Frodsham Solar

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SUSTAINABLE INVESTMENTS

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Appendix A Green Belt Assessment

1.0 INTRODUCTION

1.1 Purpose of this Document

1.1.1 This Planning Statement has been prepared on behalf of Frodsham Solar Limited ('the Applicant') in relation to an application for a Development Consent Order (DCO) for the Frodsham Solar Project ('the Proposed Development'). The application for the DCO will be submitted to the Planning Inspectorate, with the decision whether to grant a DCO being made by the Secretary of State for the Department for Energy Security and Net Zero (hereafter referred to as the 'Secretary of State') pursuant to the Planning Act 2008[i].

1.1.2 The purpose of this document is to provide detail of the Proposed Development and the need for it, overview of the relevant legislative context, and to present the Applicant's detailed assessment of the Proposed Development against the relevant National Policy Statements (NPSs) and other relevant policy and legislative considerations.

1.1.3 This document comprises an application document as defined by Regulation 5(2)(q) of the Infrastructure Planning (Applications: Prescribed Forms and Procedures) Regulations 2009[ii].

1.1.4 The Proposed Development is 'EIA development' as defined by the Infrastructure Planning (Environmental Impact Assessment) Regulations 2017 (the 'EIA Regulations')[iii], requiring an Environmental Impact Assessment (EIA). An Environmental Impact Assessment (EIA) has been undertaken and is reported by the **Environmental Statement (ES)** ***[EN010153/DR/6.1 / 6.2 / 6.3]***. In undertaking the EIA and preparing the ES, the Applicant has taken account of the EIA Scoping Opinion published on 10th July 2023 and included for reference at **ES Vol 2 Appendix 1-2: EIA Scoping Opinion** ***[EN010153/DR/6.2]***.

1.1.5 Where relevant, this document refers to the ES and other reports and assessments which collectively form the application submitted to the Planning Inspectorate for the DCO.

1.2 Overview of the Proposed Development

1.2.1 The Proposed Development comprises a new solar energy generating station and an associated on-site Battery Energy Storage System (BESS) on land at Frodsham Marsh, Frodsham, Cheshire West and Chester ('the Site'). The Proposed Development also includes the associated infrastructure for connection to the local electricity distribution network, as well as a private wire electricity connection that would enable local industrial businesses to utilise the renewable energy generated by the Proposed Development.

1.2.2 The Proposed Development is located within the administrative boundary of Cheshire West and Chester Council (CWaCC). The **Location Plan *[EN010153/DR/2.1]*** shows the Order limits for the Proposed Development.

1.2.3 The current design for the Proposed Development would enable the generation of approximately 147 megawatts (MW) of electricity, as well as the storage of approximately 100 MW of electricity in a BESS. The present gird connection offer from the District Network Operator (DNO) is for 100 MW export and 50 MW import. As noted above the Proposed Development would also be capable of exporting electricity directly to local businesses.

1.2.4 The Proposed Development is a Nationally Significant Infrastructure Project (NSIP) under Section 14(1)(a) and Section 15(2) of the Planning Act 2008 as an onshore generating station in England with a capacity of more than 50MW. As such, a DCO is required for the Proposed Development to proceed.

1.2.5 Subject to obtaining the necessary consents, construction is anticipated to commence in January 2028 and be completed in mid-2030. The Proposed Development comprises a temporary development with an operational phase of up to 40 years. Decommissioning activities would therefore commence in 2069, 40 years after final commissioning.

1.2.6 A description of the Proposed Development is provided at Chapter 4.0 of this Planning Statement.

1.3 The Applicant

1.3.1 The Applicant is Frodsham Solar Limited. The proposals for Frodsham Solar were originally introduced by a joint venture known as Peel Cubico Renewables, however, in January 2024 Cubico Sustainable Investments (Cubico) acquired Peel NRE's 50% stake in Peel Cubico Renewables Ltd. This included the joint venture's solar development pipeline, meaning that Frodsham Solar is now a Cubico project and Frodsham Solar Limited is wholly owned by Cubico.

1.3.2 Cubico is a developer, operator and long-term owner of clean energy assets with operations in 9 countries (UK, Spain, Italy, Greece, Mexico, Uruguay, USA, Colombia and Australia). Their portfolio includes onshore wind, solar photovoltaic, concentrated solar power, battery energy storage systems (BESS) and transmission line technologies.

1.3.3 Cubico are committed to playing a significant role in the world's transition to clean energy while prioritising environmental and social responsibility.

1.4 Structure of this Document

1.4.1 The remainder of the Planning Statement is structured as follows:

i) Section 2 provides the Statement of Need for the Proposed Development in the context of national policy and legislation.
ii) Section 3 provides a description of the Site and its context, in terms of physical characteristics, policy allocations and environmental designations.
iii) Section 4 provides a description of the Proposed Development and where the Applicant is seeking to secure flexibility in design, as well as the construction, operational and decommissioning activities and timescales.

iv) Section 5 provide an overview of the benefits arising as a result of the Proposed Development.

v) Section 6 provides an overview of the legislative context to the application and the legislative, policy and other considerations relevant to the consideration of the application.

vi) Section 7 provides an appraisal of the Proposed Development against the relevant national, local and other material policy considerations. **Appendix A** supports this section by carrying out a detailed assessment of the Proposed Development against Green Belt policy, given the Proposed Development is located within Green Belt.

vii) Section 8 provides a conclusion to the Planning Statement by considering the planning balance, informed by the analysis of the Proposed Development against policy and other considerations relevant to the determination of the DCO application, and the compelling need for the Proposed Development.

2.0 STATEMENT OF NEED

2.1 Introduction

2.1.1 It is established at paragraphs 3.2.6 to 3.2.8 of the Overarching National Policy Statement for Energy (EN-1)[iv] that there is a need for the Proposed Development, that the need is urgent, and that the Secretary of State should give substantial weight to that need:

"The Secretary of State should assess all applications for development consent for the types of infrastructure covered by this NPS on the basis that ***the government has demonstrated that there is a need*** *for those types of infrastructure* ***which is urgent****, as described for each of them in this Part.* [3.2.6]

In addition, the Secretary of State has determined that ***substantial weight should be given to this need*** *when considering applications for development consent under the Planning Act 2008.* [3.2.7]

The Secretary of State is not required to consider separately the specific contribution of any individual project to satisfying the need established in this NPS." [3.2.8]

2.1.2 On the basis that the need is firmly established within NPS EN-1, and that in accordance with the s104(2)(a) of the Planning Act 2008 the Secretary of State must have regard to the NPS, its provisions on need are not repeated in this Planning Statement.

2.1.3 This section of the Planning Statement instead sets out the national context for the need case which is established by NPS EN-1, considering current statutory requirements and contemporary Government and local strategy and policy that goes beyond NPS EN-1 or NPS EN-3. Accordingly, this Statement of Need is structured under the following themes:

- Statutory Requirements;
- Progress to Net Zero;

- Achieving British Energy Security;
- Green Economic Growth;
- The need to rapidly increase electricity generation;
- Grid Reform; and
- Summary.

2.1.4 A broad evidence base of published data and information has been considered in drafting this Statement of Need. However, for the purposes of decision-making the following documents are considered to be important and relevant to the Secretary of State in accordance with s104(2)(d) of the Planning Act 2008:

i) Climate Change Act 2008 (2050 Target Amendment) Order 2019 (2019)
ii) Sixth Carbon Budget (2021)[v];
iii) draft Seventh Carbon Budget (2025)[vi];
iv) Paris Agreement (2015)[vii];
v) British Energy Security Strategy (2022)[viii];
vi) Powering Up Britain (2023)[ix];
vii) Powering Up Britain: Energy Security Plan (2023)[x];
viii) Powering Up Britain: Net Zero Growth Plan (2023)[xi];
ix) Climate Change Committee 2024 Progress Report to Parliament (2024)[xii];
x) Accelerating to Net Zero: responding to the CCC progress report and delivering the Clean Energy Superpower Mission (2024)[xiii];
xi) Clean Power 2030 Action Plan (2024)[xiv];
xii) Clean Power 2030 Action Plan: Connections Reform Annex (2024)[xv];

2.1.5 It should be noted that the wider benefits of the Proposed Development (beyond the need case) are set out separately in Section 5 of this Planning Statement.

2.2 Statutory Requirements

Climate Change Act 2008 (2050 Target Amendment) Order 2019

2.2.1 The Climate Change Act 2008[xvi] initially established a legally binding target for the UK to achieve an 80% reduction in greenhouse gas emissions by 2050 (relative to 1990 levels). However, recognising the climate emergency and the need for greater ambition, in 2019 the UK Government became the first major economy globally to enact legislation committing to eliminate its contribution to global warming entirely by 2050, adopting a net zero emissions target compared to the 1990 baseline.

2.2.2 In June 2019, the Government introduced the Climate Change Act 2008 (2050 Target Amendment) Order 2019**Error! Bookmark not defined.**, revising the original Act's emissions reduction target from at least 80% to at least 100%. This amendment, commonly referred to as the net zero target, legally binds the UK to completely phase out its greenhouse gas emissions by 2050 relative to 1990 levels.

2.2.3 By the time this landmark legislation was enacted, the UK had already achieved a 42% reduction in emissions since 1990 while simultaneously growing its economy by around 72%. However, reaching the net zero target requires transformational further progress – including a massive increase in renewable energy capacity, development of carbon capture and storage technologies, expansion of nuclear energy generation, and transitioning heating and transport systems to electric alternatives.

2.2.4 In April 2021, in line with recommendations from the Climate Change Committee's Sixth Carbon Budget[v], the Government announced an additional ambitious interim target of cutting national emissions by 78% by 2035 (compared to 1990 levels).

2.2.5 Together, the legally binding net zero 2050 commitment and the 78% by 2035 milestone, make clear that a massive expansion of renewable energy projects will be essential across the UK to achieve our climate objectives.

Carbon Budgets and the Seventh Carbon Budget

2.2.6 The Climate Change Act established a system of five-year carbon budgets that cap the total UK emissions in each budget period. These carbon budgets, set 12 years in advance, serve as interim milestones on the path to net zero and are legally enforceable limits under the Act.

2.2.7 The Fourth Carbon Budget (2023–2027) was set in law in 2011, requiring a 50% reduction below 1990 levels by 2027. The Fifth and Sixth Carbon Budgets (covering 2028–2032 and 2033–2037, respectively) were adopted in 2016 and 2021. The Sixth Budget was the first one calibrated to the revised net zero 2050 target.

2.2.8 The Sixth Carbon Budget mandates the most ambitious emissions cut yet: the 78% reduction by 2035 target (relative to 1990), and effectively requires the UK power sector to reach zero carbon by 2035. Achieving this will demand a dramatic step-change in the energy system, with an immediate emphasis on accelerating renewable energy deployment as part of a suite of measures.

2.2.9 To illustrate the scale of change envisioned for solar generation, the Climate Change Committee's Electricity Generation Sector Summary[xvii] for the Sixth Carbon Budget notes on page 14:

"Large-scale solar currently has 13 GW installed capacity in the UK, which requires 290 km². Maximising the potential of solar generation might entail using an additional 1,500 km²."

2.2.10 This highlights that a several-fold increase in solar capacity (and the land area devoted to it) may be needed as part of meeting the Sixth Carbon Budget's requirements. Indeed, the Sixth Carbon Budget's analysis projects that electricity demand could at least double (or even triple) by 2050 compared to a 2018 baseline, due to the widespread electrification of vehicles and heating.

2.2.11 In 2025, the Climate Change Committee published the proposed Seventh Carbon Budget[vi] which, if accepted and enacted by the Government, will

extend the UK's carbon limits into the 2040s. This upcoming budget reinforces the need for accelerated renewable electricity deployment to stay on track for the 2050 net zero goal. Table 7.5.1 of the Seventh Carbon Budget sets out an intent to achieve 82 GW of installed solar capacity by 2040, equivalent to more than quadrupling the current installed capacity within the next 15 years.

2.2.12 Each carbon budget, together with the 2050 net zero target, collectively drives the need for new low-carbon energy infrastructure, as the energy sector must decarbonise to meet these binding limits. This in turn necessitates urgent delivery of large-scale renewable energy projects like the Proposed Development.

2.3 Progress to Net Zero

Net Zero commitments and targets

2.3.1 As noted above, the UK now has a legally binding commitment to achieve net zero greenhouse gas emissions by 2050 (established through the 2019 amendment to the Climate Change Act). In pursuit of this overarching goal, the Government has adopted a series of interim targets and benchmarks – notably the carbon budgets discussed in the previous section.

2.3.2 In addition to these domestic statutory requirements, the UK is a signatory to the Paris Agreement[vii] (2015), a landmark international treaty under which countries pledged to limit global warming to well below 2°C and ideally to 1.5°C. Under the Paris Agreement framework, nations submit Nationally Determined Contributions (NDCs) – essentially national emission-reduction pledges. The UK has made significant commitments through its NDCs, including:

i) **2030 Target**[xviii]**:** reduce economy-wide greenhouse gas emissions by at least 68% by 2030 (from 1990 levels), as announced in December 2020.
ii) **2035 Target**[xix]**:** reduce emissions by at least 81% by 2035 (from 1990 levels), as announced in November 2024 – building on the Sixth Carbon Budget's 78% recommendation.

2.3.3 Together with the carbon budgets, these incremental targets establish a clear trajectory towards net zero and highlight the significant scale of decarbonisation required in the near to medium term.

2.3.4 Within the energy sector, the Government's Clean Power 2030 Action Plan[xiv] includes a target that Britain's electricity demand should be met entirely by "clean" generation by 2030, with at least 95% coming from low-carbon technologies (allowing only a small residual amount from unabated gas for energy security). Achieving this essentially carbon-free power system by 2030 is integral to reaching net zero, because early decarbonisation of electricity will enable deeper emissions cuts in other sectors (like transport and heating) through electrification.

Emissions reductions achieved to date

2.3.5 The UK has already made substantial progress in cutting greenhouse gas emissions over the past few decades. By 2023, national emissions had fallen to roughly 50% below 1990 levels[xii], and provisional data published in early 2025 indicates approximately a 54% reduction from 1990[xx]. In other words, the country is just over halfway toward the net zero 2050 goal.

2.3.6 The early carbon budgets have been met or exceeded, with the UK comfortably meeting the first three carbon budgets covering the period 2008 to 2022[xii]. A primary contributor to hitting these initial targets was the rapid early decarbonisation of the energy sector, driven in particular by the phase-out of coal and significant growth in renewables. Coal's share of UK electricity generation has fallen from roughly 40% a decade ago to 0% today, replaced by low-carbon and alternative sources[xii].

2.3.7 The most recent data[xxi] (for 2024) shows that about 65% of UK electricity generation came from low-carbon sources (renewables plus nuclear), with renewables alone contributing a record 50.8% of total generation – up from roughly 20% low-carbon generation in 2010. The result is that the carbon intensity of UK electricity is at an all-time low, a development cited by the

Climate Change Committee (CCC) as a principal success in the nation's decarbonisation journey[xii].

2.3.8 This dramatic cut in emissions from the energy sector demonstrates what coordinated policy can achieve. A combination of supportive subsidies, market mechanisms (e.g. Contracts for Difference), and carbon pricing has driven clean investment and innovation. In turn, the costs of renewables have fallen significantly – the price of solar photovoltaic systems, for example, has dropped by roughly 85% in the past decade[viii] – making subsidy-free projects such as the Proposed Development commercially viable and attractive to private investors.

Shortfalls and the need to accelerate

2.3.9 Notwithstanding the achievements to date, the CCC's 2024 Progress Report makes it clear that the UK is not currently on track to fulfil its future carbon budgets and 2030 climate goals without a significant acceleration in delivery.

2.3.10 The CCC observed that while energy-sector decarbonisation has thus far been a success story, recent policy reversals and delays (during 2023) "*hindered progress just when acceleration was needed*," and it warned that urgent action is required to get back on track[xii].

2.3.11 A key area of concern identified by the CCC is the rate of renewable energy deployment in the UK. To meet the 2030 NDC targets, the annual installation rate of renewable generation capacity must roughly double for wind and quintuple for solar compared to recent deployment rates. The CCC finds that the current deployment rate for solar is significantly off-track relative to what is required[xii].

2.3.12 For example, in 2024 the UK added approximately 1.4 GW of new solar capacity. While this was an increase from previous years, it falls far short of the over 4 GW per year that is required to meet the 2030 goals[xii].

2.3.13 The Government's response to the CCC's 2024 Progress Report, published in December 2024, acknowledged that the UK was "*not on course to rise to the climate challenge*," necessitating a rapid change in policy[xiii]. The new Government (elected in mid 2024) has moved quickly to address these gaps — for example, by lifting the de-facto moratorium on onshore wind, increasing support for renewables auctions, and re-prioritising net zero in planning and infrastructure decisions. Nevertheless, the current delivery gap remains material and, without accelerated measures, the UK risks overshooting its legally-binding carbon budgets in the late 2020s and missing the 2030 emissions target.

2.3.14 This clear shortfall in progress is central to the need case for the Proposed Development.

The critical role of solar photovoltaics and battery energy storage in achieving Net Zero

2.3.15 As set out above, greatly expanding renewable and low-carbon energy capacity will be pivotal to closing the UK's net zero delivery gap – and solar photovoltaics (PV) and battery energy storage are especially critical to decarbonising the electricity supply.

2.3.16 Solar PV is now among the cheapest forms of power generation and can be deployed at scale relatively quickly. The UK's installed solar capacity has grown from virtually zero in 2010 to approximately 17.8 GW at the end of 2024, contributing around 5% of total electricity generation[xxii]. To align with net zero commitments, however, this expansion must vastly accelerate. The Government has set a target (in the Clean Power 2030 Action Plan) of reaching 45-47 GW of solar power by 2030. Based upon a current installed capacity of 16.6 GW (in Q2 of 2024), it will require installing well over 4 GW of new solar each year on average.. The Seventh Carbon Budget[vi] goes further, requiring 82 GW of solar capacity by 2040.

2.3.17 The CCC identifies solar PV as a key component of the future electricity mix, noting that renewables (especially solar and offshore wind) must underpin energy-sector decarbonisation given their falling costs and scalability[xii]. Solar is also seasonally and geographically complementary to wind generation, which improves overall grid reliability when the two are deployed together.

2.3.18 Crucially, large-scale solar projects can be built faster than many other major generation types, often with construction timelines in the order of 1 to 3 years, meaning they can contribute to closing the 2030 capacity gap within the required timeframe.

2.3.19 Alongside an increase in solar and other renewables, there is a pressing need for expanded energy storage capacity to provide flexibility in a renewables-dominated grid. Solar and wind output is variable (solar produces electricity only during daylight hours and varies with seasons), so storage systems are essential to shift excess generation to periods of high demand and to maintain security of supply.

2.3.20 The Government's Clean Power 2030 Action Plan emphasises the need to scale up energy storage as part of making the UK a "*clean energy superpower*" by 2030. It calls for a major increase in battery storage capacity – targeting around 27.1 GW of installed storage by 2030 (and 28.7 GW by 2035) – which represents roughly a six-fold increase from the circa 4.5 GW of battery capacity available at the end of 2024[xiv].

2.3.21 Achieving net zero will depend on rapidly scaling up both solar PV generation and battery storage over the coming decade, to provide abundant low-carbon electricity and the means to flexibly manage it on the grid.

Frodsham Solar and Net Zero

2.3.22 The trajectory of UK emissions and the policy responses described above establish a clear imperative for renewable energy infrastructure projects like the Proposed Development.

2.3.23 An analysis of progress towards net zero reveals both notable achievements (demonstrating the feasibility and benefits of decarbonisation) and major shortfalls (indicating an urgent need for additional action). In particular, the shortfall in planned emission reductions to 2030 – and the specific undersupply of solar generation capacity – underscore a pressing need to accelerate the deployment of large-scale solar PV across the UK.

2.3.24 The Proposed Development would directly contribute to closing this renewable capacity gap. With an installed solar capacity of approximately 147 MW (0.147 GW), it would increase the UK's solar generation base and produce enough clean electricity to power approximately 40,000 homes annually, facilitate connections to local industrial businesses, and save a minimum of approximately 900,000 tonnes of CO2 equivalent over its lifetime[1]. Additionally, the proposed private wire connection could allow nearby industries to decarbonise, as covered further under Section 2.5. Furthermore, the co-located battery storage (with 100 MW of capacity) would provide much-needed flexible output and grid-balancing services – capturing solar energy when it is abundant and dispatching it during peak demand or lower renewable periods, thereby improving system resilience.

2.3.25 These contributions are fully aligned with national net zero strategy, and importantly, the project is deliverable by 2030 with an agreed connection date during 2029, and partial commissioning and power export scheduled from mid-2029. That means the Proposed Development can start making a valuable contribution toward decarbonising the energy sector before the critical 2030 deadline for a predominantly clean electricity supply. In short, the Proposed Development will provide a timely and tangible boost to the UK's

*[1] Calculated based on the total GHG emissions offset by the project's electricity generation of circa 1,300,000 tonnes of CO2 equivalent (based on the 'Grid Average' scenario as set out in Table 5-17 of **ES Vol 1 Chapter 5: Climate Change [EN010153/DR/6.1]**), less the lifetime GHG emissions of the Proposed Development at circa 400,000 tonnes of CO2 equivalent (set out in Table 5-14 of **ES Vol 1 Chapter 5: Climate Change [EN010153/DR/6.1]**)*

renewable capacity at the scale and speed required to help meet our net zero objectives.

2.4 Achieving British Energy Security

British Energy Security as a National Priority

2.4.1 In recent years, the UK Government has elevated energy security to a top-tier national priority, driven by the need for secure, domestic, and affordable energy supplies. The creation of the Department for Energy Security and Net Zero (DESNZ) in early 2023 exemplifies this focus.

2.4.2 The mission is to set Britain "*on course to greater energy independence*" by replacing decades of reliance on imported fossil fuels with cheaper, cleaner domestic sources of energy[ix]. This strategic shift recognises that cheap, clean, and secure power is essential for economic growth and consumer welfare. The ultimate aim is a resilient energy system in which British consumers and industries are no longer exposed to the volatility of global fossil fuel markets.

Geopolitical Context

2.4.3 Recent geopolitical shocks have underscored why the UK is prioritising greater domestic energy security. The Russian invasion of Ukraine in February 2022 triggered an unprecedented energy price crisis across Europe, given Russia's role as a major gas and oil exporter.

2.4.4 Global gas prices spiked to record highs in 2022, with UK wholesale gas reaching approximately 20 pence per kWh in August 2022 – around ten times higher than pre-crisis levels[xxiii]. These spikes fed directly into UK energy bills. By October 2022 the regulated price cap was set to jump by approximately 80% (gas +91%, electricity +70%) before emergency government intervention limited the increase[xxiii].

2.4.5 The UK, like its European neighbours, was forced to spend enormous sums to shield consumers – an estimated £44 billion in UK government support was

allocated to help households in 2022–2023[xxiv], almost equivalent to the UK's entire annual defence budget[xxv]. Even with subsidies, millions of families faced fuel poverty as bills doubled compared to the previous year. Crucially, the root cause was the UK's exposure to the volatile international gas market.

2.4.6 The UK still relies on gas-fired power for roughly 35–40% of its electricity and uses gas to heat over 80% of homes[xxi]. North Sea gas production has been in decline for years, so more than half of Britain's gas is now imported. But even domestic North Sea gas did not protect consumers – as the Energy Secretary noted, "*whether the gas comes from the North Sea or is imported, it is sold at the same price on the international market… Britain is a price-taker, not a price-maker*."[xxvi] In other words, when global gas prices surged due to Russia's war, UK consumers paid the price regardless of local supply.

2.4.7 This painful lesson – that continued dependence on fossil fuels leaves the UK vulnerable to events beyond its control – has driven home the need for a more secure, self-reliant energy system.

2.4.8 Reducing reliance on internationally traded fossil fuel markets is now viewed as a national security imperative, especially as the world faces an "*age of heightened geopolitical risk*."[xxvi] Strengthening domestic energy generation, particularly from sources that are insulated from global turmoil, is seen as essential to protect the country from future energy shocks.

UK policy response and targets

2.4.9 To focus attention on achieving energy security, in April 2022 the UK Government launched the British Energy Security Strategy, which sets out plans to accelerate domestic energy production with the twin goals of improving energy security while meeting net zero commitments. Crucially, the British Energy Security Strategy made clear that greater deployment of renewables is pivotal for energy security, noting that the growing share of renewables in UK power generation is already reducing exposure to volatile international fossil fuel markets[viii].

2.4.10 The British Energy Security Strategy was the first policy document to set the Government's ambition of reaching 70 GW of installed solar capacity by 2035 — a five-fold increase from the then-installed capacity of approximately 14 GW. These ambitions were reaffirmed and expanded upon in the *Powering Up Britain: Energy Security Plan*[x] (March 2023) and the *Clean Power 2030 Action Plan*[xiv] (December 2024). The Energy Security Plan emphasises that "*energy security and net zero are two sides of the same coin*," meaning a rapid rollout of low-carbon power is needed to deliver a system that is both cleaner and more secure.

2.4.11 The Clean Power 2030 roadmap, in turn, commits to meeting 100% of the UK's annual electricity demand with "clean" sources by 2030 (defined as renewables, nuclear, and other low-carbon technologies), with any unabated gas generation used only as a last resort for backup[xiv]. Achieving this would put the UK on track to become a net exporter of electricity in the 2030s, marking a dramatic turnaround from the import dependence of past decades and greatly enhancing energy sovereignty.

The critical role of solar photovoltaics and battery energy storage in achieving Energy Security

Solar Photovoltaics

2.4.12 Solar energy has emerged as a cornerstone of the UK's strategy to secure long-term energy independence. As an abundant domestic resource, sunlight is immune to geopolitical interference. Every megawatt of solar capacity installed in the UK substitutes for imported gas, lessening our exposure to international fossil fuel markets.

2.4.13 Solar technology has also matured to become one of the cheapest forms of energy generation. Government figures highlight that the cost of solar panels has fallen by approximately 85% in the past decade, contributing to record-low prices for solar electricity. Since 2015 alone, UK solar and onshore wind

costs have dropped by over one-third, making renewables the lowest-cost option for generating power[viii].

2.4.14 By contrast, fossil-fuel electricity is tied to volatile commodity prices: during the 2022 crisis, gas-driven electricity prices spiked to 5–7 times higher than typical offshore wind prices[x]. Solar energy thus offers a double benefit – greater security and lower long-term cost. It can also be built quickly, relative to building a power station.

2.4.15 Crucially, as solar and other renewables scale up, they help stabilise electricity prices. Under Britain's marginal pricing system, expensive gas-fired plants often set the market price for all electricity; but when renewables provide more of the total mix, gas plants run less and set the price less frequently. Analysis of the 2022 energy price crisis found that domestic renewables acted as a brake on surging costs, moderating what would otherwise have been even higher wholesale electricity prices[x]. In effect, renewables serve as a price stabiliser by reducing the influence of gas in the market.

2.4.16 Consequently, increasing installed solar capacity is not only vital for decarbonisation but also an economic safeguard against future fossil fuel price swings. Every new solar farm or rooftop array incrementally reduces the UK's vulnerability to supply shocks. This is part of the reason why solar PV is identified as critical national infrastructure for energy security.

Battery Energy Storage

2.4.17 To fully realise the energy security benefits of renewables, battery storage and other grid flexibility measures are critical. Solar and wind are intermittent by nature, and energy storage technologies ensure that renewable power can be stored when generation exceeds demand and released when demand exceeds generation, enhancing overall reliability and reducing the costs of curtailment.

2.4.18 The term curtailment refers to an enforced reduction in power production, when there is too much electricity in the grid. When surplus generation cannot be used or transmitted, the National Electricity System Operator (NESO) is forced to "curtail" renewable output – essentially asking wind or solar farms to switch off – resulting in vast amounts of clean energy being wasted. The annual cost of renewable curtailment is currently estimated to be in the hundreds of millions of pounds[xiv], which will quickly rise into the billions if further energy storage solutions are not connected to the grid alongside the growth in renewables – a cost burden which is ultimately passed onto businesses and consumers through higher bills.

2.4.19 Installing a BESS alongside the solar array directly mitigates curtailment and strengthens grid stability and reliability. Instead of being shut off during periods of surplus generation, the solar farm's excess output can be stored on-site and released later when demand rises or when network capacity is available. This ensures that renewable energy which would otherwise be wasted is put to use, maximising the clean power contribution of the project and improving overall system efficiency.

2.4.20 The British Energy Security Strategy explicitly supports co-locating solar farms with battery storage to maximise usable output and the efficiency of land use. A diversified renewables-based system with ample storage is far more secure than one without – it can withstand sudden supply shocks or surges in demand because stored energy (and a spread of generation sources) act as a buffer. This contrasts with an energy system overly dependent on fuel imports that can be disrupted, or on just-in-time gas-fired generation that is exposed to price spikes.

2.4.21 By reducing dependence on gas-fired peaking plants and shielding consumers from fossil fuel price volatility, large-scale batteries and related technologies increase Britain's energy autonomy. The long-term vision is a self-reliant electricity system where most power is generated from UK-based renewable sources and buffered by significant storage capacity – a system

far less prone to external shocks. In practical terms, that means when the sun is shining or wind is blowing, excess energy can be stored and later used during evenings or calm periods, rather than the UK needing to import gas or pay for standby generation. This capability will be essential for a secure, affordable net zero energy system.

Frodsham Solar and Energy Security

2.4.22 The Proposed Development would directly contribute to the UK's energy security agenda. By generating approximately 147 MW of clean, home-grown electricity, Frodsham Solar will reduce dependence on imported gas-fired power, enhancing the security of supply. The inclusion of on-site battery storage means the solar farm's output can be stored and dispatched when it is most needed – for example, supporting the grid on dark winter evenings or at times of system stress – rather than being wasted at midday when solar generation is high. In effect, the Proposed Development will function not just as a generation asset but as a flexible energy hub that helps balance supply and demand locally.

2.4.23 The project is fully in line with the Government's vision of a modernised, resilient power system as outlined in the British Energy Security Strategy and the Energy Security Plan. It embodies the "two sides of the same coin" principle that net zero and energy security go hand-in-hand. By delivering secure, low-cost renewable power, the Proposed Development will strengthen energy independence and protect consumers and businesses from future energy price shocks. In summary, Frodsham Solar will make the electricity system cleaner and more secure in tandem – precisely the dual benefit that current national policy seeks from new energy infrastructure.

2.5 Delivering Green Economic Growth

National Policy and Economic Strategy

2.5.1 As set out above, the UK's commitment to net zero by 2050 is not only an environmental imperative but also increasingly seen as an engine for

economic growth. National policy has come to recognise the clean energy transition as a major opportunity to boost investment, jobs, and industrial competitiveness. An independent government review of net zero in 2023 (the '*Skidmore Review'*) described the transition as "*the economic opportunity of the 21st century*" for the UK, underscoring that decarbonisation, energy security, and economic prosperity are intrinsically connected[xxvii].

2.5.2 Recent Government strategies such as the British Energy Security Strategy (April 2022) and Powering Up Britain: Net Zero Growth Plan (March 2023) reinforce this view, emphasising that cutting emissions can drive job creation, investment, and competitiveness across the country.

2.5.3 Since 2020, over 80,000 "green jobs" have been created as a direct result of climate and energy policies[xi]. The Net Zero Growth Plan stresses that the transition to net zero offers opportunities to "*create well-paid and high-skilled jobs, support levelling-up and reinvigorate our industrial heartlands*."[xi] The target of installing 70 GW of solar by 2035 is central to delivering on these opportunities.

2.5.4 The current Government was elected in 2024 with a mission to make Britain a "*clean energy superpower*," and it accelerated the target for a fully renewable and low-carbon power system to 2030 – five years earlier than the previous 2035 goal[xiv]. Achieving this ambitious target will require a massive scaling-up of renewable deployment, as described earlier.

2.5.5 This agenda is at the heart of the Government's economic strategy, with an objective of mobilising billions of pounds of private investment and creating around 650,000 jobs by 2030 through growth in green industries[xxviii].

2.5.6 To drive this mission forward, a new publicly owned entity, Great British Energy, was established in 2024 and gained statutory authority in early 2025 to invest in clean energy generation. Great British Energy will partner with the private sector to deliver new projects and build domestic supply chains – a

strategy aimed at securing economic value from renewable development within the UK[xxviii].

2.5.7 These broad goals align with, and bolster, the policy support for the Proposed Development. There is clear consensus that expanding solar capacity and battery storage is not only an environmental necessity but also an economic opportunity for the UK.

Regional and Local Policy and Strategy

2.5.8 The Proposed Development is strategically located within a nationally significant energy corridor stretching from Ellesmere Port toward Runcorn, where over 5% of the UK's energy is consumed[xxix]. Being at the heart of this corridor of energy-intensive industry, the Site benefits from immediate proximity to complementary infrastructure and demand centres. This unique geography enables the possibility of direct integration of the Proposed Development into local networks through a private wire connection, allowing it to feed renewable electricity directly to nearby large energy users and strengthen the resilience of the area's power supply.

2.5.9 The Net Zero North West Cluster Plan[xxx] underlines the scale of the opportunity for the region, setting out a £30 billion pipeline of low-carbon projects spanning renewables, hydrogen, and carbon capture developments centred on the Liverpool Bay / Cheshire area. This pipeline is expected to "*unlock investment and remove over 40 million tonnes of carbon … as well as creating and safeguarding thousands of jobs*.[xxxi]" The Cluster Plan's ambition is for the North West to become the "*World's First Net Zero Region by 2040*.[xxx]" In effect, the North West is positioning itself as a leading clean growth cluster for the UK, leveraging its industrial base and geography to attract green investment.

2.5.10 Regional economic strategies also highlight renewable energy and clean growth as priority sectors. The Cheshire and Warrington Local Enterprise Partnership's Strategic Economic Plan[xxxii] and Local Industrial Strategy[xxxiii]

identify 'Energy and Clean Growth' as one of the region's core strengths and a driver of future prosperity – but also as a 'Grand Challenge,' recognising that "*significant investment into local energy networks*" will be required to meet future energy demand[xxxiii].

2.5.11 The Proposed Development fits well into this regional picture. It is precisely the type of low-carbon infrastructure that the North West is seeking to foster – bringing investment and net zero industry into an existing carbon-intensive industrial area, and contributing to the region's emerging clean energy ecosystem.

2.5.12 Government strategy also identifies the North West of England as a key region poised to gain from clean energy investment and the green growth agenda. The Powering Up Britain: Net Zero Growth Plan notes that regions like the North West will see unique benefits from the transition to net zero, with green industries set to boost jobs and investment outside of the South East[xi].

2.5.13 This position was reinforced in January 2025 when the Government announced that Cheshire was one of four areas (alongside Aberdeen, Lincolnshire, and Pembrokeshire) identified as "*key growth regions for clean energy, with flourishing offshore wind, nuclear, and solar industries*."[xxxiv] As a result of this initiative, Cheshire West and Chester Council has been awarded £1 million to fund green skills training (the 'Energy Skills Passport' programme) so that local workers can take up "*thousands of new job opportunities in the clean energy sector*.[xxxiv]"

2.5.14 Locally, the policy framework in Cheshire West and Chester strongly encourages renewable energy development and ties it to economic and climate objectives in the Local Plan. In May 2019, CWaCC declared a Climate Emergency and set an ambitious target of achieving carbon neutrality across the borough by 2045[xxxv]. Achieving this target will require a rapid expansion of renewable and low-carbon infrastructure over the next decade.

2.5.15 CWaCC's Climate Emergency Response Plan[xxxv] (2024 update) sets out a strategy to achieve this ambitious climate goal. The plan details specific objectives across six key sectors – Business & Industry, Transport, Housing, Energy, Land Use & Climate Adaptation, and Waste & Circular Economy – with targeted interventions to drive deep emissions cuts in each area. It also establishes clear delivery frameworks and partnerships, emphasising collaboration with national government, local industry and communities to implement the required decarbonisation measures.

2.5.16 Commenting on the net zero transition and the initiatives under the Clean Power 2030 Action Plan, the Leader of Cheshire West and Chester Council stated in January 2025: "*As one of the centres of the net zero re-industrialisation of the North, we are committed to encouraging green economic growth and the benefits that will bring to our area*.[xxxiv]"

2.5.17 This reflects the urgent need to decarbonise a local economy that includes some of the UK's most energy-intensive industries. Transitioning this heavy industrial base to sustainable energy is not only an environmental imperative but also key to long-term economic resilience and to preserving jobs in a low-carbon future. Every new solar farm or clean energy investment is an important part of building that long-term economic resilience.

Frodsham Solar and Green Economic Growth

2.5.18 The Proposed Development will make a substantial contribution to green economic growth objectives at all levels – local, regional, and national.

2.5.19 In terms of direct economic benefits, the Proposed Development represents a significant investment in the Cheshire area (on the order of tens of millions of pounds in capital expenditure), which will generate jobs and business for the local economy. During the construction phase, the Proposed Development is expected to create a range of employment opportunities – from civil engineering and electrical installation roles to support services – with the use of local contractors and labour wherever possible. The Applicant

has prepared an **outline Skills, Supply Chain and Employment Plan *[EN010153/DR/7.11]*** that provides further detail and commitments in relation to local job opportunities.

2.5.20 The **outline Skills, Supply Chain and Employment Plan [EN010153/DR/7.11]** states that it is estimated that approximately 109 full time (equivalent) jobs would be created over the construction period, which is expected to last approximately 30 months, with a peak workforce of approximately 243 staff per weekday in the twelfth month.

2.5.21 An influx of construction activity will also benefit local businesses such as equipment suppliers, transport and logistics firms, accommodation providers, and hospitality venues for workers, providing a short-term economic stimulus during the build period. The applicant aims to prioritise procuring the services of local businesses and contractors and the use of local employees, where possible.

2.5.22 Once operational, the Proposed Development will support a number of permanent jobs (or long-term contracted positions) for ongoing operations, maintenance, and security of the Site over its operational life of approximately 40 years. Most of the jobs created would relate to the ongoing operations, maintenance, and security of the solar PV and BESS facility, as well as landscaping/grounds maintenance. It will also generate business rates revenue for the local authority over its lifetime. Solar Energy UK notes that large solar farms raise "*significant revenue for local government, via business rates*", funds which can be reinvested in public services or further green initiatives locally[xxxvi].

2.5.23 Beyond these localised impacts, the Proposed Development will help drive wider economic gains associated with decarbonisation. By exporting electricity to the grid (enough to power tens of thousands of homes), the project improves energy security and helps shield households and businesses from volatile international fossil fuel markets. The availability of clean, affordable power is increasingly seen as a foundation for competitive

economic growth – high energy costs and insecurity can impede industrial investment.

2.5.24 The contribution to carbon reduction is not just an environmental gain; it also enhances the borough's appeal for investors and businesses. Companies are increasingly factoring clean energy availability into decisions on where to locate operations. Having a prominent new large-scale renewable energy development in Cheshire could attract businesses looking to power their facilities with low-carbon electricity or to site themselves near sources of clean energy (for instance, advanced manufacturing or data centres seeking renewable power purchase agreements), particularly in the context of on-going regeneration of the Protos site located immediately to the west of the Proposed Development. In this way, the Proposed Development and its potential private wire connection can have an indirect job-creation effect by improving the local infrastructure for sustainable growth.

2.5.25 Finally, the Proposed Development also complements other clean energy initiatives in the area (such as the existing Frodsham Wind Farm and the emerging HyNet hydrogen project), helping to form a cluster of low-carbon energy assets in Cheshire. Such clustering can yield synergies, spur innovation, and support supply-chain development – all hallmarks of a growing green economy.

2.6 The Need to Rapidly Increase Electricity Generation

2.6.1 The UK faces a substantial increase in electricity demand over the coming decades, driven primarily by the electrification of transport and heating as part of the net zero transition.

2.6.2 National Grid ESO's Future Energy Scenarios 2024[xxxvii] (FES 2024) projects that electricity consumption will rise dramatically as millions of electric vehicles and heat pumps are deployed to replace petrol and diesel cars and gas heating systems. In all FES 2024 net-zero pathways, annual electricity demand roughly doubles by 2050. This growth in demand is coupled with a

sharp rise in peak load requirements, underscoring the need for significant new generation and network capacity. Key FES 2024 projections include:

- **Total Electricity Consumption:** Increasing from around 300 TWh per year today to on the order of 600 TWh per year by 2050 – an approximate doubling of national electricity demand as more sectors convert from fossil fuels to electricity.
- **Peak Demand:** Climbing from a historical peak of approximately 60 GW to roughly 109 GW by 2050, in line with widespread EV charging and electric heating uptake. Even by 2035, peak demand is expected to far exceed current levels as electrification accelerates.
- **Transport Electrification:** Rapid growth in electric vehicles (cars and increasingly heavy goods vehicles) is forecast to add on the order of 120 TWh of annual electricity demand by 2050. This reflects the charging needs of tens of millions of EVs and is a major contributor to overall demand growth.
- **Heating Electrification:** The anticipated large-scale adoption of electric heat pumps to decarbonise building heating will likewise add tens of TWh of new demand. All FES 2024 net-zero pathways assume a massive rollout of heat pumps (aided by energy efficiency and thermal storage measures) as gas boilers are phased out, significantly increasing winter electricity usage. Heat electrification is anticipated to become a key driver of peak demand, especially on cold days, given that even with thermal storage, electric heating tends to coincide with peak periods.

2.6.3 Meeting this future demand with low-carbon generation is essential to achieving the UK's decarbonisation targets. The Government has legally binding targets to reach net zero emissions by 2050, and FES 2024 assumes that the power sector is fully decarbonised by 2035 in every net-zero scenario. In practice, this means almost all new generation capacity must be zero-carbon (renewables or nuclear) in order to both cover the rising electricity requirements and replace retiring fossil fuel plants.

2.6.4 FES 2024 outlines a future electricity mix dominated by renewables, in which solar PV provides a significant share of energy (particularly through daytime generation), complemented by storage to manage variability. By 2030, all FES pathways require at least 94 GW of combined wind and solar capacity on the grid (with up to 121 GW in the most ambitious case)[xxxvii]. FES 2024 acknowledges that the case for solar generation is "strong," and that solar power remains one of the lowest-cost options to meet energy needs. However, it also notes that barriers around the supply chain and the planning and connections process would need to be addressed to meet the most ambitious targets.

2.6.5 In response to the Climate Emergency declared by CWaCC in May 2019, they published a Climate Emergency Response Plan which set out the scale of the challenged faced as a borough to achieve carbon neutrality by 2045. The Plan states that the Energy systems analysis confirms that, to provide sufficient solar power to support the decarbonisation of the grid, 0.3 gigawatts of installed capacity was required by 2025, prior to the delivery of 0.8GW by 2050. This represents a 25x increase in installed capacity.

2.6.6 The need for new renewable generation is evident in the current shortfall of clean energy production within the region. The Department for Energy Security and Net Zero (DESNZ) publishes data on electricity use at district level and the proportion of that use met by local renewable generation. For Cheshire West and Chester, the data show that in 2023 (the latest available year) the district consumed approximately 1,731 GWh of electricity (domestic and non-domestic consumers combined)[xxxviii]. In the same year, only about 178 GWh of electricity was generated from renewable sources within the district – roughly 10% of its total demand[xxxix]. According to the DESNZ breakdown, this 178 GWh of local renewable generation comprised roughly 46 GWh from solar power, 85.6 GWh from onshore wind, 13.4 GWh from anaerobic digestion, and 32.8 GWh from landfill gas (with additional small contributions from sewage gas and biomass not specifically reported)[xxxix].

2.6.7 Factoring in the 178 GWh of renewable output, Cheshire West and Chester's renewable generation deficit in 2023 was on the order of 1,553 GWh. In other words, about 90% of the electricity consumed in the borough was not met by renewables. To meet CWaCC's aforementioned target of borough-wide carbon neutrality by 2045, this significant deficit needs to be reduced as quickly as possible.

2.6.8 Furthermore, based on the FES 2024 outlook, it is reasonable to assume that over time that reliance on electricity as an energy source will increase substantially as the use of fossil fuels is phased out for heating and transport. Thus, while the current data illustrates the gap under today's conditions, the actual demand for electricity in Cheshire West and Chester will grow over the next few decades – and this electricity will need to come from renewable sources if climate goals are to be achieved.

2.6.9 The Proposed Development can make a meaningful contribution toward closing this gap. The capacity factor for solar generation in Cheshire is estimated to be around 10–11%[2]. Using a conservative estimate of 10%, a 130 MW solar array would be expected to generate roughly 114 GWh per year. This represents about 7.3% of the borough's current annual electricity demand that is not already being met by renewables (i.e. approximately 7% of the present 1,553 GWh renewable shortfall). Put simply, the Proposed Development (which will connect to the local distribution network) could supply approximately one-fourteenth of all the electricity that Cheshire West and Chester currently consumes but sources from non-renewable generation. This would be a significant contribution toward the area's current and future electricity requirements, and would substantially advance the decarbonisation of the energy supply in the region.

[2] *Based on widely used PV design software.*

2.7 Grid Reform

2.7.1 The UK's electricity grid connection queue has grown to unprecedented levels, leading to long wait times and a misalignment with national needs. As of late 2024, over 560 GW of generation was in the transmission connection pipeline – roughly three times what is required for the UK's net zero scenarios[xiv]. Many proposed projects in this queue are so-called "zombie" or speculative projects with little realistic chance of completion, yet they still occupy queue positions and push firm connection dates for genuine projects into the 2030s or 2040s. This situation creates uncertainty over where and when new network infrastructure is needed, and it has been delaying viable projects, undermining investor confidence in the energy transition.

2.7.2 The current 'first-come, first-served' grid connection process has been identified as a key bottleneck. It allows early applicants to hold grid capacity rights even if they are not ready to build, blocking later-ready projects from progressing. It has become evident that the existing connection regime cannot deliver the clean power needed by 2030 without reform – simply speeding up network construction or retaining the queue status quo will not achieve the UK's targets.

2.7.3 This recognition has driven a comprehensive programme of grid connection reform led by the National Electricity System Operator (NESO) with strong Government and Ofgem support. NESO launched a Connections Reform project in 2023 and, after extensive consultation, identified proposed solutions, culminating in a December 2024 consultation on the new approach[xl].

2.7.4 Central to NESO's proposals is replacing the old first-come-first-served queue with a gated system that prioritises projects which are "first ready and needed" – effectively, a 'first ready, first connected' approach.

2.7.5 Under this new system, projects will need to satisfy defined Readiness Criteria (e.g. evidence of exclusive land rights, a secured planning consent or

a submitted DCO application) and Strategic Alignment Criteria (consistency with the capacity requirements identified in the Government's Clean Power 2030 Action Plan[xiv]) in order to secure a firm connection slot. Projects that fail to demonstrate they are sufficiently advanced or aligned with future grid needs would receive only indicative (non-firm) offers or risk losing their queue position.

2.7.6 By removing speculative proposals and focusing on truly viable projects, the reform aims to cut the queue size by about two-thirds, freeing up an estimated 500 GW of capacity on the network. This overhaul is expected to turbo-charge connections ready projects – not only driving progress toward the 2030 clean power goal but also unlocking billions of pounds of investment in new generation and storage.

2.7.7 Subject to Ofgem's approval, NESO's proposed reformed connection process will go live in Spring 2025. This timeline aligns the connections process with the Government's Clean Power 2030 Action Plan, ensuring that by the late 2020s the grid connection queue contains the right mix of projects to meet 2030 targets.

2.7.8 The Strategic Alignment Criteria established as part of the connections reform relate to the Clean Power 2030 Action Plan: Connections Reform Annex[xv] (re-published in April 2025) as they require projects to be '*aligned to the capacities within the CP30 Action Plan as described in the Connections Network Design Methodology*'. In this context, whilst the 'capacities' referred could relate to the national overarching capacity for solar set out above, it is also noted that the Connections Reform Annex sets out locational capacity for each of the regional transmission and distribution networks across the UK. The Proposed Development will be distribution-connected. Table 5 of the Annex[xv] (see Image 1 below) shows that the Order Limits (part of distribution area D5) and the point of connection lie within the SP Manweb distribution network region (which is indeed the case given that the Proposed Development will connect into a SP Manweb (SPEN) substation).

Image 1: Clean Power 2030 Connections Reform Annex – Table 5

Table 5: Mapping of distribution network region code to distribution region name

Distribution network region code	Transmission network region name
D1	SSEN - SHEPD
D2	SP Distribution
D3	ENWL
D4	NPg
D5	SP Manweb
D6	NGED
D7	SSEN - SEPD
D8	UKPN

2.7.9 Table 4 of the Annex[xv] (see Image 2 below) then sets out, for each network region, the future distribution-connected solar energy and battery storage capacity breakdown.

Image 2: Clean Power 2030 Connections Reform Annex – Table 5

Table 4: Regional capacity breakdowns for distribution connected technologies required for 2030[26] and 2035[27]

Distribution network region	Solar (MW) 2030	Solar (MW) 2035[28]	Onshore wind (MW)[29] 2030	Onshore wind (MW) 2035	Batteries (MW) 2030	Batteries (MW) 2035
Scottish and Southern Electricity Networks (SSEN) – Scottish Hydo Electric Power Distribution (SHEPD)	1,100	-	3,500	-	900	900
SP Distribution (SPD)	1,100	-	2,700	-	800	900
Northern Powergrid (NPg)	4,400	-	1,900	-	1,900	2,100
Electricity North West (ENWL)	1,500	-	700	-	900	1,000
SP Manweb	1,500	-	1,000	-	400	500
National Grid Electricity Distribution (NGED)	13,900	-	2,400	-	3,000	3,600
UK Power Networks (UKPN)	8,100	-	900	-	2,100	2,400
SSEN – Southern Electric Power Distribution (SEPD)	4,600	-	100	-	1,200	1,400
GB total	**36,200**	**-**	**13,200**	**-**	**11,200**	**12,800**

Note: MW capacity figures have been rounded to the nearest 100 MW.

2.7.10 Image 2 (referenced above) indicates that for the SP Manweb distribution area (ref. D5 area), NESO has identified a need for 1,500 MW of solar capacity to be installed by 2030. For battery storage, a need of 400 MW by 2030 and 500 MW by 2035 is identified. The Connections Reform Data Impact Assessment Part B – Workbook[xl] (December 2024) shows that there is currently about 212 MW of distribution-connected solar within their region, against the target of 1,500 MW by 2030.

2.7.11 In addition, by cross-referencing the Renewable Energy Planning Database[xli], it is possible to estimate the number of future projects already in the pipeline. This includes projects where planning permission has been granted but the scheme has not yet been built or connected (totalling roughly 263 MW), and projects where planning applications have been submitted but not yet

determined (around 77 MW). This gives a total solar pipeline (projects in planning) of roughly 340 MW in the SP Manweb area.

2.7.12 Therefore, considering existing connected solar (212 MW) plus the 340 MW pipeline, it is possible to forecast that by 2030 the region might have around 552 MW of solar accounted for – leaving roughly 1000 MW of additional solar capacity needed to hit the 1,500 MW regional target for 2030.

2.7.13 The Proposed Development would be able to contribute approximately 147 MW toward this target.

2.7.14 Whilst its connection agreement is currently only for 100MW, the Applicant sees no substantive impediment to this being able to be increased by SP Manweb if desired, given the gap to be filled. Furthermore, even if that were not to happen, the remaining 47MW will be able to be connected to local businesses, reducing their need for supply from the distribution network (and thus the overall capacity requirements on that network).

2.7.15 It is clear, therefore, that there is available headroom within the distribution network for new solar capacity, and that the Proposed Development squarely aligns with the geographical capacity established in the Clean Power 2030 Action Plan for the North West (SP Manweb) region.

2.7.16 The Proposed Development is forecast to be operational by 2030, which means it will be generating electricity for the grid in line with the Government's 2030 target for a predominantly clean electricity supply. This timeline aligns with both national policy and the expectations of the reformed connections regime.

2.7.17 The project's deliverability is further reinforced by the grid reforms described above: having met key milestones (exclusive land rights secured, a grid connection agreement in hand for 100MW export, and a DCO application submitted), the Proposed Development is exactly the type of "ready and needed" project that the system will prioritise.

2.7.18 In summary, Frodsham Solar has a confirmed path to connection and operation well before 2030, with no known outstanding grid barriers.

2.8 Summary

2.8.1 The urgent and substantial need for the Proposed Development is clearly established by national policy and statutory requirements aimed at achieving net zero emissions by 2050, as mandated by the Climate Change Act 2008 (2050 Target Amendment) Order 2019. The UK Government's legally binding climate goals, combined with ambitious interim carbon budgets and international commitments under the Paris Agreement, underscore the necessity of accelerating investment in renewable energy projects this decade.

2.8.2 Overarching National Policy Statement for Energy (EN-1) explicitly identifies an urgent need for new energy infrastructure of the type proposed, and directs that substantial weight be given to this need when considering development consent applications. EN-1 makes clear that the Government has demonstrated the urgency of such infrastructure, and that individual projects do not need to have their contribution to need assessed separately.

2.8.3 Despite the notable progress the UK has made in reducing emissions, current deployment rates of renewable electricity infrastructure – particularly solar PV and battery storage – are significantly behind what is required to meet the next set of carbon budget milestones and longer-term net zero objectives. The Climate Change Committee and other expert bodies have highlighted an urgent need to scale up renewable deployment, singling out solar energy as critical to the UK's decarbonisation strategy due to its cost-effectiveness, rapid build-out capability, and potential to substantially reduce dependence on volatile fossil fuel markets.

2.8.4 Reinforcing this need is the UK's strategic focus on energy security, particularly in light of recent global events that have exposed the vulnerabilities of fossil fuel dependence. Solar power and battery storage

directly enhance national energy resilience by providing stable, domestic and low-cost energy supplies, thereby protecting consumers and businesses from international market shocks. In effect, the Proposed Development addresses two national priorities simultaneously: delivering clean energy and strengthening energy independence.

2.8.5 Regionally, the project aligns with the North West's ambition to become a leading "clean growth" hub. It will drive substantial economic benefits in the region through job creation, local supply-chain opportunities, and enhanced industrial competitiveness in a low-carbon economy. Locally, Frodsham Solar directly contributes to Cheshire West and Chester's Climate Emergency targets by addressing the significant renewable generation deficit and supporting the area's transition to a more resilient, low-carbon energy system. It also complements and amplifies other green initiatives in the locality, helping to establish a cluster of low-carbon technologies that can spur further innovation and investment.

2.8.6 In summary, the Proposed Development is essential for closing critical gaps in renewable energy capacity, for meeting statutory climate obligations, for strengthening British energy security, and for catalysing significant economic and environmental benefits at local, regional, and national scales. The project is fully deliverable ahead of 2030 and is strategically aligned with current grid reform efforts to prioritise ready-to-build capacity. There is a clear and demonstrable need set out in NPS EN-1 for the Proposed Development – it represents a critical national priority on the path to net zero.

3.0 THE SITE AND SITE CONTEXT

3.1 The Site

3.1.1 The expected maximum area of land potentially required for the construction, operation and maintenance of the Proposed Development, which includes land required for permanent and temporary purposes, is shown on **ES Vol 3 Figure 1-1 Site Location [EN010153/DR/6.3].** This is referred to as the Order Limits.

3.1.2 The Site contains all of the principal elements of the Proposed Development which includes the:

i) Solar Array Development Area that would include solar photovoltaic (PV) modules and support frames, internal access tracks, cabling, inverters, transformers, the solar array substation (known as the 'Frodsham Solar Substation) and the BESS;
ii) Main Site Access route
iii) SPEN Grid Connection linking Frodsham Solar Substation to the SP Energy Networks (SPEN) Frodsham Substation
iv) SPEN / National Grid Substation and access to the substation compound
v) Private Wire Connection to local businesses
vi) Non Breeding Bird Mitigation Area (NBBMA)
vii) Skylark Mitigation Area

3.1.3 The development areas are shown on **ES Vol 3 Figure 1-2 Proposed Development Areas [EN010153/DR/6.3]** and are described in detail within **ES Vol 1 Chapter 2: The Proposed Development [EN010153/DR/6.1]**.

3.1.4 The Site is approximately centred on National Grid Reference (NGR) 351000E, 378500N.

3.1.5 The Solar Array Development Area covers an area of approximately 246ha, and would be located at the eastern extent of Frodsham and Helsby Marsh, an area of land between the Mersey Estuary and the M56. The northern

boundary of the Solar Array Development Area is formed by the River Weaver and the former INEOS Inovyn Dredging Deposit Ground, the north-west boundary by the Manchester Ship Canal, with the Mersey Estuary lying beyond. The western boundary of the Solar Array Development Area is formed by two of the former Manchester Ship Canal Dredging Deposit Ground Cells; Cell 3 and Cell 6. Cell 3 forms part of the NBBMA. The southern boundary of the Solar Array Development Area is formed by agricultural fields and the M56 motorway. The Solar Array Development Area is designated as a Local Wildlife Site and as Green Belt.

3.1.6 The Solar Development Area comprises three distinct areas:

i) The Eastern Cluster of Frodsham Wind Farm (approximately 152 ha): This area forms the western half of the Solar Array Development Area. Six wind turbines, 125 m to blade tip, are located in this area. The land forms part of the former Manchester Ship Canal Dredging Deposit Ground, and includes Cells 1, 2 and 5. The cells have been restored to agricultural land and are now grazed by sheep / cattle (by the tenant of Frodsham Marsh Farm). The land in this area lies between approximately 9.5 m and 12.5 m above ordnance datum (AOD).

ii) Former agricultural land used by Frodsham Wildfowlers (approximately 36 ha): The central area of the Solar Array Development Area is former agricultural land which has been left fallow and managed to encourage use by wildfowl. This area is currently used for recreational shooting by Frodsham Wildfowlers. This area of the Site is crossed by a series of ditches which have been used to drain and manage water levels on Frodsham and Helsby Marsh. The land in this area lies at approximately 6 m AOD.

iii) Agricultural land (approximately 61 ha): The south-eastern portion of the Solar Array Development Area is agricultural land. It is understood that the land has been used for growing crops and silage (this is not linked to the activities of Frodsham Marsh Farm). Some areas of the fields appear to have been left fallow and have colonised with scrub and wet grassland.

Hedgerows demarcate boundaries between field units. The land in this area lies at approximately 5 m AOD.

3.1.7 The landform across the Site is largely flat. However, engineered embankments are present that result in changes in levels across the Site. The embankments are generally associated with the cells of the former Manchester Ship Canal (MSC) dredging depot grounds, flood defences and structures associated with the M56.

3.1.8 The NBBMA comprises the land on Cell 3, a section of land between Cell 3 and the MSC, and land immediately surrounding Marsh Farm. The land between Cell 3 and the MSC, and land immediately surrounding Marsh Farm forms part of the Mersey Estuary Site of Special Scientific Interest (SSSI). Cell 3 forms part of the mitigation for Frodsham Windfarm and comprises areas of grassland with some manmade scrapes (shallow areas of water). A number of ponds are located in the land between Cell 3 and the MSC, these have been used in the past for recreational fishing.

3.1.9 The Skylark Mitigation Area comprises an area of arable land approximately 30ha in area located to the south of Moorditch Lane.

3.1.10 The Main Site Access is from the west, leading from Pool Lane roundabout. Vehicles accessing the Site would turn onto Grinsome Road (a private road) from Pool Lane roundabout and travel east towards Protos for approximately 1.5 km, routing north at Grinsome Road Roundabout, along Road 1 of Protos. Vehicles would then turn east along Marsh Lane which provides access to Frodsham Wind Farm. The Frodsham Wind Farm access tracks provide access to the Solar Array Development Area. There would be no access to the Site from Frodsham during construction, operation or decommissioning, other than for emergency vehicles, and access to a potential new public car parking area on Moorditch Lane, via Brook Furlong (refer to **ES Vol 1 Chapter 2: The Proposed Development *[EN010153/DR/6.1]*** for details on the potential new public car parking area).

3.1.11 A series of Public Rights of Way (PRoW) cross the Site, these are illustrated on **ES Vol 3 Figure 1-5: Public Rights of Way [EN010153/DR/6.3]**. The PRoW includes footpaths and restricted byways, which allow access by foot, horseback and cyclists. National Cycle Route 5 runs along a section of the Main Site Access and along part of the southern edge of the Site.

3.1.12 The Site is crossed by a series of utilities, which are illustrated on **ES Vol 3 Figure 1-6: Utilities [EN010153/DR/6.3]**. The utilities that cross the Site include several above and below ground high voltage electricity transmission lines, high pressure gas lines, water distribution mains, telecommunication lines and private pipelines associated with nearby petrochemical plants. There are also proposals for new utilities across the Site which include a Carbon Dioxide pipeline and a Hydrogen pipeline. The Applicant is in discussion with the developer of these projects to ensure that all of the schemes (each of which will contribute to achieving the government's Net Zero policies) will be capable of being delivered i.e. that none of the schemes will prevent the physical development of the others.

3.1.13 There are no designated heritage assets within the Site.

3.1.14 The eastern half of the Site lies within Flood Zone 3a, which benefits from flood defences along the River Weaver. The MSC Dredging Deposit Ground Cells in the western half of the Site are raised and so lie within Flood Zone 1. There are a series of drains which dissect the agricultural and former agricultural land in the eastern half of the Site. Some drainage ditches are also present within the area of the MSC Dredging Deposit Ground Cells. This includes three drainage ditches which are classified as Main Rivers. Flood defences maintained by the Environment Agency run along the southern bank of the River Weaver and along the Main Rivers within the Site. Frodsham Pumping Station, located close to the eastern boundary of the Site, pumps water from the drainage ditches into the River Weaver.

3.2 Site Context

3.2.1 The Site is located approximately 500 m to the north of the centre of Frodsham Town Centre. To the south-west of Frodsham lies Helsby, approximately 2 km from the Solar Array Development Area.

3.2.2 The nearest residential properties to the Solar Array Development Area are within Frodsham beyond the M56 to the south / south-east. Properties on Hawthorn Road and Wayford Mews are located approximately 140m from the Solar Array Development Area. Other properties within 350m of the Solar Array Development Area include those on Williams Way (230m distant) and Waterside Drive (290m distant).

3.2.3 Key environmental and planning designations on, and in close proximity to, the Site are shown on **ES Vol 3 Figure 1-3: Planning and Environmental Designations *[EN010153/DR/6.3]***, these are described below.

3.2.4 Two residential caravan sites are located off Brook Furlong to the north-west of Frodsham (north of the M56). These lie adjacent and to south of the Order Limits. Both sites have been developed without planning permission. In September 2022 CWaCC took enforcement action against the southerly of the two sites, requiring the cessation of the residential use, that all unauthorised development be removed, and the site be restored to grassland. An appeal against the Enforcement Notice was submitted by the occupants of the site, and on 26 July 2024 the Inspector appointed for the appeal upheld the Enforcement Notice. The upheld Enforcement Notice requires the occupants to cease the use of the site, remove all structures, and restore the site to grassland by 26 July 2025. The detailed planning history relevant to the caravan sites is set out within the Planning History section (3.3 below).

3.2.5 Frodsham Primary Academy School lies 150m to the south of the Solar Array Development Area on the outskirts of Frodsham, on Ship Street.

3.2.6 Both Frodsham and Helsby lie at the foot of the northern extent of the Cheshire Sandstone Ridge, which rises to a height of approximately 150 m to the south of Frodsham and Helsby.

3.2.7 To the north and north-east of the Site, on the north bank of the River Weaver / Weaver Navigation, lies Runcorn and the settlements of Weston and Beechwood, located approximately 1 km from the Solar Array Development Area.

3.2.8 There are large areas of industrial development along this section of the River Mersey corridor. The northern bank of the River Weaver / Weaver Navigation is occupied by the INEOS Inovyn Runcorn Site which produces a range of chemicals for industrial use. The INEOS Inovyn Runcorn Site also includes an 800MW gas-fired power station, and further north is the Runcorn Energy from Waste Plant operated by Viridor. To the west of the Solar Array Development Area are 13 further turbines associated with the Frodsham Wind Farm, beyond which lies the former CF Fertiliser plant, which was decommissioned in 2022, and purchased by Peel NRE in March 2025. Protos, a significant development site with the benefit of planning permissions for a range of energy generation and resource management businesses, is located to the west of the former CF Fertiliser plant along with the Encirc glass manufacturing facility. Beyond this to the west is the Stanlow oil refinery site.

3.2.9 As noted above, the M56 runs east west to the south of the Site. A railway line linking Chester in south to Warrington and Runcorn to the north lies approximately 500m to the south of the M56. Liverpool John Lennon Airport is located approximately 6.5km to the north west of the Site, on the northern side of the Mersey Estuary.

3.2.10 As set out above, the Manchester Ship Canal (MSC) forms the northern boundary of the Site and is separated from the Mersey Estuary by Frodsham Score, a 100-200 m wide strip of low-lying marshland. The Mersey Estuary and Frodsham Score are designated as a Special Protection Area (SPA), SSSI and Ramsar site. The SSSI also covers a strip of land approximately

100m wide on the southern side of the Manchester Ship Canal, the eastern 500m of which lies within the Site.

3.2.11 Neither the Site nor the immediate surrounding area is covered by any statutory landscape designations, e.g. National Parks or National Landscapes (formally referred to as Areas of Outstanding National Beauty (AONB)). The nearest statutory landscape designation to the Site is the Clwydian Range and Dee Valley National Landscape, located over 26.5km to the south-west. It should be noted that in 2021, the Cheshire Sandstone Ridge was shortlisted for potential designation as a potential National Landscape. At present this area has not been formally designated and the potential boundary has not been drawn. However, the landscape area most closely associated with Sandstone Ridge is located approximately 1km to the south of the Order Limits.

3.2.12 CWaCC maintain a list of non-statutory Area of Special County Value (ASCV) designations. The Weaver Valley ASCV is located approximately 930m south-east of the Solar Array Development Area at the closest point (the draft Order Limits extend to the ASCV boundary along the access track to the Frodsham Substation). The Helsby and Frodsham Hills ASCV is located approximately 1.06km south of the draft Order Limits at the closest point (and approximately 1.07km from the Solar Array Development Area).

3.2.13 There are eight Grade II Listed Buildings, one Grade II Registered Park and Garden and four Conservation Areas, including Frodsham Town Centre, within 1km of the Site. Five Scheduled Monuments lie between 1 km and 3 km from the Site.

3.2.14 Part of the Order Limits covering the emergency access at Weaver Lane south of the M56 motorway is within a mineral safeguarding area for sand and gravel. The Proposed Development within this part of the Order Limits relates only to providing and maintaining access to the Proposed Development, and therefore the Proposed Development would not sterilise the mineral reserve or prevent its future extraction.

3.2.15 Part of the Order Limits covering the access road at Grinsome Road and Marsh Lane is allocated for employment uses at Ince Park under policies of the CWaCC Local Plan Parts One and Two. The Proposed Development within this part of the Order Limits relates only to providing and maintaining access to the Proposed Development, and therefore the Proposed Development would not preclude delivery of the employment allocations.

3.2.16 Part of the eastern extent of the Order Limits lies within the Salt Works Play Area & Skateboard Park Local Green Space designation of the Frodsham Neighbourhood Plan.

3.2.17 Further information on the characteristics of the Site is provided in the **Design Approach Document *[EN010153/DR/5.8]*.**

3.3 Relevant Planning History

3.3.1 The Site is predominantly made up of land that forms part of the former MSC Dredging Deposit Ground and former agricultural land. The Eastern Cluster of the Frodsham Wind Farm (circa 152ha) forms the western half of the Solar Array Development Area, and consequently the planning history across that part of the Order Limits is quite extensive incorporating many applications for reserved matters, non-material amendments, and the discharge of conditions.

3.3.2 In addition to the Frodsham Wind Farm, there are several other developments that are located either within, or proximate to, the extent of the Order Limits which may be of relevance in the determination of the DCO. These are summarised below.

3.3.3 Many of the applications that have been granted for non-material variations, or approvals made in respect of details submitted by condition, will not be relevant to the determination of this DCO and consequently are not listed or referenced below. Those that are considered potentially of relevance to the determination of the Order are set out in the context of the development to which they relate.

Frodsham Wind Farm

3.3.4 Following a full public inquiry, on the 19 October 2012 consent was granted by the Secretary of State for Energy and Climate Change under Section 36 of the Electricity Act 1989, for the construction and operation of a Wind Turbine Generating Station of up to 57MW ('the Frodsham Wind Farm') (reference 12.04.09.109C). The consent included for deemed planning permission (reference 10/00597/DECC), and comprised the following principal components:

i) Up to 19 wind turbines; each not exceeding 125 metres to blade tip.
ii) One anemometry mast, not exceeding 80 metres in height.
iii) Underground 33kV / 132kV electrical cabling.
iv) A 33kV / 132kV electricity substation.
v) Access track.
vi) A canal berth.
vii) Habitat creation.
viii) Buildings (including administration offices) and civil engineering works.

3.3.5 Several Non-Material Amendments were subsequently granted to either amend the way in which the Wind Farm could operate or change the way in which the consent was to be applied. Those amendments of most significance include the following:

i) 14/01671/NMA granted in May 2014 to amend terminology of conditions.
ii) 14/05283/NMA granted in February 2015 to extend the access track.
iii) 15/00311/NMA granted in April 2015 to omit the anemometry mast.
iv) 15/02354/NMA granted in June 2015 to omit the access ramp between Lordship Lane and Cell 4 and substitute the site layout and access route.
v) 15/02234/NMA granted in September 2015 to amend typographical errors and amend elevation details of the west substation.
vi) 17/04743/NMA granted in December 2017 to provide an updated bat mitigation strategy.

3.3.6 Separately, several planning permissions were granted for significant stand-alone elements of development that was either not applied for under the 'parent' permission or was deemed greater than non-material in scale and nature. Of most significance, in October 2013 temporary permission was granted for the period of 14 months for the erection of an 80.2M high anemometry mast with supporting guy wires (reference 13/0393/FUL). In July 2014 planning permission was granted for the erection of a single storey building to be used as a 33kV substation, creation of a parking area, access track, cabling and perimeter fencing (reference 14/01430/FUL).

3.3.7 The DCO has been drafted to ensure that the Wind Farm can continue to operate fully in accordance with the consents granted across the Site. Protective Provisions have been included for the benefit of the Wind Farm operator, and easements have been applied between the solar infrastructure and the wind turbines, to ensure that Wind Farm can continue to operate and be maintained appropriately.

3.3.8 The Frodsham Windfarm was required to be developed and operate in accordance with a Habitat Management Plan (HMP) that required appropriate measures to be put in place to maintain and enhance the Site for wildlife purposes. The proposed HMP was required by Condition 34 and was approved in September 2014 (reference 14/02525/DIS). The HMP incorporated the design and incorporation of scrapes and wetland areas within Cell 3, and the maintenance of grassland on Cells 2 and 5.

3.3.9 The Proposed Development incorporates the development of solar panels across Cells 2 and 5 which would mean that the approved measures to mitigate the Wind Farm development will not be able to be maintained in accordance with the previously approved HMP. To deliver biodiversity gains in support of the Proposed Development, and to compensate for the loss during construction and operation, a series of ecological habitat improvements are proposed across Cell 3. Likewise, this will mean that the

mitigation approved under the Wind Farm consent would not be met by that project. The ecological and biodiversity assessments, and consequently the design of mitigation proposed in support of the DCO have been drafted to ensure that net gain is provided, with the 'baseline' for that assessment being the consented Wind Farm and the carrying out of the requirements of the HMP.

3.3.10 The DCO incorporates drafting to ensure that the Wind Farm can continue to operate without being in breach of requirements for mitigation. The **Outline LEMP** provides for the enhancement of the Wind Farm mitigation into an ecological proposition that mitigates the impacts of both schemes.

Overhead Electrical Connections

3.3.11 The Site is crossed by several existing utilities including high pressure gas mains and overhead electricity lines, the required easements of which are respected by the Proposed Development. The National Grid owns and manages the high-voltage transmission network, including overhead lines and pylons, which carry electricity across long distances. Local distribution networks are owned and managed by District Network Operators (DNOs), and take the electricity from the transmission network and distribute it to homes, businesses, and other consumers.

3.3.12 The overhead electricity cables that cross the Order Limits are 400kV and 132kV respectively. Historically they have been installed and regulated under Section 37 of the Electricity Act 1989. More recently they would fall as an NSIP project under the Planning Act 2008. The DCO includes protective provisions to ensure their retention, continued operation, and ongoing maintenance.

Hynet / Cadent

3.3.13 HyNet North West Hydrogen Pipeline Project is a large-scale (125km) industrial decarbonisation project that will see a low-carbon hydrogen pipeline, primarily produced by Vertex Hydrogen at the Stanlow

Manufacturing Complex near Ellesmere Port, pass to the north of the M56. This is being developed as part of a broader network that will ultimately help unlock an energy revolution to decarbonise the North West's industry and electricity generation network. In addition to the construction, operation and maintenance of the new hydrogen pipeline, the Hydrogen Pipeline Project includes:

i) Smaller pipelines (spurs) branching off from the main pipeline route to provide connections to industrial users in the region.
ii) Ten Hydrogen Above Ground Installations (HAGIs) and two Block Valve Installations (BVIs) required to control the flow and pressure of hydrogen at key points along the pipeline.
iii) Measures for avoiding, minimising and mitigating adverse environmental effects.
iv) Other related works including access roads, temporary compounds, ancillary works.
v) Compulsory acquisition of land, including interests in land, rights over land and imposition of restrictions, powers to override, suspend or extinguish rights over land.

3.3.14 The Project forms part of the wider Hynet North West decarbonisation project which includes other elements, including carbon dioxide pipelines, a hydrogen production facility and underground hydrogen storage. These elements are each subject to their own DCO consents and related applications.

3.3.15 The Hydrogen Pipeline Project is subject to a DCO that is running in parallel with the Proposed Development, and in September 2022 a Stage Two Statutory Consultation was submitted to relevant host authorities (CWaCC reference 22/03592/REQ) to help inform the development process. The pipeline corridor runs through the southern section of the Order Limits, and consequently both sets of developers (Cubico and Cadent) have worked together to ensure that neither will preclude the delivery of the other, and both can be facilitated in accordance with the respective project objectives and are

negotiating an Agreement on this point. The Stage Three statutory consultation period on the Hydrogen Pipeline Project ran from October 2024 to February 2025, during which Cubico made appropriate representations as part of that process.

Hynet / Eni

3.3.16 The Liverpool Bay CCS Project will operate as the backbone of the Hynet Cluster to transport carbon dioxide from capture plants across the North West of England and North Wales through new and repurposed infrastructure to safe and permanent storage in Eni's depleted natural gas reservoirs, located under the seabed in Liverpool Bay.

3.3.17 With storage capacity of 4.5 million tonnes of CO_2 per year in the first phase, and the potential to increase to 10 million tonnes in the 2030s, Eni's CO_2, the CCS Project will make a significant contribution towards achieving the UK's CCS ambitions.

3.3.18 In March 2024 the Secretary of State for the UK Government's Department for Energy, Security and Net Zero (DESNZ) granted the DCO for the CO2 pipeline. The DCO is the first Anglo-Welsh cross border application for a Nationally Significant Infrastructure Project to be granted a DCO by DESNZ and marked the completion of an 18-month determination process following Eni's submission in October 2022.

3.3.19 In April 2025 Eni announced that it had reached financial close with DESNZ, allowing the project to move into construction phase, unlocking key investment in supply chain contracts.

3.3.20 Separately the Runcorn Carbon Dioxide Spur Pipeline development forms part of the wider Hynet Project. The spur will connect the Viridor Energy from Waste facility's new carbon capture plant in Runcorn to the Hynet Carbon Dioxide Pipeline at Ince. An application for planning permission is imminent, and the route will pass through the Proposed Solar Array and Cell 3. The applicant for the pipeline, Liverpool Bay CCS Limited, and Cubico have

collaborated over the course of developing both developments, so that the projects can both be delivered successfully.

Protos Development

3.3.21 Protos (formerly known as Ince Park and prior to which the Ince Resource Recovery Park) extends across approximately 134 hectares of land at Ince Marshes, to the west of the Order Limits with both outline and detailed planning permission for energy production, general manufacturing, distribution and resource management operations. Together these land uses are working together and individually, to help process waste sustainably, decarbonise local industry, and service the wider community.

3.3.22 Protos is safeguarded under Policy EP6 of the Cheshire West and Chester Local Plan (Part Two) Land Allocations and Detailed Policies Development Plan Document for the development of a: *"multi-modal resource recovery park and energy form waste facility for use in connection with the recycling, recovery and reprocessing of waste materials."*

3.3.23 Access to the Proposed Development is taken along Grinsome Road which acts as the main arterial route to, and through, the Protos Site from the M56 / A5117 / Pool Lane.

3.3.24 Protos has been developed over time in an incremental and phased manner. The 'parent' permission that provides for what is now known as Protos was granted in 2009 following a planning appeal (reference APP/Z0645/A/07/2059606). The permission was subsequently subject to two new permissions granted under Section 73 in 2010 (reference 10/01488/FUL) and 2015 (reference 14/02277/S73) that collectively provided for several operations including:

i) Integrated Waste Management Facility, comprising Waste Transfer Station and In-Vessel Composing Facility, Materials Recovery Facility and Mechanical Biological Treatment Plan (Plot 5 and 11).
ii) Soil Treatment Facility (Plot 2).

iii) Waste and Electrical and Electronics Facility (Plot 3).
iv) Wood and Timber Recycling Facility (Plot 4).
v) Plastics Village (Plot 6).
vi) Waste Transfer Plant (Plot 7).
vii) Ethanol Production Facility (Plot 9).
viii) Block Making Facility (Plot 14).
ix) Resource Recovery Village (Plot 10a, 10b, 12 and 13).
x) Dry cargo Facility (Plot 1).
xi) Rail line and rail head.

3.3.25 Reserved Matters applications were approved in 2016, and the first phase of infrastructure works were implemented, comprising the widening of Grinsome Road and works to Pool Lane Roundabout.

3.3.26 A series of subsequent Reserve Matters applications, Discharge of Condition applications, minor material amendments under Section 73, and stand-alone planning applications were submitted and approved over the following ten years. Most notably the following stand-alone permissions have been granted at the site:

i) 20MW Battery Storage Facility comprising 10 containerised units to store electricity and supply power to the National Grid (STOR – Short Term Operating Reserve) was granted in August 2017 (reference 17/02683/FUL).
ii) 35MW Energy from Waste Facility located on Plot 8 (previous RDF site) was granted in September 2017 (reference 16/03074/FUL).
iii) A Materials Recycling Facility on Plot 10; two Plastic Recycling Facilities on Plot 11 and 12; and a Polymer Laminate Recycling Facility and Hydrogen Refuelling Station on Plot 9 granted September 2022 (reference 21/04076/FUL).

3.3.27 The Proposed Development would not prevent the continued development and operation of Protos. The cumulative impact of HGV traffic accessing the

Site during construction and operation of the Solar Array, alongside the continued development of Protos, has been assessed as part of the **Transport Assessment *[EN010153/DR/7.3]***. The results of the Transport Assessment confirm that the Proposed Development would not give rise to significant adverse effects on the highway network, and would not prevent or preclude the development and operation of Protos.

Residential Caravan Site

3.3.28 Adjacent and to the south of the Order Limits, off Brook Furlong (north of the M56), are two unauthorised residential caravan sites. Both sites have been developed without the benefit of planning permission. Consequently, in September 2022 CWaCC issued an Enforcement Notice against the most southerly of the two. The requirements of the Enforcement Notice were to cease the residential use of the site, removal all caravans, associated domestic structures, and hardstanding from the land, and to restore the Site to grassland.

3.3.29 Whilst the Enforcement Notice was being served on landowners, two planning applications (reference 22/03308/FUL & 22/02292/FUL) were submitted to CWaCC for planning permission (one regarding the northern site and one regarding the southern site). The applications replicate each other and provide for the: *"Change of Use of the Land to Use as a Gypsy Caravan Site for Five Pitches Including the Erection of Five Amenity Buildings and the Laying of Hardstanding."*

3.3.30 An appeal against the Enforcement Notice under Ground (a) (that planning permission ought to be granted) and Ground (g) (that any period specified in the notice falls short of what should reasonably be allowed) was submitted by the occupants of the Site. On the 26th July 2024 an Inspector appointed to consider the appeal upheld the Enforcement Notice. Since the appeal was brought on ground (a), an application for planning permission was deemed to have been made under Section 177(5) of the Town and Country Planning Act 1990, and the deemed planning application was consequently dismissed.

3.3.31 The upheld Enforcement Notice requires the occupants to cease the use of the site, remove all structures, and restore the site to grassland by 26 July 2025.

3.3.32 The application to the north (22/02292/FUL) remains undetermined and no Enforcement Notice has been served in respect of that parcel of land.

3.3.33 At the time of drafting, both caravan sites remain in use. They are both located beyond the extent of the Order Limits, and the Proposed Development would not affect the continued occupation of the residential caravan sites, irrespective of whether planning permission is granted for the northern site. Nonetheless, for the same rationale that applied in the case of the southern site, there is no apparent reason why a successful Environment Notice could not be upheld on the northern site.

Agricultural Permitted Development

3.3.34 The Proposed Development is located across land that forms part of the former MSC Dredging Deposit Grounds, that have been restored to agricultural land and are now grazed by sheep and cattle by the tenant of Frodsham Marsh Farm. The south-eastern portion of the Solar Array Development Area is also agricultural land that has been used for growing crops and silage for many years.

3.3.35 Schedule 2, Part 6 of the Town and Country Planning (General Permitted Development) (England) Order 2015 provides a series of Permitted Development Rights for agricultural development and which, in most cases, is subject to the Prior Approval of the Local Authority. Activities and development across the Site will inevitably have been undertaken historically with the benefit of Permitted Development. Protective Provisions are included within the DCO to ensure that these rights are not affected, and existing development can proceed without restriction.

3.4 Site Selection

3.4.1 The Site resulting in the Order Limits was originally identified as a potential location for development, and then ultimately for the Proposed Development, for several reasons. This is set out in detail within **ES Vol 2: Appendix 3.1 Alternative Site Assessment *[EN010153/DR/6.2]*** and summarised as relevant below.

3.4.2 The Planning Act 2008, as amended by the Growth and Infrastructure Act 2013, provides powers for applicants to seek authorisation for the compulsory acquisition of land or rights over land. In doing so it provides an important tool to use as a means of assembling the land needed to deliver nationally significant infrastructure projects. The rights only apply where there is a compelling case in the public interest for the compulsory acquisition, and consequently that all reasonable alternatives have been fully explored.

3.4.3 It is important therefore that having determined a need for a development, land is sought that can be utilised without the need for compulsory acquisition. At the outset of the project, Peel NRE (Peel) were a joint partner of the Applicant. Peel identified that they owned a significant percentage of the Frodsham Marshes which, following preliminary consideration, was determined to be sufficiently free from existing development and other constraints, such that it could be considered as an appropriate site for the development of a commercial solar array.

3.4.4 Having identified the potential opportunity that exists on a Site that was available and deliverable (in that a significant percentage of the area is owned by a development partner), the Applicant was mindful of paragraph 2.10.10 of NPS EN-3 which states:

"…the government is supportive of solar that is "co-located"[80] with other functions (for example agriculture, onshore wind generation or storage) to maximise efficiency of use."

3.4.5 Footnote 80 states that: *"Co-location could be an application solely seeking consent for solar but co-locating with an existing use / function; or an application seeking consent for solar and other functions."*

3.4.6 In this case the identified area for development of a solar array would be co-located with both existing agricultural use and the Frodsham Wind Farm, that would continue to operate alongside the Proposed Development. Furthermore, the Proposed Development would include a 100MW capacity (400MWh) battery storage facility that would be developed and operate alongside the Solar Array.

3.4.7 In recognition of the potential co-locational benefits, and the urgent need for utility scale renewable infrastructure to meet the UK's energy crisis, the Applicant commenced work on assessing the viability and appropriateness of developing a commercial scale solar array on land adjacent to the Frodsham Wind Farm. This initial assessment work confirmed that a commercially viable scheme could be developed utilising land available and owned by Peel, and two other landowners. This would negate the need for extensive land acquisition.

3.4.8 In addition to the above, the Site is located within the heart of the Cheshire Energy Innovation District, a corridor of industry between Ellesmere Port and Runcorn that provides secure, low carbon energy, proximate to several heavy industrial uses that require abnormal amounts of electricity to operate. Driven by fiscal, legislative and corporate objectives, many of these energy intensive operators are actively looking at ways to decarbonise. Consequently, the Site provides a real and tangible opportunity to deliver cost effective and efficient direct wire 'behind the metre' energy connections.

3.4.9 Having identified a broad location that naturally lends itself to the development of a renewable energy scheme, the availability of grid capacity is critical. Paragraph 2.10.22 of EN-3 states that: *"The capacity of the local grid network to accept the likely output from a proposed solar farm is critical to the technical and commercial feasibility of a development proposal."* Paragraph 2.10.24

goes on to states: *"the connection voltage, availability of network capacity, and the distance from the solar farm to the existing network[84] can have a significant effect on the commercial feasibility of a development proposal."* Footnote 84 states that: *"the route and type of terrain traversed by the cabling linking the solar project to the grid connection may also have an impact on the project's viability."*

3.4.10 Paragraph 4.2.21 of EN-1 goes further stating that: *"…the Secretary of State will consider the particular circumstances of any plan or project but starting from the position that energy security and decarbonising the power sector to combat climate change requires a significant number of deliverable locations for CNP Infrastructure and for each location to maximise its capacity."*

3.4.11 Having secured the opportunity at the Site, the Applicant needed to ensure that there was adequate and available capacity that could be accessed on the electricity network, and that any facility that was proposed utilised that capacity to the maximum. The Alternative Site Assessment at **ES Vol 2: Appendix 3.1 Alternative Site Assessment *[EN010153/DR/6.2]*** sets out the approach that was taken to identify the network connections that were potentially available in viable proximity from the Frodsham Marshes, and then to determine the availability or otherwise of any capacity that may exist. The SPEN Frodsham Substation represented the only available capacity within the sub-regional area and was the only feasible option to delivering a solar array of the scale proposed. This reaffirmed and supported the delivery of a Site within the area to the north of the M56 corridor, adjacent to the existing Frodsham Wind Farm.

3.4.12 Having determined that the area identified (land north of the M56 corridor proximate to the Frodsham Wind Farm) was appropriate in respect of all of the site selection criteria that had been applied up to that point, the Applicant undertook an assessment to establish the potential for alternative sites. The Alternative Site Assessment **ES Vol 2: Appendix 3.1 Alternative Site Assessment *[EN010153/DR/6.2]*** sought to establish the potential for

alternative sites or areas that could accommodate a solar array of sufficient scale to generate at least 100MW, and which could viably connect into the SPEN Frodsham Substation.

3.4.13 Having identified two potential alternative areas to that initially identified, the assessment reviewed all three against factors influencing site selection and design at Section 2.3 of the EN-3, and a series of further additional criteria that could influence the suitability of the chosen site. The result of the assessment process was that the Site forming the Order Limits is preferrable to the other areas identified, which were not considered 'reasonably available sites' i.e. in a suitable location for the type of development with a reasonable prospect that they are available to be developed at the point in time envisaged by the Proposed Development.

3.4.14 Consequently, the Site forming the Order Limits has been taken forward for development.

3.5 Cumulative Schemes

3.5.1 Cumulative effects can result from a combination of impacts, which on their own may not be significant but when combined with others, could generate significant effects.

3.5.2 **ES Vol 1 Chapter 4: Environmental Impact Assessment Methodology *[EN010153/DR/6.1]*** provides a detailed description of the approach taken to establish the potential for cumulative likely significant effects arising from the construction, operation and decommissioning of the Proposed Development.

3.5.3 Cumulative effects typically fall to be considered within two distinct categories, comprising:

i) Cumulative inter project effects – effects arising from the residual (post-mitigation) environmental effects of the Proposed Development combining and interacting with the residual environmental effects of one or more other committed developments.

ii) In-combination intra project effects – are those arising from the interaction and combination of different residual (post-mitigation) environmental effects of the Proposed Development affecting a single receptor. Individually the effects may not be significant, but the accumulation of effects may, collectively, give rise to a significant overall effect.

3.5.4 The Applicant has considered relevant legislation, policy and guidance with regard to the methodology used to consider in-combination and cumulative effects. The Applicant also engaged with CWaCC when preparing the cumulative effects assessment to agree the Zones of Influence and also the criteria used to establish the list of projects to be taken forward for detailed cumulative inter-project effects assessment.

3.5.5 A short list of projects which the Proposed Development could have potential significant cumulative environmental effects with has been prepared, see **ES Vol 2 Appendix 4-4 Short List of other 'reasonably foreseeable' developments [EN010153/DR/6.1].** The location of the projects is shown on **ES Vol 3 Figure 4-3: Short List Cumulative Schemes – 1km [EN010153/DR/6.3].**

3.5.6 **ES Vol 1 Chapter 13: Cumulative and Intra-Project Effects [EN010153/DR/6.1]** provides the cumulative effects assessment.

3.5.7 As set out in **ES Vol 1 Chapter 4: Methodology [EN010153/DR/6.1]** there are a number of development schemes located within Protos, a significant development site with the benefit of planning permissions for a range of energy generation and resource management businesses. Due to the proximity of the developments to one another, they have been collectively assessed within the cumulative assessment. Where specific cumulative effects could arise from an individual project these have been expanded on and are reported in **ES Vol 1 Chapter 13: Cumulative and Intra-Project Effects [EN010153/DR/6.1].**

3.5.8 The cumulative assessment concludes that the Proposed Development would not give rise to any significant cumulative effects. The Applicant is committed to proactive collaboration throughout the construction phase with Cadent and Eni (HyNet) and other developers of major projects that interact with the Order Limits and will co-ordinate where practicable on construction programmes and environmental mitigation measures.

4.0 THE PROPOSED DEVELOPMENT

4.1 Overview of the Proposed Development

4.1.1 The Proposed Development comprises a new solar energy generating station and an associated on-site Battery Energy Storage System (BESS) on land at Frodsham Marsh, Frodsham, Cheshire West and Chester. The Proposed Development also includes the associated infrastructure for connection to the local electricity distribution network, as well as a private wire electricity connection that would enable local businesses to utilise the renewable energy generated by the Proposed Development.

4.1.2 The Proposed Development would enable the generation of approximately 147 MW of electricity, as well as the storage of circa 100 MW of electricity in a BESS. As noted above, the Proposed Development would also be capable of exporting electricity directly to local businesses.

4.1.3 The design life of the Proposed Development is 40 years (secured through the DCO), with decommissioning to commence 40 years after final commissioning.

4.1.4 A full description of the Proposed Development is provided in **ES Vol 1 Chapter 2: Proposed Development *[EN010153/DR/6.1]*.**

4.2 Key Components of the Proposed Development

4.2.1 The principal elements of the Proposed Development comprise:

i) Solar Array Development Area that would include solar photovoltaic (PV) modules and support frames, internal access tracks, cabling, inverters, transformers, the solar array substation (known as the 'Frodsham Solar Substation) and the BESS;
ii) Main Site Access route which would be routed from the west via the Pool Lane roundabout and the access tracks used for the Frodsham Wind Farm. There would be no access to the Site from Frodsham during construction, operation or decommissioning other than for emergency

vehicles, and access to a potential new public car park area on Moorditch Lane;

iii) SPEN Grid Connection which would link the on-site Frodsham Solar Substation to the Scottish Power Energy Networks ('SPEN') Frodsham Substation;

iv) SPEN Frodsham Substation which is included along with access into the substation in order to provide the Grid Connection;

v) Private Wire Connection - which includes land to provide a buried private wire connection to facilitate future electricity connections to businesses located south-west of the Proposed Development;

vi) Non Breeding Bird Mitigation Area - which includes land that would be used to mitigate for the potential impacts of the Proposed Development on wetland bird species;

vii) Skylark Mitigation Area - which includes land that would be used to mitigate
for the potential impacts of the Proposed Development on skylark;

viii) Other infrastructure – which includes fencing, cabling, drainage, access tracks, and closed-circuit television (CCTV); and

ix) Landscaping, Habitat Creation and Recreational Infrastructure - the Proposed Development would include extensive landscaping and habitat creation which includes the specific areas set aside for skylark mitigation, and non-breeding bird mitigation and also the provision of permissive paths to provide additional recreational opportunities within the Frodsham Marshes.

4.2.2 The Solar Array Development Area would be located at the eastern extent of Frodsham and Helsby Marsh, an area of land between the Mersey Estuary and the M56. The solar panels would be installed on fixed mounting structures (metal frames) set out in rows, the orientation of which would be towards the south but with some variation in angle to minimise the potential for glare to receptors. The solar panels are connected by cabling to on-site inverters, transformers and switchgear that collectively ensure the electricity generated

by the solar panels is converted from direct current (DC) to alternating current (AC) and is exported at the required voltage.

4.2.3 The BESS would store electricity at times of low demand from the National Grid, and release electricity at times of peak demand. BESS are an important part of renewable electricity generating systems such as wind and solar due to their weather dependency and potential for intermittent generation. The BESS would be located in a single compound that includes battery storage containers and transformers, control equipment, and water storage tanks. Two locations are currently being considered for the BESS, both of which are central to the Solar Array Development Area and outside of areas of flood risk.

4.2.4 The Frodsham Solar Substation would be co-located with the BESS and include the equipment needed to control and operate the Proposed Development.

4.2.5 **ES Vol 3 Figure 2-2: Indicative Operational Site Layout [EN010153/DR/6.3]** provides an illustrative layout of the above principal elements of development.

Associated Development

4.2.6 Further associated development may be required, including:

i) laying down of internal access tracks, temporary footpath diversions, ramps, means of access, carparks, crossing of watercourses and roads;
ii) improvement, maintenance, repair and use of existing streets, private tracks, public rights of way and access roads;
iii) sustainable drainage systems including runoff outfalls, general drainage and irrigation infrastructure, systems and improvements or extensions to existing drainage and irrigation systems;
iv) works for the provision of security and monitoring measures such as CCTV columns, cameras, lighting columns and lighting, weather stations, perimeter fencing;

v) construction and decommissioning compounds, including site and welfare offices and areas to store materials and equipment.

4.2.7 **ES Vol 3 Figure 2-4: Existing and Proposed PRoW and Permissive Paths [EN010153/DR/6.3]** and **Figures 2-5(a-j): Indicative Engineering Drawings [EN010153/DR/6.3]** provide more detail on the Proposed Development described above.

4.3 Design Development

4.3.1 The approach to the design of the Proposed Development has taken account of environmental assessment, consultation and engagement activities, technical feasibility and cost considerations. **ES Vol 1 Chapter 3: Alternatives and Design Evolution [EN010153/DR/6.1]** and the **Design Approach Document [EN010153/DR/5.8]** set out the framework and process followed for decision-making on design and provide an overview of the project's design evolution and alternative design considerations.

4.3.2 The **Consultation Report [EN010153/DR/5.1]** and **Consultation Report Appendices [EN010153/DR/5.2]** set out the pre-application consultation undertaken by the Applicant and how the design of the Proposed Development has evolved in response to consultee feedback.

4.4 Design Flexibility and Securing Good Design

4.4.1 National Policy Statements EN-1 and EN-3 recognise that flexibility can be necessary in the preparation and making of a DCO to account for uncertainties in specific project details.

4.4.2 The Planning Inspectorate's Advice Note 9: 'Rochdale Envelope'[xlii] ('Advice Note 9') provides guidance regarding the degree of flexibility that may be considered appropriate within an application for development consent under the Planning Act 2008. The advice note acknowledges that there may be aspects of the Proposed Development that are not yet fixed prior to the DCO being granted, and therefore, it may be necessary for the EIA to assess likely

worst-case variations to ensure that all reasonably foreseeable likely significant environmental effects of the Proposed Development are assessed.

4.4.3 As such the DCO application and EIA are based upon maximum and, where relevant, minimum parameters and defined work areas where the types of development can take place. These parameters, hereafter referred to as 'the Design Parameters' are based on industry knowledge and best practice such that a sufficient degree of flexibility is provided within the DCO. The Design Parameters are described in detail within **ES Vol 1 Chapter 2: Proposed Development [EN010153/DR/6.1].**

4.4.4 The flexibility afforded by the DCO would be controlled through the **Works Plans [EN010153/DR/2.3]** (which limit the spatial extent of the types of development) and the Design Parameters described in **ES Vol 1 Chapter 2: Proposed Development [EN010153/DR/6.1]** out within this Chapter.

4.5 Construction Phase

Construction Programme and Phasing

4.5.1 The Construction Phase is expected to last for approximately 30 months, based on experience of constructing other similar-scale installations. Subject to securing a DCO in Summer 2026, it is anticipated that works would start on Site in January 2028 and be completed in mid-2030.

4.5.2 It is possible that the Construction Phase could be slightly shorter or longer than stated, however for the purposes of assessment a 30-month programme has been utilised. The final programme would be dependent on detailed design matters once any DCO Requirements have been appropriately discharged.

4.5.3 The construction of the Proposed Development is likely to be split into different sub-projects / packages to enable the Proposed Development to be delivered in the most efficient manner. In relation to the solar PV array areas, this is likely to be split into two main sub-projects; the western array area

(hereafter referred to as the Western Array) and the eastern array area (hereafter referred to as the Eastern Array). **ES Vol 2 Appendix 2-2 Indicative Construction Phasing and Resource Schedule [EN010153/DR/6.2]** illustrates a reasonable worst case indicative construction phasing envisaged for the purposes of the EIA. In particular this provides that no SADA construction will commence until the NBBMA is constructed.

4.5.4 A detailed description of the construction activities is provided at **ES Vol 1 Chapter 2: Proposed Development [EN010153/DR/6.1]** and would consist of the following primary stages:

i) Construction of the NBBMA;
ii) Enabling Works;
iii) Construction of the Western Array;
iv) Construction of the Eastern Array;
v) Construction of the BESS and Frodsham Solar Substation;
vi) Construction of the 132 kV SPEN Substation Grid Connection; and
vii) Construction of the 132 kV Private Wire Grid Connection.

4.5.5 An **outline Construction Environmental Management Plan (oCEMP) [EN010153/DR/7.5]** is submitted with the DCO application. The **oCEMP [EN010153/DR/7.5]** outlines the principles, controls, and measures to be implemented during construction to reduce potential significant environmental effects from occurring. Where the Proposed Development relies on mitigation measures in relation to significant construction phase environmental effects from the EIA, these measures have been outlined within the **oCEMP [EN010153/DR/7.5]** As a requirement of the **draft DCO [EN010153/DR/3.1]**, a full CEMP would be produced by the selected contractors that would construct the development and the CEMP. The CEMP would be in substantial accordance with the **oCEMP [EN010153/DR/7.5]**. and would need to be approved by the Local Planning Authority prior to construction.

Construction Staff

4.5.6 During the period of peak construction activity, between months 2 and 19, there would be a need for approximately 159 staff on-site on weekdays, on average, and 79 staff on Saturdays. The period of activity requiring the maximum number of staff on site would occur between months 12 and 18, peaking in month 12 when there would be a maximum of approximately 243 staff per weekday, and 122 staff at weekends. The workforce would be distributed across the Site with work happening in parallel across the sub-projects / packages described above.

4.5.7 An indicative workforce resource schedule is presented in **ES Vol 2 Appendix 2-2 Indicative Construction Phasing and Resource Schedule [EN010153/DR/6.2].**

Construction Access Arrangements and Compound Locations

4.5.8 **Figure 2-1: Indicative Construction Site Layout [EN010153/DR/6.3]** shows the proposed construction access tracks and construction compound locations.

4.5.9 It is anticipated that there would be two main construction compounds and four smaller secondary compounds to facilitate the construction works within the Solar Array Development Area. Two additional compounds would be provided to the north of the River Weaver for the purposes of the SPEN Grid Connection works.

4.5.10 The construction access route to the Site would be from the west, leading from Pool Lane roundabout. Pool Lane provides access via the dualled A5117 to Junction 14 of the M56 and Junction 10 of the M53. The access to the SPEN Frodsham Substation would be via the A56 Chester Road, where a dedicated private access road leads to the substation complex. All construction traffic would be directed east along the A56, where onwards connections to the strategic highway network, including Junction 12 of the M56, can be made.

4.5.11 No HGVs would be routed though the villages of Frodsham, Ince or Elton.

4.5.12 Construction access arrangements and construction compounds are described further in **ES Vol 1 Chapter 2: Proposed Development [EN010153/DR/6.1].**

4.5.13 An **outline Construction Traffic Management Plan (oCTMP) [EN010153/DR/7.4]** is submitted as part of the DCO to set out the measures the Applicant considers necessary to mitigate transport impacts during the construction phase. The **oCTMP** sets out the overall approach to how the movement of construction traffic, including Site personnel movements, will be safely managed and provides detail environmental management practices in respect of construction traffic, including seek to coordinate with cumulative developments. The **oCTMP [EN010153/DR/7.4]** will be developed into a final Construction Traffic Management Plan (CTMP) as a requirement of the **draft DCO [EN010153/DR/3.1]**, and this CTMP will require approval of the Local Highway Authority prior to construction.

Construction Hours of Work

4.5.14 Construction operations would generally be limited to 08.00 to 18.00hrs Monday to Friday and 08:00 to 13:00hrs Saturday, with no construction work on Sundays or Bank Holidays. Construction workers would typically arrive in the hour prior to start of construction and leave in the hour after construction work ceases. Construction staff would therefore arrive at the Site before 08:00 and depart after 18:00 during weekdays.

4.5.15 There may be instances where operations are required outside the above times e.g. delivery of abnormal loads, fit out of internal equipment within the substations, other quiet non-intrusive works such as electrical testing, commissioning and inspection. In such instances it would be necessary to agree a modification to the working hours with CWaCC.

Construction Lighting and Security

4.5.16 The use of artificial lighting will be required during the hours of darkness, low levels of natural light or during specific construction tasks to satisfy health and safety requirements of those on site including construction staff and visitors.

4.5.17 The Site will be secured by temporary fencing (such as Heras fencing) during the construction phase, with overall management of security resting with the Principal Contractor.

4.5.18 The principles of lighting and security measures to be provided during the construction phase are provided in **ES Vol 1 Chapter 2: Proposed Development [EN010153/DR/6.1].** Measures to control lighting pollution are documented within the **oCEMP [EN010153/DR/7.5].**

Public Rights of Way

4.5.19 There are a number of PRoW that cross the Site, as illustrated on **ES Vol 3 Figure 2-4: Existing and Proposed PRoW and Permissive Paths [EN010153/DR/6.3].** The **Outline Public Rights of Way Management Plan [EN010153/DR/7.9]** summarises the management measures required during the construction phase for each PRoW within the Site.

Utilities

4.5.20 A number of utilities cross the Site, these are illustrated on **ES Vol 3 Figure 1-6: Utilities [EN010153/DR/6.3].** Easements for these utilities have been adopted for the production of the **ES Vol 3 Figure 2-2: Indicative Operational Site Layout [EN010153/DR/6.3]** and the easements relevant to each utility are set out in **ES Vol 1 Chapter 2: Proposed Development [EN010153/DR/6.1].**

4.5.21 Protective Provisions to safeguard utilities crossing the Site are included within the **draft DCO [EN010153/DR/3.1]**.

4.5.22 The Applicant has engaged in dialogue with utility undertakers and with the developers of the HyNet Hydrogen pipeline and the proposed Carbon Dioxide pipeline. The Proposed Development has been designed cognisant of the potential requirements of these projects.

4.6 Operational Phase

4.6.1 During the operational phase of the Proposed Development, the routine activities on site would be limited primarily to vegetation and landscape management; maintenance of footpaths, recreational facilities and fencing; equipment maintenance; and servicing, cleaning of solar PV modules, and onsite agricultural management e.g. associated with sheep grazing. There would also be a requirement for replacement of components that fail or reach the end of their lifespan.

4.6.2 The **Outline Operational Environmental Management Plan (oOEMP) [EN010153/DR/7.6]** outlines the principles, controls, and measures to be implemented during the operational phase to reduce potential significant environmental effects from occurring, including during any significant periodic replacements.

4.6.3 The **Outline Landscape and Ecology Management Plan (oLEMP) [EN010153/DR/7.13]** sets out the management prescriptions and target habitat conditions for the various landscape and habitat features envisaged for the Proposed Development as shown **on ES Vol 3 Figure 2-3: Indicative Operational Site Layout [EN010153/DR/6.3]**. The **oLEMP [EN010153/DR/7.10]** contains specific detail for the management of the NBBMA. The Applicant envisages that the NBBMA would be managed by, or under the supervision of, an organisation experienced in stewardship of wetland reserves, such as the Local Wildlife Trust or the RSPB.

4.6.4 Vehicular access to the Site would be the same as that described above for construction i.e. access would be from the west via Pool Lane, Grinsome Road and the Frodsham Wind Farm access track. Vehicles would not access

the Site via Frodsham. Emergency access routes would be provided from Frodsham via Brook Furlong and Marsh Lane, and Weaver Lane. These access points would only be used by emergency service vehicles. There would be no requirement for any regular HGV access, with the vast majority of the routine maintenance, and associated deliveries, undertaken by LGV.

4.6.5 The proposed car parking area, if brought forward as discussed in the **oLEMP [EN010153/DR/7.10]** could be accessed via Brook Furlong and Moorditch Lane.

4.6.6 During the operational phase, all existing PRoW would be maintained on their existing alignment, and it is not expected that any diversions or stopping-up of PRoW is required.

4.7 Decommissioning Phase

4.7.1 When the operational phase ends, the Proposed Development would require decommissioning.

4.7.2 Decommissioning is expected to take between 12 and 24 months and would be undertaken in phases.

4.7.3 All solar PV modules, mounting poles, above ground cabling, inverters, transformers, BESS equipment, the Frodsham Solar Substation, and fencing would be removed from the Site and recycled or disposed of in accordance with good practice and market conditions at that time. It is also likely that below ground cabling would be removed from Site and recycled. The Site would be returned to a condition suitable for return to its original use after decommissioning.

4.7.4 On decommissioning, the landscaping works undertaken across the Site would remain in place, and the land would be handed back to the landowner, with the only exceptions being the potential requirement by the landowner to revert the grassland created on the eastern half of the Site (to the east of Brook Furlong) and the Skylark Mitigation Areas back to land suitable for

arable farming. Given that the western half of the Site is currently used for grazing, the grassland created and managed in this area would be retained. It is likely that tree and scrub planting, together with created pond and wetland habitats, would be retained, including the habitats created within the NBBMA. However, as the land would be handed back to the landowners on completion of decommissioning the long term retention of the landscaping improvement works cannot be assumed.

4.7.5 An **Outline Decommissioning Environmental Management Plan (oDEMP) [EN010153/DR/7.7]** is submitted with the application and provides a framework for the management of environmental impacts during the decommissioning phase of the Proposed Development. The oDEMP also sets out monitoring and auditing activities which would be used to ensure mitigation measures are carried out, recorded and effective.

4.7.6 A detailed description of decommissioning activities is provided in **ES Vol 1 Chapter 2: Proposed Development [EN010153/DR/6.1]**.

5.0 BENEFITS OF THE PROPOSED DEVELOPMENT

5.1 Introduction

5.1.1 NPS EN-1 sets out at paragraph 4.1.5 that:

"*In considering any proposed development, in particular when weighing its adverse impacts against its benefits, the Secretary of State should take into account:*

- *its potential benefits including its contribution to meeting the need for energy infrastructure, job creation, reduction of geographical disparities, environmental enhancements, and any long-term or wider benefits*
- *its potential adverse impacts, including on the environment, and including any long-term and cumulative adverse impacts, as well as any measures to avoid, reduce, mitigate or compensate for any adverse impacts, following the mitigation hierarchy"*

5.1.2 This section of the Planning Statement sets out the benefits of the Proposed Development, whilst the adverse impacts are set out in Section 7.0.

5.1.3 The benefits are explained under three separate headings as follows:

- Project benefits addressing identified national needs;
- Project benefits addressing identified local needs; and
- Additional project benefits.

5.2 Project Benefits Addressing Identified National Needs

5.2.1 The national need for the Proposed Development is established within NPS EN-1 and within Section 2.0 of this Planning Statement.

Contribution to Net Zero Targets

5.2.2 As set out in Section 2.3 of this Planning Statement, the Proposed Development would directly contribute to national decarbonisation and meeting net zero targets (in line with the statutory requirements set out at

Section 2.2 of this Planning Statement) through a supply of clean renewable energy, replacing existing fossil fuel generation in the grid. The Proposed Development is fully aligned with the net zero strategy and can make a valuable contribution towards decarbonising the energy sector before the critical 2030 deadline for a predominantly clean electricity supply.

Contribution to Increased Energy Security

5.2.3 As set out in Section 2.4 of this Planning Statement, the Proposed Development would directly contribute to the UK's energy security agenda by reducing dependence on imported fossil-fuel for gas-fired power. The inclusion of on-site battery storage means the Proposed Development will function not just as a generation asset but as a flexible energy hub that helps balance supply and demand locally. By delivering secure, low-cost renewable power, the Proposed Development will strengthen energy independence and protect consumers and businesses from future energy price shocks.

Contribution to Green Economic Growth

5.2.4 As set out in Section 2.5 of this Planning Statement, the Proposed Development will help drive wider economic gains associated with decarbonisation, in line with the Government's mission to be a 'Clean Energy Superpower'. The availability of clean, affordable power is increasingly seen as a foundation for competitive economic growth – high energy costs and insecurity can impede industrial investment.

Contribution to Increased Electricity Demand

5.2.5 As set out in Section 2.6 of this Planning Statement, the Proposed Development will make a meaningful contribution towards meeting the anticipated significant increase in future electricity demand set out in NESO's FES 2024. FES 2024 outlines a future energy mix dominated by renewables, in which solar PV provides a significant share of energy, complemented by storage to manage variability.

5.3 Project Benefits Addressing Identified Local Needs

5.3.1 The local need for the Proposed Development is established within Section 2.0 of this Planning Statement.

Local Climate Emergency and Contribution to Net Zero Targets

5.3.2 As set out in Section 2.5 of this Planning Statement, CWaCC declared a Climate Emergency in May 2019 and set an ambitious target of achieving carbon neutrality across the borough by 2045. The Proposed Development would directly contribute to reducing carbon emissions and supporting the achievement of CWaCC's carbon neutrality target, producing enough clean electricity to power approximately 40,000 homes annually, facilitate connections to local industrial businesses, and save a minimum of approximately 900,000 tonnes of CO2 equivalent over its lifetime.

Local Energy Security

5.3.3 As set out in Section 2.5 of this Planning Statement, the Proposed Development is strategically located within a nationally significant energy corridor stretching from Ellesmere Port toward Runcorn, where over 5% of the UK's energy is consumed. Being at the heart of this corridor of energy-intensive industry, the Site benefits from immediate proximity to complementary infrastructure and demand centres. This unique geography enables the possibility of direct integration of the Proposed Development into local networks through the Private Wire Connection, allowing it to feed renewable electricity directly to nearby large energy users and strengthen the resilience of the area's power supply.

5.3.4 The Proposed Development would be expected to generate roughly 114 GWh per year, which put simply would supply approximately one-fourteenth of all the electricity that Cheshire West and Chester currently consumes but sources from non-renewable generation. This would be a significant contribution toward the area's current and future electricity requirements.

Local Economic Security

5.3.5 As set out in Section 2.5 of this Planning Statement, the Proposed Development represents a significant investment in the Cheshire area (on the order of hundreds of millions of pounds in capital expenditure), which will generate jobs and business for the local economy.

5.3.6 The North West is positioning itself as a leading clean growth cluster for the UK, leveraging its industrial base and geography to attract green investment. The Proposed Development is precisely the type of low-carbon infrastructure that the North West is seeking to foster – bringing investment and net zero industry into an existing carbon-intensive industrial area, and contributing to the region's emerging clean energy ecosystem.

5.3.7 The Applicant has prepared an **outline Skills, Supply Chain and Employment Plan *[EN010153/DR/7.11]*** that provides further detail and commitments in relation to local job opportunities. Once operational, the Proposed Development will support a number of permanent jobs (or long-term contracted positions) for ongoing operations, maintenance, and security of the Site. This provides a direct link to the 'Energy Skills Passport' initiative in the borough which seeks to ensure that local workers in carbon-intensive industries can take up new opportunities in the clean energy sector as the UK transitions to net zero.

5.3.8 The contribution to carbon reduction is not just an environmental gain; it also enhances the borough's appeal for investors and businesses. Companies are increasingly factoring clean energy availability into decisions on where to locate operations. The Proposed Development could attract businesses looking to power their facilities with low-carbon electricity or to site themselves near sources of clean energy (for instance, advanced manufacturing or data centres seeking renewable power purchase agreements). In this way, the Proposed Development and its potential private wire connection can have an indirect job-creation effect by improving the local infrastructure for sustainable growth.

5.4 Additional Project Benefits

5.4.1 In addition to the substantial aforementioned benefits which are aligned with NPS EN-1 and the 'important and relevant considerations' set out in Section 2.1 of this Planning Statement, the Proposed Development will also deliver other additional benefits that arise as a result of the specific site location and design process.

5.4.2 These additional project benefits align with the aspirations for new energy development outlined by Government within NPS EN-1 and NPS EN-3.

Effective Use of Land

5.4.3 NPS EN-3 sets out at paragraph 2.10.10 (and footnote 80) that Government is supportive of solar that is co-located with other functions to maximise the efficiency of land use, and that this could be either through an application for solar co-located with an existing function (such as Frodsham Wind Farm), or through an application for solar co-located with another function (such as the BESS; the Proposed Development is effective in both these regards.

5.4.4 The Proposed Development also complements other clean energy initiatives in the area (such as the existing Frodsham Wind Farm and the emerging HyNet hydrogen project), helping to form a cluster of low-carbon energy assets in Cheshire. Such clustering can yield synergies, spur innovation, and support supply-chain development.

5.4.5 As set out at Section 3.4 of this Planning Statement and in **ES Vol 2 Appendix 3-1: Alternative Site Assessment *[EN010153/DR/6.2]***, the Site is well placed to efficiently and effectively utilise the available grid capacity within the SPEN Frodsham Substation in advance of the Clean Power 2030 target.

Nature Conservation and Biodiversity

5.4.6 As a result of the embedded design proposals and approach to delivering ecological mitigation and new green infrastructure, the Proposed

Development would deliver significant benefits for nature conservation, as identified by **ES Vol 1 Chapter 7: Terrestrial Ecology *[EN010153/DR/6.1]*** and **ES Vol 1 Chapter 8: Ornithology *[EN010153/DR/6.1]***.

5.4.7 The Proposed Development would result in likely significant beneficial effects on the Mersey Estuary SPA and Ramsar site as a result of the increased foraging/loafing opportunities created by the Proposed Development for qualifying ornithological features of the European Sites. This in particular relates to the delivery of the NBBMA, which will be implemented in accordance with the outline Non-Breeding Bird Mitigation Strategy (oNBBMS) that forms Appendix B of the **outline Landscape and Ecology Management Plan *[EN010153/DR/7.13]***. The oNBBMS has been developed in consultation with Natural England, CWaCC and the RSPB, and the final strategy will be agreed in consultation with these same organisations.

5.4.8 It is relevant that there are no managed wetland nature reserves anywhere around the Mersey Estuary SPA; the Mersey appears to be the only major estuary in the UK without an adjacent wetland reserve and therefore the creation of the NBBMA would represent a significant strategic benefit in this location. As such, the NBBMA is considered to provide a unique opportunity for the creation of valuable wetland habitat for SPA-qualifying species on land adjacent to the Mersey Estuary SPA. It would therefore provide substantial enhancements in addition to ecological mitigation.

5.4.9 In addition to the benefits derived from the NBBMA, as identified in **ES Vol 1 Chapter 7: Terrestrial Ecology *[EN010153/DR/6.1]*** the Proposed Development would also provide long-term benefits during the operational phase to the Frodsham, Helsby and Ince Marshes LWS as a result of the retention of existing valuable habitats, and the creation of substantial areas of complimentary habitats to improve the integrity and function of the LWS.

5.4.10 The ecological proposals are secured through Work No. 6a, 6b and 6c of the **draft DCO *[EN010153/DR/3.1]*** and will be delivered in accordance with the **outline Landscape and Ecology Management Plan *[EN010153/DR/7.13]***.

5.4.11 Biodiversity Net Gain (BNG) is not yet a statutory requirement for NSIPs, but Government has strongly indicated that it intends to make it a statutory requirement from November 2025. On the basis that BNG would become mandatory during the examination phase of the Proposed Development[3], the Applicant has produced a **BNG Report [EN010153/DR/7.12]** that considers land take, habitat creation and biodiversity enhancements to accompany the Proposed Development. **The BNG Report [EN010153/DR/7.12]** provides an assessment undertaken utilising DEFRA's Statutory Biodiversity Metric Calculator to provide evidence of an achievable on-site gain in biodiversity units, equivalent to a gain of 11% in area-based habitats, 89% in linear habitats, and 13% in watercourse-based habitats when including the NBBMA. When excluding the NBBMA, the Proposed Development still achieves gains in area-based and linear habitats, but a 10% gain in watercourse-based habitats is not achieved.

Access

5.4.12 As set out in detail within the **Design Approach Document *[EN010153/DR/5.8]***, the Proposed Development provides an opportunity to deliver a programme of enhanced access provision to this dynamic peri-urban landscape with its unique combination of views, natural history and industrial artefacts.

5.4.13 Permissive paths have been proposed to create additional opportunities for recreational access. They have been located to provide enhanced views of the Mersey Estuary and River Weaver, and also to offer linking paths between the existing PRoW to create a network of routes of differing lengths within the Site. In addition to providing new walking routes, it is also proposed to provide additional cycling and horse-riding opportunities by connecting to existing Restricted Byways.

[3] The Proposed Development would be excluded from mandatory BNG, as the application for development consent has been submitted prior to adoption of mandatory BNG for NSIPs.

5.4.14 In addition, new bird viewing areas and educational display boards should enhance the visitor experience.

5.4.15 The **outline Landscape and Ecology Management Plan *[EN010153/DR/7.13]*** describes how the public rights of way within the Order Limits, and newly created permissive paths, would be managed over the lifetime of the Proposed Development.

Education

5.4.16 The Proposed Development includes enhancement measures such as the provision of visitor amenities such as bird hide or viewing areas and educational information boards. These features will allow people to observe wildlife (notably birds on the marsh and estuary) and learn about the Site's ecology and the solar energy project, thereby enriching the recreational and educational value of the area.

5.5 Community Benefit Fund

5.5.1 It is noted that the Applicant has committed to providing a Community Benefit Fund of £500 per annum/per Megawatt of solar. This is expected to amount to over £2 Million, over the 40 year life of the solar farm.

5.5.2 It's anticipated that the Community Benefit Fund will be delivered in partnership with an independent third-party organisation that has expertise in the management of community funds.

5.5.3 While the eligibility criteria for the fund will be developed in consultation with local communities, and with the involvement of the third-party, the Applicant has suggested the following initiatives which communities may wish to be supported by the fund:

i) Fuel Funding – In partnership with organisations focused on providing financial support to households living in fuel poverty.
ii) Employment and Skills Funding - Funding the skills, training and employment initiatives to enable local people to secure wider employment.

iii) Community Funding – Funding for other local projects e.g. community infrastructure, environmental, educational or social initiatives

5.5.4 The Applicant recognises that whilst the Community Benefit Fund will provide local benefits, it cannot and should not be taken into account within the planning balance. Accordingly, it is not included in the Summary of Project Benefits below, or in Section 8.0 where the Planning Balance is considered.

5.6 Summary of Project Benefits

5.6.1 In summary, the Proposed Development will deliver substantial public benefits meeting national and local needs, as follows:

i) Contribution to achieving statutory net zero targets by reducing carbon emissions and addressing the global challenge of climate change;
ii) Contribution to increasing energy security
iii) Contribution to delivering on the national green economic growth agenda and making the UK a 'Clean Energy Superpower'
iv) Contribution to increasing electricity generation to meet future demand and ensure the 'lights stay on'
v) Contribution to achieving carbon neutrality within the CWaCC area in line with their 2040 target
vi) Contribution to local energy security by increasing electricity supply within the CWaCC area and the provision of a potential Private Wire Connection to support local businesses
vii) Contribution to local economic security through investment in the green economy and job creation
viii) Delivering an effective use of land being co-located with existing wind farm and other emerging clean energy initiatives, and the utilisation of available grid capacity before 2030
ix) Delivering nature conservation benefits to internationally and locally designated sites
x) Delivering enhanced access and recreation opportunities across the Site

xi) Delivering educational benefits through the provision of visitor amenity facilities.

6.0 LEGISLATION AND POLICY FRAMEWORK

6.1 Introduction

6.1.1 This section outlines the legislative framework and the planning policy context for the Proposed Development. It provides an overview of the relevant legislation, energy National Policy Statements (NPSs), the National Planning Policy Framework, local policy documents, guidance and other documents that the Secretary of State may consider to be important and relevant in their decision making.

6.2 Legislation

Planning Act 2008

6.2.1 The Proposed Development is defined as a Nationally Significant Infrastructure Project ('NSIP') under Sections 14(1)(a) and 15(2) of the Planning Act 2008[xliii] (hereafter referred to as 'the PA 2008') as an onshore generating station in England exceeding 50 MW.

6.2.2 The PA 2008 provides the legislative basis and defines the application process under which consent for NSIPs is sought.

6.2.3 The PA 2008 provides that the Secretary of State is responsible for determining the application for development consent, with the power to appoint Planning Inspectors from the Planning Inspectorate to manage and examine the application. In its role, the Planning Inspectorate will examine the application for the Proposed Development and make a recommendation to the Secretary of State who will then decide whether to grant a DCO.

6.2.4 A DCO, if granted, has the effect of providing consent for development, in addition to a range of other consents and authorisations, where specified, as well as removing the need for some consents (such as planning permission). Section 115 of the PA 2008 also states that a DCO can include consent for 'associated development', which is development that is not an NSIP in its own right but is associated with the NSIP applied for. This may be development

that supports the construction, operation or decommissioning of the NSIP; which helps to address the impacts of the NSIP; or is of a type normally brought forward with the NSIP.

6.2.5 Section 104(2) of the PA 2008 provides that the Secretary of State must have regard to the following in deciding an application for development consent:

i) Any relevant national policy statement (Section 104(2)(a) of the PA 2008);
ii) The appropriate marine policy documents (if any) determined in accordance with Section 59 of the Marine and Coastal Access Act 2009 (Section 104(2)(aa) of the PA 2008);
iii) Any Local Impact Report (Section 104(2)(b) of the PA 2008);
iv) Any matters prescribed (Section 104(2)(c) of the PA 2008); and
v) Any other matters which the Secretary of State thinks are both important and relevant to the Secretary of State's decision (Section 104(2)(d) of the PA 2008).

6.2.6 Solar PV Generation is covered within the NPS for Renewable Infrastructure (EN-3[xliv]), with energy storage recognised as associated infrastructure. Other NPS's of relevance to the Proposed Development comprise:

i) Overarching National Policy Statement for Energy (EN-1); and
ii) National Policy Statement for Electricity Networks Infrastructure (EN-5) in light of the grid connection.

6.2.7 In this case the River Weaver at the point of crossing by the SPEN Grid Connection is not tidal and the Proposed Development does not involves works in the marine environment in any event (the SPEN Connection merely passes over the River Weaver), and consequently there are no marine policy documents of relevance.

6.2.8 Cheshire West and Chester Council (CWaCC) is the host authority (Local Authority in which the Order Limits lie) and will have the opportunity to prepare a Local Impact Report (LIR) following submission of the DCO Application. The LIR will giving details of the likely impact of the Proposed Development on the

authority's area (or part of that area), and will be considered by the Secretary of State in determining the DCO.

6.2.9 The Infrastructure Planning (Decisions) Regulations 2010 are a prescribed relevant matter, and these regulations are considered under the sub-heading below.

Infrastructure Planning (Decisions) Regulations 2010

6.2.10 The Infrastructure Planning (Decisions) Regulations 2010 (as amended) are a prescribed relevant matter under the PA 2008. Regulation 3 on heritage assets and Regulation 7 concerning biological diversity are relevant to the Proposed Development. Regulation 3 requires that when deciding an application which affects a listed building or its setting, the Secretary of State must have regard to the desirability of preserving the listed building or its setting. Regulation 7 requires that when deciding an application for development consent the Secretary of State must have regard to the United Nations Environmental Programme Convention on Biological Diversity 1992.

6.2.11 The Proposed Development has had appropriate regard to preserving heritage assets and their setting as set out in **ES Vol 1 Chapter 8: Cultural Heritage and Archaeology [EN010153/DR/6.1]**. Regard has been had to biodiversity conservation and enhancement (and consequently the provisions of the United Nations Environmental Programme Convention on Biological Diversity 1992) in **ES Vol 1 Chapter 7: Terrestrial Ecology and Chapter 8: Ornithology [EN010153/DR/6.1].** The conclusions in respect of the historic environment are set out in Section 7.6, and in respect of nature conservation are set out in Section 7.7 and 7.8.

Infrastructure Planning (Environmental Impact Assessment) Regulations 2017

6.2.12 The Proposed Development is 'EIA development' as defined by the Infrastructure Planning (Environmental Impact Assessment) Regulations 2017 (the 'EIA Regulations'), requiring an Environmental Impact Assessment

(EIA). An Environmental Statement has been provided with the DCO application (as required by Regulation 5(2)(a) of the Infrastructure Planning (Applications: Prescribed Forms and Procedure) Regulations 2009 ('APFP Regulations').

The Infrastructure Planning (Applications: Prescribed Forms and Procedure) Regulations 2009

6.2.13 The PA 2008 and regulations 5, 6 and 7 of The Infrastructure Planning (Applications: Prescribed Forms and Procedure) Regulations 2009 (the 'APFP Regulations 2009') set out requirements for the documents and information that must accompany an NSIP application. This application has been prepared in accordance with the requirements of the APFP Regulations 2009.

6.3 National Policy Statements

6.3.1 Section 104(2) of the PA 2008 sets out that the primary policy considerations for NSIPs include any relevant NPS. The NPSs set out policy for nationally significant development in a particular sector and form the primary considerations for the Secretary of State's decision making on applications for NSIPs.

6.3.2 The NPSs relevant to this application are EN-1 Overarching National Policy Statement for Energy, EN-3 Renewable Energy Infrastructure and EN-5 Electricity Networks Infrastructure. NPS EN-1 and NPS EN-3 include policy specifically with respect to solar development, while NPS EN-5 covers policy relevant to the grid connection infrastructure.

6.3.3 The Department for Energy Security and Net Zero published draft updates to EN-1, EN-3 and EN-5 on the 24th of April 2025. One of the most substantial changes relates to the integration of the Clean Power 2030 Action Plan into the NPSs. In this regard, the draft update highlights the essential role that renewable energy NSIPs have in achieving the target of producing at least 95% of Great Britain's generation from clean sources of power by 2030 and

is therefore consistent with the need case set out above. In relation to solar energy the draft updates do not contain any material changes which affect the approach to the environmental assessments presented in this ES. As such the topic chapters and the planning appraisal set out in section 7 of this document, focus on the currently adopted NPSs.

EN-1 – Overarching National Policy Statement for Energy

6.3.4 NPS EN-1 sets out assessment principles and generic impacts to provide a framework for consideration of all types of energy NSIP development. EN-1 also sets out the critical national priority (CNP) for the provision of nationally significant low carbon infrastructure.

6.3.5 Further consideration of NPS EN-1 policies and the Proposed Development's compliance with them is provided in section 7 below and the **Policy Compliance Document [EN010153/DR/5.7].**

EN-3 - National Policy Statement for Renewable Energy Infrastructure

6.3.6 EN-3 is a technology-specific NPS, focusing on renewable energy generation projects, including solar development. Section 2.10 of EN-3 sets out the considerations for the Secretary of State's decision making specifically for solar PV development proposals.

6.3.7 Further consideration of NPS EN-1 policies and the Proposed Development's compliance with them is provided in section 7 below and the **Policy Compliance Document [EN010153/DR/5.7].**

EN-5 National Policy Statement for Electricity Networks Infrastructure

6.3.8 NPS EN-5 is the primary basis for decisions on NSIP applications for electricity networks infrastructure. EN-5 is relevant to the Proposed Development due to the inclusion of electricity network infrastructure within the project.

6.3.9 NPS EN-5 sets out assessment principles specific to electricity network infrastructure, in addition to the principles detailed in NPS EN-1. These are considered further within Section 7.0 below and the **Policy Compliance Document [EN010153/DR/5.7].**

6.4 Important and Relevant Considerations

Introduction

6.4.1 Other national and local policy may also be considered 'important and relevant' to the decision-making process by the Secretary of State.

6.4.2 It is considered likely that the Secretary of State may consider the National Planning Policy Framework (NPPF)[xlv], or parts of it, the Local Plans of Cheshire West and Chester Council, and relevant Neighbourhood Plans as 'important and relevant' by the in accordance with Section 104(2)(d) of the PA 2008. The following sections consider the national and local policy context that are likely considered of relevance.

National Planning Policy

National Planning Policy Framework

6.4.3 The NPPF[4] was updated in 2024 and sets out the Government's planning policies for England and how they are expected be applied in the determination of planning applications under the Town and Country Planning Act 1990 (TCPA 1990).

6.4.4 The Applicant notes that the NPPF (December 2024) has been updated subsequent to the designation of the NPS (January 2024), and that therefore the NPS does not necessarily take account of updated Government policy within the NPPF.

[4] The version of the National Planning Policy Framework published 12 December 2024 was amended on 7 February 2025 to correct cross-references from footnotes 7 and 8, and amend paragraph 155.

6.4.5 The headline changes made to the NPPF focus on driving housing supply and delivery, including increased housing opportunities within the Green Belt. It also places additional emphasis on the delivery of public infrastructure, brownfield development, wider support for renewable and low carbon energy and on the delivery of more modern forms of commercial development. The main points of relevance to the Proposed Development are:

- **Development in the Green Belt:** The revised NPPF increases opportunities to undertake development in the Green Belt. It formally defines "grey belt" as land within the Green Belt which comprises brownfield land and any other land that does not strongly contribute to the specific Green Belt purposes of preventing unrestricted sprawl and the merging of towns into one another.
- **Climate Change and Flooding:** Inserts a specific reference to the aim of transition to net zero by 2050, adding in the specific time frame which was previously missing. Whilst areas for renewables can be identified in development plans, commercial renewable schemes can be provided for elsewhere provided they adhere to the criteria used in relevant policies for identifying the renewable development areas.

6.4.6 Paragraph 5 of the NPPF confirms that it does not contain specific policies for NSIPs and that applications in relation to NSIPs are to be determined in accordance with the decision-making framework set out in The Act and relevant NPSs, as well as any other matters that are relevant. On this basis the NPPF is considered important and relevant where policies are applicable to the Proposed Development, but of less relevance to the Secretary of State's decision than the NPSs (described at Section 6.3 of this Planning Statement).

6.4.7 National Planning Practice Guidance provides more detailed interpretation on a range of topics to assist with implementation of NPPF policies. Key sections include 'Renewable and low carbon energy' (last updated 14 August 2023) and 'Climate Change' (last updated 15 March 2019).

Local Planning Policy

6.4.8 The Local Planning Policy Context is considered important and relevant to the decision-making process and provides local detail, understanding and context to the Proposed Development. The Proposed Development is located within the administrative area of Cheshire West and Chester Council (CWaCC). As set out above, CWaCC is the host authority for the DCO application.

Adopted Local Development Plan Documents

6.4.9 The Development Plan of Cheshire West and Chester Council[xlvi] comprises:

i) Cheshire West and Chester Local Plan (Part One) Strategic Policies - adopted by the Council on 29 January 2015.
ii) Cheshire West and Chester Local Plan (Part Two) Land Allocations and Detailed Policies - adopted by the Council on 18 July 2019.

6.4.10 There are also two made Neighbourhood Plans of relevance to the Proposed Development, these are:

i) Frodsham Neighbourhood Plan - made on 25 November 2024.
ii) Ince Neighbourhood Plan - made on 30 October 2023.

6.4.11 Consideration of the relevant policies of the Development Plan and the Proposed Development's compliance with them is provided in the **Policy Compliance Document [EN010153/DR/5.7].**

Emerging Local Development Plan Documents

6.4.12 Cheshire West and Chester Council decided on 15 January 2025 to begin preparation of an update to the adopted Local Plans. A formal Local Development Scheme has not yet been published however a provisional timetable identifies that an Issues and Options paper (pursuant to the consultation required under Regulation 18 of the Town and Country Planning

(Local Planning) (England) Regulations 2012) will be consulted on in Summer 2025.

Local Guidance

6.4.13 Local guidance considered as being potentially important and relevant to the Secretary of State's decision making include the following:

iii) Cheshire West and Chester Council Landscape Sensitivity Study and Guidance on Wind and Solar Photovoltaic Developments[xlvii]
iv) A Landscape Strategy for Cheshire West and Chester Borough[xlviii]

Guidance

6.4.14 The Government has published guidance (thorough online 'advice pages') about national infrastructure planning[xlix], several of which are considered to be particularly relevant to the Proposed Development. The guidance pages of most relevance are:

i) Advice on Good Design
ii) Advice on Cumulative Effects Assessment
iii) Advice on Habitats Regulations Assessments
iv) Technical Advice Page for Scoping Solar Development
v) Nationally Significant Infrastructure Projects - Advice Note Nine: Rochdale Envelope

Other Documents

6.4.15 There are other national legislation and policy documents relating to renewable energy and climate change. Some of these are discussed in more detail within the Statement of Need provided at Section 2.0 of this Planning Statement, and include the following:

i) Climate Change Act 2008 (2050 Target Amendment) Order 2019 (2019);
ii) Seventh Carbon Budget 2038-2042 (2025);

iii) Planning and Infrastructure Bill (2025);
iv) Paris Agreement (2015);
v) British Energy Security Strategy (2022);
vi) Powering Up Britain (2023);
vii) Powering Up Britain: Energy Security Plan (2023);
viii) Powering Up Britain: Net Zero Growth Plan (2023);
ix) Climate Change Committee 2024 Progress Report to Parliament (2024;
x) Accelerating to Net Zero: responding to the CCC progress report and delivering the Clean Energy Superpower Mission (2024);
xi) Mission Zero: Independent Review of Net Zero (2022);
xii) Future Energy Scenarios 2024 (2024);
xiii) Clean Power 2030 Action Plan (2024);
xiv) Clean Power 2030 Action Plan: Connections Reform Annex (2024);
xv) UK's 2030 Nationally Determined Contribution (2020);
xvi) UK's 2035 Nationally Determined Contribution (2025);
xvii) The Energy Act (2023)[l];
xviii) The Environment Act (2021)[li];
xix) Net Zero: Opportunities for the Power Sector (2020)[lii].

7.0 PLANNING APPRAISAL

7.1 Introduction

7.1.1 This section sets out the Proposed Development's compliance with the national and local policy documents set out in Section 6.0 of this Planning Statement.

7.1.2 This planning appraisal should be read alongside the separate **Policy Compliance Document *[EN010153/DR/5.7]*** which provides a comprehensive analysis of each relevant paragraph of National Policy Statements EN-1, EN-3 and EN-5, as well as all applicable Local and Neighbourhood Plan policies.

7.2 Good Design for Energy Infrastructure

Planning Policy Context

7.2.1 Overarching policy considerations in relation to good design are set out within Section 4.7 of NPS EN-1.

7.2.2 Paragraph 4.7.2 of EN-1 explains that applying good design should produce infrastructure that is sustainable and sensitive to its context – for example, by taking into account local landscape character and heritage, using natural resources efficiently, and achieving a high standard of appearance as far as practicable. EN-1 acknowledges that the nature of large energy projects may limit the extent to which they can enhance the beauty of an area, but it still encourages efforts to improve design quality. Paragraph 4.7.3 of EN-1 notes that good design is a means to meet many policy objectives in the NPS – for instance, careful siting and use of appropriate technology can mitigate adverse impacts.

7.2.3 Paragraph 4.7.7 of EN-1 requires applicants to document their design evolution. The application should explain how the design process was conducted and how the design evolved, including the alternatives considered and the reasons for selecting the preferred approach.

7.2.4 The Secretary of State should be satisfied that a project's design is sustainable as well as "attractive, durable, and adaptable" to the extent possible within the required technical and regulatory constraints (paragraph 4.7.10 of EN-1). Applicants should balance both functional requirements and aesthetic aspects of design in line with paragraph 4.7.11 of EN-1.

7.2.5 Further technology-specific considerations are set out within Section 2.10 of NPS EN-3. EN-3 encourages applicants to consider grid connection early in the design process, choosing locations with available network capacity nearby in order to minimise the length of new grid infrastructure needed, reduce costs and environmental disruption, and make best use of existing electricity networks (paragraph 2.10.25). Furthermore, while land type is not the sole determinant of a site's suitability, paragraph 2.10.29 states that, where feasible, solar PV proposals should utilise previously developed, brownfield, or lower-quality land in preference to high quality agricultural land. These considerations show that good design for solar infrastructure begins with prudent site selection and layout, balancing energy generation needs with environmental and land-use constraints.

7.2.6 Paragraphs 2.10.70-71 of EN-3 recognise the need for flexibility in design and guides applicants to set out the parameters for development as part of their application.

7.2.7 The above considerations from EN-3 in relation to factors influencing site selection and flexibility in design are mirrored within NPS EN-5 for electricity networks infrastructure, as set out in paragraphs 2.2.1 to 2.2.8 of EN-5.

7.2.8 Paragraph 2.4.3 of EN-5 sets out that electricity networks infrastructure must in the first instance be safe and secure, and that an applicant's ability to influence the aesthetic appearance of infrastructure may be limited by the functional design constraints of safety and security.

7.2.9 CWaCC Local Plan Part One Policy ENV 6 High quality design and sustainable construction; requires development to promote sustainable, high-

quality design and construction. CWaCC Local Plan Part Two Policy DM 3 Design, character and visual amenity; expects development to achieve a high standard of design that respects the character and protects the amenity of the local area. The policies recognise that high quality design and construction are key aspects of sustainable development, and that the design of major infrastructure should be of a high quality and sensitive to local context (both built and natural). Sustainable design and construction practices should take the opportunity to contribute to climate change mitigation and the protection of local character.

Applicant's Design Approach

7.2.10 The Applicant has prepared a **Design Approach Document** ***[EN010153/DR/5.8***] which sets out the design process that has been followed from the inception of the project, and how the Planning Inspectorate's Advice on Good Design has been followed.

7.2.11 Good design is not simply about aesthetics; rather, it is about creating something that functions effectively, stands the test of time, and can be experienced and appreciated by people in a meaningful way. A well-designed project balances these three elements, integrating robust engineering, practical functionality, and a sensitivity to its surroundings to create a place that works well and is enjoyable to use.

7.2.12 In the context of a ground mounted solar farm development, the design aim is typically to take advantage of the relatively low profile of the infrastructure, and to locate this in such a way that it is to a large extent hidden from view, out of sight from key receptors and screened by existing or new vegetation.

7.2.13 For the Proposed Development there are unique circumstances that require a somewhat different approach. The land within the Order Limits occupies a dynamic and yet somewhat isolated location within Frodsham Marshes at the edge of the Mersey estuary. It is visible from and in close proximity to residential areas and is passed every day by thousands of people travelling

on the adjacent motorway. Whilst there is an established network of public rights of way, these offer limited utility due to poor condition in places and limited connectivity. As a result, the land within the Order Limits is only visited by a limited number of people, despite proximity to Frodsham. The land within the Order Limits has an interesting industrial history, hosts wind turbines, and has dynamic views of uncompromising industry in the context of a dramatic estuary overlooked by a distinctive sandstone escarpment. It also supports an interesting assemblage of wildlife.

7.2.14 The **Design Approach Document *[EN010153/DR/5.8]*** explains how the design process has been conducted. It presents the vision and design principles that have guided the process, how the design of the Proposed Development has evolved through each stage of the pre-application development process, how consultation feedback at each stage has guided design changes, and how the outcomes of environmental surveys and assessment have been integrated with the process.

7.2.15 The Proposed Development's overarching aim is to help meet the need for renewable energy generation from secure, UK-based sources, which is required by government policy to address climate change and energy security. However, the Proposed Development also provides an opportunity to deliver wide-ranging environmental and social benefits. This will be achieved through enhancement of the landscape and biodiversity, and a programme of enhanced access provision that recognises the latent potential of the Site's location within a dynamic peri-urban landscape with its unique combination of views, natural history and industrial artefacts.

7.2.16 The need to achieve good design is a requirement of government policy and has been an essential part of the project development. The design that is being put forward is underpinned by an overarching Design Vision for the project, beneath which sit Project Design Principles that help to translate the vision into practical design choices and measurable project-specific criteria. These are set out in the **Design Approach Document *[EN0101553/DR/5.8]***.

7.2.17 The design of the Proposed Development has evolved and has been refined following technical analysis of the Order Limits and the surrounding area and following input and feedback from stakeholders. The design team has sought to engage proactively with stakeholders and to respond transparently to all matters raised.

7.2.18 **ES Vol 3 Figure 2-3: Illustrative Environmental Masterplan *[EN010153/DR/6.3]*** presents the output of this design process including the key features and approaches that fulfil the intention of the Project Design Principles, and which deliver a high-quality renewable energy generating facility that also delivers meaningful local environmental and community benefits.

7.2.19 The result of the design process recorded in the **Design Approach Document *[EN010153/DR/5.8]*** is the provision of the following, all of which are secured as part of the **draft DCO [EN010153/DR/3.1]:**

(a) A set of Design Principles that are followed throughout the Proposed Development.

(b) Design Parameters set out within the **Document Design Parameters [EN010153/DR/7.1]**

(c) The setbacks experienced that are then incorporated into the **Works Plans [EN010153/DR/2.3]**; and

(d) The green infrastructure proposals secured through the **Outline Landscape and Ecology Management Plan [EN010153/DR/7.13]**

7.2.20 In light of the above, the Applicant's considers that its approach to good design is consistent with national and local policy. The iterative design process that has been followed is set out within the **Design Approach Document *[EN010153/DR/5.8]***. The **Design Approach Document** sets out how the Proposed Development has taken into account the criteria of the NPS in relation to good design and sets out the context in which the Proposed

Development is situated. It provides the design response to that context to mitigate adverse impacts, and how good design principles have been integrated into the overall solution.

7.2.21 The Proposed Development has been further appraised against national and local policies relevant to design within the **Policy Compliance Document *[EN010153/DR/5.7]***.

7.3 Critical National Priority Infrastructure

7.3.1 The designation in January 2024 of the updated Overarching National Policy Statement for Energy EN-1 identified that the Government has concluded there is a 'Critical National Priority' (CNP) for the provision of nationally significant low carbon infrastructure such as the Proposed Development.

7.3.2 Section 4.2 of NPS EN-1 sets out how applications for 'CNP Infrastructure' will be considered, with the most relevant paragraphs copied below.

7.3.3 Paragraph 4.2.7 and 4.2.8 state that:

*"The 'CNP' policy **does not** create an additional or cumulative need case or weighting to that which is already outlined for each type of energy infrastructure. The policy applies following the normal consideration of the need case, the impacts of the project, and the application of the mitigation hierarchy. As such, it is relevant during Secretary of State decision making and specifically in reference to any residual impacts that have been identified. It should therefore also be given consideration by the Examining Authority when it is making its recommendation to the Secretary of State.* [4.2.7]

During decision making, the CNP policy will influence how non-HRA and non-MCZ residual impacts are considered in the planning balance. The policy will therefore also influence how the Secretary of State considers whether tests requiring clear outweighing of harm, exceptionality, or very special circumstances have been met by a CNP Infrastructure application." [4.2.8]

7.3.4 Paragraph 4.2.11 states that:

"Applicants must apply the mitigation hierarchy and demonstrate that it has been applied. They should also seek the advice of the appropriate SNCB or other relevant statutory body when undertaking this process. Applicants should demonstrate that all residual impacts are those that cannot be avoided, reduced or mitigated."

7.3.5 Paragraph 4.2.12 states that:

"Applicants should set out how residual impacts will be compensated for as far as possible. Applicants should also set out how any mitigation or compensation measures will be monitored and reporting agreed to ensure success and that action is taken. Changes to measures may be needed e.g. adaptive management. The cumulative impacts of multiple developments with residual impacts should also be considered."

7.3.6 Paragraph 4.2.14 states that:

"The Secretary of State will continue to consider the impacts and benefits of all CNP Infrastructure applications on a case-by-case basis. The Secretary of State must be satisfied that the applicant's assessment demonstrates that the requirements set out above have been met. Where the Secretary of State is satisfied that they have been met, the CNP presumptions set out below apply"

7.3.7 The CNP policy 'test' is then set out at paragraph 4.2.15:

"Where residual non-HRA or non-MCZ impacts remain after the mitigation hierarchy has been applied, these residual impacts are unlikely to outweigh the urgent need for this type of infrastructure. Therefore, in all but the most exceptional circumstances, it is unlikely that consent will be refused on the basis of these residual impacts. The exception to this presumption of consent are residual impacts onshore and offshore which present an unacceptable risk to, or unacceptable interference with, human health and public safety, defence, irreplaceable habitats or unacceptable risk to the achievement of net zero. Further, the same exception applies to this presumption for residual

impacts which present an unacceptable risk to, or unacceptable interference offshore to navigation, or onshore to flood and coastal erosion risk."

7.3.8 Paragraph 4.2.16 and 4.2.17 of NPS EN-1 confirm that any proposed development which meets the definition of CNP Infrastructure set out by the above test will be taken 'as a starting point' as having met any other tests set out within the NPS, or any other planning policy, which requires a clear outweighing of harm, exceptionality or very special circumstances.

7.3.9 The Applicant has followed the mitigation hierarchy to avoid > reduce > mitigate > compensate impacts and effects as part of the EIA process. The approach taken is set out within **the Environmental Statement *[EN010153/DR/6.1 / 6.2 / 6.3]***, but in summary, a sequential approach has been applied consistently across all environmental topics.

7.3.10 Avoidance of significant impacts was the first priority; the site selection and design were guided by environmental constraints to steer development away from less appropriate locations wherever possible, as set out in **ES Vol 2 Appendix 3-1: Alternative Site Assessment *[EN010153/DR/6.2]***. Subsequently, avoidance measures included, for example, ensuring areas of highest ecological value identified in early surveys were excluded from the developable area, no designated heritage assets lie within the construction footprint, and critical infrastructure (such as the battery storage compound) has been located on land with the lowest flood risk on site.

7.3.11 In cases where potential effects could not be entirely avoided, the Proposed Development incorporates measures to minimise or reduce their magnitude. The layout respects existing field boundaries and sightlines, maintaining generous buffers around public footpaths and important habitats (thereby seeking to protect the character of the landscape where possible). Infrastructure has been arranged and designed to lessen visual and amenity impacts – for instance, existing hedgerows are retained and reinforced with new native planting to screen views, and structures employ low profiles and non-reflective finishes to blend with the surroundings. Construction activities

are likewise phased to avoid sensitive periods for wildlife and to prevent pollution, with measures such as seasonal timing restrictions and temporary drainage controls in place to protect watercourses. Engineering design solutions have also been adopted to mitigate any unavoidable interactions, for example, where certain equipment must be sited in higher flood zones, it is raised above modelled flood levels so that it remains safe and does not obstruct floodwaters.

7.3.12 After exhausting practicable avoidance and reduction measures, a suite of mitigation actions are proposed to further address residual effects in each topic area. These include the creation of dedicated ecological mitigation areas (for instance, a Non-Breeding Bird Mitigation Area and other habitat provisions detailed in Section 7.7) to safeguard important species, extensive landscaping schemes to soften views of the solar arrays (Section 7.5), sustainable drainage features to manage runoff and maintain natural water flow (Section 7.12), and pre-emptive archaeological investigations to record and protect any unknown heritage remains (Section 7.6). Finally, enhancement measures are proposed such as interpretive information and new permissive footpaths to provide improved public access, recreation and education opportunities around the Site, helping to compensate the local community.

7.3.13 Through this clear application of the mitigation hierarchy, applied uniformly in the assessments of biodiversity, landscape, heritage, flood risk and all other relevant topics, the Proposed Development has demonstrated a rigorous approach to reducing environmental harm at source. All reasonable measures have been taken to prevent or reduce adverse effects; this ensures the Proposed Development's residual effects are as low as reasonably practicable.

7.3.14 Nonetheless, there remain a small amount of significant adverse residual effects as a result of the Proposed Development. These residual adverse effects are set out in **ES Vol 1 Chapter 14: Summary of Environmental**

Effects ***[EN010153/DR/6.1]*** and relate solely to a Local Wildlife Site within the Site during the construction phase, and to landscape and visual effects within the Site during both the construction and operational phases.

7.3.15 The CNP policy test applies to these significant residual adverse effects, and is discussed further in the relevant subsequent sub-sections of this planning appraisal.

7.4 Green Belt

Planning Policy Context

7.4.1 Overarching Green Belt policy considerations are set out within Section 5.11 of NPS EN-1. EN-1 directs applicants and decision makers to consider whether any part of a proposed project falls within an established Green Belt and, if so, to assess whether it would constitute "inappropriate development" as defined by Green Belt policy (paragraph 5.11.20). In this regard, EN-1 defers to the NPPF for the Green Belt policy tests – it cross-refers to Section 13 of the NPPF (or any successor) for guidance on the meaning of inappropriate development and relevant exceptions (EN-1 paragraph 5.11.36). Consistent with the NPPF, EN-1 recognises that inappropriate development is by definition harmful to the Green Belt, and it reiterates that most new building within the Green Belt is considered inappropriate and should be refused unless in "very special circumstances" (EN-1 paragraph 5.11.36).

7.4.2 Consistent with the NPPF, EN-1 states that very special circumstances are not defined as it is for the decision maker to assess each case on its merits and give relevant circumstances their due weight, but that substantial weight should be given to any harm to the Green Belt, and that very special circumstances may include the wider environmental benefits associated with increased production of energy from renewables (EN-1 paragraph 5.11.37).

7.4.3 In the NPPF (December 2024), national Green Belt policy is set out in Chapter 13. The NPPF affirms the great importance of Green Belt protection and

maintains the strong presumption against inappropriate development in the Green Belt.

7.4.4 Importantly, the 2024 NPPF introduced the concept of "grey belt" land, which is defined as land within an established Green Belt that comprises previously developed land and/or other land which does not strongly contribute to Green Belt purposes (a), (b) or (d) listed in NPPF paragraph 143. Land where the application of the policies relating to the areas or assets in footnote 7 of the NPPF would provide a strong reason for refusing or restricting development is also excluded from grey belt (refer to Annex 2: Glossary of the NPPF).

7.4.5 Should the proposed development be within grey belt, then it may not be "inappropriate development" in Green Belt terms should each of the tests at paragraph 155 of the NPPF apply. If the development meets all of the paragraph 155 tests, it is not considered inappropriate development, and the usual requirement to demonstrate very special circumstances does not apply. The NPPF therefore provides a narrow pathway for certain developments on grey belt land to proceed without breaching Green Belt policy, so long as they strictly satisfy the NPPF's criteria intended to protect the overall integrity and purposes of the Green Belt.

7.4.6 CWaCC Local Plan Part One Policy STRAT 9 Green Belt and countryside; alongside several of the policies of the Local Plan Part Two (DM 9; DM 10; DM 18; DM 19; DM 21; DM 22 etc.) state that proposals for the development of land in the Green Belt should accord with Green Belt policy as set out in the NPPF.

Assessment Conclusions and Appraisal

7.4.7 The Applicant has prepared a detailed Green Belt Assessment which is contained within **Appendix A: Green Belt Assessment** of this Planning Statement. This section of the Planning Statement contains only a summary of the conclusions of the Green Belt Assessment.

7.4.8 The Proposed Development is located entirely within the Liverpool, Manchester and West Yorkshire Green Belt (also referred to as the 'North Cheshire Green Belt'). The **Green Belt Assessment** concludes that the area of the Green Belt occupied by the Proposed Development comprises grey belt, and the Proposed Development would not represent inappropriate development when considered against the paragraph 155 tests. As such it causes no Green Belt harm and can be excluded from the policy requirement to give substantial weight to any harm to the Green Belt including to its openness.

7.4.9 In any event, even if the Proposed Development was considered to be inappropriate development, as part of the Government's programme to fully decarbonise the power system, meet the UK's Net Zero obligations, and transition to low-carbon energy, they have defined what comprises CNP Infrastructure, and confirmed that they should be treated as having met any 'tests' sets out in National Policy Statements or national planning policy requiring the outweighing of harm or very special circumstances. The Proposed Development is CNP Infrastructure and therefore in accordance with paragraph 4.2.17 of EN-1 the Proposed Development should be treated as meeting the requirements of paragraph 5.11.37 of EN-1 that requires very special circumstances to justify development.

7.4.10 Irrespective of this, and if it is considered that the Proposed Development represents inappropriate development, an assessment has been undertaken within the **Green Belt Assessment** of this Planning Statement to determine whether very special circumstances exist which represent considerations that clearly outweigh the potential harm to the Green Belt by reason of inappropriateness, and any other harm resulting from the proposal.

7.4.11 In this assessment, the potential harm to the Green Belt and the effects on the purposes of including land in the Green Belt have been identified and afforded weight, along with any other harm (non-Green Belt), and benefits arising from the Proposed Development. These have then been balanced

together to determine whether the benefits clearly and demonstrably outweigh the harm, and whether they represent very special circumstances. The conclusion of the assessment is that the benefits do clearly outweigh the harm, and very special circumstances do exist to justify inappropriate development should the Secretary of State conclude that such demonstration is necessary.

7.4.12 In summary, the Applicant's position is therefore that:

i) The Site meets the tests of NPPF Paragraph 155 and therefore the Proposed Development consequently is not inappropriate development. The Applicant considers that the Proposed Development is excluded from the policy requirement to give substantial weight to any harm to the Green Belt including to its openness and is not required to demonstrate very special circumstances.
ii) Should there be disagreement with point (i) and the Secretary of State concludes that it is inappropriate development, the Proposed Development is CNP Infrastructure and therefore should be taken as meeting the test of very special circumstances in accordance with EN-1 paragraph 4.2.17.
iii) Should the Secretary of State conclude that the Proposed Development is required to demonstrate very special circumstances, that very special circumstances do clearly exist to justify development in the Green Belt.

7.5 Landscape and Visual

Note: The planning appraisal relevant to Glint and Glare impacts is set out separately in Section 7.23.

Planning Policy Context

7.5.1 Overarching Landscape and Visual policy considerations are set out within Section 5.10 of NPS EN-1. EN-1 acknowledges at paragraph 5.10.13 that major energy projects are "*likely to have visual effects for many receptors around proposed sites*" and directs the Secretary of State at paragraph

5.10.14 to "*judge whether the visual effects on sensitive receptors… outweigh the benefits of the project*". It requires (paragraph 5.10.37) projects to be designed and sited carefully (taking account of relevant constraints), with appropriate mitigation to minimise harm to the landscape.

7.5.2 EN-1 advises at paragraph 5.10.16 that the Applicant should carry out a Landscape and Visual Impact Assessment (LVIA) and report it within the ES, and that the LVIA should reference relevant landscape character assessments and local landscape policies (paragraph 5.10.17). The LVIA should also include the potential impact on views and visual amenity (paragraph 5.10.21).

7.5.3 EN-1 guides the Secretary of State to consider whether the adverse impacts of the project are temporary or can be reversed during a reasonable timeframe through mitigation or at decommissioning (paragraph 5.10.36).

7.5.4 Further technology-specific considerations are set out within Section 2.10 of NPS EN-3. EN-3 requires applicants to mitigate landscape and visual impacts wherever possible – for example by screening with native hedgerows, trees or woodlands (paragraph 2.10.131).

7.5.5 Paragraph 2.10.97 of EN-3 states that "visualisations may be required to demonstrate the effects of a proposed solar farm on the setting of heritage assets and any nearby residential areas or viewpoints".

7.5.6 Policy ENV 2: Landscape and Policy STRAT 9: Green Belt and countryside; are the principal policies on landscape character and the protection of the Cheshire countryside in the CWaCC Local Plan. Policy ENV 2 commits to protecting and, where possible, enhancing the character and local distinctiveness of the landscape. It requires that development proposals take account of the site's characteristics and its relationship with its surroundings, including views into, over and out of the site. STRAT 9 recognises the intrinsic character and beauty of the Cheshire countryside and commits to its

protection by restricting development to that which require a countryside location and cannot be accommodated within identified settlements.

7.5.7 Policy GBC 2: Protection of landscape within the CWaCC Local Plan Part Two provides further guidance on how development should consider landscape in order to protect the countryside's intrinsic character and distinctiveness.

7.5.8 Generally, the local policy context (set out in the Local Plan and supporting Neighbourhood Plans) requires development to be sensitively integrated into the landscape. It should protect valued landscape characteristics (such as the Sandstone Ridge views and the open estuarine marsh), retain and enhance green infrastructure (hedgerows, trees, open space), and mitigate visual impacts on local communities and recreational users.

Assessment Conclusions

7.5.9 **ES Vol 1 Chapter 6: Landscape and Visual Impact Assessment (LVIA)** ***[EN010153/DR/6.1]*** sets out the Applicant's full assessment of the likely significant landscape and visual effects as a result of the Proposed Development. This section of the Planning Statement contains only a summary of the likely impacts and effects.

Approach

7.5.10 The LVIA follows best practice guidance set out in the Guidelines for Landscape and Visual Impact Assessment and assesses impacts at construction, operation and decommissioning. The assessment of the operational phase is undertaken for the winter of year 0 and the summer of year 10, to account for mitigation that is embedded into the scheme design.

7.5.11 The baseline of the LVIA considers published local landscape character assessments, alongside 29 representative viewpoints covering public rights of way, local settlements, roads, and recreational routes such as the Weaver Navigation and Frodsham and Helsby Hills. The locations of viewpoints and

visualisations were agreed with CWaCC as part of pre-application consultations.

7.5.12 Visualisations have been prepared to illustrate the Proposed Development in year 0 and year 10 from a number of viewpoints, and these are prepared within **ES Volume 3 Figures *[EN010153/DR/6.3]***.

Design and Mitigation Measures

7.5.13 The Proposed Development has followed the mitigation hierarchy to prevent landscape and visual harm where possible, with mitigation measures set out in full within Section 6.7 of **ES Vol 1 Chapter 6: Landscape and Visual Impact Assessment *[EN010153/DR/6.1]***.

7.5.14 In summary, avoidance measures were prioritised through site selection, avoiding nationally or locally designated landscapes (National Landscapes, or Areas of Special County Value). The layout respects the existing landscape pattern, protecting key sightlines, hedgerows, and trees. The Proposed Development is set within existing field boundaries, maintaining generous buffers around public rights of way and sensitive habitats, thereby preserving the natural character and openness of these areas.

7.5.15 Where avoidance of impacts wasn't feasible, they have been minimised through embedded design features. Existing hedgerows will be reinforced and supplemented with new native planting to screen views effectively. Careful vegetation management will preserve important visual corridors, enhancing the landscape's natural character. Structures, including solar panels and ancillary buildings, have been designed with low profiles, anti-reflective coatings, and neutral finishes to blend into the surrounding estuarine landscape.

7.5.16 Lastly, compensation and enhancement measures have been introduced to offset residual impacts. New permissive paths will improve recreational access, allowing visitors to experience previously inaccessible farmland and wildlife habitats. Educational features, such as viewing areas and

informational boards, alongside ecological enhancements like woodland copses, species-rich grassland, and wetlands, will enrich the visual and ecological diversity of the landscape. Biodiversity gains and the temporary, reversible nature of the development ensure the Site's ecological and landscape value will ultimately be enhanced, balancing initial adverse effects with long-term benefits.

7.5.17 Mitigation for landscape and visual impacts is primarily secured by the **outline Landscape and Ecology Management Plan *[EN010153/DR/7.13]***, as well as the **outline Construction Environmental Management Plan *[EN010153/DR/7.5]***, **outline Operational Environmental Management Plan *[EN010153/DR/7.6]*** and **outline Decommissioning Environmental Management Plan *[EN010153/DR/7.7]***.

Landscape effects

7.5.18 The Site's context includes the flat expanse of Frodsham Marsh, an existing wind farm, electricity pylons, industrial facilities, and transport corridors (the M56 motorway and railway). Frodsham Marsh lies at the foot of the Sandstone Ridge (Frodsham and Helsby Hills) and along the Mersey Estuary, but does not form part of a nationally or locally designated landscape. There are no nationally designated landscapes in proximity to the Site, however CWaCC maintain a local landscape designation through their Local Plan, with the Frodsham Hills Area of Special County Value[5] (ASCV) and Weaver Valley ASCV each located in proximity to the Site. The LVIA has had regard to the designations, and in particular the Statement of Importance for each and details of the specific landscape qualities. The LVIA concludes that the

[5] [5] The Applicant is aware of the aspiration and ongoing work to support the designation of the 'Cheshire Sandstone Ridge National Landscape', which could extend to include Frodsham Hill and Helsby Hill to the east of the Site. The Applicant's assessment recognises the sensitivities of this area. As the area is not yet designated, the updated statutory duty (introduced by the Levelling up and Regeneration Act 2023) set out in s85 of the Countryside and Rights of Way Act 2000 to further the purpose of conserving and enhancing the natural beauty of a National Landscape, does not apply.

Proposed Development would have no influence on the special qualities identified by CWaCC for which the ASCVs are designated.

7.5.19 The LVIA has assessed both the landscape fabric of the Site (physical features) and the broader landscape character of the area.

7.5.20 With regard to landscape fabric, construction of the Proposed Development will transform the land use of approximately 212 ha of farmland into a solar array, introducing geometric rows of panels, inverter units, access tracks and security fencing. This represents a change in land cover and visual pattern over the Site. Hedgerows will be retained or reinforced, and existing drainage ditches maintained. There will be very limited landform alteration, as panels follow the existing ground levels. No significant removal of vegetation is needed apart from small sections of hedgerow to allow access. Therefore, the impact on landscape fabric relates mainly to the reversible loss of open arable fields for the operational period.

7.5.21 With regard to landscape character, the landscape character of the Frodsham Marshes will change to a degree, acquiring a solar energy function alongside its existing mix of pastoral, wetland and infrastructure uses. This change is considered moderate to major adverse and significant, but as the character area already has low tranquility and human influences, the significance of landscape effect is limited in geographic extent. The underlying character of a flat, low-lying marshland where large-scale industry and infrastructure development exerts a strong influence would remain. Beyond the local area, the prevailing landscape character would not undergo any change of note from the baseline.

7.5.22 The enhanced level of access provision and the implementation of the landscape proposals would accord broadly with the landscape guidelines for the local area set out in a Landscape Strategy for Cheshire West and Chester Borough.

7.5.23 The effects of the Proposed Development upon landscape character would generally be adverse. The landscape and biodiversity enhancements and the enhancements to public access and interpretation would however have notable beneficial effects.

Visual Effects

7.5.24 The LVIA sets out there would be a clear distinction between effects very close to the Site and those at more distant or elevated positions.

7.5.25 Within and immediately adjacent to the Proposed Development, the LVIA identifies significant adverse visual effects for users of the public footpaths that run through the Site. Users of these paths (which currently traverse fields) would experience views of solar panels at close range, altering the visual amenity of these routes. Once mitigation planting has established these effects would be reduced but cannot be fully mitigated. The LVIA therefore concludes there will be residual significant adverse effects for users of the PRoW network through the Site.

7.5.26 For receptors away from the Site, the visual impact would be much more limited. The flat topography, low profile of the solar arrays, and presence of existing large-scale infrastructure all help to reduce the Proposed Development's prominence in the landscape.

7.5.27 Views for residents and visitors along the northern edge of Frodsham would not be dominated by the Proposed Development, with the solar arrays being low-lying such that they do not break the skyline. Views from Frodsham and Helsby are largely screened by intervening terrain, vegetation and buildings. Where there are views, they already feature notable infrastructure (the M56, wind turbines, pylons, etc.), and the LVIA concludes that the additional visual change from the Proposed Development would be minor adverse and not significant.

7.5.28 From Frodsham War Memorial (a popular panoramic viewpoint overlooking the marshes), the Proposed Development will be visible in the middle distance

but the underlying nature of the view would not change, and would remain an expansive panoramic view from an elevated and exposed location. Views from this location are across extensive lower-lying areas in a broad arc from west to east within which a dynamic mosaic of built development and land uses including a diverse array of industry and infrastructure is a well-established presence, and which provides a complex context for existing views and for any potential changes in view. The commemorative function of the War Memorial and the ability of people to experience this would be unaffected. The visual effect at the War Memorial would be moderate adverse but not significant.

7.5.29 Potential views from boats on the Weaver Navigation north of the Site would be screened and the effects not significant.

Appraisal

7.5.30 The Applicant's approach to landscape and visual impact is consistent with national policy contained within EN-1 and EN-3, and largely in accordance with local planning policies, with some limited adverse effects that are considered acceptable when weighed against the benefits.

7.5.31 EN-1 requires good design to ensure the policy objectives of the NPSs can be met and to produce sustainable infrastructure sensitive to place, but acknowledges that "the nature of energy infrastructure development will often limit the extent to which it can contribute to the enhancement of the quality of the area" (paragraph 4.7.2).

7.5.32 The iterative design process that has been followed is set out within the **Design Approach Document *[EN011053/DR/5.8]***. The design process has been informed by the LVIA from the outset to ensure that the Proposed Development responds to its context, following the mitigation hierarchy to prevent landscape and visual harm where possible, with mitigation measures set out in Section 6.7 of **ES Vol 1 Chapter 6: Landscape and Visual Impact Assessment *[EN010153/DR/6.1]***.

7.5.33 The mitigation hierarchy embedded in the project – avoidance of designated and sensitive landscapes, reduction of impacts through screening, and compensation via enhancements – aligns with the NPS philosophy that applicants should mitigate impacts "as far as possible".

7.5.34 EN-3 advises using planting for screening and landscape integration and the Proposed Development incorporates substantial native planting for these purposes. EN-3 also emphasises the importance of public amenity (e.g. rights of way) – here the Applicant has not only ensured all existing PRoWs are retained, but is also proposing to improve the network through enhancements to surfacing, adding new permissive paths, and installing interpretation for education purposes; this goes beyond just mitigation for environmental effects to provide tangible public benefits.

7.5.35 The LVIA has been carried out as per EN-1 paragraphs 5.10.16-17, taking into account existing baseline landscape character assessments and local policies, as required.

7.5.36 The LVIA does identify significant residual adverse landscape and visual effects, but these are all local to the Site level – the effects on the landscape character of this part of the Frodsham Marshes, and the effects on users of the PRoWs that pass through the Proposed Development. These effects cannot be further mitigated through the mitigation hierarchy.

7.5.37 For the residual effects on PROW users, the Proposed Development's enhancement measures (improved recreational access) help make the overall experience for users acceptable despite the change in views – effectively the project is enhancing what was previously private farmland into a managed recreational landscape albeit within a solar development. This mitigation aligns with EN-1's encouragement of environmental enhancements as part of good design.

7.5.38 As set out earlier, paragraph 5.10.13 of EN-1 acknowledges that major energy projects are "likely to have visual effects for many receptors around proposed

sites" and directs the Secretary of State at paragraph 5.10.14 to "*judge whether the visual effects on sensitive receptors… outweigh the benefits of the project*", and similarly at paragraph 5.10.35 to "*judge whether any adverse impact on the landscape would be so damaging that it is not offset by the benefits (including need) of the project*".

7.5.39 The substantial benefits of the Proposed Development are set out in Section 5.0 of this Planning Statement, and it is considered that these substantial benefits considerably outweigh the localised significant residual landscape and visual effects at the Site.

7.5.40 The Proposed Development is CNP Infrastructure and as set out above has followed the mitigation hierarchy through the design and EIA process; therefore, in accordance with paragraph 4.2.16 of EN-1 the Proposed Development should be treated as meeting the requirements of paragraphs 5.10.14 and 5.10.35 which require the benefits of the project to outweigh the visual and landscape harm.

7.5.41 Furthermore, the Proposed Development's temporary nature and reversibility addresses EN-1 paragraph 5.10.36 that any adverse impact on the landscape should be capable of being reversed in a reasonable timescale, which in this case would be in forty years when the Proposed Development is decommissioned.

7.5.42 The Proposed Development has been appraised against local plan policies relevant to landscape and visual impact within the **Policy Compliance Document *[EN010153/DR/5.7]*** and it is found to be broadly in compliance. There is inevitably a degree of tension with Policy ENV 2 which seeks to protect and enhance landscape character, however, ENV 2's test is nuanced: it requires development to take full account of the site's characteristics and views, and incorporate landscape features into the design, which the Applicant has done. STRAT 9 seeks to retain the intrinsic character and beauty of the Cheshire countryside by restricting development to that which requires a countryside location. **ES Vol 2 Appendix 3-1: Alternative Site**

Assessment [EN010153/DR/6.2] demonstrates how the Site was selected and demonstrates that it could not be accommodated within a settlement area, and accordingly complies with the objectives of STRAT 9.

7.5.43 In conclusion, having regard to the relevant national and local policies on landscape and visual amenity, and based on the findings of **ES Vol 1 Chapter 6: Landscape and Visual Impact Assessment *[EN010153/DR/6.1]***, the Proposed Development is considered to be policy compliant.

7.6 Historic Environment

Planning Policy Context

7.6.1 Overarching policy considerations for the Historic Environment are set out within Section 5.9 of NPS EN-1. EN-1 requires applicants to describe the significance of any heritage assets affected (paragraph 5.9.10), including any contribution made by their setting, with a level of detail proportionate to the asset's importance. The Secretary of State should give great weight to the conservation of heritage assets (paragraph 5.9.27); the more important the asset, the greater the weight, irrespective of whether the harm is substantial or less than substantial. EN-1 also emphasises sustaining and where possible enhancing heritage significance (paragraphs 5.9.13 to 5.9.15).

7.6.2 In decision-making, EN-1 distinguishes between substantial harm and less than substantial harm to designated assets.

7.6.3 If a development would cause substantial harm (or total loss of significance) to a designated heritage asset, consent should be refused unless that harm is necessary to deliver "substantial public benefits" that outweigh the harm (paragraph 5.9.31), or all of a strict set of tests are met (for example, no viable alternative use for the asset).

7.6.4 Where a project would lead to less than substantial harm to a designated asset's significance, EN-1 (paragraph 5.9.32) requires that this harm be

weighed against the public benefits of the proposal (including, where appropriate, securing the asset's optimum viable use).

7.6.5 For non-designated heritage assets, EN-1 calls for a balanced judgment considering the scale of harm or loss and the asset's significance (paragraph 5.9.33).

7.6.6 EN-1 makes clear that recording evidence of an asset is not a substitute for its conservation as a "documentary record of our past is not as valuable as retaining the asset" (paragraph 5.9.16). However, if loss of significance is justified, the applicant must record and advance understanding of the asset before it is lost, in a manner proportionate to its importance (paragraph 5.9.17).

7.6.7 Further technology-specific considerations are set out within Section 2.10 of NPS EN-3. EN-3 acknowledges that solar farms can impact the historic environment both above ground (paragraph 2.10.108) – for example, effects on the setting of listed buildings or other designated assets – and below ground (paragraph 2.10.109), through disturbance of archaeological remains during construction.

7.6.8 EN-3 highlights that large-scale solar developments have the potential to cause significant setting effects on heritage assets depending on their "scale, design and prominence", and it advises that applicants may need to include visualisations to illustrate impacts on the settings of heritage assets (paragraph 2.10.118-119).

7.6.9 Paragraph 2.10.110 of EN-3 recognises that solar farms can sometimes result in a positive effect on archaeology – for instance by taking land out of intensive ploughing, thereby protecting below ground remains.

7.6.10 EN-3 notes that the duration of the consent should be taken into account when considering indirect effects on setting (paragraph 2.10.160), since the impacts, while long-term, are not necessarily permanent.

7.6.11 Policy ENV 5: Historic Environment is the principal policy covering the historic environment in the CWaCC Local Plan and requires development to safeguard and where possible enhance designated and non-designated heritage assets and their settings, reflecting each asset's significance.

7.6.12 Policy DM 47 Listed Buildings of the Local Plan Part Two requires development to conserve the significance of a listed building and its setting.

7.6.13 Generally, the local policy context (set out in the Local Plan and supporting Neighbourhood Plans) echoes the national policy approach that heritage assets should be conserved in a manner appropriate to their significance, and any harm requires justification. This includes for statutory designated assets, as well as local conservation areas and other non-designated assets.

Assessment Conclusions

7.6.14 **ES Vol 1 Chapter 11: Cultural Heritage and Archaeology *[EN010153/DR/6.1]*** sets out the Applicant's full assessment of the likely significant effects on the historic environment as a result of the Proposed Development. This section of the Planning Statement contains only a brief summary of the likely impacts and effects.

Approach

7.6.15 The assessment of the historic environment follows published best practice guidance as detailed within **ES Vol 1 Chapter 11: Cultural Heritage and Archaeology *[EN010153/DR/6.1]***, and assesses impacts at construction, operation and decommissioning on above- and below-ground heritage assets.

7.6.16 Visualisations have been prepared to illustrate the Proposed Development from a number of designated heritage assets, and these are presented within **ES Volume 3 Figures *[EN010153/DR/6.3]***.

Design and Mitigation Measures

7.6.17 The Proposed Development has followed the mitigation hierarchy to prevent harm to the historic environment where possible, with mitigation measures set out in full within Section 11.7 of **ES Vol 1 Chapter 11: Cultural Heritage and Archaeology *[EN010153/DR/6.1]***.

7.6.18 In summary, avoidance measures were prioritised first by siting the project carefully – direct physical impacts on designated heritage assets have been avoided. No designated asset lies within the construction footprint, and known non-designated assets have been considered during design development.

7.6.19 Where impacts cannot be entirely avoided, the Proposed Development incorporates targeted mitigation measures. To minimise setting impacts on nearby heritage assets, strategic landscape planting designed to reduce visibility of the Proposed Development has been incorporated within the scheme design. Pre-construction archaeological investigations, including targeted trial trenching and geoarchaeological surveys in areas of potential archaeological sensitivity, will identify any significant features requiring in-situ preservation or detailed excavation, guided by a Written Scheme of Investigation which will be agreed with local archaeological advisors.

7.6.20 Residual impacts that remain unavoidable will be compensated through preservation by record. If removal of non-designated heritage assets becomes necessary, detailed photographic and written documentation will be carried out to capture their historical value. Findings from archaeological investigations will be publicly documented, published, and archived with local heritage records. Additionally, interpretative boards will be installed around the Site, enhancing public awareness and appreciation of the local historic environment, thus delivering a positive heritage-related public benefit from the project.

7.6.21 Mitigation for historic environment impacts is primarily secured by the **outline Construction Environmental Management Plan *[EN010153/DR/7.5]***, as

well as the **outline Landscape and Ecology Management Plan *[EN010153/DR/7.13]***.

Baseline Conditions

7.6.22 There are no designated heritage assets within the physical site boundaries, but several lie in the wider vicinity whose settings could potentially be affected. In particular, the Site is south of the Scheduled Monument "Promontory Fort on Helsby Hill," and near or within the wider landscape setting of three Conservation Areas in Frodsham (Frodsham Town Centre, Castle Park, and Overton) and one Registered Park and Garden (the Grade II listed Castle Park). The Grade II listed Frodsham War Memorial sits prominently over the town of Frodsham and has been considered in the assessment.

7.6.23 The Site and its immediate surroundings contain a number of non-designated heritage assets recorded in the Cheshire Historic Environment Record. These include remnants of historic landscape features such as ridge and furrow earthworks in parts of the marsh, and several features related to past industrial or land reclamation activity (for example, possible ventilation shafts on the marsh likely associated with historical infrastructure). The marsh has a history of reclamation and agricultural use, and parts have been disturbed by 19th-20th century works (including canal dredging deposits), meaning few intact archaeological remains are expected.

7.6.24 **ES Vol 1 Chapter 11: Cultural Heritage and Archaeology *[EN010153/DR/6.1]*** includes a desk-based assessment supported by a site walkover survey (with photographic recording) which identified heritage constraints. The archaeological potential of the Site is judged to be generally low for significant remains, given that Frodsham Marsh has largely been undeveloped historically (used primarily for grazing, drainage, and waste deposition). However, the desk study noted a high potential for deep peat deposits across parts of the marsh, which could contain important paleoenvironmental evidence or even waterlogged archaeological materials from early periods. It also identified a high potential for remains of post-

medieval or modern agricultural improvements (such as drainage systems or boundaries) to survive on the marsh. Such remains would be of local interest (non-designated). The potential for earlier archaeological features was considered low, except where obscured by the ridge and furrow or buried in peat.

Residual Effects

7.6.25 **ES Vol 1 Chapter 11: Cultural Heritage and Archaeology *[EN010153/DR/6.1]*** concludes that with the adoption of the embedded and additional mitigation measures, there would be no significant residual effects on the historic environment.

7.6.26 Potential direct impacts on below-ground archaeological remains are assessed as negligible to minor. This reflects the low likelihood of significant archaeology on the Site and the effectiveness of the mitigation (any minor remains encountered would be recorded, and thus the effect on the archaeological resource is reduced to negligible). Minor adverse effects are predicted upon a series of non-designated possible ventilation shafts as these assets would potentially be removed/destroyed by the construction works. It should be noted that the assessment has taken a worst-case approach assuming that all of these ventilation shafts would be lost. However, several of the shafts are located within Work No. 6a where physical development of panels and other infrastructure is not permitted. It is therefore entirely possible some of the ventilation shafts would be retained,

7.6.27 The principal residual effects are limited to the indirect (setting) impacts on certain nearby designated heritage assets. All predicted indirect impacts on the setting of heritage assets are assessed to be neutral or minor adverse at most, which in EIA terms are not significant. The only residual adverse effects identified are slight changes to the setting of a small number of heritage assets in the area, namely:

- **Promontory Fort on Helsby Hill (Scheduled Monument)** – minor adverse effect on its wider setting due to the introduction of solar panels in distant views towards the Mersey plain. The fort is located on a hill approximately 1.5 km from the Site and the development would be a small new element in its panoramic view. The fort's significance (an Iron Age defensive site) is primarily derived from its physical fabric and commanding outlook. The change in view is marginal and results in a lower-end less than substantial harm to its significance.
- **Frodsham Conservation Area** – minor adverse effect on the setting of the town's historic core. Frodsham CA lies south of the Site on higher ground. The Proposed Development would be outside the conservation area, across the M56 motorway and marshes, but in clear weather views of the panels may be visible in the distance. This constitutes a slight change to the broader landscape setting of the town, but one that does not materially harm the character or appearance of the Conservation Area.
- **Overton (St Lawrence's) Conservation Area** – minor adverse effect on setting. Overton is the hill-top historic village above Frodsham; like Frodsham CA, it overlooks the Mersey Estuary. The Proposed Development will be a distant, low-lying feature and have a negligible presence in key views. Any harm to the significance of Overton CA is minimal (less than substantial and very much at the low end).
- **Castle Park Conservation Area & Registered Park and Garden (Grade II)** – minor adverse effect on setting. Castle Park is an important historic park on the edge of Frodsham. The site is roughly 2 km north. The Proposed Development may be faintly perceptible from the higher parts of the park/gardens as a new development on the marshes. Given the distance and partial screening by intervening trees and structures, the effect on the park's setting is minor. The aesthetic and historical significance of Castle Park (as a late 18th-century house and landscaped park) would remain unharmed, aside from a minor visual change in the far background.

- **Frodsham War Memorial (Grade II)** – minor adverse effect on setting. The introduction of the solar farm would have an intangible impact on the experience of the memorial (which mainly draws its significance from its design and commemorative value). Any impact is negligible to minor.

7.6.28 For all of the above assets, **ES Vol 1 Chapter 11: Cultural Heritage and Archaeology *[EN010153/DR/6.1]*** concludes that the level of harm is "less than substantial" in terms of heritage policy, and in fact at the very low end of less than substantial. There would be no physical harm or alteration to any of these assets – only small-scale changes in aspects of their wider setting.

Appraisal

7.6.29 The Proposed Development has been designed and assessed in accordance with national policy (NPS EN-1 and EN-3) requirements, and it aligns with the Local Plan and Neighbourhood Plan objectives of conserving heritage assets. The mitigation hierarchy embedded in the project aligns with the NPS philosophy that applicants should mitigate impacts "as far as possible".

7.6.30 No instances of substantial harm to any designated heritage asset have been identified. This means the stringent test in NPS EN-1 (paragraph 5.9.31) that would refuse proposals causing substantial harm or total loss except in exceptional circumstances is not triggered.

7.6.31 All harms to designated assets are in the category of "less than substantial harm", at the lowest end of that spectrum. According to NPS EN-1 (paragraph 5.9.32), such harms must be weighed against the public benefits of the proposal.

7.6.32 The substantial public benefits of the Proposed Development are set out in Section 5.0 of this Planning Statement, and it is considered that these substantial public benefits decisively outweigh the less than substantial harm at the lowest end of that spectrum.

7.6.33 The Proposed Development is CNP Infrastructure and as set out above has followed the mitigation hierarchy through the through the design and EIA process; therefore, in accordance with paragraph 4.2.16 of EN-1 the Proposed Development should be treated as meeting the requirements of paragraph 5.9.32, and any other relevant local planning policy.

7.6.34 The time-limited nature of the consent (forty years) and reversibility of the Proposed Development if a further importance consideration, as set out in paragraph 2.10.160 of EN-3.

7.6.35 The Proposed Development has been appraised against local plan policies relevant to landscape and visual impact within the **Policy Compliance Document *[EN010153/DR/5.7]*** and it is found to be in compliance.

7.6.36 In conclusion, having regard to the relevant national and local policies on the historic environment, and based on the findings of **ES Vol 1 Chapter 11: Cultural Heritage and Archaeology *[EN010153/DR/6.1]***, the Proposed Development is considered to be policy compliant.

7.7 Biodiversity and Nature Conservation

Planning Policy Context

Note: The planning appraisal relevant to Habitats Regulations Assessment is set out separately in Section 7.8. The planning appraisal relevant to Biodiversity Net Gain is set out in Section 7.9.

7.7.1 Overarching Biodiversity and Nature Conservation policy considerations are set out within Section 5.4 of NPS EN-1. EN-1 requires applicants to assess effects on internationally, nationally and locally designated sites, protected species, and habitats of principal importance including irreplaceable habitats (paragraph 5.4.17).

7.7.2 EN-1 expects projects to avoid significant harm to biodiversity through careful design and mitigation, and to provide enhancements where possible (paragraph 5.4.21).

7.7.3 The Secretary of State is instructed to attach appropriate weight to designated nature conservation sites (international, national, local) and protected species when making decisions (paragraph 5.4.48).

7.7.4 EN-1 states that development causing adverse effects on SSSIs should not normally be permitted unless the benefits clearly outweigh the impacts on the site and broader network (paragraph 5.4.8). Further, the Secretary of State should ensure harmful aspects of the development on the SSSI are mitigated, and where possible, ensure the enhancement of the SSSI's biodiversity interest (paragraph 5.4.50).

7.7.5 Paragraph 5.4.12 of EN-1 notes that Local Wildlife Sites can make an important contribution to ecological networks and nature recovery, and paragraph 5.4.52 states the Secretary of State should give due consideration to regional or local designations, but that these in themselves should not be used to refuse development consent.

7.7.6 Paragraph 5.4.55 states that harm to protected species or important habitats should be avoided or mitigated; if such harm would result and cannot be mitigated, consent should be refused unless there is an overriding public interest and all legal tests are met.

7.7.7 Further technology-specific considerations are set out within Section 2.10 of NPS EN-3. EN-3 directs that generic biodiversity impacts are covered by EN-1 Section 5.4, and that applicants should conduct thorough ecological assessments for solar farm sites (paragraph 2.10.76-77). Key species of concern (for example, ground-nesting birds, wintering birds, bats, great crested newts, water voles, badgers, etc.) should be identified and potential impacts assessed.

7.7.8 Policy ENV 4: Biodiversity and Geodiversity is the principal policy on ecological conservation within the CWaCC Local Plan, which largely reflects the policies in the NPSs that seek to safeguard and enhance sites of biodiversity value, and protected species.

7.7.9 Generally, the local policy context (set out in the Local Plan and supporting Neighbourhood Plans) reinforce that development should minimise ecological harm, avoid fragmentation of habitats, and deliver tangible biodiversity improvements. Sites should be protected from loss or damage taking account to; the hierarchy of designations; the irreplaceability of habitats; and the impact on priority habitats and species.

Assessment Conclusions

7.7.10 **ES Vol 1 Chapter 7: Terrestrial Ecology *[EN010153/DR/6.1]*** and **ES Vol 1 Chapter 8: Ornithology *[EN010153/DR/6.1]*** set out the Applicant's full assessment of the likely significant effects of the Proposed Development on ecology. This section of the Planning Statement contains only a brief summary of the likely impacts and effects.

Approach

7.7.11 The approach to surveys and assessment of ecological receptors was undertaken in accordance with published best practice guidance by experienced professional ecologists, as set out in **ES Vol 1 Chapter 7: Terrestrial Ecology *[EN010153/DR/6.1]*** and **ES Vol 1 Chapter 8: Ornithology [EN010153/DR/6.1]**. Habitat and protected species surveys have been undertaken over several years between 2022 and 2025.

Design and Mitigation Measures

7.7.12 Following the selection of the Site (as set out in **ES Vol 2 Appendix 3-1: Alternative Site Assessment *[EN010153/DR/6.2]***), the Proposed Development has followed the mitigation hierarchy to address potential ecological impacts identified through the EIA process.

7.7.13 From the outset, the design of the Proposed Development was informed by ecological surveys to avoid sensitive habitats and species wherever feasible. The results of the Preliminary Ecological Appraisal were reviewed early in the design process to identify areas of highest ecological value within the Site.

These high-value habitat areas were excluded from development where possible. Field boundary features such as existing hedgerows, tree lines, and ditches that provide important wildlife corridors have been retained . Generous development-free buffer zones are incorporated alongside these retained features to protect them from disturbance. Open span crossings have been specified for new and existing watercourse crossings to avoid impacts associated with culverting. This careful siting of infrastructure avoids direct land-take from the most ecologically sensitive parts of the Site and prevents fragmentation of existing wildlife corridors.

7.7.14 Where potential ecological impacts could not be entirely avoided, the Proposed Development includes measures to minimise and reduce harm to habitats and species. Critical to the mitigation for non-breeding birds and ground nesting birds are the creation of the Non-Breeding Bird Mitigation Area (NBBMA) and Skylark Mitigation Area (SMA) respectively. These specific mitigation habitat areas are secured by the **outline Landscape and Ecology Management Plan (oLEMP)** ***[EN010153/DR/7.13]*** and considered further in the following section.

7.7.15 An **outline Construction Environmental Management Plan (oCEMP)** ***[EN010153/DR/7.5]*** has been prepared to control construction-phase effects through best practice measures. This plan sets out site management protocols such as phased working to limit impacts on areas of the Site that are used by birds of the Mersey Estuary SPA, and seasonal timing of works to avoid sensitive periods (for example, avoiding vegetation clearance in peak bird nesting season). It also details site protection measures during construction, including fencing off important ecological zones (e.g. buffer zones around retained hedgerows, waterbodies, and any identified faunal resting sites) to prevent accidental encroachment.

7.7.16 The **oCEMP** ***[EN010153/DR/7.5]*** outlines controls for runoff, dust, noise and vibration to ensure adjacent habitats (such as ditches and ponds) are not adversely affected during works. Surface water management and pollution

control measures will be implemented to prevent sediment or contaminants from entering watercourses, thereby safeguarding aquatic species including fish and amphibians. Construction lighting will be designed to be wildlife-sensitive (using directed, low-spill lighting only when necessary) to avoid disorienting bats or other nocturnal fauna. Noise and vibration will be managed to reduce disturbance to nearby fauna.

7.7.17 During construction, an Ecological Clerk of Works (EcoCoW) will be appointed to oversee all activities with the potential to affect ecological receptors. The EcoCoW will ensure that Reasonable Avoidance Measures (RAMs) for protected species are implemented.

7.7.18 Collectively, these measures ensure that any unavoidable impacts are tightly controlled and kept to a minimum. By following industry best practice and mitigation guidelines, the Proposed Development substantially reduces residual harm to habitats and species.

7.7.19 In circumstances where some ecological impacts are inevitable even after avoidance and mitigation measures, the Proposed Development provides compensatory measures to offset residual losses. Consistent with the mitigation hierarchy principle, such compensatory steps have been considered as a last resort and are designed to ensure no net loss of biodiversity.

7.7.20 Where hedgerow or scrub removal cannot be avoided for access or cabling, compensatory planting is secured through the landscape strategy, set out in the **oLEMP [EN010153/DR/7.10]** to ensure replacement of lost habitat on at least a like-for-like (if not greater) basis. Any necessary removal of trees will be offset by new native tree planting, and any sections of hedgerow lost will be compensated with longer lengths of new native hedgerows planted elsewhere within the Site. This new planting will, over time, restore and exceed the ecological function of what is unavoidably removed. Additionally, if any badger setts must be closed under licence, artificial badger sett construction or other appropriate compensation would be provided in

accordance with best practice. Whilst in general the design has sought to avoid such needs, the transitory nature of badger clans means this may be required.

7.7.21 Beyond mitigation and compensation, the project embraces opportunities for biodiversity enhancement, in line with national policy to seek environmental gains as part of development (EN-1 paragraph 4.6.13).

7.7.22 The **oLEMP** ***[EN010153/DR/7.13]*** details how habitats will be created, managed, and monitored to improve their condition over the lifetime of the development. These measures will not only address impacts but actively enhance local ecological networks and habitat quality, leaving the Site in better ecological shape than its current baseline.

7.7.23 Large portions of the Site currently under intensive arable use will be converted to grassland meadows, wetland features, and native scrub, which greatly increase the ecological value of the landscape. Wetland and reedbed restoration is planned in areas that had degraded (such as approximately 3.5 ha by Marsh Farm that had been lost to scrub), thereby reinstating valuable wetland habitat. The creation of these habitats will benefit not only birds but a wide range of taxa – for example, new open water and wetland edges will support amphibians and aquatic invertebrates, which in turn provide prey for bats and wetland birds. The planting of grassland meadows across the solar array fields will boost floral diversity and nectar resources, supporting pollinators and other insects.

7.7.24 The **oLEMP [EN010153/DR/7.10]** sets out there will be numerous artificial refuges and nesting/roosting features installed across the Site. Approximately 60 bat boxes (including hibernation and maternity designs) will be put up on retained trees or poles to increase roosting sites for bats. Around 20 hedgehog domes or nests and 10 reptile/amphibian hibernacula will be placed in suitable locations (e.g. along field margins), providing shelter and breeding sites for these species.

7.7.25 All newly created or enhanced habitats will be managed by suitably qualified professionals for the 40-year operational life of the Proposed Development, under targets and prescriptions defined in the **oLEMP [EN010153/DR/7.10].**

7.7.26 The Frodsham, Helsby and Ince Marshes LWS that overlaps the Site currently lacks any active conservation management – the Proposed Development introduces a regime of habitat management and monitoring for substantial parts of this LWS. This will improve the condition of the LWS habitats and the ornithological assemblage they support.

7.7.27 Finally, the Proposed Development includes measures to enhance public access in an ecologically sensitive manner, fostering appreciation of wildlife whilst minimising disturbance. New permissive paths through the Site will be guided to less sensitive areas, and designated wildlife viewing points with screening (such as bird hides or viewing screens) will be installed at strategic locations. Informative signage will be placed to encourage responsible behaviour (e.g. keeping dogs on leads) in the vicinity of important habitats. These measures will enhance the educational and recreational value of the Site, turning it into a well-managed nature-rich area accessible to the public.

7.7.28 In summary, the Proposed Development goes beyond just mitigation and compensation and delivers wider gains for biodiversity, creating a richer mosaic of habitats and long-term management commitments that will leave a positive ecological legacy on the Frodsham Marshes landscape.

Non-Breeding Bird Mitigation Area

7.7.29 To address the impact on wintering birds, an outline Non-Breeding Bird Mitigation Strategy (oNBBMS), for the creation and management of habitats for wetland birds in Cell 3 of the Manchester Ship Canal Dredging Deposit Grounds, is provided in Appendix B of the **oLEMP *[EN010153/DR/7.13]***. The NBBMA will be delivered under a full Non-Breeding Bird Mitigation Strategy that will be in substantial accordance with the oNBBMS.

7.7.30 The NBBMA is adjacent to the Proposed Development and comprises former farmland that will be turned into a mosaic of wetland features created and managed specifically for SPA birds, but also providing benefit to other birds and wildlife. This strategy, developed in consultation with Natural England, involves creating shallow wetland scrapes, ponds, and seasonally flooded grassland to provide feeding and roosting opportunities for SPA target species displaced from the solar array area. By improving habitat quality (e.g. maintaining water features year-round, managing vegetation height), this area is intended to enhance the carrying capacity for SPA bird species, offsetting the loss of some feeding habitat under the solar panels.

7.7.31 The assessments demonstrate that the NBBMA proposal would substantially improve Cell 3 for wetland birds (SPA and breeding species) in terms of habitat quality, temporal availability and with dynamic on-going active management. The oNBBMS would therefore provide extensive mitigation and enhancement measures in addition to those already being delivered by the Frodsham Wind Farm on Cell 3 i.e. provide additive mitigation.

7.7.32 The NBBMA will be in place before other construction works commence on Cells 1, 2 and 5, ensuring continuity of habitat availability.

7.7.33 A fuller description of the purpose, mitigation and enhancement measures that will be delivered by the NBBMA is provided within Section 8.7 of **ES Vol 1 Chapter 8: Ornithology *[EN010153/DR/6.1]***.

Skylark Mitigation Area

7.7.34 To mitigate for impacts on farmland bird species that rely on open habitats, a SMA is proposed within the south of the Site. This would comprise the creation of meadow grassland, which will benefit breeding skylarks through improved habitat quality and favourable management

7.7.35 Skylarks are considered likely to continue to utilise marginal habitats and areas between solar panels in the SADA for foraging, and larger gaps between panelled areas are also potentially suitable for nesting birds.

7.7.36 The enhancement works within the NBBMA will also provide suitable breeding habitat for skylark (c. 34 ha of grassland).

7.7.37 The management of the SMA is set out in the **oLEMP [EN010153/DR/7.13]** and this includes the requirement to deliver a full Skylark Mitigation Strategy as part of the final LEMP.

Designated Sites

Baseline

7.7.38 The Proposed Development is situated in proximity to several designated nature conservation sites of international, national, and local importance.

7.7.39 The Site lies adjacent to the Mersey Estuary, which is designated as a Site of Special Scientific Interest (SSSI), Special Protection Area (SPA), and Ramsar wetland. This estuarine complex supports extensive saltmarsh and intertidal habitats and is of importance for waterbirds – hosting internationally significant populations of wintering wildfowl and waders and nationally important numbers of species such as curlew, redshank and golden plover. A small part of the Mersey Estuary SSSI lies within the Site boundary (exclusively within the proposed NBBMA). There are several other SSSIs within the wider area as set out within **ES Volume 1** ***[EN010153/DR/6.1]***.

7.7.40 At the local level, the Site is within the Frodsham, Helsby and Ince Marshes Local Wildlife Site LWS, a non-statutory designation. This LWS covers a mosaic of neutral grassland, floodplain wetlands, and other semi-natural habitats (including some saltmarsh). It is recognised to be of county to international importance for birds, with records of breeding, wintering and migratory species. In addition there are two further LWS Site boundary – the Frodsham Field Studies Centre LWS, characterised by grassland, ponds and wetlands; and Easton Clifton Tip LWS, which contains calcareous grassland and wetland habitats on a former industrial tip. Numerous other LWSs are located beyond the Site boundary including Clifton Lagoon LWS

(approximately 0.1 km east) and Upper Mersey Estuary LWS (approximately 0.3 km north), both of which are designated for wetland birds.

Effects

7.7.41 **ES Vol 1 Chapter 7: Terrestrial Ecology *[EN010153/DR/6.1]*** and **ES Vol 1 Chapter 8: Ornithology *[EN010153/DR/6.1]*** concludes that with the embedded mitigation measures set out above, the Proposed Development will not result in long-term significant adverse effects to any designated site.

7.7.42 For the Mersey Estuary SSSI, SPA and Ramar site, during construction, the presence of works in former bird foraging areas will cause some disturbance and displacement of SPA birds; however, this impact is being mitigated through a phasing strategy and the early creation of alternative habitat (the NBBMA). Construction will be staged such that habitat in the NBBMA is enhanced prior to any works on the adjacent fields, ensuring birds always have refuge available. As a result, temporary construction effects on the SPA's bird species are not predicted to be significant. The Proposed Development includes the implementation of an extensive new wetland within the NBBMA to compensate for loss of functional bird habitat. This created wetland (along with long-term active management) will provide improved habitats for the displaced target species of the SPA, and is expected to support equal or greater numbers of those species over time. Consequently, the Proposed Development is anticipated to deliver a positive outcome for the Mersey Estuary SPA/Ramsar/SSSI designations in the medium to long term, with a significant beneficial effect on these internationally important bird populations once the new habitats are established.

7.7.43 There are no managed wetland nature reserves anywhere around the Mersey Estuary SPA; the Mersey appears to be the only major estuary in the UK without an adjacent wetland reserve and therefore the creation of the NBBMA would represent a significant strategic benefit in this location. As such, the Proposed Development is considered to provide a unique opportunity for the creation of valuable wetland habitat for SPA-qualifying species on land

adjacent to the Mersey Estuary SPA. It would therefore provide substantial enhancements in addition to mitigation.

7.7.44 For the Frodsham, Helsby and Ince Marshes LWS, there will be some short-term habitat disruption within the LWS during construction (notably as the NBBMA wetland is created on LWS land). This is assessed as a significant temporary adverse effect on the LWS in the construction phase. However, the habitat enhancements (wetland creation, improved grassland management, etc.) in the NBBMA and across the Site that are within the LWS will greatly improve its ecological value after construction. In the medium to long term, the LWS will experience significant beneficial effects, as the new wetland and associated management benefit the Site's biodiversity beyond its original condition.

7.7.45 The Upper Mersey Estuary LWS and Clifton Lagoon LWS would not be adverse impacted during construction but would experience indirect significant beneficial effects in the medium-to long-term as the NBBMA and other on-site habitat enhancements establish and benefit the wider ornithological assemblage.

7.7.46 No other statutory or non-statutory designated sites are expected to be materially affected. The Proposed Development's embedded mitigation measures ensure that no significant residual adverse effects are predicted beyond the construction phase on any designated site in the area. Instead, through habitat creation the Proposed Development is set to enhance the value of the key marshland areas linked to the Mersey Estuary in the long run, with residual significant beneficial effects.

Habitats

Baseline

7.7.47 The Site encompasses a diverse mosaic of terrestrial and aquatic habitats across its footprint, reflecting its position on former saltmarsh grazing land and farmland by the estuary.

7.7.48 The main Solar Array Development Area (SADA) consists of large agricultural fields (used as improved or semi-improved neutral grassland pasture and some arable land) divided by ditches, hedgerows, and treelines. Scattered within the fields are patches of marshy grassland (rushes), stands of common reed (reedbeds), areas of bramble scrub, and a few ponds, as well as farm tracks and access roads.

7.7.49 The Non-Breeding Bird Mitigation Area (NBBMA), occupying low-lying land in Cell 3 of the marshes, is currently rough grassland with some scrub, numerous ditches and pools, a cluster of ponds with fringing reedbeds, and a small block of broadleaved woodland. These wetland features in the NBBMA are partly a legacy of former mitigation for the wind farm and support a wet grassland habitat.

7.7.50 Overall, the habitat survey indicates that while a significant portion of the Site is intensively managed farmland of relatively lower ecological value, there are also pockets of higher-value habitat. Priority habitats present (or immediately adjoining the Site) include coastal and floodplain grazing marsh, reedbeds, and coastal saltmarsh (the latter along the Mersey Estuary edge). The network of ditches and ponds provides aquatic habitat for fish, amphibians, and aquatic invertebrates, and these link into the larger water bodies nearby (the Manchester Ship Canal to the north and the River Weaver to the east).

Effects

7.7.51 The Proposed Development has been designed to avoid and minimise habitat loss and fragmentation, focusing the solar arrays on the existing low-value fields while retaining the boundary and linear features. Important semi-natural habitats such as woodlands, hedgerows, tree lines, and drainage ditches will be preserved, with only minor sections of hedgerow removed and a few new open-span crossing points over ditches where absolutely necessary. This approach maintains effective ecological connectivity across the Site, allowing wildlife to continue moving along established corridors.

7.7.52 During construction there will be some disturbance to habitats (e.g. clearance of vegetation in array footprints, temporary soil stripping and compaction, and the works to create the NBBMA). These impacts are being mitigated through standard best practices as set out above.

7.7.53 Extensive habitat creation and enhancement measures are embedded in the Proposed Development to ensure that any losses are offset by gains in habitat quality and extent. Chief among these is the creation of an extensive wetland (interlinked scrapes, pools, and wet grassland) within the NBBMA, specifically designed and managed to provide optimal conditions for wetland birds. This wetland habitat, once established, will also benefit a wide array of other wildlife associated with marshes, and it includes the planned treatment of invasive New Zealand pygmyweed from existing ponds as part of its management.

7.7.54 Apart from some unavoidable minor loss of habitat in construction, the overall habitat resource on-site will be enhanced. **ES Vol 1 Chapter 7: Terrestrial Ecology *[EN010153/DR/6.1]*** concludes that no significant residual adverse effects on habitat will occur. Instead, there will be a beneficial outcome for habitats due to the long-term implementation of **outline Landscape and Ecology Management Plan *[EN011053/DR/7.13]***.

Species

Birds (Breeding and Non-breeding)

7.7.55 The Site supports an assemblage of bird species year-round. Non-breeding (wintering and migratory) birds are a particularly notable receptor – the flat fields and marshes form part of the functional feeding/roosting habitat linked to the Mersey Estuary SPA. Baseline surveys confirm that species which are qualifying interests of the SPA/Ramsar frequent the Site using the fields and wet scrapes for foraging.

7.7.56 Breeding bird surveys have also identified a diverse community of breeding species across the mosaic of habitats on Site. The farmland areas currently

support ground-nesting birds like skylark and lapwing, which nest in the open fields. Field boundaries and scrubby areas host typical farmland and wetland-edge breeders. The Frodsham Marshes LWS is noted to hold breeding skylark in particular, among other species.

Effects on Birds

7.7.57 Non-breeding birds (SPA species) will experience some habitat change: approximately 150 ha of former foraging land in the SADA will be occupied by solar panels, making it less suitable for certain species (e.g. grazing wildfowl or flocking waders that prefer open landscapes). This constitutes a displacement impact. The Proposed Development, however, includes the dedicated NBBMA to mitigate for this. By enlarging and enhancing wetland habitats through the NBBMA, the Proposed Development provides alternative high-quality foraging and roosting areas for the displaced birds immediately adjacent to the lost habitat. Construction activities will be timed and phased carefully – initial works will focus on creating the NBBMA wetland before major disturbances in the current bird fields, so that the birds can relocate with minimal interruption. Noise and construction presence will be managed to reduce disturbance. With these measures, the construction-phase disturbance to non-breeding waterbirds is assessed as minor and not significant. Once the Proposed Development is operational, much of the original farmland will be less open to birds, but the new wetland will be fully established and actively managed for them. It is predicted that this mitigation area will not only replace lost function but increase the Site's carrying capacity for waterbirds compared to the baseline. Therefore, the operational effect on SPA species is beneficial, with the habitat creation expected to benefit wetland bird populations and lead to a net gain for Mersey Estuary bird assemblages in the long term. **ES Vol 1 Chapter 8: Ornithology *[EN010153/DR/6.1]*** concludes a significant residual beneficial effect for the SPA/Ramsar birds, given the strategic improvement of habitat near the estuary.

7.7.58 For breeding birds, the layout of the Proposed Development deliberately retains hedgerows, ditches, and scrub that are used by the majority of breeding species. Thus, birds nesting in those features will largely be unaffected. The main impact is on ground-nesting species (lapwing and skylark), as the presence of closely spaced solar panels will essentially remove the open-field nesting habitat they require. As set out above, the Proposed Development includes specific mitigation for these species through the Skylark Mitigation Area. This, along with the mosaic of grass under the panels (which may still be used by some birds for foraging), will support those species. As a result, breeding bird population impacts are minimised, and it is concluded that population-level effects on skylark and lapwing will not be significant.

7.7.59 Overall, with mitigation in place, no significant residual adverse effects on bird species (breeding or non-breeding) are expected – instead, many bird species will benefit from the new habitats and long-term management secured by the Proposed Development.

Bats

7.7.60 Baseline surveys (including manual transects and automated detectors) recorded a moderate level of bat activity on the Site. Activity was concentrated along linear features such as the hedgerows, treelines and ditch edges – and near water bodies, which bats use for commuting and foraging. Open field interiors saw relatively low bat use (consistent with expectations for an exposed marsh/farmland landscape). No significant bat roosts were identified within the development footprint; trees on site were assessed for roost potential, and a few mature trees have moderate roost features, but these are being retained and no roosting was confirmed during the surveys. The farm buildings at Marsh Farm could offer bat roost opportunities, but those buildings are to remain in place. In summary, the Site serves as a foraging and commuting area for a typical assemblage of bats, of local to district importance, relying on the habitat structure present.

Effects on Bats

7.7.61 **ES Vol 1 Chapter 7: Terrestrial Ecology *[EN010153/DR/6.1]*** concludes that the Proposed Development will have a negligible to minor impact on local bat populations, which is not significant. Existing hedgerows, treelines and watercourse corridors will be kept largely intact and even supplemented, as such the key commuting routes for bats will remain functional. Only very small gaps (approximately 10m wide) in a small number of hedgerows are being created for site access and cabling – bat flight paths are not expected to be significantly altered, especially as new planting will, in time, bolster alternative linkages.

7.7.62 Foraging habitat will experience slight changes as open pasture will become rows of panels over grass, which some bat species may avoid, but conversely the planned grasslands and wetland areas should increase insect abundance, improving foraging opportunities.

7.7.63 The Proposed Development will have minimal lighting (aside from low-level, motion-activated security lighting at substations, designed to be bat-friendly), so no adverse lighting impacts are anticipated. During construction, noise and activity might cause bats to temporarily avoid certain areas at night, but given bats are mostly active at night when construction is paused, disturbance would be very limited.

7.7.64 Overall, with mitigation in place no significant residual adverse effects on bats are predicted.

Water Vole

7.7.65 The network of ditches on site is a known habitat for water vole and baseline surveys confirmed water vole presence within the Site. The surveys indicate an active water vole population inhabiting the drainage ditches of the marsh, utilising the dense bankside vegetation of the ditches for cover.

7.7.66 The Proposed Development minimises the number of watercourse crossings and any necessary crossing will be constructed following best practice mitigation measures as set out above, using open span ditch crossings rather than culverts. Habitat disturbance will be confined to small sections of ditch, and those will be reinstated or enhanced post-construction. The vast majority of ditches on Site will remain untouched and will provide continuity of vole habitat.

7.7.67 During operation, the Proposed Development will have limited impacts water voles. Fencing around the solar arrays will include small mammal gaps to ensure water voles (and other fauna) can move freely between ditches and habitat areas.

7.7.68 A minor temporary adverse effect on water voles may occur during construction (due to potential handling and relocation of individuals at crossing sites), but this is not significant. In the medium- to long-term there should be beneficial impacts from the habitat enhancements such that the outcome is assessed as neutral to slightly positive in the long run for this species.

Otter

7.7.69 No direct observations of otter were made during surveys, however there are indications that otters could potentially be using parts of the Site. Although definitive evidence is lacking, it is considered likely that otters travel through the Site, given the suitable habitat and known presence in the broader locality. There were no otter holts (dens) or regularly used resting sites identified within the Site, as such, otters are considered an infrequent transient visitor to the Site.

7.7.70 With the embedded mitigation measures set out above, the impact of the Proposed Development on otter will therefore be minimal. No significant effects on otters are expected.

Great Crested Newt

7.7.71 Great crested newt (GCN) surveys have been undertaken across the Site but have found no evidence of GCN presence. GCN are considered absent or highly unlikely to occur on Site, therefore with the embedded mitigation measures outlined above, no impacts on great crested newt will occur from the development.

Badger

7.7.72 Baseline studies for badger did not find any badger setts within the Site, but badgers are known to exist in the wider landscape.

7.7.73 Construction could cause disturbance or injury if badgers access the works, but this will be mitigated through the measures set out above. A pre-construction badger survey will be conducted to ensure no new setts have appeared.

7.7.74 During operation, the Proposed Development will be securely fenced; however, to prevent disrupting badger foraging routes, the design includes mammal gaps within the fenceline so that badgers can still access and cross the Site. These gaps would be developed as part of the development of the LEMP.

7.7.75 No significant adverse effect on badgers is predicted.

Reptiles

7.7.76 The Site's habitat was evaluated for reptiles but none were recorded during surveys, with the predominantly open, frequently inundated marshland and intensively managed fields generally suboptimal for reptiles. Reptiles are considered absent or highly unlikely to occur on Site, therefore with the embedded mitigation measures outlined above, no impacts on reptiles will occur from the development.

Invertebrates

7.7.77 An invertebrate survey has been completed to assess the Site's importance for terrestrial invertebrates, and this indicated that aside from a few localised areas, the Site is not of high importance for invertebrate assemblages. The assessment concludes that impacts on invertebrate populations would be not significant, and that the Proposed Development has the potential to enhance invertebrate biodiversity beyond the baseline conditions.

Summary

7.7.78 In summary, **ES Vol 1 Chapter 7: Terrestrial Ecology *[EN010153/DR/6.1]*** and **ES Vol 1 Chapter 8: Ornithology *[EN010153/DR/6.1]*** have assessed the baseline ecological conditions and likely impacts of the Proposed Development.

7.7.79 The Site hosts a range of ecological receptors, from internationally protected birds to locally important habitats and species. The Proposed Development has been carefully designed with embedded mitigation and enhancement measures to avoid significant harm and to provide environmental benefits. Designated sites (internationally and locally designated) are safeguarded and even enhanced through habitat creation. Important habitats on site are largely retained and bolstered with new habitat features. Notable species groups – including birds, bats, water vole, otter, great crested newt, badger, reptiles, and invertebrates – have all been considered, with mitigation tailored to each. The assessments find that no significant residual adverse effects are expected on any important ecological feature as a result of the Proposed Development.

Appraisal

7.7.80 The Proposed Development is compliant with national policy tests in NPS EN-1 and EN-3, and in accordance with local planning policies,

7.7.81 EN-1 requires Applicants to assess impacts on designated sites, habitats and protected species (paragraph 5.4.17) and to avoid significant harm to biodiversity through careful design and mitigation, providing net enhancements where possible (paragraph 5.4.21). As set out in the above sections, these requirements have been met, as reported in **ES Vol 1 Chapter 7: Terrestrial Ecology *[EN010153/DR/6.1]*** and **ES Vol 1 Chapter 8: Ornithology *[EN010153/DR/6.1]***.

7.7.82 The Proposed Development will not result in significant residual adverse effects on statutory designated sites. No part of the Proposed Development overlaps the Mersey Estuary SPA and Ramsar site, and careful phasing of works along with early habitat creation in the NBBMA ensures that any temporary disturbance to SPA bird foraging areas during construction is mitigated. In the medium to long term, the new wetland habitats established by the Proposed Development will enhance the Mersey Estuary's ecological network, yielding a significant beneficial effect for the associated ornithological assemblage. This outcome clearly also meets the NPS EN-1 policy test for SSSIs (paragraph 5.4.8) that development should not normally be permitted if it harms a SSSI unless the benefits would clearly outweigh the impacts, and that any harm is mitigated with positive enhancements to the site's biodiversity interest (para. 5.4.50). In this case, the benefits to the Mersey Estuary SSSI secured through habitat creation and management demonstrably outweigh any minor, short-term impacts.

7.7.83 Regardless, the Proposed Development is CNP Infrastructure and as set out above has followed the mitigation hierarchy through the design and EIA process; therefore in accordance with paragraph 4.2.17 of EN-1 the Proposed Development should be treated as having met the requirements of paragraph 5.4.8 which requires the benefits of development within the Mersey Estuary SSSI to outweigh the harm.

7.7.84 Works within the boundary of Mersey Estuary SSSI require formal consent from Natural England under Section 28E of the Wildlife and Countryside Act

1981. The Applicant is seeking to disapply this consent and replacing Natural England involvement through the DCO Requirements. . This is set out within the **Other Consents and Licences Statement *[EN010153/DR/5.5]***.

7.7.85 Following construction there will be no significant residual adverse effects on locally designated sites. The Frodsham, Helsby and Ince Marshes Local Wildlife Site (LWS), which overlaps part of the Site will be actively managed and improved by the Proposed Development. This aligns with EN-1's recognition of the importance of local sites (paragraph 5.4.12) and the direction to consider such sites' contribution to ecological networks (paragraph 5.4.52)

7.7.86 **ES Vol 1 Chapter 7: Terrestrial Ecology *[EN010153/DR/6.1]*** and **ES Vol 1 Chapter 8: Ornithology *[EN010153/DR/6.1]*** conclude that no significant residual adverse effects are expected on any habitats or protected species as a result of the Proposed Development, demonstrating compliance with paragraph 5.4.55 of EN-1.

7.7.87 The Proposed Development has been appraised against local plan policies relevant to biodiversity and nature conservation within the **Policy Compliance Document *[EN010153/DR/5.7]*** and it is found to be in compliance.

7.7.88 In conclusion, having regard to the relevant national and local policies for biodiversity and nature conservation, and based on the findings of **ES Vol 1 Chapter 7: Terrestrial Ecology *[EN010153/DR/6.1]*** and **ES Vol 1 Chapter 8: Ornithology *[EN010153/DR/6.1]***, the Proposed Development is considered to be policy compliant. The application of the mitigation hierarchy and the commitment to habitat enhancement ensure that the Proposed Development will cause no significant ecological harm. On the contrary, it will secure long-term biodiversity benefits, leaving the Site and its surroundings with greater ecological value and resilience.

7.8 Habitats Regulations Assessment

Planning Policy Context

7.8.1 Under the Conservation of Habitats and Species Regulations 2017 (as amended), any plan or project which may have a likely significant effect on a European site must undergo a Habitats Regulations Assessment (HRA). This means a project such as the Proposed Development must be screened for likely significant effects on any SPA or SAC in the vicinity, and if such effects cannot be ruled out, an Appropriate Assessment of implications for site integrity is required.

7.8.2 EN-1 emphasises that internationally designated sites (SACs and SPAs) have the highest level of protection, and that an HRA must be undertaken for any development with potential to affect them (paragraph 5.4.4). Paragraph 5.4.49 confirms that the Secretary of State must consider whether a project may have a likely significant effect on any such internationally important site (either alone or in combination with other plans or projects), and if so, ensure an Appropriate Assessment is undertaken in line with the Habitats Regulations before consenting the project.

7.8.3 Paragraph 4.2.19 of EN-1 confirms that if, after an Appropriate Assessment, a development would have residual adverse impact on the integrity of a site forming part of the *UK National Site Network* (the network of SACs, SPAs and equivalent sites), the Secretary of State should consider whether the project can proceed only by invoking a derogation under the Habitats Regulations.

7.8.4 EN-3 provides further policy guidance on HRA in the context of renewable energy projects (including large-scale solar). EN 3 is consistent with EN 1 and re-emphasises that any potential effects on internationally important biodiversity sites must be addressed through the Habitats Regulations framework (paragraph 2.8.8).

7.8.5 The obligation to assess and protect internationally important sites is enshrined in legislation. The *Conservation of Habitats and Species*

Regulations 2017 (as amended) (referred to as the *Habitats Regulations*) set out the legal framework for HRA in England and Wales. Regulation 63 of the 2017 Regulations requires that before any consent or authorisation can be given for a plan or project, the competent authority (Secretary of State) must determine whether the project is likely to have a significant effect on any European site, either alone or in combination with other plans or projects, and if so must undertake an appropriate assessment of the implications for that site's conservation objectives. In the context of a Development Consent Order (DCO) application under the Planning Act 2008. The Secretary of State, as decision-maker, must carry out (or rely on) an Appropriate Assessment for any proposed development that could significantly affect a SAC, SPA or other Habitats site, based on the information provided by the applicant and relevant nature conservation bodies. Development consent may only be granted if the Secretary of State can ascertain, beyond reasonable scientific doubt, that the project will not adversely affect the integrity of any affected European site, or in exceptional cases, if the project satisfies the strict derogation tests set out in the Habitats Regulations.

7.8.6 Under the Habitats Regulations, a project which would have an adverse effect on the integrity of a European site can only be approved in derogation of the usual protection if all the following tests are met:

- **No alternative solutions**: There are no feasible alternative ways to deliver the project's objectives that would avoid harm to the projected site;
- **Imperative reasons of overriding public interest**: The project is justified by imperative reasons of overriding public interest (IROPI), which may include public health, public safety or important environment, social or economic benefits at a national level;
- **Compensatory measures**: Sufficient measures are secured to fully compensate for the damage to the Site, thereby ensuring the overall coherence of the network of protected sites is maintained.

7.8.7 In effect, if an NSIP proposal would harm an internationally important habitat and alternatives or mitigation cannot avoid that harm, consent cannot be granted unless the Secretary of State is satisfied that the scheme is of such overriding public importance that it should proceed, and that robust compensation will be put in place. This is a very high bar, intended to ensure that the integrity of Europe's most valued habitat sites is not undermined except in truly exceptional circumstances.

7.8.8 The HRA requirements operate alongside the Planning Act 2008 processes for NSIPs and the Environmental Impact Assessment (EIA) regime. The Infrastructure Planning (Environmental Impact Assessment) Regulations 2017 also ensure that information on ecological impacts is available to decision-makers, and as such an applicant for a DCO must submit an Environmental Statement describing the likely significance effects on the environment. This EIA process considers effects on protected habitats and species (among others) and helps identify potential impacts on European sites. However, the HRA is a distinct legal assessment: compliance with the Habitats Regulations is a separate requirement that goes beyond general EIA ecology assessment. In effect the Habitat Regulations 2017 obligate the decision-maker to assess impacts on internationally important nature conservation sites and refuse or adjust the project unless it can be demonstrated to meet the HRA requirements.

Assessment Conclusions

7.8.9 The applicant has prepared a Report to inform the Secretary of State's Habitat Regulations Assessment at: **Information to Inform Habitats Regulations Assessment [EN010153/DR/5.3].** This section summarises its conclusions.

7.8.10 Under the Habitats Regulations the term "Functionally Linked Land" (FLL) describes areas outside of a designated site upon which qualifying species depend for key life-cycle functions (e.g. foraging, roosting or refuge). A substantial part of the Order Limits, serves as FLL to the Mersey Estuary SPA and Ramsar site, providing foraging and night-roosting habitat for

overwintering waterfowl and waders. The Report to Inform Habitats Regulations Assessment has therefore been carried out accounting for this position.

7.8.11 The Proposed Development has applied the mitigation hierarchy from the outset, emphasising avoidance of sensitive receptors and embedding safeguards into its design. The chosen development site is located entirely outside any European-designated nature site, thereby avoiding direct encroachment on protected habitats. In particular, no infrastructure will be placed within the nearby Mersey Estuary SPA/Ramsar itself.

7.8.12 A substantial buffer zone separates the solar array from the estuary: the array is set back behind the existing sea wall and the MSC, providing approximately a 250 m physical separation between the development and the estuarine habitats. This stand-off distance avoids direct habitat loss in the intertidal zone and helps reduce disturbance to qualifying bird species in the SPA. Although a small portion of the Mersey Estuary SSSI (the national site underpinning the SPA/Ramsar) falls within the Site boundary, the layout has been configured to limit works in this area and thereby minimise impacts on the supporting roosting and feeding habitats it provides for SPA birds.

7.8.13 Beyond strategic siting, the Proposed Development incorporates robust mitigation measures into its design to further avoid or lessen potential effects on European sites. Chief among these is the creation of dedicated ecological mitigation areas that will remain free of development. A Non-Breeding Bird Mitigation Area (NBBMA) has been established, almost entirely, on former rough grassland (Cell 3) adjacent to the solar array footprint. This area, which was previously managed for habitat mitigation related to the wind farm and will be enhanced and managed specifically for waterbirds associated with the Mersey Estuary. It is intended to serve as alternative foraging and roosting habitat for wetland bird species that might otherwise be displaced by the solar farm, thereby directly addressing the impact on functionally linked land.

7.8.14 Similarly, a Skylark Mitigation Area (SMA) of approximately 30 ha has been set aside on arable land south of Moorditch Lane. The SMA will be managed as grassland for the benefit of skylarks and other ground-nesting farmland birds for the lifetime of the project in accordance with the **oLEMP [EN010153/DR/7.13]** with no solar panels or other structures installed there. By embedding these mitigation areas into the Proposed Development, the design ensures that key species have secure habitats available (on-site or adjacent) from day one, which avoids and offsets potential habitat loss effects on the SPA's bird populations.

7.8.15 The project also includes a suite of embedded mitigation measures and best practices to reduce any remaining impacts during construction and operation. A phased construction programme is planned such that the NBBMA is created and functioning before solar construction occurs in adjacent fields. This sequencing follows the mitigation hierarchy by ensuring new habitat is in place to receive displaced birds in advance of any disturbance. During construction, works will be governed by the **oCEMP [EN010153/DR/7.5]** that imposes strict controls to protect nearby European sites. Measures secured through the **oCEMP [EN010153/DR/7.5]** include ecological fencing to demarcate and guard sensitive areas, seasonal timing restrictions to avoid high-risk periods for overwintering birds, a sensitive lighting strategy to prevent light spill onto habitats, and robust pollution prevention protocols (such as silt fencing and buffered storage of materials) to avoid any runoff into adjacent watercourses. In the operational phase, the Site design itself mitigates potential impacts: solar panel rows are kept low in height (under 3 m) and oriented to minimize reflection, and a 3.5 m high vegetative screen will be established along the Site perimeter.

7.8.16 These features serve to visually screen the arrays and eliminate nearly all glint/glare toward the estuary, as well as integrate the development into the landscape. By integrating these avoidance and reduction measures from the design stage onward, the project demonstrates a comprehensive application of the mitigation hierarchy, reducing potential impacts on European sites to

as low as reasonably practicable before any additional mitigation or compensation is considered.

Appraisal

7.8.17 **Screening Stage (HRA Stage 1):** A Habitats Regulations Assessment screening was undertaken to determine whether the project might have any Likely Significant Effects (LSE) on nearby European sites **Information to Inform Habitats Regulations Assessment [EN010153/DR/5.3]** (Section 5.0). The screening identified the Mersey Estuary SPA and Ramsar as the primary sensitive receptors due to the project's relatively close proximity (within ~72 m) and ecological connectivity to this estuarine bird habitat. Several impact pathways were recognized that could affect the Mersey Estuary's qualifying features, including the loss of functionally linked land (i.e. off-site feeding/roosting areas used by SPA bird species), disturbance or displacement of waterbirds from noise and activity, potential glint and glare from solar panels, and indirect effects on water and air quality. At the screening stage it was not permissible to take credit for mitigation measures not inherently part of the project's design. Given the proximity and the presence of estuary-connected habitats within the Site, it was concluded that significant effects on the Mersey Estuary SPA/Ramsar could not be excluded on a precautionary basis. The Mersey Estuary SPA/Ramsar was therefore *"screened in"* for Appropriate Assessment. In contrast, other European sites within the wider 10 km study area (such as the Midland Meres & Mosses Phase 1 and 2 Ramsar sites, approximately 6–7 km distant) were *"screened out"* because of the absence of any plausible impact pathways over that distance. No likely significant effect was identified for those more distant wetland sites, which have no ecological linkage to the Frodsham Solar site (e.g. no shared water catchments or mobile species connectivity), and thus they required no further assessment.

7.8.18 **Appropriate Assessment (HRA Stage 2):** A detailed Appropriate Assessment was carried out for the Mersey Estuary SPA/Ramsar, examining

each potential impact in light of the Site's conservation objectives and the mitigation embedded in the project **Information to Inform Habitats Regulations Assessment [EN010153/DR/5.3]** (Section 6.0). The assessment considered the construction, operation, and decommissioning phases of the solar farm, both alone and in combination with other plans or projects. The key impact pathways evaluated were functional habitat loss, disturbance/displacement of birds, glint and glare effects, and changes to water or air quality. For each pathway, the analysis incorporated the project's design measures (and any additional mitigation commitments) and used the best available scientific evidence to judge the likelihood of adverse effects on the integrity of the European site.

7.8.19 **Habitat Loss (Functionally Linked Land):** The project will result in the change of land use on certain fields that are considered functionally linked to the SPA, meaning they have been used by the SPA's qualifying bird species for feeding or roosting, especially at high tide. A small part of the Mersey Estuary SSSI, which supports large numbers of wintering wildfowl and waders, lies inside the Order Limits, indicating that some habitat utilised by SPA birds is directly affected. The Appropriate Assessment **Information to Inform Habitats Regulations Assessment [EN010153/DR/5.3]** determined that this loss of functional land will not undermine the integrity of the SPA, owing to the scale and timing of the mitigation provided. Any temporary disturbance or reduction in available feeding area during construction is mitigated by the early delivery of the NBBMA, which offers equivalent or enhanced habitat for the displaced birds. Over the long term (the operational life of the solar farm), while the solar array occupies portions of former farmland, the birds will continue to have ample high-quality habitat in the vicinity, both within the remaining saltmarsh/estuary and in the adjacent managed NBBMA. The supporting habitat availability, quality, and connectivity for the SPA's bird populations will therefore be maintained in line with the Site's conservation objectives. Accordingly, the assessment concluded that the project's habitat loss (and alteration of functional land)

would not have an adverse effect on the integrity of the Mersey Estuary SPA/Ramsar, given the committed mitigation measures and habitat management in place.

7.8.20 **Disturbance and Displacement:** Potential disturbance to qualifying bird species was examined for all phases of the development as part of the information to inform Habitats Regulations Assessment **Information to Inform Habitats Regulations Assessment [EN010153/DR/5.3].** During construction, there is the risk of noise, vibration, and visual disturbance (from machinery and human presence) which could cause waterbirds to avoid using nearby parts of the estuary or supporting fields. The works are proximate to known bird areas, so a precautionary approach was taken. The project **oCEMP [EN010153/DR/7.5]** includes measures such as fenced exclusion zones near sensitive habitat, scheduling of the most disruptive activities outside of the core wintering period and controlling construction lighting at night. These embedded measures, combined with the spatial buffer to the estuary, reduce the intensity and footprint of disturbance. The phasing strategy ensures that, at any given time, large portions of land near the NBBMA remain undisturbed refuge for birds. As a result, waterfowl and waders are expected to habituate to the limited, short-term construction presence or relocate to safe nearby areas (such as the NBBMA or undisturbed saltmarsh) without significant energetic cost.

7.8.21 During operation, the solar installation is largely passive and quiet; maintenance visits will be infrequent and along fixed routes, resulting in only minor occasional disturbance similar to normal farm traffic. Any necessary equipment replacements will be controlled to avoid undue habitat disturbance, the need for periodic significant replacements is expected to be infrequent but the **outline Operational Environmental Management Plan *[EN010153/DR/7.6]*** sets out procedures to manage such events. The panel arrays themselves are low-profile and do not create moving parts or substantial human activity. The Appropriate Assessment found that with these controls in place, disturbance and displacement impacts are mitigated to a

level that avoids any reduction in the SPA bird populations or their use of the Site. In other words, the disturbance will be too limited to appreciably alter the distribution or abundance of qualifying species, and there would be no adverse effect on site integrity from disturbance.

7.8.22 **Glint and Glare:** The assessment also considered whether sunlight reflections from the solar PV panels could disrupt bird movements or behaviour. A detailed Glint and Glare Assessment was undertaken **ES Vol 2 Appendix 4-3: Glint and Glare Assessment [EN010153/DR/6.2]** and it predicted only very limited occurrences of solar reflections toward the surrounding environment, none of which overlap with the key feeding or roosting areas used by SPA bird species. To further safeguard against any unforeseen effects, the project design includes measures to reduce glint and glare to negligible levels, including adjusting panel orientations and installing a 3.5 m high vegetative screen along the Site boundaries. With these measures in place, any residual reflections would be extremely infrequent and only under low-angle sunlight conditions, similar to that experienced by natural sun glare.

7.8.23 Importantly, such residual glint or glare does not coincide spatially with the birds' regular foraging ranges on the estuary or adjacent fields. The Appropriate Assessment noted there is no empirical evidence that solar reflections adversely affect waterbird flight paths or behaviour, especially given the open landscape and the birds' ability to adjust their flight slightly if needed. The panels are below typical tree height and present no physical barrier to flight. It was therefore concluded that the solar farm's glint and glare will not cause any disturbance or barrier effect for the SPA's qualifying species. This potential impact pathway was deemed effectively neutralized by the design, posing no risk to site integrity.

7.8.24 **Water and Air Quality:** Indirect impact pathways through water or air were examined as part of the information to inform Habitats Regulations Assessment **Information to Inform Habitats Regulations Assessment**

[EN010153/DR/5.3] and ruled out as significant factors. Surface water runoff from the construction site has a possible hydrological connection to the Mersey Estuary via local drainage ditches. Without mitigation, there was a concern that sediment, nutrients, or other pollutants could be conveyed into the estuarine environment. However, the implementation of comprehensive water management measures (secured in the **oCEMP [EN010153/DR/7.5]**) will prevent any degradation of water quality in the SPA. Construction will adhere to best practice pollution prevention: for example, silt fences and settlement ponds will capture sediment, machinery will be well maintained to avoid fuel leaks, and a buffer will be maintained between works and watercourses. No in-stream works or direct discharges into the estuary are proposed. As a result, the risk of increasing contaminant levels in the Mersey Estuary is negligible, and the change in land use from intensive agriculture to a solar farm overall is expected to reduce ongoing nutrient inputs to the estuary.

7.8.25 Similarly, potential air quality impacts (primarily dust generation and vehicle emissions during construction) are found to be minor and well controlled. Dust suppression measures will be applied on site, and the distance to the estuary means any airborne particulates is likely to settle out before reaching the sensitive saltmarsh vegetation. Baseline air quality in the area is good and is predicted to remain within national standards throughout the build period. With the embedded mitigation in place (e.g. damping down of dust and machinery emissions controls etc.) there is no credible pathway for significant air pollution affecting the SPA. The Appropriate Assessment **Information to Inform Habitats Regulations Assessment [EN010153/DR/5.3]** confirmed that neither water quality nor air quality changes attributable to the project would compromise the conservation conditions of the Mersey Estuary SPA/Ramsar. On the contrary, by removing a source of agricultural runoff and actively managing invasive plant species in the wetlands, the project is likely to improve the supporting habitat conditions over time.

7.8.26 The Appropriate Assessment **Information to Inform Habitats Regulations Assessment [EN010153/DR/5.3]** concluded that the Frodsham Solar development, with its embedded design measures and committed mitigation, will not result in an adverse effect on the integrity of the Mersey Estuary SPA or Ramsar site. All potential impact pathways were fully assessed and either found to be not significant or rendered insignificant through the proposed mitigation. In particular, habitat loss is compensated by the provision of managed supporting habitat, disturbance is minimized to avoid meaningful effects on bird populations, and indirect effects (noise, water, air, visual) are controlled to levels that do not harm the Site's qualifying features. The ecological functionality and conservation objectives of the SPA/Ramsar will therefore be maintained.

7.8.27 This conclusion applies both to the project acting alone and in combination with other developments in the area. No in-combination adverse effects are anticipated, especially as other nearby projects will be subject to similar phasing and mitigation coordination once they carry out their own Appropriate Assessment processes. In summary, by applying the mitigation hierarchy and undertaking a thorough Appropriate Assessment, the Proposed Development has demonstrated that it can proceed without detriment to the protected integrity of any European site under the Habitats Regulations.

7.9 Biodiversity and Environmental Net Gain

Planning Policy Context

7.9.1 Biodiversity Net Gain (BNG) is not yet statutory for NSIPs (anticipated to be introduced in November 2025), however EN-1's guidance establishes an expectation that, where possible, energy infrastructure projects will deliver a net positive outcome for biodiversity.

7.9.2 EN-1 sets out the principle of environmental net gain, defined as development that leaves the natural environment "in a measurably better state than beforehand" (paragraph 4.6.1). Within this, BNG is identified as an essential

component – projects in England are expected to consider and seek to incorporate measures that improve natural capital and biodiversity (EN-1 paragraph 4.6.2).

7.9.3 EN-1 makes clear that BNG does not replace the need to first follow the mitigation hierarchy, but should be pursued in addition to meeting existing obligations (paragraph 4.6.10).

7.9.4 Paragraph 4.6.7 of EN-1 states that in England, applicants should use the latest version of the statutory biodiversity metric to calculate their biodiversity baseline and present planned BNG outcomes, and that this should be presented as part of the application.

7.9.5 Further technology-specific considerations are set out within Section 2.10 of EN-3. Paragraph 2.10.89 of EN-3 notes that solar farms have potential to increase a site's biodiversity value, especially on previously intensively-managed land, and that in some cases this can provide benefits and enhancements beyond what basic biodiversity net gain requires, resulting in wider environmental gains.

7.9.6 The local policy context (set out in the Local Plan and supporting Neighbourhood Plans) broadly mirrors national requirements, requiring measurable net gains for biodiversity.

Assessment Conclusions

7.9.7 The **BNG Report** ***[EN010153/DR/7.12]*** provides an assessment undertaken utilising DEFRA's Statutory Biodiversity Metric Calculator to provide evidence of an achievable on-site gain in biodiversity units, equivalent to a gain of 11% in area-based habitats, 89% in linear habitats, and 13% in watercourse-based habitats when including the NBBMA. When excluding the NBBMA, the Proposed Development still achieves gains in area-based and linear habitats, but a 10% gain in watercourse-based habitats is not achieved.

7.9.8 Measures relating to the creation, management and monitoring of habitats created and enhanced, as well as other biodiversity enhancement measures, are set out within the **outline Landscape and Ecology Management Plan (oLEMP)** ***[EN010153/DR/7.13]***.

7.9.9 The Proposed Development will leave biodiversity in a measurably better state, which is the cornerstone of both national and local policy.

7.10 Ground Conditions

Planning Policy Context

7.10.1 Overarching policy considerations relating to ground conditions are set out within Section 5.11 of NPS EN-1. EN-1 sets out that developing land will inevitably affect soil resources (paragraph 5.11.4), so applicants should identify effects on soils and seek to minimise impacts on soil health and protect or improve soil quality (paragraph 5.11.13).

7.10.2 Developments are expected to contribute to and enhance the environment by preventing new or existing developments from being put at unacceptable risk from soil pollution or land instability (paragraph 5.11.15).

7.10.3 EN-1 requires that where a development is being proposed on sites with pre-existing land contamination, it should be ensured that the site is suitable for the intended use (paragraph 5.11.17), with risks considered in accordance with contaminated land statutory guidance (paragraph 5.11.5). Applicants are specifically required to assess contamination risks and address them as needed, with opportunities for remediation considered where possible (paragraph 5.11.18).

7.10.4 EN-1 further encourages the use of Soil Management Plans to handle soils sustainably and to carefully consider the sustainable reuse of excavated soils, especially where large volumes may be surplus or affected by contamination (paragraph 5.11.14).

7.10.5 Further technology-specific considerations are set out within Section 2.10 of NPS EN-3. EN-3 notes that whilst land type should not be the sole factor in site selection, use of previously developed, brownfield or contaminated land is encouraged where possible (paragraph 2.10.29).

7.10.6 EN-3 advises applicants to consider site-specific risks and provide relevant geotechnical or hydrological information where necessary, for example in identifying the presence of peat at a site, or in connection to land stability risks (paragraph 2.10.92).

7.10.7 Policy DM 32: Land Contamination and Instability is the principal policy covering ground conditions in the CWaCC Local Plan and sets detailed requirements for developments on land that is known or suspected to be contaminated or unstable. Any development on previously developed or potentially contaminated sites must be supported by an appropriate contamination risk assessment showing that contamination risks can be successfully mitigated and managed over the development's lifetime.

Assessment Conclusions

7.10.8 **ES Vol 1 Chapter 10: Ground Conditions *[EN010153/DR/6.1]*** sets out the Applicant's full assessment of the likely significant effects on ground conditions as a result of the Proposed Development. The chapter is supported by comprehensive supporting environmental investigation set out in **ES Vol 2 Appendix 10-1: Stage 1 Geo-Environmental Assessment *[EN010153/DR/6.2]***. This section of the Planning Statement contains only a brief summary of the likely impacts and effects.

Approach

7.10.9 The approach to preparing **ES Vol 1 Chapter 10: Ground Conditions *[EN010153/DR/6.1]*** has been informed by a comprehensive site investigation programme including desk studies and data gathering, walkover surveys, intrusive ground investigations, groundwater and leachability testing, ground

gas and unexploded ordnance risk assessment, and other specialist surveys such as peat assessment.

7.10.10 The Applicant has followed the Environment Agency's Land Contamination Risk Management (LCRM) guidance in preparing the assessment and conducting the **ES Vol 2 Appendix 10-1: Stage 1 Geo-Environmental Assessment *[EN010153/DR/6.2]***.

Baseline

7.10.11 The Site has a history of land reclamation use that strongly influences its soils and geology. The western half of the solar array area comprises the former Manchester Ship Canal Dredging Deposit Grounds – a series of engineered cells where dredged sediments from the ship canal were historically deposited and allowed to settle. These cells (notably Cells 1–5, with Cell 6 still active just south of the Site) have since been drained; today they form flat agricultural fields. The deposited canal dredgings mean that much of the western site area is underlain by made ground consisting of silty clay dredge material, in places many metres thick. Site investigations confirm that the dredge deposits reach over 10 m below ground level in parts of the western site. These sediments contain a mix of estuarine alluvium and organic material, including some peat layers at depth (a band of fibrous peat was encountered around 10–12 m below ground in boreholes) as well as potential contaminants from the canal.

7.10.12 In contrast, the eastern half of the Site consists of former agricultural marshland now managed as arable land or rough grassland for wildlife. Ground investigations in the eastern area (drilled to approximately 5.5 m depth) did not encounter peat deposits. A targeted Peat Reconnaissance Survey concluded that there is no evidence of near-surface peat in the eastern part of the Site; any historic peat that may have existed has likely been lost due to past agricultural drainage and land use. The site's natural stratigraphy includes Tidal Flat Deposits (estuarine silts and clays with some organic

content) underlain by glacial sands and the bedrock (Triassic sandstones) at greater depth.

7.10.13 Aside from the dredged materials on Site, there are also several former landfill or waste sites in the vicinity.

7.10.14 The site walkover and desk study did not identify any areas of significant contamination beyond the known dredge deposits and adjacent landfills. Ground gas (methane/CO_2) generation is possible from degrading organic dredge material or peat at depth, and this has been considered in the risk assessment.

7.10.15 Overall, the ground stability hazard at the Site is low – **ES Vol 1 Chapter 10: Ground Conditions *[EN010153/DR/6.1]*** finds a very low risk of landslide or subsidence across most of the Site, and negligible risks from shrinking clays, collapsible ground or dissolution cavities.

7.10.16 In summary, the Site's baseline is characterised by deep made-ground (dredged sediment) in the west (with some associated contamination and peat layers), more natural alluvial soils in the east, and a context of nearby historic waste disposal sites.

Design and Mitigation Measures

7.10.17 The Proposed Development has followed the mitigation hierarchy to prevent issues as a result of ground conditions as far as possible, with mitigation measures set out in full within Section 10.7 of **ES Vol 1 Chapter 10: Ground Conditions *[EN010153/DR/6.1]***.

7.10.18 On the former dredging cells, the design of the Proposed Development has ensured that ground disturbance associated with construction of the solar arrays, BESS and on-site substation will be limited. The solar arrays will use pile foundations (driven, screw or helical piles) that will only penetrate up to a maximum of 5 m below ground and produce minimal excavated arisings. These piling methods do not introduce new pathways for contaminant

migration, and thus are not expected to create significant geo-environmental risk. If any locations are found unsuitable for piling due to obstructions or stability concerns, the fallback is to use surface-mounted frame structures to avoid deep excavation. In this way, the Proposed Development avoids aggravating latent contamination and limits soil disruption.

7.10.19 During construction, industry-standard mitigation measures will be implemented to manage soils and contamination risks. An **outline Soil Management Plan (oSMP)** ***[EN010153/DR/7.10]*** has been prepared, setting out best-practice methods for soil handling, storage, and reuse across all phases of the project. The oSMP describes how topsoil and subsoil will be stripped and stored separately to prevent mixing, how soil stockpiles will be controlled to avoid erosion or runoff, and how soils will be restored on completion of works. Crucially, the oSMP also includes a contaminated land and materials management strategy that aligns with the CL:AIRE Definition of Waste Code of Practice (DoWCoP) and EA guidance. This means excavated materials will be tested and managed appropriately, reusing them on site where safe and permissible, or disposing of them off-site in accordance with waste regulations. By planning for on-site reuse of dredged material the Proposed Development seeks to avoid creating waste while ensuring no contaminated material is left in a harmful state.

7.10.20 The applicant has committed to prepare a Materials Management Plan prior to construction, and to obtain any necessary EA approvals or permits (as set out in the **Other Consents and Licences Statement** ***[EN010153/DR/5.5]***).

7.10.21 Further mitigation measures for the construction phase are set out in the **outline Construction Environmental Management Plan (oCEMP)** ***[EN010153/DR/7.5]***. These measures include protocols to avoid and reduce the risk of the spread of contamination during works. Construction staff will follow pollution prevention guidelines to avoid introducing new contaminants. If unexpected contamination is encountered, the **oCEMP [EN010153/DR/7.5]**

provides for an Unexpected Contamination Protocol to stop-work and ensure appropriate remediation procedures.

7.10.22 The Proposed Development has committed to develop a Remedial Strategy as part of the final CEMP. This strategy will detail any clean-up or specific remediation actions needed for areas of the Site before construction, based on further ground investigations.

7.10.23 A Foundation Works Risk Assessment and a Piling Risk Assessment will be undertaken prior to construction to inform piling and foundation methods in areas of made ground to ensure that foundation construction does not mobilise contaminants or create pathways to groundwater.

7.10.24 In light of the above, the DCO commits the Applicant to bringing forward a ground conditions investigations and assessments strategy which will provide the LPA with information as to how its investigations and assessments will fit together to ensure all impacts are appropriately mitigated.

7.10.25 An **outline Operational Environmental Management Plan (oOEMP)** ***[EN010153/DR/7.6]*** will be in place to manage any maintenance activities that involve ground disturbance. Similarly, an **outline Decommissioning Environmental Management Plan (oDEMP)** ***[EN010153/DR/7.7]*** will ensure that when the Proposed Development is removed, this is done with measures to protect soils and properly manage or dispose of any waste materials.

Assessment

7.10.26 **ES Vol 1 Chapter 10: Ground Conditions** ***[EN010153/DR/6.1]*** evaluates potential contaminant linkages for a range of receptors – including construction workers, future site maintenance personnel, nearby residents, controlled waters (groundwater and surface water), farmland soils, livestock, ecological receptors, and built structures. The risk of contaminant mobilisation is largely associated with ground disturbance during construction of the NBBMA and foundation works (piles and excavations) across the Proposed Development. However, with the embedded design and mitigation measures

set out above in place, none of these receptors are predicted to experience significant effects.

7.10.27 By the operational phase, all infrastructure will be designed for the ground conditions, so the presence of the Proposed Development does not pose ongoing contamination pathways. The stability of structures will be ensured through appropriate foundation design, meaning no significant risk from settlement or instability.

7.10.28 **ES Vol 1 Chapter 10: Ground Conditions *[EN010153/DR/6.1]*** confirms that no significant residual impacts on human health, controlled waters, ecology, land or property due to ground contamination or ground instability have been identified.

Appraisal

7.10.29 National policy requirements for managing soils, contamination and stability are addressed by the application. EN-1 calls for careful assessment of soil impacts and encourages mitigation to protect soil quality; the Applicant has undertaken a thorough geo-environmental assessment of the Site's soils and geology, including intrusive investigations and laboratory testing, to identify any contamination or stability risks, and to inform the mitigation strategy.

7.10.30 The inclusion of the **oSMP *[EN010153/DR/7.10]*** directly responds to EN-1 paragraph 5.11.14, which encourages Soil Management Plans to minimise land contamination and ensure sustainable reuse of soil resources.

7.10.31 EN-1 also requires that new developments should not be put at unacceptable risk from existing contamination or land instability. The Applicant's investigations have confirmed that the Site is suitable for the Proposed Development; no unacceptable risks have been found, and any pre-existing contamination will be managed or remediated so that the Proposed Development will not introduce risks to people or the environment.

7.10.32 The planned Remedial Strategy and the engineering design of foundations ensure that land instability and settlement risks are adequately controlled, aligning with EN-1 (paragraphs 5.11.17–5.11.18) which require making sure the ground is stable and safe for the intended use.

7.10.33 EN-3 expects developers to identify and consider peat soils; the Applicant's peat survey confirms that peat is largely absent from the developable areas (aside from deep subsurface layers that will remain undisturbed).

7.10.34 The Proposed Development has been appraised against local plan policies relevant to ground conditions within the **Policy Compliance Document *[EN010153/DR/5.7]***. In terms of Policy DM 32: Land Contamination and Instability, the application clearly meets its requirements. A comprehensive contamination assessment has been provided as part of **ES Vol 1 Chapter 10: Ground Conditions *[EN010153/DR/6.1]***, demonstrating the Applicant's understanding of the contamination profile across the Site. This assessment, coupled with the proposed mitigation measures, shows that any risks from contaminants can be successfully mitigated and managed over the lifetime of the development.

7.10.35 In conclusion, having regard to the relevant national and local policies on ground conditions, and based on the findings of **ES Vol 1 Chapter 10: Ground Conditions *[EN010153/DR/6.1]***, the Proposed Development is policy compliant.

7.11 Agricultural Land

Planning Policy Context

7.11.1 Overarching policy considerations relevant to agricultural land are set out within Section 5.11 of NPS EN-1, with further considerations provided in the technology specific NPS EN-3.

7.11.2 EN-1 directs that applicants should seek to minimise impacts on the 'best and most versatile' (BMV) agricultural land – defined as Grades 1, 2, and 3a – and

instead use lower quality land (Grades 3b, 4, 5) wherever possible (para. 5.11.12). Applicants are also expected to identify and mitigate effects on soil health, protecting or improving soil quality with appropriate measures (para. 5.11.13).

7.11.3 EN-1 encourages applicants to prepare a Soil Management Plan to ensure sustainable handling of soils and to reduce contamination risks, especially if significant volumes of soil will be disturbed (para. 5.11.14).

7.11.4 In terms of decision-making, NPS EN-1 sets out that applicants should avoid siting projects on BMV agricultural land without clear justification. If development on BMV land is proposed, the economic and other benefits of that farmland should be taken into account, and poorer quality land should be preferred over higher quality land (para. 5.11.34).

7.11.5 Further technology-specific considerations are set out within Section 2.10 of NPS EN-3. EN-3 sets out that whilst land type should not be the predominant factor in site selection, applicants should, where possible, use previously developed, brownfield, contaminated or industrial land for solar projects. If the use of agricultural land is necessary, poorer quality farmland should be preferred and BMV land avoided as far as practicable (paragraph 2.10.29).

7.11.6 EN-3 makes clear that while development of ground-mounted solar arrays on BMV land is not prohibited, any such proposal's impacts on the land and environment must be carefully considered (paragraph 2.10.30).

7.11.7 EN-3 acknowledges that at the scale of NSIP solar projects some use of agricultural land is likely; accordingly, applicants should explain their site selection, demonstrating that they have considered and, where possible, prioritised brownfield sites, existing industrial land, and lower-grade agricultural land in preference to higher-grade farmland (paragraph 2.10.31).

7.11.8 EN-3 states that the Agricultural Land Classification (ALC) is the appropriate system for grading land, and where relevant field surveys should be conducted to establish the ALC grade and soil characteristics. This

information should be used to inform soil management practices during construction, operation, and decommissioning of the solar farm (paragraph 2.10.33).

7.11.9 Finally, EN-3 notes at paragraph 2.10.32 that consideration may be given as to whether the proposal allows for continued agricultural use or co-location with other functions, to maximise the efficiency of land use.

7.11.10 The local policy context (set out in the Local Plan and supporting Neighbourhood Plans) echoes the national policy approach. CWaCC Local Plan Part One policy STRAT 1 Sustainable development supports a series of sustainable development principles, including the minimisation of the loss of high-grade agricultural land. Local Plan Part Two policy DM 52 Solar energy states that, where it is demonstrated that there are no suitable sites on previously developed land and development is proposed on agricultural land, the best and most versatile land must be avoided in favour of lesser quality land.

Assessment Conclusions

7.11.11 An Agricultural Land Classification (ALC) and Soil Resources survey was undertaken prior to EIA Scoping and included with the EIA Scoping Report, which forms *Appendix 17.2* of **ES Vol 2 Appendix 1-1 Frodsham Solar Scoping Report *[EN010153/DR/6.2]***.

7.11.12 The ALC survey established that the Site is predominantly grade 4, with some areas of grade 3b land in the west. The Site is therefore not 'best and most versatile' agricultural land.

7.11.13 On the basis of the findings of the ALC survey, and the Applicant's commitment to preparing an **outline Soil Management Plan *[EN010153/DR/7.10]***, an assessment of effects on agricultural land was scoped out of the ES as significant effects would not occur.

Appraisal

7.11.14 The Applicant's approach to site selection and why agricultural land is needed is set out within **ES Vol 2 Appendix 3-1: Alternative Site Assessment *[EN010153/DR/6.2]***. This confirms that the use of agricultural land is necessary to deliver the Proposed Development, and that lower quality and contaminated land has been prioritised over higher quality greenfield land, which accords with the requirements of EN-3 paragraph 2.10.31.

7.11.15 The Applicant has used the ALC system (EN-3 paragraph 2.10.33) and confirmed that the Site is not BMV land (EN-1 paragraph 5.11.34, and EN-3 paragraph 2.10.30).

7.11.16 An **outline Soil Management Plan *(oSMP) [EN010153/DR/7.10]*** has been prepared and submitted with the application. The oSMP sets out how soils will be handled to preserve their quality and allow for successful reinstatement. The plan covers the approach to managing soils that may be contaminated, and how they would be either re-used, treated, or disposed of. As an outline plan, it sets the principles and commitments that will later be refined into a final SMP before construction begins.

7.11.17 The Proposed Development has been appraised against local plan policies relevant to agricultural land within the **Policy Compliance Document *[EN010153/DR/5.7]***.

7.11.18 In conclusion, having regard to relevant national and local policies on agricultural land, the Proposed Development is policy compliant.

7.12 Flood Risk and Drainage

Planning Policy Context

7.12.1 Overarching flood risk policy considerations are set out within Section 5.8 of NPS EN-1. EN-1 sets out that the aim of planning policy on development and flood risk is to ensure that risks from all sources of flooding are taken into account, to avoid inappropriate development in areas at risk of flooding, and

to steer new development to areas with the lowest risk of flooding (paragraph 5.8.6). Where new energy infrastructure is, exceptionally, sited in a flood risk area, it must be made safe for its lifetime without increasing flood risk elsewhere (paragraph 5.8.7).

7.12.2 EN-1 requires a risk-based, sequential approach to site selection. New projects should be steered to areas of lowest flood risk, avoiding Flood Zones 2 and 3 wherever feasible. If a development is to be located in a higher-risk flood zone, the Sequential Test must be applied to show there is no reasonably available site in a lower risk area (paragraph 5.8.21).

7.12.3 If the sequential test cannot deliver a reasonably acceptable site then the Exception Test is required. The Exception Test requires applicants to demonstrate two elements: (i) that the development will provide wider sustainability benefits outweighing the flood risk, and (ii) that the development will be safe for its lifetime, considering the vulnerability of its users, without increasing flood risk elsewhere (paragraph 5.8.11). Both elements must be satisfied for consent.

7.12.4 EN-1 mandates that a site-specific Flood Risk Assessment (FRA) be provided for all development in Flood Zones 2 or 3 (paragraph 5.8.13) to identify all forms of flooding to and from the development and how those risks will be managed, taking climate change into account (paragraph 5.8.14). The minimum requirements for a FRA are set out in detail at paragraph 5.8.15.

7.12.5 If proposed development that may be at risk of flooding, EN-1 requires applicants to consult the Environment Agency and Lead Local Flood Authority during the pre-application period (paragraph 5.8.18).

7.12.6 With regard to surface water and drainage, EN-1 encourages the use of Sustainable Drainage Systems (SuDS) and natural flood management techniques wherever possible to manage surface water and ensure no increase in flood risk off-site (paragraph 5.8.27).

7.12.7 Paragraph 5.8.29 of EN-1 states that a sequential approach should be applied to the layout and design of the development, with vulnerable infrastructure located on parts of the site at lower risk of flooding.

7.12.8 EN-1 requires applicants to ensure the risk of flooding is managed by ensuring flood warning and evacuation plans are in place (paragraph 5.8.33-34).

7.12.9 Further technology-specific considerations are set out within Section 2.10 of NPS EN-3. EN-3 states that where a FRA has been carried out, it must be submitted alongside the ES (paragraph 2.10.86).

7.12.10 Paragraphs 2.10.87-88 of EN-3 states that culverting should be avoided wherever possible.

7.12.11 Policy ENV 1: Flood Risk and Water Management and Policy DM 40: Development and Flood Risk are the principal policies on flood risk in the CWaCC Local Plan, and broadly mirror the requirements set out in national policy and guidance. Policy ENV 1 confirms that development should follow the sequential approach to determining the suitability of land for development, directing development to areas of lowest risk of flooding, and where necessary apply the exception test. Policy DM 40 states that flood risk should be avoided or reduced by locating development within areas of lower flood risk through the application of a borough-wide sequential test, and then where required, applying the exception test in line with national policy.

Assessment Conclusions

7.12.12 **ES Vol 1 Chapter 9: Flood Risk and Drainage *[EN010153/DR/6.1]*** sets out the Applicant's full assessment of flood risk and drainage for the Proposed Development, identifying any likely significant effects. The chapter is supported by the mandatory FRA at **ES Vol 2 Appendix 9-1: Flood Risk Assessment *[EN010153/DR/6.2]***. This section of the Planning Statement contains only a brief summary of he likely impacts and effects.

Approach

7.12.13 As is explained in ES Vol 2 Appendix 3-1: Alternative Site Assessment (ASA) [EN010153/DR/6.2], despite the fact that the Part Two Local Plan is adopted, and consequently has been judged 'sound' and in accordance with the NPPF, applying a borough-wide sequential test in all cases may be neither appropriate nor in accordance with NPS policy. EN-1 (paragraph 4.2.21) requires a significant number of deliverable locations for CNP infrastructure, and for each location to maximise their capacity. As set out at Section 3.4 above (Site Selection) EN-3 paragraph 2.10.22 states that the capacity of the local grid network is critical to the technical and commercial feasibility of a development, and the distance from the solar farm to the existing network can have a significant effect on commercial feasibility of a proposal. The available grid capacity at the SPEN Frodsham substation needs to be utilised to capacity to help deliver the clean power needed by 2030 and consequently to comply with the objectives of EN-1 and EN-3. To identify a feasible and appropriate site that can utilise the available grid capacity it needs to be a site that is sufficiently close such that it is economically practical. It is not therefore appropriate, or consistent with the objectives of EN-1 and EN-3, to undertake a borough-wide sequential search in the case of a solar farm whose general location is dependent upon proximity to a grid connection with sufficient capacity.

7.12.14 Site-specific hydraulic modelling has been undertaken for the Site to determine potential flood extents and levels under various periods, and future climate change scenarios. The modelling accounts for projected increases in river flows and sea levels, in line with the latest climate change allowances, to ensure a robust understanding of flood risk over the development's lifetime. The hydraulic modelling is presented in **ES Vol 2 Appendix 9-2: Hydraulic Modelling Report *[EN010153/DR/6.2]***.

7.12.15 Flood risk mapping data updated by the Environment Agency in March 2025 has informed the FRA and sequential test, however the site-specific hydraulic

modelling which has been reviewed by the EA provides a finer grain of detail appropriate to the Site.

7.12.16 The flood modelling and drainage design incorporate the appropriate climate change allowances for the North West. For fluvial and tidal flood risk, the FRA has used the 1 in 100 year flood level plus a 35% and 45% increase (adaptive scenario) to reflect potential increases in flow by the 2080s, following Environment Agency guidance.

Design and Mitigation Measures

7.12.17 Following the selection of the Site (as set out in **ES Vol 2 Appendix 3-1: Alternative Site Assessment *[EN010153/DR/6.2]***), the Proposed Development has followed the mitigation hierarchy to address flood risk and drainage effects.

7.12.18 The layout of the Proposed Development was developed iteratively to avoid placing the most flood-sensitive infrastructure in areas of greatest flood risk. A sequential approach was applied within the Site, such that wherever possible infrastructure was sited in Flood Zone 1. Notably, the Battery Energy Storage System (BESS) compound and the new substation (Frodsham Solar Substation) have been located in the western part of the Site to keep these vulnerable elements on land with the lowest flood risk.

7.12.19 Where it has been essential to locate infrastructure within Flood Zone 3, the design minimises vulnerability and incorporates protective measures. All such infrastructure has been designed to a site-wide ‘design flood level’ to withstand flood conditions and avoid flood impacts. For example, the solar PV panels will be mounted on frames that elevate the modules above the design flood level, and sensitive electrical equipment (inverters/transformers) will similarly be raised on platforms safely above the modelled flood heights.

7.12.20 These measures ensure that even during a flood event, key components remain dry and operational (or can be shut down safely) and do not obstruct water flows. At the same time, the spacing of panel rows and the open nature

of the mounting structures would allow flood water to pass through the Proposed Development with minimal impedance.

7.12.21 It is noted that no ground raising is proposed as part of the Proposed Development. Flood water volume displacement has been considered by the hydraulic modelling (see **ES Vol 2 Appendix 9-3: Hydraulic Modelling Report [EN010153/DR/6.2]**) as a result of the cumulative footprint of all solar module supporting columns, fence posts, CCTV posts and any other posts / stilts used to raise infrastructure above flood levels. During both the defended and breach modelled scenarios for the River Weaver there is no increase in flood risk elsewhere as a result of the Proposed Development. For the River Mersey defended and breach tidal events, there is negligible change in flood risk offsite, with small areas of increased flood depth in the agricultural fields immediately south of the Site. There would be no increased risk of flooding of residential areas or of infrastructure.

7.12.22 The Applicant has chosen to utilise open span crossings (as opposed to culverts) of all watercourses within the Site where new crossings are required for access, and in addition has committed to replacing existing culverts with open span crossings to enhance site drainage and the existing watercourses.

7.12.23 Where flood risk cannot be entirely avoided, the Applicant has implemented measures to reduce and mitigate any potential impacts. As set out in the **outline Construction Environmental Management Plan (oCEMP) *[EN010153/DR/7.5]***, during construction a range of standard best-practice measures will mitigate drainage and water pollution risks – for example, temporary drainage will be installed where necessary, works will avoid periods of heavy rain, and sediment controls (such as silt fences or settlement ponds) will be used to prevent runoff carrying soil into watercourses.

7.12.24 Maintenance of the Proposed Development's drainage features is secured by the requirements of the **outline Operational Environmental Management Plan *[EN010153/DR/7.6]*** which ensures regular maintenance of SuDS and ditches.

7.12.25 A Flood Warning and Evacuation Plan (FWEP) **ES Vol 1 Chapter 9: Flood Risk, Drainage and Surface Water Appendix M *[EN010153/DR/6.1]*** has been prepared which sets out how a flood event would be responded to.

Assessment Findings

7.12.26 **ES Vol 1 Chapter 9: Flood Risk and Drainage *[EN010153/DR/6.1]*** concludes that with the design and mitigation measures set out above in place, the Proposed Development would not present an unacceptable flood risk to people or property and would not increase flood risk off-site for any nearby areas or receptors. The FRA and associated modelling demonstrate that any alterations to local flood flow paths or storage (for instance, the presence of solar panel mounting structures or new infrastructure) will be accommodated or managed within the Site so that no worsening of flood conditions occurs beyond the Site boundary.

7.12.27 The Proposed Development is resilient to the impacts of climate change on flooding; even under more extreme future climate conditions (with heavier rainfall and higher river levels), the Site's flood protections remain effective, and the proposed infrastructure would be protected.

7.12.28 During the operational phase, surface water runoff rates will be controlled to greenfield rates. The vast majority of the Proposed Development will remain or be transitioned to permeable green field (grassland). The solar arrays themselves introduce minimal new impermeable surfaces (as acknowledged by paragraph 2.10.84 of EN-3) – rainfall on the solar panels will drip onto vegetated ground and continue to infiltrate into the soil or drain to nearby watercourses, as it does in the existing scenario. Where new impermeable surfaces are proposed (most notably at the substation and BESS compound, as well as small pads for inverter/transformer equipment), the design integrates SuDS to provide natural attenuation.

7.12.29 Overall, the significance of flood risk and drainage effects from the project was assessed to be neutral or negligible after mitigation. **ES Vol 1 Chapter**

9: Flood Risk and Drainage *[EN010153/DR/6.1]* confirms there would be no significant adverse effects on flood risk, drainage, or surface water quality in any phase (construction, operation, or decommissioning) of the Proposed Development.

Sequential Test

7.12.30 A Sequential Test has been undertaken and is reported in **ES Vol 2 Appendix 3-1: Alternative Site Assessment (ASA) *[EN010153/DR/6.2]*** which demonstrates that there are no reasonably available alternative locations for the Proposed Development in areas of lower flood risk. The Sequential Test and ASA have considered the specific requirements of the Proposed Development – including the need for a large, contiguous site, appropriate topography, proximity to a viable grid connection point, and land availability. Given these constraints, there are no reasonably available suitable alternative sites outside Flood Zone 3. The evidence shows that the Site offers a unique combination of grid connection opportunity and available open land, and that other potential locations are not suitable for other overriding reasons (such as environmental designations or insufficient size). The Applicant's assessment confirms that the chosen Site meets the requirements of the Sequential Test and on this basis, national and local policy allow the project to be considered in Flood Zone 3a, subject to the Exception Test.

Exception Test

7.12.31 An Exception Test has been carried out because part of the Proposed Development falls within Zone 3a and the use is classified as "Essential Infrastructure" within Annex 3 of the NPPF.

7.12.32 As set out in Section 2.0 of this Planning Statement, there is an urgent need for new renewable electricity generating capacity to meet our energy objectives, transition to net zero, and meet our statutory carbon budgets. This is manifest most notably in section 3.2.6 of EN-1 where it is confirmed that the Secretary of State should assess all development covered by the NPS on

the basis that the government has demonstrated there is need for it which is urgent, and that substantial weight should be given for this need.

7.12.33 Section 2.0 of this Planning Statement provides further detail on legislative and government policy in relation to the need for additional renewable energy capacity. The development would provide a significant supply of renewable energy to the District Network, and potentially directly to industry via private wire. Consequently, the wider sustainability benefits that outweigh the flood risk have been appropriately demonstrated. Nonetheless, it remains a prerequisite on applicants to ensure that new energy infrastructure is designed to ensure it can remain operational and will be safe for its lifetime and will not increase flood risk elsewhere (EN-1 paragraph 5.8.7 and EN-3 paragraph 2.4.11).

7.12.34 The Proposed Development has been designed so that the elements of the Proposed Development that are critical to the ongoing functioning of the generating station in the event of an extreme flood would be located within the Flood Zone 1 areas of the Site (the BESS compound, substation compound etc). The only operational elements of the Proposed Development proposed in Flood Zone 3 would comprise some of the PV panels, PCUs / transformer stations, below ground electric cables, security fencing and CCTV camera, the OHL connection to SPEN Frodsham Substation (raised well above the design flood levels), and access tracks (largely permeable and constructed at grade to avoid impact of runoff and conveyance) etc.

7.12.35 In relation to those elements of the Proposed Development within Flood Zone 3a, **ES Vol 1 Chapter 2: The Proposed Development *[EN010153/DR/6.1]*** describes how the components of electrical infrastructure which are vulnerable to inundation in a flood event have been raised above the design flood level for the Site. This will enable that part of the facility affected by any flood water to maintain operation during a flood event. In extreme events, the Proposed Development would also operate so that individual sections would be able to be isolated from the power system. This would enable the

remainder of the Site to continue to operate independently and ensure that health and safety risks are appropriately managed. This has been calculated via the hydraulic flood modelling set out above.

7.12.36 **ES Vol 2 Appendix 9-1: Flood Risk Assessment and Drainage Strategy *[EN010153/DR/6.2]*** also describes how surface water runoff from impermeable areas of the Proposed Development would be managed to greenfield runoff rates. It also addresses the impact of development within the flood zone in relation to displacement of flood water. In this regard the Proposed Development would not impact flood risk elsewhere.

7.12.37 In relation to the safety of users the Proposed Development will not be permanently staffed but would be temporarily occupied during routine maintenance visits. The Site will also be occupied during construction.

7.12.38 As set out in the Flood Warning and Evacuation Plan **ES Vol 1 Chapter 9: Flood Risk, Drainage and Surface Water Appendix M *[EN010153/DR/6.1]*,** when a flood warning is in place, any construction works would not take place. During the operational phase, maintenance visits would not be undertaken when a flood warning is in force. The Site is capable of being operated remotely and would be for the majority of its operational life. As such the generating station could continue to operate during a flood event and there would be no requirement for staff to be present. In this regard site users would not be vulnerable during a flood event.

7.12.39 As set out above, the potential vulnerability of the Proposed Development is laid out within the Flood Risk Vulnerability Classification set out in Annex 3 of the NPPF, and there are no ‘users’ of the development per se. This confirms that solar farms are essential infrastructure. Table 2 of the government Flood Risk and Classification guidance (paragraph 079), confirms that for essential infrastructure in Flood Zone 3a the exception test is required in so far as it should be designed and constructed to remain operational and safe in times of flooding.

7.12.40 This prerequisite for essential infrastructure is demonstrated above, and accordingly the development is considered to have passed the requirements of the Exception Test.

Appraisal

7.12.41 In summary, the Sequential Test has been satisfied (no preferable site at lower risk exists) and the Exception Test is passed, with the FRA and ASA showing that the Proposed Development's benefits outweigh the flood risk and that it will be safe and not worsen flooding elsewhere. This outcome aligns with EN-1 paragraphs 5.8.9–5.8.11, meaning the Proposed Development's location is justified in flood risk terms.

7.12.42 An appropriate FRA has been prepared in accordance with paragraphs 5.8.13-15 of EN-1, and the Applicant has consulted with the Environment Agency and LLFA throughout the pre-application period in accordance with paragraph 5.8.18 of EN-1.

7.12.43 The Proposed Development has incorporated SuDS in accordance with paragraph 5.8.27 of EN-1 to minimise the risk of surface water flooding and ensure that there is in increase in flood risk off-site. The Applicant has committed to using open-span crossings (rather than culverts) as per paragraph 2.10.87 of EN-3 for all watercourse crossings within the Site, to avoid restricting flows or fragmenting the existing drainage network.

7.12.44 A sequential approach has been taken to the layout of the Proposed Development to ensure that the most flood-sensitive infrastructure is sited in areas of least flood risk, in accordance with paragraph 5.8.29 of EN-1. Where it has been essential to locate infrastructure within Flood Zone 3, the design minimises vulnerability and incorporates protective measures. All such infrastructure has been designed to a site-wide 'design flood level' to withstand flood conditions and avoid flood impacts.

7.12.45 The Proposed Development has been appraised against local plan policies relevant to flood risk and drainage within the **Policy Compliance Document *[EN010153/DR/5.7]*** and it is found to be wholly in compliance.

7.12.46 In conclusion, the Proposed Development can be regarded as fully in compliance with relevant flood risk and drainage policies. It accords with NPS EN-1 and EN-3 by ensuring flood risks are effectively managed and mitigated, and it meets all requirements of local plan policy by not increasing flood risk and by employing sustainable drainage methods. The Proposed Development therefore carries no policy conflicts in respect of flood risk and drainage.

7.13 Water Quality and Resources

Planning Policy Context

7.13.1 Overarching water quality and resources policy considerations are set out within Section 5.16 of NPS EN-1. EN-1 paragraph 5.16.2 notes that during construction, operation and decommissioning, projects may lead to greater water use, involve discharges to water, and cause adverse ecological effects from changes to the water environment, with a risk of spills or pollution incidents. Where a project is likely to affect the water environment, EN-1 paragraph 5.16.3 requires the applicant's ES to assess the existing status of water quality and resources and the project's impacts on them.

7.13.2 Paragraph 5.16.7 of EN-1 specifies that the ES should describe the quality of affected waters, existing water resource uses (including abstractions) and any changes, physical characteristics of water bodies, WFD-protected areas, and how climate change could influence these factors.

7.13.3 Applicants are encouraged to manage surface water during construction by treating surface water run-off prior to discharging (EN-1 paragraph 5.16.5).

7.13.4 For decision-making, EN-1 paragraph 5.16.12 states that no project should undermine WFD objectives and directs the Secretary of State to give greater weight to impacts that risk a water body failing to meet good status.

7.13.5 Paragraph 5.16.14 of EN-1 requires the Secretary of State to be satisfied the development complies with River Basin Management Plans and the Water Environment (WFD) Regulations 2017 – development consent should be refused if a scheme would cause deterioration of a water body's status or prevent it reaching good status, unless the stringent tests in the WFD regulations are met.

7.13.6 Further technology-specific considerations are set out within Section 2.10 of NPS EN-3. EN-3 emphasises that solar development generally has a limited impact on drainage, since panels drain to the ground (paragraph 2.10.84). Paragraph 2.10.84 encourages the use of permeable access tracks and SuDS to control any localised run-off increase.

7.13.7 Paragraph 2.10.86 of EN-3 directs that solar farm be configures to avoid impacts on existing drainage and watercourses , given their temporary nature. To this end, paragraph 2.10.87 of EN-3 states that culverting of watercourses should be avoided or minimised to temporary works only if absolutely necessary for construction access (paragraph 2.10.88).

7.13.8 Generally, the local policy context (set out in the Local Plan and supporting Neighbourhood Plans) broadly mirrors the policy set out in the NPSs, aligning with national objectives such as WFD compliance and sustainable water management.

Assessment Conclusions

7.13.9 **ES Vol 1 Chapter 9: Flood Risk and Drainage *[EN010153/DR/6.1]*** sets out the Applicant's assessment of water quality and resources for the Proposed Development, identifying any likely significant effects. The chapter is supported **ES Vol 2 Appendix 9-2: Water Framework Directive Assessment *[EN010153/DR/6.2]*** which is a standalone assessment within

the ES examining compliance with WFD objectives. This section of the Planning Statement contains only a brief summary of the likely impacts and effects.

Design and Mitigation Measures

7.13.10 The Proposed Development has followed the mitigation hierarchy to prevent harm to the water environment where possible, with mitigation measures set out in full within Section 9.8 of ***ES Vol 1 Chapter 9: Flood Risk and Drainage [EN010153/DR/6.1]***.

7.13.11 The layout of the solar arrays and infrastructure has been developed to avoid sensitive hydrological areas and incorporate wide buffers to watercourses and ditches through the Site apart from where absolutely necessary for construction access and cabling. The number of watercourse crossings for vehicles and cables has been minimised; where crossings are unavoidable, the design uses clear-span bridges so that the water flow is uninterrupted and no culvert constriction occurs.

7.13.12 In terms of water resources, as set out in **ES Vol 1 Chapter 2: The Proposed Development *[EN010153/DR/6.1]***, the Proposed Development avoids abstraction and will utilise mains water or brought-in water for construction and operational needs, thereby avoiding drawing from local rivers or aquifers.

7.13.13 An **outline Construction Environmental Management Plan (oCEMP) *[EN010153/DR/7.5]*** has been prepared, outlining specific pollution prevention and response measures to be implemented by the contractor. This includes measures such as silt traps, on-site speed limits (to prevent dust and soil track-out), and emergency response procedures if a spill occurs. Furthermore, surface water sampling and analysis will be undertaken to establish a water quality baseline prior to construction, with confirmatory water quality data obtained following completion of the works to demonstrate that the construction phase has not had a detrimental effect on water quality.

7.13.14 A separate **outline Operational Environmental Management Plan (oOEMP)** ***[EN010153/DR/7.6]*** will ensure ongoing maintenance measures, like regular inspection and maintenance of the SuDS drainage system and watercourse crossings (to promptly clear any debris and ensure effective drainage).

7.13.15 An **outline Battery Safety Management Plan (oBSMP)** ***[EN010153/DR/7.8]*** sets out measures that will be implemented for the BESS compound to ensure that should a fire or major incident occur, any contaminated pollution run-off would be contained to a lagoon to prevent discharge to nearby watercourses.

Assessment

7.13.16 **ES Vol 2 Appendix 9-2: Water Framework Directive Assessment** ***[EN010153/DR/6.2]*** identifies the relevant water bodies and evaluates the Proposed Development against WDF objectives.

7.13.17 The Site lies within the Northwest River Basin Management Plan area, of which the following WFD water body catchments cover the Site:

- The Weaver (Dane to Frodsham) Water Body;
- The Manchester Ship Canal Water Body;
- The Mersey Estuary Water Body;
- The Peckmill Brook, Hoolpool Gutter at Ince Marshes Water Body; and
- The Wirral and West Cheshire Permo-Triassic Sandstone Aquifers.

7.13.18 The WFD Assessment has considered potential changes to hydromorphology, water chemistry, and ecology that the project could cause. The assessment concludes that with the embedded design and mitigation measures outlined above, the residual effect on the status of all relevant WFD parameters is negligible, equating to no impact on the overall water body status objectives.

Appraisal

7.13.19 The Applicant's approach to managing water quality and resources is consistent with national policy contained within NPS EN-1 and EN-3, as well as local planning policies.

7.13.20 The Applicant has fully assessed the water environment baseline and impacts in the ES, satisfying the requirement for a thorough assessment, as required by EN-1 paragraph 5.16.3 and 5.16.7.

7.13.21 The submitted **ES Vol 2 Appendix 9-2: Water Framework Directive Assessment *[EN010153/DR/6.2]*** demonstrates that the Proposed Development will not cause deterioration of any water body status nor prevent the achievement of good status in the future. This ensures compliance with the WFD Regulations 2017, satisfying the tests in EN-1 paragraphs 5.6.12 and 5.16.14.

7.13.22 The Applicant has committed to using open-span crossings (rather than culverts) as per paragraph 2.10.87 of EN-3 for all watercourse crossings within the Site, to avoid restricting flows or fragmenting the existing drainage network.

7.13.23 The Proposed Development has been appraised against local plan policies relevant to water quality and resources within the **Policy Compliance Document *[EN010153/DR/5.7]*** and is found to be in compliance.

7.13.24 In conclusion, having regard to the relevant national and local policies on water quality and resources, and based on the findings of **ES Vol 1 Chapter 9: Flood Risk and Drainage *[EN010153/DR/6.1]***, the Proposed Development is considered to be policy compliant.

7.14 Traffic and Transport

Planning Policy Context

7.14.1 Overarching policy considerations relevant to traffic and transport are set out in Section 5.14 of NPS EN-1.

7.14.2 EN-1 requires a transport assessment be undertaken for projects likely to have significant transport implications (paragraph 5.14.5). Applicants are expected to consult with the relevant highway authorities (National Highways and the local highway authority) on the assessment and proposed mitigation measures (paragraph 5.14.6). The assessment should consider potential disruptions to existing transport networks and infrastructure (paragraph 5.14.8).

7.14.3 EN-1 requires the preparation of a travel plan with demand management measures to reduce impacts, including promoting sustainable transport modes for workers and deliveries (paragraph 5.14.7).

7.14.4 Where impacts cannot be avoided, EN-1 calls for mitigation measures such as consolidating trips, routing and timing deliveries to avoid peak hours, and modal shift where feasible (paragraphs 5.14.11–5.14.13).

7.14.5 Paragraph 5.14.21 states that the Secretary of State should only consider refusing development on highways grounds if there would be an unacceptable impact on highway safety, residual cumulative effects on the road network would be severe, or if the applicant does not show how consideration has been given to the provision of adequate active public or shared transport access and provision.

7.14.6 Further technology-specific considerations are set out within Section 2.10 of NPS EN-3. EN-3 acknowledges that the construction phase of solar farms is likely to give rise to greater impacts than the operational phase (paragraph 2.10.35).

7.14.7 Paragraph 2.10.39 of EN-3 states that applicants should include the full extent of the access routes necessary for operation and maintenance of the development, along with an assessment of the effects.

7.14.8 EN-3 sets out that applicants should assess alternative routes for delivering construction materials and equipment and choose the most appropriate route to minimise local impacts (para. 2.10.123). If the source of materials is uncertain, a reasonable worst-case traffic scenario should be evaluated (paragraph 2.10.124). Applicants must ensure the capacity of roads and bridges on the chosen route is sufficient for the size/weight of loads, identifying any required upgrades in their assessment (paragraph 2.10.125).

7.14.9 Where multiple developments in the area around a proposed site could generate cumulative construction traffic (for example, using the same access routes), EN-3 expects a cumulative transport assessment to be undertaken (paragraph 2.10.126). This should consider combined movements from the Proposed Development and other projects, in consultation with local highways authorities if appropriate.

7.14.10 Policy STRAT 10: Transport and Accessibility is the principal policy on highways impacts in the CWaCC Local Plan. In line with policy considerations in EN-1 and EN-3, it requires new development to be located and designed to enable safe and efficient access. Furthermore, it seeks to ensure that additional traffic can be accommodated safely and satisfactorily within existing or proposed highway networks, and that satisfactory arrangements can be made to accommodate additional traffic prior to development coming into use. The policy also requires new development to provide adequate levels of parking in accordance with the Council's parking standards.

Assessment Conclusions

Approach

7.14.11 An assessment of Traffic and Transport effects was scoped out of the ES, as set out in **ES Vol 2 Appendix 1-2: Frodsham Solar Scoping Opinion *[EN010153/DR/6.2]***.

7.14.12 In line with the policy imperatives however, the Applicant has therefore prepared a comprehensive **Transport Assessment (TA) *[EN010153/DR/7.3]*** for the Proposed Development covering the construction and operational phases. In addition, an **outline Construction Traffic Management Plan (oCTMP) *[EN010153/DR/7.4]*** has been prepared for the construction phase.

Design and Mitigation Measures

7.14.13 The Proposed Development has followed the mitigation hierarchy to prevent highway impacts where possible, with mitigation measures set out within the **TA *[EN010153/DR/7.3]*** and **oCTMP *[EN010153/DR/7.4]***.

7.14.14 The primary avoidance mitigation measures are through scheme design and traffic routing, with construction traffic routed to avoid any residential areas (notably Frodsham, Helsby, Ince and Elton).

7.14.15 To further mitigate and reduce the number of vehicle trips, the **oCTMP *[EN010153/DR/7.4]*** sets out measures to encourage and facilitate car sharing among construction workers. Deliveries will be timed to avoid morning and evening peak traffic periods on the public highway network. Enforcement measures will be in place – such as induction training for all contractors, clear signage on the approved construction routes, and monitoring of contractor compliance.

7.14.16 Details of all proposed traffic management measures are set out within the oCTMP which will be developed into a full plan post consent, which must be in substantial accordance with the oCTMP and will require approval by

CWaCC. The Proposed Development must be undertaken in accordance with the approved plans. This is secured via a Requirement in Schedule 2 of the **draft DCO *[EN010153/DR/3.1]***.

7.14.17 With the incorporation of the embedded mitigation measures set out above, the **Transport Assessment *[EN010153/DR/7.3]*** concludes that there would be no significant residual adverse traffic effects, with residual impacts on traffic flows, road safety, and amenity assessed as negligible to minor adverse (not significant).

7.14.18 The **Transport Assessment *[EN010153/DR/7.3]*** includes a cumulative impact assessment considering other committed developments that could be under construction in the area concurrently. In particular, the TA considers the construction traffic from the HyNet North West project and ongoing developments at Protos (Ince) Energy Park. These projects, if built in overlapping timeframes, could generate additional HGV traffic on the same road links as the Proposed Development. The TA assumes a conservative case where peak construction of Frodsham Solar coincides with peak construction traffic from other committed developments in 2028.

7.14.19 The cumulative assessment concludes that there would be no severe residual cumulative impact on the road network from the Proposed Development together with other projects. While traffic from the different projects will temporarily increase flows on certain routes, the assessment finds the network can handle the combined traffic with only minor increases in delays.

7.14.20 The Applicant has committed to continue liaison with the promoters of other projects to coordinate logistics and vehicle movements, which is set out within the **oCTMP *[EN010153/DR/7.4]***. During operation, where periodic significant replacements are to be undertaken, the **oOEMP** requires that measures comparable to those in the **oCTMP** are undertaken.

Appraisal

7.14.21 The Proposed Development's approach to traffic and transport impacts is consistent with national policy contained within EN-1 and EN-3, as well as local planning policies.

7.14.22 The Applicant has prepared a **TA *[EN010153/DR/7.3]*** and **oCTMP *[EN010153/DR/7.4]***, in line with EN-1's expectation that significant transport implications be assessed and mitigation identified (paragraph 5.14.5), and this has been based on consultation throughout with both National Highways and CWaCC in accordance with paragraph 5.14.6 of EN-1. The TA includes an assessment of cumulative construction traffic impacts as required by paragraph 2.10.126 of EN-3.

7.14.23 The findings of the TA are that the Proposed Development would result in no unacceptable impacts on highway safety, and there would be no severe residual cumulative effects on the highway network. Therefore, in accordance with paragraph 5.14.21 of EN-1 there is no reason for the Secretary of State to refuse the Proposed Development on highway grounds.

7.14.24 The Proposed Development has been appraised against local plan policies relevant to traffic and transport impacts within the **Policy Compliance Document *[EN010153/DR/5.7]*** and it is found to be in compliance with all policies.

7.14.25 In conclusion, having regard to the relevant national and local policies on traffic and transport impacts, and based on the findings of the **Transport Assessment *[EN010153/DR/7.3]***, the Proposed Development is considered to be policy compliant.

7.15 Tourism and Recreation

Planning Policy Context

7.15.1 Overarching policy considerations relating to tourism and recreation are set out within Section 5.11 and 5.13 of NPS EN-1. EN-1 requires applicants to

identify in the Environmental Statement any effects of the project on current and proposed land uses in the vicinity of the site (paragraph 5.11.8).

7.15.2 Paragraph 5.11.30 of EN-1 states that public rights of way (PRoW) and other rights of access to land are important recreational facilities and expects applicants to take appropriate mitigation measures to address adverse impacts, as well as to identify opportunities for improving or creating new access.

7.15.3 EN-1 further encourages early engagement with local authorities on local or regional issues and opportunities (paragraph 5.13.3) and calls for assessments to consider both positive and negative effects on tourism and recreational amenity (paragraph 5.13.4).

7.15.4 Further technology-specific considerations are set out within Section 2.10 of NPS EN-3. Paragraph 2.10.40 of EN-3 notes that solar developments may affect the provision of public rights of way, but that as far as practicable applicants should (as far as practicable) keep them safe and open during construction and for the operation of the Proposed Development (paragraph 2.10.43).

7.15.5 EN 3 encourages developers to design site layout and appearance to enable the continued recreational use of PRoW (paragraph 2.10.42), and to consider and maximise opportunities for enhancements to the PRoW network as part of the Proposed Development (paragraph 2.10.44).

7.15.6 Paragraph 2.10.45 of EN-3 states that applicants should provide an outline Public Rights of Way Management Plan which sets out detail on how PRoW would be managed to ensure they are safe to use.

7.15.7 The CWaCC Local Plan Part One and Part Two includes Policy ECON 3 Visiotr Economy and DM 37 PRoW. ECON 3 requires development to be assessed against several tourism related criteria. as relevant to the development and locality. It includes providing support to development that has the potential to improve access to rights of ways. The supporting text to

Policy DM 37 states at paragraphs 14.31 and 14.32 that development should support opportunities to improve cycle routes across Frodsham marshes.

7.15.8 The **Design Approach Document (DAD) [EN010153/DR/5.8]** sets out the range of measures that the Applicant has committed to in order to improve both the quality and variety of public access provision within the Order Limits.

Assessment Conclusions

7.15.9 **ES Vol 1 Chapter 12: Tourism and Recreation *[EN010153/DR/7.5]*** sets out the Applicant's full assessment of the likely significant tourism and recreation effects as a result of the Proposed Development. This section of the Planning Statement contains only a brief summary of the likely impacts and effects.

Design and Mitigation Measures

7.15.10 The Proposed Development has followed the mitigation hierarchy to prevent impacts on local tourism businesses and the local PRoW network. Mitigation measures are set out within Section 12.7 of **ES Vol 1 Chapter 12: Tourism and Recreation *[EN010153/DR/6.1]***.

7.15.11 From the outset, the layout of the Proposed Development has been designed to avoid direct impacts on PRoW, with all existing rights of way retained on their current alignment. There will be no permanent closures or diversion of PRoW as a result of the Proposed Development.

7.15.12 To reduce impacts on users of the PRoW they are set within wide corridors through the Site, with more visually obtrusive components of the Proposed Development set away from PRoW as far as practicable.

7.15.13 To avoid impacts on existing businesses and recreational clubs located in very close proximity to the Site (specifically Hover Force and Runcorn Model Flying Club), construction or operational traffic will be specifically excluded from using Brook Furlong, as set out in the **outline Construction Traffic Management Plan *[EN010153/DR/7.4]***.

7.15.14 To mitigate impacts on the River Weaver, sufficient height clearance across the river would be maintained to allow boats to continue to operate (save during a limited time where construction stringing is taking place), with particular reference to overhead cabling between the SADA and SPEN Frodsham Substation. The cabling would be no lower than the nearest existing headroom limitation.

7.15.15 Where impacts could not be entirely designed out, the Proposed Development includes management measures during construction to protect recreational users.

7.15.16 An **outline Public Right of Way Management Plan *[EN010153/DR/7.9]*** has been prepared which sets out how public rights of way will be managed or temporarily diverted during construction, and what the long-term operational arrangements will be. It includes creation of new permissive paths and improvements to existing paths as part of mitigation and enhancement. The plan ensures that public access is maintained as far as possible and that any closures or diversions are done safely and with suitable alternatives. As an outline plan, it will be developed into a full plan post consent, which must be in substantial accordance with the oCTMP and will require approval by CWaCC. The Proposed Development must be undertaken in accordance with the approved plans. This is secured via a Requirement in Schedule 2 of the **draft DCO *[EN010153/DR/3.1]***.

7.15.17 An **outline Construction Environmental Management Plan (oCEMP) *[EN010153/DR/7.5]*** has been prepared which sets out best practice measures to control impacts such as dust and noise on PRoW users, and prior notification before any short temporary closures of the River Weaver.

7.15.18 As set out in the **outline Landscape and Ecology Management Plan (oLEMP) *[EN010153/DR/7.10]*** the Proposed Development incorporates proposed landscaping that will, once established, provide visual screening and landscape integration for PRoW to mitigate impacts on users. Furthermore, new permissive paths will improve recreational access, allowing

visitors to experience previously inaccessible farmland and wildlife habitats. Improvements to surfacing of existing PRoW and to NCN 5 will ensure enhanced cycling provision across the Frodsham Marshes.

7.15.19 The Proposed Development includes further enhancement measures such as the provision of visitor amenities such as bird hide or viewing areas and educational information boards. These features will allow people to observe wildlife (notably birds on the marsh and estuary) and learn about the Site's ecology and the solar energy project, thereby enriching the recreational and educational value of the area.

Assessment

7.15.20 **ES Vol 1 Chapter 12: Tourism and Recreation *[EN010153/DR/6.1]*** concludes that with the implementation of the above mitigation measures, the Proposed Development would not result in any likely significant adverse effects on tourism and recreational activities. The construction phase may cause temporary disruption, but these impacts would not lead to any significant effects and will be effectively managed through the **oCEMP *[EN010153/DR/7.5]*** and the **outline Public Rights of Way Management Plan *[EN010153/DR/7.9]***.

7.15.21 During the operational phase, the enhanced PRoW network and additional recreational facilities are likely to have a beneficial effect on local tourism and recreation, potentially increasing the number of visitors to the Study Area. Overall, the Proposed Development is not anticipated to adversely affect the local tourism economy or recreational use of the Study Area.

Appraisal

7.15.22 The Proposed Development's approach to tourism and recreation impacts is consistent national policy contained within EN-1 and EN-3, and in accordance with local planning policies.

7.15.23 As set out in **ES Vol 1 Chapter 12: Tourism and Recreation *[EN011053/DR/6.1]***, the Applicant has identified all relevant tourism and recreational uses around the Site from the outset and incorporated appropriate embedded mitigation in accordance with paragraph 5.11.8 and 5.13.4 of EN-1. The assessment concludes that the Proposed Development will not have a likely significant adverse effect on tourism and recreational activities.

7.15.24 The Applicant has prepared an **outline Public Rights of Way Management Plan *[EN010153/DR/7.9]*** in accordance with paragraph 2.10.45 of EN-3.

7.15.25 The Proposed Development goes beyond just mitigating for adverse impacts and has sought opportunities to deliver real enhancement to the local area, with commitments to deliver an improved existing PRoW network as well as new permissive paths to expand recreational access, in accordance with paragraph 5.11.30 of EN-1 and paragraph 2.10.44 of EN-3.

7.15.26 The Proposed Development has been appraised against local plan policies relevant to tourism and recreation impacts within the **Policy Compliance Document *[EN010153/DR/5.7]*** and is found to be in compliance. With reference to the supporting text to Policy DM 37, the Proposed Development will deliver on an opportunity to enhance cycling opportunities across the Frodsham marshes between Frodsham and Ince.

7.15.27 In conclusion, having regard to the relevant national and local policies on tourism and recreation, and based on the findings of **ES Vol 1 Chapter 12: Tourism and Recreation *[EN010153/DR/6.1]***, the Proposed Development is considered to be policy compliant.

7.16 Noise and Vibration

Planning Policy Context

7.16.1 Overarching noise and vibration policy considerations are set out within Section 5.12 of NPS EN-1. Where a development is likely to cause noise

impacts, EN-1 requires a detailed noise assessment covering the noise generating aspects of the proposal, the existing baseline noise environment, sensitive receptors, predicted changes in noise during construction and operation (day and night), and an assessment of effects on health and quality of life (paragraph 5.12.6). Where applicable, this should also include an assessment of noise impacts on ecological receptors (paragraph 5.12.4).

7.16.2 EN-1 sets out that the nature and extent of noise assessment for development should be proportionate to the likely noise impact of a development (paragraph 5.12.7) and include as part of this a consideration of ancillary activities such as construction traffic (paragraph 5.12.8).

7.16.3 EN-1 states that a development should not be granted consent unless it meets three aims (paragraph 5.12.17):

i) avoid significant adverse noise impacts on health and quality of life;
ii) mitigate and minimise other adverse impacts; and
iii) where possible, contribute to improvements in health and quality of life.

7.16.4 Further technology-specific considerations are set out within Section 2.10 of NPS EN-3. EN-3 provides limited further policy in relation to noise and vibration impacts but does state at paragraph 2.10.162 that no more than limited weight is likely to be given to noise and vibration impacts arising from traffic and transport during the operational phase of a project.

7.16.5 CWaCC Local Plan Part Two Policy DM 30: Noise is the principal policy on noise within the Local Plan. It requires development to not give rise to significant adverse impacts on health or quality of life from noise, which is aligned with national policy in EN-1. Policy SOC 5: Health and well-being states that development that gives rise to significant adverse impacts on health (e.g. noise) will not be allowed.

7.16.6 Paragraph 198 of the NPPF states that planning policies and decisions should ensure that new development is appropriate for its location. It states that in doing so, they should identify and protect tranquil areas which have remained

relatively undisturbed by noise and are prized for their recreational and amenity value. The Planning Practice Guidance: Noise **[Paragraph: 008 Reference ID:30-00820190722]** sets out what factors are relevant if seeking to identify areas of tranquillity. It states that for an area to justify being protected for its tranquillity, it is likely to be undisturbed by noise from human sources that undermine the intrinsic character of the area. It may, for example, provide a sense of peace and quiet or a positive soundscape where natural sounds such as flowing water or birdsong are more prominent than background noise such as transport.

7.16.7 The Proposed Development is located within an area that is flat and open across Frodsham Marshes and the Mersey Estuary, and forms part of the Green Belt, but nonetheless is far from unspoilt landscape. In addition to the large wind turbines, electricity transmission towers and elevated M56 corridor, the Site is set against a wider context of urbanised industrial development, and a host of other mixed development. Consequently the area is not perceived as 'tranquil' in the context of the NPPF.

Assessment Conclusions

7.16.8 An assessment of noise and vibration effects was scoped out of the ES, as set out in **ES Vol 2 Appendix 1-2: Frodsham Solar Scoping Opinion *[EN010153/DR/6.2]***. The Applicant has however prepared a standalone assessment of noise impacts to demonstrate the noise impacts of the Proposed Development are acceptable, and this is presented as **ES Vol 2 Appendix 4-1: Noise Impact Assessment *[EN010153/DR/6.2]***.

Design and Mitigation Measures

7.16.9 The Proposed Development has followed the mitigation hierarchy to prevent noise and vibration impacts. To avoid impacts, embedded design measures include the careful layout of infrastructure – for instance, the noisier elements (inverters, the BESS compound, and the on-site substation) are sited as far as practicable or required from sensitive receptors.

7.16.10 During construction, a suite of mitigation measures are set out in the **outline Construction Environmental Management Plan (oCEMP)** ***[EN010153/DR/7.5]***. The **oCEMP [EN010153/DR/7.5].** includes for established best practice measures (such as BS 5228) to control noise and vibration. The contractor will be required to maintain plant in good working order (to prevent excessive noise) and adhere to a Construction Noise Management Plan.

7.16.11 Construction traffic will be managed through the **outline Construction Traffic Management Plan (oCTMP)** ***[EN010153/DR/7.4]***. This prevents heavy or other vehicles from passing directly through sensitive areas such as the residential areas of Frodsham, Helsby, Ince or Elton.

7.16.12 The **outline Operational Environmental Management Plan** ***[EN010153/DR/7.6]*** sets out measures to mitigate for the noise impacts of the development during the operational phase.

Assessment

7.16.13 With the above mitigation measures in place, the residual noise and vibration effects of the Proposed Development are assessed to be not significant. During construction, residual noise levels at all receptors (including the nearby travellers sites) are expected to remain at most minor, and well below the Significant Observed Adverse Effect Level. Noise impacts would be temporary and any short-lived noise events would be managed using best practicable means in accordance with the **oCTMP** ***[EN010153/DR/7.5]***.

7.16.14 In operation, the Proposed Development has been designed such that no significant adverse effects occur. The final operational noise levels are predicted to be very low at receptors, so the residual operational impact is essentially neutral.

7.16.15 For ecological receptors, at both construction and operation the residual noise impacts after mitigation are also negligible – bird populations will not experience significant disturbance.

7.16.16 E**S Vol 2 Appendix 4-1: Noise Impact Assessment *[EN010153/DR/6.2]*** concludes that the Proposed Development has been designed to operate such that it complies with all appropriate and relevant noise standards and guidance.

Appraisal

7.16.17 The Proposed Development has been designed such that it is consisted with all national policy and guidance, according with the requirements of EN-1 regarding noise control.

7.16.18 **ES Vol 2 Appendix 4-1: Noise Impact Assessment *[EN010153/DR/6.2]*** demonstrates that:

i) Significant adverse noise impacts will be avoided, meeting the first aim of paragraph 5.12.17 of EN-1. All predicted noise levels at receptors are well below thresholds of significant effect – no receptor is expected to experience noise above the level that would cause material health or quality of life impairment.
ii) The Proposed Development also mitigates and minimises other adverse noise impacts so far as practicable, meeting the second aim of paragraph 5.12.17 of EN-1.
iii) Whilst the Proposed Development does not contribute to an improvement in existing health and quality of life through the effective management and control of noise, it does not lead to a reduction, meeting the third aim of paragraph 5.2.17 of EN-1.

7.16.19 On the basis of the above, the Proposed Development meets the tests set out in EN-1.

7.16.20 The Proposed Development has been appraised against local plan policies relevant to noise and vibration within the **Policy Compliance Document *[EN010153/DR/5.7]*** and is found to be in compliance.

7.16.21 In conclusion, having regard to the relevant national and local policies on noise and vibration, and based on the findings of **ES Vol 2 Appendix 4-1: Noise Impact Assessment *[EN010153/DR/6.2]***, the Proposed Development is considered to be policy compliant.

7.17 Climate Change and Greenhouse Gas Emissions

Planning Policy Context

7.17.1 Overarching climate change and greenhouse gas emissions policy considerations are set out within Section 4.10 and Section 5.3 of EN-1. EN-1 emphasises that new energy infrastructure must be sufficiently resilient to the impacts of climate change over its full life cycle. Applicants are expected to consider both climate change mitigation (reducing greenhouse gas emissions) and adaptation (ensuring resilience to future climate conditions) in project design.

7.17.2 Section 4.10 of EN-1 deals with climate change resilience and adaptation and expects the applicant's ES to set out how a development will take account of the projected impacts of climate change (paragraph 4.10.9), considering a range of climate change scenarios to demonstrate that the development has a high level of climate resilience (paragraph 4.10.10-11). Where there are safety critical elements to the development, a credible maximum climate change scenario should be applied to ensure those elements are safe for the lifetime of the development (paragraph 4.10.12).

7.17.3 Section 5.3 of EN-1 deals with greenhouse gas emissions and notes that whilst new energy infrastructure is vital to decarbonise the economy; the construction, operation and decommissioning of that energy infrastructure will in itself lead to greenhouse gas emissions (paragraph 5.3.1). Paragraph 5.3.4 of EN-1 states that all applications should include a greenhouse gas assessment as part of their ES and sets the requirements of the assessment. For decision making, paragraph 5.3.8-10 of EN-1 state that the Secretary of State should be satisfied that the applicant has as far as possible assessed

and taken reasonable steps to reduce the greenhouse gas emissions of a project.

7.17.4 NPS EN-3 provides limited further specific requirements in relation to solar development but does note at paragraph 2.4.11 that consideration should be given to climate resilience and an increased risk of flooding and impact of higher temperatures.

7.17.5 Central to the CWaCC Local Plan Vision is the promotion of a positive adaption to climate change. The Environmental Strategic Objectives of the Plan include (SO14) to mitigate and adapt to the effects of climate change, and supporting the development of infrastructure that is resilient to the effects of climate change. This is followed through into Policy STRAT 1: Sustainable Development and STRAT 11: Infrastructure that support development that mitigates and adapts to climate change. Policy DM 40: Development and flood risk requires development at risk from flood risk to demonstrate that the effects of climate change have been considered, and that regarding energy policy, the Local Plan ensures that development contributes to the mitigation or adaption of climate change. Local policy context is aligned with national policy in EN-1, encouraging developments to contribute to emissions reduction targets, provided they are delivered in a sustainable manner and resilient to future climate change.

Assessment Conclusions

7.17.6 **ES Vol 1 Chapter 5: Climate Change *[EN010153/DR/6.1]*** sets out the Applicant's full assessment of the likely significant climate change effects as a result of the Proposed Development, and is supported by **ES Vol 2 Appendix 5-1: Greenhouse Gas Assessment *[EN010153/DR/6.2]*** and **ES Vol 2 Appendix 5-3: Climate Resilience Assessment *[EN010153/DR/6.2]***.

Design and Mitigation Measures

7.17.7 The Proposed Development has as far as practicable followed the mitigation hierarchy in addressing its climate change impacts and resilience, and

greenhouse gas emissions, with mitigation measures set out within Section 5.7of **ES Vol 1 Chapter 5: Climate Change *[EN010153/DR/6.1]***.

7.17.8 From the outset, the primary purpose of the Proposed Development is to avoid greenhouse gas emissions by generating renewable electricity without burning fossil fuels. This avoids the significant carbon emissions that a conventional power station of equivalent output would produce. Beyond this inherent benefit, the Proposed Development incorporates measures to minimise greenhouse gas emissions at every stage. During construction, mitigation measures to reduce greenhouse gas emissions are set out in the **outline Construction Environmental Management Plan (oCEMP) *[EN010153/DR/7.5]***, which includes for optimising vehicle movements, using modern equipment and machinery, and maximising the reuse of materials on site. Further measures for the operational phase are then set out in the **outline Operational Environmental Management Plan (oOEMP) *[EN010153/DR/7.6]*** and for the decommissioning phase in the **outline Decommissioning Environmental Management Plan *[EN010153/DR/7.7]***. These measures incorporate the GHG Reduction Strategy for the purposes of paragraph 5.3.7 of NPS EN-1.

7.17.9 The project design process has also integrated climate resilience measures from an early stage. Critical infrastructure (like the BESS and on-site substation) is located on higher ground or on built-up platforms to avoid flood damage. Where climate resilience risks cannot be completely avoided, the Proposed Development includes mitigation measures to reduce impacts. This has included the identification of a 'design flood level' based on flood modelling that accounts for worst-case future climate change scenarios over the lifetime of the Proposed Development, with any flood sensitive infrastructure raised above this design flood level to ensure it is safe at times of flood risk.

7.17.10 Climate resilience mitigation measures are also set out in the **oCEMP *[EN010153/DR/7.5]*** and **oOEMP *[EN010153/DR/7.6]***.

Assessment

7.17.11 **ES Vol 1 Chapter 5: Climate Change *[EN010153/DR/6.1]*** and **ES Vol 2 Appendix 5-1: Greenhouse Gas Assessment *[EN010153/DR/6.2]*** calculate the total lifecycle emissions of the Proposed Development.

7.17.12 The assessment considers the resilience of the Proposed Development to the projected changes in climate, the impact of the Proposed Development on climate change and measures taken to mitigate the impacts.

7.17.13 The resilience of the Proposed Development to the effects of climate change has been assessed to be negligible to slight, which is not significant. Therefore, it is considered that the Proposed Development is resilient to the effects of climate change and no additional mitigation measures are recommended.

7.17.14 The Proposed Development has a beneficial effect on climate change which is a significant effect. This is because the Proposed Development's net greenhouse gas impacts are below zero as it causes a reduction in atmospheric greenhouse gas concentration through offsetting other more carbon intensive methods of electricity generation. Additionally, the Proposed Development substantially exceeds net zero requirements and has a positive climate impact.

Appraisal

7.17.15 The Proposed Development is entirely consistent with national policy set out in EN-1, and local policy set out in the CWaCC Local Plan. The Proposed Development directly advances the core aim of NPS EN-1 and EN-3 to decarbonise the energy sector.

7.17.16 The Proposed Development demonstrates a robust approach to climate adaptation and resilience, which is a requirement of both EN-1 (Section 4.10) and EN-3 (Section 2.4). By designing and mitigating for future climate

scenarios (in terms of flood depths, or temperature extremes), the Proposed Development is compliant with paragraphs 4.10.9-4.10.12 of EN-1.

7.17.17 The Applicant has quantified the greenhouse gas emissions in accordance with paragraph 5.3.4 of EN-1, including a full lifecycle greenhouse gas assessment that demonstrates alignment with the UK's trajectory towards net zero. The Proposed Development incorporates all reasonable measures to reduce greenhouse gas emissions, as per paragraph 5.3.8-10 of EN-1.

7.17.18 The Proposed Development has been appraised against local plan policies relevant to climate change matters within the **Policy Compliance Document *[EN010153/DR/5.7]*** and is found to be in compliance.

7.17.19 In conclusion, having regard to the relevant national and local policies on climate change, and based on the findings of **ES Vol 1 Chapter 5: Climate Change *[EN010153/DR/6.1]***, the Proposed Development is considered to be policy compliant.

7.18 Air Quality and Emissions

Planning Policy Context

7.18.1 Overarching air quality policy considerations are set out within Section 5.2 of NPS EN-1. EN-1 acknowledges that energy infrastructure can have adverse effects on air quality during construction, operation, and decommissioning, with emissions potentially affecting human health and the environment (paragraph 5.2.1). EN-1 states that regardless of the level of effect on air quality, developments should minimise all emissions as far as possible (paragraph 5.2.3).

7.18.2 Paragraph 5.2.7 of EN-1 notes that proximity to emission sources can have significant impacts on sensitive receptor sites, such as residents or protected ecosystems. Paragraph 5.2.8 requires that where likely significant adverse effects on air quality are likely to occur, the applicant should undertake an

assessment of impacts within the ES. Paragraph 5.2.9 then sets out the required contents of the assessment.

7.18.3 For decision making, paragraphs 5.2.16-18 set out that the Secretary of State should give air quality considerations substantial weight where a project would lead to a deterioration in air quality, and that where a project is proposed near to a sensitive receptor site for air quality then development consent should be refused if justification for the location and a suitable mitigation strategy are not provided.

7.18.4 Paragraph 5.7.1 states that during construction, operation and decommissioning of energy infrastructure there is the potential for emissions arising as dust. EN-1 states that applicants should assess the potential for emissions of dust to have a detrimental impact on amenity (paragraph 5.7.5).

7.18.5 Policy DM 31: Air Quality is the principal policy on air quality matters in the CWaCC Local Plan and broadly mirrors the policy requirements set out in EN-1. It states that development should not result in significant or unacceptable adverse impacts on health or quality of life from air pollution. The policy confirms that where an air quality assessment identifies an unacceptable impact on or from air quality, an appropriate scheme of mitigation must be submitted that demonstrates that the development is appropriate in its location.

Assessment Conclusions

7.18.6 An assessment of air quality effects was scoped out of the ES, as set out in **ES Vol 2 Appendix 1-2: Frodsham Solar Scoping Opinion *[EN010153/DR/6.2]*** on the basis that a Construction Dust Assessment was provided with the application.

7.18.7 The Applicant has therefore prepared a standalone Construction Dust Assessment to demonstrate the impacts of the Proposed Development are acceptable, and this is presented as **ES Vol 2 Appendix 4-2: Construction Dust Assessment *[EN010153/DR/6.2]***.

Design and Mitigation Measures

7.18.8 The Proposed Development has followed the mitigation hierarchy to prevent air quality impacts where possible, with mitigation measures set out within Section 7.0 of **ES Vol 2 Appendix 4-2: Construction Dust Assessment *[EN010153/DR/6.2]*** and within the **outline Construction Environmental Management Plan (oCEMP) *[EN010153/DR/7.5]***.

7.18.9 The embedded mitigation measures are provided in Table 5-10 of the **oCEMP *[EN010153/DR/7.5]*** and include a commitment to prepare a Construction Dust Management Plan (CDMP) as part of the final CEMP, which will be agreed with appropriate stakeholders. The CDMP will include for the implementation of Best Practice Measures to control and manage dust emissions.

Assessment

7.18.10 **ES Vol 2 Appendix 4-2: Construction Dust Assessment *[EN010153/DR/6.2]*** has considered the potential for fugitive dust to be generated during the various elements of the construction phase across the Site. Potential impacts and resulting effects have been assessed taking into account the nature and extent of the Proposed Development, local wind data and the sensitivity of the surrounding area. The assessment has been carried out using the qualitative approach described in the latest IAQM guidance on construction dust.

7.18.11 The essence of the IAQM guidance is that best practice working practices and mitigation measures are generally accepted as providing effective control against the impact of airborne dust and suspended particulate matter. These have been included within the **oCEMP [EN010153/DR/7.5]** and would be further provided in the subsequent full CEMP that will be a requirement of any consent.

7.18.12 Through the incorporation of the embedded mitigation and standard dust mitigation measures no unacceptable impacts or resulting effects on human health, amenity or ecological receptors have been identified.

Appraisal

7.18.13 The Proposed Development has been designed and includes embedded mitigation such that it is consistent with all national policy and guidance, according with the requirements of EN-1 regarding air quality and emissions impacts.

7.18.14 **ES Vol 2 Appendix 4-2: Construction Dust Assessment *[EN010153/DR/6.2]*** confirms that the Proposed Development will have no significant adverse impact or other unacceptable impact on any sensitive receptors.

7.18.15 The Proposed Development has been appraised against local plan policies relevant to air quality within the **Policy Compliance Document *[EN010153/DR/5.7]*** and is found to be in compliance.

7.18.16 In conclusion, having regard to the relevant national and local policies on air quality, and based on the findings of ***ES Vol 2 Appendix 4-3: Construction Dust Assessment [EN010153/DR/6.2]***, the Proposed Development is considered to be policy compliant.

7.19 Resource and Waste Management

Planning Policy Context

7.19.1 Overarching resource and waste management considerations are set out within Section 5.15 of NPS EN-1. EN-1 emphasises application of the waste hierarchy – prioritising waste prevention, then re-use, recycling, recovery, and disposal only as a last resort (paragraph 5.2.12).

7.19.2 Applicants are required to set out the arrangements that are proposed for managing any waste produced and set out the sustainable management of

waste and use of resources throughout any relevant demolition, excavation and construction activities (paragraph 5.15.8).

7.19.3 EN-1 states that for decision making, the Secretary of State should be satisfied that a robust strategy is in place for managing waste in line with the waste hierarchy across the lifetime of the Proposed Development (paragraph 5.15.15), and where necessary use requirements to ensure that appropriate measures for waste management are applied (paragraph 5.15.16).

7.19.4 Further technology-specific considerations are set out within Section 2.10 of NPS EN-3. EN-3 notes that solar panel performance degrades over time and as such there may be a need to replace or upgrade panels and equipment during the life of the project to maintain efficiency (paragraph 2.10.55).

7.19.5 Policy ENV 8: Managing Waste of the CWaCC Local Plan sets out the borough's approach to waste in line with the waste hierarchy set out in NPS EN-1. It states that waste management needs will be met by managing waste as a resource; promoting waste minimisation and increasing waste awareness; delivering sustainable waste management; and providing waste management infrastructure. The policy identifies the type and level of waste management infrastructure needed across the plan period to deliver sustainable waste management.

Assessment Conclusions

7.19.6 An assessment of materials and waste impacts and effects was scoped out of the ES, as set out in **ES Vol 2 Appendix 1-2: Frodsham Solar Scoping Opinion *[EN010153/DR/6.2]***.

7.19.7 A statement setting out the overall approach to waste management is provided at Section 2.8 of **ES Vol 1 Chapter 2: The Proposed Development *[EN010153/DR/6.1]***.

7.19.8 The Applicant has set out measures to manage waste in line with the waste hierarchy at all stages of the project within the **outline Construction**

Environmental Management Plan *[EN010153/DR/7.5]*, the **outline Operational Environmental Management Plan *[EN010153/DR/7.6]***, and the **outline Decommissioning Environmental Management Plan *[EN010153/DR/7.7]***.

7.19.9 In addition, the Applicant has prepared an **outline Soil Management Plan *[EN010153/DR/7.10]*** that sets out the approach to be taken to sustainably managing soil resources across the Site, including the handling of potentially contaminated land.

Appraisal

7.19.10 The Proposed Development's approach to waste management is consistent national policy contained within EN-1 and EN-3, and in accordance with local planning policies.

7.19.11 As set out in Section 2.8: Waste Management **ES Vol 1 Chapter 2: The Proposed Development [EN010153/DR/6.1]** the Applicant has anticipated that, due to the nature of the project, significant quantities of waste are not anticipated. Nonetheless, the **oCEMP [EN010153/DR/7.7], oOEMP [EN010153/DR/7.8] and oDEMP [EN010153/DR/7.9]** set out the embedded mitigation to control and manage waste on-site, and the framework for the management of waste.

7.19.12 Section 2.8 Waste Management **ES Vol 1 Chapter 2: The Proposed Development [EN010153/DR/6.1]** confirms that any arisings would be managed in accordance with the Waste Duty of Care Code of Practice, which implements the duty of care set out in Section 34(1) of the Environmental Protection Act 1990. Waste would be sent to an appropriate waste management facility and managed in accordance with the duty to apply the waste hierarchy as required by Regulation 12 of the Waste (England and Wales) Regulations 2011.

7.19.13 Through all phases of the development, the waste hierarchy would be complied with such that opportunities to minimise waste as far as possible will

be explored. Possibilities to re-use or recycle materials will be explored before resorting to landfill options, in accordance with paragraph 5.2.12 of EN-1.

7.19.14 The Proposed Development has been appraised against local plan policies relevant to waste management within the Policy Compliance Document [EN010153/DR/5.7] and is found to be in compliance.

7.19.15 In conclusion, having regard to the relevant national and local policies on waste management, and based on the findings of **ES Vol 1 Chapter 2: The Proposed Development [EN010153/DR/6.1]**, specifically Section 2.8: Waste Management, the Proposed Development is policy compliant.

7.20 Socio Economic Impacts

Planning Policy Context

7.20.1 Overarching socio-economic policy considerations are set out in Section 5.13 of NPS EN-1. EN-1 advises applicants to consider all pertinent socio-economic impacts, including potential job creation and training opportunities, with an emphasis on sustainable jobs that help develop skills for the transition to Net Zero (paragraph 5.13.4). Furthermore, consideration should be given to the provision of educational and visitor facilities, or any indirect beneficial impacts for the region hosting the infrastructure such as local supply chains (paragraph 5.13.4).

7.20.2 In decision-making, the Secretary of State should consider any evident socio-economic effects (both positive and negative), giving little weight to assertions that lack supporting evidence (paragraph 5.13.9-10).

7.20.3 EN-1 states that the Secretary of State may wish to include a requirement that specifies the approval by the local authority of an employment and skills plan detailing arrangements to promote local employment and skills development opportunities (paragraph 5.13.12).

7.20.4 CWaCC Local Plan Policy ECON 1: Economic Growth, Employment and Enterprise confirms that the Council will promote sustainable economic growth and attract new inward investment.

Assessment Conclusions

7.20.5 A comprehensive assessment of socio-economic impacts and effects was scoped out of the ES, as set out in **ES Vol 2 Appendix 1-2: Frodsham Solar Scoping Opinion *[EN010153/DR/6.2]*** on the basis that an assessment of Tourism and Recreation impacts and effects was undertaken. The Applicant has undertaken such an assessment within **ES Vol 1 Chapter 12: Tourism and Recreation *[EN010153/DR/6.1]*** which is covered in Section 7.15 of this Planning Statement.

7.20.6 The Applicant has prepared an **outline Skills, Supply Chain and Employment Plan *[EN010153/DR/7.11]*** which sets out the Applicant's approach to maximising local economic benefits from the Proposed Development. It includes commitments to use local labour and businesses where possible, to provide training or apprenticeship opportunities during construction, and to liaise with local job centres or educational institutions.

Appraisal

7.20.7 The Proposed Development will not result in likely significant adverse socio-economic effects and as such an assessment was scoped out of the ES; paragraphs 5.3.9-10 of EN-1 therefore carry limited weight for decision making. It is estimated that approximately 109 full time (equivalent) jobs would be created over the construction period, which is expected to last approximately 30 months. The Applicant has set out a commitment to deliver local jobs and use local supply chains as far as practicable, with this commitment secured by the **outline Skills, Supply Chain and Employment Plan *[EN010153/DR/7.11]***, which will be developed into a final Skills, Supply Chain and Employment Plan as a requirement of the **draft DCO**

[EN010153/DR/3.1] for approval by CWaCC prior to construction. This accords with the requirements of paragraphs 5.13.4 and 5.3.12 of NPS EN-1.

7.20.8 **ES Vol 2 Appendix 1-1: Frodsham Solar Scoping Report (May 2023) [EN010153/DR/6.2]** Chapter 14 considered the potentially beneficial and adverse socio-economic effects arising from the Proposed Development. From a beneficial perspective this included employment (direct and indirect); Gross value added (direct and indirect) generated by construction and operation; and potential enhancements to access the Site by the public. From an adverse perspective, the report considered the effects on health and other social infrastructure capacity; economic effects on the volume and value of leisure uses; and the economic effects related to disruption to public rights of way.

7.20.9 The Scoping Report concluded that, given the Site's location and characteristics of a solar PV energy operation, the Proposed Development has the potential to generate limited socio-economic effects, many of which would be temporary during construction. Based upon the conclusions of the Scoping Report, the Scoping Opinion **ES Vol 2 Appendix 1-2: Frodsham Solar Scoping Opinion [EN010153/DR/6.2]** concluded that socioeconomic (employment) could be scoped out. The economic effects on the volume and value of local tourism, and the effects on recreational use of public rights of way, is considered above.

7.21 Human Health

Planning Policy Context

7.21.1 Overarching human health policy considerations are set out within Section 4.4 of NPS EN-1, which requires applicants to evaluate the likely impacts of a proposed development on human health within the ES, and to identify appropriate mitigation measures (paragraph 4.4.4). EN-1 notes that a development may have direct impacts on health which could include increased traffic, air or water pollution, dust and odour, hazardous waste,

noise, radiation, or an increase in pests (paragraph 4.4.2). Development could also have indirect health impacts, for example if it affects key public services, or the use of open space for recreation and physical activity (paragraph 4.4.3).

7.21.2 EN-1 highlights the importance of addressing indirect health impacts by promoting enhancements to encourage health and well-being, and paying particular attention to effects on vulnerable populations and those with protected characteristics who might be disproportionately affected (paragraph 4.4.6).

7.21.3 In terms of decision-making, EN 1 notes that many health-related effects of energy projects (such as pollution control) are managed by separate regulatory regimes, meaning significant health risks are unlikely to justify refusal if properly regulated (paragraph 4.4.7). However, any residual health concerns not addressed by other regimes (for instance, noise disturbance) may still be taken into account by the Secretary of State when imposing requirements on a project (paragraph 4.4.8).

7.21.4 In addition, EN-1 contains a series of topic-specific considerations in Section 5.0 that are relevant to protecting human health. These include policies on air quality (Section 5.2), noise and vibration (5.12), traffic and transport (5.14), flood risk (5.8), and others such as dust, odour, light and other nuisances (5.7), water quality (5.16), and land use including green infrastructure (5.11). Taken together, these policies require that the environmental factors which can affect human health are thoroughly assessed and controlled.

7.21.5 Further technology-specific considerations are set out within NPS EN-3. Section 2.10 of EN-3 addresses the design and operation of solar developments and, while it does not introduce new health-specific policies, it reinforces certain considerations to protect people's health and amenity, such as mitigating for construction traffic, maintaining public access, and mitigating glint and glare.

7.21.6 Policy SOC 5: Health and Well-being is the principal policy on health and wellbeing in the CWaCC Local Plan and makes clear that proposals resulting in unacceptable levels of pollution (whether to soil, water or air), excessive noise, light intrusion, or other hazards to public health, including harm to residential amenity, should not be allowed.

7.21.7 Further policy requirements in the Local Plan such as Policy DM 29, Policy DM 30 and Policy DM 31 reflect requirements set out in NPS EN-1 to consider and assess impacts on human health as part of the development process.

Assessment Conclusions

7.21.8 A standalone assessment of impacts on human health was scoped out of the ES, as set out in **ES Vol 2 Appendix 1-2: Frodsham Solar Scoping Opinion *[EN010153/DR/6.2]*** on the basis that an assessment of potential impacts on human health was covered elsewhere within the application. Accordingly, the assessment of human health can be inferred with reference to the following parts of the ES and wider application:

- **ES Vol 1 Chapter 5: Climate Change *[EN010153/DR/6.1]***;
- **ES Vol 1 Chapter 6: Landscape and Visual Amenity *[EN010153/DR/6.1]***;
- **ES Vol 1 Chapter 9: Flood Risk and Drainage *[EN010153/DR/6.1]***;
- **ES Vol 1 Chapter 10: Ground Conditions *[EN010153/DR/6.1]***;
- **ES Vol 1 Chapter 12: Tourism and Recreation *[EN010153/DR/6.1]***;
- **ES Vol 2 Appendix 4-1: Noise Impact Assessment *[EN010153/DR/6.2]***;
- **ES Vol 2 Appendix 4-2: Construction Dust Assessment *[EN010153/DR/6.2]***;
- **ES Vol 2 Appendix 4-3: Glint and Glare Assessment *[EN010153/DR/6.2]***; and
- **Transport Assessment *[EN010153/DR/7.3]***.

Design and Mitigation Measures

7.21.9 The Applicant has followed the mitigation hierarchy to prevent human health impacts as far as possible. Detail of the required mitigation measures is set out in full within the relevant assessments listed above.

7.21.10 Environmental mitigation measures for human health are set out for the construction, operation and decommissioning phases in the following control documents:

- **Outline Construction Environmental Management Plan *[EN010153/DR/7.5]***;
- **Outline Operational Environmental Management Plan *[EN010153/DR/7.6]***;
- **Outline Decommissioning Environmental Management Plan *[EN010153/DR/7.7]***;
- **Outline Construction Traffic Management Plan *[EN010153/DR/7.4]***;
- **Outline Battery Safety Management Plan *[EN010153/DR/7.8]***;
- **Outline Public Rights of Way Management Plan *[EN010153/DR/7.9]***; and
- **Outline Soil Management Plan *[EN010153/DR/7.10]***.

7.21.11 Furthermore the Proposed Development includes measures to enhance public access to the marshes, seeking to turn the Site into a managed nature-rich area which is accessible to the public, that in turn should offer benefits to health and wellbeing. The approach to design and access improvements is set out in the **Design Approach Document *[EN010153/DR/5.8]***.

Appraisal

7.21.12 The effects of the Proposed Development on human health have been scoped out of the ES on the basis that likely significant adverse effects would not occur. The assessments submitted with the application (set out above) conclude that with the embedded mitigation measures the Proposed Development will not result in any residual significant adverse effects on

human health. The Proposed Development is therefore compliant with applicable policy set out in EN-1 at paragraph 4.4.7 and 4.4.8.

7.21.13 The Proposed Development has been appraised against local plan policies relevant to human health impacts within the **Policy Compliance Document *[EN010153/DR/5.7]*** and it is found to be in compliance.

7.21.14 In conclusion, having regard to the relevant national and local policies on human health, the Proposed Development is considered to be policy compliant.

7.22 Safety and Security Considerations

Planning Policy Context

7.22.1 Overarching safety and security policy considerations are set out within Section 4.13 of NPS EN-1. EN-1 requires applicants to consult with the HSE on matters relating to safety (paragraph 4.3.15).

7.22.2 Further technology-specific considerations are set out within Section 2.10 of NPS EN-3. EN-3 recognises that large solar sites will include security measures and must be planned with safety and security in mind.

7.22.3 EN-3 notes that associated infrastructure for solar farms often encompasses site security provisions such as perimeter fencing, lighting, or CCTV (paragraph 2.10.16). EN-3 advises that security measures should be designed on a site-specific basis, and that an assessment is provided of the potential visual impacts of such infrastructure.

7.22.4 CWaCC Local Plan Policy SOC 5 Health and Well-being states that to meet the health and well-being needs of residents, proposals should promote safe and accessible environments. Policy ENV 6 High Quality Design and Sustainable Construction also recognises the need for safe development, stating that high quality design should promote safe secure environments local policy context is aligned with national policy, encouraging developments to be designed such that they are safe. With relevance to flood risk, Policy

DM 40 Development and Flood Risk, recognises that proposals for development that is at risk will only be supported where a FRA shows that the development will be safe, and passes the exception test where relevant. Finally, as part of the criteria under which ground mounted solar energy will be supported, Policy DM 52 Solar Energy: seeks to ensure that any development proposed should ensure that it causes no risk to public safety.

Assessment Conclusions

7.22.5 The approach to the design of site security measures is set out in **ES Vol 1 Chapter 2: The Proposed Development [EN010153/DR/6.1].**

7.22.6 A standalone Major Accidents and Disasters assessment was scoped out of the ES, as set out in **ES Vol 2 Appendix 1-2: Frodsham Solar Scoping Opinion [EN010153/DR/6.2]**, providing matters relating to fire are considered. ES Vol 1 Chapter 2: The Proposed Development [EN010153/DR/6.1] considers the potential for a fire within the BESS and an **Outline Battery Safety Management Plan** [EN010153/DR/7.8] is provided with the DCO application.

Design and Mitigation Measures

7.22.7 The Applicant has consulted with the HSE during the pre-application stage, as set out in the **Consultation Report [EN010153/DR/5.1].** The HSE raised the matter of existing utilities including pipelines which cross the Site. These are illustrated on **ES Vol 3 Figure 1-6: Utilities [EN010153/DR/6.3].** To protect these utilities and avoid direct impact, the Applicant has incorporated easements within the design of the Proposed Development, as set out in **Table 2-11 of ES Vol 1 Chapter 2: The Proposed Development [EN010153/DR/6.1]**. Specific safeguards to protect assets would be required to be adopted during construction works, with working methods to be agreed with the utility undertakers and adopted within agreed construction method statements. Protective Provisions to safeguard utilities crossing the Site are included within the draft **DCO [EN010153/DR/3.1]** to secure this.

7.22.8 As set out previously the Applicant is also in dialogue with the developers of the HyNet Hydrogen pipeline, which is proposed to cross the Site, and also the proposed Carbon Dioxide pipeline which would cross the Site and connect the Runcorn Energy Recovery Carbon Capture Plant to the Liverpool Bay Carbon and Capture Storage project. The Proposed Development is also being designed cognisant of the potential requirements of these projects.

7.22.9 In terms of potential fire risk at the BESS compound, a comprehensive fire risk management strategy would be developed prior to construction for the BESS in liaison with Chesire Fire and Rescue Service and in line with National Fire Chiefs Council's (NFCC) recommendations. The key principles of this strategy are set out in the **outline Battery Safety Management Plan [EN010153/DR/7.8].** A full Battery Safety Management plan would be developed post DCO consent in substantial accordance with this outline, alongside an Emergency Response Plan.

7.22.10 The operational areas of the SADA would be enclosed by fencing which would comprise a 2.0m high wire-mesh deer fence. Additional security fencing, weldmesh or palisade, up to 2.4m in height, would surround the Frodsham Solar Substation and BESS. Post-mounted internal facing closed-circuit television (CCTV) systems would be installed around the perimeter fence and would have fixed, inward-facing viewsheds and would be aligned to capture only the perimeter fence and the area inside the fence, thereby not capturing publicly accessible areas. Additionally, dome security cameras would be installed at the Frodsham Solar Substation, and the BESS compound, as well as at every entrance point to the Site potentially used to access the Site. Dome cameras may also be installed adjacent to the PCU stations.

7.22.11 The Frodsham Solar Substation and the BESS compounds would have inward-facing security lighting installed. This would be operated with passive infrared (PIR) detectors or would be turned on manually for maintenance in low light conditions or in the event of an emergency. No lighting would be required across the SADA.

7.22.12 During consultation, a number of respondents set out concerns relating to the security of the potential new visitor car park at Moorditch Lane. As set out in **ES Vol 1 Chapter 2: The Proposed Development *[EN010153/DR/6.1]***, the potential visitor car park on Moorditch Lane will only be provided should the proposed access enhancements result in a demonstrable increase in cars informally parking along Moorditch Lane, and if this causes access/egress issues for other users of Moorditch Lane. Its provision will be agreed with CWaCC. The Applicant commits to addressing any unforeseen access/egress issues on Moorditch Lane that are caused by the Proposed Development, either by constructing the car park or via alternative measures. If delivered, the car park will include security features (e.g. height-restricting barriers and a lockable gate), and the Applicant reserves the right to remove the car park later, if it gives rise to persistent anti-social behaviour. Suitable evidence of such behaviour would first be presented to CWaCC and potential solutions discussed.

7.22.13 **ES Vol 1 Chapter 2: Proposed Development [EN010153/DR/6.1]** sets out the type of lighting that would be necessary to satisfy health and safety requirements, and to ensure the welfare of those on site.

7.22.14 Further site and public security measures are set out within the **oCEMP *[EN010153/DR/7.5];* oOEMP *[EN010153/DR/7.6]***, and the **oDEMP *[EN010153/DR/7.7]***.

Assessment

7.22.15 The **ES [EN010153/DR/6.1]** has been prepared based on the embedded design and mitigation measures set out above, and as such the assessments included in the ES are cognisant of all site safety and security requirements.

Appraisal

7.22.16 The NPSs and relevant local planning policy seek to ensure that proposals are designed so that any risk to the safety of the public and the wider environment is appropriately minimised and mitigated. Potential risks to safety

have been identified through the development of the project and in consultation with the HSE. A comprehensive fire risk management strategy would be developed at the detailed design stage for the BESS in liaison with Chesire Fire and Rescue and in line with National Fire Chiefs Council's (NFCC) recommendations. The key principles of this strategy are set out in the **Outline BESS Battery Safety Management Plan [EN010153/DR/7.8].** The anticipated site-wide safety provisions are set out within **ES Vol 1 Chapter 2: Proposed Development [EN010153/DR/6.1].**

7.22.17 Fencing, gates and signage would prevent unauthorised public access to construction areas, and public specific safety signage would be installed as necessary and appropriate to ensure that members of the public accessing the Site or passing through, or near to it, along the improved public rights of way are informed of any associated risks.

7.22.18 The **oCEMP [EN010153/DR/7.5]; oOEMP [EN010153/DR/7.6], and oDEMP [EN010153/DR/7.7]** collectively ensure that the Proposed Development would be constructed, operate and ultimately be decommissioned in accordance with the provisions of EN-1, EN-3 and relevant local plan policy.

7.23 Glint and Glare

Planning Policy Context

7.23.1 National policy considerations relevant to glint and glare impacts are set out within NPS EN-3, which provides specific guidance for solar developments. EN-3 acknowledges that while solar panels are specifically designed to absorb light, "*solar panels may reflect the sun's rays at certain angles, causing glint and glare*" (paragraph 2.10.102).

7.23.2 Paragraph 2.10.103 of EN-3 directs applicants to identify potential glint and glare issues for relevant receptors (such as homes, roads, and aviation) and to undertake a glint and glare assessment if necessary. If such an assessment is needed, it should quantify the geometry, duration, and intensity of reflections affecting each receptor.

7.23.3 EN-3 also encourages the use of embedded mitigation such as anti-glare/anti-reflective coatings on panels to reduce reflective intensity (paragraph 2.10.134), whilst identifying that applicants may consider screening between potentially affected receptors and the panels (paragraph 2.10.135), or adjusting the azimuth angle or tilt angle of the panels (paragraph 2.10.136).

7.23.4 For decision making, paragraph 2.10.158 of EN-3 confirms that the Secretary of State should consider glint and glare impacts on nearby homes, motorists, public rights of way, and aviation infrastructure.

7.23.5 The CWaCC Local Plan does not contain specific policy in relation to glint and glare impacts but does more widely require development to minimise impacts on amenity.

Assessment Conclusions

7.23.6 An assessment of glint and glare effects was scoped out of the ES, as set out in **ES Vol 2 Appendix 1-2: Frodsham Solar Scoping Opinion *[EN010153/DR/6.2]***. The Applicant has however prepared a standalone assessment of glint and glare impacts to demonstrate the impacts of the Proposed Development are acceptable, and this is presented as **ES Vol 2 Appendix 4-3: Glint and Glare Assessment *[EN010153/DR/6.2]***.

Design and Mitigation Measures

7.23.7 The Proposed Development has followed the mitigation hierarchy to prevent glint and glare impacts as far as possible, with mitigation measures set out in **ES Vol 1 Chapter 2: The Proposed Development *[EN010153/DR/6.1]*** and in **ES Vol 2 Appendix 4-3: Glint and Glare Assessment *[EN010153/DR/6.2]***.

7.23.8 During the preliminary design phase an iterative approach was taken to modelling glint and glare impacts to avoid impacts where possible, and where not possible, to reduce impacts to an acceptable level. The initial modelling identified potential impacts on road users of the M56, and so following

consultation with National Highways, the azimuth angles and tilt angles of panels in the eastern extent of the Proposed Development have been changed to avoid or reduce the worst impacts. The design parameters that secure this are set out in Table 2-1 of **ES Vol 1 Chapter 2: The Proposed Development *[EN010153/DR/6.1]*** and within the **Design Parameters Statement *[EN010153/DR/7.1]***.

7.23.9 Landscape planting (hedgerows and trees) is proposed around the Site, which will progressively screen views of the panels. Specifically, this planting is located along the northern side of the M56 motorway to provide screening for road users, and residents to the south of the M56. This serves as mitigation for any residual glimpses of reflecting panels and is secured by the **outline Landscape and Ecology Management Plan *[EN010153/DR/7.13]***.

Assessment

7.23.10 **ES Vol 2 Appendix 4-3: Glint and Glare Assessment *[EN010153/DR/6.2]*** concludes that after implementing the above design and mitigation measures, the residual glint and glare impacts would be low for all relevant receptors. There are no residual likely significant adverse effects predicted in respect of glint and glare.

Appraisal

7.23.11 The Proposed Development's approach to glint and glare impacts is consistent with national policy set out within EN-3. The Applicant has undertaken a glint and glare assessment as required by paragraph 2.10.103 of EN-3 and included embedded mitigation measures as suggested by paragraphs 2.10.134-136. **ES Vol 2 Appendix 4-3: Glint and Glare Assessment *[EN010153/DR/6.2]*** concludes that residual glint and glare effects would be low for all receptors set out in paragraph 2.10.158 of EN-3.

7.23.12 The Proposed Development has been appraised against relevant local plan policies within the **Policy Compliance Document *[EN010153/DR/5.7]*** and is found to be in compliance.

7.23.13 In conclusion, having regard to the relevant national and local policies on glint and glare, the Proposed Development is considered to be policy compliant.

7.24 Other Matters

Mineral Safeguarding

7.24.1 Part of the Order Limits covering the emergency access at Weaver Lane south of the M56 motorway are within a mineral safeguarding area for sand and gravel, covered by Policy ENV 9 of the CWaCC Local Plan Part One.

7.24.2 EN-1 paragraph 5.11.19 seeks to ensure that applicants safeguard any mineral resource on a proposed site as far as possible. Where a project does have a sterilising effect upon a Mineral Safeguarding Area measures should ensure that appropriate mitigation is put in place to safeguard the mineral resource.

7.24.3 CWaCC Policy ENV 9 seeks to make provision for adequate, steady and sustainable supply of sand, gravel, salt and brine by safeguarding Cheshire's finite natural resources from incompatible development. The Proposed Development within this part of the Order Limits relates only to providing and maintaining access to the Proposed Development, and therefore the Proposed Development would not sterilise the mineral reserve or prevent its future extraction. Consequently the Proposed Development would not conflict with the objectives of Policy ENV 9

Electromagnetic Fields

7.24.4 EN-5 (paragraph 2.9.44) recognises that power frequency electromagnetic fields arise from the generation, transmission, distribution and use of electricity, and are a result of voltages applied to electrical conductors and equipment. To prevent the potential effects on the central nervous system and microshock on contact with a ground object, the International Commission on Non-Ionizing Radiation Protection (ICNIRP) developed health protection guidelines.

7.24.5 **ES Vol 1 Chapter 2: The Proposed Development [EN010153/DR/6.1]** provides a description of the typical electromagnetic fields produced by overhead electrical lines. This confirms that 132 kV electrical lines as proposed within Work No. 5 do not present a risk in relation to electric magnetic fields. On this basis, users of the Site, both in relation to members of the public and operatives, would not be exposed to levels of EMF above the relevant exposure limits. The Proposed Development will comply with the Electricity Safety, Quality and Continuity Regulations 2002.

Sulphur Hexafluoride

7.24.6 EN-5 (paragraph 2.9.59) states that Sulphur Hexafluoride (SF6) is an insulating and arc-suppressant gas used in high-voltage switchgear for electricity networks. It is a potent greenhouse gas, and EN-5 states that applicants should consider whether development can be designed to avoid their use.

7.24.7 The Proposed Development will require 132 kV circuit breakers at the Frodsham Solar Substation and at the SPEN Frodsham Substation. It is possible that these components would require SF6 in line with current standards set by Distribution Network Operators.

7.24.8 Manufacturers are however now increasingly able to offer SF6-free components, and those that do continue to use SF6 are sealed-for-life with extremely low leakage rates. For this reason, as set out in **ES Vol 2 Appendix 5-1: Greenhouse Gas Assessment [EN010153/DR/6.2]**, it is assumed that emissions of SF6 from the Proposed Development will be minimal and not material to the assessment of greenhouse gas emissions for the Proposed Development.

Other Consents and Licences

7.24.9 EN-1 Section 4.12 deals with Pollution Control and Other Environmental Regulatory Regimes. It confirms that the planning and pollution control systems are separate but complementary. The planning system controls the

development and use of land in the public interest. Pollution control is concerned with preventing and controlling pollution through the use of measures to prohibit or limit the release of substances to the environment from different sources. Paragraph 4.12.9 states that, in considering an application for DCO the Secretary of State should focus on whether the development itself is an acceptable use of the land, and the impact of that use, rather than the control of process emissions, or discharges themselves.

7.24.10 The **Other Consents and Licences Statement [EN010153/DR/5.5]** provides information on the additional consents and licences that are or may be required to construct and operate the Proposed Development. It sets out those consents requiring separate approval, and those incorporated within the Draft DCO. It also sets out the nature of relevant consents required, key legislation in their consenting, the relevant consenting authority and the status of the consent or licence.

8.0 PLANNING BALANCE AND CONCLUSION

8.1 Introduction

8.1.1 This section has been revised and updated following Examination Issue Specific Hearing 2 (24 – 26 February 2026), for Deadline 5 (26 March 2026). This updated Planning Balance and Conclusion Chapter has been amended to clarify the Applicant's position in respect of the overall planning balance, how that relates to the Green Belt assessment at Appendix A (also updated for Deadline 5), and to ensure consistency across both documents. For clarity, the preceding Chapters of the Planning Statement (above) have not been amended as part of this exercise. –A number of further small changes have been made at Deadline 6 (22 April 2026) to rectify minor typographical errors identified within the latest version.

8.1.2 All development delivers benefits of one form or another (otherwise development would simply not happen), and all development gives rise to harm to one degree or another (an inevitable consequence of change), but at its core the planning balance is about comparing the benefits that a proposed development would deliver against the harm that it would cause. The decision maker should then be able to arrive at a balanced judgement as to whether consent should be granted and a DCO made.

8.1.3 This section brings together the relevant legislative framework and policy context and applies them to the overall planning balance for the Proposed Development. It sets out the basis on which the application must be determined under the Planning Act 2008 (PA2008) and the National Policy Statements (NPSs) and weighs the substantial public benefits of the scheme against any residual adverse impacts. As demonstrated below, the application falls to be decided in accordance with the relevant NPSs and the clear public benefits of the Proposed Development are considered to clearly and demonstrably outweigh the limited and temporary residual harms.

8.2 Section 104(2) of the PA 2008

8.2.1 The Proposed Development is an application for a Development Consent Order (DCO). In determining such an application, Section 104 of the PA 2008 sets out the primary decision-making framework. Section 104(2) requires the Secretary of State to have regard to the following matters that are of relevance to the determination of this Order:

a) Any relevant National Policy Statement (NPS);

b) Any Local Impact Report (LIR) submitted by the local authority;

c) Any matters prescribed in applicable legislation; and

d) Any other matters which the Secretary of State considers important and relevant to the decision.

8.2.2 The relevant NPSs for this project are the Overarching NPS for Energy (EN-1), the NPS for Renewable Energy Infrastructure (EN-3), and the NPS for Electricity Networks (EN-5) in respect of the grid connection. In accordance with Section 104(3) PA 2008, the application must be decided in accordance with these NPSs except to the extent that any of the limited exceptions in Section 104(4)–(8) apply. Those exceptions include circumstances where granting consent would breach international obligations, be unlawful, or where the adverse impacts of the development would outweigh its benefits, among others. None of those exceptions are engaged in this case, as explained below, and no relevant NPS policy indicates that consent should be refused.

8.2.3 A Local Impact Report was prepared by the host authority (CWaCC) on 22 December 2025 and provided at Deadline One [REP1-046~~]...]~~. The Applicant has had regard to the relevant local planning policies and the National Planning Policy Framework (NPPF) as matters “important and relevant” under Section 104(2)(d). The NPPF (updated December 2024) acknowledges that it does not contain specific policies for Nationally Significant Infrastructure Projects (NSIPs) and that NSIP applications are determined under the PA

2008 framework. Accordingly, while local development plan policies and the NPPF provide useful context (for example, CWaCC's climate emergency declaration and carbon neutrality target by 2045 support the need for renewable energy infrastructure), these plans are afforded weight only to the extent they are relevant, and do not displace the primacy of the NPS in the decision-making process.

8.2.4 In terms of prescribed matters under Section 104(2)(c), the applicable provisions are those set out in the Infrastructure Planning (Decisions) Regulations 2010. In respect of Regulation 3 (when deciding an application which affects a listed building or its setting the Secretary of State must have regard to the desirability of preserving the listed building). The assessment on Cultural Heritage confirms that the Proposed Development would not have any direct effects on any Listed Building or significantly adversely affect their setting see **ES Vol 1 Chapter 11: Cultural Heritage and Archaeology [EN010153/DR/6.1]**. In respect of Regulation 7 (when deciding an application for development consent the Secretary of State must have regard to the United Nations Environmental Programme Convention on Biological Diversity 1992 - the conservation and enhancement of biological diversity) the relevant assessment concludes that there would be no significant residual adverse effects for any important terrestrial ecological feature, see **ES Vol 1 Chapter 7: Terrestrial Ecology [EN010153/DR/6.1]** and **ES Vol 1 Chapter 8: Ornithology [EN010153/DR/6.1]**.

8.2.5 This Planning Statement provides evidence of the Proposed Development's compliance with the policies of the NPSs, the relevant prescribed matters, other relevant planning policy, and matters that the Applicant considers are likely to be important and relevant, to inform the Secretary of State's decision as to whether to grant a DCO. An Environmental Impact Assessment has also been undertaken, and an Environmental Statement is submitted, in compliance with the Infrastructure Planning (Environmental Impact Assessment) Regulations 2017.

8.2.6 Considering the above, the planning balance can be considered in light of the urgent national need for the Project and the comprehensive evidence of its impacts and benefits.

8.3 The Planning Balance

8.3.1 In accordance with NPS EN-1, whilst the presumption applies in favour of granting development consent, namely the urgent need for large scale solar infrastructure, as "Critical National Priority" (CNP) infrastructure, will generally outweigh any other residual impacts, it is still necessary to apply the planning balance exercise to conclude as to the weight to be afforded to the benefits of the scheme against the adverse impacts, and come to a decision in granting or refusing the Order.

8.3.2 A detailed appraisal of the harm and benefit arising from the Proposed Development is provided at **EN010153/DR/8.46 – Green Belt Impacts Summary Table (Table 2).** This has been used to inform the 'green belt balancing' exercise. The green belt balancing exercise is only required in the event that 'very special circumstances' are needed to justify inappropriate development in the Green Belt. The table separately lists individual sub-components of each of the considerations, and applies a weight to each one in turn. Where criteria can give rise to varying degrees of impact (both positive and negative); across different phases of the development (construction; operation; or following decommissioning); and taken from different locations (within or beyond the Order Limits), then an overall combined effect is provided 'on balance'. This is then afforded weight to be given in the final balancing exercise in respect of Green Belt matters.

8.3.3 This 'overall' balance is arrived at to help determine whether that harm to the Green Belt by reason of inappropriateness, and any other harm resulting from the proposal is clearly outweighed by other considerations. This final assessment is provided within Appendix A (Green Belt Assessment).

8.3.4 Whilst, as set out below, the weight given to relevant considerations within the Green Belt balancing exercise has also been applied in the overall planning balance undertaken, this is not a process of double-counting the benefits and harms. The Secretary of State will be required to establish if ~~it~~he agrees with the Applicant in respect of the balancing exercise undertaken for the Green Belt ~~in in determining~~ having determined if very special circumstances ~~exist, should this judgement is required, prior~~are needed to ~~then, having determined going on to consider whether he agrees with the Applicant's position in weighting the overall planning balance as part of the decision-making process,~~ including ~~consideration of the conclusion of~~ justify inappropriate development in the Green Belt ~~matters within that overall balance.~~.

8.3.5 Paragraph 4.1.5 of NPS EN-1 sets out how the Secretary of State, when making a decision, will weigh; *"adverse impacts against its benefits"* The glossary associated with EN-1 confirms that in making a decision, the Secretary of State will apply the following hierarchy of weight:

a. No weight

b. Limited weight.

c. Moderate weight.

d. Great weight.

e. Significant weight.

f. Substantial weight.

8.3.6 The assessment below has regard to the planning appraisal in Section 7.0 above regarding relation to the potential impacts of the project, and applies the relevant planning balance using the weighting set out above.

National Need

8.3.7 The Proposed Development meets the definition of a "Critical National Priority" (CNP) infrastructure project under EN-1, reflecting the urgent national priority to deliver low-carbon energy at scale. NPS EN-1 (Section 4.2) makes clear that for such CNP Infrastructure, once the normal consideration of need, impacts and mitigation has been undertaken, any residual adverse impacts are "unlikely to outweigh the urgent need" for the infrastructure. In all but the most exceptional cases, a CNP project is to be treated as having met any policy tests that require the outweighing of harm or demonstration of exceptionality. Accordingly, while the planning assessment must weigh benefits and harms in the usual way (as required by NPS EN-1 paragraph 4.1.5), the starting point is a strong presumption in favour of development consent for this nationally important solar scheme. The urgent need for new renewable energy capacity carries **substantial** weight in the overall planning balance, and the Government's policy is that such need will generally outweigh residual impacts for CNP infrastructure. In parallel to the generation of renewable energy, the development includes an on-site Battery Energy Storage System (BESS) that is critical to electricity decarbonisation by helping to balance the grid supply. The provision of the BESS is given **moderate** weight in the planning balance.

Public Benefit (including ecology and biodiversity)

8.3.8 The Proposed Development will deliver a number of public benefits that address both national and local needs. On a national level, the project will make a significant contribution towards the UK's legally binding Net Zero target and carbon budget commitments by providing nationally significant, clean and renewable electricity. This contribution to meeting the climate change commitment is given **significant** weight in the overall planning balance. It will help to contribute to energy security, by diversifying and increasing the UK's domestic energy supply (thereby reducing reliance on fossil fuels and imports) and ensuring future electricity demand can be met.

The contribution to meeting the need for national energy security is also afforded **significant** weight in support of the proposal when considered as part of the overall planning balance.

8.3.9 The Proposed Development aligns with, and advances, the national policy agenda for green economic growth, supporting the transition to a clean energy economy. At the local and regional level, Frodsham Solar will assist CWaCC in achieving its own climate objectives (the Council has set a target for a carbon neutral borough by 2045 within their Climate Emergency Response Plan) by substantially increasing low-carbon energy generation in the area. It will enhance local energy resilience, including the potential for a private wire supply to nearby industry, and will bring economic benefits through investment in the green economy and the creation of new jobs during construction and operation. The Proposed Development represents an efficient use of land by co-locating a solar farm adjacent to the existing Frodsham Wind Farm in accordance with EN-3 paragraph 2.5.2, and capitalising on available grid connection capacity before 2030. The efficient use of land in this case carries **moderate** weight in the planning balance.

8.3.10 A comprehensive ecological impact assessment has been carried out (ES Chapter 7: Terrestrial Ecology **ES Vol 1 Chapter 7: Terrestrial Ecology** and **Chapter 8: Ornithology [EN010153/DR/6.1]** given the Site's proximity to sensitive habitats. Part of the Order Limits overlap with the Mersey Estuary Site of Special Scientific Interest (SSSI) along the MSC corridor, and the Site lies adjacent to the Mersey Estuary Special Protection Area (SPA) and Ramsar site. These designated sites are of international and national importance for waterbirds.

8.3.11 The project will deliver measurable benefits in that it is designed to achieve biodiversity gains through habitat creation and ecological management. Notably, the Applicant will be implementing dedicated new ecological mitigation areas that will remain free of development to compensate and enhance habitats for species associated with the Mersey

Estuary designated sites. This will secure long-term nature conservation benefits for internationally and nationally designated wildlife sites (SPA, Ramsar and SSSI), improving habitat availability for important bird populations. The benefits relating to terrestrial habitats and species, ornithology, and non-statutory designated sites during the longer-term operational phase of the development are afforded **limited** / **great** weight. **ES Vol 1 Chapter 8: Ornithology [EN010153/DR/6.1]** identifies a significant moderate beneficial effect through the creation of the NBBMA and wider screening, which carries **significant** beneficial weight in the planning balance.

8.3.12 Balanced against these positive effects, the impact on both designated and non-designated sites; habitats, ornithology and other species during the construction phase of the project is typically assessed as a minor adverse harm which is given **limited** to **moderate** weight. In balancing the short-term harm against the longer-term benefits, the Proposed Development would result in an overall positive effect on ecology and biodiversity. This combined positive effect is given **moderate** weight in the final planning balance.

8.3.13 Public access and recreation will be improved by the Proposed Development in the longer term; for example, new or enhanced footpath links across the Site are proposed, including a circular trail and a new parking area for visitors[6], which will provide a recreational amenity benefit for local communities. This benefit is given **limited** weight. However, the effects on a series of public rights of way during construction is assessed as negligible to minor adverse, and **limited** weight is given to that harm in the short term. The overall weight in the planning balance is positive albeit **limited** due to the fact

[6] The provision of a new parking area for visitors is dependent upon the completion of surveys within the first two years of operation which will identify whether it is necessary. Irrespective, of whether the parking area is delivered, the main public access benefit derives from the creation of a new footpath network. The weighting given to public access and recreational benefits would not differ irrespective of whether or not the public car park is delivered.

that the benefits derived from a new and enhanced public footpath network would be experienced over a longer period of time.

Green Belt

8.3.14 The entirety of the Site lies within the North Cheshire Green Belt (Liverpool–Manchester Green Belt). A detailed Green Belt Assessment has been undertaken (Appendix A to this Planning Statement). EN-~~1recognises~~1 recognises that there is a general presumption against inappropriate development in the Green Belt. Such development should not be approved except in very special circumstances. The Proposed Development is not listed as being not inappropriate, however recent change to national policy has introduced the concept of "grey belt" in which development should not be considered inappropriate where development meets criteria listed under paragraph 155 of the NPPF.

8.3.15 The Green Belt Assessment concludes that the area in which the Site is located is "grey belt" (land that does not strongly contribute to the relevant Green Belt purposes set out within paragraph 143 of the NPPF), and would not constitute inappropriate development under the relevant tests of national policy (notably NPPF paragraph 155). If the development is not inappropriate, it follows that it causes no harm to the Green Belt, and there is no requirement to apply substantial weight to Green Belt harm or to demonstrate very special circumstances. This is confirmed by paragraph 153 of the NPPF in which it states that local authorities should ensure substantial weight is given to any harm to the Green Belt, other than in the case of development on grey belt land, where development is not inappropriate.

8.3.16 In the event that the Secretary of State was to conclude that the Proposed Development was inappropriate development, the development comprises Critical National Priority (CNP) Infrastructure, and in accordance with NPS EN-1 (paragraph 4.2.17) and EN-1's Green Belt policy (paragraph 5.11.37) it should be treated as having met the 'tests' requiring the outweighing of harm or very special circumstances due to the overriding national importance.

8.3.17 The Applicant has concluded that the development is on grey belt, and that the development is not inappropriate. Consequently, there is no requirement to give substantial weight to any harm to the Green Belt.

8.3.18 Should the Secretary of State conclude otherwise (either that he considers that the Site is not grey belt, or that the Proposed Development is not CNP Infrastructure), the benefits of the Proposed Development clearly outweigh any harm, and very special circumstances do exist to justify the project in Green Belt policy terms. Therefore, whether viewed through the lens of the NPPF/EN-1 Green Belt test or the CNP policy presumption, Green Belt policy does not bar the grant of consent, either because the Proposed Development is not in conflict with Green Belt policy at all, or (alternatively) because any harm is clearly and demonstrably outweighed by compelling benefits.

Landscape and Visual Amenity

8.3.19 **ES Vol 1 Chapter 6: Landscape and Visual Amenity [EN010153/DR/6.1]** has evaluated the effects of the solar farm on landscape character and visual receptors. The Site lies on generally flat low-lying land, and the design keeps the solar arrays low in height (the panels are mounted close to ground level). There is also substantial existing infrastructure in the vicinity, including the adjacent wind turbines (up to 125m tall), electricity pylons, the M56 motorway, and industrial installations which provide a context of large-scale structures in the landscape. As a result, the visual influence of the solar farm will be highly localised. The landscape character impact from within the Order Limits during the construction phase of the development is concluded to have moderate to major adverse effects which would be significant in EIA terms. This has been afforded **significant** weight in the planning balance. Likewise, the landscape character impact from within the Order Limits during operation in the short term, would experience moderate to major adverse effects which would be afforded **significant** weight. The impact on landscape fabric, and landscape character beyond the Order Limits

in the longer term during both operation and construction would result in negligible to moderate adverse effects, for which **limited** to **moderate** weight is given.

8.3.20 **ES Vol 1 Chapter 6: Landscape and Visual Amenity [EN010153/DR/6.1]** found that the only significant visual effects will occur for receptors immediately adjacent to or within the Site, notably users of public footpaths that run through the Site itself. Walkers on these paths will experience close-range views of solar panels, resulting in a noticeable change to visual amenity along those routes. Even these effects will lessen over time as the proposed mitigation planting (new hedgerows and trees around the Site) grows to help screen and filter views, but it is acknowledged that some residual visual impact for footpath users will remain.

8.3.21 For the wider area the visual effects are much more limited. Beyond the Site and its immediate margins, views of the development are largely obscured or minor due to distance, existing vegetation and the low profile of the panels. Residents and visitors on the northern edge of Frodsham, for example, will not see the solar farm as a dominant feature. The panels will sit below the skyline and be seen against a backdrop that already contains motorways, wind turbines and other infrastructure.

8.3.22 From key public viewpoints such as Frodsham Hill and Helsby Hill, the arrays are either screened by intervening landforms/vegetation or visible only as a small new element in a broad panorama that is already characterized by a mosaic of industrial and developed features. The Landscape and Visual Amenity Assessment concludes that any off-site visual changes would be minor adverse and not significant. The landscape of Frodsham Marsh is already influenced by human modifications, and the addition of solar panels (especially with mitigation planting) will not fundamentally change the character of this low-lying marshland adjoining existing energy infrastructure. Furthermore, the development is strictly time-limited and reversible. The DCO will secure a 40-year operational period, after which all solar arrays and

equipment will be decommissioned and removed. This means that any landscape/visual effects are temporary and the landscape will be restored in the long term.

8.3.23 The visual impacts during the construction phase of the development, from within the Order Limits are considered moderate / major for which **great / significant** weight is afforded. In contrast, the visual impact during construction, from beyond the Order Limits, concludes negligible effect through to minor / moderate effects for which **limited** weight is given.

8.3.24 During the operational phase of the development, as mitigation is established and maturity is achieved, the effects within the Order Limit varies from minor to moderate adverse, and the weight afforded is consequently **moderate** to **significant**. Beyond the Order Limit the effect is negligible through to moderate adverse and **limited** weight is given.

8.3.25 In contrast to the harm caused to the landscape from within and beyond the Order Limits, it is recognised that there are moderate beneficial effects on the overall landscape fabric (grassland, hedgerows, scrub vegetation, trees and waterbodies) during the operational phase of the development, and moderate to major beneficial effects to the landscape character in the longer term, from within the Order Limits. These benefits are given **Limited** to **Moderate** weight.

8.3.26 On balance, the overall Landscape and Visual effects are considered negative and weigh against the development, and for which **Moderate** weight should be applied in the overall planning balance.

Heritage

8.3.27 **ES Vol 1 Chapter 11: Cultural Heritage and Archaeology [EN010153/DR/6.1]** concludes minor adverse effect on non-designated ventilation shafts and negligible adverse direct effect on ridge and furrow deposits, Whilst affording great weight to the desirability of preserving assets is applied, the overall harm is considered to be limited and the weight to be

applied in the planning balance to archaeological heritage during the construction phase of the project is considered to be **limited.**

8.3.28 There are no designated heritage assets within the Site boundary that would be directly affected by the construction or operation of the project. A number of designated heritage assets lie in the wider area around the Site, primarily a few Listed Buildings and Conservation Areas in Frodsham town and the surrounding villages, as well as a Scheduled Monument (the Halton Castle promontory fort) to the south.

8.3.29 The Applicant's heritage assessment (ES Chapter 8: Cultural Heritage and Archaeology) **ES Vol 1 Chapter 11: Cultural Heritage and Archaeology [EN010153/DR/6.1]** concluded that the Proposed Development would not cause any physical harm to heritage assets, and any impacts would be limited to potential changes in setting (i.e. views) for certain assets. Where such setting effects occur, they have been assessed as minor adverse in magnitude. For example, a minor adverse effect was identified for the setting of the Frodsham Conservation Area, which lies on higher ground to the south. The solar farm will be outside the Conservation Area and largely screened by terrain, resulting in only a distant glimpse of panels, with no material change to the character of the historic townscape. Similarly, a minor adverse (and non-significant) effect on the setting of Castle Park (Grade II Registered Park and Garden) in Frodsham was assessed, due to very limited visibility about 2 km north of that asset. All potential heritage setting effects were judged to fall into the category of "less than substantial harm" (in many cases at the very lowest end of less-than-substantial) to the significance of the affected heritage assets. In accordance with NPS EN-1 and the NPPF, the decision-maker is required to give great weight to the conservation of heritage assets, and to weigh any less-than-substantial harm against the public benefits of the proposal. The harm to the setting of affected heritage assets is minor adverse and indirect, and the negative weight given in the planning balance is **limited.**

Traffic

8.3.30 **APP-131 Transport Assessment** concludes that across the adopted highway network during peak periods of the construction phase, traffic generated would be below the IEMA Rule 1 Threshold and would largely fall within accepted level of day-to day traffic variation. Impact at key junctions would not be significant, and the impact on pedestrian and cycle amenity would be negligible. The negative weight given in the planning balance during both construction and operation phase of the project is **limited.**

Residential Amenity

8.3.31 The potential harm to residential amenity during the construction phase of the development is limited to dust and noise generated by construction operations and HGVs access and crossing the Site. NPS EN-3 states that limited weight should be given to noise from construction impacts following the implementation of appropriate mitigation. **REP1-012 Outline Construction Environmental Management Plan (CEMP)** confirms that a Construction Dust Management Plan (CDMP) would ensure that appropriate measures are employed to control dust during construction. Consequently, **Limited** weight is given to harm from noise and dust during construction.

8.3.32 During the operational phase of the development, harm to residential amenity would potentially arise from glint and glare from the solar array. **REP4-018 6.2 ES Volume 2 Appendix 6-3 Residential Properties** confirms the use of antireflective coating, and concludes that no properties would experience a moderate effect, but that low glint and glare effects would be experienced by a small number of properties. The maximum daily duration for any impacted dwelling is predicted to be 22 minutes. The maximum median daily duration is just less than four minutes. **Limited** weight is given to harm from glint and glare during operation, and the overall weight to residential amenity (construction and operation) is **limited.**

Other Environmental Considerations

8.3.33 All other potential environmental effects of the Proposed Development have been assessed within the Environmental Statement, and no unacceptable impacts have been identified. Nonetheless, other environmental considerations that the Proposed Development may have an impact on (positive or negative), and consequently may ultimately affect the overall balance of harm against benefit, are determined to be **Neutral.** This is because the residual effects are inconsequential or so negligible following the implementation of embedded or additional mitigation, that **no weighting** should be applied in the overall planning balance. These considerations include the impact on:

i) Ground Conditions.
ii) Agricultural Land.
iii) Flood Risk and Drainage.
iv) Water Quality.
v) Air Quality.
vi) Socio-Economic.
vii) Resource and Waste Management.
viii)Human Health.

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Summary of Planning Balance

8.3.34 For the benefit of clarity, and as set out above, it is the Applicants position that the Site is located in grey belt and the tests at paragraph 155 of the NPPF are met, such that the Proposed Development is not inappropriate. Consequently, and in accordance with paragraph 153 of the NPPF, substantial weight does not need to be given to the harm to the Green Belt, and the need to treat Green Belt harm is not engaged. This is because, where development is not considered to be inappropriate in the Green Belt, it follows that the test of impacts to openness or to Green Belt purposes are appropriately addressed, and the proposal does not have to be justified by very special circumstances.

8.3.35 A summary of the above planning balance, based on the above assumption, is provided in Table 8.1 below.

Issue / Criteria	Finding on Balance	Weighting
Need for renewable energy	Positive	Substantial
Need for energy security	Positive	Significant
Contribution to climate change	Positive	Significant
Need for energy storage	Positive	Moderate
Efficiency of land use	Positive	Moderate
Ecology and Biodiversity	Positive	Moderate
Tourism / rights of way	Positive	Limited
Ground Conditions	Neutral	No weighing
Agricultural Land	Neutral	No weighting
Flood Risk and Drainage	Neutral	No weighting
Water Quality	Neutral	No weighting
Air Quality	Neutral	No weighting
Socio-Economic	Neutral	No weighting
Resource and Waste Management	Neutral	No weighting
Human Health	Neutral	No weighting
Noise	Negative	Limited
Glint and Glare	Negative	Limited
Traffic	Negative	Limited
Heritage	Negative	Limited
Landscape and Visual	Negative	Moderate

8.3.36 In the scenario where the Secretary of State concludes that the Site is not within grey belt and that the proposal represents inappropriate development in the Green Belt, paragraph 153 of the NPPF requires the decision maker to

give substantial weight to any harm to the Green Belt, including harm to its openness, which should be carried forward into the planning balance. Inappropriate development is, by definition, harmful to the Green Belt and should not be approved except in very special circumstances.

8.3.37 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. In the event that it is accepted the development represents Critical National Priority Infrastructure, as a starting point it should be presumed that the very special circumstances 'test' has been met.

8.3.38 Irrespective, and in both instances (i.e. where it is concluded that the site is not ~~green~~grey belt, and the proposal represents inappropriate development, and/or the proposal is assumed to be Critical National Priority Infrastructure), the limited impact on the openness of the Green Belt and the temporary harm, still need to be afforded substantial weight. The Applicant's position is that, in such scenarios, the other considerations which support the scheme are patently sufficient to clearly outweigh the limited Green Belt harm and other harm.

8.3.39 When all the above factors are weighed together, the planning balance strongly supports approval of the Proposed Development. The Proposed Development will deliver a wide array of benefits addressing an urgent national infrastructure need for clean energy, contributing substantially to climate change targets, improving energy security, and providing local economic and environmental enhancements. These factors carry **substantial**, **significant,** or **moderate positive weight** in the overall decision. Set against these benefits, the potential harms of the development are, in the most part, limited in extent, nature, and duration. Any residual adverse impacts (for example, a degree of visual change for nearby footpath users, or minor setting effects on heritage assets) have been mitigated to acceptable levels. These are all given **limited** weight, save for the **moderate**

weight afforded to residual landscape and visual impact. In all cases this impact is outweighed by the benefits when applying the tests of the NPS and NPPF.

8.3.40 The temporary and reversible nature of the proposal (a 40-year operational life with full land restoration thereafter) further tempers the weight of any harm. In policy terms, the application accords with the relevant NPSs (EN-1, EN-3, EN-5) and there are no specific NPS policies that indicate refusal. EN-1 includes a presumption in favour of the development given the urgent national need. None of the restrictive grounds in Section 104(4)–(8) PA 2008 applies as follows:

i) Breach of international obligations – given the baseline characteristics of the Site, the residual effects of the Proposed Development, and its beneficial climate change impact, there is no reason to conclude that, in deciding the application in accordance with the NPSs that there would be such a breach.
ii) Breach of any enactment – given the residual effects of the Proposed Development, there is no reason to conclude that, in deciding the application in accordance with the NPSs that there would be such a breach.
iii) Unlawful by virtue of any enactment – given the residual effects of the Proposed Development, there is no reason to conclude that, in deciding the application in accordance with the NPSs would be unlawful due to any enactment.
iv) Adverse impacts would outweigh its benefits – the Planning Statement and accompanying documents demonstrate beyond doubt that the need and benefits of the Proposed Development are very significant for which substantial weight should be given. The Environmental Statement and accompanying documents demonstrate that, subject to the embedded and additional mitigation measures proposed, the Proposed Development would give rise to limited impacts and consequential harm. There is no

reasons to conclude therefore that the adverse impacts would outweigh its benefits.

v) Any condition prescribed for deciding an application otherwise than in accordance with a NPS is met – no matters are so prescribed.

8.3.41 There exists no breach of international obligations or law, and the adverse impacts would demonstrably not outweigh the benefits. By contrast the benefits of the Proposed Development are very substantial leading to an overwhelming balance in favour of granting development consent for the Proposed Development. In terms of Section 104(7), the benefits of the Proposed Development clearly and decisively outweigh the limited and localised adverse impacts.

8.4 Final Conclusion

8.4.1 NPS EN-1 sets out national policy for energy infrastructure of the type proposed. Paragraph 4.1.3 states that; *"Given the level and urgency of need for infrastructure of the types covered by the energy NPSs set out in Part 3 of this NPS, the Secretary of State will start with a presumption in favour of granting consent for applications for energy NSIPs."*

8.4.2 This Planning Statement demonstrates that the Proposed Development is in accordance with NPS EN-1 paragraph 4.1.3. Furthermore, there is specific further presumption at paragraph 4.1.7 that the urgent need for CNP infrastructure, which includes solar of the type proposed, will; *"…in general outweigh any other residual impacts not being addressed by the application of the mitigation hierarchy."*

8.4.3 Section 104 of the PA2008 sets out the matters which the Secretary of State must have regard to in deciding an application where NPSs have effect. The application has been assessed against each of the relevant matters in Section 104(2). None of the limited exceptions in Section 104(4)-(8) apply. The adverse impacts that should be afforded moderate weight against the Proposed Development is limited to residual visual amenity impact on a

limited number of footpath users. Other negative impacts are limited to acceptable levels through the implementation of appropriate mitigation, are limited in duration, and given limited weight in the overall planning balance. These impacts are significantly outweighed by the substantial and significant public interest and wider benefits of the Proposed Development.

8.4.4 The Site lies within the Green Belt where very special circumstances are required to justify inappropriate development. The Applicant has demonstrated that the area is grey belt and that the Proposed Development would not constitute inappropriate development. Irrespective, it is Critical National Priority (CNP) Infrastructure and would meet the 'tests' requiring harm or very special circumstances in any event. In any event, very special circumstances have been demonstrated that outweigh any harm.

8.4.5 The Proposed Development will help meet the urgent and critical need to bring forward large scale solar development to meet the targets for decarbonisation and net zero, and help to provide resilience, security and affordability to electricity supplies. There is a clear and demonstrable need for the Proposed Development that will deliver national and local economic, social and environmental benefits in accordance with the Government objectives to deliver sustainable development.

8.4.6 The analysis demonstrates that the Proposed Development complies with national planning policy and other local policy taken as a whole, both by virtue of the benefits it delivers and as a result of its design and location selection. In terms of the overall planning balance, the clear and substantial national and local benefits demonstrably outweigh the limited adverse effects that would be localised, short-term, and/or reversible at the end of the Proposed Development's lifetime.

8.4.7 The Planning Statement has demonstrated that the Proposed Development is in accordance with relevant national and local policy. Given the urgent need for large scale solar development and substantial benefits of the proposal, there exists a clear and compelling case for the DCO to be made.

9.0 REFERENCES

[i] HMSO, (2008). *Planning Act 2008*. [online] Available at: https://www.legislation.gov.uk/ukpga/2008/29/introduction [Accessed 8 April 2025]

[ii] HMSO, (2009). *Infrastructure Planning (Applications: Prescribed Forms and Procedure) Regulations 2009*. [online] Available at: https://www.legislation.gov.uk/uksi/2009/2264/contents/made [Accessed 8 April 2025]

[iii] HMSO, (2017). *Infrastructure Planning (Environmental Impact Assessment) Regulations 2017*. [online] Available at: https://www.legislation.gov.uk/ukpga/2017/29/introduegulationsion [Accessed 8 April 2025]

[iv] Department for Energy Security and Net Zero, (2023). *Overarching National Policy Statement for Energy (EN-1)*. [online] Available at: https://www.gov.uk/government/publications/overarching-national-policy-statement-for-energy-en-1 [Accessed 8 April 2025]

[v] Climate Change Committee, (2021). The Sixth Carbon Budget: The UK's path to Net Zero. [online] Available at: https://www.theccc.org.uk/publication/sixth-carbon-budget/ [Accessed 8 April 2025]

[vi] Climate Change Committee, (2025). *Draft Seventh Carbon Budget*. [online] Available at: https://www.theccc.org.uk/publication/the-seventh-carbon-budget/#publication-downloads/ [Accessed 8 April 2025]

[vii] United Nations, (2015). *Paris Agreement*. [online] Available at: https://unfccc.int/process-and-meetings/the-paris-agreement/the-paris-agreement [Accessed 8 April 2025]

[viii] Department for Energy Security and Net Zero, (2022). *British Energy Security Strategy*. [online] Available at: https://www.gov.uk/government/publications/british-energy-security-strategy [Accessed 8 April 2025]

[ix] Department for Energy Security and Net Zero, (2023). *Powering Up Britain*. [online] Available at: https://www.gov.uk/government/publications/powering-up-britain [Accessed 8 April 2025]

[x] Department for Energy Security and Net Zero, (2023). *Powering Up Britain: Energy Security Plan*. [online] Available at: https://www.gov.uk/government/publications/powering-up-britain [Accessed 8 April 2025]

[xi] Department for Energy Security and Net Zero, (2023). *Powering Up Britain: Net Zero Growth Plan*. [online] Available at: https://www.gov.uk/government/publications/powering-up-britain [Accessed 8 April 2025]

[xii] Climate Change Committee, (2024). *2024 Progress Report to Parliament*. [online] Available at: https://www.theccc.org.uk/publication/progress-in-reducing-emissions-2024-report-to-parliament/ [Accessed 8 April 2025]

[xiii] Department for Energy Security and Net Zero, (2024). *Accelerating to Net Zero: responding to the CCC progress report and delivering the Clean Energy Superpower Mission*. [online] Available at: https://assets.publishing.service.gov.uk/media/67619987d20fc50099e1902f/committee-on-climate-change-2024-government-response.pdf [Accessed 8 April 2025]

[xiv] Department for Energy Security and Net Zero, (2024). *Clean Power 2030 Action Plan*. [online] Available at: https://www.gov.uk/government/publications/clean-power-2030-action-plan [Accessed 8 April 2025]

[xv] Department for Energy Security and Net Zero, (2024). *Clean Power 2030 Action Plan: Connections Reform Annex*. [online] Available at: https://www.gov.uk/government/publications/clean-power-2030-action-plan [Accessed 8 April 2025]

[xvi] HMSO, (2008). Climate Change Act 2008. [online] Available at: https://www.legislation.gov.uk/ukpga/2008/27/contents [Accessed 8 April 2025]

[xvii] Climate Change Committee, (2021). *The Sixth Carbon Budget: Electricity Generation Sector Summary*. [online] Available at: https://www.theccc.org.uk/publication/sixth-carbon-budget/ [Accessed 8 April 2025]

[xviii] Department for Energy Security and Net Zero, (2020). *UK's 2030 Nationally Determined Contribution*. [online] Available at: https://www.gov.uk/government/publications/the-uks-nationally-determined-contribution-communication-to-the-unfccc [Accessed 8 April 2025]

[xix] Department for Energy Security and Net Zero, (2025). *UK's 2035 Nationally Determined Contribution*. [online] Available at: https://www.gov.uk/government/publications/uks-2035-nationally-determined-contribution-ndc-emissions-reduction-target-under-the-paris-agreement [Accessed 8 April 2025]

[xx] Department for Energy Security and Net Zero, (2025). *2024 UK Provisional Greenhouse Gas Emissions*. [online] Available at: https://assets.publishing.service.gov.uk/media/67e3e0f79137aeade25de022/2024-provisional-greenhouse-gas-emissions-statistics-statistical-summary.pdf [Accessed 8 April 2025]

[xxi] Department for Energy Security and Net Zero, (2025). *Energy Trends 2024*. [online] Available at: https://assets.publishing.service.gov.uk/media/67e4f7744038ca2e9441206e/Energy_Trends_March_2025.pdf [Accessed 8 April 2025]

[xxii] Department for Energy Security and Net Zero, (2025). *Energy Trends 2024: Renewable electricity capacity and generation (ET 6.1 - quarterly)*. [online] Available at: https://www.gov.uk/government/statistics/energy-trends-section-6-renewables [Accessed 8 April 2025]

[xxiii] House of Commons Library, (2025). *Research Briefing: Gas and electricity prices during the 'energy crisis' and beyond*. [online] Available at: https://commonslibrary.parliament.uk/research-briefings/cbp-9714/ [Accessed 8 April 2025]

[xxiv] National Audit Office, (2024). *Energy bills support schemes 'undoubtedly successful at protecting majority of consumers'*. [online] Available at: https://www.nao.org.uk/press-releases/energy-bills-support-schemes-undoubtedly-successful-at-protecting-majority-of-consumers/ [Accessed 8 April 2025]

[xxv] House of Commons Library, (2024). *UK Defence Spending*. [online] Available at: https://commonslibrary.parliament.uk/research-briefings/cbp-8175/ [Accessed 8 April 2025]

[xxvi] Department for Energy Security and Net Zero, (2024). *Energy UK conference 2024: keynote speech by Ed Miliband*. [online] Available at: https://www.gov.uk/government/speeches/energy-uk-conference-2024-keynote-speech-by-by-ed-miliband [Accessed 8 April 2025]

[xxvii] Rt Hon Chris Skidmore MP, (2022). *Mission Zero: Independent Review of Net Zero*. [online] Available at: https://www.gov.uk/government/publications/review-of-net-zero [Accessed 8 April 2025]

[xxviii] UK Government, (2024). *What is Great British Energy and what does it mean for me?* [online] Available at: https://www.gov.uk/government/news/what-is-great-british-energy-and-what-does-it-mean-for-me [Accessed 8 April 2025]

[xxix] Protos, (2017). *UK's first Energy Innovation District*. [online] Available at: https://www.protos.co.uk/news/uk-s-first-energy-innovation-district [Accessed 8 April 2025]

[xxx] Net Zero North West, (2023). *North West Cluster Plan*. [online] Available at: https://www.netzeronw.co.uk/north-west-cluster [Accessed 8 April 2025]

[xxxi] Cheshire and Warrington Local Enterprise Partnership, (2025). *Green skills training and jobs boost as Cheshire chosen by government as "key growth region" for clean energy*. [online] Available at: https://cheshireandwarrington.com/latest-news/green-skills-training-and-jobs-boost-as-cheshire-chosen-by-government-as-key-growth-region-for-clean-energy [Accessed 8 April 2025]

[xxxii] Cheshire and Warrington Local Enterprise Partnership, (2018). *Strategic Economic Plan*. [online] Available at: https://cheshireandwarrington.com/media/qvhhspzh/strategiceconomicplan.pdf [Accessed 8 April 2025]

[xxxiii] Cheshire and Warrington Local Enterprise Partnership, (2019). *Local Industrial Strategy*. [online] https://cheshireandwarrington.com/media/nllbfshc/ai-9-lis-summary-doc_march-19_low.pdf [Accessed 8 April 2025]

[xxxiv] Department for Energy Security and Net Zero, (2025). *Support for workers to benefit from thousands of clean power jobs*. [online] Available at: https://www.gov.uk/government/news/support-for-workers-to-benefit-from-thousands-of-clean-power-jobs [Accessed 8 April 2025]

[xxxv] Cheshire West and Chester Council, (2024). *Climate Emergency Response Plan*. [online] Available at: https://www.cheshirewestandchester.gov.uk/asset-library/the-climate-emergency/appendix-2-cwc-climate-emergency-response-plan-2024-update.pdf [Accessed 8 April 2025]

[xxxvi] Solar Energy UK, (2024). *Community Engagement Good Practice Guidance*. [online] Available at: https://solarenergyuk.org/wp-content/uploads/2024/07/CGPG2024.pdf [Accessed 8 April 2025]

[xxxvii] NESO, (2024). *Future Energy Scenarios 2024*. [online] Available at: https://www.neso.energy/document/321041/download [Accessed 8 April 2025]

[xxxviii] Department for Energy Security and Net Zero, (2024). *Regional and local authority electricity consumption statistics*. Available at: https://www.gov.uk/government/statistics/regional-and-local-authority-electricity-consumption-statistics [Accessed 8 April 2025]

[xxxix] Department for Energy Security and Net Zero, (2024). *Renewable electricity by local authority, 2014 to 2023*. [online] Available at: https://www.gov.uk/government/statistics/regional-renewable-statistics [Accessed 8 April 2025]

[xl] NESO, (2024). *Connections Reform Methodologies – December 2024 Consultation*. [online] Available at: https://www.neso.energy/industry-information/connections/connections-reform [Accessed 8 April 2025]

[xli] Department for Energy Security and Net Zero, (2025). *Renewable Energy Planning Database – January 2025 (quarter 4)*. [online] Available at: https://www.gov.uk/government/publications/renewable-energy-planning-database-monthly-extract [Accessed 8 April 2025]

[xlii] National Infrastructure Planning (2018). *Advice Note 9: Using the 'Rochdale Envelope'*. [online] Available at: https://www.gov.uk/government/publications/nationally-significant-infrastructure-projects-advice-note-nine-rochdale-envelope [Accessed 8 April 2025]

[xliii] HMSO (2008). Planning Act 2008. Available at: https://www.legislation.gov.uk/ukpga/2008/29/introduction [Last Accessed: 06 March 2025]

[xliv] Department of Energy and Climate Change (2024). National Policy Statement for Renewable Energy Infrastructure (EN-3). Available at: https://assets.publishing.service.gov.uk/media/65a7889996a5ec000d731aba/nps-renewable-energy-infrastructure-en3.pdf [Last Accessed: 31 January 2024]

[xlv] Ministry of Housing, Communities and Local Government (2024) *National Planning Policy Framework*. [online] Available at: https://assets.publishing.service.gov.uk/media/67aafe8f3b41f783cca46251/NPPF_December_2024.pdf [Accessed 17 April 2025]

[xlvi] Cheshire West and Chester Council (multiple publication years) *Adopted Development Plan Documents.* [online] Available at: https://consult.cheshirewestandchester.gov.uk/kse/folder/59487 [Last Accessed 17 April 2025]

[xlvii] Cheshire West and Chester Council (2016) *Landscape Sensitivity Study and Guidance on Wind and Solar Photovoltaic Developments*. [online] Available at: https://www.cheshirewestandchester.gov.uk/asset-library/final-march-2016-cwacsensitivitystudy.pdf [Last accessed 17 April 2025]

[xlviii] Cheshire West and Chester Council (2016) *A Landscape Strategy for Cheshier West and Chester Borough* [online] Available at: https://www.cheshirewestandchester.gov.uk/documents/planning-and-building-consultancy/total-environment/landscape-assessment/CWaC-LandscapeStrategyPart1-Final-March2016.pdf [Last accessed 17 April 2025]

[xlix] Planning Inspectorate (multiple years) *Nationally Significant Infrastructure Projects: Advice pages* [online] Available at: https://www.gov.uk/government/collections/national-infrastructure-planning-advice-notes [Last accessed 17 April 2025]

[l] HMSO (2023) *Energy Act 2023* [online] Available at: https://www.legislation.gov.uk/ukpga/2023/52/introduction/enacted [Last accessed 17 April 2025]

[li] HMSO (2021) *Environment Act 2021* [online] Available at: https://www.legislation.gov.uk/ukpga/2021/30/introduction [Last accessed 17 April 2025]

[lii] National Infrastructure Commission (2020) *Net zero: Opportunities for the power sector* [online] Available at: https://nic.org.uk/studies-reports/net-zero-opportunities-for-the-power-sector/ [Last accessed 17 April 2025]

Appendix A:
Green Belt Assessment

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1.0 GREEN BELT ASSESSMENT

1.1 Background

1.1.1 This Appendix has been revisited following Examination Issue Specific Hearing 2, (24 – 26 February 2026) for Deadline 5 (26 March 2026). This updated Green Belt Assessment has been amended to clarify the Applicant's position in respect of the Green Belt balance, how that relates to the overall planning balance, and to ensure consistency with the main text of the Planning Statement. A number of final amendments have been made to this Appendix ~~post Deadline 5~~at Deadline 6 to address minor typographical or formatting errors.

1.1.2 The Site is located entirely within the Liverpool, Manchester and West Yorkshire Green Belt. The Green Belt expands east/west across the northern part of Cheshire West and Chester forming a 'belt' circa 12km in width covering approximately forty-two percent of the borough. It runs from the Mersey estuary north of the borough, to the A51/A54/A556 corridor that connects the M6 in the east with the city of Chester in the west. To the west the Green Belt envelopes around the city of Chester and includes the non-urbanised western half of the Wirral Estuary, and the River Dee plain as far as the Welsh border. To the east it continues beyond the M6 corridor, south of Manchester as far as the Peak District National Park.

1.1.3 The Site sits within an isolated protrusion of Green Belt, north of the M56, with the River Weaver and town of Runcorn to the north, and Protos Energy Park and Chester East M56 Motorway Services to the west, both of which lie beyond the limits of the Green Belt. The extent of the Green Belt within the Order limits is illustrated on **ES Vol 3 Figure 1-3: Planning and Environmental Designations [EN010153/DR/6.3]**

1.1.4 Paragraph 5.11.20 of NPS EN-1 states:

"The general policies controlling development in the countryside apply with equal force in Green Belts but there is, in addition, a general presumption

against inappropriate development within them. Such development should not be approved except in very special circumstances. Applicants should therefore determine whether their proposal, or any part of it, is within an established Green Belt and if it is, whether their proposal may be inappropriate development within the meaning of Green Belt policy (see paragraph 5.11.36 below). "

1.1.5 This document provides an assessment of the Site and the Proposed Development in the context of relevant national planning policy and guidance relating to the Green Belt.

1.2 Inappropriate Development

1.2.1 EN-1 paragraph 5.11.36 recognises that energy infrastructure projects may comprise 'inappropriate development', and that inappropriate development is by definition harmful to the Green Belt. Consequently, and pursuant to paragraph 5.11.20 of EN-1, it is important to identify whether the Proposed Development represents inappropriate development within the meaning of Green Belt policy.

1.2.2 NPS EN-1 confirms that there is a general presumption against inappropriate development within the Green Belt (NPS EN-1 paragraph 5.11.20), and that inappropriate development is by definition harmful to the Green Belt (NPS EN-1 paragraph 5.11.36). As such it should not be approved except in very special circumstances. In terms of whether energy infrastructure comprises inappropriate development in the Green Belt, and whether very special circumstances may exist, the NPS refers to the NPPF (NPS EN-1 paragraph 5.11.36 footnote 257).

1.2.3 Solar farms and BESS facilities are not listed as an exception to being inappropriate development under paragraph 154 of the NPPF, and consequently have to date always been, by definition, 'inappropriate' in the Green Belt.

1.2.4 Critically however, significant recent changes to the NPPF (December 2024) have introduced the concept of 'grey belt' land which has fundamentally altered how development within the Green Belt should be viewed in specific cases.

1.2.5 The key relevance of grey belt is that development in the Green Belt should not be considered inappropriate where it would utilise grey belt and meet the other criteria listed in NPPF paragraph 155.

1.2.6 The NPPF Glossary defines grey belt land as follows:

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

1.2.7 The key relevance of grey belt is that development in the Green Belt should not be considered inappropriate where it would utilise grey belt land and meet the other criteria listed in NPPF paragraph 155 which reads:

"The development of homes, commercial and other development in the Green Belt should also not be regarded as inappropriate where all the following apply:

a. The development would utilise grey belt land and would not fundamentally undermine the purposes (taken together) of the remaining Green Belt across the area of the plan;

b. There is a demonstrable unmet need for the type of development proposed[56];

c. The development would be in a sustainable location, with particular reference to paragraphs 110 and 115 of this Framework[57]; and

d. Where applicable the development proposed meets the 'Golden Rules' requirements set out in paragraphs 156-157 below."

(Note: Footnote 56 and paragraphs 156-157 relate exclusively to housing development. Footnote 57 relates exclusively to traveller sites.)

1.2.8 The introduction of the grey belt and the tests at NPPF paragraph 155 represent a step change in policy. In certain cases, development previously acknowledged as 'inappropriate development' in Green Belt policy terms (including solar energy) might no longer be so.

1.2.9 To determine whether the Site in this instance represents grey belt one must take a view as to whether or not it strongly contributes to purposes a), b) or d), in paragraph 143 of the NPPF and whether or not it is excluded by the application of the policies referred to in Footnote 7. Following that assessment, the Proposed Development can be considered against the NPPF paragraph 155 tests to finally determine whether it should be considered inappropriate development.

1.3 Does the Site comprise Grey Belt?

Purposes of Including Land within the Green Belt

1.3.1 The recently updated Planning Practice Guidance (PPG) provides specific guidance as to considering the question of the contribution that land makes to the relevant Green Belt purposes (in respect of those purposes that are required for consideration of whether sites represent grey belt land), and consequently how each should be assessed. Each of the purposes of including land in the Green Belt are considered in turn below.

1.3.2 Purpose a) – to check the unrestricted sprawl of large built-up areas. This purpose relates to the sprawl and unchecked growth of large built-up areas. The PPG (Paragraph 005 Reference ID: 64-004-20250225) confirms that areas that make a strong contribution to the Green Belt, are likely to include those that:

"are likely to be free of existing development, and lack physical feature(s) in reasonable proximity that could restrict and contain development. They are also likely to include all of the following features: - be adjacent or near to a large built up area; - if developed, result in an incongruous pattern of development (such as an extended 'finger' of development into the Green Belt."

1.3.3 The urban area of Runcorn is located to the east of the Site, albeit distinctly separated from it by the River Weaver and Weaver Navigation. The area of the Green Belt north of the M56 corridor and south of the River Mersey (i.e. that which includes and surrounds the Site) is dominated by significant existing infrastructure in the form of the Frodsham Wind Farm; the elevated M56 corridor; and large above ground electricity transmission towers. The large built-up area of Runcorn is not restricted by virtue of the Green Belt, rather it is constrained from further growth by the physical restriction of the river corridor and the Weaver Navigation. The urban areas of Frodsham and Helsby are constrained by the presence of the M56 corridor. It is concluded that on this basis, the area of Green Belt in and around the Site is not free of existing development, and whilst near to the large built-up area of Runcorn, the Site is separated from it, and development upon it would not result in an incongruous pattern of development. Consequently, the area of the Green Belt in which the Proposed Development would be located does not contribute strongly to purpose (a) of including land in the Green Belt.

1.3.4 Purpose b) – to prevent neighbouring towns merging into one another. This purpose of the Green Belt is to stop towns from merging together and forming one homogeneous urban area. The PPG makes clear that this relates to the merging of towns specifically and not villages. The PPG states (Paragraph 005 Reference ID: 64-004-20250225) that areas that make a strong contribution to this purpose are those that:

"…are likely to be free of existing development and include all of the following features: - forming a substantial part of a gap between towns; - the

development of which would be likely to result in the loss of visual separation of towns."

1.3.5 The nearest towns to the Site are Runcorn (with the closest parts of the built up suburbs of Runcorn circa 1.5km to the northeast), Frodsham (circa 0.4km to the southeast), and Ellesmere Port (over 8km to the west)[1]. The western built residential limits of Runcorn are defined and maintained by the existence of the A557 Weston Point Expressway, beyond which is the heavy industrial river frontage that is prevented from expanding westward by the River Mersey and River Weaver. It is these physical barriers, as opposed to Green Belt designation, that prevents any risk of Runcorn merging with Frodsham or Ellesmere Port. Likewise, the northern built limits of Frodsham are defined and maintained by the existence of the M56 Motorway which prevents further incremental growth north. This cannot be said for the southern boundary of Frodsham where it is the Green Belt designation that prevents the town from expanding further into the open countryside. Ellesmere Port is sufficiently remote from the Site such that the purpose of the Green Belt in this location is not to prevent it from merging with other towns to the east. As in the case of purpose (a) above, the area is not free from development. Furthermore, development on the Green Belt within the Site would not result in loss of visual separation between Frodsham and Runcorn, which would continue to be, and appear as, separate and unrelated towns. On this basis, the Green Belt in this location is not strongly contributing to the second purpose of Green Belt.

1.3.6 <u>Purpose c) – to assist in safeguarding the countryside from encroachment</u>: The Green Belt exists in part to form a green lung around large towns and cities so that urban areas do not sprawl indefinitely, and the benefits of living, working and relaxing within the open countryside can be enjoyed more easily and sustainably. This is demonstrated by purpose c) which is intended to stop the open countryside being lost piece by piece over time to development. The

[1] *Helsby, Stanlow and Ince are villages not towns and consequently not addressed by the policy*

PPG does not provide any guidance as to how any individual part of the Green Belt contributes to this purpose in the same way as it does for purpose a) and b), on the basis that purpose c) is not relevant to whether or not the land is grey belt. Nonetheless, it is logical that an area of the Green Belt that is free from all development, and which benefits from a feeling of a natural unspoilt landscape and broad sweeping undisturbed views, is likely to contribute more strongly to this purpose than an area that is already subject to development within a wider context of built man-made structures. In this case, the landscape, whilst flat and open across Frodsham Marshes, and the Mersey estuary beyond, is far from unspoilt countryside. In addition to the large wind turbines, electricity transmission towers and the elevated M56 corridor, the Site is set against a wider context of urbanised industrial development on the opposite bank of the river and the Protos energy and waste park to the west. The introduction of development within the Site to the north of the M56, relatively distant from settlements would not change the underlying landform or alter the field pattern or arrangement. It would comprise development that would, in the most part, be relatively low in height and would be temporary and easily reversible. Whilst it would inevitably increase the influence of development on the character of the landscape within the Green Belt which would otherwise not be the case, it would not do so to the extent of development that exists across the Order limits, or other more 'traditional' built forms of development. Whilst the Green Belt in this location may help in part to safeguarding the countryside from further encroachment, the reality is that it is very much encroached already by a wide variety of built structures. These are abnormally tall (a series of large wind turbines and electricity pylons); they are not fixed but rather move across the landscape, and consequently attract the eye when viewed both close up and at distance (rotating turbines); they generate constant tonal noise at all times of the day and night (traffic along the M56, trains along the railway and turbines rotating); they are distributed across the wider landscape not focused within a small section of the Green Belt north of the M56; and they are set against a wider landscape that is dominated by large heavy chemical related industrial development. The

Green Belt in this area is considered to be contributing moderately at best to this purpose.

1.3.7 Purpose d) – to preserve the setting and special character of historic towns: This purpose is intended to ensure that where relevant, Green Belt preserves the character and setting of towns that are historically important. The PPG states (Paragraph 005 Reference ID: 64-004-20250225) that areas that make a strong contribution to this purpose are those that:

"…are likely to be free of existing development and include all of the following features: - form part of the setting of the historic town: - make a considerable contribution to the special character of a historic town. This could be (but is not limited to) as a result of it being within, adjacent to, or of significant visual importance to the historic aspect of the town."."

1.3.8 The town of Frodsham is located to the south of the Site, beyond the M56. It contains a number of historic assets (listed buildings and registered parks and gardens) along with archaeological sites and locally important buildings. The town includes four Conservation Areas which generally join together and cover the western part of the town:

i. Frodsham Town Centre Conservation Area.

ii. Castle Park Conservation Area.

iii. Overton, St Laurence Conservation Area.

iv. Overton, Five Crosses Conservation Area.

1.3.9 Frodsham Town Conservation Area runs mainly along Main Street and High Street through the town centre. **ES Vol 1 Chapter 11: Cultural Heritage and Archaeology** ***[EN010153/DR/6.1]*** confirms that the elements of setting of buildings that contribute to their cultural value are derived from their immediate streetscape and inter-relationship with other assets along the road. Views to the Green Belt north of the M56 from the Conservation Area are limited and glimpsed, with glimpses of the 'marshes' limited to the higher,

northeastern part of the Conservation Area. Any changes in view towards the Green Belt would be seen in the context of existing modern development and the 'busy' M56.

1.3.10 Castle Park Conservation Area and Registered Park and Garden is located to the southwest of the town centre, with Chester Road to the west; Fountain Lane / Park Lane in the east; Howey Lane to the south; and the railway line to the north. **ES Vol 1 Chapter 11: Cultural Heritage and Archaeology *[EN010153/DR/6.1]*** states that the area is generally well screened from views inwards and outwards by mature vegetation along its northern boundaries, albeit with views of the Mersey estuary and South Merseyside through more prominent gaps in the vegetation cover. It recognises that some glimpsed views towards the Green Belt would contribute to the character of the Conservation Area, but that the presence of the M56 has a persistent negative effect; *"…in the form of continual background noise…in peaceful setting of Castle Park."* (**ES Vol 1 Chapter 11: Cultural Heritage and Archaeology *[EN010153/DR/6.1]***, paragraph 11.8.47). Based on the conclusions of the heritage assessment, it is not considered that the introduction of limited views towards the part of the Green Belt that would be occupied by the Proposed Development means that the retention of the Green Belt in its current form is critical in preserving the setting and special character of the town.

1.3.11 Overton St. Lawrence's and Overton Five Crosses Conservation Areas are located adjacent to each other, with Overton St Lawrences directly to the east of Castle Park, incorporating the area around Church Road Cemetery and Frodsham CoE Primary School; and Overton Five Crosses further east and south along Vicarage Lane, covering Overton Hall and Frodsham Methodist Church. The topography rises as one, and heads south out of the town. **ES Vol 1 Chapter 11: Cultural Heritage and Archaeology *[EN010153/DR/6.1]*** confirms that open areas in the northwestern part of the Overton St Lawrence's Conservation Area do benefit from views towards the Mersey Estuary. **ES Vol 1 Chapter 11: Cultural Heritage and Archaeology *[EN010153/DR/6.1]*** notes (paragraph 11.8.52) that key views within the

Conservation Area are short and terminated quickly due to the sweeping nature of the highways. It also references the Overton St. Lawrence's (Frodsham) Conservation Area Appraisal which records several open panoramic views from Churchfields and St. Lawrence's Church car park which contribute to the character of the area, albeit in recognition that (paragraph 11.8.52):

"…clear views north, over Frodsham below, towards industrial clutter of distant pylons, smoking oil refinery stacks and chemical work" and *"clear views northeast over Frodsham and the distant motorway below, to Runcorn."*

1.3.12 **ES Vol 1 Chapter 11: Cultural Heritage and Archaeology *[EN010153/DR/6.1]*** concludes that large elements of the Proposed Development would appear within the panoramic views that contribute to the overall character of the Conservation Area, however this is within an area that already contains wind turbines and the busy M56 in the foreground. Consequently, and on balance, it states that there would be a low magnitude of impact on the character of the Conservation Area during the operational phase of the development. Due to topography change and the built nature of the area, views towards the Green Belt from Overton Five Crosses Conservation Area are very limited or non-existent.

1.3.13 Assessment as to whether the area of the Green Belt north of the M56, without the Proposed Development in place, helps to achieve the purpose of preserving the setting and special character of the historic town, is reliant on the findings of the heritage assessment. The Proposed Development would represent a change within the existing largely green space of the 'marshes' to the north of Frodsham. Whilst oblique and glimpsed views of the Green Belt are available from Castle Park Conservation Area, and panoramic views are available in part from the Churchfields area of Overton St. Lawrence's Conservation Area, these are all in the context of an area that is developed with wind turbines, wider industrial clutter, electrical infrastructure, railway line and the M56 corridor.

1.3.14 **ES Vol 1 Chapter 11: Cultural Heritage and Archaeology *[EN010153/DR/6.1]*** found that there would be no or neutral effects upon the setting of designated heritage assets during construction (paragraph 11.8.10); and no, neutral or minor adverse effects upon the setting of heritage assets during the operational phase. The setting and special character of the historic town is not reliant upon an unspoilt and open views across the Mersey Estuary, and the area of the Green Belt occupied by the Site is not considered to be contributing strongly to this purpose.

1.3.15 Purpose e) – to assist in urban regeneration, by encouraging the recycling of derelict and other urban land: This purpose is intended to direct development away from the open countryside and towards derelict and other urban land, thereby assisting with the recycling and reuse of abandoned sites within the built-up area, and urban regeneration. The scale and nature of the development means that there is no available brownfield land or other urban land that could accommodate the Proposed Development. **ES Vol 2 Appendix 3-1: Alternative Site Assessment *[EN010153/DR/6.2]*** sets out the constraints associated with the implementation of both the solar array and the grid connection, and specifically how urban areas would not be feasible due to existing uses and that by their very nature are developed. The role that this part of the Green Belt plays in helping to achieve this purpose is only relevant when development is proposed that could otherwise be directed to urban areas. Thus, the purpose of assisting in the recycling of derelict and urban land is not considered relevant in this case.

Footnote 7

1.3.16 In considering whether land is grey belt, consideration needs to be given to whether it contains or affects areas or assets identified in NPPF footnote 7, and if so whether the application of those policies in this instance would provide a strong reason for refusing or restricting development. The areas of assets within Footnote 7 (other than Green Belt) are as follows:

i. Sites of Special Scientific Interest.

ii. Local Green Space.

iii. National Landscapes.

iv. National Parks.

v. Heritage Coast.

vi. Irreplaceable Habitats.

vii. Heritage Assets.

viii. Areas at Risk of Flooding or Coastal Change.

ix. Habitats Sites (within definition at regulation 8 of Conservation of Habitats and Species Regulations 2017).

x. Potential Special Protection Areas and possible Special Areas of Conservation.

xi. Listed or proposed Ramsar Sites.

1.3.17 Of the areas / assets listed in Footnote 7 above, the Site does include areas at risk of flooding (the eastern half of the Site is located within Flood Zone 3a); and is located adjacent to the Mersey Estuary Site of Special Scientific Interest (SSSI) (partially within the SSSI) and the Special Protection Area (SPA) and Ramsar Site.

1.3.18 Planning policies relevant to flood risk seek to direct development away from areas at risk of flooding to those at lower risk by applying a sequential test and then, if necessary, the exception test. The aim of the sequential test is to steer new development to areas with the lowest risk of flooding from any source. Critically, this policy approach recognises that, where appropriate, and the test applied, development can still take place within higher risk areas. **ES Vol 2 Appendix 3-1: Alternative Site Assessment *[EN010153/DR/6.2]*** sets out the sequential test case followed in support of the Proposed Development. In this case, the layout and design of the Proposed

Development has been advanced to mitigate the potential flood risk impacts. The Proposed Development has been designed to ensure that it remains operational during future predicted flood events, and the eastern half, where the flood risk is greater, components vulnerable to flood damage will be raised above predicted flood levels. The Proposed Development would have a negligible impact on flood risk elsewhere, and in conclusion it would pass the flood risk policy and is not excluded by Footnote 7.

1.3.19 In terms of the ecological designations along the Mersey estuary, the assessment concludes that there would be no significant beneficial or adverse effects on statutory or locally designated sites for nature conservation during the Construction Phase except for significant temporary adverse effects on Frodsham, Helsby and Ince Marshes Local Wildlife Site as a result of construction activity within it. Management of the created and enhanced habitats would be informed by a regular ecological monitoring program during the Proposed Development's operational lifespan, as set out in the **outline Landscape and Ecology Management Plan *[EN010153/DR/7.13]***. As such the Proposed Development would result in medium to long term positive effects on International / National Statutory Designated Sites for Nature Conservation (SPA, Ramsar and SSSI) and non-statutory designated sites for nature conservation as set out within **ES Vol 1 Chapter 14 Summary of Effects [EN010153/DR/6.1].**

1.3.20 In light of the foregoing, the application of the policies referred to in footnote 7 (both in terms of flood risk and ecological designated sites) would not provide a strong reason for refusing or restricting the Proposed Development in that in both cases it would not give rise to net harm, and in the case of ecology and biodiversity, the Proposed Development would provide significant net benefit over the course of the development.

Conclusion

1.3.21 Considering the above, the area of the Green Belt occupied by the Proposed Development would demonstrably comprise grey belt.

1.4 Paragraph 155 'tests'

1.4.1 As set out at Section 1.2, development in the Green Belt should not be considered inappropriate where it would utilise grey belt and meet the other criteria in NPPF paragraph 155. Paragraph 155 sets 4 'tests', here referred to as criteria a-d. Of these, criterion d. relates solely to residential development and consequently has no relevance in this case.

1.4.2 Criteria a requires that the development utilises grey belt and would not fundamentally undermine the purposes (taken together) of the remaining Green Belt across the area of the plan.

1.4.3 It has been established in Section 1.3 of this Green Belt Assessment that the Site comprises grey belt land, thus the first requirement of criterion a is met.

1.4.4 In relation to the second requirement of criterion a and a consideration of whether the development would undermine the purposes, when taken together, of the remaining Green Belt, as set out above, the Liverpool, Manchester and West Yorkshire Green Belt is substantial. Across CWaCC it is around 38,500 hectares from the Mersey Estuary in the north, to the Cheshire Sandstone Ridge in the south, and from the Wirral peninsula and boundary with Wales in the west, to the Peak District National Park and Yorkshire towns of Barnsley and Sheffield the east. The section of the Green Belt affected by the Proposed Development is a relatively small tongue of the Green Belt between the Mersey Estuary and the M56 which then retracts east around Runcorn and west around Protos and the Chester Motorway Services. The effect of temporary development in the form of solar panels and associated development, across a part of that small element of the Green Belt would be localised and limited solely to the immediate confines of the Green Belt north of the M56, west of the Weaver, south of the Mersey, and east of Protos. This represents an area of Green Belt that is very different in context, attractiveness and openness than that to the south of Frodsham and Helsby towards Delamere and Sandiway. Development of the Green Belt under the existing Wind Farm and in the shadow of large electricity pylons and the

elevated M56 would not affect the ability of the remaining Green Belt across CWaCC from serving all five of the Green Belt purposes in a meaningful way.

1.4.5 Based on the foregoing, the Proposed Development would comply with the provisions of criterion a.

1.4.6 Criterion b requires that there is a demonstrable unmet need for the type of development proposed. The undeniable need is set out in detail within Section 2.0 (need) and Section 5.0 (scheme benefits) of the Planning Statement, below in regard to our assessment of Critical National Priority Infrastructure, and most starkly demonstrated at EN-1 paragraph 3.2.6 – 3.2.8 at which it states:

"3.2.6 The Secretary of State should assess all applications for development consent for the types of infrastructure covered by this NPS on the basis that the government has demonstrated that there is a need for those types of infrastructure, which is urgent, as described for each of them in this Part.

3.2.7 In addition, the Secretary of State has determined that substantial weight should be given to this need when considering applications for development consent under the Planning Act 2008.

3.2.8 The Secretary of State is not required to consider separately the specific contribution of any individual project to satisfying the need established in this NPS."

1.4.7 Considering the above, the need is clear and undeniable recognised both within national policy and within the Planning Statement in support of the Order.

1.4.8 Based on the foregoing, the Proposed Development would comply with the provisions of criterion b.

1.4.9 Criterion c requires that development be within a sustainable location with particular reference to NPPF paragraphs 110 and 115. NPPF paragraph 110 indicates that development should be focussed on locations that are or can

be made sustainable, through limiting the need to travel. NPPF paragraph 115 seeks to ensure, amongst other things, that sustainable transport modes are prioritised taking account of the type of development and its location, safe access can be achieved and any significant impacts on the capacity of the highway network or highway safety can be acceptably mitigated.

1.4.10 The Site is in a sustainable location with access via Marsh Lane which is accessed directly from the strategy road network via the A5117, Pool Lane, and Grinsome Road. This allows access directly to the M56 and the northwest motorway network without needing to traverse along local roads or past sensitive receptors. Access to the SPEN Frodsham Substation located north of the River Weaver would be from Junction 12 of the M56 via the A557 and A56, and then the existing SPEN Substation.

1.4.11 Separately to the criteria at paragraph 110 and 115, the Site is located within the northwest energy corridor, influenced by major industrial land uses and infrastructure, both the east and west of the Site, providing a real opportunity to provide direct electricity supply more efficiently and sustainably.

1.4.12 The Site is a highly sustainable location, both in terms of power supply opportunities and in terms of highway access, consistent with criterion c.

1.5 Conclusions on NPPF Paragraph 155

1.5.1 In conclusion, and with regard to Paragraph 155:

i. The Proposed Development is within grey belt land, and would not fundamentally undermine the purposes of the Green Belt across the remaining area of the Plan.

ii. The Proposed Development demonstrably meets / accords with all of other relevant criteria in NPPF paragraph 155.

iii. Consequently, the Proposed Development **is not inappropriate development** in national Green Belt policy terms.

1.5.2 On the basis that the Proposed Development is not inappropriate development, the Applicant considers that it is excluded from the policy requirement to give substantial weight to any harm to the Green Belt including to its openness.

1.5.3 However, the Applicant also recognises that ultimately this is a matter for the Secretary of State to determine as decision maker. As such, the rest of this Green Belt Statement sets out the Applicant's position on Green Belt matters, if it was determined that the Site or the Proposed Development does not meet the definition of 'grey belt' or that paragraph 155 is not met, and that the Proposed Development is therefore considered to be 'inappropriate development'.

1.6 Critical National Priority Infrastructure

1.6.1 Government policy is unwavering in its support for the delivery of new large-scale energy infrastructure to meet its energy objectives (NPS EN-1 paragraph 3.1.1). It considers this need to be urgent, and that the Secretary of State should assess all applications for consent for the types of infrastructure covered by EN-1 on the basis that it has demonstrated that there is a need that is urgent, and that substantial weight should be given to this need (NPS EN-1 paragraph 3.2.6). It is clear that the UK's energy security and net zero obligations can only be delivered if we can enable the development of new low carbon sources of energy at speed and scale (NPS EN-1 paragraph 4.2.2). Government analysis shows that a secure, reliable, affordable, net-zero consistent system in 2050 is likely to be composed predominantly of wind and solar (NPS EN-1 paragraph 3.3.20). The urgent need for these types of infrastructure is most clearly defined at NPS EN-1 paragraph 3.2.6 to 3.2.8:

"The Secretary of State should access all applications for development consent for the types of infrastructure covered by this NPS on the basis that the government has demonstrated that there is a need for those

types of infrastructure which is urgent, as described for each of them in this Part.

In addition, the Secretary of State has determined that substantial weight should be given to this need when considering applications for development consent under the Planning Act 2008.

The Secretary of State is not required to consider separately the specific contribution of any individual project to satisfying the need established in this NPS."

1.6.2 The Government has committed to fully decarbonising the power system by 2035, subject to security of supply, to underpin its 2050 net zero goals. Ensuring the UK is more energy independent, resilient and secure requires the smooth transition to abundant, low-carbon energy. To achieve these statutory objectives, the Government has concluded that there is a critical national priority (CNP) for the provision of nationally significant low carbon infrastructure. The Government has stated that it strongly supports the delivery of CNP Infrastructure, and it should be progressed as quickly as possible (NPS EN-1 paragraph 3.3.62). CNP Infrastructure as defined in paragraph 4.2.5 of the NPS EN-1 as including:

for electricity generation, all onshore and offshore enabling electricity generation that does not involve fossil fuel combustion (that is renewable generation…".

1.6.3 EN-1 confirms that, subject to the point above, the Secretary of State will take as a starting point that CNP Infrastructure is to be treated as if it has met any 'tests' set out in the NPSs or any other planning policy, which requires the outweighing of harm, exceptionality, or very special circumstances (NPS EN-1 paragraph 4.2.16). This includes that where development within the Green Belt requires 'very special circumstances' to justify development, as a starting point, that should be presumed as having been met (NPS EN-1 paragraph 4.2.17).

1.6.4 NPS EN-1 paragraph 4.2.15 states that the exception to the presumption of consent afforded to CNP Infrastructure are residual impacts onshore and offshore which present an unacceptable risk to, or unacceptable interference with the following:

i. Human health and public safety. – The BESS would be constructed within a compound located centrally within the Site. Both possible compound locations are on the former MSC Dredging Grounds cells which are raised and not located within an area at risk of flooding and therefore sequentially preferable to other locations in the east of the Site closer to the SPEN substation. The location has been informed by modelling undertaken to ensure the development does not present unacceptable risk to human health, public safety or other infrastructure as set out in the Outline Battery Safety Management Plan **[EN010153/DR/7.8].** Lighting during construction and operation would be sufficient to satisfy health and safety requirements and the welfare of those on site.

ii. Defence. – The nature of the Proposed Development is such that it would not present and unacceptable risk to local or UK defence.

iii. Irreplaceable habitats. – Irreplaceable habitats are habitats which would be technically very difficult (or take a very significant time) to restore, recreate or replace once destroyed, taking into account their age, uniqueness, species diversity or rarity [NPS EN-1 paragraph 5.4.14]. Irreplaceable habitats are included as part of the evaluation of identified ecological features at Table 7.3 [Scoping of Ecological Features] set out within **ES Chapter 7: Terrestrial Ecology [EN010153/DR/6.1].** Table 7.3 confirms that there are no peat dependant ecological habitats or species within the Main Development Area, and there are no other irreplaceable habitats present, and consequently they were scoped out of detailed assessment.

iv. Unacceptable risk to the achievement of net zero. – Achieving a carbon-free power system by 2030 is integral to reaching net zero, because early decarbonisation of electricity will enable deeper emissions cuts in other sectors (like transport and heating) through electrification. The Proposed Development will assist in cutting greenhouse gas emissions by generating electricity from a renewable source and consequently help to transition towards net zero.

v. Unacceptable interference offshore to navigation. – The Proposed Development would have no impact or influence on offshore navigation.

1.6.5 Unacceptable risk to onshore flood and coastal erosion. – The eastern half of the Site lies within Flood Zone 3a, which benefits from flood defences along the River Weaver. The MSC Dredging Deposit Ground Cells in the western half of the Site are raised and so lie within Flood Zone 1 **ES Vol 1 Chapter 9: Flood Risk and Drainage [EN010153/DR/6.1]** sets out the Applicant's full assessment of flood risk and drainage for the Proposed Development, identifying any likely significant effects. The chapter is supported by the mandatory FRA at **ES Vol 2 Appendix 9-1: Flood Risk Assessment [EN010153/DR/6.2]**. The Assessment concludes that with the design and mitigation measures proposed implemented, the Proposed Development would not present an unacceptable flood risk to people or property and would not increase flood risk off-site for any areas or receptors. The FRA and associated modelling demonstrate that any alterations to local flood flow paths or storage (for instance, the presence of solar panel mounting structures or new infrastructure) will be accommodated or managed within the Site so that no worsening of flood conditions occurs beyond the Site boundary.

1.6.6 The NPS is clear that the implementation of CNP policy does not create an additional need or weighting to decision making, and it applies following consideration of need, the impacts of the project, and the application of the mitigation hierarchy (NPS EN-1 paragraph 4.2.7). The mitigation hierarchy is

a term used to incorporate the avoid, reduce, mitigate and compensate process required to protect the environment and biodiversity. It has been applied in the design of the Proposed Development and the approach to how the Mitigation Hierarchy has been followed is set out within the Planning Statement **[EN010153/DR/5.6].**

1.6.7 Consequently, in accordance with the principles set out in Section 4.2 of NPS EN-1, it is reasonable to conclude that the requirement to demonstrate very special circumstances, to justify inappropriate development in the Green Belt, has been met through the application of the mitigation hierarchy and the presumption in favour of CNP infrastructure in EN-1.

1.6.8 If, for whatever reason the Secretary of State was to conclude that the Proposed Development had not followed the mitigation hierarchy and thus that the Proposed Development did not represent CNP infrastructure, and consequently there remained a need for the demonstration of very special circumstances necessary to justify inappropriate development, the Applicant has undertaken such consideration below.

1.7 Harm to the Green Belt

1.7.1 As set out above, inappropriate development is by definition, harmful to the Green Belt. NPS EN-1 paragraph 5.11.20 states that such development should not be approved except in very special circumstances. Paragraph 153 of the NPPF confirms 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.**

1.7.2 In the event that the Secretary of State concludes that very special circumstances are required to be demonstrated in this case (i.e. that it is not grey belt and the paragraph 155 tests have not been met; and/or the Proposed Development is not CNP), it would be necessary to balance the harm to the Green Belt, and any other harm, against other considerations.

The purpose of this subsection is to assess the extent of harm to the Green Belt. The assessment is contained in the following subsections:

i. need for a Green Belt Location;

ii. effects on the Openness of the Green Belt; and

iii. enhancing the Beneficial Use of the Green Belt.

Need for a Green Belt Location

1.7.3 The Site was identified, and its suitability as a solar farm assessed, through an Alternative Site Assessment (**ES Vol 2 Appendix 3-1: Alternative Site Assessmen*t [EN010153/DR/6.2]***. This process adopted a clear, reasoned and planning-based methodology, which was applied consistently and objectively. NPS EN-1 paragraph 4.3.22 guides the Secretary of State as to the weight that should be applied to the consideration of alternatives in the decision-making process. It states that, given the level and urgency of need for new energy infrastructure:

"…the consideration of alternatives in order to comply with policy requirements should be carried out in a proportionate manner, and only alternatives that can meet the objectives of the proposed development need to be considered."

1.7.4 In this case, there were several reasons why the Site was originally identified as a potential location for the development. First and foremost, connection to a substation that has sufficient available capacity is critical in delivering the significant energy infrastructure which EN-1 confirms is urgently needed (paragraph 4.11.1). NPS EN-3 Paragraph 2.10.22 states:

"The capacity of the local grid network to accept the likely output from a proposed solar farm is critical to the technical and commercial feasibility of a development proposal…the connection voltage, availability of network capacity, and the distance from the solar farm to the existing network can

have a significant effect on the commercial feasibility of a development proposal."

1.7.5 The Frodsham SPEN represents the only connection within the Mersey Ring with capacity, and consequently to utilise the spare capacity, a Site is required to be located sufficiently proximate to make it technically and economically viable. In this case, the Frodsham SPEN substation is surrounded by a series of constraints that are a significant limiting factor in delivering a commercially viable grid connection due to the costs associated with directional drilling and/or alternative constraint avoidance measures. To the north and east are the Mersey Estuary, River Weaver and Weaver Navigation. Beyond the Weaver corridor is the town of Runcorn and to the south are the towns of Frodsham and Helsby. Major linear infrastructure to the south, including the elevated M56 corridor and Chester to Manchester railway line, also represent further constraining factors that would require cost-restrictive solutions to avoid. In light of all these constraints, a search area of 5km was applied as a reasonable and proportionate distance. This is consistent with similar sized solar projects across the UK, the vast majority of which are located within the open countryside and consequently are not located within an area that is so constrained by the array of natural and manmade features outlined above.

1.7.6 Most of the Site is under the ownership of a single owner, Peel NRE (Peel), who at the outset of the project were also a joint venture partner of the Applicant. In addition to this, a large proportion of the Site also forms part of Frodsham Wind Farm, and within an 'energy corridor' between the Protos Energy Park in the west and the industrial area of Runcorn in the east. This corridor along the M56 is home to some of the UKs most energy intensive companies that require large amounts of electricity to operate. Driven by fiscal, legislative and corporate objectives, many of these energy intensive operators are actively looking to decarbonise. This provided a real and tangible opportunity to deliver a direct wire 'behind the meter' connection which can be supplied without the need for additional transmission and distribution systems.

1.7.7 NPS EN-3 (paragraph 2.10.10) is supportive of solar development that is co-located with onshore wind generation to maximise efficiency of land-use. In light of this, in 2022 Peel commenced work on assessing the viability and appropriateness of developing a commercial scale solar array at the Site. The outcome of the initial viability work concluded that a commercial scale solar array could be developed utilising the land available and owned by Peel, and one other landowner (Frodsham Wildfowlers). The small number of landowners, one of which was originally a joint venture partner of the Applicant, within a close proximity to the point of connection made the land acquisition process straight forward when compared with a potential site under the ownership of multiple parties, which is frequently the case for large, NSIP scale, solar developments.

1.7.8 Following exclusion of urban areas, and those on the opposite side of the Mersey Estuary which are too distant to viably connect to, it left only Green Belt land as potentially available. **ES Vol 2 Appendix 3-1: Alternative Site Assessment *[EN010153/DR/6.2]*** demonstrates that the Site is preferable to alternative Green Belt sites. In regard to the relevance as to whether there are alternative preferable sites within the Green Belt, The Lower Thames Crossing Examining Authority's Report and Recommendation to the Secretary of State for Transport 2024 (TRO010032)[2] concludes at paragraph 12.2.112 that; *"It is germane that there are no sequentially preferable Green Belt or non-Green Belt alignments for the Proposed Development that could meet the scheme objectives."*

1.7.9 In order to meet the Proposed Development's need of delivering renewable energy by 2030, and providing the host of benefits that weigh in its favour, set out below, use of this Green Belt site cannot be avoided.

[2] *Lower Thames Crossing Examining Authority's Report on Findings and Conclusions & Recommendation to the Secretary of State for Transport 20 March 2024*

Effects on the Openness of the Green Belt

1.7.10 EN-1 paragraph 5.11.2 states that the fundamental aim of Green Belt is to prevent urban sprawl by keeping land permanently open. This is consistent with Government policy within paragraph 142 of the NPPF which confirms that the Government attaches great importance to Green Belts, and that the essential characteristics of them are their openness and permanence. The five purposes of the Green Belt are set out at paragraph 143 of the NPPF and listed within the assessment of grey belt policy above. For completeness they are repeated below:

a) *to check the unrestricted sprawl of large built-up areas;*

b) *to prevent neighbouring towns merging into one another;*

c) *to assist in safeguarding the countryside from encroachment;*

d) *to preserve the setting and special character of historic towns; and*

e) *to assist in urban regeneration, by encouraging the recycling of derelict and other urban land.*

1.7.11 It is widely accepted that the openness of the Green Belt and the above purposes are interrelated, particularly the first three purposes (a-c). This was reflected in the Supreme Court's Judgement in R (on the application of Samuel Smith Old Brewery (Tadcaster) and others) (Respondents) v North Yorkshire County Council (Appellant) [2020] UKSC3 in which in summing up the legal principles Lord Carnwath states:

"The concept of 'openness' in para 90 of the NPPF [now 142] seems to me a good example of such a broad policy concept. It is naturally read as referring back to the underlying aim of Green Belt policy, stated at the beginning of this section: 'to prevent urban sprawl by keeping land permanently open…' Openness is the counterpart to urban sprawl and is linked to the purposes to be served by the Green Belt" (our emphasis).

1.7.12 Neither EN-1 nor the NPPF define openness (in a Green Belt context), however in short, land which is open can contribute towards meeting the purpose, subject to (in all bar purpose (c)), the way the land in question sits in the context of other features and structures around it.

1.7.13 Assessing the impact of a proposal on the openness of the Green Belt requires a judgement based on the circumstances of the case. The courts have identified several matters which may need to be considered in making this assessment. These include (amongst other things):

i. openness can have both spatial and visual aspects – in other words, the visual impact of the proposal may be relevant, as could its volume;

ii. the duration of the development, and its remediability (i.e. its ability to return to previous state or condition), taking into account any provisions to return land to its original state or to an equivalent (or improved) state of openness; and

iii. the degree of activity likely to be generated, such as traffic generation.

1.7.14 The PPG clarifies what factors can be taken into account when considering the potential impact of development on the openness of the Green Belt (Paragraph 13 Reference ID 64-013-20250225). These include, but are not limited to:

i. Spatial or physical aspects, notably its visual impact and its 'volume';

ii. Degree of perceived openness;

iii. Duration of development and remediability;

iv. Degree of activity likely to be generated.

1.7.15 The spatial and physical openness of the Green Belt relates to an absence of built (inappropriate) development and the uncluttered and expansiveness that comes with large open spaces. Whilst effect on spatial and physical openness most often relates to an introduction of new buildings, it can also encompass

other structures and built form. Consequently, all development considered to be inappropriate development has a direct effect on the spatial and physical openness of the Green Belt.

1.7.16 The Proposed Development, whilst having Order Limits covering circa 340 hectares, would predominantly comprise solar panels (circa 169 hectares and circa 50% of the Site) and associated infrastructure. In addition, the following supporting infrastructure and works would also form part of the Proposed Development:

i. Transformer / Power Conversion Units

ii. Battery Energy Storage System (BESS).

iii. On-site substation (Frodsham Solar Substation).

iv. Electrical connection from Frodsham Solar Substation to Frodsham SPEN.

v. Direct private wire from Frodsham Solar Substation to businesses.

vi. Temporary construction compounds.

vii. Creation and enhancement of green infrastructure.

viii. Creation of skylark and non-breeding bird mitigation.

1.7.17 Whilst solar panels are acknowledged as structures that are inappropriate development (in Green Belt policy terms), they do not have the mass or density of buildings and typically are set lower than other forms of built structure, reflecting the wider topography. They would sit over a mixture of arable agricultural land, rough grazing pasture, and rough grazing pasture used for wildfowling. They would be erected on an open metal frame that would allow sheep grazing to continue beneath them. Consequently, whilst visible, they lack the ‘volume’ of most physical built development which can be a key determinant of spatial and physical harm to openness.

1.7.18 Perceived (or the perception of) openness goes beyond solely that of spatial and physical openness and reflects the wider visual setting which would change following the introduction of the Proposed Development. The extent to which the Green Belt is already developed can influence the harm that additional inappropriate development would have on openness. In this case the Site is set against a series of abnormally large structures. In addition to the Frodsham wind turbines that sit at a turbine height of 125m to blade tip, there are 132kv (25m tall) and 400kv (50m tall) pylons that cross the Site. To the south is the elevated M56 corridor which is 'active' with the constant movement of vehicles, to the northeast is the heavily industrialised area of Runcorn dominated by large chemical and energy related infrastructure focused along the eastern bank of the River Weaver / southern bank of the River Mersey, and to the southwest are the major industrial areas of Protos and Stanlow Refinery which includes large buildings and multiple tall stacks. This array of industrial and semi-urban infrastructure results in a Green Belt that is not unspoilt, and which can accommodate further large-scale energy infrastructure without having significant impact on the feeling of openness that may be attributed to other parts of the Green Belt or open countryside that are not occupied in the same way by numerous large built structures.

1.7.19 **ES Vol 1 Chapter 6: Landscape and Visual Amenity *[EN010153/DR/6.1]*** concludes that the combination of the location of the Proposed Development and the approach taken to the design would limit the degree to which the perceived openness of the Green Belt would change. The Green Belt in and around the Order Limits would continue to be experienced as an area that is flat and low-lying, with more elevated landscapes to the south where long views in and out are available, and where industrial and infrastructure development is a prominent influence. The LVIA concludes that the introduction of the Proposed Development would not materially change the perceived openness of the Green Belt.

1.7.20 The duration of the Proposed Development is long-term, 40 years, but it is not permanent. Further, there is a commitment to decommissioning the Proposed

Development at the end of its operational life, such that it is reversible with the Site returning to its previous state of spatial openness at the end of the project life. During their operational life, solar farms are static and do not generate the material level of activity which might attract the eye and contribute towards a diminution of visual / perceived openness, that would typically be experienced with other built development that has high number of servicing vehicles (e.g. industry or commercial uses), or a high number of pedestrian footfall (e.g. residential or retail).

1.7.21 It remains the case that the proposal would introduce development across a large part of the Green Belt north of the M56, albeit set in the context of larger established development. Having regard to the foregoing, it is judged that the Proposed Development would cause limited harm to the openness of the Green Belt for its 40-year operational lifetime. Thereafter, it would be decommissioned, and the openness would be restored.

1.7.22 As set out above, the NPPF recognises that the essential characteristics of the Green Belt are their openness and permanence. In the event that the Proposed Development was considered to be not located on grey belt, and was considered to be inappropriate development (and therefore that the NPPF paragraph 155 tests had not been met), the NPPF requires substantial weight to be given to any harm including its openness. Whilst only being temporary development, and despite having limited 'volume' or built mass, in that scenario, the limited harm to openness from the Proposed Development would nonetheless be afforded substantial weight.

Enhancing the Beneficial Use of the Green Belt

1.7.23 Paragraph 151 of the NPPF states that once Green Belts have been defined, local planning authorities should plan positively to enhance their beneficial use. This includes (amongst other things) providing opportunities to provide access, to retain and enhance landscapes, visual amenity and biodiversity.

1.7.24 The Applicant has sought to positively enhance the Green Belt through the proposed landscaping scheme, habitat creation and other embedded and additional mitigation. The primary mitigation measures include:

i. Retention of existing vegetation cover that defines character and provides visual screening.

ii. Containment of development within established field boundaries to retain landscape pattern, provision of development-free buffers, and retention of open vistas.

iii. Extensive landscape planting scheme comprising new trees and hedgerows.

iv. Project-specific Landscape and Ecology Management Plan providing long-term management and maintenance.

v. Creation of new permissive footpaths.

vi. Non-Breeding Bird Mitigation Area – located west of the Solar Array Development Area and comprises 'Cell 3' of the Manchester Ship Canal Dredging Deposit Ground.

vii. Skylark Mitigation Area – located south of the Solar Array Development Area between Moorditch Lane and M56 comprising agricultural land currently in arable cultivation.

1.7.25 The proposed landscaping scheme, alongside habitat enhancements and mitigation, and their long-term management would ensure there is a minimum 10% net gain in biodiversity. Alongside retention of existing landscape features, the proposed landscape scheme would reinforce and improve the landscape features. As such, the facets of the Proposed Development would demonstrably enhance the beneficial use of the Green Belt and would not result in any actual or perceived harm. The enhancement would weigh in favour of the Proposed Development.

Conclusions on Harm to the Green Belt

1.7.26 The Proposed Development would cause direct harm to the openness of the Green Belt for its 40-year operational lifetime. Thereafter, it would be decommissioned, and the Site would be restored. Whilst present, the Proposed Development would result in limited harm to the spatial / physical and perceived openness of the Green Belt.

1.7.27 In accordance with the NPPF, the fundamental aim of Green Belt policy is to prevent urban sprawl by keeping land permanently open; the essential characteristics of Green Belt are their openness and permanence. The Green Belt serves five purposes, albeit it is concluded that across the location of the Site, the Green Belt does not strongly serve any of the five purposes

1.7.28 The Proposed Development would enhance the beneficial use of the Green Belt, weighing in its favour, alongside the temporary nature of the Proposed Development and its reversibility.

1.7.29 The limited harm should be afforded **substantial** negative weight in the event that the Secretary of State were to conclude that the Site is not grey belt and that the development is therefore inappropriate development in the Green Belt.

1.8 Any Other Harm

1.8.1 Very special circumstances (VSCs) are only required to be demonstrated in the event that the Secretary of State were to conclude that the Site is not grey belt and the paragraph 155 tests have not been met, or the Secretary of State were to conclude that the Proposed Development is not Critical National Priority (CNP) Infrastructure (as CNP Infrastructure status gives a policy assumption that the VSCs tests are ~~made out~~met).

1.8.2 VSCs are not defined in NPS EN-1. However, 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. Thus, VSCs can only occur when the harm to the Green Belt, alongside any other harm, is clearly outweighed by other considerations.

1.8.3 The term "any other harm" was explained in Redhill Aerodrome Ltd v Secretary of State for Communities and Local Government [2015] J.P.L. 416 (referred 'Redhill Judgment'). In this case the Court of Appeal held that the words "any other harm" were unqualified and that all other considerations (which by definition would be non-Green Belt factors) must be included in the weighing exercise (irrespective of whether they are determinative in their own right or not). Consideration of "any other harm" in light of the Redhill Judgement is provided below.

1.8.4 Other harm resultant from the Proposed Development has been considered and assessed as part of the EIA process, or where not likely to give rise to significant effects, as separate assessments. The results of the relevant assessments are summarised within the Planning Statement. A detailed appraisal of both the harm and benefits arising from the Proposed Development is provided at Document **EN010153/DR/8.46 – Green Belt Impacts Summary Table (Table 2)**. Whilst the green belt balancing exercise is only required in the event that very special circumstances are needed to justify inappropriate development in the Green Belt, it has also been used to help inform the conclusions of the overall planning balance provided within the accompanying Planning Statement. Importantly, the table separately lists all individual components of each consideration, and applies weight to each in turn. Where criteria can give rise to varying degrees of impact (both positive and negative); across different phases of the development (construction, operation, or decommissioning); and taken from different locations (within or beyond the Order Limits), or from any combination of the above; then an overall combined effect is determined. This can then be afforded weight in the final balancing exercise. In this case, this 'overall' balance is arrived at to help determine whether **harm** to the Green Belt by reason of inappropriateness,

and **any other harm** resulting from the proposal is clearly outweighed by **other considerations**.

1.8.5 The environmental topics which it is considered that the Proposed Development gives rise to some degree of harm or benefit; are impacts on landscape character, landscape fabric, and visual impact; ecological habitat and biodiversity; residential amenity including noise and dust (during construction) and glint and glare (during operation); archaeology and cultural heritage; traffic and transport; tourism (including rights of way); ground conditions; agricultural land; flood risk and drainage; water quality; socio-economic; resource and waste management; and human health . These are summarised below in the context of this Green Belt Assessment, and then collectively summarised within Table 1.

Landscape and Visual

1.8.6 **ES Vol 1 Chapter 6: Landscape and Visual Amenity *[EN010153/DR/6.1]*** considers the potential effects of the Proposed Development on the landscape as an environmental resource, including the physical fabric of the Site and the character of the wider landscape. The landscape character impact from within the Order Limits during both the construction phase of the development, and during the operational phase at least in the short term, are concluded to have moderate to major adverse effects which would be significant in EIA terms. This has been afforded **significant** weight in the balancing exercise. The impact on landscape fabric, and landscape character beyond the Order Limits in the longer-term during both operation and construction would result in negligible to moderate adverse effects, for which **limited** to **moderate** weight is given.

1.8.7 The visual impacts during the construction phase of the development, from within the Order Limits are considered moderate / major for which **great** / **significant** weight is afforded. In contrast, the visual impact during construction, from beyond the Order Limits, concludes negligible effect through to minor / moderate effects for which **limited** weight is given.

1.8.8 During the operational phase of the development, as mitigation is established and maturity is achieved, the effects within the Order Limit varies from minor to moderate adverse, and the weight afforded is consequently **moderate** to **significant**. Beyond the Order Limit the effect is negligible through to moderate adverse and **limited** weight is given.

1.8.9 In contrast to the harm caused to the landscape from within and beyond the Order Limits, it is recognised that there are moderate beneficial effects on the overall landscape fabric (grassland, hedgerows, scrub vegetation, trees and waterbodies) during the operational phase of the development, and moderate to major beneficial effects to the landscape character in the longer term, from within the Order Limits. These benefits are given **Limited** to **Moderate** weight.

1.8.10 Overall, the landscape and visual effects from the development are considered negative and weigh against the development, for which **Moderate** weight should be applied in the final Green Belt balancing exercise.

Ecology and Biodiversity

1.8.11 **ES Vol 1 Chapter 7: Terrestrial Ecology *[EN010153/DR/6.1]*** presents the findings of an assessment of the likely effects of the Proposed Development on terrestrial ecology, and **ES Vol 1 Chapter 8: Ornithology *[EN010153/DR/6.1]***. They state that the Proposed Development has been designed so that the majority of land impacted by the solar array and associated infrastructure is low value habitats, such as arable land and intensively grazed pasture. The design seeks to largely retain important ecological features and maintain connectivity for species. Accordingly, there would be no significant beneficial or adverse effects on habitats during construction. The assessment concludes that there would be no significant beneficial or adverse effects on statutory or locally designated sites for nature conservation during Construction, with the exception of significant temporary adverse effects on Frodsham, Helsby and Ince Marshes LWS as a result of construction activity within the designated area. In terms of ornithology, measures are proposed that provide a substantial opportunity to deliver a

valuable habitat for SPA-qualifying species on land adjacent to the Mersey Estuary SPA. Whilst there would be some disturbance effects on breeding birds, these are not considered likely to give rise to significant effects.

1.8.12 The benefits on terrestrial habitats, species, ornithology, and non-statutory designated sites during the longer-term operational phase of the development are afforded **limited** / **great** weight in the planning balance. **ES Vol 1 Chapter 8: Ornithology [EN010153/DR/6.1]** identifies a significant moderate beneficial effect through the creation of the NBBMA and wider screening, which carries **significant** beneficial weight.

1.8.13 Balanced against these positive effects, the impact on both designated and non-designated sites; habitat, ornithology and other species during the construction phase of the project is typically assessed as a minor adverse harm which is given **limited** to **moderate** weight. In balancing the short-term harm against the longer-term benefits, the Proposed Development would result in an overall positive effect on ecology and biodiversity. This combined positive effect is given **moderate** weight in the final planning balance.

Tourism and Recreation

1.8.14 **ES Vol 1 Chapter 12: Tourism and Recreation *[EN010153/DR/6.1]*** concludes that with the implementation of the proposed mitigation measures, the Proposed Development would result in adverse effects on tourism and recreational activities during the construction phase, but that these effects would not be significant. During the operational phase, the enhanced PROW network and additional recreational facilities, including a circular trail and new parking area[3] are likely to have a positive effect on recreational amenity and **limited** weight is given to this benefit. The negative effects on a series of

[3] The provision of a new parking area for visitors is dependent upon the findings of structural surveys of Brook Furlong bridge over the M56 motorway, that would be undertaken prior to construction. Irrespective, of whether the parking area is delivered, the main public access benefit derives from the creation of a new footpath network and improvements to the existing network of public rights of way. The weighting given to public access and recreational benefits would not differ irrespective of whether or not the public car park is delivered.

public rights of way during construction is likewise assessed as negligible to minor adverse, and **limited** weight is given to the harm, in the short term. Overall, the benefits derived from a new and enhanced public footpath network outweigh the short-term harm, and **limited** overall weight is afforded to the benefit.

Residential Amenity

1.8.15 The potential harm to residential amenity during the construction phase of the development is limited to dust and noise generated by construction operations. NPS EN-3 states that limited weight should be given to noise from construction impacts following the implementation of appropriate mitigation. **REP1-012 Outline Construction Environmental Management Plan (CEMP)** confirms that a Construction Dust Management Plan (CDMP) would ensure that appropriate measures are employed to control dust during construction. Consequently, l**imited** weight is given to harm from noise and dust during construction.

1.8.16 During the operational phase of the development, harm to residential amenity would potentially arise from glint and glare from the solar array. **REP4-018 6.2 ES Volume 2 Appendix 6-3 Residential Properties** confirms the use of antireflective coating, and concludes that low glint and glare would be experienced by a small number of properties. The maximum daily duration for any impacted dwelling is predicted to be 22 minutes. The maximum median daily duration is just less than four minutes. **Limited** weight is given to harm from glint and glare during operation, and the overall weight to residential amenity (construction and operation) is **limited**.

Heritage

1.8.17 ***ES Vol 1 Chapter 11: Cultural Heritage and Archaeology [EN010153/DR/6.1]*** concludes minor adverse effect on non-designated ventilation shafts and negligible adverse direct effect on ridge and furrow deposits, Whilst affording great weight to the desirability of preserving assets

is applied, the overall harm is considered to be limited and the weight to be applied in the planning balance to archaeological heritage during the construction phase of the project is considered to be **limited**.

1.8.18 **Chapter 11** concluded that the Proposed Development would not cause any physical harm to heritage assets, and any impacts would be limited to potential changes in setting (i.e. views) for certain assets. Where such setting effects occur, they have been assessed as minor adverse in magnitude. All potential heritage setting effects were judged to fall into the category of "less than substantial harm" (in many cases at the very lowest end of less-than-substantial) to the significance of the affected heritage assets. In accordance with NPS EN-1 and the NPPF, the decision-maker is required to give great weight to the conservation of heritage assets, and to weigh any less-than-substantial harm against the public benefits of the proposal. In this case, the harm to the setting of each affected heritage assets is minor adverse and indirect, and the negative weight given in the planning balance is **limited**.

Traffic

1.8.19 As set out in the **Transport Assessment *[EN010153/DR/7.3]***, the impact of the Proposed Development on the adopted highway network during peak periods of the construction phase, traffic generated would be below the IEMA Rule 1 Threshold and would largely fall within accepted level of day-to day traffic variation. Impact at key junctions would not be significant, and the impact on pedestrian and cycle amenity would be negligible. The negative weight given in the planning balance during both construction and operation phase of the project is **limited**.

Other Considerations

1.8.20 Other environmental considerations that the Proposed Development may have an impact on (positive or negative), and consequently may ultimately affect the overall balance of harm against benefit, are determined to be **Neutral**. This is because the residual effects are inconsequential or so

negligible following the implementation of embedded or additional mitigation, that no weighting should be applied in the overall planning balance. These considerations include the impact on:

i) Ground Conditions.
ii) Agricultural Land.
iii) Flood Risk and Drainage.
iv) Water Quality.
v) Air Quality.
vi) Socio-Economic.
vii) Resource and Waste Management.
viii) Human Health.

1.9 Review of Other Considerations in Favour

1.9.1 As set out above, very special circumstances are only needed to be demonstrated in the event that the Secretary of State concludes that the Site is not located on grey belt and the tests at NPPF paragraph 155 are not met; or the Secretary of State concludes that the Proposed Development is not Critical National Priority Infrastructure.

1.9.2 In that event, they will not exist unless the potential harm to the Green Belt by reason of inappropriateness, and any other harm, is clearly (our emphasis) outweighed by other considerations (NPPF paragraph 153). The need and benefits of the Proposed Development are demonstrable and considerable. They are set out in detail within Section 5.0 of the Planning Statement. The key benefits (considerations in favour) are summarised below.

1.9.3 The key benefits (other considerations) in support of the Proposed Development are:

i. Contribution to meeting the need for renewable energy which is given substantial weight[4].

ii. Contribution to meeting the climate change emergency which is given significant weight.

iii. Contribution to meeting the need for energy security which is given significant weight.

iv. Contribution to meeting the need for energy storage which is given moderate weight.

v. The efficient use of land which is given moderate weight.

vi. Overall, and on balance, positive impacts on ecology and biodiversity which is given moderate weight.

vii. Overall, and on balance, positive impacts on recreation and the public rights of way network which is given limited weight.

1.10 Do Other Considerations Clearly Outweigh the Harm?

1.10.1 Paragraph 153 of the NPPF confirms that substantial weight is given to any harm to the Green Belt, and 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. It is therefore critical that an assessment is made as to whether the benefits (other considerations) clearly outweigh the harm.

[4] For clarity, it is noted that this benefit is stated in the scenario where CNP status is said to not apply; but should be seen in the context of the policy imperatives and reasoning set out in NPS-EN1 for why low carbon projects such as the Proposed Development should be considered to be a 'critical national priority' and thus clearly in the public interest to be brought forward.

1.10.2 Putting aside the substantial weight that must be given to the harm to the Green Belt, including harm to its openness[5], the other harm arising from the Proposed Development comprises:

i. Overall and on balance, harm to the local landscape character and visual impact which is given moderate weight.

ii. Overall and on balance, harm to archaeological heritage which is given limited weight.

iii. Overall and on balance, harm to traffic and transport which is given limited weight.

iv. Overall and on balance, harm to residential amenity in terms of noise, dust and glint and glare which is given limited weight.

1.10.3 The considerations weighing in favour of the Proposed Development are set out above. The overall balance as to whether very special circumstances exist (other considerations) that would clearly outweigh the harm to the Green Belt by reason of inappropriateness, and any other harm is summarised below, accepting the fact that, in the event very special circumstances are required to be demonstrated, significant weight is given to the harm to the Green Belt.

[5] On the basis that the Secretary of State concludes that the Proposed Development is not located on grey belt land and the tests of paragraph 155 of the NPPF have not been met.

Table 1.0 – Summary of the Balancing Exercise

Issue / Criteria	Finding on Balance	Weighting
Need for renewable energy	Positive	Substantial
Need for energy security	Positive	Significant
Contribution to climate change	Positive	Significant
Need for energy storage	Positive	Moderate
Efficiency of land use	Positive	Moderate
Ecology and Biodiversity	Positive	Moderate
Tourism / rights of way	Positive	Limited
Ground Conditions	Neutral	No weighing
Agricultural Land	Neutral	No weighting
Flood Risk and Drainage	Neutral	No weighting
Water Quality	Neutral	No weighting
Air Quality	Neutral	No weighting
Socio-Economic	Neutral	No weighting
Resource and Waste Management	Neutral	No weighting
Human Health	Neutral	No weighting
Noise	Negative	Limited
Glint and Glare	Negative	Limited
Traffic	Negative	Limited
Heritage	Negative	Limited
Landscape and Visual	Negative	Moderate

1.11 Very Special Circumstances

1.11.1 Paragraph 153 of the NPPF is clear, that other considerations need to clearly (our emphasis) outweigh the potential harm to the Green Belt by reason of

inappropriateness, and any other (non-Green Belt) harm in order to represent very special circumstances that would justify inappropriate development in the Green Belt. Paragraph 153 makes clear that substantial weight needs to be given to any harm to the Green Belt, including harm to its openness.

1.11.2 Appraisal of other considerations is provided above by reviewing the other considerations, and then balancing those against all harms, to come to a conclusion as to whether they would clearly outweigh them or not.

1.11.3 Based on the foregoing, it is concluded that in this case, the harm to the Green Belt and any other harm caused by the Proposed Development is clearly and demonstrably outweighed by the positive considerations that weigh in its favour. In this case several of the benefits identified that clearly outweigh the harm to the Green Belt and other harm, are in themselves substantial, significant, or moderate and represent very special circumstances.

1.12 Conclusions in Respect of Green Belt Assessment

1.12.1 EN-1 recognises that there is a general presumption against inappropriate development in the Green Belt. Such development should not be approved except in very special circumstances. Consequently, it is critical to determine whether proposals represent inappropriate development. The Proposed Development is not listed as being not inappropriate, however recent change to national policy has introduced the concept of 'grey belt' in which development should not be considered inappropriate where development meets criteria listed under paragraph 155 of the NPPF. The assessment above demonstrates that the Order Limits are within the grey belt, and the Proposed Development meets the relevant criteria such that it is not inappropriate development.

1.12.2 Irrespective of the conclusions on grey belt and paragraph 155, the Proposed Development represents Critical National Infrastructure, which the Secretary of State takes as a starting point has met any of the 'tests' set out in the NPSs or any other planning policy that requires the outweighing of harm,

exceptionality, or very special circumstances (required to justify inappropriate development).

1.12.3 Nonetheless and irrespective of the foregoing, the Applicant has undertaken an assessment that demonstrates very special circumstances exist that clearly outweigh the potential harm to the Green Belt by reason of inappropriateness and any other harm. Consequently, the Proposed Development would meet the tests of Green Belt policy irrespective of any critical national priority for the provision of nationally significant low carbon infrastructure, and irrespective of whether or not the Proposed Development can be considered to be inappropriate development or not.

1.13 Overall Conclusions

1.13.1 The Proposed Development is located entirely within the Liverpool, Manchester and West Yorkshire Green Belt. The assessment above concludes that the area of the Green Belt occupied by the Proposed Development comprises grey belt, and the Proposed Development would not represent inappropriate development when considered against the paragraph 155 tests. As such it causes no Green Belt harm and can be excluded from the policy requirement to give substantial weight to any harm to the Green Belt including to its openness.

1.13.2 In any event even if the Proposed Development was inappropriate development, as part of the Government's programme to fully decarbonise the power system, meet the UK's Net Zero obligations, and transition to low-carbon energy, they have defined what comprises Critical National Priority Infrastructure, and confirmed that they should be treated as having met any 'tests' sets out in National Policy Statements or national planning policy requiring the outweighing of harm or very special circumstances. The Proposed Development constitutes Critical National Priority Infrastructure.

1.13.3 Irrespective of this, and if it is considered that the Proposed Development represents inappropriate development, an assessment has been undertaken

to determine whether very special circumstances exist which represent considerations that clearly outweigh the potential harm to the Green Belt by reason of inappropriateness, and any other harm resulting from the proposal.

1.13.4 In this assessment, the potential harm to the Green Belt and the effects on the purposes of including land in the Green Belt have been identified and afforded weight, along with any other harm (non-Green Belt), and benefits arising from the Proposed Development. These have then been balanced together to determine whether the benefits clearly and demonstrably outweigh the harm, and whether they represent very special circumstances. The conclusion of the assessment is that the benefits do clearly outweigh the harm, and very special circumstances do exist to justify inappropriate development should the Secretary of State conclude that such demonstration is necessary.