Tillbridge Solar

Tillbridge Solar Project
EN010142

Written Summary of Applicant's Oral Submissions at the Issue Specific Hearing 1 (ISH1)

EN010142/APP/9.2

Infrastructure Planning (Examination Procedure) Rules 2010

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9.2 Written Summary of Applicant's Oral Submissions at the Issue Specific Hearing 1 (ISH1) on 15 October 2024

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1.0 INTRODUCTION

1.1 This note summarises the oral submissions made by Tillbridge Solar Limited (the "**Applicant**") at Issue Specific Hearing 1 ("**ISH1**") held on 15 October 2024 in relation to the application for development consent ("**Application**") for the Tillbridge Solar Project (the "**Scheme**").

1.2 Where the Examining Authority (the "**ExA**") requested further information from the Applicant on specified matters, or the Applicant undertook to provide further information during the course of ISH1, that further information is either set out in this document or provided as part of the Applicant's Deadline 1 submissions.

1.3 This note does not purport to summarise the oral submissions of other parties, and summaries of submissions made by other parties are only included where necessary to give context to the Applicant's submissions, or where the Applicant agreed with the submission(s) made and so made no further submissions (this is noted within the document where relevant).

1.4 The structure of this note follows the order of the items listed in the detailed agenda published by the ExA on 23 September 2024 (the "**Agenda**"). Numbered agenda items referred to are references to the numbered items in the Agenda. The Applicant's substantive oral submissions commenced at Item 3 of the Agenda. Therefore, this note does not address Items 1 and 2 on the Agenda as these were procedural and administrative in nature.

2.0 WRITTEN SUMMARY OF THE APPLICANT'S ORAL SUBMISSIONS

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3. General introduction to dDCO	
DCO Overview	Tom Atkins, on behalf of the Applicant, provided an overview of the most recent version of the **draft DCO [AS-004]**: • Mr Atkins explained that the Order has been drafted having regard to relevant Planning Inspectorate (PINS) guidance, best practice and precedents established in other made DCOs, in particular energy DCOs. It includes 50 articles, divided into 6 Parts, and then 17 Schedules, which are given effect by, or tie into, the articles. • The draft DCO is proposed to be called the *Tillbridge Solar Order*, and is drafted to consent the construction, operation (including maintenance) and decommissioning of the authorised development, as described in Schedule 1. Article 2 of the Order sets out the definitions of terms used within the Order. • **Part 2** of the Order sets out the Principal Powers – including granting the undertaker consent for the authorised development, as constrained by the Order limits and numbered areas shown on the Works Plans. This part of the Order also authorises the maintenance and operation of the authorised development. • **Part 3** of the Order provides a suite of powers in relation to street works, including carrying out street works within streets, altering the layout of streets, creating accesses, temporarily prohibiting or restricting use of streets and public rights of way, entering into agreements with street authorities, and traffic regulation measures. These provisions give effect to Schedules 4 to 8. • **Part 4** contains supplemental powers, relating to discharge of water, protective works to buildings, and the authority to survey and investigate the Order land. • **Part 5** of the Order sets out the powers of acquisition or temporary possession. These include powers to compulsorily acquire rights in land, to extinguish rights in land, or to take temporary possession of land. These articles relate only to the Order land, as shown on the Land and Crown Land Plans. There are also standard provisions relating to compensation payable to affected persons, and powers in relation to land and apparatus of statutory undertakers. These articles give effect to Schedules 9 to 11. • **Part 6** includes various miscellaneous or general provisions. • The Order then has a series of Schedules, 1 through to 17– each Schedule identifies its operative article in the Order, in the top right of the Schedule. o **Schedule 1** – sets out the authorised development. The works numbers align with the numbered areas on the Works Plans. o **Schedule 2** are the requirements, relate to construction, operation and decommissioning of the Scheme, including detailed design and the various environmental management and other plans.

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	○ **Schedule 3** sets out the legislation to be disapplied. Mr Atkins noted that This would be covered in more detail later in relation to Agenda Item 5.1. ○ **Schedule 4** (Streets subject to street works) - sets out the streets that are to be subject to street works by reference to the Access and Rights of Way Plans. The Schedule relates to Article 8 (Street works). ○ **Schedule 5** (Alteration of streets) - sets out the streets that are to be permanently altered (Part 1) and temporarily altered (Part 2) by reference to the **Streets, Rights of Ways and Access Plans [APP-008]**. This Schedule relates to Articles 9 (Power to alter layout, etc., of streets) and 10 (Construction and maintenance of altered streets). ○ **Schedule 6** (Streets and public rights of way) sets out the locations of the streets and public rights of way in respect of which use will be temporarily prohibited or restricted, temporary management of public rights of way, as well as the permanent and temporary use of motor vehicles on public rights of way. It references the **Streets, Rights of Ways and Access Plans [APP-008]**. This Schedule relates to Article 11 (Temporary prohibition or restriction of the use of streets and public rights of way). ○ **Schedule 7** (Access to works) sets out the permanent means of accesses to works (Part 1) and temporary means of accesses to works (Part 2). It references the **Streets, Rights of Ways and Access Plans [APP-008]**. The Schedule relates to Article 14 (Access to works). ○ **Schedule 8** (Traffic regulation measures) sets out the locations and extent of temporary traffic signal and banksman control areas or changes to traffic regulation necessitated by the authorised development. It references the **Streets, Rights of Ways and Access Plans [APP-008].** The Schedule relates to Article 16 (Traffic regulation measures). ○ **Schedule 9** (Land in which only new rights etc. may be acquired) – sets out the areas of land over which only new rights may be acquired by the undertaker and the nature of the rights that may be acquired. The plot numbers in column 1 of that table correlate with the relevant plot reference numbers on the **Land and Crown Land Plans [AS-040]** and the nature of the rights in column 2 explains the purposes for which rights over land may be acquired and restrictive covenants imposed. The Schedule relates to Article 22 (Compulsory acquisition of rights). ○ **Schedule 10** (Modification of compensation and compulsory purchase enactments for the creation of new rights and imposition of new restrictive covenants) - modifies existing compensation legislation including the Land Compensation Act 1973 and the Compulsory Purchase Act 1965. ○ **Schedule 11** (Land of which temporary possession may be taken) - sets out the land of which only temporary possession may be taken, pursuant to Article 29 (Temporary use of land for constructing the authorised development). The plot numbers in column 1 of that table correlate with the relevant plot reference numbers on the **Land and Crown Land Plans [AS-040]** and the column 2 explains the purposes for which temporary possession may be taken.

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	○ **Schedule 12** (Hedgerows to be removed) identifies the lengths and locations of hedgerow to be removed and the purpose of removal, with Part 1 relating to important hedgerows (under the Hedgerow Regulations) and Part 2 relating to other hedgerows which require removal. It references the **Hedgerow Removal Plan [AS-044]**. The Schedule relates to Article 38. ○ **Schedule 13** (Documents and plans to be certified) – lists the documents that the undertaker must have certified as true copies by the Secretary of State pursuant to Article 40 (Certification of plans and documents, etc.). ○ **Schedule 14** (Arbitration rules) sets out the procedures for arbitration in accordance with Article 42 (Arbitration). ○ **Schedule 15** (Protective provisions) – sets out protective provisions (PPs) for the benefit of statutory undertakers whose equipment may be affected by the authorised development. This schedule contains standard PP and a suite of bespoke PPs. Some of these provisions are agreed with the relevant statutory undertakers, whereas others represent the Applicant's latest position whilst the drafting is still being agreed with the relevant statutory undertaker. Mr Atkins noted that the Applicant would provide an update in that respect under Agenda Item 5.2. ○ **Schedule 16** (Deemed marine licence) – is proposed to be deleted at Deadline 1 per discussions with the Marine Management Organisation. ○ **Schedule 17** (Procedure for discharge of requirements) – sets out the procedure for discharge of requirements.
4. Scope of the proposed development	
4.1 – Generating Capacity	**Generating Capacity** The ExA asked the Applicant to explain the generating capacity of the proposed generating station and direct the ExA to relevant evidence that sets out the Scheme's 500MW import and export capacity. Alexis Coleman, for the Applicant, explained that grid connection capacity for the Scheme is established through a bilateral connection agreement with National Grid for 500 MW of import and export capacity at the National Grid Cottam Substation. This serves as the primary limiting factor to the Scheme's output. Ms Coleman referred the ExA to the **Grid Connection Statement [APP-214]**, which sets out the detail of the Applicant's grid connection and the agreements in place with National Grid. ***Post-hearing note:*** *In response to subsequent queries from the ExA, the Applicant agreed to provide additional written evidence of the Scheme's 500MW import and export capability. This is provided as* ***Appendix A*** *to this written summary.* **Lower and upper limits of output** The ExA asked the Applicant to explain the upper and lower limits of output from the Scheme, in practice, and whether this would fluctuate and if there were any limits in place. Ms Coleman, on behalf of the Applicant, noted that there is a limit on the electricity that can be exported from the Scheme to the grid. Site selection and design have both been informed by the capacity within the bilateral connection agreement with National Grid, namely

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	500MW. While the maximum electricity that can be generated by the Scheme is higher than 500MW, the Scheme can only ever export 500MW in accordance with the agreement entered into with National Grid. This approach is supported by the National Policy Statement for renewable energy infrastructure (NPS EN-3). Paragraph 2.10.55 of NPS EN-3 specifically provides that applicants may account for decline in generating capacity over time due to panel degradation by overplanting solar panel arrays (i.e. installing a greater number of panels than is necessary to achieve the agreed export capacity). As Ms Coleman highlighted, this approach would enable the Applicant to maximise the renewable energy generation benefits of the Scheme over its lifetime, by ensuring the Scheme would continue to be able to export the 500MW throughout its operation. In terms of a limit on the generation capacity of the Scheme, Ms Coleman went on to explain that the Applicant has not imposed any upper or lower cap on capacity as the impacts of solar farms like the Scheme are not related to generation capacity but rather to physical aspects such as size and scale. The Applicant has proposed a suite of controls to manage these aspects of the Scheme, including the **Works Plans [EN010142/APP/2.3(Rev01)]**, which clearly identify the areas within which the numbered works making up the Scheme can be located, and the **Outline Design Principles Statement [AS-058]**, which set maximum parameters for the location, scale and design of Scheme components which have been assessed through the Environmental Impact Assessment (EIA) presented in the **Environmental Statement** (ES) **[APP-031 to APP-050]**. This approach is appropriate and has been endorsed by the Secretary of State, with all other made solar development consent orders (DCOs) having no upper limit on energy generation capacity. Paragraph 2.10.56 of NPS EN-3 also expressly states that export capacity "should not be seen as an appropriate tool to constrain the impacts of a solar farm." ***Post-hearing note:*** *The ExA requested confirmation that the import and export capacity of the Scheme are the same, namely 500MW. Ms Coleman confirmed that 500MW is the agreed figure with National Grid but agreed to provide additional evidence on the upper and lower output limits of the Scheme. This evidence is provided in* ***Appendix B*** *to this written summary.* Referring to paragraph 5.32 of the **Planning Statement [APP-211]** the ExA asked whether the total energy generation figure of 48.5 TW/Hr generation capacity is the correct and accurate figure. Mr Gergely Czuczor, on behalf of the Applicant, responded that 48.5 TW/Hr generation capacity figure is correct in terms of the Scheme design proposed at the time of Application but that this could be subject to change depending on the technology available at the detailed design stage. Responding to the ExA's query as to how this figure could increase, Mr Czuczor explained that the theoretical minimum and maximum output of the Scheme will be determined by the specific components selected and technological advancements in terms of the efficiency of these components during the detailed design phase. The ExA then referred to **Chapter 7: Climate Change** of the ES **[APP-038]**, specifically paragraph 7.3.8, where the total capacity of the battery energy storage system (BESS) is referenced as 2,310 MWh, being sufficient to store three hours of peak production from the solar generating station, querying what this indicates in terms of the maximum output of the Scheme. Mr Czuczor stated that over the three hours of production, the maximum output from the BESS at any moment in time would be limited by the 500MW grid connection – the BESS has been designed to store three hours of electricity produced by the solar PV, which would then be transmitted to the grid once solar energy production ceased.

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	The ExA sought further clarification, querying why the total capacity is noted as 2,310 MWh when the grid connection capacity over three hours would be 1500 MWh (being 500MW multiplied by three). Ms Coleman, for the Applicant, explained that while the export/import cap is 500MW per the grid connection agreement, in order to maximise the electricity that can be generated and exported from the Scheme, the installed generation capacity of the Scheme is higher than 500MW (i.e. overplanted) and this means there is more electricity that can be generated and stored in the BESS whilst remaining within the 500MW import/export limit. ***Post-hearing note:*** *The Applicant agreed to provide further clarification and detail on this point in writing. This is provided in* ***Appendix B*** *to this written summary. It is noted that the references within* ***Chapter 7: Climate Change*** *of the ES* ***[APP-039]*** *(as referred to above) to three hours of peak production is a typographical error and should instead refer to four hours of peak production. This has been explained in the* ***Appendix B****. This does not affect the above explanation.* Mr Mark Prior, on behalf of 7000 Acres, raised a concern regarding the potential additional impact on the region as a result of overplanting the Scheme, stating that 7000 Acres believe the capacity of the electricity output of the Scheme should be capped in accordance the grid connection agreement. Ms Coleman, for the Applicant, explained that the issue with capping the number of panels to align directly to the grid connection is that although 500MW could be exported in the first year, due to panel degradation over time, less than 500MW would be achieved every year afterwards. This would result in a less efficient use of land and potentially require additional solar farms to be constructed elsewhere to make up for the loss in renewable energy generation. Ms Coleman emphasised that overplanting is specifically allowed for in NPS EN-3 (paragraph 2.10.55) as this ensures the substantial renewable energy benefit can be delivered by maximising energy production over the lifetime of the Scheme. Overplanting was also discussed in the Secretary of State's decision letter on the Mallard Pass Solar Farm DCO and was cited as a benefit of that project. Capping the installed capacity would therefore have the opposite effect for nationally significantly solar projects like the Scheme, by failing to maximise the available grid connection and therefore reducing the extent of renewable energy which can be provided by the Scheme. ***Post-hearing note:*** *Mr Simon Skelton, on behalf of 7000 Acres, asserted that the energy generation from the Scheme will be approximately 26 TWh over its 60 year lifetime rather than 48.5 TWh, based on the calculations done by 7000 Acres. The methodology and calculations undertaken by the Applicant that evidence the 48.5 TWh figure are set out in* ***Appendix B*** *to this written summary.*
4.2 – Associated Development – Battery Energy Storage System (BESS)	The ExA referred to the **Statement of Need [APP-210]**, which says when the BESS is not supporting generation of solar PV panels it may be useful to support the National Grid at times rather than for storing solar generated energy from the Scheme. The ExA queried at what times the BESS would not be supporting operation at the Principal Site. Ms Coleman, on behalf of the Applicant, outlined that the primary purpose of the BESS is to take the electricity from the solar panels forming part of the Scheme in times of low demand when the sun is shining, and send it to the National Grid in times of higher demand. This maximises efficiency. The secondary purpose of the BESS is provide ancillary and balancing services for the grid. This would occur in times of surplus when there is more electricity on the grid than there is demand (i.e. times of low demand). Mr Czuczor, for the Applicant, went on to explain that it is difficult to say at this stage the precise times during which the secondary purpose of the BESS would be utilised due to the 60 year operational lifetime of the Scheme. In general terms, however, solar generation is estimated based on what

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	can be foreseen, such as meteorological assessments and seasons and on predictions as to when the BESS can or cannot be used for supporting the solar PV. When it cannot be used for supporting solar PV, then it can be used for supporting the National Grid if needed/ possible. ***Post-hearing note:*** *The ExA asked how often and at what times the secondary use of the BESS would be used and what proportion of any given day would be given up to import from the National Grid as opposed to supporting the co-located solar development. The Applicant has prepared a note setting this out in more detail, which is provided as* ***Appendix B*** *to this written summary.* The ExA then referred to Table 5-1 in the **Statement of Need [APP-210]**, stating that, as they understood it, the table sets out the services of the BESS component of the Scheme, and asked how many of those functions relate to electricity generated from the solar panels. Mr Czuczor noted that Table 5-1 refers to the BESS alone and not the generating capacity/station, and that the functions outlined are in isolation of the generating station itself. The ExA further queried the references to various service contracts in paragraphs 6.11.22-25 of the **Statement of Need [APP-210]** and whether there are such contracts in place for the Scheme or whether there are likely to be such contracts for the BESS component of the Scheme. Mr Czuczor stated that these contracts were subject to agreement with the National Grid and had not yet been signed but would need to be in place in order to provide these services to the National Grid. Ms Coleman went on to highlight that the Overarching National Policy Statement for energy (NPS EN-1) outlines the important role of energy storage and balancing services in renewable energy generation (see paragraphs 3.3.25-27). Solar energy, by its nature, does not respond to demand – it responds to environment. Energy storage addresses the impacts of the inherent intermittency and fluctuations associated with renewable energy generation like solar or wind, maximising the useable output from these energy sources. In other words, energy storage works to make the operation of intermittent forms of renewable generation, such as solar, more efficient. The ExA asked the Applicant to provide a headline figure of what the BESS would be able to store, in terms of either GWh or MWh. Ms Coleman noted that this was difficult to determine at this stage. Mr Czuczor noted that it is difficult to provide a precise standalone figure in terms of storage at this stage, but in general terms, the BESS would be appropriately sized to respond to, and support operationally, the authorised development. Ms Coleman went on to explain that while other solar schemes have a centralised BESS site (also known as AC-coupled), the Scheme has a DC-coupled approach meaning there are smaller groups of BESS integrated throughout the Principal Site. Due to the way it is embedded within the Scheme, this type of BESS is not the sort of BESS that could come forward by itself and could not form a standalone development in the absence of the solar generating station. Referring to paragraphs 6.11.21-22 of the **Statement of Need [APP-210]**, the ExA queried whether the BESS was subordinate to the solar element of the Scheme, and in particular whether the DC-coupled approach adopted by the Applicant means that functionality to store energy from the grid is not lost as easily as with AC-coupled schemes, and whether this resulted in more efficient import connection. Mr Harry Wilder, on behalf of the Applicant, explained that in fact the opposite is true, and the greater efficiency referred to in the cited paragraphs relates to the efficiency of the Scheme as a whole in terms of the amount of energy generated from the solar PV that is able

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	to be stored in the BESS. This is because typical, AC-coupled batteries store in AC while energy is generated from solar PV in DC. Therefore, with AC-coupled schemes, before energy generated from solar PV can be stored it needs to go through an inverter to convert it from DC to AC and this results in an energy loss. The DC-coupled approach adopted for the Scheme means an inverter is not required prior to storage in the BESS of the energy generated by the solar PV, and therefore the resultant energy loss is removed and so the system is more efficient. By comparison, the DC-coupled BESS system is less efficient than an AC-coupled scheme at receiving energy from the grid for storage, as it will need to go through the inverter before it can be stored within the BESS, with the associated energy losses accrued. In this way, the approach to DC-coupled BESS as part of the Scheme has prioritised the efficiency of the operation of the solar PV. ***Post-hearing note:*** *Further explanation on the efficiency of the Scheme, including the function and efficiency of the DC-coupled BESS is provided within* ***Appendix B*** *to this written summary.* The ExA queried why the terms "BESS station" and "BESS compound" are used in the **Outline Design Principles Statement [AS-058]** but do not appear in Schedule 1 of the **draft DCO [AS-004]**. Ms Coleman stated that the Applicant would review the wording used in the **Outline Design Principles Statement [AS-058]** to ensure it was clear as to what works were provided for under each Work Number ensuring alignment with Schedule 1 of the **draft DCO [AS-004].** ***Post-hearing note:*** *In response to the above, the Applicant intends to update and submit an amended* ***Outline Design Principles Statement [AS-058]*** *at Deadline 2.* Responding to points raised by interested parties regarding whether the BESS is associated development, Ms Coleman noted that the term "electricity storage" is used throughout NPS EN-1 and that NPS EN-3 specifically identifies energy storage as the type of associated infrastructure that may be treated as associated development for solar farms (see paragraph 2.10.16). Ms Coleman emphasised that the Scheme has satisfied the tests for associated development under the *Planning Act 2008: Guidance on associated development applications for major infrastructure projects* (April 2013) and that while the BESS is able to cross subsidise the Scheme this not its sole purpose – the main purpose of the BESS is to increase the operational efficiency of the solar PV generation. Finally, Ms Coleman noted that all but one of the consented solar DCOs to date have battery storage, which has in every case been accepted as associated development. ***Post-hearing note:*** *The Applicant has prepared a note setting out how the BESS satisfies the relevant tests for associated development. This is provided as* ***Appendix B*** *to this written summary.*
4.3 – Operational lifetime of the Proposed Development	The ExA asked the Applicant to explain the basis for the 60-year lifetime of the Scheme. Ms Coleman, for the Applicant, explained that this approach reflects that taken in neighbouring schemes, having been accepted in Mallard Pass, Gate Burton and Cottam, and is the most efficient use of land. Further, although NPS EN-3 references that a lifespan of 40 years is "typical" for a solar farm, it also anticipates schemes having lifetimes in excess of that with applicants able to seek consent for differing periods of operation or without a time period (refer to paragraph 2.10.65).

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	The ExA noted that the definition of "maintain" in the **draft DCO [AS-004]** includes the ability to replace and improve any part of authorised development while Article 5(3) provides a power to maintain the authorised development. Based on these provisions, the ExA asked the Applicant to confirm whether or not Article 5(1) would enable replacement of Scheme components and whether this was standard DCO wording. Ms Coleman, for the Applicant, highlighted that Article 5(3) places controls upon the exercise of the maintenance power as it does not authorise works as part of maintenance of the Scheme which are likely to give rise to any materially new or materially different effects that have not been assessed in the environmental statement. In addition, and to assist the local authorities with enforcement of activities pursuant to Article 5, provisions are included the **Framework Operational Environmental Management Plan** ("OEMP") **[EN010142/APP/7.9(Rev01)]**, which sets out in Table 2-2 the various components of the Scheme and their respective likely operational lifetimes. Wholesale replacement of all Scheme components is not authorised under Article 5(1), with assumptions around HGV traffic in the Framework OEMP and **Chapter 16: Transport and Access** of the ES **[APP-047]** reflecting this approach. This has also been built into the Framework OEMP at section 2.3, which requires the Applicant to submit an annual maintenance schedule to the relevant local authorities for approval. This maintenance schedule will reduce the monitoring responsibilities being assumed by local authorities in terms of effects that might be occurring as a result of maintenance activities. Ms Coleman confirmed that Article 5 reflects standard DCO wording that is precedented in the Mallard Pass, Gate Burton and Cottam DCOs (amongst others), which is necessary due to the difficulty in being specific about maintenance activities required over the 60-year lifetime of the Scheme, hence they are controlled by their environmental impacts rather than prescribing the activities themselves. ***Post-hearing note:*** *In response to a request by the ExA and local planning authorities for a more tangible figure on potential panel replacement, the Applicant refers to Section 2.3 of the* ***Framework OEMP [EN010142/APP/7.9(Rev01)]*** *which sets out what information the Applicant will provide in its annual planned maintenance schedule. Paragraph 2.3.10 provides the minimum information that must be included as a matter of course, while paragraph 2.3.11 requires the Applicant to provide further notification to the relevant local planning authorities in respect of any maintenance undertaken as a result of unforeseen emergencies. Table 2-2 of the Framework OEMP provides an overview of the indicative design life of the various Scheme components, which indicates when and how frequently components are likely to need replacing throughout the Scheme's operational lifetime. It is noted that the local authorities' approval is needed for the OEMP and they therefore have control over the specific requirements in relation to the maintenance schedule.* *Table 2-2 in the Framework OEMP mirrors Table 3-1 in* ***Chapter 3: Scheme Description*** *of the ES* ***[AS-053]****. As set out in paragraph 3.2.4 of Chapter 3, during the operational phase, as components approach the end of their design life the Applicant will evaluate whether the components require maintenance and/or replacing. It is not anticipated that wholescale maintenance or replacement would be required but rather it would be programmed in stages to maintain the electrical export to the National Grid.*
4.4 – Decommissioning	The ExA asked the Applicant to confirm how the Scheme will be undertaken and funded in the event that the Applicant or its operating company ceases to exist. Ms Coleman, on behalf of the Applicant, stated that the **Framework Decommissioning Environmental Management Plan** ("DEMP") **[EN010142/APP/7.10(Rev01)]** provides for how the decommissioning will take place, noting that the Applicant is aware of its obligations in the **draft DCO [EN010142/APP/3.1(Rev03)]** with respect to decommissioning as set out in Requirement 20, meaning it would be

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	setting aside funds during the operation of the Scheme to meet the cost of decommissioning. The requirements of the DCO are enforceable and it is a criminal offence to fail to comply with a DCO. The Proceeds of Crime Act 2002 also acts as a further deterrent, and elements of the installed solar PV represent a valuable asset meaning it would be in Applicant's interest financially to decommission the site in order to sell or recycle the panels and other components. If the undertaker went into liquidation or receivership, its assets would be sold off to fund the decommissioning of the Scheme that is required pursuant to the legal requirement of the DCO (in this context, it is relevant that the DCO is a piece of legislation, and therefore different to a planning permission). Ms Coleman went on to explain that a decommissioning bond is not routine for energy DCOs and while similar arguments have been advanced requesting a decommissioning bond in most other solar DCOs, the Secretary of State has not required one for the seven made solar DCOs to date. In Cleve Hill, for example, the ExA came to the conclusion that the Applicant intended to follow good commercial practice and set aside funds during the scheme's lifetime, meaning it was not necessary to require a bond. The ExA further noted that as the enforcement provisions are already rigorous it is not routine for DCOs to impose decommissioning bonds. This was also addressed more recently in the decision for the Mallard Pass DCO where, with the decommissioning requirement in place, the Secretary of State considered there was no need for further controls. The Applicant would also be under an obligation, pursuant to agreements with landowners, to return the land to landowners following decommissioning. ***Post hearing note:*** *The Applicant has set out examples from other solar DCO decisions relating to decommissioning and funding below.* *For Cleve Hill Solar Park, the ExA's recommendation report at paragraph 12.3.50 stated as follows (in respect of which the Secretary of State's decision letter was in agreement):* *"We were informed [REP2-006], [REP3-015] and [REP5-010] that, although the Applicant intended to follow good commercial practice to set aside funds during the operational life of the project, it was not necessary to provide a financial bond as guarantee as the enforcement mechanisms in the PA2008 were rigorous, criminal liability would be a possible consequence of a breach of the Requirement, and The Proceeds of Crime Act 2002 added further deterrent to a breach. Moreover, it was not routine practice for DCOs to incorporate decommissioning bonds.* ***Without clear precedent or Government guidance, we see no basis to justify a financial bond secured by requirement in the DCO. Moreover, we do not believe that such a requirement would meet the relevant law and policy on the drafting of requirements***." (emphasis added) *Similarly, for Mallard Pass Solar Farm, the ExA's recommendation report at paragraph 7.4.73 stated as follows (in respect of which the Secretary of State's decision letter was in agreement):* *"MPAG [REP2-090] and others have raised concerns in relation to the decommissioning timeline, its enforceability and availability of funding. The Requirement includes the need for approval of a detailed Decommissioning Environmental Management Plan (DEMP) [REP10-008]. This includes a decommissioning programme, compliance with which would be enforceable under the DCO. We do not consider it necessary for any further controls to be imposed on the timeframe for the decommissioning programme. Nor do we agree with Mr Richard Williams [REP4-066] that it would be necessary to make provision to increase the level of a potential fine within the DCO.* ***Whilst there were suggestions by Interested Parties for***

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	***provision to be made for a financial bond, consistent with the other made DCO's for solar projects we do not consider this to be necessary given the controls that would already be in place via Requirement 18 of the DCO**."* (emphasis added) ***Post-hearing note:** Also in respect of decommissioning, the ExA queried the assumptions made by the Applicant in terms of the retention of some elements of solar infrastructure, namely the substations and the Solar Farm Control Centre. The Applicant has prepared a note setting out the assumptions considered by each ES chapter in terms of removal or retention of Scheme components, which is provided as **Appendix C** to this written summary.* In response to a query from 7,000 Acres, Ms Coleman explained that the underground cabling for the Scheme will be left in situ upon decommissioning, as the environmental impact and disruption would be greater were it to be removed.
5.1 – Articles of the dDCO	
Article 6(1) (modification of statutory provisions)	The ExA queried the basis on which the Applicant sought to disapply the provisions set out at Article 6(1). Ms Coleman, on behalf of the Applicant, set out the basis the provisions sought to be disapplied under Article 6(1). She explained each of the acts listed was justified within the **Explanatory Memorandum [APP-015]**, and where necessary discussed with relevant statutory undertakers and captured within the matters addressed within the protective provisions agreed with those statutory undertakers. ***Post-hearing note:** For completeness, a summary of each of the provisions sought to be disapplied pursuant to Article 6(1) is provided below:* • *Article 6(1)(a) to disapply section 23 of the Land Drainage Act 1991, is sought on the basis that this section prohibits the obstruction and other works in watercourses without the consent of the lead local flood authority or relevant internal drainage board, and so would apply separate controls on the Scheme.* • *Article 6(1)(b) to disapply section 32 of the Land Drainage Act 1991, is sought on the basis that this section would inappropriately allow the provisions of the Order relating to drainage to be revisited by allowing a third party to apply to amend the powers and duties within the DCO.* • *Article 6(1)(c) to disapply byelaws made under section 66 of the Land Drainage Act 1991 and Section 6(1)(d) to disapply byelaws under paras 5, 6, or 6A of Schedule 25 to the Water Resources Act 1991, are sought on the basis that such byelaws apply additional approvals which could delay construction or operation of the Scheme.* *The disapplication of these provisions, in favour of appropriate alternative controls within the relevant protective provisions, has been agreed to date with Scunthorpe and Gainsborough Drainage Board and Upper Witham Drainage Board, whilst the Applicant is in the process of agreeing this with Trent Valley Drainage Board and the Environment Agency.* • *Article 6(1)(e) to disapply regulation 12 of the Environmental Permitting (England and Wales) Regulations 2016, is only sought insofar as a flood risk activity permit is required. This enables the Applicant to carry out a flood risk activity without the need for an environmental permit. This is considered appropriate on the basis that this application appropriately assesses the flood risk*

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	of the Scheme and its activities. The intention is that the Order sufficiently controls this risk, and where there are outstanding concerns by the Environment Agency these will be controlled by the protective provisions to be entered into with the Environment Agency. *The above legislation was all disapplied under the Gate Burton Energy Park and Cottam Solar Project Orders as made.* The ExA asked for the views of the Environment Agency and the Lead local Flood Authority as to whether they agree to this approach and whether any agreements are in place. Mr Wayne Cattell, for the Environment Agency, confirmed that the Environment Agency is confident protective provisions can be agreed. Mr McBride, on behalf of Lincolnshire County Council, confirmed that no issues have been raised. Ms Coleman, for the Applicant, further discussed the local legislation to be disapplied per Article 6(1)(f) and Schedule 3 of the draft DCO. She outlined that the basis for their disapplication was the result of a search for historic legislation and that the legislation in this Schedule was proposed to be disapplied to ensure that any powers inconsistent with the Scheme did not apply within the Order limits. This Schedule is also reasonably consistent and aligned with corresponding schedules in the Gate Burton and Cottam DCOs. The ExA asked if a further breakdown of the legislation included within Schedule 3 could be provided in writing. ***Post-hearing note:*** *The Applicant has prepared a note setting out the legislation that is proposed to be disapplied through Schedule 3 of the* ***draft DCO [EN010142/APP/3.1(Rev03)]****. This is provided as* ***Appendix D*** *to this written summary.*
Article 18 (Removal of human remains)	The ExA queried the necessity of this provision given most DCOs have had it removed. Ms Coleman, for the Applicant, confirmed that, having reviewed other recently made DCOs, and confirming there are no known burial grounds within the Order limits, the Applicant considers any accidental discovery of human remains can be appropriately managed through the standard archaeological mitigation strategy provided for at Requirement 11. The Applicant has therefore removed this provision from the updated **draft DCO [EN010142/APP/3.1(Rev03)]** submitted at Deadline 1.
Article 19 (Protective works to buildings)	The ExA sought clarification as to the need for this provision and the basis for needing to undertake protective works, as there is no indication in the Application that the Applicant is proposing to protect other people's property. Ms Coleman, for the Applicant, clarified that there are no buildings within the Order limits to which article 19 would currently apply. Therefore, the primary reason for the inclusion of this provision is on a precautionary approach, based on potential for there to be buildings constructed within the Order limits that may require protective works. For example, there is a planning permission for a set of barns within the Cable Route Corridor, which may be constructed prior to construction on the Scheme commencing. Therefore, this provision has been included in anticipation of buildings like these which do not currently exist but may be constructed and established ahead of construction of the Scheme. The ExA asked if the owners of those buildings been notified that it may be necessary to undertake protective works. Ms Coleman confirmed that the Applicant is in discussions with the owners of these buildings in terms of compatibility and how the two developments may coexist.

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	Post-hearing note: *The record of engagement undertaken by the Applicant with the owner of the barns to date is set out in the* ***Schedule of Negotiations [EN010142/APP/4.4(Rev02)]****.* In response to a concern raised by the ExA regarding the extent of the power sought through this provision, Ms Coleman stated that the Applicant could only exercise the power within the Order limits, and only in accordance with the timeframes and compensation requirements set out in the article. ***Post-hearing note:*** *The Applicant agreed during the course of the hearing to confirm any buildings within the Order limits requiring protective works. The Applicant can confirm that the only existing building within the Order limits is the National Grid Cottam Substation, in respect of which any protective works will be agreed in accordance with protective provisions agreed between the Applicant and EDF. Discussions are ongoing between the parties in relation to the protective provisions. As emphasised at ISH1, this provision seeks to ensure that the Applicant has the necessary powers under the DCO to carry out required protective woks to any buildings that may be constructed prior to the commencement of construction on the Scheme, such as the planned barns located within the Cable Route Corridor.*
Article 26 (Acquisition of subsoil or airspace only)	In response to a query from the ExA as to why the Applicant would require airspace rights, Ms Coleman, for the Applicant, confirmed that the Applicant intends to remove this wording within Article 26 of the **draft DCO [EN010142/APP/3.1(Rev03)]** at Deadline 1 and confirmed that there are no overhead bridges or overhead lines proposed as part of the Scheme. The Applicant will, however, be retaining the ability to acquire the subsoil rights sought in this provision, particularly in respect of the cable works proposed by the Scheme.
Article 36 (Transfer the benefit of the Order)	The ExA queried why is there a specific article proposed in the draft DCO for transferring the benefit of the DCO to another party and the potential scenarios where this might occur. Ms Coleman, for the Applicant, explained that this article is included in in every energy DCO because, unlike a planning permission, DCOs are made with reference to a specific named undertaker due to the powers DCOs contain (such as compulsory acquisition). It is the Applicant's intention to build out and operate the Scheme, however, this article is included on a precautionary basis to protect against unforeseen circumstances. An example of this is the cable route (Work No. 4) and the ability to transfer the benefit of order to Cottam Solar Project, Gate Burton Energy Park or West Burton Solar Project if it is determined that, in order to minimise impacts of cable works, one party contracts the cable works, and the others have the benefit of that corridor. Ms Coleman also noted that the Applicant intends to remove references to holding companies or subsidiaries in line with other made orders to date from the updated **draft DCO [EN010142/APP/3.1(Rev03)]** submitted at Deadline 1. In relation to the shared cable corridor, the ExA queried how would it work where the Scheme was looking to compulsorily acquire land that is already subject to the DCO(s) and associated compulsory acquisition powers for the other schemes and whether, if the compulsory acquisition of the relevant land had already occurred for another scheme, the Applicant would withdraw those parcels from the land they intend to compulsorily acquire. Ms Coleman stated that the Applicant has a cooperation agreement with those other developers in place to minimise impacts and collaborate on detailed design, and that a further cooperation agreement is currently under negotiation that will put in place mechanisms

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	for dealing with detailed design overlapping compulsory acquisition powers. Further, while the compulsory acquisition rights do overlap in places, in practice each project would only end up with permanent rights related to the easement they required. Ms Coleman noted the specific wording within the Article 36(3)(b) – (d) which explicitly enables transfer to the other Lincolnshire solar schemes under the Article. This will enable areas of overlapping works to be undertaken by a single Scheme, if necessary and agreed in line with the updated cooperation agreement.
Articles 38 and 39 (TPO)	The ExA asked the Applicant to explain the necessity of this provision. Ms Coleman, for the Applicant, confirmed that this provision would be amended as part of the updated **draft DCO [EN010142/APP/3.1(Rev03)]** submitted at Deadline 1 to limit the power to being within the Order limits or trees overhanging the Order limits. Ms Coleman noted that there are trees within the Order limits that are currently subject to tree preservation orders and emphasised that the Applicant does not intend to cut these down. The power is instead included as some tree removal will be required for the Scheme, and the provision is necessary to guard against the potential for those trees becoming subject to tree preservation orders before construction of the Scheme. Ms Garbett for 7000 Acres raised an associated question as to the disapplication of the tree replacement requirements within this Article. Ms Coleman proposed to respond to this at Deadline 1. ***Post-hearing note:*** *There are only two trees subject to TPOs within the Order limits. These are located within the Cable Route Corridor, as indicated on Sheets 20 and 21 of* ***Arboricultural Impact Assessment Part 3 [APP-109].*** *As indicated within the proposed cable routing captured within that Assessment, the Scheme proposes to avoid direct impacts on these trees through micro-siting and detailed design for the cabling through this section of the Cable Route Corridor.* *However, the Applicant still proposes to retain this Article for the purposes of the Scheme, subject to minor amendments as captured within the* ***draft DCO [EN010142/APP/3.1(Rev03)]*** *submitted at Deadline 1. The amended Article permits the undertaker to fell or lop any tree protected by a tree preservation order made after 10 April 2024 (being the date of submission of the Application). This is considered necessary to protect against the ongoing construction, operation and maintenance of the Scheme being interrupted or affected by a TPO which a local authority may implement in the future. There is some likelihood that TPOs could be applied over the course of the Scheme's operation, given the extent of time for which the Scheme is anticipated to operate (ie 60 years), over which the values of trees within the Order limits may change. The Applicant cannot risk the construction or operation of the Scheme being blocked by a future order, noting that the Scheme is a nationally significant infrastructure project.* *It is noted per questions raised by 7000 Acres at ISH1 that the amended Article also confirms that the duty contained in section 206(1) (replacement of trees) of the 1990 Act does not apply. That section provides that replacement of removed TPO trees must occur "in the same place" as where the original tree was removed. This cannot be committed to since the Scheme would only need to undertake works to a tree protected by a TPO, if there was conflict with the Scheme spatially (i.e. the tree was in the way of intended infrastructure). The undertaker would therefore not be able to commit to replanting a replacement tree in the same location in which it was removed. However, to clarify intentions in respect of any TPO tree replacements, the Applicant has amended the* ***Framework LEMP***

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	[EN010142/APP/7.17(Rev02)]] *at Deadline 1 to clarify that the undertaker will replace any TPO tree in a suitable location elsewhere within the Order limits if a tree has to be removed.*
Article 50 – Crown Rights	The ExA requested an update on progress towards obtaining the appropriate consent from the Crown Estate and an understanding of timescales. Ms Coleman, on behalf of the Applicant, confirmed that the Applicant is in discussions with the Crown Estate and has provided a costs undertaking to deal with consent required under section 135 of the Planning Act 2008. The agreed position of the parties is that they are both cognisant of the examination timetable and will aim to reach agreement in a timely fashion and before the close of the examination.
Additional Item: Articles 9, 10, 11 and 16 (Street Works)	In response to concerns raised by Mr McBride, on behalf of Lincolnshire County Council, related to provisions within some of the streets works articles within the **draft DCO [AS-004]** for detailed design and permitting, Ms Coleman stated that the Applicant and Lincolnshire County Council had discussed these provisions and that while the Applicant does not consider the articles within the draft DCO require amendment, the Applicant acknowledges that provisions could to be added to the Framework Construction Traffic Management Plan to reflect the matters raised and provide for approval of detail of alterations to layout of the highway by the County Council. ***Post-hearing note***: *The Applicant agreed to look at the wording of the Framework Construction Traffic Management Plan [APP-222-223] used in the Cottam Solar Project DCO to see if it could be applied to the Scheme. The Applicant confirms that the* ***Framework Construction Traffic Management Plan*** *(CTMP)* ***[EN010142/APP/7.11(Rev02)]*** *for the Scheme has been updated to reflect the approach taken in Cottam, which sets out a procedure for the approval of detailed design under Articles 9, 10, 11 and 16. An updated version of the* ***Framework CTMP [EN010142/APP/7.11(Rev02)]*** *has been submitted at Deadline 1.*
Additional Item: Discharge of chemicals:	In response to a concern raised by 7,000 Acres, Ms Coleman, on behalf of the Applicant, confirmed that clean water would be used to wash the solar panels, and this is secured in the **Framework OEMP [EN010142/APP/7.9(Rev01)]**. ***Post-hearing note:*** *Paragraph 2.2.1 of the* ***Framework OEMP [EN010142/APP/7.9(Rev01)]*** *refers to the use of clean water with no added chemicals, sourced from local potable water suppliers, for the annual panel cleaning. As set out within* ***Chapter 10: Water Environment [EN010142/APP/6.1]****, the Solar PV units will be regularly observed and any panels which required maintenance / replacement will be removed before there was any leakage of chemicals from the sealed units. The panels are constructed in a robust manner and their components cannot be separated except with a considerable mechanical load. Therefore, the risk of any liquid leakage from the panels is very low, such that the impacts of such leaks are negligible. Any other matter washed off the panels is assumed to have already landed on the Site in a baseline scenario (ie dirt, dust, animal droppings), and is therefore not considered to be additional pollution added by the Scheme, nor result in measurable pollution risk. As such, this will not lead to any significant pollution risk.* *As set out within* ***Appendix 10-4: Outline Drainage Strategy*** *of the ES* ***[APP-098]****, runoff from the panels will infiltrate into the ground. In order to limit the potential for channelisation from water dripping off the end of the panels, the areas between, under and surrounding the solar PV panels will be planted with native grassland and wildflower mix. This planting will intercept and absorb water running off the panels, preventing it from concentrating and potentially forming channels in the ground. In case of any overland flows, it is proposed to install perimeter swales within low laying areas on the edge of certain fields with an outfall to the nearest watercourse.*

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5.2 – Schedules of the dDCO	
Schedule 2 – Requirement 4 (Community Liaison Group)	The ExA stated that it was interested in the likely nature, frequency and means of communication with the community liaison group. Ms Coleman, on behalf of the Applicant, stated that the Applicant had discussed this requirement with the local planning authorities in relation to clarifying what the terms of reference would cover. The Applicant maintains that the requirement should be kept high level at this stage, with detail to be provided within the terms of reference. Following the approach taken by other recently made solar DCOs, the terms of reference would be agreed with the local authorities, as the local authority is best placed to do so being aware of the local community, its needs and who should be involved in the group. The Applicant would then need to implement the community liaison group as approved and that would be the stage at which the community became directly involved. Ms Coleman emphasised that the purpose of the group was to facilitate liaison with the community. Scott Harker, for the Applicant, noted that typically these groups (in relation to other solar NSIPs) have been formed of people living locally and representatives of community interest groups, with the terms of reference being with the group beforehand and the first meeting scheduled prior to the commencement of construction. Following this initial meeting, the group would be able to amend its own terms of reference as required to ensure the needs of the community are being met, including (for example) splitting out into specialised groups such as one dealing with the Principal Site and another considering the Cable Route Corridor. ***Post-hearing note:*** *In response to queries raised by interested parties regarding the content of the terms of reference, the Applicant agreed to provide an example of what the terms of reference for a community liaison group could look like, based on another NSIP. This is provided as* ***Appendix E*** *to this written summary. Appendix E also sets out justification as to why the relevant planning authority should be the body to approve the terms of reference for the CLG, in response to questions at ISH1.*
Schedule 2 – Requirement 6	The ExA asked about the status of the battery safety management plan and the views of local authority fire services. Ms Coleman, for the Applicant, stated that the Applicant has engaged with Lincolnshire Fire & Rescue service (LFR) on the **Framework Battery Safety Management Plan (BSMP) [APP-225]**. LFR have confirmed that they are content that the Framework BSMP captures the requirements of the National Fire Chiefs Council (NFCC) Guidance (Ref. 1-1), recognising that updates will need to be made when the updated guidance from the NFCC is published. The Applicant understands that the NFCC is expected to revise its Grid Scale Energy Storage System Planning – Guidance for Fire and Rescue Services in late 2024. In addition, more specific details on water supplies and locations are to be added. The Applicant is proposing to update the Framework BSMP during examination once the updated NFCC guidance has been published and will then also provide further details on water supply for firefighting within the Framework BSMP. In response to a query from the ExA, Mr McBride, on behalf of Lincolnshire County Council, confirmed that he was comfortable that there is good ongoing dialogue between the Applicant and LFR in relation to compliance with local and national fire safety guidance. ***Post-hearing note:*** *Since the hearing, the Applicant has had confirmation that the publication of the Guidance by NFCC is more likely to be in early 2025.*

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Schedule 2 – Requirement 8 (Biodiversity Net Gain)	The ExA asked the Applicant to set out the extent of their engagement with the authorities responsible for delivery of Biodiversity Net Gain (BNG). Ms Coleman, on behalf of the Applicant, confirmed that following comments from the Environment Agency in their Relevant Representations the Applicant will be updating the **draft DCO [EN010142/APP/3.1(Rev03)]** at Deadline 1 to include the Environment Agency as a consultee in relation to this requirement. Natural England in their Relevant Representation stated that they wish to see 10% BNG secured in the DCO. The Applicant has secured this figure but has done so via the **Framework LEMP [EN010142/APP/7.17(Rev02)]** instead and this satisfies their general requirements. This approach is also consistent with that taken in Gate Burton, which the Secretary of State (agreeing with the Examining Authority) confirmed is an appropriate mechanism for securing BNG (refer to paragraphs 4.13 and 7.4 of the Secretary of State's Decision Letter and paragraph 5.2.14 of the Examining Authority's Recommendation Report). Mr McBride, for Lincolnshire County Council, stated that the Council has discussed with the Applicant that they would like to be a consultee in relation to this requirement, especially in respect of landscaping and ecology. This is because the Lincolnshire County Council now has the resource to respond to this whereas it did not when the other solar NSIPs were coming forwards. ***Post-hearing note:*** *Following ISH1, the Applicant has liaised with Mr McBride on this matter in conjunction with sharing the initial SoCG with LCC. The position is currently under discussion.* In response to a query raised by 7,000 Acres, Ms Coleman confirmed that biodiversity loss is accounted for in BNG metric used to calculate the BNG generated through the Scheme, which calculates how much loss there will be in terms of habitat units and then what is planned on being delivered in habitat units.
Schedule 2 – Requirement 11 (Archaeological Mitigation Strategy)	The ExA asked the Applicant for an update on the status of the archaeological mitigation strategy and the statutory consultees' views on this. Ms Coleman, for the Applicant, stated that the Applicant is proposing to submit its Archaeological Mitigation Strategy (AMS) at Deadline 1. The Applicant has engaged with Lincolnshire County Council, Nottinghamshire County Council and Historic England on the contents of the AMS and will track agreement on closing out comments on the AMS through Statements of Common Ground, also to be submitted at Deadline 1. Updates have also been made to Requirement 11 within the **draft DCO [EN010142/APP/3.1(Rev03)]** as submitted at Deadline 1 to reflect the changes to the AMS.
Schedule 2 – Requirement 20	Shemuel Sheikh, on behalf of West Lindsey District Council, noted that Requirement 20, as currently drafted, requires decommissioning after a 60-year period but does not currently require decommissioning if energy generation ceases. Mr Sheikh also suggested that the period for discharging requirements under Schedule 17 of the **draft DCO [AS-004]** be consistent with the timeframe for decommissioning in Requirement 20.

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	Ms Coleman, for the Applicant, noted that the Applicant had discussed these points with West Lindsey District Council and would take those points away to consider. ***Post-hearing note:*** *In response to the matters raised by West Lindsey District Council, the Applicant has updated the* ***draft DCO [EN010142/APP/3.1(Rev03)]*** *at Deadline 1 to address the points raised, specifically:* • *Adding a new definition for the "date of decommissioning" as the date that each part of the authorised development has permanently ceased to generate electricity on a commercial basis. This definition aligns with Requirement 20 (Decommissioning) to ensure the existing 60-year limit on operation applies, as well as including a new trigger for decommissioning of all or part of the authorised development when electricity generation ceases permanently. This definition was adopted from the Cottam Solar Project Order 2024, which used this drafting to achieve the purposes sought by West Lindsey District Council.* • *Amending Requirement 20, Paragraph (2) to align the timeframes for the undertaker to submit a decommissioning environmental management plan to the relevant planning authority for approval with those in Schedule 17 (from ten weeks to eight weeks).*
Schedule 2 – General Requirements	The ExA noted that there have been a couple of recently made solar DCOs and asked if the Applicant would be updating the **draft DCO [AS-004]** and **Explanatory Memorandum [APP-015]** to reflect the position reached in terms of the Requirements. Ms Coleman, on behalf of the Applicant, confirmed that the Applicant has reviewed the recently made solar DCOs for Gate Burton and Cottam and has made amendments throughout the **draft DCO [EN010142/APP/3.1(Rev03)]** that will be submitted at Deadline 1 to reflect the drafting included in those orders. These amendments will also be picked up in the revised **Explanatory Memorandum [EN010142/APP/3.2(Rev01)]** submitted at Deadline 1.
Schedule 3 – Legislation to be disapplied	The disapplication of local legislation listed within Schedule 3 was discussed alongside the legislation to be disapplied within Article 6, as set out earlier in this note.
Schedule 15 – Protective Provisions	The ExA requested an update on the progress of negotiating protective provisions with statutory undertakers. Mr Atkins, on behalf of the Applicant, provided the following update: • **Canal and River Trust** – protective provisions agreed in August 2023 between CRT, Tillbridge, Gate Burton Energy Park, Cottam Solar Project and West Burton Solar Project. Agreed provisions included in the **draft DCO [EN010142/APP/3.1(Rev03)]**. • **Lincolnshire Fire and Rescue** – agreed protective provisions included in the **draft DCO [EN010142/APP/3.1(Rev03)]**. • **Scunthorpe and Gainsborough Drainage Board & Upper Witham Drainage Board** – the Applicant met with both drainage boards in August 2024. Both have confirmed that the standard protective provisions for the protection of drainage authorities included in the **draft DCO [EN010142/APP/3.1(Rev03)]** are sufficient and no bespoke provisions are required. • **Gate Burton Energy Park, Cottam Solar Project & West Burton Solar Project** – the four developers have an agreed set of protective provisions, with project-specific versions included in each of their respective DCOs:

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	○ Gate Burton – subject to the resolution of one minor outstanding matter, protective provisions are agreed and will be included in the updated **draft DCO [EN010142/APP/3.1(Rev03)]** submitted at Deadline 1. ○ Cottam – subject to some minor amendments to reflect similar changes included in the Tillbridge provisions in the Cottam DCO, the provisions are agreed and will be included in the updated **draft DCO [EN010142/APP/3.1(Rev03)]** submitted at Deadline 1. ○ West Burton – the protective provisions included in the **draft** DCO **[EN010142/APP/3.1(Rev03)]** are agreed. • **Network Rail** – Protective provisions have been agreed with Network Rail, however the parties remain in discussion regarding separate agreements that will sit alongside these provisions (those agreements being private as between the parties). • **Anglian Water, Cadent Gas, Uniper, Northern Powergrid** – Discussions between the Applicant and these statutory undertakers are progressing well, with the protective provisions for inclusion in the draft DCO substantively agreed with the exception of a few outstanding matters. The parties are working to refine and resolve these matters, with a view to submitting an agreed set of protective provisions at the appropriate examination deadline once agreement has been reached. While the Applicant cannot provide exact timescales for resolution at this stage, the Applicant is confident that agreement can be reached within the timescales of the examination. • **EDF** – The Applicant has reviewed and provided comments on EDF's standard protective provisions and is awaiting EDF's response. The bulk of the provisions are agreed, with only a handful of provisions needing further discussion and resolution (from the Applicant's perspective). While the Applicant cannot provide exact timescales for resolution at this stage, the Applicant is confident that agreement can be reached within the timescales of the examination. • **Environment Agency** – The Applicant has reviewed and provided comments on the EA's previous standard protective provisions. Discussions are currently on hold while the EA updates their standard provisions. The latest update the Applicant has received from the EA is that they anticipate their review and update of their standard provisions will be complete within the next 3-4 weeks, by which time they will be able to provide an update on their position regarding the Applicant's comments on the previous set of provisions. While the Applicant cannot provide exact timescales for resolution at this stage, the EA have confirmed they do not anticipate any fundamental disagreement, and the parties are confident that agreement can be reached within the timescales of the examination. • **Exolum** – The Applicant has reviewed and provided comments on Exolum's standard protective provisions and is awaiting Exolum's response. While the provisions are substantively agreed by the Applicant, there are a number of aspects that require further discussion before agreement can be reached. While the Applicant cannot provide exact timescales for resolution at this stage, the Applicant is confident that agreement can be reached within the timescales of the examination. • **National Grid Electricity Transmission** – NGET provided the Applicant with a copy of their standard protective provisions, which the Applicant is currently reviewing. The Applicant will provide NGET with our comments on their provisions in due course, with a view to refining and resolving issues as far as possible. While the Applicant cannot provide exact timescales for resolution at this stage, the Applicant is confident that agreement can be reached within the timescales of the examination.

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	• **Trent Valley Drainage Board** – The Applicant has provided the Drainage Board with a copy of the standard drainage board provisions included in the draft DCO for review and comment. The Applicant is awaiting a response from the Drainage Board but discussions around protective provisions to date have generally been positive, including at a technical meeting between the Applicant and the Drainage Board held in August 2024. While the Applicant cannot provide exact timescales for resolution at this stage, the Applicant is confident that agreement can be reached within the timescales of the examination. • **Ministry of Defence, National Gas, Vodafone** – These statutory undertakers have all confirmed that they have no assets or apparatus that will be impacted by the Scheme, such that protective provisions are not required. • **E.ON** – The Applicant has had some correspondence with E.ON to date, most recently in June 2024 where E.ON confirmed it was no longer a statutory undertaker. The Applicant is currently undertaking land referencing checks to confirm whether E.ON nonetheless has assets or apparatus that may be impacted by the Scheme, following which the Applicant will liaise with E.ON as appropriate to confirm whether protective provisions may be required. • **IGas Energy, Openreach, Prowind Cottam Windfarm, Severn Trent Water, Virgin Media, Western Power Distribution** – The Applicant wrote to these statutory undertakers in September 2023 enclosing the standard protective provisions applicable to their respective assets/apparatus and offering to commence discussions regarding the inclusion of protective provisions in the draft DCO. No responses were received to that initial correspondence. The Applicant followed up with these parties via email in May 2024 following acceptance of the Application. No responses have been received to date.
Schedule 16 – Deemed Marine Licence	In response to a query from the ExA, Ms Coleman, for the Applicant, confirmed that the Applicant is aware of the recent decisions in relation to the Gate Burton Energy Park Order and the Cottam Solar Project Order, in which the made Orders did not include the proposed Deemed Marine Licence (DML) and associated articles. The Applicant had included the DML and associated drafting in its draft DCO on a precautionary basis but accepts the decision of the SoS on the other recently made Orders. Ms Coleman confirmed that the Applicant will be amending the **draft DCO [EN010142/APP/3.1(Rev03)]** at Deadline 1 to: • delete the "MMO" and accompanying definition in Article 2; • delete Article 45 (Deemed marine licence); • delete Schedule 16 (Deemed marine licence under the 2009 Act); • amend Article 36 (Consent to transfer the benefit of the Order) to delete sub-paragraph (4); and • delete reference to Schedule 16 in the provisions for the protection of the Canal & River Trust in Part 4 of Schedule 15. Ms Coleman noted that the Applicant has amended the **Explanatory Memorandum [EN010142/APP/3.2(Rev01)]** accordingly, with a revised version also to be submitted at Deadline 1. The ExA requested further clarification as to whether a Marine Licence was required by the Applicant to carry out works under the River Trent. Ms Coleman explained that no Marine Licence was required because of an exclusion applying to the relevant works.

Schedule 17 – Discharge conditions	In response to a number of points raised by Shemuel Sheikh, for West Lindsey District Council, in relation to Schedule 17 of the **draft DCO [AS-004]**, Ms Coleman stated that: • In terms of the discharge period applied under the Schedule, the Applicant maintains the eight-week period should be retained as the Scheme is a NSIP for which there is a critical national priority and has an earlier National Grid connection date of August 2028 than Gate Burton, Cottam and West Burton meaning time is of the essence in respect of discharge of requirements. The eight-week period is fairly standard for energy DCOs and is the same as a number of others (for example, Cleve Hill, Little Crow, Net Zero Tesside, Drax Bioenergy and Carbon Capture, Hornsea Four Offshore Wind). Moreover, PINS Advice Note 15 attaches standard drafting in relation to discharge of certain approvals, which sets out a 42-day decision making period, and the Applicant is proposing a timeframe in excess of this. Paragraph 2 of Schedule 17 of the **draft DCO [AS-004]** does not preclude a longer period than eight weeks being agreed between the parties, and in practice the Applicant is likely to agree to additional time rather than risk the Councils refusing the application. However, given many of the applications for discharge of requirements should be able to be dealt with within eight weeks, the Applicant would prefer the default position to require a shorter time, with the option to extend. • Regarding further information and consultation timeframes set out in the Schedule, the Applicant agreed to take those points away and consider the approach adopted in Cottam. • In terms of the fees schedule, the Applicant has agreed to include the provisions that West Lindsey District Council has requested, which are based on those adopted in Cottam, West Burton and Mallard Pass. The ExA asked that the Statement of Common Ground between West Lindsey District Council and the Applicant be updated to reflect that the length of the discharge period is not agreed. ***Post-hearing note:*** *The Applicant has considered the matters raised by West Lindsey District Council. As recorded within the SoCG between the parties:* • *The Applicant has made subsequent updates to Schedule 17 within the* ***draft DCO [EN010142/APP/3.1(Rev03)]*** *for Deadline 1 to include a fee schedule for the discharge of requirements. The fees are in accordance with the Cottam Solar Project, being the most recently approved development consent Order in the area.* • *The Applicant continues to consider the time periods provided within Schedule 17 for discharge of requirements is reasonable on the basis that:* o *Section 2, paragraph (1) (c) states that a longer period of determination can be agreed in writing by the undertaker and the relevant planning authority. The Applicant considers this provides sufficient optionality for longer periods for determination where necessary and agreed between the parties, while not providing for longer periods as a matter of course.* o *Should development consent be granted for the Scheme, the Applicant has a shorter pre-construction phase to appoint a contractor/s to build the Scheme, to secure approval of the detailed design and the discharge of requirements than the other solar NSIPs within Lincolnshire. The Scheme has the earliest point of connection date out of all four solar schemes (August 2028).* o *While the Applicant understands the resource implications of multiple NSIPs in the region, it does not consider it appropriate for the Council to seek increasingly greater determination periods per project.*

References

Ref. 1-1. National Fire Chiefs Council (2022). Grid Scale Battery Energy Storage System Planning – Guidance for FRS. Version 1.0. November 2022. Available at: https://nfcc.org.uk/wp-content/uploads/2023/10/Grid-Scale-Battery-Energy-Storage-System-planning-Guidance-for-FRS.pdf [Accessed 29/10/2024].

Appendix A
Agreed Grid Connection

Appendix A Grid Connection Agreement Details

1.1 Introduction

1.1.1 Details of the bilateral connection agreement (BCA) that Tillbridge Solar Limited has secured with the National Electricity System Operator are publicly available to view through the Transmission Entry Capacity (TEC) register that is published and regularly updated on the National Electricity System Operator's website (Ref 1).

1.1.2 A screenshot of the entry for the Tillbridge Solar Project is provided below. As can be seen, cumulative total capacity for the connection is 500MW.

Project Name	Customer Name	Connection Site	Stage	MW Connected	MW Increase / Decrease	Cumulative Total Capacity (MW)
Tillbridge Solar	TILLBRIDGE SOLAR LIMITED	Cottam 400kV Substation		0.0	500.0	500.0

MW Effective From	Project Status	Agreement Type	HOST TO	Plant Type	Project ID	Project Number
2028-08-01	Scoping	Direct Connection	NGET	Energy Storage System;PV Array (Photo Voltaic/solar)	a0l4L0000005ifWQAQ	PRO-001126

2. References

Ref. 1 National Energy System Operator, TEC Register (2024) Available at: www.neso.energy/data-portal/transmission-entry-capacity-tec-register/tec_register [Accessed October 2024]

Appendix B
Note on Generating Capacity and Associated Development

Tillbridge Solar

Tillbridge Solar Project
EN010142

Written Summary of Applicant's Oral Submissions at Issue Specific Hearing 1

Appendix B: Note on generating capacity and associated development

Document Reference: EN010142/APP/9.2

Planning Act 2008
The Infrastructure Planning (Examination Procedure) Rules 2010

October 2024
Revision Number: 00

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Tables

1. Introduction

1.1 The Scheme

1.1.1 The Tillbridge Solar Project (the Scheme) will comprise the construction, operation (including maintenance), and decommissioning of ground-mounted solar photovoltaic (PV) arrays. The Scheme will also include associated development to support the solar PV arrays.

1.1.2 The Scheme is made up of the Principal Site, the Cable Route Corridor and works to the existing National Grid Cottam Substation. The Principal Site comprises the solar PV arrays, electrical substations, grid balancing infrastructure, cabling and areas for landscaping and ecological enhancement.

1.1.3 The associated development element of the Scheme includes but is not limited to access provision; a Battery Energy Storage System (BESS), to support the operation of the ground mounted solar PV arrays; the development of on-site substations; underground cabling between the different areas of solar PV arrays; and areas of landscaping and biodiversity enhancement.

1.1.4 The Scheme also includes a 400kV underground Cable Route Corridor of approximately 18.5km in length connecting the Principal Site to the National Electricity Transmission System (NETS) at the existing National Grid Cottam Substation. The Scheme will export and import electricity to the NETS.

1.1.5 A full description of the Scheme is included in **Chapter 3: Scheme Description** of the Environmental Statement (ES) **[AS-053]**. An overview of the Scheme and its environmental impacts is provided in the Environmental Statement **Non-Technical Summary [AS-024]**.

1.2 Purpose of this note

1.2.1 This note has been written to provide further detailed responses to certain questions asked by the Examining Authority (ExA) during Issue Specific Hearing 1 (ISH1) on the draft Development Consent Order (DCO) and general principles of the proposed development.

1.2.2 During ISH1, the Applicant was asked to comment on various aspects relating to the design and principles of the Scheme, including:

a. Generating capacity; and

b. Associated Development – Battery Energy Storage System (BESS).

1.2.3 This note sets out the Applicant's response to the ExA's questions on the above matters. It outlines the evidence and technical information which demonstrate that the principal development of the Scheme comprises the ground mounted solar photovoltaic generating station with a gross electrical output capacity of over 50 megawatts including solar panels fitted to mounting structures and solar stations (**Work No. 1** as set out in Schedule 1

of the **draft DCO [EN010142/APP/3.1(Rev03)]**), with the BESS (**Work No. 2** Schedule 1 of the **draft DCO [EN010142/APP/3.1(Rev03)]**) constituting associated development within the meaning of section 115(2) of the Planning Act 2008 (PA 2008) (Ref 1-1).

1.2.4 This note forms an appendix to the **Written Summary of the Applicant's Oral Submissions at ISH1 [EN010142/APP/9.2]** and should be read together with that document.

1.3 Note structure

1.3.1 This note is structured around the following topics:

a. **Section 2** – Legislation and planning policy context.

b. **Section 3** – Consented Solar DCO Schemes and associated development.

c. **Section 4** - An explanation of the terminology associated with energy power and capacity ratings.

d. **Section 5** – A summary of the Scheme's peak output and overplanting.

e. **Section 6** – A summary of DC coupling and the services that could be provided by the BESS.

f. **Section 7** – Figures for the likely total energy yield of the Scheme over its lifetime.

g. **Section 8** – Principal and associated development of the Scheme.

h. **Section 9** – Conclusion.

2. Legislation and planning policy context

2.1.1 Section 115 of the PA 2008 (Ref 1-1) states that development consent can include consent for 'associated development'. This constitutes development that is not a Nationally Significant Infrastructure Project (NSIP) in its own right but is associated with a NSIP. The elements of the Scheme that constitute the NSIP and the elements that constitute associated development are clearly set out and defined in **Schedule 1** of the **draft DCO [EN010142/APP/3.1](Rev03)**.

2.1.2 The *Planning Act 2008: Guidance on associated development applications for major infrastructure projects* (April 2013) (Ref 1-2) published by the Department for Communities and Local Government (DCLG) sets out core principles to be taken into account by the Secretary of State in determining whether development can be considered as associated development. These are as follows:

a. There must be a direct relationship between the associated development and the principal development. It should support construction or operation of the principal development, or help address its impacts;

b. Associated development should be subordinate to the principal development;

c. Development should not be treated as associated development if it is only necessary as a source of additional revenue for the applicant in order to cross-subsidise the cost of principal development. This does not mean that the applicant cannot cross-subsidise, but if part of a proposal is only necessary as a means of cross-subsidising the principal development then that part should not be treated as associated development; and

d. Associated development should be proportionate to the nature and scale of the principal development.

2.1.3 Paragraph 6 provides further clarification, stating that:

"*It is expected that associated development will, in most cases, be typical of development brought forward alongside the relevant type of principal development or of a kind that is usually necessary to support a particular type of project.*"

2.1.4 Paragraph 1.3.12 of National Policy Statement EN-1 (NPS EN-1) (Ref 1-3) confirms that *"NPS will be the primary policy for Secretary of State decision making on associated development".* Paragraph 2.10.16 of NPS EN-3 (Ref 1-4) relates to the consideration of associated development specifically in relation to solar development. This specifically identifies energy storage as an example of the kind of associated infrastructure that may be treated as associated development as part of a solar farm.

2.1.5 Furthermore, paragraphs 3.3.4 to 3.3.7 of NPS EN-1 (Ref 1-3) recognise and support the role that storage has in sitting alongside and being ancillary to the primary generating station to provide increased flexibility and improved efficiencies to supply electricity to the grid when demand is higher.

3. Consented solar DCO Schemes and associated development

3.1.1 Development consent has been granted for a number of large-scale solar projects which include battery storage as associated development. Whilst it is acknowledged that in accordance with paragraph 2.10.16 of NPS EN-3 (Ref 1-4) that the Secretary of State will consider on a case by case basis whether associated infrastructure may be treated as associated development, previous decisions on similar solar schemes are important and relevant. These decisions establish the principle of battery storage being associated development, sitting alongside and being ancillary to, large-scale solar development.

3.1.2 Longfield Solar Farm [EN010118] was granted development consent on 26 June 2023 comprising the construction, operation, maintenance and decommissioning of a solar photovoltaic (PV) electricity generating facility with a total generating capacity exceeding 50MW (AC), an energy storage facility and an export/ import connection to the National Grid.

3.1.3 Sunnica Energy Farm [EN010106] was granted development consent on 12 July 2024 for the construction, operation, maintenance and decommissioning of a generating station with a gross electrical output capacity of over 50MW, comprising ground mounted solar PV panel arrays; one or more BESS with a gross storage capacity of over 50MW; connection to the UK electricity transmission system and other associated and ancillary development.

3.1.4 Within Lincolnshire, development consent has recently been granted for Gate Burton Energy Park [EN10131] on 15 July 2024 and the Cottam Solar Project [EN10133] on 5 September 2024. Both projects have similarities to this Scheme in terms of:

a. Battery storage as associated development.

b. Bilateral Agreement with National Grid including both import and export (500MW in the case of Gate Burton and 600MW in the case of Cottam).

c. Time limited consent at 60 years.

3.1.5 In the case of the Gate Burton Energy Park [EN10131], the ExA similarly sought clarification at the first issue specific hearing on the generating capacity of the generating station, whether the BESS is associated development, the operational life of the proposed development and decommissioning. The ExA confirmed in the recommendation report at paragraphs 1.3.12 and 1.3.15 to 1.3.17 that the associated infrastructure for the Gate Burton Energy Park, including the BESS is:

“1.3.12 …evidently necessary associated development…The inclusion of these associated development was not questioned by the Interested Parties (IPs) and I am satisfied that they reasonably fall within the core principles established in the Guidance…

1.3.15. From the information before me I am satisfied that the co-location of a BESS with a solar generating station is a reasonable and appropriate function. As noted at paragraph 2.10.10 of the 2024

National Policy Statement EN-3 in respect of the British Energy Security Strategy "It sets out that the Government is supportive of solar that is co-located with other functions (for example agriculture, onshore wind generation, or storage) to maximise the efficiency of land use." And at 2.10.16 where it is stated "Associated infrastructure may also be proposed and may be treated, on a case by case basis, as associated development, such as energy storage…"

1.3.16. Whilst the Applicant notes that the overall capacity of the generating station and the BESS are not proposed to be capped in terms of electrical output the ODPs place a physical envelope within which the development must be contained. The BESS in terms of its physical size and footprint, its location within the extent of the Solar and Energy Storage Park and its nature is consistent with and proportionate to the scale of the generating station. The BESS is directly related to the proposed generating station to store and export electricity generated by the generating station, and -would thereby support the operation of the principal development. It is not an aim in itself in that it would not be sited and developed at this location were it not for its association with the generating station.

1.3.17. As to whether the BESS would generate additional revenue for the Applicant, there is no detailed financial break down before me, but it is not unreasonable to conclude that providing grid balancing services and accepting the importation and exportation of electricity from the BESS would have a commercial benefit. However, the Guidance advises that development should not be treated as associated development if it is only necessary as a source of additional revenue. Moreover, it goes on to advise that this does not mean that the applicant cannot cross subsidise. Given that there is a reasonable and legitimate benefit associated with the provision of storage, co-location is supported by government, and it is not the case that the BESS is only being proposed as a source of additional revenue I am satisfied that the BESS is appropriately included as associated development."

3.1.6 The Secretary of State, in reaching his decision on the Gate Burton Energy Park agreed with the ExA stating at paragraph 4.2 that:

"…BESS constitutes associated development, noting that it will enable grid balancing and is ancillary to energy generation; as storage directly linked to the operational generation and efficiency, the BESS will help deliver a secure and reliable energy supply."

3.1.7 It should be noted that all of the made development consents with associated BESS are AC-coupled. This means that the BESS is concentrated and contained within one area of the site and that the energy generated from the solar PV in DC needs to be converted to AC in order to be stored. The BESS is not co-located with the solar PV or the solar stations (transformers, switchgear and inverters) in the same way that it is for this Scheme. Despite the centralised nature of the BESS design on the above solar DCO projects, both the ExA and the Secretary of State were satisfied that the BESS nonetheless met the core principles of associated development set out in the DCLG guidance (Ref 1-2). This conclusion is

even more evident in the case of a DC-coupled system like that proposed for the Scheme, as will be explored further in section 8.

4. Terminology

4.1 Power and capacity ratings

4.1.1 Power and capacity ratings measure the instantaneous power output or capacity of a system, usually referring to how much power is being generated or used at a specific moment in time.

4.1.2 Definitions of frequently used terms relating to power and capacity ratings are given in Table 1 below.

Table 1 – definitions of terms relating to power and capacity

Term	Definition
W (Watt)	The base unit of power, representing one joule per second.
kW (Kilowatt)	Equal to 1,000 watts, used for measuring smaller-scale power outputs or consumption.
MW (Megawatt)	Equal to 1,000 kW (1 million watts). Commonly used for medium- to large-scale power plants, including solar farms.
GW (Gigawatt)	Equal to 1,000 MW (1 billion watts). This unit is used for very large-scale generation capacities.

4.2 Peak power ratings (DC capacity)

4.2.1 The peak power ratings refer to the maximum potential power output under standard testing conditions, commonly used to describe the capacity of solar PV systems.

4.2.2 Definitions of frequently used terms relating to peak power ratings are given in Table 2 below.

Table 2 – definitions of terms relating to peak power ratings

Term	Definition
Wp (Watt-peak)	The maximum output of a photovoltaic (PV) system under standard testing conditions (STC), typically used for individual solar panels.
kWp (Kilowatt-peak)	Equal to 1,000 Wp, indicating the peak output of a solar PV array.
MWp (Megawatt-peak)	Equal to 1,000 kWp. Large solar farms are usually rated in MWp based on their peak generation capacity under optimal sunlight.

Term	Definition
GWp (Gigawatt-peak)	Equal to 1,000 MWp. Large-scale national or global solar generation capacities might be referred to in GWp.

4.3 Energy (storage, consumption and production)

4.3.1 Energy refers to the amount of energy generated, stored, or consumed over time.

4.3.2 Definitions of frequently used terms relating to energy generation, storage or consumption over time are given in Table 3 below.

Table 3 – definitions of terms relating to energy use over time

Term	Definition
Wh (Watt-hour)	The amount of energy used or produced by a system that generates or consumes 1 watt for 1 hour.
kWh (Kilowatt-hour)	Equal to 1,000 Wh. This is the most common unit for household energy consumption or for smaller renewable energy systems.
MWh (Megawatt-hour)	Equal to 1,000 kWh (1 million Wh). Used to measure the output of large-scale energy generation or storage systems over time.
GWh (Gigawatt-hour)	Equal to 1,000 MWh (1 billion Wh). Used to represent the total energy generated or consumed by national grids or large energy systems over longer periods.
TWh (Terawatt-hour)	Equal to 1,000 GWh (1 trillion Wh). Used to measure the total energy production or consumption on a very large scale, such as national or global energy use.

4.4 Apparent power (VA)

4.4.1 Apparent power is used when discussing systems with alternating current (AC), specifically referring to the total power required by a system, including both active and reactive power.

4.4.2 Definitions of frequently used terms relating to apparent power are given in Table 4 below.

Table 4 – definitions of terms relating to apparent power

Term	Definition
VA (Volt-Ampere)	A measure of apparent power, which accounts for both the active and reactive components in an AC system.

Term	Definition
kVA (Kilovolt-ampere)	Equal to 1,000 VA. Used for systems with higher power ratings, such as transformers or large electrical systems.
MVA (Megavolt-ampere)	Equal to 1,000 kVA (1 million VA). Large electrical systems, such as grid connections for solar farms or battery energy storage systems, are rated in MVA.

4.5 AC power ratings

4.5.1 AC power ratings refer to the output capacity of an energy generation system on the AC side. The transmission and distribution networks operate on AC, which requires all generators to feed electricity into the grid in AC form. The AC power rating is typically lower than the DC capacity of a project because, during the complete process starting with irradiation and ending with export to the grid, energy losses occur.

4.5.2 They key term here is MWac (Megawatt alternating current), this refers to the maximum power output a solar PV system can provide after converting DC to AC.

4.5.3 Solar farms are typically rated both in MWp (DC capacity) and MWac (AC capacity) to show the difference between theoretical peak capacity (DC capacity) and practical output capacity (AC capacity) after losses.

4.6 How these terms are used in relation to renewable energy projects

4.6.1 Table 5 below sets out the typical usage of the terms defined in Section 2 with regard to elements of the Scheme (solar PV, BESS and grid connection).

Table 5 – usage of terminology in relation to the Tillbridge Solar Project

Aspect	Terms
Solar PV generating stations	Typically, the DC capacity of solar PV systems is referred to in terms of Wp, kWp, or MWp, while the AC capacity (the amount of energy the system can feed into the grid) is given in MWac.
BESS	BESS capacities are usually rated in MWh (for energy storage) and MW or MVA (for power output). The power rating determines how much energy can be delivered at any moment, while the energy rating (in MWh) refers to the total energy stored.
Grid connection	When connecting to the grid, systems are often rated in MVA, which accounts for both

Aspect	Terms
	the real and reactive power that flows through the system. MW might be also used to refer to the grid connection, however as the grid is AC, it should be treated as MWac.

5. Scheme output and overplanting

5.1 Key figures

5.1.1 The solar photovoltaic (PV) plant for the Application is designed with a direct current (DC) capacity, or peak power rating, of 784 MWp using currently available technologies. This refers to the maximum output of the solar panels under optimal conditions based upon a design at this point in time. It is important to note that this does not represent the final detailed design for which the Applicant would seek approval in accordance with the requirements of the **draft DCO [EN010142/APP/3.1]** prior to the start of construction.

5.1.2 The Scheme's grid connection is rated at 500 MWac, which represents the AC power that the system can deliver to the grid after conversion from DC. The BESS is aligned with this grid connection, with an output capacity of 500 MWac.

5.1.3 In terms of energy storage, the BESS is designed to provide energy for four hours at full output.[1] This translates to a minimum required capacity of 2,000 MWh. However, to ensure operational reliability and provide a buffer to allow for secure operation at its maximum output capacity, the BESS has been sized at 2,310 MWh. This allows for flexibility in the system's performance, ensuring that it meets the required operational demands while maintaining stability and efficiency.

5.2 Overplanting

5.2.1 Overplanting refers to the ratio between a project's direct current (DC) capacity, or peak power rating, and its grid connection capacity. To arrive at figures set out in Section 5.1 above, the Scheme has been designed with an overplanting ratio of 1.57 (157%).

5.2.2 Overplanting is supported by the National Policy Statement for renewable energy infrastructure (NPS EN-3) (see paragraph 2.10.55) (Ref 1-4) as a means for applicants to account for decline in installed generation capacity over time due to panel degradation. It ensures that land is used efficiently by enabling the substantial renewable energy benefit of solar PV generation to be maximised over the lifetime of the Scheme.

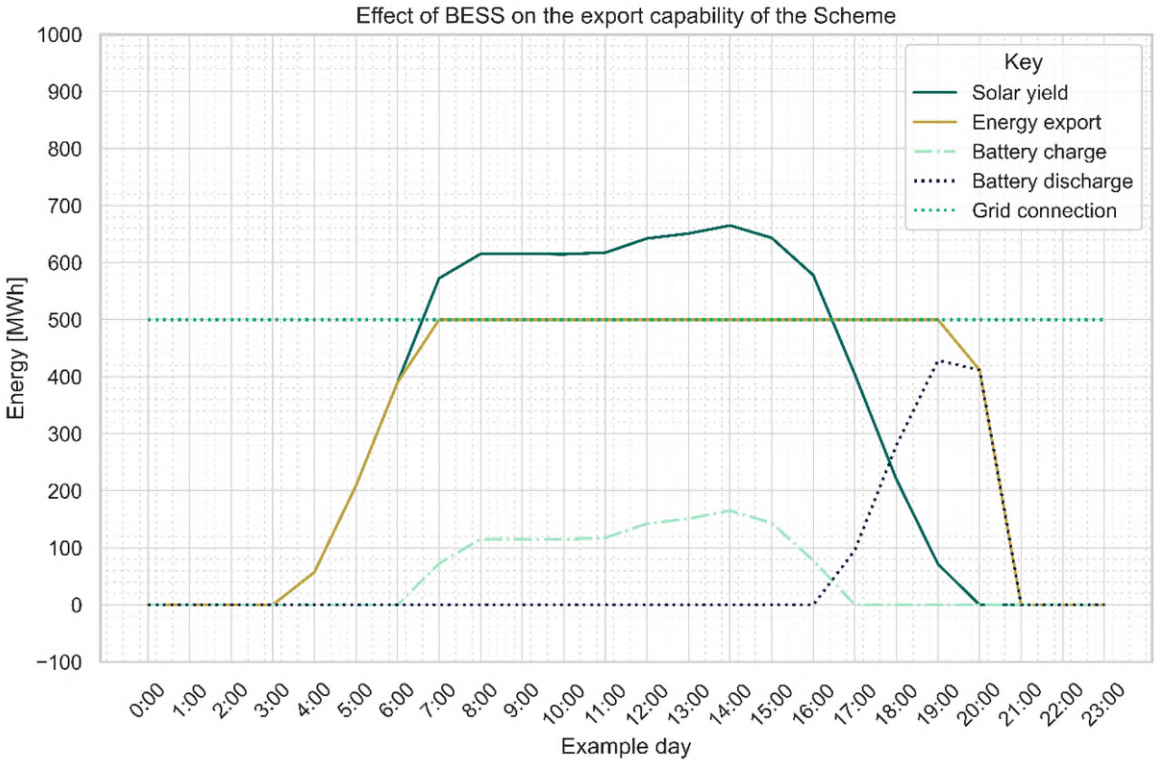
5.2.3 Another important benefit of overplanting is that it allows for a more consistent and efficient use of the grid connection, particularly during periods

[1] The Applicant notes that this differs from the duration of three hours stated in paragraph 7.3.8 of **Chapter 7: Climate Change** of the ES **[AP-038]**. This was due to a drafting error. It is confirmed that the battery capacity number remains the same with no impact on calculations within the ES chapter.

of lower solar irradiance, such as during cloudy or less sunny hours. Through the use of an overplanted setup, the Scheme is designed to have a higher instantaneous power output than its agreed grid connection. The excess power generated during times of higher solar irradiance is stored in the BESS via DC coupling. This allows the system to capture and store energy that would otherwise be curtailed, ensuring that the energy is available for export at times when generation is lower.

5.2.4 Solar farms that employ overplanting and BESS can also make use of the full capacity of the grid connection for longer periods. This approach optimises energy delivery to the grid, maximising the efficiency of the grid connection and enhancing the overall load factor of the renewable energy system.

Figure 1: Example of the benefits of overplanting and BESS



5.2.5 Figure 1 above illustrates how excess energy generated by the overplanted PV system is stored in the BESS when PV output exceeds the export limit set by the grid connection agreement. This stored energy is then discharged when PV generation falls below the export limit, extending the period of maximum capacity export by approximately two and a half hours on this example day.

5.2.6 It is important to note, that the BESS can provide up to four hours of maximum capacity. Therefore, under perfect conditions, any excess energy generated by the PV can be stored in the BESS instead of being curtailed or lost.

6. Energy yield

6.1 Solar PV generating station

6.1.1 The Scheme is designed using industry standard tools by the technical advisor, such as AutoCAD, and Virto.CAD or PVcase. A 3D environment is created for the location which incorporates the outputs from topographical and drone surveys which provide the model for shading scenarios.

6.1.2 The illustrative site layout is created using the components and arrangement set out in Chapter 3 of the **Scheme Description [AS-053]** and the **Works Plans [EN010142/APP/2.3(Rev02)]**.

6.1.3 To estimate the projected energy yield of the solar PV plant, local meteorological data is collected by the technical advisor from reputable and bankable sources such as Meteonorm, Solargis and PVGIS (refer to Table 6). For the purpose of the Application and bankability[2], an average of these three sources is taken to represent a conservative value, resulting in 1,010.8 kWh/m2 of Global Horizontal Irradiation (GHI)[3].

Table 6: Meteorological data sources

Month	Meteonorm	Solargis	PVGIS	Average
Unit	kWh/m²	kWh/m²	kWh/m²	kWh/m²
January	21.2	20.8	21.1	21.0
February	36.1	38.2	38.1	37.5
March	77.8	75.4	77.9	77.0
April	118.1	112.2	119.0	116.4
May	146.9	144.8	150.1	147.3
June	154.0	142.4	150.2	148.9
July	156.2	145.5	154.9	152.2
August	126.4	121.5	129.1	125.7
September	89.8	84.6	92.1	88.8
October	51.7	51.8	53.0	52.2
November	26.3	25.3	27.9	26.5
December	17.6	16.6	17.8	17.3
Year	**1,022.1**	**979.1**	**1,031.3**	**1,010.8**

[2] Bankability refers to the reliability and credibility of the assessment during project financing, meaning that the analysis has been conducted using industry-standard methodologies, reputable sources, and validated assumptions.
[3] Global Horizontal Irradiation (GHI) is the total amount of solar radiation received per unit area on a horizontal surface. It includes direct sunlight (beam radiation) and diffuse sunlight scattered by the atmosphere. GHI is a critical parameter for estimating the energy potential of solar PV systems, as it reflects the solar resource available to generate electricity in a given location.

6.1.4 The figure above is accurate as of GMT 09:24 30 November 2023 when the data was accessed by the technical advisor.

6.1.5 The design and the meteorological data are loaded into PVsyst, an industry standard and leading tool to conduct energy yield calculations. For the purpose of the simulation, components were selected to represent the design and to provide a representative value based on technology that is currently available as described in **Chapter 3: Scheme Description** of the ES **[AS-053]**.

6.1.6 Factors such as irradiance loss due to shading, soiling losses, temperature-related PV performance degradation, ohmic (electrical resistance) losses, light-induced degradation (LID), inverter losses, transmission losses, and module degradation over time are all considered in the energy yield calculation.

6.1.7 The assessment takes into account a wide range of variables, each carefully calculated to provide a comprehensive and realistic projection of how much energy the Scheme is likely to generate under typical operating conditions during its first year of operation.

6.1.8 Using the above inputs the simulation is run, resulting in a projected year one energy yield of 881.30 GWh.

6.1.9 Finally, the cumulative projected energy yield is calculated over 60-years. This incorporates the year one energy yield and includes the solar panel degradation.

6.1.10 An industry wide average is taken for degradation, in year 1 a 2% degradation is expected. In subsequent years this figure is 0.45%.

6.1.11 For the purpose of the calculation, it is assumed that in year 30 the PV modules are replaced[4], the year 1 degradation values are then applied.

6.1.12 The projected energy yield of 48.5 TWh over the 60-year operational lifetime of the solar photovoltaic (PV) plant is derived from indicative energy yield assessments. This projection is shown in Figure 2.

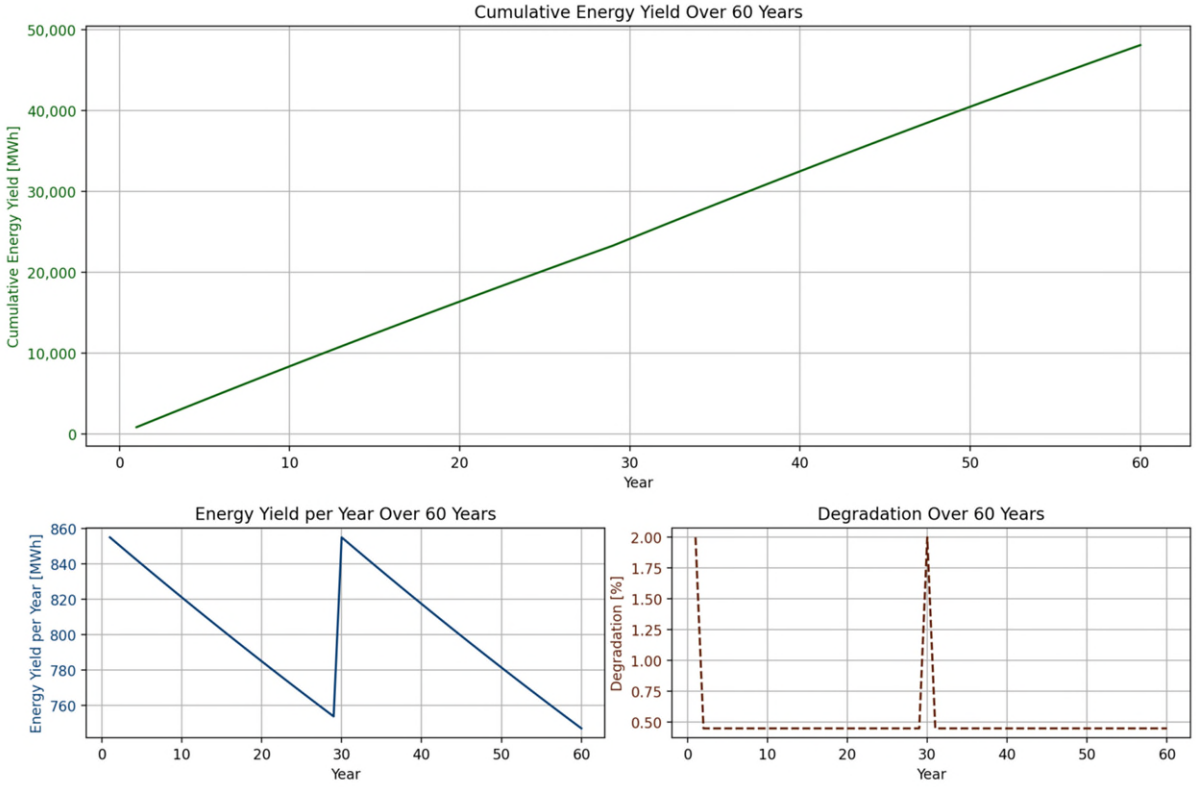
6.1.13 The projected energy yield of 48.5 TWh is a conservative estimate.

6.1.14 A major factor not included in this calculation is the potential impact of future climate change. Studies and models indicate that climate change leads to an increase in solar irradiation reaching the ground in the coming decades, which would, in turn, result in higher annual solar energy yields. As this assessment is based on current climatic conditions, it does not incorporate these potential future increases in solar radiation, which could enhance the Scheme's overall energy generation beyond the conservative estimate provided.

6.1.15 As such, while the current projections are robust and methodologically sound, it is possible that the actual energy yield over the plant's operational lifetime could exceed the 48.5 TWh estimate due to improved technology and changes in environmental factors such as increased solar irradiance.

[4] This is in accordance with assumptions within Chapter 7: Climate Change of the ES (paragraphs 7.3.7 and 7.3.24) [APP-038].

Figure 2. Estimated energy yield over the lifetime of the Scheme



6.1.16 It is important to note that in these calculations, the DC capacity of the Scheme is the primary defining factor, not the grid connection. While the grid connection may impose curtailment during peak generation periods, the Scheme is designed to maximise the delivery of energy generated by the solar PV to the grid. The BESS plays a crucial role in this process by storing excess energy during times of curtailment and releasing it when demand increases.

6.1.17 Calculating the projected energy yield based on the grid connection rather than the DC capacity of the Scheme would result in misleading and inaccurate figures. The grid connection may impose limitations, such as curtailment, but it does not reflect the true generating potential of the Scheme. As such, energy yield estimates derived from grid connection values cannot be treated as reliable, as they fail to capture the full capability of the Scheme, particularly when considering the role of the BESS in optimising energy delivery.

7. BESS services

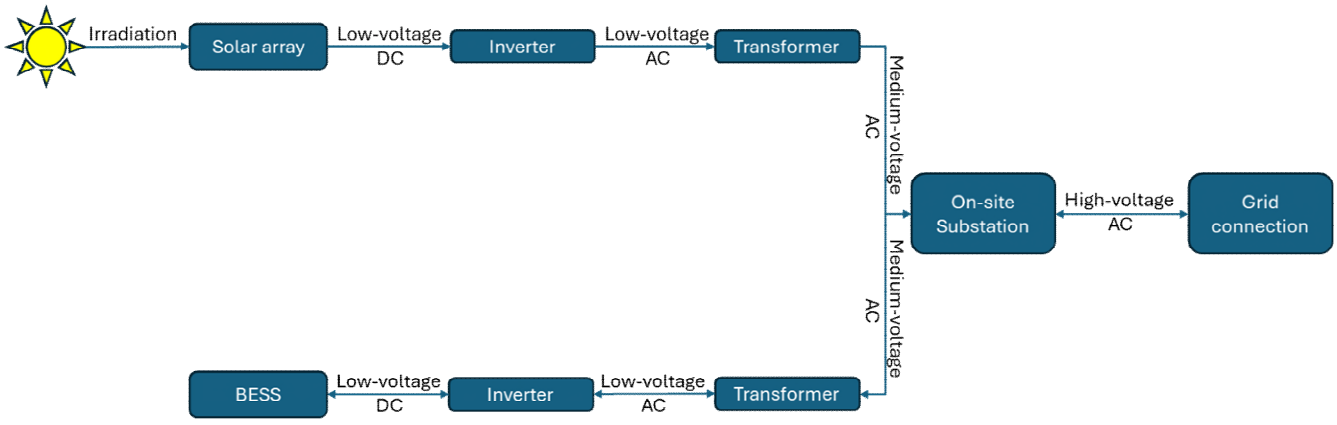
7.1 DC coupling

7.1.1 DC coupling refers to the method of connecting the BESS directly to the generating station, without multiple conversions between AC and DC.

7.1.2 In contrast, an AC-coupled system requires the power generated by the PV panels to undergo several conversion stages before reaching the BESS. First, the electricity is converted from DC to AC using an inverter, then passed through a transformer and switchgear to increase the voltage for transmission. Afterward, the voltage is stepped down using another transformer and the electricity is converted back to DC via another inverter before entering the BESS. This process is shown in Figure 3 below.

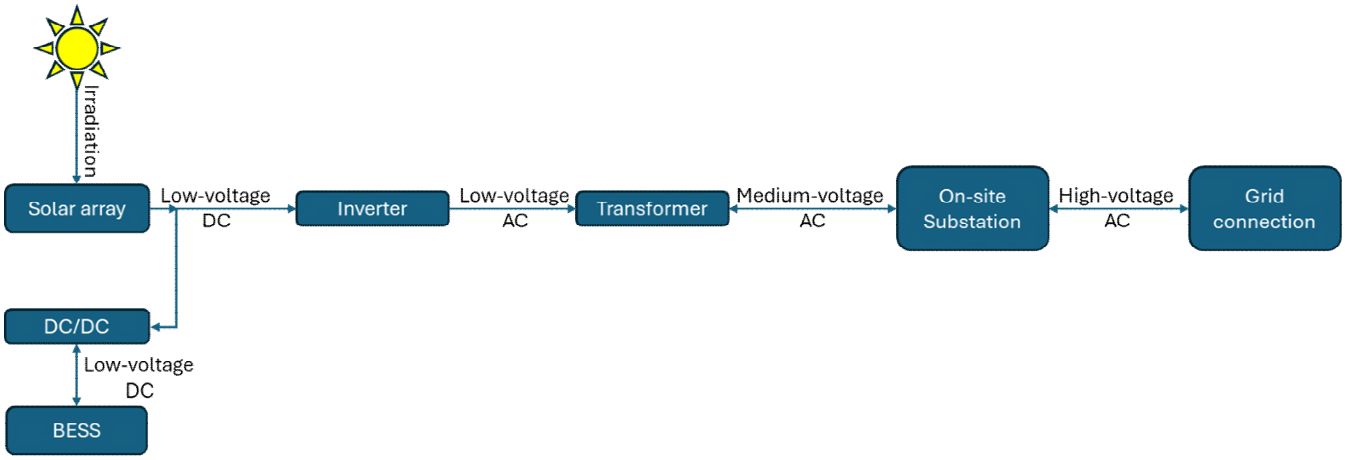
7.1.3 The above process introduces clipping losses, particularly when the DC to AC ratio of the system is not optimised, leading to reduced efficiencies. Clipping loss occurs at the inverter when the energy generated by the solar panels exceeds the inverter's capacity to convert DC to AC, resulting in energy loss. In a DC-coupled solution, this loss is mitigated by diverting the excess energy to the BESS, effectively eliminating clipping losses and improving the overall system efficiency. This is possible in the case of the Scheme because the excess energy would be in DC, as is the BESS, therefore no conversion is required for it to take in the excess energy.

Figure 3. Indicative representation of an AC-coupled co-located BESS



7.1.4 With DC coupling, the energy generated by the PV panels flows directly to the BESS through a DC/DC converter, staying in DC throughout the process. This reduces energy losses associated with multiple conversions, making the system more efficient in managing the electricity generated by the solar PV. This is illustrated in Figure 4 below.

Figure 4. Indicative representation of a DC-coupled co-located BESS



7.1.5 Since the energy remains in low-voltage DC within a DC-coupled system, it is essential to position the BESS in close proximity to the solar PV. This minimises transmission losses and ensures efficient energy transfer between the PV panels and the storage system.

7.1.6 Due to the necessity of locating the BESS in immediate proximity to the PV array and the sharing of inverters between the solar PV and BESS, the BESS forms an integral component of a project using a DC-coupled system, such as the Scheme. In this way, the BESS is designed to directly respond to and support the efficient operation of the solar PV, and by its nature could not be a standalone BESS scheme.

7.1.7 The key function of a DC-coupled system is not to enhance the efficiency of importing electricity from the grid, as electricity would first need to be converted from AC to DC in order to be stored in the BESS. Rather, a DC-coupled system allows for the maximisation of energy generated by the solar panels by minimising energy losses associated with transmission and by removing the need for multiple conversion steps between DC and AC. This underscores the role of the BESS as associated development to the Scheme.

7.2 Possible services and contractual arrangements

7.2.1 For the BESS to operate in compliance with industry standards (Ref 1-5) and meet all relevant requirements, the Applicant would need to enter into agreements as specified by the National Energy System Operator (NESO) to provide grid balancing services. These agreements, while covering commercial aspects, would focus on services necessary to ensure the stable and reliable operation of the grid.

7.2.2 Examples of such services include frequency regulation, load balancing, voltage support, and reserve capacity. These functions are critical for maintaining grid stability, especially as renewable energy sources become more integrated into the energy system.

7.2.3 The Applicant has not yet entered into any such agreements but would need to do so for the Scheme to provide any of the aforementioned services.

8. Principal and Associated Development

8.1.1 The total area of the Principal Site is 1,345 ha. Of this, the total area taken up by the generating station and built associated development is approximately 780 ha. This comprises the total area of Solar PV Panels, Solar Stations and BESS, Solar Farm Control Centre, On-Site Substations, Access Roads and Access Tracks. Biodiversity Zones, Proposed Woodland and Sensitive Archaeological Sites are not included within this figure.

8.1.2 Of the 780 ha, Solar PV Panels comprise 739.6 ha, with the remainder built associated development elements listed above comprising 40.4 ha.

8.2 Principal development – solar PV generating station

8.2.1 The solar PV generating station has been designed to maximise electricity generation. The Scheme design is not driven by the grid connection (although the design is informed by the capacity within the grid connection agreement), but by the adoption and application of the latest technical design for the delivery of an efficient large-scale solar Scheme that makes an efficient use of land.

8.2.2 Paragraph 2.10.61 of NPS EN-3 (Ref 1-4) confirms that:

"For a solar farm to generate electricity efficiently the panel array spacing should seek to maximise the potential power output of the site."

8.2.3 The above acknowledges the need to bring forward a design that is efficient and maximises electricity generation. The yield of the Scheme and the inputs into the design process will achieve this.

8.2.4 The principles of the design have regard to the degradation of panels over the 60-year period and the potential need for the replacement of modules at 30 years and thereby the need for over-planting to ensure that the generating station will remain efficient over its lifetime.

8.2.5 It would be an inefficient use of land to design the Scheme to the grid connection of 500MW, which would result in a reduction in output below the grid connection capacity from the first year, reducing year on year through the lifetime of the project. Overplanting by a factor of 1.57 enables consideration of degradation and the ability to retain the generation capacity of the Scheme at a higher level during its operation.

8.2.6 Overplanting is supported by NPS EN-3 (Ref 1-4) (see paragraph 2.10.55). The installed capacity of the Scheme of c. 784MW is justified on the basis of maximising electricity generation having regard to the potential for installed generating capacity to decline over time with a reduction in panel efficiency.

8.2.7 Overplanting is a benefit of the Scheme in terms of maximising the renewable energy generated across its operational lifetime. This has recently

been confirmed in relation to the Mallard Pass Solar Farm [EN010127]. The ExA, at paragraph 6.5.10 of their recommendation report states:

"We also acknowledge the flexibility sought within the Proposed Development at this time, the benefits of overplanting and the Applicant's justification on overplanting not being a substitute for the absence of storage in this case, as considered in further detail in Chapter 3. We agree that a smaller scheme would not deliver the same generation capacity and therefore have a lesser overall benefit. Thereby any reduction in the size of the scheme would not be reasonable in this context."

8.2.8 The Secretary of State agreed with the ExA, noting at paragraph 4.18 that the "*concept of overplanting is supported by 2023 draft EN-3* [as it then was]".

8.2.9 In addition, paragraph 3.2.2 of NPS EN-1 (Ref 1-3) confirms that it is not the role of the planning system to deliver specific amounts or limit any form of infrastructure. This is particularly pertinent given the urgent and critical need to deliver critical national priority infrastructure, which includes solar development, established by NPS EN-1 (Ref 1-3) (paragraph 3.2.6).

8.2.10 The Scheme has been designed to ensure that the same benefits associated with renewable electricity generation upon commissioning are retained throughout the Scheme's operational life. The design approach ensures that land is used efficiently by enabling the substantial renewable energy benefit of solar PV generation to be maximised over the lifetime of the Scheme.

8.2.11 It is estimated that 267.9 ha of the 739.6 ha of proposed Solar PV Panels would be occupied by overplanting. This derives an overplanting figure of 284MW out of the 784MW of installed capacity as the available grid connection (per the bilateral connection agreement with National Grid) is 500MW. However, it should be noted that in, technical design terms, the Scheme design is based upon the concept of creating an efficient scheme that maximises electricity generation rather than being designed based around the grid connection agreement. The overplanting ratio is reasonable and ensures that the benefits of overplanting, which is supported by NPS EN-3 (Ref 1-4) are maximised.

8.2.12 The Mallard Pass Solar Farm [EN010127] has an overplanting ratio with a range of 1.3 to 1.5 times multiplied by the grid connection agreement. In his decision letter, the Secretary of State concluded that the overplanting ratio was justified and reasonable. This decision is important and relevant given that this Scheme falls within a similar range.

8.2.13 The Scheme is DC coupled and not AC coupled. The DC coupled technology is proposed to improve efficiencies and maximise electricity generation. In land use terms, if overplanting was reduced, it is likely that the Scheme would revert to an AC coupled system since the benefit derived from overplanting would be removed. An AC coupled design would not reduce the size of the Scheme since the PV rows would be further apart and would require a greater capacity of inverters. This outcome would result in a less efficient use of land as well reducing the efficiency of the Scheme as a generating station.

8.2.14 There is also a critical urgent need to deploy large-scale renewable energy developments at pace, as confirmed by NPS EN-1 (Ref 1-3) and the classification of solar and other renewable energy infrastructure as a critical national priority. The Scheme design, following the ExA's acceptance of the Change Request on the 24 October 2024, comprises 780 ha, or 1927 acres of land to be utilised as the generating station and built associated development, which as outlined in paragraph 8.1.1 comprises Solar PV Panels, Solar Stations and BESS, Solar Farm Control Centre, On-Site Substations, Access Roads and Access Tracks, and excludes Biodiversity Zones, Proposed Woodland, and Sensitive Archaeological Sites. This equates to the provision of 2.45 acres per MW. This is within the lower end of the range set out at paragraph 2.10.17 of NPS EN-3 (Ref 1-4), demonstrating that the proposed land take is comfortably within the expected range set out in national policy. However, it is important to note that paragraph 2.10.17 of NPS EN-3 (Ref 1-4) does state that *"this will vary significantly depending on the site, with some being larger and some being smaller. This is also expected to change over time as the technology continues to evolve to become more efficient."*

8.2.15 The above context is important. It is also relevant to note that in terms of recently consented schemes the indicative design of the Gate Burton Energy Park [EN010131] equates to 2.2 acres per MW and the Cottam Solar Project [EN010133] 4.94 acres per MW. This illustrates that different design approaches and concepts are taken by individual projects and that there is not a one size fits all approach. This will be reflective of site-specific situations and the use of different technologies and design approaches by different projects. It is also relevant that the ExA, in their recommendation report in relation to the Cottam Solar Project [EN010133], and agreed by the SoS, stated in paragraph 3.2.66 that:

"Moreover, while we note that, at around 1200ha, the amount of land required for the Proposed Development would exceed the 2 to 4 acres per MW of output identified in 2024 NPS EN-3, we recognise that the amount of land required for large scale ground mounted solar generation will vary significantly depending on the site - with some being larger and some being smaller."

8.2.16 In short, the case is made for the overplanting of the Scheme as this is justified and reasonable and supported by NPS EN-3 (Ref 1-4). It is an important benefit of the Scheme that allows for a more consistent and efficient use of the grid connection, particularly during periods of lower solar irradiance, such as during cloudy or less sunny hours. Through the use of overplanting, the Scheme is designed to have a higher power output than its agreed grid connection. The excess power generated during times of higher solar irradiance is stored in the BESS via DC coupling. This allows the system to capture and store energy that would otherwise be curtailed, ensuring that the energy is available for export at times when generation is lower.

8.2.17 Solar farms that employ overplanting can also make use of the full capacity of the grid connection for longer periods. This approach optimises energy delivery to the grid, maximising the efficiency of the grid connection and enhancing the overall load factor of the renewable energy system.

8.2.18 National planning policy does not define what level of overplanting is reasonable. It is based on professional judgement by the technical design team. In this case, over-planting has been justified and is reasonable for the reasons set out above.

8.2.19 The projected yield of the Scheme over 60 years at 48.5TWh is substantial with the renewable electricity generation of the project being a significant benefit of the Scheme.

8.3 Associated development – BESS

8.3.1 The BESS proposed for the Scheme satisfies the criteria for associated development set out in DCLG's *Planning Act 2008: Guidance on associated development applications for major infrastructure projects (April 2013)* (Ref 1-2).

8.3.2 The BESS has a clear and direct relationship with the principal development of the Scheme, being the solar PV generating station. This relationship is emphasised by the use of DC coupling, which requires the BESS to be distributed across the Principal Site and co-located with the solar PV arrays and Solar Stations. By reducing the number of times that the electricity needs to be converted from DC to AC, the overall efficiency of the energy generation and storage process associated with the Scheme is improved.

8.3.3 The BESS is subordinate to the solar PV development because its primary function is to store and manage the energy generated by the solar panels. Its operation is dependent on the generation capacity of the solar PV array and the existence of the generating station itself, as it is co-located with the Solar Stations dispersed throughout the Principal Site rather than being in a single location (due to its DC-coupled design) and is designed specifically to handle the energy output of the Scheme. The supporting role of the BESS is further emphasised by the approaching to DC coupling, aimed at improving the overall efficiency of the energy generated by the solar PV arrays.

8.3.4 NPS EN-1 (Ref 1-3) (see paragraphs 3.3.25 to 3.3.28) recognises the key role of electricity storage in providing flexibility to the energy system. Whilst storage is important as a supporting function to a generating station, NPS EN-1 recognises that it can only currently store electricity over a period of hours and not for prolonged periods of time. This limitation in technology demonstrates that by its very nature that BESS is subordinate to and ancillary to the generating station with the BESS having limited storage capacity.

8.3.5 The inclusion of BESS as associated development alongside large-scale solar projects is well-established in decision-making. It is established that in planning policy terms that BESS co-located alongside solar as a supporting and secondary function to the primary generating station is acceptable to ensure an efficient use of land and Scheme.

8.3.6 While the BESS may have the potential to import electricity from the grid and store it (with the 500 MW import capacity), this is not its primary purpose. The BESS is constructed as part of the overall Scheme to enhance the efficiency and reliability of the solar PV operation, and its co-location with the solar stations emphasises its subordinate role. The potential to import

electricity from the grid also has the ability to meet the associated development tests as set out in paragraph 2.1.2 above. The ability to import electricity is to provide grid balancing and ancillary services that have traditionally been provided by more conventional generating stations, which are being displaced by renewable energy generation stations, such as the Scheme. In this regard, the ancillary grid balancing services addresses an impact of the Scheme.

8.3.7 The BESS is proportionate in both size and function to the scale of the solar PV. In terms of land-use, the co-located solar stations and BESS would accommodate approximately 24.75ha, or 3% of the 780ha of land required for the generating station and built associated development. The limited land take further demonstrates the subservient nature of the solar stations/BESS alongside the principal purpose of the Scheme as a solar PV generating station. This dispersal across the Principal Site, being co-located with the Solar Stations, allows it to store excess energy produced during periods of high solar generation. This enhances the ability of the solar farm to maintain a consistent supply of energy to the grid, especially during times of lower solar irradiance.

8.3.8 The storage capacity of the BESS—designed for four hours of storage with a total energy capacity of 2,310 MWh—ensures that it is suitably sized to handle the energy output of the solar PV array in times of curtailment. The strategic co-location of the BESS across the Principal Site also minimises electrical losses, making it a proportionate and necessary component of the Scheme.

8.3.9 Using the current indicative Scheme design, it is estimated that the BESS will be charged by the solar PV array on approximately 30% of the days in a year. This does not mean that the BESS would not be in use the rest of the time. The rest of the time its use will be dependent upon weather conditions, and the extent to which it is used for grid balancing services which will be dictated by the needs of the grid. For this reason, it is not possible to put a definitive figure on how often the BESS will take energy from the grid. However, the Applicant can confirm that the approximate 30% figure is a higher figure than would be expected of solar schemes with AC-coupled BESS. Due to weather and seasonal factors, this charging will primarily occur during Spring, Summer and Autumn, when solar irradiance is highest.

8.3.10 This seasonal variation in charging further emphasises the importance of the BESS in ensuring that energy is captured and stored efficiently during periods of peak generation and can be made available for use throughout the year, but its limited capacity demonstrates it subordinate nature to the principal development (generating station).

9. Conclusion

9.1.1 This note has clarified that the principal purpose of the Scheme is to implement an efficient and well-designed solar generation station whose primary purpose is to generate electricity. It has been demonstrated that the Scheme makes an efficient use of land and will deliver an innovative (DC-coupled) design solution that will maximise the generation of electricity using the latest technology providing substantial benefits.

9.1.2 It has been evidenced that the BESS is ancillary and subordinate to the primary function of the Scheme as a solar generating station. The note has expanded further upon the case already made in the Application in paragraphs 2.2.4 to 2.2.9 of the **Planning Statement [AS-029]** and in paragraphs 2.1.4 to 2.1.7 of the **Explanatory Memorandum** to the Draft Development Consent Order **[EN010142/APP/3.2](Rev01)**, and orally during the Applicant's submissions at ISH1.

9.1.3 NPS EN-1 (Ref 1-3), recognises that energy storage can be associated development as part of a solar farm and that it has an ancillary role alongside a generating station to provide increased flexibility and efficiencies to the principal development. In addition, development consent has been granted for a number of solar projects where the principle has been established through decision-making that BESS is associated development, the most recent of which was the Cottam Solar Project [EN010133], also located in Lincolnshire. Furthermore, the consented Schemes also have both export and import grid connections and are AC coupled. This Scheme being DC-coupled provides additional evidence that the BESS meets the core associated development principles set out in the DCLG guidance (Ref 1-2).

10. References

Ref 1-1 HMSO (2008). Planning Act 2008. Available at: https://www.legislation.gov.uk/ukpga/2008/29/contents

Ref 1-2 Department for Communities and Local Government (2013). Planning Act 2008: associated development applications for major infrastructure projects. Available at: https://www.gov.uk/government/publications/planning-act-2008-associated-development-applications-for-major-infrastructure-projects

Ref 1-3 Department for Energy Security & Net Zero (2023). Overarching National Policy Statement for Energy (EN-1). Available at: https://www.gov.uk/government/publications/overarching-national-policy-statement-for-energy-en-1

Ref 1-4 Department for Energy Security & Net Zero (2023). National Policy Statement for Renewable Energy Infrastructure (EN-3). Available at: https://www.gov.uk/government/publications/national-policy-statement-for-renewable-energy-infrastructure-en-3

Ref 1-5 National Grid ESO (2020). ESO Balancing Services: A guide to contracting, tendering and providing response and reserve services. Available at: https://www.neso.energy/industry-information/balancing-services/how-supply-your-services

Appendix C
Review of Worst-Case Decommissioning Assessment Conclusions in the Environmental Statement

Tillbridge Solar

Tillbridge Solar Project

EN010142

Volume 9
Written Summary of the Applicant's Oral Submissions at ISH1

Appendix C: Review of Worst-Case Decommissioning Assessment Conclusions in the ES

Document Reference: EN010142/APP/9.2

The Infrastructure Planning (Examination Procedure) Rules 2010

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1. Introduction

1.1.1 This document has been prepared by AECOM Ltd ('AECOM') on behalf of Tillbridge Solar Ltd (the 'Applicant') following the Issue Specific Hearing 1 (ISH1) held on Tuesday 15 October 2024 in relation to the construction, operation and decommissioning of the Tillbridge Solar Project (hereafter referred to as 'the Scheme').

1.1.2 During ISH1, the Examining Authority (ExA) asked the Applicant how the Environmental Statement (ES) had considered the removal and retention of the Scheme components during the decommissioning phase, for example how the landscape and visual assessment had considered the potential retention of substations and Solar Farm Control Centre building on the Principal Site. The Applicant confirmed during the course of the hearing that each technical chapter within the ES is based on a worst-case scenario specific to that assessment, but agreed to provide the ExA with a more detailed written response.

1.1.3 This document provides the Applicant's written response to the ExA's questions on this matter, setting out the worst-case assumptions considered in the decommissioning assessment of each technical chapter (**Chapters 6 – 18**) of the ES **[APP-037 to APP-049]**, specifically in terms of the removal or retention of the substations and Solar Farm Control Centre building and the assessment conclusions based on the relevant assumptions. The information presented within this note draws on the conclusions of **Chapters 6 – 18** of the ES **[APP-037 to APP-049].** In order to assist the ExA, the Applicant has drawn this information together to set out in one place the worst-case assessment assumptions associated with the decommissioning phase.

2. Decommissioning of the Scheme

2.1.1 As set out within **Chapter 3: Scheme Description** of the ES **[AS-053]**, once the Scheme reaches the end of its 60-year operational life, all infrastructure associated with the Scheme will be removed from the Principal Site and recycled or disposed of in accordance with good practice and market conditions at that time. This includes removal of all PV panels, mounting poles, on-site cabling, inverters, transformers and concrete foundations to those elements not remaining, with the exception of the cabling in the Cable Route Corridor which may remain in-situ as this is currently the most environmentally acceptable option with the lowest impacts. In addition, the future of the substations and the Solar Farm Control Centre building would be agreed with the relevant Local Planning Authority prior to the commencement of decommissioning, as this was requested by Lincolnshire County Council in pre-application discussions.

2.1.2 Decommissioning will take between 12 and 24 months in two main phases; the first phase would remove the above ground structures followed by the second phase for the removal of below ground elements of the Scheme.

2.1.3 A **Framework Decommissioning Environmental Management Plan (DEMP) [EN010142/APP/7.10(Rev01)]** has been produced as part of the DCO Application, with the most recent version submitted as part of the Applicant's Deadline 1 submissions, to demonstrate how the decommissioning works would be managed. Among other things, the Framework DEMP expressly provides for the removal of all solar PV array infrastructure including modules, mounting structures, cabling inverters and transformers and concrete foundations (see for example paragraph 1.1.4).

2.1.4 **Table 1** below provides an overview of the worst-case decommissioning assumptions made in each technical chapter (**Chapters 6 – 18**) of the ES **[APP-037 to APP-049]** and the corresponding assessment conclusions of each chapter regarding decommissioning effects.

Table 1. Review of Worst-Case Decommissioning Assumptions and Assessment Conclusions

ExA Library Reference	ES Chapter Number	Topic	Worst-case Decommissioning Assumption	Decommissioning Assessment Conclusions	Update to assessment required?
APP-037	Chapter 6	Air Quality	Chapter assumes the removal of all solar infrastructure and associated works, including the Solar Farm Control Centre building and on-site substations. This is considered to be the worst-case assumption, as the decommissioning of the substations and Solar Farm Control Centre would result in additional temporary disruption. If the substations and Solar Farm Control Centre were retained, they would not produce any direct emissions to air.	Effects are no worse than for the construction phase, with the implementation of measures set out within the **Framework DEMP [EN010142/APP/7.10(Rev01)]**. In conclusion, there are no likely significant effects during the decommissioning phase.	N
APP-038	Chapter 7	Climate Change	Chapter assumes the removal of all solar infrastructure and associated works, including the Solar Farm Control Centre building and on-site substations. This is considered to be the worst-case assumption, as the decommissioning of the substations and Solar Farm Control Centre would likely produce more greenhouse gas	The resources and effort required for decommissioning are assumed to be equivalent to those required for the construction phase, with the implementation of measures set out within the **Framework DEMP [EN010142/APP/7.10(Rev01)]**. GHG emissions from the decommissioning phase are assessed to result in a minor adverse (not significant) effect and these would be offset by the benefits delivered by the Scheme during its operation.	N

ExA Library Reference	ES Chapter Number	Topic	Worst-case Decommissioning Assumption	Decommissioning Assessment Conclusions	Update to assessment required?
			(GHG) emissions than their retention.		
APP-039	Chapter 8	Cultural Heritage	Chapter assumes the removal of all solar infrastructure and associated works, including the Solar Farm Control Centre building and on-site substations. This is considered to be the worst-case assumption, as the decommissioning of the substations and Solar Farm Control Centre would result in additional temporary disruption. All effects from the physical presence of the solar infrastructure on the setting of heritage assets were considered as negligible to minor adverse (not significant).	Effects are no worse than for the construction phase, with the implementation of measures set out within the **Framework DEMP [EN010142/APP/7.10(Rev01)]**. In conclusion, there are no likely significant effects during the decommissioning phase.	N
APP-040	Chapter 9	Ecology and Nature Conservation	Chapter assumes the removal of all solar infrastructure and associated works, including the Solar Farm Control Centre building and on-site substations. The proposed planting and habitat enhancement (as illustrated on **Figure 3-1** of the	Effects are no worse than for the construction phase, with the implementation of measures set out within the **Framework DEMP [EN010142/APP/7.10(Rev01)]**. In conclusion, there are no likely significant effects during the decommissioning phase.	N

ExA Library Reference	ES Chapter Number	Topic	Worst-case Decommissioning Assumption	Decommissioning Assessment Conclusions	Update to assessment required?
			ES **[AS-055]**) will remain, although some targeted vegetation loss may be required, for example to accommodate vehicle movements or road widening. This is considered to be the worst-case assumption, as the decommissioning of the substations and Solar Farm Control Centre would result in additional temporary disruption.		
APP-041	Chapter 10	Water Environment	Chapter assumes the removal of all solar infrastructure and associated works, including the Solar Farm Control Centre building and on-site substations. This is considered to be the worst-case assumption, as the decommissioning of the substations and Solar Farm Control Centre would result in additional temporary disruption.	Effects are no worse than for the construction phase, with the implementation of measures set out within the **Framework DEMP [EN010142/APP/7.10(Rev01)]**. In conclusion, there are no likely significant effects during the decommissioning phase.	N
APP-042	Chapter 11	Human Health	Chapter assumes the removal of all solar infrastructure and associated works, including the Solar Farm Control Centre building and on-site substations.	Effects are no worse than for the construction phase, with the implementation of measures set out within the **Framework DEMP [EN010142/APP/7.10(Rev01)]**. In conclusion,	N

ExA Library Reference	ES Chapter Number	Topic	Worst-case Decommissioning Assumption	Decommissioning Assessment Conclusions	Update to assessment required?
			This is considered to be the worst-case assumption, as the decommissioning of the substations and Solar Farm Control Centre would result in additional temporary disruption.	there are no likely significant effects during the decommissioning phase.	
APP-043	Chapter 12	Landscape and Visual Amenity	Chapter assumes the removal of all solar infrastructure and associated works, including the Solar Farm Control Centre building and on-site substations. The proposed planting and habitat enhancement (as illustrated on **Figure 3-1** of the ES **[AS-055]**) will remain, although some targeted vegetation loss may be required, for example to accommodate vehicle movements or road widening. This is considered to be the worst-case assumption, as the decommissioning of the substations and Solar Farm Control Centre would result in additional temporary disruption. The retention of the Solar Farm Control Centre and substations at the end of the	The LVIA states that whilst activities at this stage are considered as a worst-case scenario similar to those at the construction stage, the increased maturity of vegetation and resultant screening, established in accordance with the **Framework Landscape and Ecological Management Plan (LEMP) [EN010142/APP/7.17(Rev02)]** will reduce both landscape (perceptual) and visual effects at decommissioning. In conclusion, there are no likely significant effects during the decommissioning phase.	N

ExA Library Reference	ES Chapter Number	Topic	Worst-case Decommissioning Assumption	Decommissioning Assessment Conclusions	Update to assessment required?
			decommissioning phase would not result in significant landscape and visual effects on their own. This is because they would be sufficiently screened from representative viewpoints by woodland planting introduced by the Scheme, which will at that stage have matured over 60 years and therefore be substantially taller and denser. The mature planting will also reduce the perceptual influence of these features upon the wider landscape character. In addition, the Solar Farm Control Centre and elements within the substations are not considered to be without precedent, in that agricultural barns of a similar scale and form are present within the baseline.		
AS-006	Chapter 13	Noise and Vibration	Chapter assumes the removal of all solar infrastructure and associated works, including the Solar Farm Control Centre building and on-site substations. This is considered to be the	Noise and vibration effects during the decommissioning phase of the Scheme are anticipated to be similar or less than noise effects during the construction phase. With the implementation of measures set out within the **Framework DEMP [EN010142/APP/7.10(Rev01)]**	N

ExA Library Reference	ES Chapter Number	Topic	Worst-case Decommissioning Assumption	Decommissioning Assessment Conclusions	Update to assessment required?
			worst-case assumption, as the decommissioning of the substations and Solar Farm Control Centre would result in additional temporary disruption.	it is assumed, conservatively, that the significance of effects during decommissioning will be the same as for construction. In conclusion, there are no likely significant effects during the decommissioning phase.	
APP-045	Chapter 14	Socio-economics and Land Use	Chapter assumes the removal of all solar infrastructure and associated works, including the Solar Farm Control Centre building and on-site substations. This is considered to be the worst-case assumption, as the decommissioning of the substations and Solar Farm Control Centre would result in additional temporary disruption.	Effects are no worse than for the construction phase, with the implementation of measures set out within the **Framework DEMP [EN010142/APP/7.10(Rev01)]**. In conclusion, there are no likely significant effects during the decommissioning phase.	N
APP-046	Chapter 15	Soils and Agriculture	Chapter assumes the components which will remain after decommissioning and therefore have the potential to be permanent are the on-site substations, and proposed woodland. The remaining solar infrastructure, including the Solar Farm Control Centre building, will be removed at the end of the Scheme lifetime.	With regards to agricultural land quality, there is no decommissioning effect further to that from construction. In addition, with the implementation of measures set out within the **Framework Soil Management Plan [EN010142/APP/7.12(Rev01)],** the effect on soils is considered negligible (not significant). With the return of the Principal Site to current landowners, the effect on agricultural businesses is considered minor beneficial (not significant). In conclusion,	N

ExA Library Reference	ES Chapter Number	Topic	Worst-case Decommissioning Assumption	Decommissioning Assessment Conclusions	Update to assessment required?
			This is considered to result in worst-case effects for soils and agriculture assessment. The Solar Farm Control Centre building takes up 0.2 hectares (ha) of Agricultural Land Classification (ALC) Grade 3b (not Best and Most Versatile) land. If it was to be retained permanently, it would not alter the conclusions of the soils and agriculture assessment.	there are no likely significant effects during the decommissioning phase.	
APP-047	Chapter 16	Transport and Access	Chapter assumes the removal of all solar infrastructure and associated works, including the Solar Farm Control Centre building and on-site substations. This is considered to be the worst-case assumption, as the decommissioning of the substations and Solar Farm Control Centre would result in additional temporary traffic movements, compared to being retained permanently.	For the purposes of the ES, the decommissioning assessment year is assumed to be no earlier than 2088 (at least 60 years from opening). The decommissioning period is expected to be similar in nature to the construction phase, albeit with fewer vehicle trips over a slightly shorter duration. In addition, the decommissioning phase is considered to be too far into the future to be able to accurately predict traffic flows or road/ junction layouts at that time. It is therefore considered reasonable to assume that the impacts will be the same as, or no greater than, the construction phase. This may overestimate the actual impacts slightly, but it is considered broadly accurate. The construction phase assessment identified one significant residual effect on the severance /	N

ExA Library Reference	ES Chapter Number	Topic	Worst-case Decommissioning Assumption	Decommissioning Assessment Conclusions	Update to assessment required?
				pedestrian delay/ non-motorised user amenity on the B1241, as a result of the construction of the Cable Route Corridor. It is unlikely that this significant effect would also occur during the decommissioning phase, as the cable is likely to be left in-situ.	
APP-048	Chapter 17	Glint and Glare	Chapter assumes the removal of all solar infrastructure and associated works, including the Solar Farm Control Centre building and on-site substations. The removal or retention of substations and the Solar Farm Control Centre building does not affect the glint and glare assessment.	By the nature of the other phases i.e. the addition of panels during construction and the removal of panels during decommissioning, there will be the same or fewer panels during these two phases when compared to the fully built out Scheme during the operational phase. Therefore the decommissioning effects are no worse than for the operational phase, with the implementation of measures set out within the **Framework DEMP [EN010142/APP/7.10(Rev01)]**. In conclusion, there are no likely significant effects during the decommissioning phase.	N
APP-048	Chapter 17	Ground Conditions	Chapter assumes the removal of all solar infrastructure and associated works, including the Solar Farm Control Centre building and on-site substations. This is considered to be the worst-case assumption, as the decommissioning of the substations and Solar Farm	Effects are no worse than for the construction phase, with the implementation of measures set out within the **Framework DEMP [EN010142/APP/7.10(Rev01)]**. In conclusion, there are no likely significant effects during the decommissioning phase.	N

ExA Library Reference	ES Chapter Number	Topic	Worst-case Decommissioning Assumption	Decommissioning Assessment Conclusions	Update to assessment required?
			Control Centre would result in additional temporary disruption.		
APP-048	Chapter 17	Major Accidents and Disasters	Chapter assumes the removal of all solar infrastructure and associated works, including the Solar Farm Control Centre building and on-site substations. This is considered to be the worst-case assumption, as the decommissioning of the substations and Solar Farm Control Centre would result in additional temporary disruption.	Effects are no worse than for the construction phase, with the implementation of measures set out within the **Framework DEMP [EN010142/APP/7.10(Rev01)]**.	N
APP-048	Chapter 17	Telecommunications, Television Reception and Utilities	Chapter assumes the removal of all solar infrastructure and associated works, including the Solar Farm Control Centre building and on-site substations. This is considered to be the worst-case assumption, as the decommissioning of the substations and Solar Farm Control Centre would result in additional temporary disruption.	No effects are anticipated in the decommissioning phase for telecommunications and television reception. For utilities, the potential exists for utilities to be affected during decommissioning of the Scheme through inadvertent damage caused as a result of excavation and engineering operations. However, these effects are no worse than for construction phase, with the implementation of measures set out within the **Framework DEMP [EN010142/APP/7.10(Rev01)]**, and therefore no adverse effects are expected during decommissioning.	N

ExA Library Reference	ES Chapter Number	Topic	Worst-case Decommissioning Assumption	Decommissioning Assessment Conclusions	Update to assessment required?
APP-048	Chapter 17	Materials and Waste	Chapter assumes the removal of all solar infrastructure and associated works, including the Solar Farm Control Centre building and on-site substations. This is considered to be the worst-case assumption, as the decommissioning of the substations and Solar Farm Control Centre would result in additional waste, compared to their retention.	With the implementation of measures set out within the **Framework DEMP [EN010142/APP/7.10(Rev01)]**, decommissioning waste effects on landfill capacity are assessed as slight (not significant).	N
APP-048	Chapter 17	Electric and Electro-Magnetic Fields	Chapter assumes the removal of all solar infrastructure and associated works, including the Solar Farm Control Centre building and on-site substations. The removal or retention of substations and the Solar Farm Control Centre building does not affect the electric and electro-magnetic fields assessment.	Effects are no worse than for construction phase, with the implementation of measures set out within the **Framework DEMP [EN010142/APP/7.10(Rev01)]**. In conclusion, there are no likely significant effects during the decommissioning phase.	N
APP-049	Chapter 18	Cumulative Effects and	Chapter is based on the worst-case decommissioning assumptions of each technical assessment, as set out above.	Decommissioning cumulative effects are no worse than for the construction phase, with the implementation of measures set out within the **Framework DEMP [EN010142/APP/7.10(Rev01)]**. Therefore, the	N

ExA Library Reference	ES Chapter Number	Topic	Worst-case Decommissioning Assumption	Decommissioning Assessment Conclusions	Update to assessment required?
		Interactions		only significant residual cumulative effects relevant to the decommissioning phase relate to those identified for landscape and visual receptors and socio-economics in the construction phase assessment.	

3. Conclusion

3.1.1 In summary, this document reviews the worst-case assumptions considered in the decommissioning assessment of each technical chapter and the decommissioning assessment conclusions. The potential retention of the on-site substations and the Solar Farm Control Centre building is not considered to change the conclusions of the ES.

Appendix D
Breakdown of Schedule 3 to the draft DCO

Appendix D: Disapplication of Schedule 3 local legislation

1. Introduction

1.1 The Examining Authority sought clarification on the local legislation sought to be disapplied within Schedule 3 to the draft Development Consent Order (DCO) **[EN010142/APP/3.1(Rev03)]**. The Applicant provides **Table 1** below, outlining each of the Acts captured within Schedule 3, and the specific reasons for their disapplication.

1.2 The general reason for the disapplication of these Acts is that they address matters whose merits and acceptability can, and will, already have been sufficiently considered and resolved if the DCO is made, notably in relation to the assessment of impacts in respect of drainage, local waterbodies, highways and railways, and the controls within the DCO to manage these, predominantly through the protective provisions entered into with drainage authorities, the Environment Agency, and railway authorities as well as the proposed management plans secured within Schedule 2 to the draft DCO **[EN010142/APP/3.1(Rev3)]**. Such matters should therefore not be the subject of further regulatory consideration or control, which would cause unnecessary uncertainty and duplication, and may unjustifiably delay the implementation of the Scheme.

1.3 Unlike the modern legislation listed within Article 6 to the DCO, which is disapplied in a specific manner in respect of particular permitting requirements or controls, the local legislation listed within Schedule 3 is largely historic in nature. Given this historic nature, this list has been prepared taking a precautionary approach, because in some cases it was difficult to conclusively determine whether or not the provisions of the legislation were relevant to the DCO, given that plans were not available in respect of the majority of the Acts considered to make clear their precise geographic scope. The Acts were obtained through a series of searches to capture any remaining legislation still in force within the vicinity of the Scheme.

1.4 To counteract the precautionary identification of this range of local legislation, Schedule 3 paragraph 1 of the draft DCO **[EN010142/APP/3.1(Rev3)]** disapplies the listed legislation only "*in so far as they relate to the construction of any numbered work or the carrying out of any operation required for the purpose of, or in connection with, the construction, operation, maintenance or decommissioning of the authorised development*." This means that where there is no conflict with the construction, operation, maintenance or decommissioning of the Scheme, the operation of these Acts will continue to apply.

1.5 It is also noted that the above approach, was adopted and accepted in the recently made Gate Burton Energy Park and Cottam Solar Project Orders. The local legislation captured in the equivalent schedules in those Orders largely align with those captured by Schedule 3.

Table 1: Schedule 3 local legislation to be disapplied

Name of Act	Reasons for disapplication
Stowe, Sturton and Bransby Inclosures Act 1803	This Act includes various provisions that protect common land rights and other interests within Stowe, Sturton and Bransby. The Scheme may conflict with the Act's powers where clear and unencumbered land use is required within the Order limits.
Great Grimsby and Sheffield Junction Railway Act 1845	This Act includes provisions for the Great Grimsby and Sheffield Junction Railway Company to construct and operate a railway from Bole to Gainsborough. The Scheme may conflict with the Act's powers where there is an overlap between the Order limits and the railway.
Great Northern Railway Act 1846	This Act includes various provisions to make and maintain a Railway from London to York. The Scheme may conflict with the Act's powers where there is an overlap between the Order limits and the railway.
Sheffield and Lincolnshire Junction Railway Act 1846	This Act includes various provisions to make and maintain a Railway from Sheffield to Gainsborough. The Scheme may conflict with the Act's powers where there is an overlap between the Order limits and the railway.
Manchester, Sheffield, and Lincolnshire Railways, and Manchester and Lincolnshire Union Railway and Chesterfield and Gainsborough Canal Amalgamation Act 1847	This Act incorporates the Manchester and Lincoln Union Railway and Chesterfield and Gainsborough Canal Company with the Manchester, Sheffield and Lincolnshire Railway Company. The Scheme may conflict with the Act's powers where there is a conflict with the powers accorded in respect of local railways or canals.
Gainsborough Waterworks Act 1865	The Act includes various powers to supply Gainsborough with water, such as to construct works and enter upon and take lands. The Scheme may conflict with the Act's powers where works are required within drains or would result in discharges to these drains.
West Riding and Grimsby Railway (Extension) Act 1865	This Act authorises the West Riding and Grimsby Railway Company to construct and operate a Railway from the South Yorkshire Railway to Lincoln. The Scheme may conflict with the Act's powers where there is an overlap of the Order limits with the location of the railway.

Trent and Lincolnshire Water Act 1971	This Act includes various powers in respect of the construction or operation of water resources and to acquire lands within the Lincolnshire region. The Scheme may conflict with the Act's powers where works are required within drains or would result in discharges to these drains.
Trent (Burton on Trent and Humber) Navigation Act 1887	This Act includes various powers to construct new works for improving and maintaining the navigation of the River Trent. The Scheme may conflict with the Act's powers where access to the River Trent between Wilden Ferry and Gainsborough is required, in respect of the cable route construction works adjacent to and beneath the River Trent, or where works are required within drains or would result in discharges to these drains.
Trent Navigation Act 1906	This Act includes various powers to construct new works and for the improvement and maintenance the navigation of the River Trent. The Scheme may conflict with the Act's powers where access to the River Trent between Wilden Ferry and Gainsborough is required, in respect of the cable route construction works adjacent to and beneath the River Trent, or where works are required within drains or would result in discharges to these drains.
Great Central Railway Act 1907	This Act includes various provisions for the Great Railway Company to construct new works, take lands and make and maintain new railways and wharves in the County of Lincoln. The Scheme may conflict with the Act's powers where there is an overlap of the Order limits with the location of the railway.
Lincolnshire Rivers Fisheries Provisional Order Confirmation Act 1928	This Act confirms a Provisional Order relating to the Rivers Witham, Welland, Trent and other waters to maintain, improve and develop the trout and freshwater fisheries in the area. The Scheme may conflict with the Act's powers in respect of any impacts by the Scheme on the River Trent or where works are required within drains or would result in discharges to these drains.
Anglian Water Authority Act 1977	This Act includes various provisions for Anglian Water for the development of rivers and waterways for recreational purposes. This Scheme may conflict with the Act's powers where works are required within drains or would result in discharges to these drains and/or rivers.

Appendix E
Community Liaison Group

Appendix E Terms of Reference for Community Liaison Group (CLG)

1.1 Introduction

1.1.1 During the course of Issue Specific Hearing 1 (ISH1) on the Tillbridge Solar Project (the Scheme), in response to requests from interested parties, the Examining Authority (the ExA) asked Tillbridge Solar Limited (the Applicant) to provide examples of terms of reference of existing Community Liaison Groups (CLGs).

1.2 CLG requirements in other solar DCOs

1.2.1 The Applicant is proposing that the terms of reference of any CLG relating to the Scheme are subject to the approval of West Lindsey District Council (WLDC) and Bassetlaw District Council (BDC), as a requirement set out in Schedule 2 of the **draft DCO [EN010142/APP/3.1]**.

1.2.2 There is precedent for such an approach as it replicates the measures secured in the made development consent orders (DCOs) and respective Framework Construction Environmental Management Plans for the neighbouring Gate Burton Energy Park [EN010131] and Cottam Solar Project [EN010133]. The most recent draft DCO for West Burton Solar Project [EN010132] also contains the same wording and provisions as those in the two aforementioned made DCOs. The Scheme proposes to adopt this same wording.

1.2.3 Given the proximity of the projects, consistency and commonality in approach with regard to communications with the community and the relevant DCO requirements attached to the various projects should be encouraged. Such commonality will ensure a consistent approach across the various projects (should all of the four DCOs be made) and will help to facilitate effective liaison with, and provide clarity for, the local community, local authorities and undertakers of the respective DCOs.

1.3 Purpose of the CLG

1.3.1 The purpose of the CLG is to communicate with the local community before and during the construction phase of the Scheme. It is anticipated that the membership of the CLG will include both members of the community and their elected representatives (at parish and local authority level).

1.3.2 The terms of reference for the CLG will effectively provide a constitution for the group. Although WLC and BDC would approve the terms of reference of the CLG as a requirement of the **draft DCO [EN010142/APP/3.1]**, it is envisaged that the terms of reference would not be static and would be broad enough to allow the members of the CLG to determine their own direction going forward once the regular meetings have commenced. This would include matters such as frequency of meetings, membership, and topics to be covered. The community and its views would therefore be

central to the CLG and how it would be run over the course of the construction period for the Scheme.

1.3.3 The practice of the local authority helping to shape the Applicant's approach to engaging with the community is well-established within the Planning Act 2008 (the PA 2008) (Ref 1) through the requirement to consult with the relevant local authorities on the Applicant's Statement of Community Consultation (SoCC) ahead of carrying out statutory consultation under Section 47 of the PA 2008 (Ref 1). Often the local authority's input at this stage of statutory consultation is invaluable as they have a particular insight into members of the community who are not often heard from or harder to reach. Similarly, by working with the local authority on the approval of the terms of reference for the CLG, the Applicant has the valuable input of an impartial authority who is required to consider the whole community it represents.

1.4 Example terms of reference

1.4.1 As requested by the ExA and interested parties at ISH1, the below shows the form that terms of reference for the Scheme could take. These are based upon the active terms of a current Nationally Significant Infrastructure Project (NSIP) to assist the ExA and interested parties in understanding the functions and the likely mechanisms that would be put in place to facilitate the CLG for the Scheme.

CLG terms of reference

1.4.2 *The group would facilitate conversation between residents, local authorities and other local interested stakeholders in relation to the construction of the project.*

Purpose

1.4.3 The overarching role of a CLG would be to encourage communications between the developer and local stakeholders. The CLG would help to ensure that the project team understands the views of the community, and would provide an opportunity for the local community to share their insights and to be provided with timely updates about the project.

CLG Chair

1.4.4 The project would explore the possibility of appointing an independent chair.

Membership of the CLG

1.4.5 Membership of the CLG would be confirmed at its first meeting [the organisations and categories of person who could be invited to join the CLG potentially including elected members of local authorities, local authority officers, parish council representatives, community groups, and/or relevant statutory stakeholders].

Duties and scope of work of the CLG

1.4.6 The CLG would provide a platform for discussions and would be a place where a range of issues can be discussed relating to the project's construction. The project team would provide updates on works carried out on site and scheduled for the near future. CLG members would be able to comment and provide recommendations to the project team on future activities and communications. All actions taken by the project team that were informed by these discussions would be reported back to the group.

1.4.7 The CLG members would be expected to:

a. Participate in group discussion on the project's objectives and help shape communication frequency, format and content.

b. Suggest and nominate members to join the CLG.

c. Encourage engagement in the Community Benefit Fund which would come forward around the same time.

d. Fulfil the obligation set out in the DCO and embrace the spirit of full engagement.

Frequency of CLG meetings

1.4.8 The expectation would be for the CLG to meet at least quarterly. However, the group will be able to set its own meeting schedule.

The organisation and management of CLG meetings

1.4.9 There organisation and management of CLG meetings would be discussed and agreed but would be expected to follow these broad principles:

a. Relevant materials, communications and correspondence would be distributed to all members in a timely manner.

b. The CLG would initially meet quarterly and may decide to increase the frequency of meetings as appropriate.

c. Invitations would be circulated within an agreed number of working days before each meeting. Any additional, time sensitive meeting invites would also be circulated an agreed number of days before.

d. Agendas would be circulated within an agreed number of working days before each meeting.

e. Meeting access links (where meetings are held online), would be circulated an agreed period of time before the meeting.

f. Notes from meetings would be circulated to all CLG members and any other interested stakeholders within an agreed number of working days following the meeting taking place.

g. CLG members would be invited to add agenda items for discussion ahead of each meeting – this would be expected to take place at the end of each meeting.

Reporting the CLG's work

1.4.10 CLG meetings would be organised around an agenda circulated to members in advance of every meeting. The minutes of every meeting would be circulated for comment and approved by the CLG members at the following meeting.

1.4.11 It is expected that the approved minutes of every meeting will be published on the project website for anyone to review and to raise through their community's representative on the CLG.

House rules

1.4.12 There would be a set of house rules that CLG members would be expected to adhere to and respect. Examples of these include:

a. All participants must listen to and treat members' views and opinions with respect.

b. Members must raise their hand if they wish to speak (use raise hand function if meeting online using Microsoft Teams).

c. Members must not speak over each other (remain on mute until asked to speak if meeting online).

d. The CLG would enable public discussion. The purpose would be to hear the many points of view and explore options and solutions.

2. References

Ref. 1 HMSO (2008). The Planning Act 2008