CULHAM STORAGE LIMITED

STATEMENT OF CASE

Appeal against the refusal of planning application P24/S1498/FUL:

The development of a Battery Energy Storage System (BESS), comprising a 500 megawatt (MW) battery storage facility with associated infrastructure, access and landscaping, with a connection into the Culham Jet National Grid substation

Land to the north of the Culham Campus Thame Lane near Clifton Hampden, OX14 3GY

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Appendices

1 Introduction

1.1.1 This Statement of Case is submitted in support of a planning appeal made on behalf Culham Storage Limited (the "**Appellant**"). A list of all Core Documents ("**CD**") referenced in this Statement of Case and that are relevant to this Appeal are provided separately and at Appendix A of the draft Statement of Common Ground ("**SoCG**").

1.1.2 This appeal is made under the provisions of Section 78 of The Town and Country Planning Act 1990 (as amended) against the refusal of planning permission sought by application reference P24/S1498/FUL by South Oxfordshire District Council ("**SODC**").

1.1.3 On 2 May 2024, the Appellant submitted a planning application seeking planning permission for the following **Proposed Development**[1]:

"The development of a Battery Energy Storage System (BESS), comprising a 500 megawatt (MW) battery storage facility with associated infrastructure, access and landscaping, with a connection into the Culham Jet National Grid substation."

1.1.4 The proposed scheme in the application comprised 296 sound insulated lithium ion battery units housed within standard sized shipping containers and 37 larger noise insulated inverter houses to accommodate the inverters and transformers ("the **Application Scheme**").

1.1.5 The application was refused under delegated powers on 8 August 2024, with the assessment set out in the Delegated Report ("**DR**"). The DR considered the responses from professional consultees and stakeholders in section 2, where objections are noted from the Parish Council's, Oxford County Council ("**OCC**") Highways and Archaeology and SODC Heritage. Representations were also made by other consultees, including Historic England (who did not object to the proposals).

1.1.6 Therefore, in this appeal the Appellant has included the information sought by consultees to respond to RFR5-RFR8 and refinements to the Application Scheme to respond to RFR1-4 (the "**Appeal Scheme**") described in Section 2.5. The Appeal Scheme is consistent with the description of development in the DN and seeks approval for the same Proposed Development but with minor refinements to the layout.

1.1.7 This document explains why the Appellant considers that permission should be granted for the Proposed Development, in accordance with the policies in the development plan and taking into account other material considerations. A draft

[1] The application was registered/validated on 9 May 2024

SoCG has also been prepared, which contains additional detail (all of which the Appellant believes to be uncontentious).

1.1.8 The Appellant reserves the right to submit further information in response to any comments made by SODC or others in relation to this Statement (including its Appendices), draft SoCG and any changes in circumstance.

2 Background

2.1 Appeal Site and Context

2.1.1 The Appeal Site measures c. 26.8 hectares and located on agricultural land adjacent to the Culham Campus (formally Culham Science Centre). Whilst the Appeal Site is located within the Green Belt, Culham Campus to the south and the adjacent land to the southeast and east have been removed from the Green Belt in the December 2020 South Oxfordshire Local Plan 2011-2035 (the "**Local Plan**"). These sites are allocated in the Local Plan for commercial and residential respectively.

2.1.2 Part of the Appeal Site in the north is located within the Grade I Nuneham Courtenay Registered Park and Garden (RPG).

2.1.3 Culham Campus is owned and managed by the United Kingdom Atomic Energy Authority (UKAEA). It is sited in South Oxfordshire and is renowned for being one of the most successful science locations in the UK. Along with other public and private sector organisations in the area, it partners with Science Vale UK to promote South Oxfordshire as a global hotspot for enterprise and innovation in science, high technology and the application of knowledge.

2.1.4 Scientists, engineers, researchers and entrepreneurs from diverse fields come together here to create a dynamic environment, encouraging knowledge exchange and collaboration. Driving progress, innovative thought in the pursuit of scientific breakthroughs.

2.1.5 Culham Storage has been designed in collaboration with UKAEA and National Grid.

2.1.6 Further details of the Appeal Site are provided in Section 2 of the draft SoCG.

2.2 Need

2.2.1 In June 2019, the UK Government committed to a legally binding target to achieve a 100% reduction in greenhouse gas emissions by 2050 compared with 1990 levels[2]. This is referred to as the 'net zero target'. Battery storage forms an important element of renewable energy infrastructure to ensure that the government's legally binding climate targets can be met.

2.2.2 To help achieve the net zero target, the Government committed to decarbonise the power system by 2035[3]. The Government identified a need for around 30 GW of total low carbon flexible capacity (including battery storage) in 2030, and 60 GW in 2050[4] to maintain energy security and cost-effectively integrate high levels of

[2] Climate Change Act 2008 (2050 Target Amendment) Order 2019 (CD3.1.1)
[3] Net Zero Strategy: Build Back Greener (October 2021) (CD3.3.18)
[4] The Department for Business Energy and Industrial Strategy, Smart Systems and Flexibility Plan 2021 (CD3.3.7) page 5

renewable generation. The National Energy System Operator (NESO) identifies in 2024 that there is currently 4.7GW of battery storage, with aims to provide 28GW by 2030 and 36GW by 2050 in the Holistic Transition and Electric Engagement scenarios[5].

2.2.3 In December 2024, the UK Government accepted independent advice from the NESO on the energy infrastructure required to deliver clean power by 2030[6].

2.2.4 It states that, based on NESO and the Department of Energy Security and Net Zero (DESNZ) battery storage growth scenario for 2020, it expects 23-27GW of battery storage to be needed by 2030 to support clean power, a very significant level of increase[7]. The Government expects the majority of this to come from grid-scale batteries with small-scale batteries also making a contribution.

2.2.5 It recognises that successful delivery will require rapid deployment of new clean energy capacity. The delivery of clean power is complemented by flexible capacity which includes battery storage.

2.2.6 It goes on to explain that there are, amongst other things, specific actions necessary for battery storage to deliver on its potential for supporting clean power. Improving the time it takes for grid-scale batteries to obtain grid connections and planning decisions are the most significant actions in order to deliver the huge increase in grid-scale battery capacity.

2.2.7 The Proposed Development would also provide Culham Campus and UKAEA (which is of global importance) with an enhanced connection to the UK National Grid that will give greater power security, resilience and stability. This will contribute significantly to one of the UK's goals for the Campus to continue to be a world leading fusion facility, driving growth and employment in the region.

2.3 Proposed Development

2.3.1 A full description of the Proposed Development is provided in Section 4 of the draft SoCG which accompanies the appeal. The details are variously set out as the '**Application Scheme'** and the '**Appeal Scheme'** depending on whether the proposed amendments to the layout are accepted by the Inspector.

2.3.2 The Appeal Scheme is unchanged from the Application scheme in terms of capacity (500MW). The batteries will be housed in sound insulated container units and larger noise insulated inverter houses, along with proposed landscaping and drainage infrastructure. Minor refinements were made to the layout in the Appeal Scheme to respond to consultation responses during the determination of the planning application that were not able to be submitted before a decision was issued. These are summarised in Section 2.5.

[5] NESO Future Energy Scenarios, July 2024, (CD3.6.1), page 119
[6] Clean Power 2030 Action Plan: A new era of clean electricity (December 2024) (CD3.3.1)
[7] Clean Power 2030 Action Plan: A new era of clean electricity (December 2024) (CD3.3.1) page 96

2.3.3 The Proposed Development benefits from an agreement with National Grid Electricity Transmission (NGET) to connect its BESS to Culham Jet substation from Q3 2027. This is in advance of 2030 and will help the Government meet their Clean Energy Mission and the NESO targets to achieve a decarbonised electricity system by 2035.

2.3.4 Key landscaping features include screening by new hedgerows around the battery compound, woodland planting along southern boundary of the RPG. Woodland planting proposed along the western boundary and to the north of the substation building. This planting will help to restore (as far as possible) a historic parkland feature in order to enhance the setting of the RPG.

2.3.5 An attenuation pond is proposed to the west of the battery compound between the railway line, with a wildlife pond to support enhanced biodiversity provided to the north of the battery compound.

2.3.6 The proposals also include new public access into the RPG and encouraging the use of the Public Rights of Way (PRoW) networks in the Green Belt.

2.3.7 The Proposed Development will have an estimated construction period of 12-18 months and will primarily utilise modular facilities assembled off-site and brought to the Site for installation. This reduces amount and duration of construction activity on site.

2.3.8 The operational life of the development is intended to be up to 40 years, with decommissioning estimated to take 12 months.

2.4 Further information and documents

2.4.1 Further details sought through consultation have been provided in relation to archaeology, biodiversity and drainage in the following documents:

- Archaeology –
    - Culham Battery Storage_Trial Trenching_Final Report_18 12 2024) (CD2.2.2); and
    - Heritage Impact Assessment (Updated December 2024) (CD2.2.3)
- Biodiversity[8] –
    - EBD_2513_Culham_BIA_v5: Ecology by Design (2024). Culham Battery Storage Biodiversity Net Gain Assessment (v5) (CD2.2.6);

[8] Note that both Biodiversity Net Gain Assessment (v5) and Ecological Impact Assessment (v7) deal with both Application Scheme and Appeal Scheme

- EBD_2513_Culham_EcIA_v7: Ecology by Design (2024). Culham Battery Storage Ecological Impact Assessment (v7) (CD2.2.7);
- Application Scheme statutory metric_v1.1 (CD2.2.4);
- Baseline and Proposed Conditions Sheets (CD2.2.5);

- Drainage – Flood Risk Assessment and Conceptual Drainage Strategy: HLEF85368 6 – Layout v6 December 2024 (CD2.2.8); and
- Draft Section 106 Planning Obligations Agreement (CD2.2.1).

2.5 Proposed Appeal Scheme

2.5.1 The Appellant has continued to review the scheme following the determination of the planning application informed by consultation responses. Potential refinements have been identified, principally to include the relocation of the connection tower from within the RPG and related works. In summary the changes comprise:

- The relocation of connection tower to the main battery storage main compound;
- Updates to landscaping proposals to extend the woodland planting further south along the western boundary and to remove the proposed scrubland and tree planting from around the previous connection tower;
- Reduction in car parking from 14 to 4 spaces;
- Associated repositioning and reduction of battery storage containers and invertors to 248 containers and 31 invertor buildings due to improved technology;
- Reduction in the number of water tanks from 3 to 2 but with the same total storage capacity; and
- Minor alterations to the fence location around the battery compound.

2.5.2 The Appeal Scheme refinements are shown on the following drawings:

- Block Plan (SL254_L_X_GA_1_Rev A) (CD2.3.17);
- Cross Sections (SL254_L_X_CS_1_Rev A) (CD2.3.16);
- Planting Plan Sheet 1 of 5 (515_PP_01_Rev A) (CD2.3.7);
- Planting Plan Sheet 2 of 5 (515_PP_02_Rev A) (CD2.3.8);
- Planting Plan Sheet 3 of 5 (515_PP_03_Rev A) (CD2.3.9);
- Planting Plan Sheet 4 of 5 (515_PP_04_Rev A) (CD2.3.10);

- Planting Plan Sheet 5 of 5 (515_PP_05_Rev A) (CD2.3.11); and
- Fire Water Tank (SD_12 Rev A) (CD2.3.15).

2.5.3 The Potential Scheme Amendments are also supported by the following reports:

- List of species to be used within the new landscape areas (515_LPSPEC_01_Rev A) (CD2.3.4);
- Landscape and Ecological Management Plan (515_Culham BESS LEMP_Rev A) (CD2.3.3);
- Figure _HO_01: 1932 Ordnance Survey map overlain on an extract of the Appeal Scheme Block Plan (CD2.3.13);
- 515_BPO_01 Culham BESS Application and Appeal plan overlay (CD2.3.5);
- 515_EE_01_Rev A Culham BESS Ecological Enhancements (CD2.3.6);
- Accurate Verified Representations Updated to Accord With The Appeal Scheme (CD2.3.12);
- Flood Risk Assessment and Conceptual Drainage Strategy: HLEF85368 6 – Layout v8 December 2024 (CD2.3.2);
- Biodiversity:
    - Appeal Scheme statutory metric_v1 (CD2.3.1).
- Supplementary Environmental Information Report (CD2.3.18).

2.5.4 The Appeal Scheme layout plan has been issued to SODC on 20th November 2024 ahead of submission of this Appeal.

2.5.5 The proposed changes will not lead to any additional adverse effects not previously identified nor considered by interested parties who have been involved in the application and seek to reduce effects in response to consultation responses.

2.5.6 The Appellant has considered the acceptability of these potential amendments in light of the Planning Inspectorate's Procedural Guide: Planning Appeals – England ('the Procedural Guide'). The Procedural Guide has been recently updated to reflect the latest guidance with regard to amending the proposed scheme once an appeal has been made. The judgment reached in the *Holborn Studios* case,[9] which is a refinement of the 'Wheatcroft principles', which set out that two tests will be considered. These are:

[9] Holborn Studios Ltd v The Council of the London Borough of Hackney (2018)

- Whether the proposed amendment involves a "substantial difference" or "fundamental change" to the application; and
- Whether, if accepted, the proposed amendment(s) would cause unlawful procedural unfairness to anyone involved in the appeal.

2.5.7 The Appellant considers that the Appeal Scheme amendments would not constitute a substantial difference or fundamental change to the application. The Description of Development initially applied for by the Appellant to SODC would not require changes to accommodate the amendments. The changes are considered to fall well within the scope of the 'substantive limitations' on powers to amend planning permissions that are referred to in the *Holborn Studios* case.

2.5.8 Regarding procedural fairness, these amendments are being put forward as part of the appeal submission as the Appeal Scheme. This means that landowners to whom notice is served pursuant to Articles 13 and 36 of The Town and Country Planning (Development Management Procedure) (England) Order 2015 will be made aware of Appeal Scheme amendments. Interested people will also be notified by the LPA of the appeal, inviting them to submit representations, through which any views and comments on the Appeal Scheme amendments can be made. Therefore, it is not considered that there is any procedural unfairness to anyone involved in the appeal through proposing these Appeal Scheme amendments. If, contrary to the Appellant's view, a further period of consultation is required, this will be undertaken prior to the inquiry.

2.5.9 The Appellant is therefore requesting that the Planning Inspectorate consider the acceptability of these amendments as part of this Appeal. Where the Planning Inspectorate does not consider such changes to be acceptable at this stage, then the Appellant confirms that the Proposed Development as originally set out in the Application Scheme can still be delivered.

2.6 Planning Application Process

SODC Decision

2.6.1 The application was refused under delegated powers on 8th August 2024, thirteen weeks from the validation date of 9th May 2024. The Decision Notice sets out the following eight reasons for refusal:

RFR1 – Green Belt

"The development is inappropriate development in the Green Belt that would be harmful to the spatial and visual openness of the Green Belt and would conflict with the purposes of the Green Belt. This site additionally provides an important Green Belt function in relation to strategic sites removed from the Green Belt for development. The application does not constitute very special circumstances as required by the National Planning Policy Framework to outweigh the substantial harm to the openness of the Green Belt. As such, the proposal is contrary to the NPPF, and Policies STRAT6 and DES9 of the South Oxfordshire Local Plan 2035."

RFR2 – Landscape Character

"The site proposed for battery storage provides a valuable transition between the registered parkland and the Culham Science site. The battery storage is large scale, would be industrial in appearance, and would introduce an urban industrial development into an important area of rural countryside. It would result in significant adverse effects on the landscape character and to views including those from public rights of way. The proposed mitigation is ineffective

in mitigating this harm and the proposal is contrary to the NPPF, and Policies ENV1, DES1 and DES2 of the South Oxfordshire Local Plan 2035, and Policy CUL5 of the Culham Neighbourhood Plan.

Further, this proposal, in addition to the development on allocated sites STRAT8 and STRAT9, will create an increased cumulative impact harmful to the landscape character of the area, contrary to Policies ENV1, DES1 and DES2 of the South Oxfordshire Local Plan 2035."

RFR3 – Heritage Impacts to RPG

"The proposed development of an industrial nature would encroach into the Nuneham Courtenay Grade I Registered Park and Garden (RPG), a highly significant C18 parkland landscape, which contains several listed buildings and structures. The development will result in significant adverse impacts to the designated heritage asset, and the setting of the RPG. The proposed landscape mitigation fails to respect the character of the RPG and its setting and would result in further harm. The harm to the heritage assets considerably outweighs the benefits of the proposed development and the proposal is therefore contrary to the NPPF and Policies ENV6 and ENV10 of the South Oxfordshire Local Plan 2035.

Further, this proposal, in addition to the development on allocated sites STRAT8 and STRAT9, will create an increased cumulative impact harmful to the setting of the designated Registered Park and Garden, contrary to Policies ENV6 and ENV10 of the South Oxfordshire Local Plan 2035, the NPPF."

RFR4 – Loss of BMV

"The loss of Best and Most Versatile land throughout the lifetime of the proposed development (40 years) has not been justified by compelling evidence in accordance with the written ministerial statement of 15 May 2024 concerning the use of agricultural land, which is reflected in policy DES7 of the South Oxfordshire Local Plan 2035 and the NPPF."

RFR5 – Insufficient Archaeological Information

"Insufficient information relating to the results of an archaeological trenched evaluation has been submitted to demonstrate that the proposed development would protect against harm to archaeological assets. As this information has not been provided, and the County Archaeologist has been unable to assess the impacts of the development, the development is contrary to Policy ENV9 of the South Oxfordshire Local Plan 2035."

RFR6 - Insufficient Drainage Information

"Insufficient information has been submitted to demonstrate that the proposed development would be served by an appropriate drainage strategy. As such, the proposal is contrary to Policies INF4, EP4 and STRAT4 of the South Oxfordshire Local Plan 2035."

RFR7 - Insufficient Biodiversity Information

"Insufficient information has been submitted to demonstrate that the proposed development would address Biodiversity Net Gain requirements. As such, the proposal is contrary to Policy ENV3 of the South Oxfordshire Local Plan 2035."

RFR8 - Insufficient Arboricultural Information

"There is insufficient and inconsistent information regarding Arboricultural matters and to adequately assess any harmful impact on trees. As such, the proposal is contrary to Policy ENV1 of the South Oxfordshire Local Plan."

2.7 Overview of Engagement with SODC and Others

Pre-Application

2.7.1 The Appellant undertook a pre-application consultation with SODC on 9th September 2022, with a response received on 13th September 2022 (CD1.5.1). The proposals evolved in response to the feedback to seek to reduce impacts to the RPG and look to provide landscape enhancements to minimise potential impacts.

2.7.2 An Environmental Impact Assessment (EIA) Scoping Request was made to SODC, with SODC's Scoping Opinion dated 30th January 2023 (ref: P22/S4551/SCO) confirming that an EIA would be required (CD1.2).

Post-Submission

2.7.3 The Appellant arranged a post-submission call with the SODC case officer on 18th June to discuss the application and statutory consultee responses (see agenda in CD1.5.2). The Appellant committed to provide responses to consultee comments in a single submission after all comments had been received, noting that at that time the Environment Agency (EA) had not responded.

2.7.4 SODC did not request an agreement to an extension of time and issued a decision at thirteen weeks from validation without any prior notification to allow the Appellant to provide responses.

2.7.5 Concerns were raised by Historic England who sought amendments to the connection tower and landscaping. Network Rail provided advice that drainage should be located at least 5m from the railway boundary.

2.7.6 OCC Transport objected seeking further justification for 14 car parking spaces – this has been reduced to 4 in the Appeal Scheme based on the low operational parking need.

2.7.7 SODC Conservation and Design raised concerns and sought considerable public benefits to outweigh impacts. Otherwise, further information was sought by OCC Archaeology, SODC Forestry, SODC Ecology and SODC Drainage.

2.7.8 Other objections were received from The Garden Trust relating to the RPG and the Campaign to Protect Rural England (South Oxfordshire and Public Rights of Way), three residents and the Parish Councils in relation to the Green Belt, landscape character and loss of BMV.

2.7.9 Full details of pre-application engagement and key correspondence during the determination of the application are provided in the draft SoCG.

3 Policy and legislative context

3.1.1 This section outlines the principal planning policy, supplementary guidance and material considerations to the Appellant's case and SODC's reasons for refusal. The draft SoCG provides a summary of other planning policies relevant to the appeal.

3.2 Legislation

3.2.1 Section 38(6) of the Planning and Compulsory Purchase Act 2004, read together with section 70(2) of the Town and Country Planning Act 1990, requires that applications be determined in accordance with the Development Plan unless material considerations indicate otherwise.

3.3 Development Plan

3.3.1 The relevant adopted Development Plan comprises:

- December 2020 South Oxfordshire Local Plan 2011-2035 (the "**Local Plan**") (CD3.4.1); and
- Culham Neighbourhood Plan (March 2023) ("the **Neighbourhood Plan**") (CD3.4.2).

3.3.2 Reference is also made to the National Planning Policy Framework ("**the NPPF**") published in December 2024 (CD3.2.1). The NPPF is a material planning consideration in the determination of planning applications.

3.4 Relevant Development Plan Policies and Guidance

3.4.1 As required by Article 35(1)(b) of the Town and Country Planning (Development Management Procedure) (England) Order 2015, the Decision Notice specifies all policies with which SODC allege conflict. A summary of the relevant parts of the Development Plan policies and material considerations referred to in the reasons for refusal are summarised below:

Green Belt – RFR1

- **Local Plan Policy STRAT6 (Green Belt)** – repeats the main considerations set out in the National Planning Policy Framework (NPPF) restricting development to those limited types which are deemed appropriate in the Green Belt, unless very special circumstances can be demonstrated.

- Considers that Strategic Allocations removed from the Green Belt should deliver compensatory improvements to the environmental quality and accessibility of the remaining Green Belt land, in relation to landscape, biodiversity or recreational needs and opportunities.

- On land removed from the Green Belt, new development is required to be carefully designed to minimise visual impact.

- **Local Plan Policy DES9 (Renewable and Low Carbon Energy)** – supports planning applications for renewable and low carbon energy generation, provided that they do not cause a significantly adverse effect to landscape, historic environment, openness of the Green Belt amongst others.

- **NPPF** – Section 13 of the NPPF, considers "*substantial weight*" should be given to any harm to the Green Belt, including harm to its openness (paragraph 153). New buildings are considered inappropriate in the Green Belt, subject to listed exceptions which do not include renewable energy generation or storage (paragraph 154). Paragraph 160 acknowledges that many elements of renewable energy projects will comprise inappropriate development where "*very special circumstances*" are required to justify development and may "*include the wider environmental benefits associated with increased production of energy from renewable sources."*

- Paragraph 153 clarifies that *"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.

- Furthermore, the NPPF states that the fundamental aim of the Green Belt is to prevent urban sprawl by keeping land permanently open, with the five purposes of the Green Belt set out paragraph 143.

- The NPPF makes multiple references to supporting renewable energy infrastructure proposals as follows:

    - Paragraph 161 states that the planning system should support the transition to net zero by 2050. 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 conversation of existing buildings; and support renewable and low carbon energy and associated infrastructure

    - When determining planning applications for all forms of renewable and low carbon energy development, 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 and the proposal's contribution to a net zero future*" (paragraph 168 a)).

Landscape Character and Details – RFR2 and RFR8

- **Local Plan Policy ENV1 (Landscape and Countryside)** – states that SODC's landscape, countryside and rural areas will be protected against harmful development. Development will only be permitted where it protects and, where

possible enhances, features that contribute to the nature and quality of SODC's landscapes, such as trees, hedgerows, habitats, topographical features and important views, amongst others.

- **Local Plan Policy DES1 (Delivering High Quality Development)** – considered all new development must be of a high quality design that respecting the existing landscape character.

- **Local Plan Policy DES2 (Enhancing Local Character)** – seeks that proposals should reflect the positive features that make up the character of the local area and should both physically and visually enhance and complement the surroundings and informed by contextual analysis. Where proposals that have the potential to impact upon a Conservation Area or the setting of a Conservation Area they should also take account of the relevant Conservation Character Appraisal.

- **Neighbourhood Plan Policy CUL5 (Design Code for Culham)** – supports proposals in Culham provided they have full regard to the essential design considerations and general design principles set out in the Culham Design Code attached as Appendix B.

- **Culham Design Code** – the DR in paragraph 8.9 considers the relevant part of the Culham Design Code to part OVS2.0.1. This considers that development should contribute to the maintenance and delivery of a high quality multi-functional network of Green and Blue Infrastructure to provide long-term benefits for people, places and nature, in ways that reinforce local character.

- **NPPF** – Regarding design paragraph 135 considers that developments are visually attractive as a result of good, layout and appropriate and effective landscaping as well as being sympathetic to local character and landscape setting.

- Decisions should contribute to and enhance the natural and local environment protecting and enhancing valued landscapes recognising the intrinsic character and beauty of the countryside (paragraph 187).

Heritage Impacts - RFR3

- **Local Plan Policy ENV6 (Historic Environment)** – considers that proposals for new development that may affect designated and non-designated heritage assets should take account of the desirability of sustaining and enhancing their significance and putting them to viable uses consistent with their conservation. These include Conservation Areas, RPG's and historic landscapes.

- New development should be sensitively designed and should not cause harm to the historic environment. Where proposals have an impact on heritage assets they will be supported where they conserve or enhance the significance of the asset, make a positive contribution to local character and make a positive contribution towards wider public benefits.

- **Local Plan Policy ENV10 (Historic Battlefields, Registered Parks and Gardens and Historic Landscapes)** – states that proposals should conserve or enhance the special historic interest of the heritage asset. Any harm or loss of significance of any heritage asset requires convincing justification, with substantial harm or total loss of Grade 1 or II" Registered Historic Parks and Gardens wholly exceptional.

- **NPPF** – Paragraph 202 stresses the importance of conserving heritage assets in a manner appropriate to their significance. When considering the impact of a proposed development on the significance of a designated heritage asset, great weight should be given to the asset's conservation (paragraph 212).

- Any harm to, or loss of, the significance of a designated heritage asset should require clear and convincing justification, and substantial harm to or loss of grade I and II* registered parks and gardens should be wholly exceptional (paragraph 213 (b)).

Loss of BMV – RFR4

- **Local Plan Policy DES7 (Efficient Use of Resources)** – requires new development to avoid the development of the best and most versatile agricultural land, unless it is demonstrated to be the most sustainable choice from reasonable alternatives, by first using areas of poorer quality land in preference to that of a higher quality.

- **NPPF** – paragraph 187 (b) states that decisions should contribute to and enhance the natural and local environment by recognising the economic and other benefits of the best and most versatile agricultural land.

Archaeology – RFR5

- **Local Plan Policy ENV9 (Archaeology and Scheduled Monuments)** –seeks to protect the site and setting of Scheduled Monuments or nationally important designated or undesignated archaeological remains. Requiring assessments of appropriate detail to determine whether the development site is known to, or is likely to, contain archaeological remains. Proposals must show the development proposals have had regard to any such remains.

Drainage – RFR6

- **Local Plan Policy INF4 (Water Resources)** – requires proposals to demonstrate that there is or will be adequate surface water capacity to serve the whole development.

- **Local Plan Policy EP4 (Flood Risk)** – requires all development to provide a Drainage Strategy and is expected to incorporate Sustainable Drainage Systems and ensure that run-off rates are attenuated to greenfield un-off rates. Higher rates would need to be justified, and the risks quantified. Sustainable

Drainage Systems should seek to enhance water quality and biodiversity in line with the Water Framework Directive.

- **Local Plan Policy STRAT4 (Strategic Development)** – expects each development to provide an integrated water management plan to include proposed foul and surface water drainage strategies.

- **NPPF –** paragraph 182 states that applications which could affect drainage on or around the site should incorporate sustainable drainage systems to control flow rates and reduce volume of runoff, and which are proportionate to the nature and scale of the proposals. It goes on to state that theses should provide multifunctional benefits wherever possible, through facilitating improvements in water quality and biodiversity as well as benefits for amenity.

Biodiversity – RFR7

- **Local Plan Policy ENV3 (Biodiversity)** – supports development that will conserve, restore and enhance biodiversity and encourages proposals to provide a net gain in biodiversity where possible.

Arboriculture – RFR8

- **Local Plan Policy ENV1 (Landscape and Countryside)** – states that development will only be permitted where it protects and, where possible enhances, features that contribute to the nature and quality of SODC's landscapes. In particular in part i) trees, hedgerows, habitats, topographical features and important views, amongst others.

3.5 Relevant Material Considerations

3.5.1 Summaries of the relevant considerations listed below are provided in **Appendix A**.

Legislation

- The Climate Change Act 2008 (as amended)

- Infrastructure Planning (Electricity Storage Facilities) Order 2020

- Five Year Review of the Energy Act 2013 (May 2022)

National Planning Policy

- National Planning Policy Framework (December 2024)

- National Planning Practice Guidance (NPPG) (March 2014 and updated thereafter)

- Overarching National Policy Statement for Energy (EN-1)

- National Policy Statement for Renewable Energy Infrastructure (EN-3)

National Energy Policy and related documents

- Clean Power 2030 Action Plan: A new era of clean electricity (December 2024)
- Secretary of State for Energy Security and Net Zero Statement (8 July 2024)
- Invest 2035: the UK's modern industrial strategy (14 October 2024)
- UK Battery Strategy (November 2023)
- National Infrastructure Assessment (October 2023)
- British Energy Security Strategy (April 2022)
- Transitioning to a net zero energy system: smart systems and flexibility plan 2021 (July 2021)
- Industrial Decarbonisation Strategy (March 2021)
- Energy White Paper. Powering our Net Zero Future (December 2020)
- The Committee on Climate Change: The Sixth Carbon Budget. The UK's Path to Net Zero (December 2020)
- National Infrastructure Strategy Fairer, Faster, Greener (November 2020)
- Progress in reducing emissions: 2023 Report to Parliament (June 2023)
- Net Zero – Opportunities for the power sector (March 2020)
- Committee on Climate Change Net Zero Publications (May 2019)
- Net Zero – The UK's Contribution to Stopping Global Warming (May 2019)
- Technical Annex: Integrating Variable Renewables (May 2019)
- National Infrastructure Commission's Smart Power Report (March 2016)

Local Evidence Base

- South Oxfordshire Local Green Belt Study (September 2015)
- Oxford Green Belt Study (October 2015)
- Green Belt Assessment of Strategic Sites in South Oxfordshire (December 2018)

- South Oxfordshire District Council's Green Belt Topic Paper (April 2020)

Local energy policy and related documents

- Oxfordshire Energy Strategy (OES) (November 2019)
- Oxfordshire Industrial Strategy (OIS)

Infrastructure operator related documents

- 2024 NESO FES (July 2024)
- National Grid ESO: The Electricity Ten Year Statement 2023
- National Grid ESO: Day in the Life 2035 Second Edition (October 2022)

Recent Appeal Decisions

3.5.2 An initial list of the appeals that may be referred to in evidence is provided in **Appendix B**.

4 The Appellant's Case

4.1 Introduction

4.1.1 The Appellant considers the energy and the other benefits of the Proposed Development clearly outweighs any harm caused by reason of definitional harm and any other harm such that Very Special Circumstances exist to justify the grant of planning permission. It considers that insufficient information has been provided by SODC in refusing the Proposed Development. In summary, the reasons for refusal raise the following issues:

- **RFR1: Inappropriate development in the Green Belt** – the circumstances put forward by the applicant do not amount to the very special circumstances to clearly outweigh substantial harm to the Green Belt.

- **RFR2: Harm to landscape character** – the proposals would urbanise an area of rural countryside and result significant adverse effects on landscape character and to views including those from public rights of way that are not effectively mitigated.

- **RFR3: Harm to the Grade I RPG** – the development will result in significant adverse impacts to the RPG and its setting, with further harm from the proposed landscape mitigation that fails to respect the character of the RPG. The harm to the heritage assets from the proposals and cumulatively with adjacent allocated sites considerably outweighs the benefits of the proposed development.

- **RFR4: Loss of BMV agricultural land** - the loss of BMV land throughout the lifetime of the proposed development (40 years) has not been justified by compelling evidence in accordance with the written ministerial statement of 15 May 2024 concerning the use of agricultural land.

- **RFR5: Insufficient archaeological information** – insufficient results from an archaeological trenched evaluation submitted to demonstrate that the proposed development would protect against harm to archaeological assets.

- **RFR6: Insufficient drainage information** – insufficient drainage details submitted to demonstrate the drainage strategy is appropriate.

- **RFR7: Insufficient BNG information** – insufficient information submitted to address BNG requirements.

- **RFR8: Insufficient and inconsistent arboricultural information** – insufficient information regarding arboricultural matters to adequately assess any harmful impact on trees.

4.2 Development Plan Compliance

4.2.1 The Appellant considers that the Proposed Development accords with the Development Plan as a whole when the temporary and permanent elements are considered. This includes compliance with policies cited in the reasons for refusal. As such, the Proposed Development benefits from the statutory presumption in favour of the Development Plan as set out in Section 38(6) of the Planning and Compulsory Purchase Act 2004.

4.2.2 The Proposed Development constitutes essential low carbon energy infrastructure. It will make a significant contribution to the Government meeting its 2050 net zero target for emissions, its 2035 target for a 78% reduction in emissions and clean electricity generation by 2030 by supporting the growth of renewable energy generation through the provision of energy storage and grid stabilisation.

4.2.3 Overall, the Proposed Development as both the Application Scheme and Appeal Scheme should be granted planning permission without delay in accordance with the presumption in favour of sustainable development outlined by Paragraph 11 of the NPPF.

4.3 RFR1: Inappropriate development in the Green Belt

4.3.1 The NPPF supports renewable and low carbon energy and associated infrastructure (paragraph 161), values their contribution towards cutting greenhouse gas emissions" (paragraph 168 (b)) and directs local planning authorities to give significant weight to the benefits associated with renewable and low carbon energy generation and the proposal's contribution to a net zero future (paragraph 168 (a)).

4.3.2 Local Plan Policy DES9 adds further support for planning applications for renewable and low carbon energy generation, provided that they do not cause a significantly adverse effect to landscape, historic environment, openness of the Green Belt amongst others.

4.3.3 Therefore, the principle of the BESS proposals and low carbon energy generation are strongly supported by the NPPF and Local Plan Policy DES9, subject to not causing unacceptable adverse effects.

4.3.4 Local Plan Policy STRAT6 restricts development in the Green Belt to those limited types which are deemed appropriate in the Green Belt, unless very special circumstances can be demonstrated, in line with the NPPF. Where land is removed from the Green Belt it also seeks compensatory improvements to the environmental quality and accessibility of the remaining Green Belt land, in relation to landscape, biodiversity or recreational needs and opportunities.

4.3.5 It is accepted that the Proposed Development will comprise inappropriate development in the Green Belt as stated in NPPF paragraph 153 and is not listed as an exception in NPPF paragraph 154. In these circumstances, NPPF paragraph 153 sets out that 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".

4.3.6 The Proposed Development includes compensatory improvements to offset the loss of openness of the Green Belt as sought by Local Plan Policy STRAT6. These include a new permissive path providing increased public access via a loop from Thame Lane around the RPG along with landscape and biodiversity enhancements. Along with the biodiversity gains, the Proposed Development would provide the compensatory improvements required by Local Plan Policy STRAT6 to environmental quality, accessibility of the Green Belt in relation to landscape biodiversity or recreational needs and opportunities.

4.3.7 As required by the NPPF and Local Plan Policy STRAT6 harms to the openness of the Green Belt, its purposes and other harms are considered below, with very special circumstances demonstrated after the planning balance has been carried out in Section 5.

Openness

4.3.8 The NPPG explains that assessments of the impact of development on the openness of the Green Belt may involve both spatial and visual considerations as well as the duration of any impact and degree of activity likely to be generated.

4.3.9 The Appeal Site comprises land to the north of the Culham Campus and former airfield buildings on land currently mainly used for agricultural purposes. The land slopes up to the north and west with dense woodland on the northern boundary leading towards the River Thames, with the railway cutting bounding the Site to the east.

4.3.10 Electricity pylons are visually dominant across the Appeal Site running north to south through the site and west to east in the southern section. These along with the Culham Campus create an urbanised context to the site, which will become further urbanised when the Local Plan Allocation STRAT9 for approximately 3,500 homes and employment floorspace to the south and west of the Appeal Site is built out.

4.3.11 The harm to the Green Belt would be during the 40-year operational period, whereafter the Proposed Development would be removed (except for the connection points). The Appellant agrees with the approach taken by the Inspector in the Berden Hall Farm appeal, where the Inspectors Report states in paragraph 32 that:

"A period of 40 years is a long time in terms of the human lifespan. However, I would question whether that is the correct way to measure the duration of the proposal. Tackling the effects of climate change is not a short-term project. We are still some way off 2050, when 'net zero' is meant to be attained, and it is fair to observe too that if/when 'net zero' is attained in 2050, it will need to be maintained thereafter. In simple terms, current generations are being asked to take action to address the impacts of climate change in their lifetimes, with the attendant impacts of those actions, in an attempt to ensure that future generations inherit a tenable way of life.

The 40-year period proposed must be considered in the light of longer-term aspirations in relation to our climate; aspirations that stretch well beyond current generations".

4.3.12 The Inspector goes on to stress in paragraph 34 that "*The most important point, it seems to me, is not whether the scheme would endure for 40 years or longer, but the fact that it could be reversed*". The Proposed Development would for the most part be reversable, except for the retained landscaping and the connection tower in the Application Scheme, meaning the harm would not be permanent and would reduce following decommissioning.

4.3.13 Spatially, the Proposed Development will result in some loss of openness of the Green Belt in the immediate area of the Appeal Site where the battery compound and substation are located.

4.3.14 Visually, the Application Scheme comprises established blocks of woodland along the southern edge of the RPG which will, in time, screen the proposed permanent development associated with STRAT9 from the Green Belt to the north. This will enhance the perceived openness and green character of this part of the Green Belt.

4.3.15 The connection tower will remain permanently. However, high voltage transmission lines passing across Green Belt, as shown with the existing pylons bisecting the Appeal Site and, in this context, will have no adverse effect on the key attributes which define Green Belt.

4.3.16 The visual impacts in the Appeal Scheme are reduced due to the relocation of the connection tower to the battery compound area, where it will be viewed in the context of the dominant existing cluster of towers and overhead wires and often with the Culham Campus as a backdrop.

4.3.17 There will be some impacts during the estimated construction period of 12-18 months for the Proposed Development and minimal activity generated during its 40-year operational life limited to occasional maintenance and security checks.

4.3.18 Overall, the Appellant considers that there will be **minor to moderate harm** to the openness of the Green Belt to a localised area adjacent to existing and future urban development during the operation of the development, with harms reduced following decommissioning.

Green Belt Purposes

4.3.19 The NPPF in paragraph 142 states that the fundamental aim of the Green Belt is to prevent urban sprawl by keeping land permanently open and sets out the five purposes of the Green Belt in paragraph 143 as follows:

1. to check the unrestricted sprawl of large built-up areas;
2. to prevent neighbouring towns merging into one another;
3. to assist in safeguarding the countryside from encroachment;

4. to preserve the setting and special character of historic towns; and
5. to assist in urban regeneration, by encouraging the recycling of derelict and other urban land.

4.3.20 SODC make no reference to any specific Green Belt purpose in the DN, and no assessment is undertaken in the DR of the impact on the Green Belt purposes.

4.3.21 The Green Belt Assessment (CD1.1.40) undertakes an assessment of the impact of the Proposed Development against the five Green Belt purposes using the three Green Belt studies prepared to support the evidence base for the Local Plan[10]. The assessment is relevant to both the Application Scheme and Appeal Scheme and is summarised below:

- **Purposes 1 and 4** – the Appeal Site is located 5km away from the large built-up area of Oxford and its historic setting and **minor harm** to purposes 1 and 4(checking urban sprawl and preserving the setting of historic towns) will result from the Proposed Development.

- **Purpose 2** – **minor harm** would arise from the Proposed Development in respect of purpose 2, preventing towns from merging as a result of the 5km distance from Oxford and 1.5km from the next nearest town, Abingdon.

- **Purpose 3** – **moderate harm** will result from the Proposed Development in respect of purpose 3, safeguarding the countryside from encroachment due to the replacement of agricultural land with renewable energy infrastructure. However, this harm will be localised against the Green Belt boundary where existing building clusters in the strategic allocations will be substantially urbanised, and harm balanced against the significant landscape enhancements proposed.

- **Purpose 5** – the proposed BESS would enable increased capacity for greater renewable energy generation in this area, as required by Local Plan Policy STRAT4 for strategic sites. Therefore, resulting **in negligible to minor beneficial effects** to purpose 5, assisting urban regeneration.

4.3.22 Overall, the Appellant considers that there will be **moderate harm** to Purpose 3 and **minor or lower** level of harm to Purposes 1, 2, 4 and 5. This would principally result from the encroachment of the development of land currently used for agriculture during the operational period but taken into account the benefits of the proposed landscaping enhancements enabling renewable energy generation.

[10] SODC Local Green Belt Study (September 2015) (CD3.4.3), Oxford Green Belt Study (October 2015) (CD3.4.4) and Green Belt Assessment of Strategic Sites in South Oxfordshire (December 2018) (CD3.4.5)

Other Harms

4.3.23 The potential harms relevant to the Proposed Development are considered to be the loss of agricultural land, harm to landscape character and impacts to heritage assets.

Other Matters

Absence of alternatives

4.3.24 The submitted Site Selection Process report (CD1.1.47) explains why the Substation in Culham was identified as the connection point mainly due to its location between ESO grid boundaries B9 and LE1, its connection to the 400kV network and availability of grid connection before 2030.

4.3.25 Paragraph 2.44 of the Site Selection Process report explains that the site of the 200MW planning application in Culham is too small to meet the objectives of the Proposed Development to provide a 500MW to urgently enable more renewable energy generation. Whilst a smaller capacity proposal could be submitted, this would not optimise the benefits of the connection and the urgent need to provide 30GWof electricity storage by 2030.

4.3.26 Given the urgency to (very significantly[11]) increase capacity to meet clean energy targets for 2030 and 2035, the likelihood is that all suitable sites will be required to achieve these targets, and they should not be seen as competing proposals.

RFR1 Summary

4.3.27 The Green Belt test whether the harm resulting from the sum of definitional harm plus any other harm would be clearly outweighed by other material considerations such that very special circumstances exist is set out in Section 5.

4.4 RFR2: Harm to landscape character

4.4.1 RFR2 alleges conflict with Local Plan Policies ENV1, DES1 and DES2, Culham Neighbourhood Plan Policy CUL5 (Design Code part OVS2.0.1) and the NPPF for the following reasons:

- The proposals would urbanise an area of rural countryside;
- Results in significant adverse effects on landscape character and to views including those from public rights of way; and
- That are not effectively mitigated.

[11] Clean Power 2030 Action Plan: A new era of clean electricity (December 2024) page 96 (CD3.3.1)

4.4.2 Local Plan Policy ENV1 seeks to protect the landscape, countryside and rural areas against harmful development and only permits development where it protects and, where possible enhances, features that contribute to the nature and quality of SODC's landscapes. These include trees, hedgerows, habitats, topographical features and important views, amongst others.

4.4.3 Local Plan Policy DES1 adds that new development must respect the existing landscape character, with Local Plan Policy DES2 seeks that proposals should both physically and visually enhance and complement the surroundings. The Culham Design Code paragraph 8.9 referenced in the DR further considers that development should contribute to the maintenance and delivery of a high quality multi-functional network of Green and Blue Infrastructure to provide long-term benefits for people, places and nature, in ways that reinforce local character.

4.4.4 The Appeal Site forms a transition between the RPG and the Culham Campus, but currently it is not a valuable one. The Proposed Development provides the opportunity to establish a valuable transition in the long term. Currently the land is grassland which is heavily influenced by high voltage overhead transmission lines which pass through it, including supporting towers. Elements of the former airfield at Culham remain including fencing and tracks. The area allows clear views across it from the RPG to the Culham Campusand in the future to development within the Local Plan STRAT9 development area. As a result, it is the Appellant's view that the quality of local landscape character is already adversely affected by existing urbanisation and will be subject to further urbanising effects from the building out of STRAT9.

4.4.5 The proposals will establish a belt of woodland along the parish boundary which will, in time, screen the Proposed development, Culham Campusand the STRAT9 development from the RPG.

4.4.6 It is not possible to plant a full linear length of woodland because of a protection zone along the railway, maintenance wayleaves around transmission line towers and under the overhead wires. The Proposed Development seeks to replicate the historic woodland as far is possible given these modern-day constraints. Figure 12 in Appendix A of the Landscape and Visual Chapter of the ES submitted as part of the application shows the position of the proposed woodland with the woodland on the 1883 OS plan.

4.4.7 As such, the proposed landscaping is sympathetic and contributes to existing landscape character through tree planting and reintroduces historic woodland belts that used to be present before the introduction of the airfield. These elements of the Proposed Development enhance the landscape character in compliance Local Plan Polices ENV1, DES1 and DES2 and Culham Design Code part OVS2.0.1, as well as considerations in NPPF paragraph 135 and 180, subject to demonstrating the Proposed Development isn't harmful as a whole.

4.4.8 As set out against RFR1, the Appellant's view is that the potential harms from the Proposed Development are at their most significant during the temporary 40 year

operational period, with the residual harms relating to the permanent elements the key harms.

4.4.9 For the Application Scheme, there would be a Moderate – Major harm to the landscape character of the Site but a Minor adverse effect on the character of the landscape immediately adjacent to the Site since it is already influenced by electrical infrastructure and urban development (increasingly so if STRAT9 is built out).

4.4.10 There will be a Moderate adverse effect on the setting of a small part of the RPG, the remaining portion will be unaffected. The Application Scheme will result in Moderate and Moderate to Major harm to the visual amenity of people using the Oxfordshire Green Belt Way as is passes the Site, both during construction and in the early operational years before mitigation has become effective. As compensation, the Appeal Scheme will beneficially allow walkers (and workers within the CSC) access into the part of the RPG that is within control of the Appellant.

4.4.11 The harm to the setting of the RPG will decline as the woodland planting matures and will result in a Moderate benefit once it effectively screens the BESS and other urban influences further to the south. Once the BESS has been decommissioned the woodland will beneficially screen the permanent development within STRAT9 from the RPG.

4.4.12 The extension of the existing substation falls within Culham Campus and will not have an unacceptable visual impact, particularly on the character and appearance of the surrounding countryside and the RPG. It will be located on the east side of an existing substation and will be largely screened by the substation and existing infrastructure and buildings to the west, south and east. It will be visible from a small area to the north but seen through the existing perimeter security fence. Rising ground and existing mature woodland immediately to the north will ensure that there will be no adverse effect on the setting of the RPG.

4.4.13 The connection tower will have a direct effect on the character and appearance of the RPG, but it will be discretely located, seen in the context of an existing high voltage overhead transmission line which passes through the RPG. While it will have a localised adverse effect, if considered in relation to the RPG as a whole, the effect will not be unacceptable.

4.4.14 In the long term the proposed mitigation will enhance the value of the Site as a buffer between the CSC and STRAT9 and will protect the setting of the RPG. Thereby, consistent with Local Plan Policy ENV1 as a whole. Whilst there will be adverse effects on views from public rights of way, the character and appearance of the landscape adjacent to the affected public rights of way is already substantially adversely affected by the electricity pylons and lines, Culham Campus and STRAT9 being built out in future. The perceived additional harm to the enjoyment of the countryside to users is, therefore, not significant and should be considered in conjunction with the benefits associated with achieving climate change goals.

4.4.15 Adjustments have been made in the Appeal Scheme to relocate the connection tower to the battery compound area where it will be viewed cumulatively with the

electricity pylons and Culham Campus. Other amendments include the retention of existing ground levels that will minimise any potential harms perceived from the earthworks proposed within the RPG and between the railway and battery compound in the Application Scheme.

4.4.16 Since landscaping is expected to be conditioned, the Appeal Scheme retains the proposed tree belt in the RPG, with the potential for the woodland and/or parkland tree planting to be modified in consultation with stakeholders, if it is deemed inappropriate. However, for the purposes of this Appeal it is retained because it is the view of the Appellant that the landscaping, particularly the woodland planting, is beneficial to the character and setting of the RPG and recreates a historic feature, albeit as best it can within a landscape where modern infrastructure has intruded since the parkland was created.

4.4.17 The Landscape and Visual chapter of the ES concluded that the Landscape Value of the Appeal Site outside the RPG is Low, while High within the RPG, with the removal of the Connection Tower from the RPG removing this direct adverse effect in the Appeal Scheme.

4.4.18 Due to the way the landscape is perceived with the view of the existing pylons and wires, it is not a pristine landscape but one significantly adversely affected by, and defined by, electrical infrastructure. Therefore, the relocation of the connection to the BESS compound will result in substantially less impact on landscape character than the location proposed in the Application Scheme. The existing towers and wires in the BESS compound area are so dominant that the relocation of the connection to this area will not have a significant cumulative effect.

4.4.19 The scale of the Proposed Development should also be seen in context with the first planning application for Culham No. 1 Site (part of the STRAT9 allocation and immediately adjacent to the Appeal Site, (SODC ref: 24/S1729/O). This proposed commercial buildings within a height range of 18 – 25m high, far exceeding the proposed 12.5m connection tower and will likely to have a greater impact cumulatively being large blocks rather than slender, latticed steelwork.

4.4.20 In summary, the Appeal Scheme removes the direct adverse landscape and visual effects on the RPG arising from the Application Scheme by relocating the point of connection compound and tower out of the RPS as recommended by Heritage England, although this will result in a slight increase in visual impact to users of the Oxford Green Belt Way who will pass closer to the relocated tower. Once the woodland planting is effective and the BESS decommissioned there will be a Moderate benefit to the setting of the RPG.

4.4.21 Therefore both schemes are considered to comply with Local Plan Policies ENV1, DES1 and DES2, Neighbourhood Plan Policy CUL5 (Design Code part OVS2.0.1) and the NPPF.

4.5 RFR3: Harm to the Grade I RPG

4.5.1 RFR3 alleges conflict Local Plan Policies ENV6 and ENV10 and the NPPF for the following reasons:

- The development will result in significant adverse impacts to the RPG and its setting;
- Further harm from the proposed landscape mitigation that fails to respect the character of the RPG; and
- The cumulative harm to the heritage assets with adjacent allocated sites considerably outweighs the benefits of the Proposed Development.

4.5.2 The Local Plan in Policy ENV6 considers that proposals for new development that may affect designated and non-designated heritage assets should take account of the desirability of sustaining and enhancing their significance and putting them to viable uses consistent with their conservation. New development should be sensitively designed and should not cause harm to the historic environment, where there is an impact, proposals will be supported where they:

- Conserve or enhance the significance of the asset;
- Make a positive contribution to local character; and
- Make a positive contribution towards wider public benefits.

4.5.3 Local Plan Policy ENV10 adds that proposals should conserve or enhance the special historic interest of the heritage asset, with any harm or loss of significance of any heritage asset requiring convincing justification, with substantial harm or total loss of Grade 1 or II* Registered Historic Parks and Gardens wholly exceptional. The Local Plan is consistent with NPPF paragraph's 202 and 213, with the NPPF adding in paragraph 212 that great weight should be given to the asset's conservation.

4.5.4 The NPPF concludes in paragraph 215 that where a development proposal will lead to less than substantial harm to the significance of a designated heritage asset, this harm should be weighed against the public benefits of the proposal.

4.5.5 In preparing the Proposed Development, historic maps had been reviewed to understand the original character of the RPG within the Appeal Site to identify opportunities to both enhance the significance of the RPG and make a positive contribution towards local character. This resulted in a tree belt proposed along the southern boundary replicating the location of historic woodland. Figure HO1 (CD2.3.13) overlays the 1932 OS plan on the Appeal Scheme Block Plan to show how the proposed woodland matches the location and extent, as far as possible, given modern constraints.

4.5.6 The proposed tree belt is also consistent with Historic England's response dated 10 July 2024 (CD1.3.16), where they state that:

"Restoration in the south of the parkland was a key recommendation within the 2019 Parkland Management Plan for the estate and whilst not a statutory document

clearly illustrates, from a deep understanding of the whole estate, what sensitive and sympathetic improvements would be. (The Parkland Management Plan 2019 was produced by Askew Nelson Ltd)".

4.5.7 And goes on to say:

"A key feature of restoration in the southern portion of the park would be the reintroduction of a naturalistic shelter belt in its original location and supplementary or restoration planting of the woodland pasture (at least for landscaping to demonstrably respond to Brownian naturalistic planting principles and the restoration of features where possible)."

4.5.8 The 2019 Parkland Management Plan was prepared for the owners of the estate affiliated to the house and garden and not the application part of the RPG and so no specific management recommendations are made for this area. Nevertheless, what is included in the Proposed Development is considered appropriate but final details could also be approved subject to a condition, so planting and management plans meet the aspirations of the relevant stakeholders.

4.5.9 In general, the Proposed Development is designed to locate the main compounds in the south outside the RPG boundary and whilst the Appellant acknowledges their scale, and nature will change the setting of the RPG.

4.5.10 In the Application Scheme, the connection tower will have a direct effect on the character and appearance of the RPG, but it will be discretely located, seen in the context of an existing high voltage overhead transmission line which passes through the RPG.

4.5.11 For the Application Scheme in the long term, the proposed woodland will benefit the character and appearance of the RPG. Whilst Historic England and SODC considered that the proposed planting within the RPG is not historically accurate, the Appellant considers that landscape management could be conditioned, and a final scheme agreed with the relevant stakeholders.

4.5.12 Refinements to address Historic England's comments have been proposed in the Appeal Scheme. This removes the connection tower and revises the proposed landscaping and earthworks in consideration with Historic England's suggestions.

4.5.13 Oxford Archaeology have been commissioned to provide heritage advice regarding the potential harm incurred by both the Appeal and the Application Scheme, as presented in Section 4, upon the condition/setting of the Grade I RGP. This guidance is set out (in full) within the Oxford Archaeology Heritage Impact Assessment (HIA) (CD2.2.3; Appendix A).

4.5.14 The HIA was informed, in part, by an updated walkover survey of the Application Site; the results of a recent (October 2024) archaeological investigation within the Application Site, and with reference to the updated development plans as presented in Section 4. The HIA has been supplied by Oxford Archaeology as part of suite of submitted documentation/programme of works in support of the Application. To

date, these comprise an Archaeological Desk-based Assessment (DBA) (CD1.1.23-CD1.1.25), a contributary chapter to an Environmental Impact Assessment (CD1.1.10), a Written Scheme of Investigation (WSI) (CD1.1.28), a programme of archaeological evaluation trenching within the Application Site, completed in October 2024 (CD2.2.2), as well as ongoing consultation/guidance on an ad hoc basis.

4.5.15 The Oxford Archaeology HIA acknowledges the situation of the Application Site on the south-western boundary of the Grade I RPG, the high (national) significance of this heritage asset, and its susceptibility to receive both temporary and lasting impacts as a result of both Application and Appeal Schemes. The HIA broadly concurs with the Appellant's view that the quality of historic landscape character (from which this limited section of the RPG derives its significance) is already adversely affected by existing urbanisation and will be subject to further urbanising effects from the building out of STRAT9.

4.5.16 The HIA concurs that, in the Application Scheme, the connection tower will have a direct effect on the character and appearance of the RPG, but it will be discretely located, and seen in the context of an existing high voltage overhead transmission line which passes through the RPG. Regarding the Appeal Scheme, the HIA notes that the relocation of the connection tower will result in less incursion into the RPG, and ultimately incur a lesser degree of impact than that of the Application Scheme. The HIA acknowledges that both Appeal/Application Schemes will involve incursion into the RPG, and concurs with the Appellant's view that the Appeal Scheme, as revised, is sympathetic to the local character and landscape setting of the RPG.

4.5.17 The HIA notes that the Proposed Development seeks to replicate a stretch of historic woodland that formerly marked the south-western boundary of the RPG, and which ran along the north side of the parish boundary – the boundary upon which the historic curtilage of the RPG was (likely) initially sighted. The loss of this historic woodland has contributed, in part, to a general loss of the historic character to this part of the RPG that has occurred in tandem with the 20th century development that has taken place in its environs.

4.5.18 The HIA concurs, therefore, that the Development Scheme presents an opportunity to enhance key aspects of the setting/significance of the RPG; principally, the restoration of a stretch of historic woodland/parkland within the southern extent of the RPG. This will benefit the character and appearance of the RPG, in part, by screening these areas of the RPG from the more industrial elements of the scheme, and from the urbanising affects incurred by the building out of STRAT 9; but also, by effectively restoring the historic, 18th century curtilage and planned-form of the RPG as far as possible given modern-day constraints. The inclusion of a woodland boundary also serves as a means to articulate a physical indicator of the historic parish boundary, which had been present up to the mid-20th century, but it no longer extant.

4.5.19 The HIA acknowledges that, the scheme will involve incursion into the RPG and that works relating to the Proposed Development will incur a degree of temporary harm. However, the potential enhancements to the setting/character of the RPG by the

scheme in the long term will, in part, work to offset these negative effects. The assessment therefore concludes that the scheme will have a less than substantial effect upon the RPG and that this effect is at the lower end of the range Low to Medium.

4.5.20 As set out in the planning balance in Section 5, the Proposed Development will provide substantial public benefits to meeting climate change and net zero targets, energy security, increased public access to the Green Belt and BNG.

4.5.21 Overall, there would be less than substantial harm at the middle of the range from the Application Scheme and at the lower end of the range for the Appeal Scheme balanced against the public benefits of the Proposed Development in support the urgent need to meet climate change and net zero targets. Therefore, the considerations of Local Plan Policies ENV6 and ENV10 and the NPPF would be complied with.

4.6 RFR4: Loss of BMV agricultural land

4.6.1 RFR4 considers that the Proposed Development conflicts with Local Plan Policy DES7 and the written ministerial statement (WMS) of 15 May 2024[12] (CD5.18) concerning the use of agricultural land in the following manner:

- The loss of BMV land throughout the lifetime of the proposed development (40 years) has not been justified by compelling evidence.

4.6.2 As demonstrated in the submitted Agricultural Land Classification Study (CD1.1.4), the Appellant acknowledges that the Appeal Site concluded that the land is in agricultural land classification Grade 2 (88%), Grade 3a (11%) and Grade 3b (1%) and therefore 99% of the Appeal Site is assessed as BMV.

4.6.3 The NPPF and DES7 require that, for development that including areas of BMV land should be avoided if alternatives are available, by first using areas of poorer quality land in preference to that of a higher quality.

4.6.4 The surrounding area DEFRA ALC map data in the RFR4 Figure (CD5.19) shows that the typical ALC mix is representative of the Appeal Site, being a combination of the grades 2 and 3 found onsite, with grade 4 mainly adjacent to watercourses (primarily the River Thames). This shows that within 2km of the Appeal Site that 18.9% is Grade 2 and 43.2% Grade 3, making up 62.1% of land as BMV and only 10% of non-urban remaining land.

4.6.5 In selecting a site, and as documented within the Site Selection Process report (CD1.1.47) in section 2, three alternative sites (IS1, IS2 and IS3) were identified and assessed on various metrics against the appeal site.

[12] The Written Ministerial Statement published in May 2024, titled 'Solar and protecting our Food Security and Best and Most Versatile (BMV) Land' (CD5.18)

4.6.6 For site IS1 it was considered that the site performs no better in terms of ALC than the appeal site. For IS2 it was noted that the location is farmed and comprises grade 2 land within the DEFRA ALC map data and performs no better than the appeal site in ALC terms. For site IS3 it was noted that the location is mostly farmed and comprises grade 2 land within the DEFRA ALC map data, thus performing no better in terms of ALC than the Appeal Site.

4.6.7 This demonstrates that alternative sites perform no better than the Appeal Site in terms of agricultural land classification grading.

4.6.8 The loss of BMV would also be minimal compared to the amount of productive BMV land within the surrounding area and South Oxfordshire District.

4.6.9 There have also been no objections from any statutory body concerning BMV, including Natural England.

4.6.10 RFR4 refers to a WMS that specifically relates to large solar farm development. However, the benefits and disbenefits of solar and BESS proposals are different due to the nature and scale of the infrastructure and should not be directly compared.

4.6.11 Overall, a small amount of BMV would be lost through the Proposed Development resulting in **minor harm**, with no poorer quality land available in the area, and which will be outweighed by the substantial benefits of the proposals and satisfy the considerations of Local Plan Policy DES7 and the NPPF.

4.7 RFR5: Insufficient archaeological information

4.7.1 RFR5 contends that the Proposed Development is contrary with Local Plan Policy ENV9 due to insufficient from an archaeological trenched evaluation submitted to demonstrate archaeological assets would be protected from harm.

4.7.2 Local Plan Policy ENV9 seeks to protect the site and setting of Scheduled Monuments or nationally important designated or undesignated archaeological remains.

4.7.3 There are no designated heritage sites assets on the Appeal Site and therefore, NPPF paragraph 216 applies. This considers that the effect on the significance of a non-designated heritage asset should be taken into account, with a balanced judgement required having regard to the scale of any harm or loss and the significance of the heritage asset.

4.7.4 The Appellant considers the submitted desk-based assessment, survey scope for trenching and written scheme of investigation provided in the ES was proportionate for the stage and detail of the proposals. There is the reasonable expectation that conditions would be applied to any planning permission requiring further archaeological recording.

4.7.5 Notwithstanding, the Appellant had commissioned archaeological trenching in response to the OCC Archaeologists comments and included in this appeal[13].

4.7.6 These works demonstrated that the south-western part of the site was occupied during the late Roman period, including a settlement of at least moderate status, with access to economic networks with local/regional and international links. These areas, and the remainder of the site, subsequently remained unoccupied until the late post-medieval period, during which time the site retained its rural character, as evidenced by plough-scars and furrows in the centre of the evaluation areas. The site remained rural up until the establishment of the Royal Naval Air Station in the mid-20th century. The areas of the site within the Military Station were not subject to excavation; however, instances of modern quarrying/dumping and related infrastructure in the western, and eastern-most extents of the site, as well as modern glass and metal assemblages from across the site, reflect the succeeding occupation of the site as a modern military base. This modern activity appears only to have affected preceding (predominantly Roman) deposits/remains in the areas immediately adjacent to modern development, and at the western-most extent of the site; across the remainder of the site, underlying deposits appear to also have been moderately affected by ploughing/furrow activity during the post-medieval period.

4.7.7 The Roman material in the south-western part of the site, while of regional archaeological interest, is not considered to be of sufficient significance to prohibit or constrain the scheme; however, is anticipated further works may be requested by the OCC Archaeologist, as a condition, to record and mitigate the impact of the development upon this material. It is likewise anticipated that for the remaining areas of the site, which have been found to contain only post-medieval agricultural activity of limited significance, may be subject to development without further condition – however, this would need to be separately confirmed by the OCC Archaeologist prior to commencement. This is considered acceptable in line with paragraph 218 of the NPPF.

4.7.8 Therefore, the information referenced in RFR5 has been provided to demonstrate appropriate protection for archaeological assets resulting in **minor harm** and accords with Local Plan Policy ENV9.

4.8 RFR6: Insufficient drainage information

4.8.1 RFR6 states there were insufficient drainage details submitted to demonstrate the drainage strategy is appropriate as required by Local Plan Policies INF4, EP4 and STRAT4.

4.8.2 Local Plan Policy INF4 requires proposals to demonstrate that there is or will be adequate surface water capacity to serve the whole development. Local Plan Policy EP4 requiring all development to provide a Drainage Strategy and is expected to incorporate Sustainable Drainage Systems and ensure that run-off rates are

[13] Archaeological Evaluation Report Issue No. 1 November 2024 by Oxford Archaeology (CD2.2.2)

attenuated to greenfield run-off rates. Local Plan Policy STRAT4 expects each development to provide an integrated water management plan to include proposed foul and surface water drainage strategies.

4.8.3 The Application Scheme was supported by a Flood Risk Assessment and Conceptual Drainage Strategy (April 2024).

4.8.4 The DR in section 16 (paragraphs 16.1 to 16.4 inclusive) also summarises the Drainage Officer's and Network Rail's comments querying the outfall on the western side of the railway.

4.8.5 The Appellant has refined the proposed Conceptual Drainage Strategy for the Application Scheme and Appeal Scheme to address these concerns and submitted as part of this Appeal.[14] The intention was to submit the updated drainage details during the determination period; however, the decision was issued before they could be finalised and issued.

4.8.6 The drainage strategy had previously been designed utilising a surface water outfall to an ordinary watercourse, which was deemed unfeasible.

4.8.7 The Drainage Strategy for the site has now been re-designed utilising infiltration methods of surface water disposal as per the preference of the Drainage Hierarchy, outlined within the PPG (Paragraph 056, ID:7-056-20220825), which sets out the preference of surface water discharge options for developments. Concerns have previously been raised by the Environment Agency over the use of infiltration at battery storage sites, due to fire risk and the associated contamination of waterbodies during firefighting activities. It is proposed that the battery compound gravel bases are lined to prevent uncontrolled infiltration. The bases will form an attenuation blanket, which during normal operating conditions will form part of the wider drainage strategy.

4.8.8 Penstocks (pipe or gate that controls the flow of water from one area to another) will be present at the outlet of the attenuation blanket.

4.8.9 The penstocks at the site, as default, will be open. This will allow surface water from these areas to be collected and conveyed into the wider surface water management strategy at the site. The installation of an automated penstock system will allow the remote closure of penstocks, at the outset of a fire event, without the need for personnel on-site.

4.8.10 The attenuation blanket will provide storage for water released onto the site during a fire event, and will hold the water until testing is undertaken, and deemed if the water should be tanked off-site for specialised treatment or can be released into the wider drainage system.

[14] The Application Scheme Flood Risk Assessment and Conceptual Drainage Strategy (CD2.2.8) and the Appeal Scheme Flood Risk Assessment and Conceptual Drainage Strategy (CD2.3.2).

4.8.11 Details on the proposed surface water drainage system are provided within Section 8, and Appendices G and H of the Application Scheme Flood Risk Assessment and Conceptual Drainage Strategy (CD2.2.8) and the Appeal Scheme Flood Risk Assessment and Conceptual Drainage Strategy (CD2.3.2).

4.8.12 The concerns raised by the Drainage Officer and Network Rail have also been addressed within the updated drainage strategy. The previously suggested outfall was located on the opposite side of the railway line, which was deemed unsuitable by both the Drainage Officer and Network Rail. This outfall is no longer proposed as infiltration methods will be utilised, and therefore will not encroach upon the Network Rail infrastructure or boundaries. The Flood Risk Assessment and Drainage Strategy have been updated to provide clarity on storage provision and channels which will convey flows for the development. The updated Drainage Strategy now reflects a feasible and sustainable method of managing surface water at the development.

4.8.13 Consequently, the updated drainage strategies address concerns made by SODC's Drainage Officer and Network Rail resulting in no harm and the Proposed Development, therefore, complies with by Local Plan Policies INF4, EP4 and STRAT4.

4.9 RFR7: Insufficient BNG information

4.9.1 RFR6 states that insufficient information relating to BNG requirements was submitted to confirm the Proposed Development complies with Local Plan Policy ENV3.

4.9.2 Local Plan Policy ENV3 supports development that will conserve, restore and enhance biodiversity and encourages proposals to provide a net gain in biodiversity where possible.

4.9.3 Based on the Application Scheme, the DR paragraph 17.4 considers that further information is required to be able confirm the ecology measures are acceptable. The information requested is listed as the baseline habitat condition, an updated BNG metric, a justification for the loss of medium distinctiveness habitats and additional plans for the purpose of using a planning obligation to secure onsite BNG for sale on the BNG market.

4.9.4 The Appellant has provided the requested information as part of the Appeal for both the Application Scheme[15] and the Appeal Scheme[16]. These result in a BNG of 67.11% for the Application Scheme and 62.10% BNG for the Appeal Scheme, satisfying trading rules for both. Excess habitat gains would not be sold on the BNG market for either scheme

[15] Application Scheme: Baseline and proposed conditions (CD2.2.5), statutory metric (CD2.2.4), Biodiversity Net Gain Assessment (CD2.2.6) and Ecological Impact Assessment (CD2.2.7)
[16] Appeal Scheme: Baseline and proposed conditions (CD2.2.5), statutory metric (CD2.3.1), Biodiversity Net Gain Assessment (CD2.2.6) and Ecological Impact Assessment (CD2.2.7)

4.9.5 Overall, the further BNG information provided with this Appeal demonstrate that the BNG requirements in Local Plan Policy ENV3 are met for both the Application Scheme and Appeal Scheme resulting in **significant benefits**.

4.10 RFR8: Insufficient and inconsistent arboricultural information

4.10.1 RFR8 states that insufficient information regarding arboricultural matters is submitted to adequately assess the impact on trees as required by Local Plan Policy ENV1.

4.10.2 Local Plan Policy ENV1 states that development will only be permitted where it protects and, where possible enhances, features that contribute to the nature and quality of SODC's landscapes. In particular in part i) trees, hedgerows, habitats, topographical features and important views, amongst others.

4.10.3 Paragraph 18.1 of the DR confirm that SODC have no in principle objection to the Proposed Development in the Application Scheme layout but queried consistency between drawings.

4.10.4 As with RFR5-RFR7, the Appellant was waiting to issue a single response to all consultation comments, but the decision was issued before this additional information could be issued.

4.10.5 The Appellant confirms that the final landscaping details are set out in the latest updated Landscape Ecological Management Plan Rev A (CD2.3.3) and Appeal Scheme planting drawings (CD2.3.7- CD2.3.11).

4.10.6 The below ground cables have been moved south into the road and outside of the route protection (RPA) of the trees as requested by the Forestry Officer.

4.10.7 All fence post footings required for RPA fencing will be dug by hand and sleeved to prevent the egress of leachates with the RPA of retained trees.

4.10.8 Overall, the Proposed Development involves an increase in trees and biodiversity that will enhance the nature and quality of the existing landscape in line with the requirements of Local Plan Policy ENV1.

4.10.9 Therefore, the additional information and clarification provides appropriate details to adequately demonstrate that both the Application Scheme and Appeal Scheme comply with the requirements of Local Plan Policy ENV1 resulting in **no harm**.

5 Planning Balance

5.1.1 In the weighing the planning balance, paragraph 153 pf the NPPF states that *'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.

5.1.2 Paragraph 160 of the NPPF recognises that when located in the Green Belt, element of many renewable energy projects will comprise inappropriate development. In such cases, the NPPF explains that 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.

5.1.3 There is a clear national and regional need to decarbonise the electricity system; provide resilience to the grid; and to secure the UK's energy supply and reduce costs to consumers. The Appellant is satisfied that there are very special circumstances which clearly outweigh any harm to the Green Belt (notwithstanding the substantial weight this attracts) and any other harms caused by the development.

5.1.4 A summary of the harm that has been identified and the other material considerations referred to by the Appellant are set out below.

5.2 Planning Benefits

5.2.1 The Proposed Development will result in a range of wider environmental and other benefits, these have been demonstrated to clearly outweigh the harms identified above. These benefits and their respective weight in the balancing process are detailed in Section 9 of the Green Belt Assessment (CD1.1.40) and summarised below.

Wider Environmental Benefits

5.2.2 BESS is essential if the Government is to achieve the legally binding target of achieving net zero by 2050 and a 78% reduction by 2035, with BESS a crucial part of the infrastructure to support the increased reliance on renewable energy and associated problems of intermittency.

5.2.3 The Proposed Development responds directly to help meeting the very significant level of increase in battery storage growth identified by the government and will also help realise the rapid deployment of new clean energy capacity.

5.2.4 The wider environmental benefits associated with the Proposed Development include how the proposals will play an important role in meeting the following needs:

- The importance and urgency of increasing low carbon generation to help achieve the Government's 2050 Net Zero target;

- The overall national need for 30GW of electricity storage capacity by 2030, of which there is a 28GW need for BESS to balance supply and demand to help achieve the Government and NESO's 2035 low carbon electricity generation target. The Government confirms that this is a very significant level of increase;

- The need for greater energy security to help secure energy supplies and manage demand to reduce costs to consumers;

- The need for greater electricity capacity in meeting additional demands for electricity from electric vehicles amongst other things; and

5.2.5 Local need to support the sustainable growth of Oxfordshire settlements and energy hungry science facilities, such as the UKAEA Nuclear Fusion research at Culham Campus adjacent to the Site.

5.2.6 The proposed 500MW capacity is one of the largest schemes coming forward since the Storage Order was enacted in 2020. This means the proposed capacity would be 10 times larger than the previous maximum 49.9MW capacity limit to follow the Town and Country Planning Act 1990 process, which was the most common route.

5.2.7 Greater weight has been given to similar battery storage proposals recently due to the increasing focus on the impact of high energy bills on the cost of living, energy security following the conflict in Ukraine and the pressing need to meet climate change goals. This is seen in the following recent decisions in SODC and nationally this year summarised below.

5.2.8 There are also a number of material considerations, not least the legally binding net zero target and Government policy supporting the decarbonisation of the electricity system; the rapid need to deploy new clean energy capacity as per the Government's Clean Power 2030 Action Plan; and the strategic imperative to deliver housing and a strong and competitive economy supported by an increase in the use and supply of low carbon energy.

5.2.9 Locally the Proposed Development is located adjacent to and will support the existing and future operations of the Culham Campus which is owned and managed by the UK Atomic Energy Authority. Significant weight should be afforded to the benefits associated with renewable and low carbon energy and contribution to a net zero future. These matters add further support to the grant of permission.

<u>SODC Low Carbon Energy Precedents</u>

Culham Science Centre Energy Storage Facility (ref: P16/S2368/FUL)

5.2.10 On 15th November 2016 SODC approved a 250MW battery storage facility within Culham Campus, south of Thame Lane and southeast of the Site on land within the Green Belt at the time.

5.2.11 The planning permission was granted under delegated authority on the basis that the following very special circumstances exist:

- National importance;
- More efficient use of renewable energy sources;
- Optimum site for the delivery of the 250MW energy storage facility; and
- Compatibility with existing uses.

5.2.12 In comparison, the Proposed Development would provide twice the storage capacity, making a greater contribution to meeting national need and supporting the use of renewable energy sources and on adjacent land to Culham Campus to support its profile and growth.

Nineveh Farm (ref: P20/S4360/FUL)

5.2.13 A 123ha site solar farm generating 45MW and battery storage scheme was granted planning permission by SODC on 11th January 2022 (ref: P20/S4360/FUL) at Nineveh Farm, Land to Southwest of Cowley Substation Nuneham Courtenay.

5.2.14 Whilst it is acknowledged that the scheme provides both renewable energy generation and battery storage, the same Green Belt policy tests applied.

5.2.15 In the 15 December 2021 Planning Committee Report explained in paragraph 6.73 that the following very special circumstances existed to outweigh the harm to the Green Belt:

- the proximity to a substation that has capacity;
- its temporary nature;
- that the site is well screened from wider views;
- proposed planting will further screen the site;
- the contribution to low carbon energy generation; and
- the net gain in biodiversity.

5.2.16 In relation to the Proposed Development, not only do all the same reasons above apply but the Site is significantly smaller, with only 1.23ha proposed to be developed and would therefore, result in less harm to the Green Belt openness and purposes for 10 times the MW capacity.

Recent Appeals

Land West of Battlesbridge, Rettendon, Chelmsford City Council – Planning Inspectorate (PINS) ref: APP/W1525/W/22/3306710

5.2.17 The appeal was allowed, and planning permission is granted for the construction of a battery energy storage system and ancillary development.

5.2.18 The Inspector sets out in paragraph 34. that the overall weight of the environmental benefits of the development whilst not confined to the site, would not be diminished particularly given the demonstrable need for battery storage and were afforded very substantial weight.

5.2.19 When undertaking the Green Belt balance, the inspector considered that very special circumstances existed based on the very substantial weight given to the environmental benefits, stating in paragraph 46. that:

"Although they might arise elsewhere and are not wholly unique, I have not seen or read anything in the evidence that limits very special circumstances in this instance to those that are wholly unique."

5.2.20 In making this decision, the Inspector acknowledged that there might be other BESS schemes providing environmental benefits elsewhere. However, due to their need to support wider environmental benefits from renewable energy generation, the number of other proposals elsewhere should not dimmish the weight given to the environmental benefits from BESS schemes or for the benefits to be unique to the relevant proposals.

Mill Hill, London Borough of Barnet –PINS ref: APP/N5090/W/22/3298962

5.2.21 An appeal was allowed on 13 March 2023 for a 50MW battery storage facility and associated welfare, storage and control room on Green Belt land in Mill Hill.

5.2.22 In paragraph 38 the Inspector acknowledged that whilst the proposals were not a renewable energy project, they would provide enhanced energy resilience to the National Grid and over time support renewable energy production.

5.2.23 Overall, the Inspector agreed that very special circumstances existed and in weighing the planning balance reaffirmed in paragraph 54 that:

"The delivery of suitable renewable energy projects, and those that would support them, is fundamental to facilitate the country's transition to a low carbon future in a changing climate."

5.2.24 The same principles of providing enhanced energy resilience and support the transition to low carbon energy generation resulting in very special circumstances also apply to the Proposed Development.

Monk Fryston, Selby District Council – PINS refs: APP/N2739/W/22/3290256 and APP/N2739/W/22/3300623

5.2.25 Two recent Green Belt appeals for BESS schemes on nearby sites at Monk Fryston in Selby District Council were allowed on the basis that both the Inspector's agreed that very special circumstances existed.

5.2.26 The first was allowed on 1 August 2022 (PINS ref: APP/N2739/W/22/3290256) for a 50MW BESS scheme where the Inspector considered the weight of the proposed need for the energy storage to be significant and stated in Paragraph 26 that:

"Energy storage is seen as a significant part of this strategy, and battery units such as this are seen as positive in terms of being renewable and produce negligible emissions in line with commitments with regard to Net-Zero emissions. As a result, significant weight can be attached to this matter."

5.2.27 In the planning balance, the Inspector concluded that collectively, the need for the BESS proposals to address the energy strategy issues facing the country, along with the technical data and justification for its Green Belt location amounted to very special circumstances (Paragraph 31 and 32) on the basis that:

"….that there is a clear and pressing need to address the energy strategy issues facing the country, hence the need for the proposal. In addition to this the proposal has been supported by a considerable level of technical data and justification for the proposal as to why it needs to be located in the Green Belt"

5.2.28 The second appeal was allowed on 1 December 2022 for a larger 320MW BESS development, with a synchronous condenser (ref: APP/N2739/W/22/3300623). In paragraph 29. the Inspector gave significant weight to the need for the BESS development on the basis of that:

"...National Grid estimates that electricity storage will need to increase significantly to support the decarbonisation of the system with as much as twelve fold and seven fold increases in capacity and volume respectively from 2021 to 2050 to meet the challenging Net Zero targets4. The Future Energy Scenarios Report 2022 updates the requirement for battery storage capacity from 13 GW in the 2021 Future Energy Scenarios Report to 20GW by 2030."

5.2.29 In comparison, the Proposed Development has ten times the capacity of the first appeal and around a third greater capacity than the larger 320MW BESS scheme. Consequently, the contribution to wider environmental benefits would be even greater from the Proposed Development than these appeal schemes and should therefore, be given significant weight.

Wider Environmental Benefits: Meeting the National and Regional Need for Energy Storage Demand

5.2.30 The Proposed Development has a storage capacity of up to 500 MW. This is of a greater capacity than most schemes in the country, which are mostly up to 50MW.

The Government set out its support for delivering larger battery storage schemes with a capacity above 50MW by amending the legislative framework in the 2020 Storage Order.

5.2.31 The Government identified a need for a minimum of 30 GW of low carbon storage by 2030 to help balance periods of high and low renewable output. NESO has set targets for capacity for up to 28 GW of battery storage by 2030 to meet the Government's intention for the electricity system to be fully decarbonised by 2035. The Proposed Development will connect into the national transmission network, where the energy storage will be able to support national and local capacity.

5.2.32 At a local level the OIS emphasises that future growth in Oxfordshire will be restricted unless energy infrastructure responds to the changing requirements and next generation needs of energy-intensive science and technology assets. The Proposed Development is located within Science Vale where these energy-intensive science and technology developments are located, including the Culham Campus adjacent to the Site. The proposed BESS would be able to provide help balance the grid and enable increased capacity of renewable energy in the area to help meet the energy-intensive demands of the facilities in Science Vale.

5.2.33 As the Inspectors noted in the recent appeal examples, there is a clear and pressing need to address the energy strategy issues facing the country, hence the need for BESS proposals. These appeals were allowed for smaller capacity schemes at 50MW and 320MW and both were considered to amount to very special circumstances.

5.2.34 Consequently, the Proposed Development will provide an even greater contribution to meeting the energy strategy needs and should be given even greater weight particularly as the Government's own Clear Power 2030 Action Plan states that the successful path to the delivery of clean power by 2030 will require rapid deployment of new clean energy capacity across the whole of the UK It also recognises that a very significant level of increase will be required in battery storage by 2030.

5.2.35 Even when taking the Proposed Development into account, and whilst larger than most schemes in the country, it still represents a modest 0.5GW (1.9%) of the modelled growth scenarios 23-27GW. Put into context a further 16 developments of a similar scale to that of the Proposed development would be required to meet the higher end of the modelled growth scenario highlighting the importance of the Proposed Development in making an important contribution to increasing capacity to 28GW by 2030.

5.2.36 The NPPF supports renewable and low carbon energy and associated infrastructure (paragraph 161), values their contribution towards cutting greenhouse gas emissions (paragraph 168 (b)) and directs local planning authorities to give significant weight to the benefits associated with renewable and low carbon energy generation and the proposal's contribution to a net zero future (paragraph 168 (a)).

5.2.37 The contribution towards meeting the national and local battery energy storage demands are significant benefits of the Proposed Development, which **should therefore be given significant weight**.

Wider Environmental Benefits: Delivery and Timing

5.2.38 The Proposed Development benefits from a connection agreement with National Grid which has been secured for 2027. Subject to the grant of planning permission, the Proposed Development could be constructed and operational by 2027 and thereby providing urgently needed capacity and stability to the national transmission network. This is directly aligned with the Government's "path to 2030" where is states that *"Successful delivery will require rapid deployment of new clean energy capacity across the whole of the UK….."*

5.2.39 This connection would provide a significant contribution towards achieving the 30GW low carbon storage and 28GW battery storage need identified by the Government and NESO by 2030 and **should be given significant weight**.

Wider Environmental Benefits: Supporting Culham Campus

5.2.40 The Site is located next to Culham Campus that is owned and managed by the UKAEA. It is renowned for being one of the most successful science locations in the UK and a national centre of fusion research since 1965. Along with other public and private sector organisations in the area, it partners with Science Vale UK to promote South Oxfordshire as a global hotspot for enterprise and innovation in science, high technology and the application of knowledge.

5.2.41 Ensuring a strong electricity supply to the campus is paramount to its success. Culham Storage would provide an enhanced connection to the UK National Grid that will give greater power security, resilience and stability. This will contribute significantly Culham Campus continuing to be a world leading fusion facility, driving growth and employment in the region.

5.2.42 The UKAEA provided a letter of support to the Applicant on 22 June 2022 (CD5.20). In their letter the UKAEA explain that the Proposed Development would provide the following range of direct and indirect benefits to the Science Centre:

- **Resilience** – An alternative cable route to supply electricity will reduce 400kV outages so these would only be short term if at all. It will allow the campus to be simultaneously fed from two points of supply establishing a very high degree of reliance. Design proposals for the future reconfiguration of the UKAEA substation will allow UKAEA to secure additional supplies for facilities in the future;

- **Stability** – Substantially stabilised grid connection helping gain approval for facilities which have fast changes and large power requirements;

- **Financial benefits** – UKAEA electricity costs will be reduced as the costs for the reconfigured substation where the BESS connects will be shared nationwide by National Grid as part of its transmission network costs;

- **Attractiveness** – Increasing the resilience of the high-powered connection will help attract tenants, future fusion facilities and attract new businesses, such as high-power advanced computing, to the area; and

- **Opportunity** – The Proposed Development would increase the UKAEA's ability to deploy assets such as the jet flywheel generators or consider new large-scale generator research and development opportunities.

5.2.43 Accordingly, the benefits to supporting the growth of the high-skilled workforce, research and investment at Culham Campus **should be given moderate weight**.

Energy Security Benefits

5.2.44 Further energy security benefits arise from the increased capacity of renewable energy generation enabled by the proposed BESS. Increased renewable energy generation will enable the phasing out of fossil fuels, which are often imported and volatile in price and supply, as shown by the impact on prices resulting from current global events, such as the recent pandemic and conflict in Ukraine.

5.2.45 In response, the Government published the British Energy Security Strategy in April 2022. This strategy encourages the development of large-scale, long-duration electricity storage as part of a flexible energy network based on low carbon energy generation, which is generated within the country and less volatile to supply and cost issues from global events.

5.2.46 As a result, **moderate weight should be given** to these benefits due to the forecast constraints in fossil fuel supplies over the coming years and to support the Government's strategy to generate secure renewable energy within the country.

Landscape and Biodiversity benefits

5.2.47 The proposals include substantial landscape mitigation and enhancements across 16ha of the Site, involving new hedgerows, woodland and scrubland. This includes reinstating historic woodland along the boundary with the RPG and parkland tree planting and grassland restoration within it.

5.2.48 Not only does the proposed landscaping providing screening to the proposed battery compound and substation building, but it also helps screen land removed from the Green Belt to the south and west. This would provide the compensatory improvements to the environmental quality and accessibility of the remaining Green Belt land sought by Local Plan Policy STRAT6 as part of the development of the adjacent strategic sites SRTAT8 and STRAT9.

5.2.49 The Proposed Development will result in BNG of 67.11% in the Application Scheme and 62.10% in the Appeal Scheme.

5.2.50 The proposals also include new public access into the enhanced RPG and encouraging use of the PRoW networks in the Green Belt, which is also sought to be delivered in the adjacent strategic sites by Local Plan Policy STRAT6 and provides further benefits.

5.2.51 Based on the considerations relating to landscape enhancements, biodiversity and increase public access to the Green Belt above, **significant weight should be given** to the landscape and ecological benefits of the Proposed Development.

Public Access Benefits

5.2.52 As part of the landscape enhancements, a new permissive path is proposed from Thame Lane providing a loop around the open part of the Site within the Listed P&G as shown in Figure 9-1.

5.2.53 These proposals will increase public access to the Green Belt and the Listed P&G, which affords exceptional views over the Thames Valley towards Abingdon.

5.2.54 Increasing recreational access to the Green Belt is consistent with the aims of Local Plan Policy STRAT6 where development in the Green Belt should delivery compensatory improvements to, amongst others, accessibility of the remaining Green Belt land.

5.2.55 These public accessibility improvements would provide some benefits that should be afforded **minor weight**.

5.3 Green Belt Harm

5.3.1 In accordance with the NPPF and NPPG the Appellant has considered the harm to the openness of the Green Belt and to the Green Belt purposes and considers the harm from the Proposed Development as follows:

- **Openness** - there will be minor harm to the spatial and visual openness of the Green Belt to a localised area adjacent to existing and future urban development.

- **Green Belt Purposes** - there will be a negligible to minor harm to the relevant Green Belt purposes resulting from the encroachment of the development onto land currently used for agriculture and taking into account the benefits enabling renewable energy generation to support urban regeneration.

5.4 Other Harms

5.4.1 Other harms are considered to be those referred to RFR2-RFR8. The Appellant considers the degree of harm to these matters to be as follows:

- **Harm to Landscape Character** – The Proposed Development will result in a **temporary moderate to major adverse effect** on the landscape character of the Site and the small part of the Wooded Estatelands Landscape Character

Area influenced by it. Once the BESS is decommissioned the retained woodland mitigation will result in a residual benefit to landscape character, enhancing the value of the landscape between the Culham Campus and the RPG.

- **Harm to Visual Amenity** – there will be a **temporary moderate to major adverse effect** on users of a short section of the Oxford Green Belt Way as it skirts the Culham Campus. Once the BESS is decommissioned the retained woodland mitigation will result in a residual benefit.

- **Harm to Heritage Assets** – **less than substantial harm** as the Proposed Development will incur a degree of temporary harm however the potential enhancements to the setting/character of the RPG by the scheme in the long term will, in part, work to offset these negative effects.

- **Loss of BMV agricultural land** – **minor harm**, with no poorer quality land available in the area, which will be outweighed by the substantial benefits of the proposals.

- **Archaeology – minor harm** as appropriate additional assessment information provided and further controls of management and recording to be secured by condition.

- **Drainage – no harm** would result as the Proposed Development has addressed comments raised by the SODC's Drainage Officer and Network Rail.

- **Biodiversity – significant benefits** as additional information demonstrates that there would be a compliant 67.11% BNG in the Application Scheme and 62.10% in the Appeal Scheme.

- **Arboriculture – no harm** due to consistent information being provided and a balance of new tree planting to compensate for any loss. The Proposed Development requires minimal tree loss. The removal of T17, T18 and G1 has been queried but they are young trees, the removal of which will avoid potential future interference with existing and proposed electrical infrastructure.

5.4.2 Overall, the Appellant considers that identified harm caused by reason of definitional harm plus any other harm would be clearly outweighed by other material considerations, which, in this case, are principally the significant benefits of the Proposed Development in meeting national energy needs and associated environmental benefits. Therefore, very special circumstances exist to justify this development in the Green Belt and the Proposed Development throughout its lifetime will comply with the relevant Development Plan policies and other material considerations.

6 Summary and conclusions

6.1.1 The Appellant considers that the Proposed Development accords with the Development Plan, read as a whole and is further supported by other material considerations including the NPPF and Government and Local policy supporting the transition to a low carbon electricity network.

6.1.2 SODC refused the application under delegated powers without notifying the Appellant or waiting for responses to consultation comments to be submitted. Eight reasons for refusal were cited, relating to the Green Belt, landscape character, heritage, BMV, archaeology, BNG, drainage and arboriculture.

6.1.3 Amended details are proposed in the Appeal Scheme that reflect the refinements to respond to consultation comments that would have been discussed with SODC should they have engaged further with the Appellant before issuing their decision.

6.1.4 In planning balance, the harms to Green Belt in terms of openness and the five purposes and other harms that formed RFR2-RFR8 are clearly outweighed by other material considerations, namely the benefits of the scheme (environmental, cost of living, energy security, landscape, biodiversity and public access) such that very special circumstances exist to justify development in the Green Belt.

6.1.5 It is considered that all policies cited by SODC, in so far as they relate to the reasons for refusal, are addressed and complied with.

6.1.6 Therefore, the Proposed Development should be granted planning permission in accordance with the statutory presumption as set out in Section 38(6) of the Planning and Compulsory Purchase Act 2004.

Appendix A – Summary of Relevant Material Considerations

Relevant Material Considerations: Legislation

The Climate Change Act 2008 (as amended) (CD3.1.1)

1.1 The original Climate Change Act passed in 2008 introduced a legally binding climate change mitigation target for the UK to reduce its greenhouse gases by 80% by 2050, compared to 1990 levels. In 2019, the Climate Change Act 2008 (2050 Target Amendment) Order 2019 was passed which increased the UK's commitment to a 100% reduction in emissions by 2050. This 'net zero' target led to a series of Government renewable and low carbon energy targets and strategies and created a more positive policy environment for energy storage and management.

Infrastructure Planning (Electricity Storage Facilities) Order 2020 (CD3.1.2)

1.2 This Order amends the Planning Act 2008 (c.29) to remove proposals for battery storage above 50MW in England from the category of generating stations under NSIP process. The effect of these statutory instruments is that consent for the development of electricity storage facilities will only require planning consent from the local planning authority under the Town and Country Planning Act ("TCPA") 1990 irrespective of the generating capacity. These changes were introduced to remove barriers to electricity storage and make it simpler for large storage facilities to obtain planning permission.

Five Year Review of the Energy Act 2013 (May 2022) (CD3.1.3)

1.3 The Energy Act 2013 introduced a legislative framework for delivering secure, affordable and low carbon energy. One of the aims of the Act is to ensure that, as older power plants are taken offline, the UK remains able to meet its energy demands whilst decarbonising.

1.4 In March 2022, the Government reviewed the Energy Act 2013 and concluded on page 9 that "*the power sector is vital to meet the UK's net zero emissions target"* and re-affirmed "*that renewables will be foundation of this, alongside firm of flexible low carbon generating capacity*."

National Policy Statements ('NPSs')

1.5 The Department for Energy Security and Net Zero adopted a revised suite of National Policy Statements for Energy on 22nd November 2023.

Overarching National Policy Statement for Energy (EN-1) (CD3.2.3)

1.6 Paragraph 1.2.1 of the Overarching National Policy Statement for Energy (EN-1) clearly states that "this NPS… may be a material consideration in decision making on applications that fall under the Town and Country Planning Act 1990 (as amended)*."* Paragraph 1.2.2 continues: *"Whether the policies in this NPS are material and to what extent, will be judged on a case-by-case basis and will depend upon the extent to which the matters are already covered by applicable planning policy."*

1.7 It explains that the according to the Net Zero Strategy by 2035, all our electricity will need to come from low carbon sources, subject to security of supply, whilst meeting a 40-60 per cent increase in demand (paragraph 3.3.57).

1.8 NPS EN-1 acknowledges the greater role and need for storage since the first NPS EN-1 was published in July 20122. Specially, it states that *"Storage has a key role to play in achieving net zero and providing flexibility to the energy system, so that high volumes of low carbon power, heat and transport can be integrated*" (paragraph 3.3.25).

1.9 It goes on to add that *"Storage is needed to reduce the costs of the electricity system and increase reliability by storing surplus electricity in times of low demand to provide electricity when demand is higher"* (paragraph 3.3.26).

1.10 In meeting energy security and carbon reduction objectives, the EN-1 clearly states that renewables offer a low carbon and proven fuel source, nevertheless their intermittent nature. In paragraph 3.3.5 the Government clearly seeks *"industry to bring forward many new low carbon developments within the 10 to 15 years to meet the twin challenge of energy security and climate change as we move towards 2050."*

1.11 The EN-1 notes the *"key role"* of electricity energy storage in *"achieving net zero and providing flexibility to the energy system, so that high volumes of low carbon power, heat and transport can be integrated"* (paragraph 3.3.25). It continues in paragraph 3.3.26 to state that:

"Storage is needed to reduce the costs of the electricity system and increase reliability by storing surplus electricity in times of low demand to provide electricity when demand is higher."

National Policy Statement for Renewable Energy Infrastructure (EN-3) (CD3.2.4)

1.12 The NPS EN-3 reinforces the urgency of providing new generation of electricity from renewable sources to secure the transition to net zero and meet the statutory targets for the sixth carbon budget. The Government predicts that this *"...could require a fourfold increase in low carbon electricity generation, with most of this likely to come from renewables"* (paragraph 1.1.2).

1.13 In paragraph 2.9.9, NPS EN-3 states that *"electricity storage is essential for a net zero energy system, it stores electricity when it is abundant for periods when it is scarce, as well as providing a range of services to help maintain the resilience and*

stability of the grid." The Government recognises that the need for this infrastructure is increasing *"...as we increase the volume of variable renewables and increase peak demand through the electrification of heat and transport. It will be critical to maintaining energy security as we shift away from gas over the 2020s-30s"* (paragraph 2.9.10).

Relevant material considerations: National Energy Policy and related documents

Clean Power 2030 Action Plan: A new ear of clean electricity (December 2024) (CD3.3.1)

1.14 In December 2024, the Government published its plan setting out how it will work with the clean power sector, including industry, trade unions, investors, policy makers and others to achieve its clean power goal.

1.15 It explains that successful delivery will require rapid deployment of new clean energy capacity across the whole of the UK, reflecting the shared renewable ambitions of the UK, Scottish and Welsh Governments.

1.16 In the plan, its set out the expectations for the 2030 capacities of key technologies at national and regional level to significantly reducing fossil fuel dependency:

- 43-50 GW of offshore wind;
- 27-29 GW of onshore wind, and
- 45-47 GW of solar power, significantly reducing our fossil-fuel dependency.

1.17 It goes on to explain that these will be complemented by flexible capacity, including 23-27 GW of battery capacity, 4-6 GW of long-duration energy storage, and development of flexibility technologies including gas carbon capture utilisation & storage, hydrogen, and substantial opportunity for consumer-led flexibility.

1.18 It sets out that there is 4.5 GW of battery storage capacity in Great Britain the majority of which is grid-scale. Based on NESO and DESNZ battery storage growth scenarios for 2030, it is expected that 23-27 GW of battery storage to be needed by 2030 to support clean power, a very significant level of increase. The government expects the majority of this increase to come from grid-scale batteries, with small-scale batteries also making a contribution.

1.19 It identifies that among the specific actions required for batteries, improving the time it takes for mature grid-scale batteries to obtain grid connections and planning decisions are the most significant actions in order to deliver the huge increase in grid-scale battery capacity.

Secretary of State for Energy Security and Net Zero Statement (8 July 2024) (CD3.3.2)

1.20 The Secretary of State for Energy Security and Net Zero outlined his priorities on 5th July 2024 to boost energy independence and cutting bills through clean power by 2030 and increasing the urgent need for energy infrastructure to support renewable energy generation.

Invest 2035: the UK's modern industrial strategy (14 October 2024) (CD3.3.3)

1.21 A subsequent consultation has been launched on the Government's industrial strategy 'Invest 2035: the UK's modern industrial strategy' on 14th October 2024. This sets out the Net Zero objectives for the Industrial Strategy to capture the growth opportunities of the Clean Energy Mission and Net Zero transition (page 14).

UK Battery Strategy (November 2023) (CD3.3.4)

1.22 In November 2023, the Department for Business and Trade published the UK Battery Strategy. It is primarily focussed on boosting the UK's battery manufacturing and supply chain capacities. The strategy is sets out the importance of grid-scale BESS, which *"allow us to use electricity more flexibly and decarbonise the energy system in a cost-effective way"* (page 10). They will *"enable us to use energy in a more flexible way that supports decarbonisation goals by helping to balance the system, maximise the usable output from renewable energy, and avoid the need for new generation capacity"* (page 14).

National Infrastructure Assessment (October 2023) (CD3.3.5)

1.23 The National Infrastructure Commission published the Second National Infrastructure Assessment report which covers, among others, recommendations for the energy sector to help the transition to net zero carbon emissions by 2050.

1.24 It is clearly stated that the Government should accelerate the deployment of renewable power, and this should be complemented by more flexible technologies by 2035. In addition, it is recommended that the "*Government should support the market to deploy electricity storage and demand side response (tools and incentives to reduce or reschedule energy usage at times of peak demand)"* (page 11).

1.25 Notably, the National Infrastructure Commission notes that currently circa 80% of the UK's energy demand is met by fossil fuel and electricity demand will increase by around 50% by 2035. Therefore, the National Infrastructure Commission clearly recommends that *"Government should target a total of 60GW of short duration flexibility by 2035. Government should introduce policy in 2024 to enable this, ensuring all viable technologies have a route to market"* (page 43).

British Energy Security Strategy (April 2022) (CD3.3.6)

1.26 The British Energy Security Strategy was published by the Government in response to concern over the security, affordability, and sustainability of the UK's energy supply and proposed accelerating the UK's transition to a low-carbon, energy independent future. In terms of flexibility of the energy system, the Government

intends to prioritise *"all forms of flexibility with sufficient large-scale, long-duration electricity storage to balance the overall"* (page 25).

Transitioning to a net zero energy system: smart systems and flexibility plan 2021 (July 2021) (CD3.3.7)

1.27 The Department for Business, Energy and Industrial Strategy published the 'Smart Systems and Flexibility Plan 2021' in conjunction with Ofgem to set out a vision for delivering flexible electricity systems underpinning energy security and the transition to a net zero 2050. On page 5 it states that around 30 GW of total low carbon flexible capacity in 2030, and 60 GW in 2050, may be needed to maintain energy security and cost-effectively integrate high levels of renewable generation.

1.28 Page 38 explains the importance of battery storage as essential to a net zero system as it can store electricity when it is abundant (e.g. when it is windy or sunny) for periods when it is scarce (e.g. when demand is higher). It goes to say that the need for electricity storage will rise as we increase the volume of renewables on the system and increase peak demand through the electrification of heat and transport.

Industrial Decarbonisation Strategy (March 2021) (CD3.3.8)

1.29 In the Industrial Decarbonisation Strategy, the Government recognised that decarbonising UK industry is a key part of its commitment towards the 2050 net zero target. The strategy reinforced the Government's priority to switch away from fossil fuel combustion to low carbon alternatives, including energy storage.

Energy White Paper. Powering our Net Zero Future (December 2020) (CD3.3.9)

1.30 The Energy White Paper reiterates the need to act now to achieve the 2050 net zero emissions target. Energy storage in batteries is stated as an important element to balance supply and demand and achieve the key commitment of Efficient Electricity Markets (Page 72).

The Committee on Climate Change: The Sixth Carbon Budget. The UK's Path to Net Zero (December 2020) (CD3.3.10)

1.31 The Sixth Carbon Budget report produced by the Committee on Climate Change recommends the UK reduces greenhouse gas emissions by 78% between 1990 and 2035, bringing forward the UK's previous target of 80% by nearly 15 years. The Sixth Carbon Budget report to the Government recommended increasingly ambitious net zero targets. In 2021, the Government adopted the Sixth Carbon Budget (2033–37) to cut emissions by 78% by 2035.

National Infrastructure Strategy Fairer, Faster, Greener (November 2020) (CD3.3.11)

1.32 In the National Infrastructure Strategy Fairer, Faster, Greener report, the Government set out plans to transform UK infrastructure to achieve net zero emissions by 2050. Importantly, the Government recognises that to achieve net zero

by 2050 and to address additional demand from electrification in transport, heating and some industrial processes *"…will require increased investments in network infrastructure, sources of flexibility, such as interconnection, demand response and storage and enough low carbon generation capacity to provide the vast majority of the UK's electricity needs."* (page 50).

Progress in reducing emissions: 2023 Report to Parliament (June 2023) (CD3.3.12)

1.33 The CCC Progress Report to Parliament[17] is a statutory report that assesses the progress made in reducing UK emissions in 2023. One of its key messages is that the UK Government's policy framework lacks the urgency needed to deliver on its own future targets. It notes that tangible progress has been made in delivering the necessary grid storage capacity, but that this is conditional on that capacity obtaining network connections.

Net Zero – Opportunities for the power sector (March 2020) (CD3.3.13)

1.34 The Net Zero – Opportunities for the power sector report was produced by the National Infrastructure Commission to advise the Government on the pathway to a net zero target in the sector through a largely renewable energy system.

1.35 In terms of recommendations to the Government, the report noted *"new low carbon capacity is needed over the next decade and renewables can deliver this"* (page 10) in the 2020s, taking into account the fact that nuclear power stations will likely only be able to deliver new capacity in the early 2030s.

Committee on Climate Change Net Zero Publications (May 2019) (CD3.3.14)

Net Zero – The UK's Contribution to Stopping Global Warming (May 2019) (CD3.3.15)

1.36 In May 2019 the Committee on Climate Change published Net Zero – The UK's Contribution to Stopping Global Warming. The report recommends a new target of net zero greenhouse gas emissions by 2050. This was passed into law in June 2019.

1.37 The report highlights the falling cost of key renewable technologies including battery storage and advises that flexibility in the energy supply (e.g. demand response, storage and interconnection) should be encouraged by policy and regulatory frameworks (page 46).

1.38 In June 2019, the new target was passed into law through the Climate Change Act 2008 (2050 Target Amendment) Order 2019.

Technical Annex: Integrating Variable Renewables (May 2019) (CD3.3.16)

[17] Climate Change Committee, June 2023, Progress in reducing UK emissions: 2023 Report to Parliament.

1.39 The Technical Annex emphasises that reducing electricity emissions close to zero will require sustained and increased deployment of renewables and that improvements in system flexibility, such as battery storage, can help accommodate large volumes of variable renewables in the system at low cost (page 4).

National Infrastructure Commission's Smart Power Report (March 2016) (CD3.3.17)

1.40 The report identified the "*key role*" to be played by storage technology in providing grid stability services needed to keep the electricity system resilient to unexpected events, such as power station failures (paragraph 2.28). Under the same paragraph, the report noted that battery and other storage technologies were "*ideally placed*" to provide this type of service as they can dispatch power extremely quickly, precisely matching the needs of the system, and that demand for them was likely to grow as an increasing share of generation comes from intermittent renewables such as wind and solar.

1.41 Adding that storage also offers a cheaper way of ensuring that electricity networks at national and local level are able to deal with peaks and troughs in the flow of electricity (paragraph 2.33 - 37) and provide a source of electricity at times of peak demand, thereby reducing the need to build conventional power stations (paragraphs 2.39 – 2.41).

Relevant material considerations: Local energy policy and related documents

Oxfordshire Energy Strategy (November 2019) (CD3.5.1)

6.1.7 The OES states in Section 3.3.1 that energy infrastructure is vital to support the growth of 100,000 new homes to 2031 and other energy hungry big science facilities such as the Culham Campus.

1.42 To achieve this the priority is to ensure that the network is smart and flexible, balancing local demand and supply and able to connect local clean energy supplies for new and existing developments. Section 3.3.5 adds that the strategy will need to support the development of energy storage at all levels.

Oxfordshire Industrial Strategy (OIS) (CD3.5.2)

1.43 The OIS at page 23 sets out the importance of investing in energy infrastructure to support the changing requirements and next generation needs of energy-intensive science and technology assets in the area.

Relevant material considerations: Infrastructure operator related documents

2024 NESO FES (July 2024) (CD3.6.1)

1.44 The NESO in their 2024 FES provide a framework to achieve the Government's commitment to a decarbonised electricity system by 2035 and 2050 Net Zero target

through four scenarios depending on speed of transition to clean energy and balance of energy sources. Within which battery storage is considered a key element (page 118), with the FES aiming to provide 28GW of battery storage by 2030 and 36GW by 2050 in the Holistic Transition and Electric Engagement scenarios (page 119).

National Grid ESO: The Electricity Ten Year Statement 2023 (CD3.6.2)

1.45 Using data from the 2023 FES, the NGESO's Electricity Ten Year Statement ('ETYS') identifies points in the transmission network where more transfer capacity is needed. Stakeholders are then invited to propose solutions to these requirements. It sets out that growing low carbon and renewable energy generation will continue to drive system needs.

1.46 One of its key messages is that there is a need for timely and coordinated network reinforcements to help significantly reduce network constraints. Network reinforcements include electricity storage such as BESS.

National Grid ESO: Day in the Life 2035 Second Edition (October 2022) (CD3.6.3)

1.47 National Grid ESO produced a report along with REGEN which provides a snapshot of what a net zero energy system could like on winter's day with low winds and very little sunshine and summer's day. Importantly, the delivery of a net zero energy system is dependent on energy storage, alongside the development of low carbon, dispatchable generation. This means that energy storage is particularly important, especially long-duration storage, which will be critical for optimisation of the usage of low-cost energy, for balancing supply and demand , and for operating the network efficiently.

1.48 Additionally, the Day in the Life 2035 report highlights that all types of demand-side flexibility will be required within a network dominated by renewable electricity supply. In this scenario energy storage will be key along with other solutions to provide opportunities for multi-vector energy optimisation.

1.49 In summary, the Day in the Life 2035 report notes that electricity storage plays a critical role in a net zero power system (page 126):

"In addition to providing system services at both transmission and distribution level, energy storage will be critical to maximise the value of renewable electricity through 'price arbitrage': when electricity is cheaper, typically during periods of low demand and/or high renewable output, energy is stored. Electricity is then supplied when prices are highest, either when demand is high, available generation is low, or there is a requirement for system services."

Appendix B – Relevant planning and appeal decisions

APP/A0665/V/15/3013622 – Called in application for Land at Clifton Drive, Sealand Road, Chester (CD4.1)

APP/G2713/W/23/3315877 - Land South of Leeming Substation, west of the village of Scruton, bordering Fence Dike Lane, part of Low Street and Feltham Lane, DL7 0RG (CD4.2)

APP/N2739/W/22/3300623 - Rawfield Lane, Fairburn, Selby LS25 5JB (CD4.3)

APP/W1525/W/22/3306710 – Land West of Battlesbridge, Rettendon, Chelmsford City Council (CD4.4)

APP/N5090/W/22/3298962 – National Grid Mill Hill Substation, Land west of National Grid Mill Hill Substation, Mill Hill NW7 1NT (CD4.5)

APP/P1615/W/22/3307140 – Land off Northington Lane, Awre, GL14 1 EL (CD4.6)

S62A/22/0006: Application determined by Secretary of State, Land at Berden Hall Farm, Ginns Road, Berden, Uttlesford District Council (CD4.7)