once operational will not generate trips, with a smaller number of journeys to the site for maintenance purposes only. Therefore, the effects of the proposal on reducing congestion and emissions and improving air quality and public health as a result of traffic movements are likely to be very limited. With regards to Paragraph 115 of the Framework, this states:

*"In assessing sites that may be allocated for development in plans, or specific applications for development, it should be ensured that:*

- a) sustainable transport modes are prioritised taking account of the vision for the site, the type of development and its location;*
- b) safe and suitable access to the site can be achieved for all users;*
- c) the design of streets, parking areas, other transport elements and the content of associated standards reflects current national guidance, including the National Design Guide and the National Model Design Code; and*
- d) any significant impacts from the development on the transport network (in terms of capacity and congestion), or on highway safety, can be cost effectively mitigated to an acceptable degree through a vision-led approach."*

7.19. It is considered in regard to paragraph 115 sub-paragraph (a) that the sustainable transport options have been prioritised, taking account of the nature of the proposal and its location.

7.20. Finally, the Golden Rules are applicable more broadly to residential development and paragraph 155 sub-paragraph (d) is therefore not applicable to this development.

7.21. Noting the definition of Grey Belt, it is considered that the site meets the definition and in accordance with Paragraph 155 the proposal would not constitute inappropriate development and does not require demonstration of Very Special Circumstances as demonstrated in the recent Baird Decision at Great Batt, Walsall (Appeal Reference APP/V4630/W/24/3347424) and the Thomas Decision at Carrington, Greater Manchester (APP/Q4245/W/24/3354822).

7.22. Nonetheless, in the event that it is considered that the very special circumstances balance is required, this has been demonstrated in previous submissions. The proposal does not affect 4 of the 5 purposes of the green belt and the effect on purpose (c) encroachment is

limited to a very small proportion of the overall green belt and will be temporary. The harm to openness and other harm, including landscape harm is also temporary, limited, highly localised and will reduce over time as landscaping mitigation matures. Whilst noting that substantial weight should be given to Green Belt harm through inappropriateness or any other harm, the limited harm has been considered against the substantial benefits of the scheme. These benefits can be listed as, but not limited to:

- Battery storage facilities are essential infrastructure to support the UK's climate change targets, in maintaining and balancing a continuous supply of energy generated from renewable sources. This flexibility in approach adds resilience to the energy supply and allows the storage of energy until required, creating a more efficient and reliable energy system.
- Economic benefits associated with investment and support for on-site employment during the construction period and with associated management and maintenance of the scheme.
- Appropriate biodiversity and landscape enhancement via increased boundary planting and species-rich grassland resulting in a net gain in biodiversity across the site. This equates to a 23.66% net gain in area habitats and a 11.39% net gain in hedgerow habitats and a 10.19% net gain in watercourse units as a result of the proposed development.

7.23. Notwithstanding that in light of the revised NPPF the site should be considered as Grey Belt and the proposal is therefore not inappropriate development, in the event that it is deemed that very special circumstances are required to be shown, the conclusion of the applicant's planning statement holds; the harms to the green belt and other harms are clearly outweighed by the benefits of the proposal and very special circumstances are demonstrated.

### **Green Belt**

7.24. The proposed development site is located within the designated London Area Green Belt as defined by the policies of the Local Plan.

7.25. Paragraph 153 of the NPPF, relating to development proposals affecting the Green Belt outlines that inappropriate development is, by definition, harmful to the Green Belt and should not be approved except in very special circumstances.

7.26. Paragraph 154 and 155 provides exceptions for development in the Green Belt and which this proposal does not fall in to. Therefore, the development of an energy storage project in the Green Belt would represent inappropriate development when assessed against planning policy.

7.27. With regards to renewable energy development, paragraph 160 states:

*"When located in the Green Belt, elements of many renewable energy projects will comprise inappropriate development. In such cases developers will need to demonstrate very special circumstances if projects are to proceed. Such very special circumstances may include the wider environmental benefits associated with increased production of energy from renewable sources."*

- 7.28. Paragraph 168 part A states that *“when determining planning applications for all forms of renewable and low carbon energy developments and their associated infrastructure, local planning authorities should not require applicants to demonstrate the overall need for renewable or low carbon energy and give significant weight to the benefits associated with renewable and low carbon energy generation and the proposal’s contribution to a net zero future.”*
- 7.29. This clearly outlines that the provision of renewable energy development can be considered as very special circumstances in the determination of an application. The only matter left to assess is then whether the benefits of the development significantly outweigh the impacts on the openness of the Green Belt.
- 7.30. Paragraph 143 of the NPPF identifies that the five main principles of the Green Belt are as follows:
- a) To check the unrestricted sprawl of large built-up areas;
  - b) To prevent neighbouring towns merging into one another;
  - c) To assist in safeguarding the countryside from encroachment;
  - d) To preserve the setting and special character of historic towns; and
  - e) To assist in urban regeneration, by encouraging the recycling of derelict and other urban land
- 7.31. A number of aspects of the proposed development as outlined in the application will assist in achieving these benefits, including additional landscaping and planting.
- 7.32. The siting and scale of the proposed development would not significantly impact the openness and permanence of the Green Belt and we consider that it would not impact the purposes for inclusion within the Green Belt which are considered below.
- 7.33. The development does not contribute to urban sprawl (purpose a), nor does it assist in merging towns (purpose b) as it is not an urban form of development and is commonplace within rural areas due to size and development constraints on brownfield land. The proposal does not form an urban feature. The preservation of the setting and special character of historic towns (purpose d) is not relevant to this development. Finally, with respect to purpose (e) there are no derelict urban land sites available, and it is not considered that the proposal is in conflict with this objective. As such, it is considered that the proposal conflicts only with purpose (c). It is however demonstrated within the wider submission that the scheme would be physically limited to the site itself and it would result only in localised effects on landscape features, character, and visual amenity. Within the context of Basildon Borough Council, the 17.9ha development proposal represents only 0.26% of the approximately 6,950 hectares of Green Belt that covers the Basildon Borough<sup>2</sup>. It is also relevant that the temporary nature of the proposal means that any encroachment into the Green Belt arising would not be permanent.

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<sup>2</sup> [https://www.basildon.gov.uk/media/12047/Basildon-Green-Belt-Study-Final-Report-2023/pdf/Basildon\\_Green\\_Belt\\_Study\\_Final\\_Report.pdf?m=1724236070813](https://www.basildon.gov.uk/media/12047/Basildon-Green-Belt-Study-Final-Report-2023/pdf/Basildon_Green_Belt_Study_Final_Report.pdf?m=1724236070813)

- 7.34. The design enhances the characteristics of the landscape character through significant levels of new native tree and hedgerow planting. The delivered net gain is in excess of the required net gain of 10%. This equates to a 23.66% net gain in area habitats, a 11.39% net gain in hedgerow habitats and a 10.19% net gain in watercourse units as a result of the proposed development.
- 7.35. As detailed within the submitted Landscape and Visual Assessment, the total extent of the landscape and visual effects would be localised and limited in nature.
- 7.36. The above clarifies that the proposal does not relate or impact the five purposes of the Green Belt thereby the impact of the development on the Green Belt designation is to be limited.

#### Very Special Circumstances

- 7.37. Paragraph 153 of the NPPF stipulates:
- 'When considering any planning application, local planning authorities should ensure that substantial weight is given to any harm to the Green Belt, including harm to its openness. Inappropriate development is, by definition, harmful to the Green Belt and should not be approved except in very special circumstances. 'Very special circumstances' will not exist unless the potential harm to the Green Belt by reason of inappropriateness, and any other harm resulting from the proposal, is clearly outweighed by other considerations.'*
- 7.38. As outlined above, the proposal does not impact on four of the five principles of the Green Belt (those being a, b, d and e) and only has the potential to impact on purpose (c), and the impact on openness is limited. Furthermore, the development is of temporary nature as confirmed in the Renewable Energy PPG. The application is supported by a Landscape and Visual Impact Assessment (LVA) that concludes that it is considered with regard to the sensitive design of proposed development and the additional landscape mitigation proposed that the actual perceivable extent of any harm to the Green Belt is relatively limited, especially in future years as the mitigation develops. As such, the proposal would not result in significant adverse impacts to the Green Belt. The benefits of the renewable energy output in satisfying local, national and international renewable energy targets would therefore significantly outweigh the impact on the Green Belt and would satisfy the 'Very Special Circumstances' Test. This is considered in further detail below.
- 7.39. As outlined, there is a need for this type of development as promoted through a number of international, national and local targets for renewable energy across all areas of the country. Paragraph 168 of the NPPF outlines that local authorities should not require the applicant to demonstrate the need for renewable energy. Chapter 14 of the NPPF clearly substantiates the importance of renewable energy developments across the country and suitably supports the principle of development for these technologies.
- 7.40. It is considered that this shows a clear direction of travel at a national level in support of renewable energy generation in England.
- 7.41. The use of battery storage to support renewable energy development has been discussed in recent case law. A recent Green Belt example of this being the Lowlands Farm Appeal in Halesowen (Appeal Reference APP/C4615/W/24/3341383) in which the Inspector recognised that electricity storage has a key role to play in achieving net zero and providing flexibility to the energy system. As a result, significant weight was afforded to the benefits of energy security, flexibility and contributing to achieving net zero. Additionally, the Inspector also had



regard to the paragraph 4.1.7 of EN-1 which states that it is likely that the need for critical national policy projects will outweigh the residual effects in all but the most exceptional cases. In this case therefore, it was considered that the material considerations and benefits demonstrated as part of the scheme would outweigh the harms to the Green Belt and therefore very special circumstances existing to justify the development.

- 7.42. Similarly, this approach was echoed by the Inspector at Werrington (Appeal Ref APP/B3438/W/23/3335922) who stated that ‘support for such energy storage development is clearly set out by the Government’s energy strategy and the Framework’ and the notion that the Government’s intention to move away from fossil fuels, ‘requires an increase in not only the infrastructure to supply such energy but also to provide storage facilities to even out energy supply to meet demand more flexibly and efficiently.’ When considering the Green Belt in this case, the Inspector concluded that:

*“Noting the substantial weight to be given to the Green Belt harm in terms of its impacts on openness and having carefully considered any other that has been identified, I find that the acceptability of the proposed scheme is finely balance. Due to the limited harm I have found in relation to the openness of the Green Belt, notwithstanding the substantial weight attributed to it, and considering the potential for other harm to be mitigated or addressed through the development or attached conditions, I find that, on balance, the benefits in favour of the proposal, when considered cumulatively and individually, would clearly outweigh the limited Green Belt harm and other identified harm.”*

- 7.43. In reviewing these appeal decisions, and those issued in relation to renewable energy development, there is a very clearly a consistent approach from the Secretary of State and appointed inspectors in determining appeal over the last two years that either ‘significant’ or ‘substantial’ weight should be given to this benefit.

- 7.44. The wider benefits of the proposed development have been outlined above along within the numerous supporting documents. These include, but are not limited to:

- Enabling the move to a bigger reliance on low carbon and renewable energy in achieving net zero for which there is a clear and urgent need as set out in the Local Plan, NPPF and National Policy Statements.
- A deliverable scheme with a viable and available grid connection at Rayleigh Main Substation. It has been demonstrated that there are no available sites to accommodate the development.
- Biodiversity Net Gains – Biodiversity Net gains are achieved across the development equating to a 23.66% net gain in area habitats, a 11.39% net gain in hedgerow habitats and a 10.19% net gain in watercourse units as a result of the proposed development
- Economic benefits arising from the construction employment and use of local materials where practicable.

- 7.45. In conclusion, the adverse impacts of the proposed development would be minimal and would not impact the 5 principles of the Green Belt. The weight to be afforded to the Green Belt allocation should only be limited. The significant benefits that come from the scheme amount to very special circumstances in overcoming the impact on the Green Belt. The site area associated with the development is marginal within the Green Belt. On balance, when considering the limited spatial nature of the site within the Green Belt against the benefits of

the scheme as outlined within this report, the harms caused are clearly outweighed by the benefits and therefore very special circumstances exist to justify the development.

- 7.46. Further support is provided by the NPPF for renewable energy development and rural diversification. The proposal leads to economic, social and environmental benefits and therefore accord with the core principles of sustainable development as outlined in Paragraph 8 of the NPPF.

#### Conclusion

- 7.47. The site is located within the London Area Green Belt. It is considered with regards to the sensitive design of the proposed development and the additional landscape mitigation proposed that the actual perceived extent of any harm to the Green Belt is limited, especially in future years as the landscape mitigation develops. This harm should therefore be weighed accordingly alongside the benefits of the proposals, as set out in the wider analysis of the 'very special circumstances'.
- 7.48. Current Case Law clearly outlines that the provision of renewable energy development can be considered as very special circumstances in the determination of an application. Overall, it is considered that substantial weight should be given to the benefits of the proposal in providing the necessary renewable energy infrastructure to support the significant generation of clean renewable electricity and carbon displacement. Based on the significant weight given by national policy to the delivery of this type of development, the mitigating measures to minimise the proposals impact on the landscape, the wider environmental benefits associated with renewable energy production and the benefits to biodiversity when considered cumulatively, clearly outweigh the limited Green Belt harm and any other harm identified. This amounts to a very special circumstance in line with the NPPF.

#### **Agricultural Land Classification**

- 7.49. The site in its current use comprises agricultural land. The NPPF outlines that planning policies and decisions should contribute to and enhance the natural and local environment by recognising the intrinsic character and beauty of the countryside, and the wider benefits from natural capital and ecosystem services, including the economic and other benefits of the best and most versatile agricultural land.
- 7.50. Furthermore, Footnote 65 states, *"Where significant development of agricultural land is demonstrated to be necessary, areas of poorer quality land should be preferred to those of a higher quality."*
- 7.51. An Agricultural Land Classification Survey has been undertaken for the site. This report confirmed the classification of the land as follows:



ALC Grade	Area (Ha)	Percentage
Grade 1	0.0	0.0%
Grade 2	0.0	0.0%
Subgrade 3a	9.5	94.1%
Subgrade 3b	0.0	0.0%
Grade 4	0.0	0.0%
Grade 5	0.0	0.0%
Non-Agricultural	0.6	5.9%
Total BMV	9.5	94.1%
Total Non-BMV	0.6	5.9%
<b>Total Site Area</b>	<b>10.1</b>	<b>100%</b>

*Figure 7.1 – Agricultural Land Classification*

- 7.52. It is therefore recognised that 94.1% of the land comprises what is considered to be best and most versatile (BMV) land.
- 7.53. It is accepted that the proposed development will reduce the arable production when compared to the current use. The proposed development will reduce intensive cultivation practices and move towards the establishment of biodiversity or pollinating area for the duration of the scheme.
- 7.54. The NPPF does not preclude the use of BMV land, instead it requires planning policies and decisions to ‘recognise’ the economic and other benefits of BMV land. It does not prohibit the loss of this land.
- 7.55. As such, whilst the proposed development will result in the temporary loss of agricultural land, when considered against the other significant benefits associated with the development, the planning balance makes the harm acceptable in planning terms.
- 7.56. It is therefore considered that the proposed development is in accordance with the relevant national policy.

#### **Landscape and Visual Amenity**

- 7.57. The site lies outside of any nationally designated landscape (National Parks, National Landscapes) and there are no local level landscape designations identified in the adopted Basildon Local Plan.
- 7.58. A Landscape and Visual Assessment (LVA) has been prepared to accompany this planning application and confirms that the scheme can be effectively integrated and assimilated into the surrounding landscape with the adverse effects highly localised to the immediate environs only.
- 7.59. This report concludes that whilst the development would introduce a new man-made feature into the landscape. It is acknowledged however, that no valuable landscape features would be lost. The influence upon the surroundings would be limited by surrounding vegetation.

7.60. Due to the enclosed nature of the site within the surrounding vegetation and embankments, the visibility of the proposed development is very limited in nature. Overall, the total extent of the landscape and visual effects would be localised and limited in nature.

7.61. It is therefore considered that the development accords with the relevant national and local policies.

#### Cumulative Effects

7.62. It is acknowledged that there are a number of energy developments within the study area, with varying status, these are detailed within the submitted Landscape and Visual Assessment. It is predicted that there would be some increased cumulative effects upon the landscape character and visual receptors as a result of the proposed development and the consented and in-planning similar development types. However, it is predicted that cumulative effects already identified would not increase to any notable degree, with effects influenced by the existing nearby or adjacent road and energy infrastructure.

#### **Ecology and Biodiversity**

7.63. The site is not identified as being located within a designated area for ecology. The NPPF identified that planning policy should identify and pursue opportunities for securing measurable gains for biodiversity.

7.64. The application is supported by an Ecological Impact Assessment. This report summarises the potential ecological constraints to the development. This report concludes that the scheme would have a significant positive impact on biodiversity.

7.65. The Ecological Impact Assessment shows the following enhancements including, but not limited to:

- Management and enhancement of existing boundary trees and hedgerow to enhance these landscape features;
- Creation of species-diverse, modified grassland (approx. 8.01 ha) across open field and field margins, managed to create species-diverse grassland combined with tussocky field margins.
- Creation of 0.19ha other neutral grassland.
- Creation of 0.15ha of mixed scrub.
- Creation of approx. 230m of native, species-rich hedgerow to the west of the substation compound.
- Retention of all remaining watercourse, with the creation of field margins/ cessation arable management enhancing ditches through reduced riparian encroachment.

7.66. The supporting ecological appraisal outlines the biodiversity net gains that can be achieved on site which are significantly more than the required net gains of 10%. The delivered net gain is in excess of the required net gain of 10%. This equates to a 23.66% net gain in area habitats, a 11.39% net gain in hedgerow habitats and a 10.19% net gain in watercourse units as a result of the proposed development.

- 7.67. Extended habitat surveys (UK Habitat Classification) were undertaken in February 2025 and updated in May 2025, with all habitats within the original redline categorised according to the UK Habitat Classification criteria. The main BESS Site comprises three arable fields separated by hedgerows and wet ditches, bounded by woodland. The Site is fully encompassed by a major A-road network and has established access tracks along the northern margin of the Site that connect with this road network.
- 7.68. Peripheral habitats within fields and adjacent to established and proposed access routes included cropland, woodland, bramble and mixed scrub, plus modified and other neutral grassland.
- 7.69. Two Special Protection Areas (SPAs) of importance for wintering birds are situated within 5km of Site (Benfleet and Southend Marshes SPA; Crouch and Roach Estuaries SPA). Scoping wintering bird surveys informed assessment of the Site as not being ecologically important for waterbirds associated with these SPAs. An additional ten nationally or locally important designated sites are present within 2km of the Site, but none are considered to be at risk of impact from the proposed development.
- 7.70. The Site was considered suitable to support a variety of wildlife, including badgers, bats, hazel dormice, amphibians (including great crested newts), reptiles and nesting birds. An invasive, non-native species under Schedule 9 of the Wildlife and Countryside Act, 1981, goat's rue *Ruta graveolens*, was recorded on Site but within the wider field margin (Field 6).
- 7.71. Proposals will result in the loss of up to approx. 40m of wet ditch to new culverts, to enable the creation of new access routes; along with approx. 60m hedgerow removal, although micro-siting may avoid/ reduce the extent of hedgerow loss.
- 7.72. As highlighted above, the proposed habitats include the creation of approx. 8.01 hectares of species-diverse, modified grassland in good condition; 0.19ha other neutral grassland; 0.15ha mixed scrub; and approximately 230m of native, species-rich.
- 7.73. A combination of bird boxes, bat boxes and shelter features for amphibians and reptiles have been recommended, contributing to the net positive impact upon biodiversity within the local area. The provision of locally appropriate ecological enhancements also ensures that the scheme is consistent with the requirements of the NPPF.
- 7.74. A detailed assessment on Biodiversity Net Gain is provided in a separate report concludes that over 10% net gain can be achieved for all habitat types.
- 7.75. The application is supported by an Outline Construction Environmental Management Plan (Ref 05560-10225043) that outlines the best practice methods for managing the environmental impacts, including mitigation and monitoring, during the construction of the proposed development. In particular the document describes how noise, vibration, dust and other airborne pollutants from construction works will be controlled and mitigated.
- 7.76. The applicant would be happy to accept an appropriately worded planning condition to secure the details of a finalised document.
- 7.77. It is therefore considered that the scheme is in accordance with Policy BAS C1 of the Basildon Local Plan in the delivery of ecological benefits and the conservation of on-site ecological features.

### **Heritage and Archaeology**

- 7.78. There are no designated assets (listed buildings, conservation areas, scheduled monuments, world heritage sites, registered battlefields, registered parks and gardens) located within the site.
- 7.79. The application is supported by a Heritage Statement and associated reports which provides information with regards to the significance of the historic environment and archaeological resource on the site. The report assesses the implication of the scheme on both archaeological potential and built heritage.
- 7.80. It is concluded that owing to the findings of the geophysical survey, the potential for significant archaeological remains across the prehistoric to Romano-British, medieval and post-medieval to modern dates are low.
- 7.81. Similarly, when considering built heritage, and owing to the site not including or being located within the vicinity of any designated heritage assets, it is concluded that the proposed development will result in no harm to designated heritage assets via an alteration to setting.

### **Highways and Transport**

- 7.82. During the construction phase, delivery of materials and access will be taken from the existing agricultural access located on the A1245 slip road onto Southern Arterial Road A127. Construction vehicles will operate a one-way system leaving the site to the south onto the A1245, or the A130 or to the west onto the A127, the detail of which may be refined subject to Highways discussion/agreement.. This route has been identified to minimise traffic disruption during construction by avoiding local villages and is supported by an access strategy in consultation with Essex County Council.
- 7.83. Whilst it is acknowledged that there will be an increase in highway movement during the construction period, it is not anticipated that outside of this time, the proposed development will accrue a high number of trips.
- 7.84. A Construction Traffic Management Plan and Transport Statement has been submitted in support of the application. This document sets out the framework for managing movement of traffic associated with the proposed development in order to mitigate against the effects of traffic travelling to and from the site during the construction period.

### **Flood Risk and Drainage**

- 7.85. The site is predominantly located within Flood Zone 1, an area identified as being at lowest risk of flooding with a section of land to the north of the site in Flood Zone 2 and Zone 3. It is also acknowledged that there is a drainage ditch intersecting the site and an area of surface water flooding on the northern boundary of the site
- 7.86. The submitted Flood Risk Assessment and Surface Water Drainage Strategy (Report Reference V4-IN\_P24-3044) provided considers the risk of flooding from all sources and the necessary details of the proposed drainage strategy. This report concludes that the proposed development would mitigate the increased surface water runoff to that of greenfield rates, which would prevent the flood risk from increasing as a result of the proposed development.

- 7.87. The application is also supported by a Flood Risk Sequential Test that demonstrates that a sequential approach has been undertaken when designing the site layout, meaning that all water sensitive infrastructure has been situated within Flood Zone 1. Less sensitive infrastructure has been situated in Flood Zones 2 and 3 where necessary. It is also demonstrated why other sites within the search radius are not sequentially preferable when compared to the application site.

### **Noise**

- 7.88. The application is supported by an Acoustic Impact Assessment (Report Reference O5560-9764571). This assessment has been prepared in accordance with BS 4142:2014+A1:2019.
- 7.89. There is likely to be some temporary noise during the construction phase of the development, largely associated with site activities and vehicle movements, however, this noise can be controlled to a negligible level through a Construction Environmental Management Plan.
- 7.90. Operational noise and vibration generated by the proposal is also very limited. The main sources of sound within the proposed development are from the cooling fans for the inverters housed within the PCS units, air conditioning for the BESS and the transformers. However, these emit low-level sound and as such, no significant or adverse impacts regarding noise and vibration are expected as a result of this proposal.
- 7.91. This report concludes that the results show that noise levels resulting from the operation of the site in isolation and cumulatively will be low in the context of relevant assessment criteria and can be considered 'present and no intrusive; in terms of government policy and guidance provided within the NPSE and NPPG.

### **Other Matters**

#### Fire Safety

- 7.92. The application is supported by an Outline Fire Risk Management Plan (Report Ref O5560-9571670) that contains the key mitigation measures against which the risk of fire ignition and propagation within the site. The key principles of the NFCC Grid Scale Battery Energy Storage Planning Guidance for FRS, 2023 are addressed through the mitigations identified within this report.
- 7.93. Battery technology and associated understanding of fire risk is continually evolving within the industry. As such, this document sets out key principles and mitigation measures based on the current understanding of battery fire risk but does not include a detailed Fire Risk Management Plan. A detailed Fire Risk Management Plan would be developed during detailed design, following battery selection. It is anticipated that this will include a project specific fire risk appraisal, which will be used to verify and finalise the strategy presented in this document, and an emergency response plan, which will be developed through liaison with the local fire service.

#### Crime Prevention

- 7.94. Policy BAS BE24 of the Local Plan stipulates:

*'The Council will expect the design and layout of new development to include consideration of crime prevention. The Local Planning Authority will consult the Police in respect of relevant applications and made the best possible efforts to improve street lighting.'*

- 7.95. RES Ltd will be following the necessary national guidance to ensure the security of the future development site and the infrastructure located within the site's boundary.
- 7.96. The level of security provided by the proposed fencing is considered generally acceptable and need to be balanced with visual considerations. It is considered that if anything more substantial was to be installed this would not be acceptable visually.
- 7.97. The CCTV system proposed (as detailed on Drawing Reference 04875-RES-SEC-DR-PT-003 Rev 1) will be capable of recording clear images that will meet the standards as set out in the Home Office Publication 28/09 CCTV Operational Requirement Manual 2009 as well as the UK Police Requirement for Digital CCTV Systems 09/05. As such, it is considered that scheme meets the relevant national standards and can be maintained in a manner that will ensure the security of the scheme across the lifetime of the development.
- 7.98. The CCTV cameras will not face residential areas.

## 8. Planning Balance

8.1. To summarise, the above planning assessment has demonstrated the following:

- Notwithstanding the location within the Green Belt and in light of the demonstration of very special circumstances, this planning application is in broad compliance with the Development Plan and national planning policy and guidance. Policy compliance strongly supports planning permission being granted.
- The development and operation of the BESS would give rise to a wide range of social, environmental and economic benefits which amount to a very substantial weight in favour of planning permission being granted (against what are limited effects).
- The impacts associated with the development at this location are limited, the impacts are suitably mitigated, and the proposal is in compliance with relevant issue specific planning policies in the Development Plan, so do not weigh against the development.

8.2. Whilst it is accepted that the proposal will result in changes to the local environment, such as in terms of visual impact, those changes are not such that would constitute a breach of the policies contained within the Development Plan. This is also the case where any identified harm can be addressed by way of a planning condition, such as matters of landscaping, ecological mitigation and enhancement. This application, as summarised by the planning statement, has demonstrated accordance with policy and is consequently in accordance with guidance contained within the NPPF and NPPG.

8.3. Notwithstanding this accordance with the development, the change to the local environment could be perceived as being harmful, such as impacts upon the Green Belt. This statement has set out the benefits of the proposal and these are substantial in their weight (particularly in combatting climate change and meeting the ambitious targets for renewable energy production), so as to constitute very special circumstances. As such, those benefits can be regarded as further supporting the acceptability of the Proposed Development against the Development Plan or should a more pessimistic view be taken as being capable of outweighing any conflict with the Development Plan (which we do not consider there to be).

8.4. The benefits the scheme, can be listed as, but not limited to:

- Battery storage facilities are essential infrastructure to support the UK's climate change targets, in maintaining and balancing a continuous supply of energy generated from renewable sources. This flexibility approach adds resilience to energy supply and allows the storage of energy until required, creating a more efficient and reliable energy system.
- Economic benefits associated with investment and support for on-site employment during the construction period and with associated management and maintenance of the scheme.
- Appropriate biodiversity and landscape enhancement via increased boundary planting and species-rich grassland resulting in a net gain in biodiversity across the site.

8.5. In consideration of compliance with the Development Plan and other planning policy requirements, the significant benefits and limited adverse effects, resulting in very special

circumstances associated with the Proposed Development it is clear that this development is, on balance, acceptable in planning terms.

- 8.6. The Proposed Development has been shown to achieve the main objectives of sustainable development (environmental, social and economic) without causing undue detriment to any of those matters. The presumption in favour of sustainable development set out in the NPPF there applies here. As the NPPF directs, in such circumstances and where the application complies with the Development Plan, the application should be approved without delay.



## 9. Conclusion

- 9.1. This statement has been prepared by Pegasus Group on behalf of Renewable Energy Systems Ltd in support of the accompanying application for full planning permission for the proposed Battery Energy Storage System (BESS) and Associated Infrastructure.
- 9.2. The development supports the UK Government's intention to move to a low carbon economy, which represents a substantial benefit. The impacts of the proposal have been shown to be acceptable and, where necessary mitigation measures have been set out to reduce potential impacts of the proposed development.
- 9.3. National planning policy and guidance is a material consideration in the determination of this planning application. The proposal has been shown to be in compliance with the relevant Development Plan policies.
- 9.4. Accordingly, this proposal represents sustainable development, and as such this planning application should be approved without delay.

Town & Country Planning Act 1990 (as amended)  
Planning and Compulsory Purchase Act 2004

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