SUNNICA ENERGY FARM
DCO EXAMINATION

WRITTEN REPRESENTATION

SAY NO TO SUNNICA ACTION GROUP LTD

11 November 2022

CONTENTS

1. Introduction

1.1.1. The Say No to Sunnica Action Group Limited (**SNTS**) is an interested party (ID No 20031080) in the DCO examination. It is an action group representing the interests of many community members around the proposed development site, along with industry bodies interested in Newmarket and its surrounding area. It is incorporated as a limited company (company number 13804465).

1.1.2. The Newmarket Horseman's Group is an interested party (RR 45584 by Tattersalls Ltd) in the DCO examination. It associates itself entirely with the submissions of SNTS and does not intend to put in separate Written Representations. Save for where it is indicated explicitly during the examination, the ExA should assume that the Newmarket Horseman's Group approves of and associates itself with the representations of SNTS. For coordination purposes, the Newmarket Horseman's Group is represented by Tattersalls Ltd.

1.1.3. Throughout these Written Representations (and all other documents submitted by SNTS), the interested party identified as making the representations will be SNTS. However, the ExA should consider that any reference to SNTS includes a reference to those it represents (including The Newmarket Horsemen's Group) unless indicated otherwise.

1.1.4. SNTS is not opposed to constructing photovoltaic (**PV**) generation in the United Kingdom[1]. The Action Group recognises the climate emergency, and the local and national policies strongly favours the construction of renewable energy generation. In respect of solar, the Government supports the installation of well-designed and effective solar schemes. For example, the recently published British Energy Security Strategy notes on page 19 (in a section headed solar and other technologies).

> 'We will continue supporting the effective use of land by encouraging large scale projects to locate on previously developed, or lower value land, where possible, and ensure projects are designed to avoid, mitigate, and where necessary, compensate for the impacts of using greenfield sites.'

[1] SNTS recognises that Government policy identifies a need for this type of generation.

1.1.5. SNTS similarly supports the effective use of land for solar projects. However, SNTS is opposed to the Sunnica scheme, at least as currently designed, because it is not an effective use of land which properly avoids significant harm to the location and local communities. These Written Representations go through the reasons for these objections at length, but they can essentially be broken down into three components:

a. That the scheme as currently designed does not comply with certain legal requirements set out in legislation and, therefore, cannot be consented.
b. That the scheme's current design is an example of "bad solar", which causes disproportionate harm to the location and local communities. This weighs against it in the planning balance.
c. That the scheme is proposed in a location which is particularly sensitive to this particular development which causes disproportionate harm to the location and local communities. This weighs against it in the planning balance.

1.1.6. Indeed, it is generally recognised with PV generation that the scale of development will inevitably have impacts, particularly if sited in rural areas. In this case, poor design and poor placement (in the rural area) of compounds and large disaggregated sites of solar panels over a wide area make the scheme particularly harmful.

1.1.7. To repeat the point already made, SNTS say that it is the design of *this* scheme placed in *this* proposed location which makes Sunnica a proposal that should not be consented.

1.1.8. SNTS Notes that the Applicant has referred to the Draft National Policy Statements for Energy in section 2.2.5 and Table 2.2 of Environmental Statement - Appendix 6A - Relevant Legislation and Policy for Climate Change **[APP-056].** SNTS notes that these draft policy statements have not yet been adopted and as Government policy on energy is fluid in the current environment, these draft NPS should not be relied upon in determining this application except where the existing NPS is silent on the issue.

2. Cumulative Impact Intrinsic to the Scheme

2.1.1. Before moving to the specifics of these representations, it is useful to begin by considering the Sunnica scheme at a high level. This is because, at its core, the disproportionate harm of Sunnica is informed by two things: its size and its shape. Because Sunnica is exceptional in both of these regards (if consented, it will be by a considerable margin the largest PV generating installation in the UK[2] See **Appendix B**), the impact that it has on the location and the communities around it is very significant. This means that, internal to the scheme itself, it can have a cumulative impact which is far in excess of smaller and more contained schemes.

2.1.2. SNTS say that the size and shape of the scheme are failures of good design (NPPF paras 126, 130, 134; NPS EN-1 section 4.5). While appearance is important, NPS EN-1 at para 4.5.1 requires energy projects '*should produce sustainable infrastructure sensitive to place*'. Unlike physical appearance (over which an applicant might have limited control – NPS EN-1 para 4.5.3), good design of the shape and size of the scheme sensitive to place is a crucial decision for an applicant. That is particularly the case here; the land size and layout of this scheme has entirely been driven by the applicant. SNTS say that there are intrinsic flaws in the size and shape of the scheme which render it poor design.

2.1.3. Considering first the size, the overall site size is 981 hectares with a maximum area for PV cells at 621 hectares and a maximum area for BESS at 31.1 hectares. As a result of its size, it is difficult to place the scheme in the landscape without the appearance of changing the nature of that landscape. As the Councils noted in their LIRs[3], the effect of Sunnica is to change the landscape from a rural setting to an essentially industrial one. SNTS agrees; because it is so large, it will not appear as a neatly contained development in an otherwise rural landscape, but rather will be the feature that defines the landscape. This is a significant harm that sets it apart from schemes which are smaller *per se*, or (because of

[2] Indeed, if built today it would be one of the largest PV generating plants in Europe.

[3] See throughout section 7: Cultural Heritage **[REP1-024]**.

their smaller size) can be placed in areas to reduce harm (see, for example, the siting of the Little Crow site - **Figure 1**).

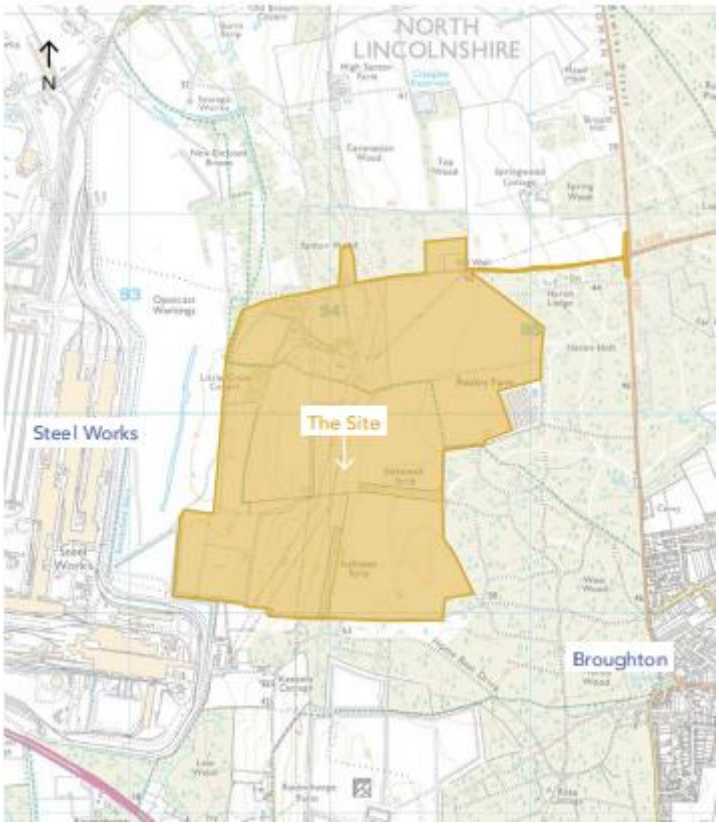


FIGURE 1 - LITTLE CROW SOLAR PARK LOCATION PLAN

2.1.4. However, the shape of the scheme then exacerbates this harm considerably. Unlike other recently consented NSIPs (e.g. Cleve Hill and Little Crow), the site is not one self-contained one. It is instead strung out across the landscape. A table comparing Sites exceeding 50MW can be found in **Appendix B**. While the applicant describes the scheme as having four sites, it is quite easy to see how the scheme divides up further. For example, in **Appendix D,** we indicate how the scheme might be described as instead six sites connected by narrow cable corridors spread between and close to villages located between Newmarket and Mildenhall (See **Annex A** Figure 2 – Landscape Masterplan). As the cables will be buried, the effect will be of several discrete sites. One can quite easily go higher than that if roadways and other permanent features are identified as further dividing lines between sites.

2.1.5. To undertake this assessment of the number of apparent sites is fundamental to this scheme. As the overall scheme is split into more areas, the amount of land and number of

people affected by the scheme increases due to the design of the scheme siting compounds and solar sites between and close to a number of closely related historic villages within a very short timescale causing significant and detrimental industrialisation of a wholly rural area. No other solar scheme granted consent has this characteristic.

2.1.6. This is true in the sense that one loses the economy of scale by considering the site as one large, combined field[4]. But, more fundamentally, every time that the site is divided, the amount of perimeter for the given area of the scheme increases significantly, a simple factor of geometry. One might consider the perimeter of a cake when whole as compared to sliced into six separate slices (in that scenario, the perimeter is increased by the length of the radius six times). The perimeter of the scheme, and thus the number of people directly affected by its presence and appearance, is vast when compared to one contained site of 981 hectares on a single site away from settlements (such as is the case at Cleve Hill – **Appendix E**).

2.1.7. This difference is fundamental to understanding the harm that the scheme does to the location and local communities. It means that the scheme dominates the landscape because it is not contained; it is spread across it and engulfs locations. That has the effect of changing not just a section of the landscape from purely rural to the semi-rural and industrialised landscape but giving the impression that the landscape over many square miles has been changed fundamentally. Consider, for example, a resident of Isleham travelling to Red Lodge. In undertaking that journey, the cyclist, horse rider, walker or driver would pass two areas of PV cells surrounding their village before driving between two solar sites and a BESS site on their way into Red Lodge. The nature of that journey would change from one of travel through the rural countryside with features consistent with agricultural and equine uses to one with several apparently separate solar farms, which would dominate the countryside and materially diminish enjoyment of the route.

2.1.8. By having this massive scheme split into sections which present as separate schemes, the effect would be as if 68 (or more) separate PV-generating schemes had been consented. The cumulative impact caused by separating and virtually surrounding communities and

[4] So the scheme must be larger so as to produce its defined peak output power.

dominating the landscape and causing this to be a change over a very short space of time, is a significant one. This causes extensive harm, which is difficult to mitigate. And, in certain cases, including at the Limekilns, valued landscape of significant importance historically is currently unable to be mitigated. This sets the scheme apart from other solar NSIPs (such as Cleve Hill and Little Crow - **Appendix E**); its design necessarily maximises the possible harm to the location and local communities by being sizeable in both area and perimeter, degree of change and impact on communities. At its purest, therefore, the scheme is an example of bad solar and an example of exceptionally poor design

2.1.9. The scheme (as shown in **Appendix D**) is considerably different from other NSIP (or equivalent in Wales and Scotland). It is the only one that is not aggregated into a single unit, reflecting land availability as a driving force rather than good design. For its size, it is closer to settlements and has more communities in its shadow.

2.1.10. **Appendix** shows the Order Limits for Cleve Hill and Little Crow. Cleve Hill is located on the coast, so one aspect opens towards the Thames Estuary. Little Crow has on one side the Scunthorpe Steelworks. Both sites are already crossed by overhead transmission lines. These sites, like Sunnica, are considerably larger than other NSIP applications to date. However, SNTS says that Sunnica is unique in its impacts created by its location and its spread-out design.

2.1.11. These cumulative impacts increase the harms that are identified throughout these Written Representations. For the local community, the historic rural connections between towns and villages are cut off. Jobs and significant agricultural value are lost because of the size and shape of the scheme. Historic and culturally significant sites like Chippenham Park and the Limekilns are effectively surrounded or views from them are dominated by the scheme. The insensitivity of the scheme can be seen in one simple example: the nature of views looking out from one the most important gallops in Newmarket towards Ely Cathedral, kept and protected for many years as a jewel of the horseracing industry in the UK (and, indeed, the world) becomes one of modern industrialisation; instead of pastures and agricultural fields, a wide panoramic spread from left to right of solar panels.

2.1.12. Tourists similarly will face these changes in the nature of the location, and the area will lose its current charm. Visitors seeking rurality will inevitably be put off visiting the area and will consider going elsewhere. By having such a massive scheme spread over such a

considerable area, all of these harms are maximised in a way that will significantly and for many generations damage local communities and the way that they function both socially and, in their reliance on tourism and investment in racehorse training, economically. This charming, historic rural area that has not seen such a degree of change for literally hundreds of years, if ever.

3. Landscape and Visual Impact

3.1.1. SNTS Has commissioned an expert report from Michelle Bolger Landscape Consultancy, which is **Annex A** to this written representation.

3.1.2. Michelle Bolger is an expert landscape consultant with considerable experience. She has produced a Landscape and Visual Issues report which concludes that the proposal would result in up to major adverse effects on the visual amenity of a number of users, including people who use the local PRoW network, visitors to the Limekilns and users of a number of roads in the area. Proposed mitigation planting will, after a period of 15 years, lessen the views of the infrastructure to varying degrees, but it will not restore the current visual amenity, and in places, the mitigation planting in itself will restrict open views. In some cases, such as at the Limekilns, with elevated views across a large area of the site, it will not be possible to screen the development with mitigation planting.

3.1.3. Michelle Bolger considers that there are a number of places within the judgments made in the submitted landscape and visual impact assessments of the applicants that underestimate the harm that the proposals would cause. The process orientated in the LVIA creates complexity, length and a level of repetition which buries key judgments such that a false impression is given of the degree of impact caused by the development. Minor adverse effects are estimated by the applicants who failed to consider and give sufficient weight to the loss of openness, for example. The LVIA fails to identify the most valuable factors within the landscape and, therefore, to adequately assess the impact of these factors. It also demonstrates an inability to follow its own methodology without explanation.

3.1.4. However, despite underestimating the value and the insensitivity of the LLCAs, the LVIA concludes that in some cases, the scheme would cause a major adverse landscape effect, the highest level of effect. Across all judgments, there are 22 occurrences of a major adverse effect. These are buried within 282 occurrences of either negligible or neutral effects, which give a false impression of the overall impact of the development as being benign. The opposite is true.

3.1.5. In addition, the effectiveness of mitigation planting is overestimated, and the impact is underestimated. For example, in the finding that the landscape in which Sunnica East site a is located (LLCA 11) would only experience a minor adverse effect at year 1. There has

been a failure to identify the most valuable aspect of the landscape and, therefore, to adequately assess the impacts on these aspects. There has been a failure to follow best practice guidance with the LVIA. Surprisingly, given the gestation period for the development, there has been no consideration of the landscape impact in wintertime, a major failure and absence of information but one which clearly undermines the conclusions reached on the information submitted.

3.1.6. Assessment of the proposed BESS and substation compounds has been inadequately considered, including failure to have proper regard to the latest information concerning the need for substantial built development in the countryside in the proposed compounds. There has been no attempt given to lay out the compounds so as to minimise landscape and visual impacts. The minimisation of a view of a tall transformer or other such industrialised structure from one angle may well be the cause of maximisation from another.

3.1.7. There is no way in which such compounds would be permitted but for their being attached to a solar scheme. However, this is a case of the tail wagging the dog and it being a PV solar scheme attached to a number of battery farms in the countryside.

3.1.8. The photomontage submitted with the ES underrepresents the impact of the development. There has been an inappropriate selection of the location and viewing direction of photomontages, as has been apparent on the accompanied site visits. Key views have been omitted. The BESS infrastructure has been inappropriately depicted, and the baseline images are awkwardly presented. The growth rates used for mitigation planting shown are overoptimistic. The absence of winter views leads to the absence of photomontage in a worst-case scenario.

3.1.9. The development is not sensitive to place, and the mitigation measures proposed by the Applicant will do little to improve this because the fundamental issue relates to the location of the key development sites. The site selection process was flawed and failed to take into account the high-value aspects of the landscape, the strong sense of place and local distinctiveness. The development is not showing good design in terms of siting relative to existing landscape character, landform and vegetation; the opposite is true. This is all contrary to EN-1 4.5.1 and 4.5.2.

3.1.10. The development fails to accord with NPPF as it fails to recognise the intrinsic character and beauty of the countryside. It would not protect nor enhance the valued landscape, which includes the Limekilns and Chippenham Park in the case of Sunnica West Site A.

3.1.11. Contrary to the Development Plans of West Suffolk and East Cambridgeshire, the development would, due to its location and scale, result in significant, long-term harm to the character of the landscape, including the setting of settlements. It would fail to protect or enhance the character as required by policy DM 13 of the West Suffolk Local Plan. It would not be consistent with policy ENV 1 of the East Cambridgeshire Local Plan as, due to its location and scale, it would fail to protect, conserve, or enhance space between settlements and their wider landscape setting, key views into and out of settlements and the unspoiled nature and tranquillity of the area.

3.1.12. Overall, the proposals are in conflict with the relevant national policy statements and national and local landscape policies.

4. Heritage Impact

4.1.1. SNTS Has commissioned an expert report by Dr Richard Hoggett of Richard Hoggett Heritage which is **Annex B** to this written representation

4.1.2. The report makes it clear that the construction of the Sunnica Energy Farm will have a negative impact on the significance of a number of designated and non-designated heritage assets. The Applicant's own assessment identifies that several of these impacts are of sufficient magnitude to be considered 'significant' and, as set out in the report, in many cases, it is apparent that the Applicant's assessments understate the full extent of the impact.

4.1.3. It is also apparent that the Applicant does not consider their proposed landscape mitigation scheme will reduce the scale of this impact further. For ease of reference, **Table 1** below summarises the impacts upon designated heritage assets identified by the Applicant, together with our heritage expert's assessment. In no case has the Applicant assessed the impact to be greater than our expert's assessment.

TABLE 1 – VARIATIONS IN ASSESSMENT OF HERITAGE IMPACTS

Heritage Asset	NHLE Entry Number	Heritage Value	Applicant's Assessment		SNTS Expert's Assessment	
			Magnitude of Effect	Significance of Effect	Magnitude of Effect	Significance of Effect
Scheduled Monuments						
Roman Villa	1006868	High (SM)	Very Low	Minor	Low	Moderate
Barrow	1015243	High (SM)	Very Low	Minor	Low	Moderate
Barrow	1015244	High (SM)	Very Low	Minor	Low	Moderate
Barrow	1015245	High (SM)	Very Low	Minor	Low	Moderate
Barrow Group	1015246	High (SM)	Low	Moderate	Medium	Major
Barrow	1015011	High (SM)	Low	Minor	Low	Moderate
Barrow	1018097	High (SM)	Low	Moderate	Low	Moderate
Barrow	1020395	High (SM)	Very Low	Minor	Very Low	Minor
Registered Parks and Gardens						

Chippenham Park	1000615	Medium (G2)		Medium	Moderate		High	Major
Listed Buildings								
Grange Farmhouse	1037602	Medium (G2)		Very Low	Negligible		Very Low	Negligible
The Manor	1037604	Medium (G2)		Very Low	Negligible		Very Low	Negligible
Badlingham Manor	1126373	Medium (G2)		Low	Minor		Low	Minor
The Cottage	1126374	Medium (G2)		Very Low	Negligible		Very Low	Negligible
Waterhall Farm	1126383	Medium (G2)		Very Low	Negligible		Medium	Moderate
Park Farmhouse	1162059	Medium (G2)		Low	Minor		Low	Minor
Phantom Cottage	1126385	Medium (G2)		Low	Minor		Low	Minor
Entrance Lodges & Triumphal Arch	1126376	High (G2*)		Very Low	Minor		Medium	Major
Conservation Areas								
Isleham CA	N/A	Medium		Low	Minor		Low	Minor
Freckenham CA	N/A	Medium		Low	Minor		Low	Minor
Snailwell CA	N/A	Medium		Low	Minor		Medium	Moderate

4.1.4. NPS EN-1 Section 5.8 sets out:

> *5.8.11 In considering applications, the IPC should seek to identify and assess the particular significance of any heritage asset that may be affected by the proposed development, including by development affecting the setting of a heritage asset, taking account of:*
>
> ● *evidence provided with the application;*
>
> ● *any designation records;*
>
> ● *the Historic Environment Record, and similar sources of information;*
>
> ● *the heritage assets themselves;*

● *the outcome of consultations with interested parties; and*

● *where appropriate and when the need to understand the significance of the heritage asset demands it, expert advice.*

5.8.12 In considering the impact of a proposed development on any heritage assets, the IPC should take into account the particular nature of the significance of the heritage assets and the value that they hold for this and future generations. This understanding should be used to avoid or minimise conflict between conservation of that significance and proposals for development.

5.8.13 The IPC should take into account the desirability of sustaining and, where appropriate, enhancing the significance of heritage assets, the contribution of their settings and the positive contribution they can make to sustainable communities and economic vitality. The IPC should take into account the desirability of new development making a positive contribution to the character and local distinctiveness of the historic environment. The consideration of design should include scale, height, massing, alignment, materials and use. The IPC should have regard to any relevant local authority development plans or local impact report on the proposed development …..

5.8.14 There should be a presumption in favour of the conservation of designated heritage assets and the more significant the designated heritage asset, the greater the presumption in favour of its conservation should be. Once lost heritage assets cannot be replaced and their loss has a cultural, environmental, economic and social impact. Significance can be harmed or lost through alteration or destruction of the heritage asset or development within its setting. Loss affecting any designated heritage asset should require clear and convincing justification. Substantial harm to or loss of a grade II listed building park or garden should be exceptional. Substantial harm to or loss of designated assets of the highest significance, including Scheduled Monuments; registered battlefields; grade I and II listed buildings; grade I and II* registered parks and gardens; and World Heritage Sites, should be wholly exceptional.*

4.1.5. The identified cultural heritage impacts affect numerous Scheduled Monuments, a Registered Park and Garden, several listed buildings, surrounding Conservation Areas and the historic Limekilns Gallops. The scheme will also have a considerable impact on the extensive archaeological deposits which survive within the proposed development area.

The identified heritage impacts range from negligible to major, with particularly significant adverse impacts identified on the scheduled Chippenham Barrow Cemetery, the Grade II registered Chippenham Hall Park, and the Grade II* listed southern lodges and triumphal arches at the southern entrance to the park. In every case, these impacts constitute 'less than substantial harm' to the significance of each heritage asset, with the instances singled out here sitting at the top of the 'less than substantial' scale.

4.1.6. As is set out in the report, under the existing suite of planning legislation and policy, it is required that this 'less than substantial harm' be weighed against the wider benefits of the DCO application. In doing so, 'great weight' should be given to the conservation of the heritage assets concerned, and the more important the assets, the greater that weight should be.

4.1.7. Both the Applicant's own assessment presented in the Environmental Statement and our Expert's assessment concluded that the development of the Sunnica Energy Farm would result in multiple instances of adverse heritage impact, which cannot be mitigated. As such, considerable benefits will need to be demonstrated to justify the approval of a DCO Application which will result in such high levels of harm to so many designated and non-designated heritage assets.

5. Agricultural Impacts

5.1.1. SNTS Has commissioned an expert report by Reading Agricultural Consultants, which is **Annex C** to this written representation

5.1.2. The impacts of the proposed development on the agricultural land resource are based on the assumption that the development is judged to be merely a temporary use, despite a projected, lengthy 40-year plus timespan.

5.1.3. The land resource is assessed to be of low sensitivity to change due to the predominance of land of less than BMV quality in the ALC assessed by the Applicant identified in the baseline.

5.1.4. The limited extent of land of BMV quality stated as being affected by the proposed development is contested on the basis that the constraint of droughtiness on some land has been exaggerated and that the ability of the land to be irrigated has been discounted.

5.1.5. A Freedom of Information request of Natural England has confirmed that the guidelines on the assessment of agricultural land quality published in 1988 and including the availability of irrigation as a positive determining factor, remain extant and unqualified.

5.1.6. The extent of land of BMV quality affected by the proposed development has, therefore, been significantly understated.

5.1.7. Notwithstanding the differences of opinion on the classificatory methodology, the actual land use situation affected by the proposed development and reflective of the productive capability of the land is as set out in the Soils and Agriculture Baseline Report in **Annex C**.

5.1.8. This is a description which closely reflects that for BMV subgrade 3a (good quality) land in the 1988 guidelines rather than one for land of lower quality as claimed:

> *"Land capable of consistently producing moderate to high yields of a narrow range of arable crops, especially cereals, or moderate yields of a wide range of crops including cereals, grass, oilseed rape, potatoes, sugar beet and the less demanding horticultural crops."*

5.1.9. This is a stated capability to which the ES affords a low sensitivity to change and to the loss of which, over a potentially minimum period of 40 years, it gives no recognition or weight in the assessment of the effect of the proposed development.

5.1.10. Instead, the ES places great weight on the assumed neutral impact of the proposed development on the required land and soil resources and, indeed, on the beneficial consequences of the long-term removal of the sites from substantive agricultural production.

5.1.11. It considers that the development will remove potential compaction and erosion risks and promote structural benefits through deeper root development in the subsoil and increase organic matter levels in the soil.

5.1.12. The ES fails to take into account that the land will continue to be accessed and subject to repeated vehicle movements for the construction of the scheme, driving steel stanchions into potentially tight chalk rock in some areas and the potential for mixing soil and substrates when removing those stanchions, and subsequent management of the land and infrastructure along routes necessarily prescribed by the layout of the development with compaction consequences.

5.1.13. Further, no information is provided about the feasibility of the establishment and management of the grassland on established productive arable soils other than vague references to sheep.

5.1.14. No evidence has been advanced based on the monitoring of decommissioned or existing solar facilities or similar developments to support the contention that there are no negative impacts arising from the prolonged change in the environment of the land, or if such impacts were likely, how they might be mitigated.

5.1.15. The cessation of current agricultural land uses on the commencement of construction will have physical consequences for the operation of the affected farm businesses.

5.1.16. These are identified in the Soils and Agriculture Baseline Report:

- A reduction in available land under arable crops
- Disruption to management programmes and use of specialised equipment affecting individual farmers or their contractors (possible loss of contracts)

- Potential surplus capacity in specialist crop and water storage infrastructure

5.1.17. These effects are assessed in the ES on an individual farm basis in terms of proportional land take, operational severance, or infrastructure effects but are attributed to an all-encompassing assessment of representing a medium magnitude of change.

5.1.18. The use of the land as a solar farm is claimed to represent a positive diversification of farm business to their economic benefit despite the farm not owning the income stream from the solar farm.

5.1.19. None of these considerations is assessed in terms of their scale, practicality and certainty on a farm-by-farm basis but is addressed as generalisations.

5.1.20. Normal practice in the assessment of the effects of development proposals on farm holdings is to concentrate on the physical impacts of development proposals and the extent to which the operational functioning of the associated farm enterprises is compromised.

5.1.21. Financial considerations arising from the release of land for development are not included in the assessment.

5.1.22. The proposed solar development is promoted as a form of farm diversification, which would conventionally operate alongside a continuing farming business. Given the scale of change of the development and its longevity, particularly in the case of two of the affected holdings, the financial arrangements have more in common with conventional compensation than commercial activities subordinate to farming activity. Whether or not this is the case, it cannot be assumed that individual recipients of the financial arrangements will use these in the furtherance of their own or other local agricultural activities.

5.1.23. Consequently, whilst there may be a financial benefit accruing from the development, it may not offset the functional effects of the proposed development.

5.1.24. The ES also fails to consider the cumulative effects of aspects of the proposed development on the affected agricultural businesses. The existing Bay Farm AD plant is extensively integrated with two of the affected agricultural businesses. The 'green' feedstock for the plant mainly comprises maize and sugar beet grown on surrounding land and agricultural

by-products, including sugar beet pulp and vegetable outgrades and livestock manure. All of the Sunnica site has been identified as a supplier of feedstock to the AD plant

5.1.25. It is understood that the AD operation, in turn, relies upon the crops grown on the land holding to provide a beneficial use for digestate arising from the site. The EIA does not account for the impact of the loss of land associated with the proposed development on the availability of land for spreading digestate from the AD plant.

5.1.26. The areas of maize and beet grown on the proposed development area for use in the plant are not identified in the ES, but it is very likely that a significant proportion of feedstock will be drawn from land that would be occupied by Solar PV arrays should the development proceed. It is more likely that the proposed development area makes up a substantial element of the land bank that the AD operation relies upon for the beneficial use of digestate arising from the operation.

5.1.27. The likely impacts of the displacement of land used for growing feedstock and the application of digestate are not identified in the ES, and consequently, the effects of the proposed development, for instance, in terms of increased and displaced vehicle movements associated with the continuing AD operation, and the viability of the AD plant cannot be assessed as part of the EIA.

Agricultural Land Classification

5.1.28. The Applicant has said that the majority of land within the area of the scheme is poor and of Agricultural Land Classification 3b or 4 **[APP-115 - Environmental Statement - Appendix 12B - Soils and Agricultural Baseline Report]** in Section 5**.** Reference is made to an email in 2019 from Natural England stating that irrigation is no longer used to reduce ALC drought limitation. However, Natural England, as a result of an FOI request, has confirmed that this is not the case, and the 1988 guidelines remain extant. This is expanded upon in paragraphs 9.28 et al of **Annex C**.

5.1.29. In Table 5-2 in **[APP-115],** the Applicant states the agricultural land classification to be:

Table 5-2 ALC Grade Distribution

ALC Grade	Area (ha)*	%
3a	37.3*	3.8
3b	493.3	50.3
4	393.4	40.1
Non -agricultural	57.0	5.8
Total	**981.0**	**100.0**

**Note: Due to a lack of survey data at Burwell National Grid Substation Extension for the reasons set out in Section 2, it has been assumed as a worst case that this land is BMV land. The total presented in this table does not include the area of land required for Burwell National Grid Substation Extension (less than 1ha) because this is based on an assumption (and this table presents collected data).*

5.1.30. **Annex C** to this representation contains a report by Patrick Stephenson Limited who was instructed to undertake a detailed Agricultural Land Classification Survey. The conclusion of this work is that the Agricultural Land Classification of the site is, in fact higher (page 9 of the Stephenson Report in **Annex C**):

Table 2 Summary of ALC Grades

Grade/Subgrade	Approximate Area Ha	Area %
2	8.0	10.0
3a	54.4	68.0
3b	15.9	19.9
4	1.7	2.1
Total	80.00	100

5.1.31. Consequently, the Applicant has significantly altered the balance of BMV land in the scheme to favour development. SNTS concludes that at least 50% of the site, possibly more, is Best and Most Versatile.

5.1.32. It is generally accepted that high-quality, productive agricultural land is an asset to the Country, and as such, it is protected in Government Guidance and Policy, including the National Planning Policy Framework (NPPF)7 and the Draft Overarching National Policy Statement for Energy (EN-1). This is reflected in Solar Energy UK's eleven commitments (**Appendix K**) to best practice, which state in their first guideline that, inter alia, developers:

> *"will focus on non-agricultural land or land which is of lower agricultural quality"*

5.1.33. However, the notes supporting the ten commitments go on to state that ground-mounted solar:

> *"Should ideally utilise previously developed land, brownfield, contaminated land, industrial land and preferably agricultural land of classification 3a [sic], 3b, 4, and 5 (in most instances avoiding use of the "Best and Most Versatile" cropland where possible), which is clearly in conflict with industry guidance10, which states that "Ground Mounted Solar PV projects over 50kWp should ideally utilise … … agricultural land preferably of classification 3b, 4 and 5 (avoiding the use of "Best and Most Versatile" cropland where possible)".*

5.1.34. Most recently, the Welsh Minister for Climate Change, Julie James AS and colleagues, had cause to review the recommendation of an Inspector to grant planning permission for a solar park at Gwernigron Farm, St Asaph Denbighshire. The Ministers' review considered, inter alia, whether the development would result in the loss of Best and Most Versatile Agricultural Land, and whether any harm identified in relation to the matters considered would be outweighed by the benefits of the scheme, in particular its contribution to renewable energy generation and combatting the climate change emergency.

5.1.35. The inspector considered that the 37-year period of the development could be regarded in policy terms as temporary [Inspector's Report (IR) paragraph 314, Ministers' Decision Letter (DL) paragraph 63], that the renewable energy generated by the solar farm provided overriding need (IR319) and that overall, with detailed mitigation, harm to BMV and soils could be avoided and the development would accord with Planning Policy Wales policy to conserve BMV agricultural land (IR331).

5.1.36. The Welsh Ministers differed in the planning balance from the Inspector and concluded that the amount of energy generated (IR110 - 47.5MW) did not override the loss of BMV (DL68 - 43.1ha) and that the fact that the land would be unavailable for food production for 37 years (DL69).

5.1.37. The Minister's decision was that the 'fragility of this finite resource' (DL71) with 'significant risk of permanent loss' 'fundamentally conflicts with national planning policy' and planning permission was refused.

Conclusions

5.1.38. The Applicant has underestimated the impact and long-term effects on agriculture affected by the scheme. Contrary to the Applicant's assessment, experts employed by SNTS have concluded that, in fact, at least 50% of Grade 2 and Grade 3a.

5.1.39. As set out in **Section 16** of this representation, the Applicant has failed to demonstrate that there is no alternative to development on Best and Most Versatile (BMV) land. This is not in accordance with NPS EN-1:

> *5.10.15 The IPC should ensure that applicants do not site their scheme on the best and most versatile agricultural land without justification. It should give little weight to the loss of poorer quality agricultural land (in grades 3b, 4 and 5), except in areas (such as uplands) where particular agricultural practices may themselves contribute to the quality and character of the environment or the local economy*

5.1.40. The Applicant has not demonstrated that there is any justification for siting the development on BMV land. On the contrary, they have sought to reclassify the land so that the majority is no longer BMV in order to facilitate development.

5.1.41. Regardless of grade, the land is highly productive.

5.1.42. Consequently, in accordance with the NPPF and emerging Government policy on food security (**Section 12** in this representation) development of the land for non-agricultural use should be rejected.

6. Ecology and Biodiversity Net Gain

6.1.1. SNTS commissioned an expert report by Bioscan, which is **Annex D** to this written representation. Bioscan is one of the longest-established and most respected names in applied ecological consultancy. The report was written by Dominic Woodfield.

6.1.2. Dominic Woodfield is the Managing Director at Bioscan, joining the company in December 1998 as a senior ecologist and becoming a director in 2000. He is a Chartered Ecologist, Chartered Environmentalist and a full member of the Chartered Institute of Ecology and Environmental Management (CIEEM).

6.1.3. Dominic's project experience is comprehensive, ranging from single-species issues on small sites through to EIA coordination on large infrastructure projects and from project inception and scheme design through to implementation, site monitoring, research studies and expert witness work.

6.1.4. As an expert witness, Dominic has a formidable reputation amongst legal and planning professionals, and he has worked with a number of top-rated counsel. He has presented evidence on a diverse range of ecology topics to numerous Section 77 and 78 public inquiries, Transport and Works inquiries, Compulsory Purchase Order inquiries and also to various examinations in public related to Local and Minerals Plans and to nationally significant infrastructure projects (NSIPs).

Relevant Policy

6.1.5. NPS EN-3 at 2.4.2 sets out:

> *Proposals for renewable energy infrastructure should demonstrate good design in respect of landscape and visual amenity, and in the design of the project to mitigate impacts such as noise and effects on ecology.*

6.1.6. NPS EN-1 establishes:

> *5.3.3 Where the development is subject to EIA the applicant should ensure that the ES clearly sets out any effects on internationally, nationally and locally designated sites of ecological or geological conservation importance, on protected species and on habitats and other species identified as being of principal importance for the conservation of*

biodiversity. The applicant should provide environmental information proportionate to the infrastructure where EIA is not required to help the IPC consider thoroughly the potential effects of a proposed project.

5.3.4 The applicant should show how the project has taken advantage of opportunities to conserve and enhance biodiversity and geological conservation interests.

5.3.5 The Government's biodiversity strategy is set out in 'Working with the grain of nature'99. Its aim is to ensure:

● a halting, and if possible a reversal, of declines in priority habitats and species, with wild species and habitats as part of healthy, functioning ecosystems; and

● the general acceptance of biodiversity's essential role in enhancing the quality of life, with its conservation becoming a natural consideration in all relevant public, private and non-governmental decisions and policies.

5.3.6 In having regard to the aim of the Government's biodiversity strategy the IPC should take account of the context of the challenge of climate change: failure to address this challenge will result in significant adverse impacts to biodiversity. The policy set out in the following sections recognises the need to protect the most important biodiversity and geological conservation interests. The benefits of nationally significant low carbon energy infrastructure development may include benefits for biodiversity and geological conservation interests and these benefits may outweigh harm to these interests. The IPC may take account of any such net benefit in cases where it can be demonstrated.

5.3.7 As a general principle, and subject to the specific policies below, development should aim to avoid significant harm to biodiversity and geological conservation interests, including through mitigation and consideration of reasonable alternatives (as set out in Section 4.4 above); where significant harm cannot be avoided, then appropriate compensation measures should be sought.

5.3.8 In taking decisions, the IPC should ensure that appropriate weight is attached to designated sites of international, national and local importance; protected species; habitats and other species of principal importance for the conservation of biodiversity; and to biodiversity and geological interests within the wider environment.

Assessment

6.1.7. As set out in the report in **Annex D**, independent checks have been made on the accuracy of much of the baseline habitat survey work presented in Chapter 8 of the submitted Environmental Statement **[APP-040]** and in the accompanying appendices and drawings. This has enabled an independent review of the robustness and veracity of the impact assessment statements arising, including the claims by the Applicant that the project will, overall, deliver a significant net gain in biodiversity as compared with the present (baseline) situation.

6.1.8. It will be seen from the report that this process has exposed a number of errors. The effect of these errors is to undermine the reliability and robustness of both the impact assessments and the Biodiversity Net Gain calculations presented by the applicant. It is striking that in no example or location have we found the baseline value of a habitat or other ecological resource to have been overestimated – in all examples where we have identified error or omission, such an error has had the effect of underestimating the value of the baseline position.

Dialogue with Applicant

6.1.9. In order to assist the Examining Authority, SNTS have sought to narrow the issues of dispute on ecology by giving the applicant advance sight of our report in **Annex D** to this representation and inviting comment and response on the issues it raises.

6.1.10. Having received the reply in **Appendix H** to this representation, SNTS position has not changed. We maintain that the applicant's submissions on ecology, as encompassed within ES Chapter 8 and the suite of supporting documents,

a) fail to present a sufficiently accurate representation of the baseline ecological interest present within the proposed order limits, and

b) are not, therefore, sufficiently reliable for robust decision-making.

6.1.11. The report in **Annex D** demonstrated that the correction of the errors we have identified calls into question the overall compliance of the scheme with national policy to avoid net biodiversity loss. The applicant has not provided a substantive response on this point. The

ExA is advised that without remedy of such deficiencies, caution should be applied in using the ES to inform decision-making on biodiversity matters.

6.1.12. Similarly, the mitigation and compensation proposals offered in the applicant's submission material, being founded on an incomplete understanding and/or representation of the baseline position and an, at best, optimistic view of the delivery challenges they will face, cannot in their present form be relied upon by decision-makers as a safeguard to avoid the project ultimately giving rise to a significant net loss of biodiversity.

6.1.13. The applicant advised, in its response of 16th September 2022, that further survey work was in hand, implying that it would pick up the identified errors and omissions and that the results would be reported to the examination at Deadline 1. We are not aware of any submission to this effect being made at Deadline 1. Should a submission be made, we will review it and update our position.

6.1.14. The overall conclusion to be reached is, therefore, that it is not possible to determine whether net harm to biodiversity would be avoided by the proposed scheme and that the Examining Authority is, therefore not in possession of sufficient information to determine whether relevant policies and the duties of the NERC Act 2006 placed on the Secretary of State could be met if the scheme were approved.

7. The Horseracing Industry

Introduction

7.1.1. Newmarket is generally accepted in horse racing as being the premier location in the world for the training and breeding of thoroughbred racehorses. The Newmarket racehorse industry underpins the local economy of the area in and around the town and the town itself. Notwithstanding this being the case, horse racing has received limited analysis by the applicant in its application for this scheme. SNTS say this is a considerable flaw, and significant harm has been missed by the applicant in its consideration of the socio-economic impacts of the scheme. Our position is that the scheme will degrade the setting of horse racing in Newmarket (including but extending beyond just landscape) and that this will diminish Newmarket's place on the world stage as the premier location for horseracing. That is a significant planning harm indicating against the making of the DCO.

7.1.2. SNTS and Newmarket Horseman's Group have commissioned a report by Richard Sykes-Popham of Rapleys (which is **Annex E** to this written representation) to assess the impact of the scheme on Newmarket. Aside from that report, the evidence from those members of the racehorse industry in the Examination of the application is crucial. It is those individuals who are best placed to describe the harm that the scheme will cause to the industry and Newmarket as a whole. Such industry experts will speak at Open Floor Hearings and at an Issue Specific Hearing, if held, scrutinising the impact on the horse racing industry in Newmarket.

7.1.3. The remainder of this section is broken up into the following parts:

d. Policy.
e. Headline harms.
f. Report of Richard Sykes-Popham.
g. Other relevant reports.
h. Conclusion.

7.1.4. Much of the detail of this section resides in the report of Richard Sykes-Popham. To avoid duplication, SNTS does not repeat the contents of his report here, but instead draws conclusions from it that we say demonstrates the harm that the scheme will cause to horse racing in Newmarket.

Policy

7.1.5. Horseracing has relevance to Newmarket in the sense of the culture that surrounds the industry and the heritage that goes with Newmarket being a pre-eminent location for horseracing for centuries. Thus, heritage policies explored in the Heritage Impact section of this report are also relevant here.

7.1.6. However, the policy support for maintaining and growing the horse racing industry extends far beyond this. Most crucially, it engages policy on building a strong competitive economy.

7.1.7. All of Part 6 of NPPF is relevant to this issue. However, of particular note are the following paragraphs. First, there is para 81:

> *Planning policies and decisions should help create the conditions in which businesses can invest, expand and adapt. Significant weight should be placed on the need to support economic growth and productivity, taking into account both local business needs and wider opportunities for development. The approach taken should allow each area to build on its strengths, counter any weaknesses and address the challenges of the future. This is particularly important where Britain can be a global leader in driving innovation, and in areas with high levels of productivity, which should be able to capitalise on their performance and potential.*

7.1.8. Paragraph 83 of NPPF then provides:

> *Planning policies and decisions should recognise and address the specific locational requirements of different sectors. This includes making provision for clusters or networks of knowledge and data-driven, creative or high technology industries; and for storage and distribution operations at a variety of scales and in suitably accessible locations.*

7.1.9. There are provisions of the NPPF which specifically deal with supporting a prosperous rural economy. The horseracing industry in Newmarket is structured around the town as its focal point, but the outer and more rural areas are crucial to the industry's continued success. As such, para 84 of NPPF is also relevant:

> *Planning policies and decisions should enable:*

a) the sustainable growth and expansion of all types of business in rural areas, both through conversion of existing buildings and well-designed new buildings;

b) the development and diversification of agricultural and other land-based rural businesses;

c) sustainable rural tourism and leisure developments which respect the character of the countryside; and

d) the retention and development of accessible local services and community facilities, such as local shops, meeting places, sports venues, open space, cultural buildings, public houses and places of worship.

7.1.10. It remains the case that good design policy is crucial to Newmarket, as much of the harm to the industry turns on the scheme's landscape and visual impact and its cultural and heritage impact. Thus, while generally referring to NPPF part 12, of particular note are paras 126 and 130(b). The importance of certain parts of the landscape is directly linked to horseracing (most notably the Limekilns). Thus, NPPF para 174 again remains relevant for its interrelationship with those provisions of Part 6 of NPPF identified above.

7.1.11. Turning from NPPF, NPS EN-1 provides policy on the assessment of the socio-economic impacts of a scheme. Paras 5.12.6 to 5.12.9 provide:

IPC decision making

5.12.6 The IPC should have regard to the potential socio-economic impacts of new energy infrastructure identified by the applicant and from any other sources that the IPC considers to be both relevant and important to its decision.

5.12.7 The IPC may conclude that limited weight is to be given to assertions of socio-economic impacts that are not supported by evidence (particularly in view of the need for energy infrastructure as set out in this NPS).

5.12.8 The IPC should consider any relevant positive provisions the developer has made or is proposing to make to mitigate impacts (for example through planning obligations) and any legacy benefits that may arise as well as any options for phasing development in relation to the socio-economic impacts.

Mitigation

5.12.9 The IPC should consider whether mitigation measures are necessary to mitigate any adverse socio-economic impacts of the development. For example, high quality design can improve the visual and environmental experience for visitors and the local community alike.

7.1.12. Finally, as it is particularly pertinent in the context of the Limekilns, there is a specific policy in the East Cambridgeshire District Council Local Plan that addresses the horse racing industry. Policy EMP 6 provides:

Policy EMP 6: Development affecting the horse racing industry

Any development which is likely to have an adverse impact on the operational use of an existing site within the horse racing industry, or which would threaten the long term viability of the horse racing industry as a whole, will not be permitted.

The explanation to that provision of the plan is given at para 5.7.1:

Given the historical association of the Newmarket area with horse racing, and its importance to the local economy, it is important that development does not have an adverse impact on the industry. Development which harms the long-term viability of operational studs and other racing facilities, or the racing industry as a whole, will be resisted.

7.1.13. In SNTS's view, these policies come together to indicate a strong imperative at both a national and local level to protect the horse racing industry and assist it in its growth.

Headline Harms

7.1.14. The report of Richard Sykes-Popham considered below goes into this issue in considerably more detail, but SNTS believe it is important to set out in a short and digestible way the high-level issues facing the horse racing industry as a result of the proposal. It is necessary

to do this because of the overall failure of the applicant in the DCO application to deal with the scheme in sufficient detail[5].

7.1.15. The horse racing industry is several hundred years old in Newmarket. With royal beginnings, it blossomed over centuries to become the premier location in the world for training and breeding thoroughbred racehorses. Horse racing is crucial to the character of the town. At the macro level, this includes the range of establishments and facilities which make up the equine cluster: the historic gallops that date back to the 18th Century, the numerous stables and stud yards, and the two racecourses. However, even at a micro level one can see how horse racing is key to the town and its surrounds. Indeed, it is notable that the Preliminary Hearings for this meeting were held with the Examining Authority sat in front of a wall-size painting of racing horses[6]. The industry permeates all of Newmarket and the surrounding area.

7.1.16. The equine industry makes a massive financial contribution to Newmarket. Figures from 2014 (**Annex K**) indicate that the total economic contribution of the industry was 200 million, with over 3,000 direct full-time equivalent employees, including significant part-time employment, and over 5000 attributable jobs in the wider area. It is correct to say that not only does the industry permeate all of Newmarket, but the town and its surroundings are heavily dependent on its success.

7.1.17. One essential part of the equine industry in Newmarket is the Limekilns gallops. These gallops are placed due south from the site of Sunnica West A (across the A14 road) and are legendary 18th Century gallops. These gallops are legendary because of their history; they have been used for nothing else for nearly 300 years. They are also legendary because of their quality, with the grass and soil below maintained over that same period to be perfect for the training of horses. Indeed, many winners have trained at the Limekilns over the

[5] There is a limited consideration of the horse racing industry at para 6.13.15-6.13.18 of the Planning Statement for the application **[APP-261]**, along with a reply to policy EMP6 at Appendix B. Limited references appear in a small number of other documents. This is all perfunctory and too quick to dismiss the harm of the scheme. This limited consideration should be contrasted against the extensive analysis of Richard Sykes-Popham. There is simply no proper assessment of the harm of the scheme to the horse racing industry.

[6] Similarly, the Heath Court Hotel, where the first ISH on the draft DCO was held, has an awards cabinet in its reception which includes the winning trophy from the 2022 Derby.

years, including winners of the July Cup at Newmarket, the Gold Cup and Champion Stakes at Ascot and the Epsom Derby, the Arc de Triomphe in France, the Breeders Cup in America and the Melbourne Cup in Australia.

7.1.18. As the ExA has already seen on its site visit to the Limekilns, the scheme will overlook and occupy the sight line of those on the gallops. Because of the topography of the landscape, these are views that cannot be successfully mitigated. The rural landscape would be fundamentally changed from one of rural and agricultural surrounds to one of an industrial solar scheme. The image of the Limekilns, secured in art over the centuries, would be lost.

7.1.19. In considering the harms that come from the scheme, it is crucial to recognise the precarious nature of horseracing. While the Newmarket cluster is pre-eminent, other such clusters exist and compete in Ireland, France and the USA. To maintain its place of pre-eminence, Newmarket requires investment by individuals involved in racehorses, training and breeding. Going further, what is crucial to the success of this high-value industry is an investment by high-net-worth individuals. Such individuals are, because of the very wealth that is crucial to Newmarket, footloose and can invest practically anywhere in the world. They can also invest in any recreation that they choose. Thus, the precarious nature of such investment in Newmarket is twofold.

7.1.20. The history and landscape of Newmarket are two of the key features in attracting those individuals. The royal beginnings and a landscape which has remained broadly unchanged since the beginning of the equine industry in Newmarket set it apart from other locations. The Limekilns, already noted above, are legendary in the sport. Indeed, for those seeking investors, the Limekilns play a critical role. Trainers will take potential investors to the gallops to see the horses exercise. With the setting, the history, and the culture, the nature of Newmarket as the centre of the horseracing world is one which is centred on selling the experience. It is the experience of Newmarket that is sought out by significant investors; it is the experience of Newmarket, of the Limekilns gallops, which will be damaged if the scheme is approved.

7.1.21. While SNTS say the harm to the Limekilns and its surrounds is significant, it does not require us to go so far as to recognise the risk to the horse racing industry. A degrading of the experience in a highly competitive market may make all the difference for high net-worth individuals' decisions to invest. Indeed, it only takes one major investor to choose

not to invest in Newmarket for substantial harm to be caused. Such investors are not identifiable by their very nature of being a footloose investor. It is imperative that all is done to avoid causing potential harm to the major benefits that the horseracing industry brings to the area by avoiding and not imposing upon it harmful challenges and changes outside its control.

7.1.22. It is correct to say that so many of the other harms identified as arising from the scheme go further to degrade the experience that makes up Newmarket as the centre of the horse racing and training world. Noise and traffic pose a risk for valuable horses, both in their travel between stables and gallops also while they are in their yard. Indeed, in the context of breeding and training of thoroughbred horses, due to the vulnerable nature of horses, construction noise will be a significantly greater harm than would arise to a normal user on an ordinary agricultural unit. This is but one example of the special nature of Newmarket and its added susceptibility to harm.

7.1.23. Finally, it is important to engage with the idea that the harm is temporary because the scheme is temporary. For the reasons expressed elsewhere, SNTS does not accept this scheme is temporary, as it will exist for two generations. But, even if it is temporary, the harm that it creates will not. Once Newmarket is knocked down from its position as one of the most significant horse racing locations in the world, it will be very difficult (likely impossible) to return. The scheme will leave the equine industry in decline with little route to recovery.

7.1.24. In addition, it is important to note the additional harm of even the construction phase of the scheme. Two years is a significant period of time in the horseracing industry. If, as is likely, investment reduces because of the appearance of the local area as a building site, harm will eventuate. That lack of investment will cause significant difficulties for the various industries committed to horses locally. Two years could be all it takes for the decline in the industry in Newmarket to begin. And this is before the scheme is in place for 40 years (with 15 years being the suggested period for any foliage mitigation to take effect).

Report of Richard Sykes-Popham

7.1.25. Horseracing in Britain is of major significance; historically, culturally, economically and in pure sporting terms. There is no location in the world comparable to Newmarket in terms

of scale, diversity and concentration of its horseracing operations. The industry is worth £208m annually to the local economy alone. The risk of urbanisation is one of the most significant threats to the horseracing industry. High net worth investors are mostly footloose in terms of geography and choice of investment locations.

7.1.26. The £208m is made up as shown in Table 2:

TABLE 2

	Economic contribution £ (direct, indirect and induced)	Employment (direct only)	Employment (with multiplier)
Trainers	96,816,000	2,020	
Stud farms	81,166,000	814	
Horseracing institutions	9,824,000	119	
Vets and scientific institutions	6,508,000	172	
Horse transporters	1,036,000	35	
Visitors to Newmarket	8,816,000	85	
Capital expenditure	3,865,000	40	
Totals	**208,031,000**	**3,285**	**8,500**

Source: SQW survey

Source **Annex K**

7.1.27. Direct jobs plus temporary event-related employment created a direct expenditure on wages totalling £79m in 2014, leaving £128.5m of indirect and induced effects. These indirect and induced benefits are from the area around Newmarket with dependent businesses such as stud farms, training establishments, suppliers, and the benefit from wages earned being spent in the area.

7.1.28. The nature of the high-net-worth investment on which the industry relies also poses a threat. The horseracing industry has a significant physical presence in Newmarket (as opposed to its operational presence, the presence and activity of people, animals and vehicles associated with the industry). Some of the physical assets in and around Newmarket used by the industry lie close to nearby development sites. The Limekilns and Water Hall are of considerable significance to the Newmarket community. The Railway Field is of significance by virtue of its long history, for location, see **Figure 2.**

7.1.29. Arran House Stud and Snailwell Gallops (**Figure 2**) are of significance for their hillside location and heathland character. The Limekilns development would have a significant overall impact on each of the horseracing industry assets identified. It would alter the nature of the views from the site from rural to semi-industrial and weaken the relationship between Newmarket, the horse racing industry and the surrounding countryside. There is consensus among those in the horseracing industry that loss of and/or reduced investment would be a very real possibility if the proposed development were to go ahead. This could lead to a reduction in the number of horses to train and breeding and sales activities as well as an impact on local businesses.

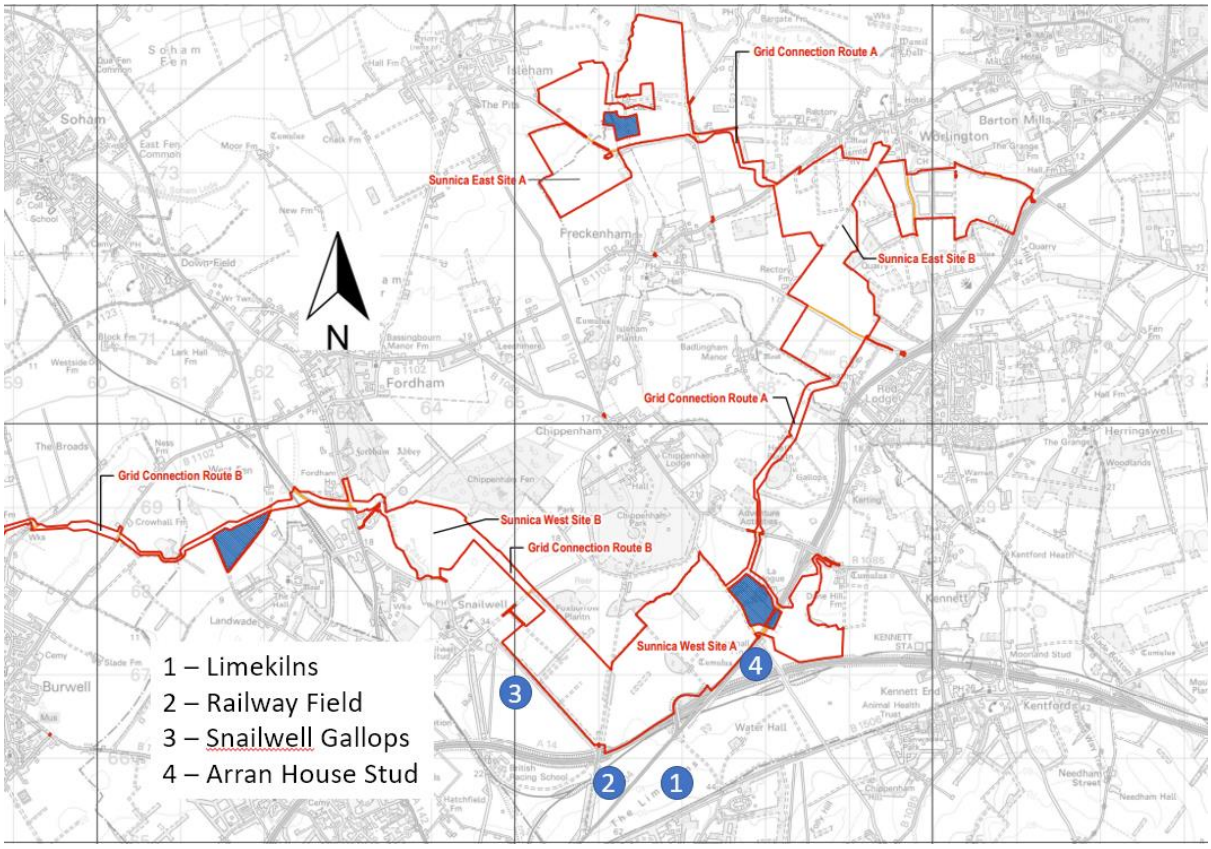


FIGURE 2 - KEY LOCATIONS

7.1.30. The Limekilns are an essential component of the living cultural heritage that is Newmarket. The proposed development would alter the course of their heritage evolution forever. Noise, busyness, movement and activity during the construction phase, glint and glare, and noise during the operational phase would be problematic for the highly tuned thoroughbred horses that are trained there. The proposed development would cause social and economic harm to the horseracing industry, most notably through its impact on

employment and tourism. It has the potential to reverse some or all of the gains made by the industry over the last 30 years and could lead to a decline in its success. Even a blip in results at one of Newmarket's largest racing operations, Godolphin, resulted in fewer horses to train and the closure of one of its yards in 2014.

7.1.31. The horseracing industry in Newmarket holds major significance within and outside the area. Even a small impact has the potential to cause significant harm. It would be completely illogical, indiscriminate, and careless to imperil such a centre of cultural significance and value.

Other Reports

7.1.32. The Thoroughbred Breeders Association published a report in 2018 on the contribution of thoroughbred breeding to the UK Economy. This report is included in **Annex J** to this representation.

7.1.33. Great Britain's thoroughbred industry is recognised globally for its world-class breeding, training, and racing. It produces the highest proportion of thoroughbreds in the world's top rankings of any breeding country. It is also home to the world's most illustrious race meetings.

7.1.34. Great Britain's favourable breeding environment, high standard of equine welfare laws, excellent infrastructure, and highly skilled staff make it one of the best countries in the world in which to establish a breeding operation. As a result, many global breeders locate in Great Britain, injecting substantial foreign investment into the economy and producing well-paid jobs both in breeding and supporting industries.

7.1.35. The report estimated that in 2017 the thoroughbred breeding industry contributed £427m to the British economy, supporting over 19,000 jobs. Approximately 87% of the direct economic impact accrued to the rural economy.

7.1.36. The breeding industry underpins the performance of several closely related businesses including thoroughbred auction houses, owners, racecourses, racing media firms and gambling firms. All of which are dependent on GB breeding industry output for their revenues.

7.1.37. However, despite sustaining the entire racing industry, and its sizeable economic contribution in terms of jobs and output, the future of GB breeding is at risk.

7.1.38. Approximately 20,000 individual runners are required to sustain the GB race calendar. GB bred horses are the main source of supply, accounting for close to 50% of all horses in training and racing. Should the economics of breeding continue to worsen or an adverse economic shock (e.g. recession) occur, many small to medium sized breeders will no longer be able to sustain their operations.

Conclusions

7.1.39. That Newmarket is of local, regional, national and, in some cases, international significance because of its longstanding and inextricable association with the horseracing industry is significant. Suffolk and Cambridgeshire are privileged to be home to the headquarters of horseracing and the de-facto home of horseracing.

7.1.40. It is likely to be more vulnerable today than at any point in recent history due to the threats to it and pressures on it, particularly from development. The impact of the Sunnica development creates a threat to horseracing from:

a) Loss of investment;
b) A resulting contraction of the industry;
c) Loss of some or all of the gains made in the last 30 years during which Newmarket has reasserted itself as the preeminent racehorse breeding, training and racing centre in the world;
d) The risk of a downward trend that could take many years to halt and reverse.

7.1.41. The significance of the nature found in Newmarket and its horseracing industry is rare and it goes without saying that it must be valued and protected.

7.1.42. It is for this reason that the significance specifically identified by the local development plan making process over time, and that the protection of its significance has become an established objective of local land use planning. The key policy, which is found in the East Cambridgeshire Local Plan, states unequivocally that development that would threaten the long-term viability of the horseracing industry will not be permitted.

7.1.43. Further, although subservient to the East Cambridgeshire local plan in terms of the weight to be attached to it in this case, the West Suffolk Local Plan, also offers a high level of protection for the horseracing industry and stipulates that the benefits of development must significantly outweigh the harm the development would cause for it to be permitted.

7.1.44. Had the proposed development's impact been assessed by the applicant it would have been shown to be significant and, at the very least, it would have been shown to threaten the long-term viability of the industry.

7.1.45. SNTS says that the long-term viability of the horseracing industry will be threatened by the proposed development and therefore that, in accordance with very clear direction of the relevant local planning policy, development consent should not be granted for it.

8. Impact on Local Communities

Introduction

8.1.1. Due to its size and shape, the scheme will impact local residents in and around Newmarket over a wide area. It will change how local residents live in their own villages and towns, and how they interact with other villages and towns within the area. SNTS say that there is significant harm to local residents across the scheme which is difficult, if not impossible, to mitigate. Many of these harms are directly addressed here: harm to village life; harm to sense of place; harm to businesses; harm to employment. However, the impact on local residents goes far beyond that, and ties in with many of the other problems identified in the scheme in these Written Representations. Overall, an important negative of the scheme is it takes far more from local residents than they gain, over a period which (from the perspective of local residents) should properly be characterised as permanent.

8.1.2. The remainder of this section is broken down into the following parts:

i. Policy.
j. Harm to local residents generally.
k. Outline Skills, Supply Chain and Employment Plan.
l. Evidence in WRs, at OFHs and at ISHs.
m. Conclusion.

Policy

8.1.3. There are various features of planning policy important to the harm that is done to residents around developments. This includes the following paragraphs from NPPF (many of which centre on Part 8 of NPPF). First, there is para 92:

> *Planning policies and decisions should aim to achieve healthy, inclusive and safe places which:*
>
> *a) promote social interaction, including opportunities for meetings between people who might not otherwise come into contact with each other – for example through mixed-use developments, strong neighbourhood centres, street layouts that allow for easy pedestrian and cycle connections within and between neighbourhoods, and active street frontages;*

[…]

c) enable and support healthy lifestyles, especially where this would address identified local health and well-being needs – for example through the provision of safe and accessible green infrastructure, sports facilities, local shops, access to healthier food, allotments and layouts that encourage walking and cycling.

In respect of social, recreational and cultural facilities and services, NPPF provides at para 93:

To provide the social, recreational and cultural facilities and services the community needs, planning policies and decisions should:

a) plan positively for the provision and use of shared spaces, community facilities (such as local shops, meeting places, sports venues, open space, cultural buildings, public houses and places of worship) and other local services to enhance the sustainability of communities and residential environments;

[…]

c) guard against the unnecessary loss of valued facilities and services, particularly where this would reduce the community's ability to meet its day-to-day needs;

d) ensure that established shops, facilities and services are able to develop and modernise, and are retained for the benefit of the community; and

e) ensure an integrated approach to considering the location of housing, economic uses and community facilities and services.

8.1.4. Separate provision in Part 8 of NPPF is also made for the issue of open spaces and recreation. These policies are also pertinent to the section on recreation (addressed further below). Paragraph 98 provides:

Access to a network of high quality open spaces and opportunities for sport and physical activity is important for the health and well-being of communities, and can deliver wider benefits for nature and support efforts to address climate change. Planning policies should be based on robust and up-to-date assessments of the need for open space, sport and recreation facilities (including quantitative or qualitative deficits or surpluses) and

opportunities for new provision. Information gained from the assessments should be used to determine what open space, sport and recreational provision is needed, which plans should then seek to accommodate.

8.1.5. Aside from policies directed specifically to the health and safety of communities, the broader policy on ensuring good design is also important from the perspective of local communities (see e.g. para 126 NPPF). Of note in the policies on considering the area alongside the development, para 130 provides:

Planning policies and decisions should ensure that developments:

a) will function well and add to the overall quality of the area, not just for the short term but over the lifetime of the development;

b) are visually attractive as a result of good architecture, layout and appropriate and effective landscaping;

c) are sympathetic to local character and history, including the surrounding built environment and landscape setting, while not preventing or discouraging appropriate innovation or change (such as increased densities);

d) establish or maintain a strong sense of place, using the arrangement of streets, spaces, building types and materials to create attractive, welcoming and distinctive places to live, work and visit;

[…]

8.1.6. Finally, the provisions concerning and enhancing the natural environment are important here. Residents of villages and towns around the scheme have chosen to live in rural locations, and there is an important link between that setting and the enjoyment of their home (including the work they do and the recreation they have). Thus, the provisions of Part 15 of NPPF are relevant including particularly NPPF para 174(b).

8.1.7. NPS EN-1 sets out various relevant policies also. Again, those policies addressed in the introductory part of this Written Representations on good design are relevant. However, the policy also goes on to consider impact on the '*health and well-being ("health")*' (NPS EN-1 para 4.13.1) of the population. Such impacts can be both direct and indirect.

8.1.8. Paragraph 4.13.3 addresses the issue of direct impacts:

> *The direct impacts on health may include increased traffic, air or water pollution, dust, odour, hazardous waste and substances, noise, exposure to radiation, and increases in pests.*

8.1.9. Paragraph 4.13.4 then goes on to consider indirect health impacts more broadly:

> *New energy infrastructure may also affect the composition, size and proximity of the local population, and in doing so have indirect health impacts, for example if it in some way affects access to key public services, transport or the use of open space for recreation and physical activity.*

Harm To Local Residents Generally

8.1.10. In a sense, the harm to local residents is generally those harms that are recognised throughout the text of this Written Representation. Thus, when a harm to landscape or visual amenity is identified, it is most typically a local resident's enjoyment of the landscape that is most persistently and seriously harmed. Thus, this section in part identifies a prime subject to experience the harm (or, the impact of the harm caused to e.g. the landscape).

8.1.11. However, it is crucial for the ExA to consider why those harms are particularly great for local residents, especially local residents living in the small towns and villages surrounding the scheme. The residents of these towns have, broadly, either lived in these towns all of their lives, or have moved to these towns to enjoy a rural lifestyle. Of course, this will not be blanket correct, but SNTS is of the view this represents a majority experience. When the Written Representations, OFHs and ISHs take place, SNTS is of the view that the evidence provided will support this interpretation (and we will comment on that evidence at the relevant time).

8.1.12. For such people, there are important features of the setting of their home that is taken away by the scheme. Most prominently, there is the industrialisation of the setting of their home and rural villages. This is an issue that permeates much of their life: currently when they walk, cycle, ride or drive to another village or town, they are met with green fields and a rural atmosphere. This is part of the experience of travelling to meet friends and family in other rural towns and villages, the connection to the land. For many who have lived here for generations, that is how their parents travelled, and their parents' parents.

There is both a connection with history as well as community. When the solar panels and BESS are installed, this rural setting will end.

8.1.13. As was noted in the section on cumulative impact, for some this will present as a sense of surrounding. Indeed, it is no response for the applicant to say that some green fields remain, the important point is the overall sense of the setting. The sense of place, local character and history which is reflected in the NPPF. While residents will not be constantly confronted with solar panels and an industrial landscape, they regularly will be. The regularity will give the sense of change; the sense that wherever residents turn, there has been a loss of the rural setting. This is a degrading of the overall quality of the area; a destruction of the established sense of place, and the loss of local character and history.

8.1.14. It is also no response to say the scheme is temporary. Indeed, the scheme is not temporary. If one considers the strict planning sense of a temporary structure (for the Town and Country Planning Act 1990), it is certainly true that this is not temporary[7]. However, the point goes far further than that. For the people who live local to the scheme, they will see the scheme present for in excess of 40 years. This is two generations of people whose sense of place will be dominated by the scheme. A child born on the day that construction commences on the DCO will be in their mid-40s by the time the scheme is proposed to be removed. Not only a resident's children, but their children's children will see the scheme in place.

8.1.15. And the scheme is not being built in the form of a structure that is inherently temporary. It is not a marquee or a portable building. Steel frames will be driven into the ground, concrete laid, and foliage permanently removed. The development is only temporary in the sense that it is one day planned to be decommissioned; it will be in operation for over a generation and for anyone over a certain age, then in all probability they will not see it decommissioned in their lifetime. The ExA should therefore give little weight to the "temporary" nature of the scheme. A planned operational life of 40 years is in effect permanent in terms of its impact on local communities.

[7] Skerritts of Nottingham Ltd v Secretary of State for the Environment, Transport and the Regions (No.2) [2000] 2 PLR 102.

8.1.16. And this is before one considers the purported temporary nature of the scheme versus the very permanent nature of the harm. This is a point already made in the context of the horse racing industry, but the matter bears repeating here. For those towns and villages for whom the sense of place is destroyed by the scheme, that destruction will be permanent. The links to other villages, lost because of the lack of desire to walk public rights of ways and roads because of (1) construction traffic; (2) noise; (3) appearance of the solar panels and industrialisation of the landscape; and (4) concerns about BESS (among a host of other reasons) will not recover. The applicant cannot provide an outline plan for the repairing of the broken links between communities.

8.1.17. Sense of place is a crucial aspect of a person's wellbeing; their pride in their home. The scheme will harm that sense of place and likewise that person's wellbeing. Planning policy aims to protect that sense of place. The scheme is not designed so as to effectively achieve such protection.

Evidence in Written Representations, OFHs, and ISHs

8.1.18. Harm to local individuals is, necessarily, something that locals that are part of this Examination process can speak to most pertinently. The areas around the scheme are their lives and their communities, and their voices are critical. They can speak to these issues in their Written Representations, and at OFHs and ISHs on this specific issue. Similarly, the Parish Councils which represent the villages and small towns around the area are engaged with the Examination. Thus, again it would be expected that evidence pertinent to these issues will be advanced by them in their Written Representations.

8.1.19. With this in mind, SNTS notes that the evidence due to come in at the Written Representation stage will be particularly pertinent to this issue. SNTS will expand more on the specifics of the case at the comments on WRs stage, considering that this will provide the best opportunity to collate and bring together the experiences and views of locals and local communities across the area.

8.1.20. While these specifics are, thus, put off until after Written Representations are made, this does not in any way detract from the more general points concerning the scheme advanced above.

Conclusion

8.1.21. The harm to local communities is significant. It arises from the intrinsic nature of the scheme (its size, shape and nature) but also from the impact it has on amenities in the local area. These are harms that are difficult to mitigate and that people will have to permanently live with. These factors should weigh heavily against the scheme in the planning balance.

9. Skills, Supply Chain, and Employment

9.1.1. This is a response to the Outline Skills, Supply Chain and Employment Plan **[APP-268].**

Local Community Profile Page ii

9.1.2. This refers to the study area having higher levels of unemployment and lower levels of economic activity.

9.1.3. For East Cambridgeshire this is not correct. The current profile for East Cambs is:

Labour Supply

Employment and unemployment (Jul 2021-Jun 2022)

	East Cambridgeshire (Numbers)	East Cambridgeshire (%)	East (%)	Great Britain (%)
All People				
Economically Active†	50,600	87.5	80.3	78.6
In Employment†	47,600	81.9	77.9	75.5
Employees†	39,800	69.5	68.3	66.0
Self Employed†	7,800	12.4	9.4	9.2
Unemployed (Model-Based)§	1,100	2.2	3.0	3.8

Source: Office for National Statistics (NOMIS)

9.1.4. This shows that East Cambridgeshire has a lower level of unemployment than the East of England and GB.

9.1.5. For West Suffolk the picture is similar:

Labour Supply

Employment and unemployment (Jul 2021-Jun 2022)

	West Suffolk (Numbers)	West Suffolk (%)	East (%)	Great Britain (%)
All People				
Economically Active†	88,000	76.9	80.3	78.6
In Employment†	87,400	76.4	77.9	75.5
Employees†	75,200	66.9	68.3	66.0
Self Employed†	12,200	9.5	9.4	9.2
Unemployed (Model-Based)§	2,500	2.8	3.0	3.8

Source: Office for National Statistics (NOMIS)

Summary of Employment Benefits

9.1.6. Although this refers to job creation it is not clear how many of the jobs needed to construct, operate, and decommission the project will be entirely new. Construction is highly itinerant and most skilled construction workers move from site to site. Major contractors provide site accommodation and construction workers and to some degree construction management live away from home during the working week.

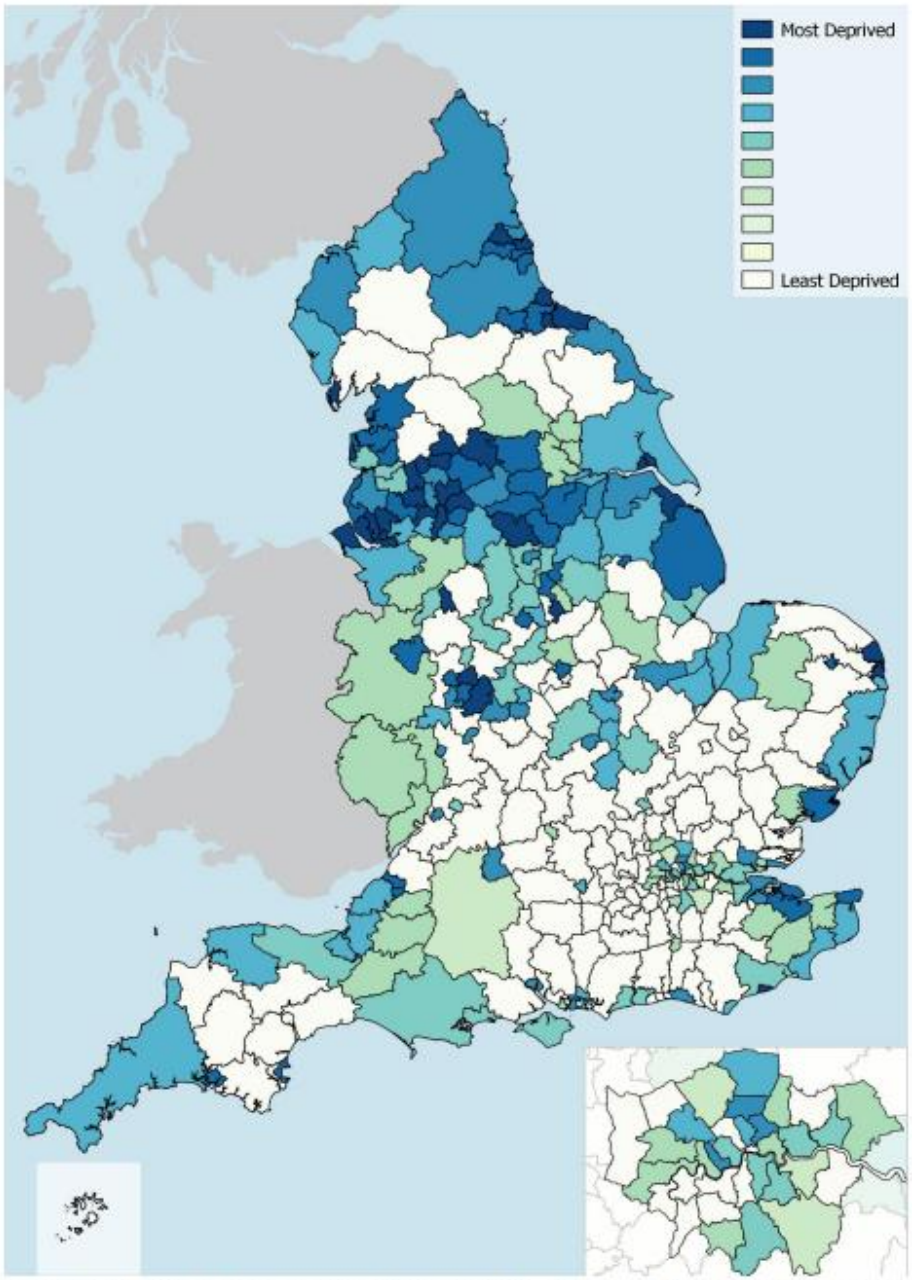
9.1.7. The contribution of transient employment during construction and decommissioning should be ignored. It is unlikely that construction and decommissioning will create a new jobs base in an area so focussed on racing and dependent employment.

9.1.8. The economic impact of horse racing on Newmarket and the surrounding area is presented in **Annex K.** This estimated in 2014 that 8500 direct and indirect jobs in the area are dependent on racing. The impact on racing is discussed in **Section 7** and the Applicant has not assessed the impact of the development on racing.

9.1.9. SNTS says that employment benefits during construction and decommissioning are only transient, and in the case of skilled jobs likely to use skills from outside the area. As the charts show, there is not a local manufacturing, construction, and electrical skills base due to the lack of industry to support it. The Applicant has underestimated the agricultural employment displaced by the scheme and assumed that this is only related to BMV land, and that no jobs will be lost despite 981 Ha of productive agricultural land being lost to the scheme.

9.1.10. The gain of jobs during operation is a poor compensation for the impact of this development on the local area and loss of jobs. In any case this gain is only temporary. The longer term impact of such a major transformational development will last long beyond decommissioning of the scheme.

Map 2: Distribution of the Index of Multiple Deprivation (IMD) 2019 by local authority based on the proportion of their neighbourhoods in the most deprived decile nationally



Note: there are 123 Districts with no Lower-layer Super Output Areas in the most deprived 10 per cent of areas. These areas score zero on this summary measure and are shown in the least deprived decile.

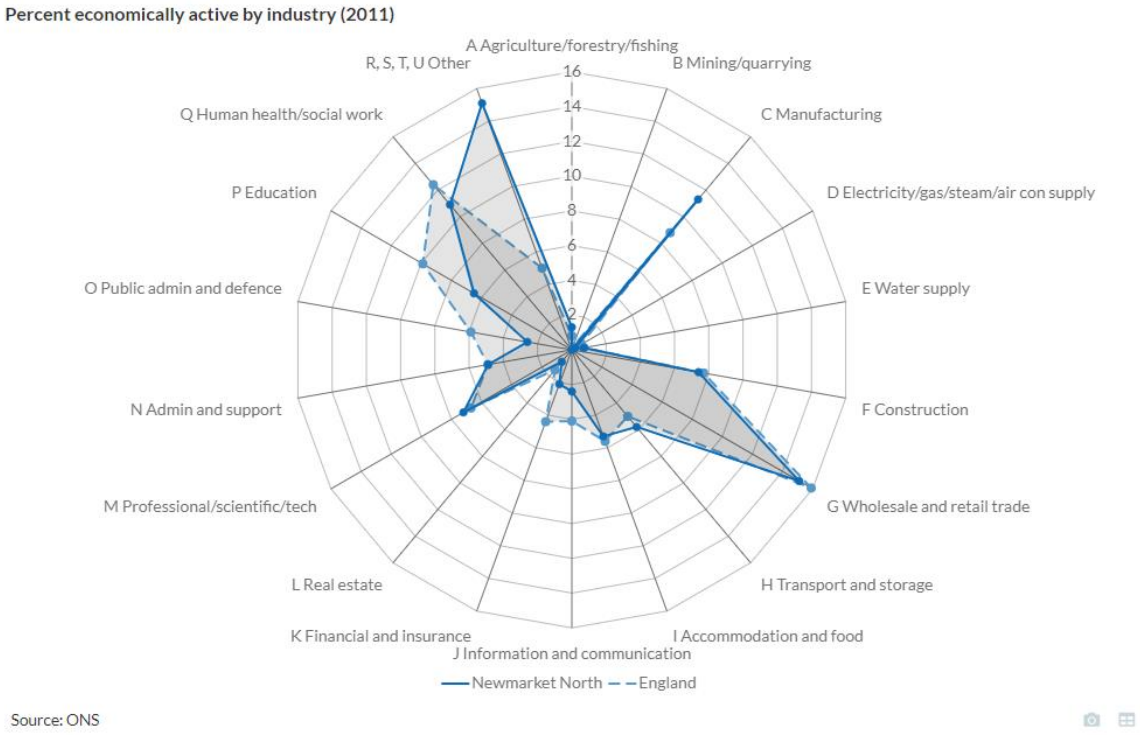
12 The English Indices of Deprivation 2019 - Statistical Release

Source

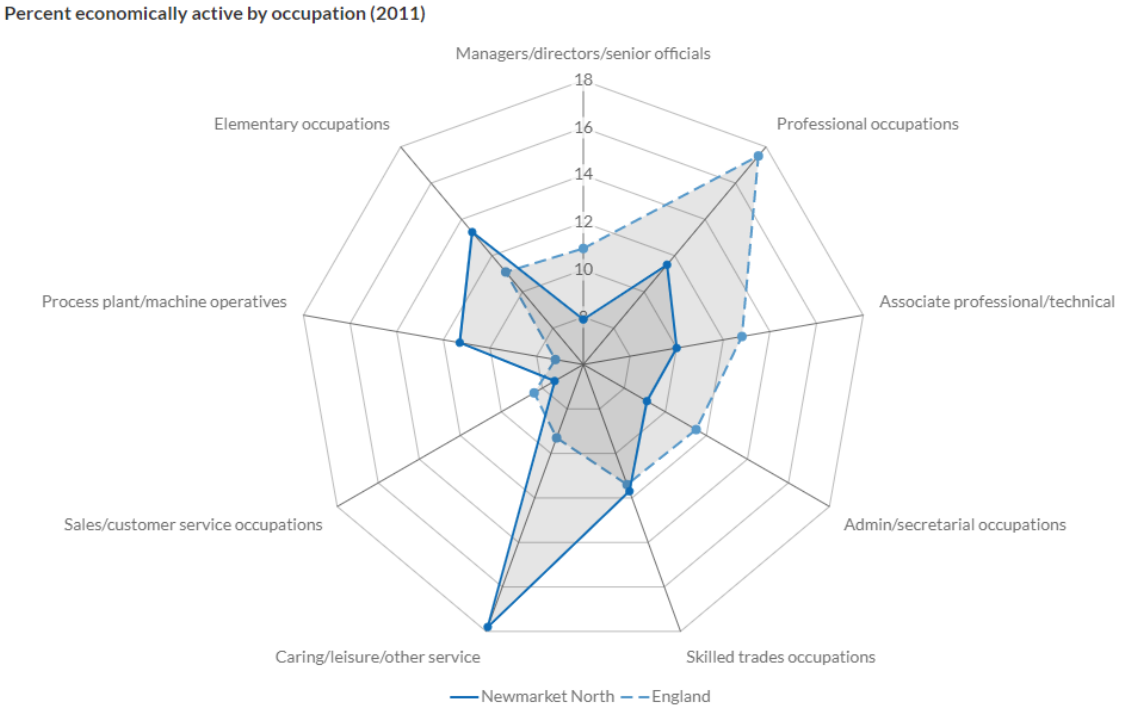
https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/835115/IoD2019_Statistical_Release.pdf

9.1.11. Although indices of deprivation are higher towards the north the immediate area around the planned development is one of the least deprived areas in the UK.

9.1.12. In terms of Newmarket local employment is skewed towards racing and retail/wholesale, creating a narrow employment base with low levels of other economic activity.

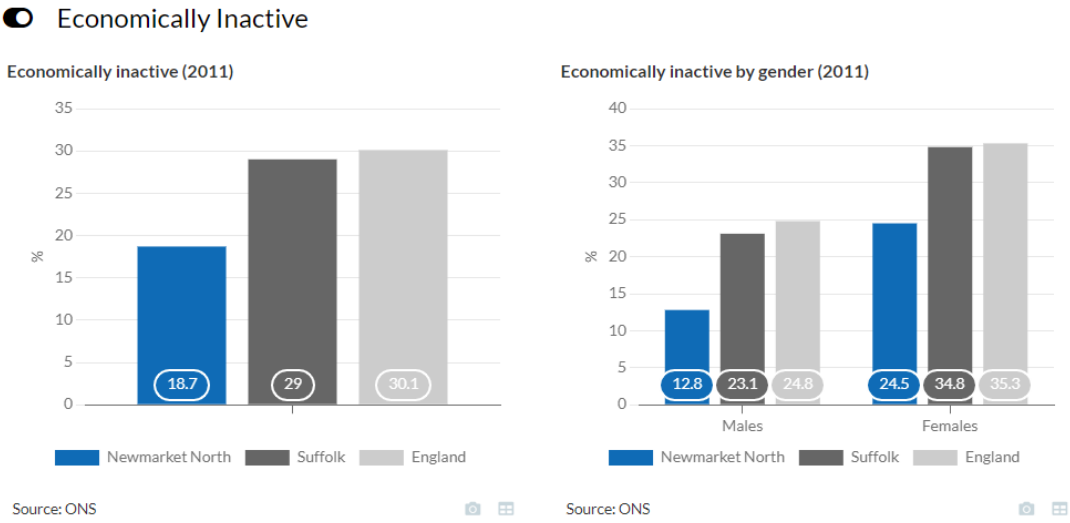


Source: ONS and Suffolk Observatory



Source: ONS and Suffolk Observatory

9.1.13. Newmarket has lower levels of economic inactivity than Suffolk and the East of England, but these are concentrated in just a few sectors, making them particularly vulnerable to change.



Source: ONS and Suffolk Observatory

9.1.14. In the ES chapter on Socio Economics and Land Use **[APP-044]** the claim is made that there will be no agricultural job losses as part of the scheme (12.8.43). It is difficult to reconcile this with the total area to be diverted to solar generation. The basis for this assessment appears to be that only BMV has been considered (37.3 Ha) and that the sensitivity of the land to change (grades 3b/4) is low and "no agricultural land resource" is lost. There is also an assumption that farming enterprises affected by the scheme will be able to divert labour to other land with no loss of jobs (12.8.43). Further that diversion to solar creates diversification for farming enterprises with no loss of income. A total of 2FTE are stated to be related to agriculture and these are alleged to be non-permanent.

9.1.15. SNTS says that the Applicant has wrongly reclassified the land to show a lower proportion of BMV and that the land locally is productive and a source of employment.

9.1.16. A Farm Budget (**Appendix C**) has been prepared by a local farmer for a 981 Ha theoretical farm (the area consumed by Sunnica) using an established 8-year rotation and actual yields achieved on local farms.

> *Labour - £340,284 – the average farm worker earns around £47k = 7.2 say **8** full time employees*
>
> *Casual labour - is not included in this figure. Estimated casual labour would be required for:*
>
> *Wheat harvest 3 people for 4 weeks*
>
> *Potato harvest 10 people for 9 weeks*
>
> *Onion harvest 6 people for 6 weeks*

9.1.17. Contrary to the statement by the Applicant that there are only 2 agricultural jobs at risk there are in fact 8 full time and up to 10 casual jobs would be at risk. SNTS says that these jobs will be lost.

10. Impact on Recreation

10.1.1. Impacts on recreation are a specific feature of the impact on local communities. However, it is carved out separately because the harm of the scheme is, in SNTS's view, particularly notable. By changing the setting of many of the villages surrounding the scheme, public rights of way will be degraded, and the recreational desirability of the natural environment will decline considerably. It should also be remembered that recreation has a direct relationship with the more general enjoyment of place for locals, but it is also pertinent to tourism in the area and how holidaymakers enjoy the area. Thus, harm to available recreation can be financially as well as socially and culturally negative.

10.1.2. The remainder of this part is set out in the following sections:

a. Policy.
b. Harm to recreation generally.
c. Specific evidence, including in WRs, at OFHs and at ISHs.
d. Conclusion.

Policy

10.1.3. Many of the policies identified above are equally pertinent to the area of recreation. They are not repeated here. Among a host of other policies, this includes NPPF para 130. In respect of rights of public rights of way particularly, para 100 of NPPF provides:

> *Planning policies and decisions should protect and enhance public rights of way and access, including taking opportunities to provide better facilities for users, for example, by adding links to existing rights of way networks, including National Trails.*

10.1.4. In respect of the NPSs, public rights of way appear primarily in the draft NPS. Draft NPS EN-1 notes that '*[p]ublic rights of way, National Trails and other rights of access to land are important recreational facilities*' (para 5.11.23). Draft NPS EN-3 deals with the issue of public rights of way (particularly in the context of solar) more clearly at para 2.49.5:

> *Considering the likely extent of solar sites, it is possible that proposed developments may affect the provision of local footpath networks and public rights of way. Public rights of way may need to be temporarily stopped up to enable construction; however it should be the applicant's intention, where practicable and safe, to keep all public*

rights of way that cross the proposed development site open during construction and to protect users where a public right of way borders or crosses the site. Developers are encouraged to design the layout and appearance of the site to ensure continued recreational use of public rights of way, where possible during construction, but in particular across the operation of the site, and to minimise as much as possible the visual outlook from existing footpaths. It should be noted that sites may provide the opportunity to facilitate enhancements to the local footpath network and the adoption of new public rights of way through site layout and design of access.

Harm to recreation generally

10.1.5. At the highest level, the changes to setting throughout the area will influence and (so say SNTS) damage the use of recreational open areas. Sunnica have produced various documents indicating the zone of theoretical visibility for the sites (including for horses) [**REP1-008]** to **[REP1-014]**. Simply put, these documents indicate the sizeable amount of the local area from which the scheme will be visible. The scheme represents an industrialisation and degradation of the local landscape. Thus, the evidence suggests that this will harm the recreational use of the area around the scheme as people feel it is no longer rural. This is an overall negative which should weigh in the planning balance.

10.1.6. While dealt with somewhat in outline in the preceding section, the harm to public rights of way by the scheme is considerable. One can quickly get a handle of the extent of the damage to these ways by comparing the parameter plans **[APP-135]** and **[APP-136]** with the map of public rights of way within the scheme **[APP-240]**. To take three examples:

a. Public right of way 204/5: on its north-eastern side will have the solar panels making up W03 and W04 in addition to the EC05 mitigation site.
b. Public right of way W-257/003/0: on its north-eastern side will have solar panels making up E19-E22.
c. Badlingham Lane (U6006): on both sides will have a run of solar panels at E12-E16 before passing the ECO3 mitigation site.

10.1.7. These are far from the only examples where public rights of way will be enclosed on one or both sides by solar panels. However, the introduction of the solar panels and other industrial infrastructure such as substations and BESS will fundamentally change the setting of these rights of way. This is particularly so on the Sunnica East site as there is less

shielding woodland and mitigation measures. Regardless, glimpsed views and enclosure of public rights of way to hide solar panels will degrade the quality of the public rights of way. Indeed, the concern of bringing horses (which can be easily spooked) alongside solar panels may be enough to make users of bridleways avoid using such routes all together.

10.1.8. The change of the setting to one of industrialisation neither protects nor enhances public rights of way. Visual overlooking will be a feature of many of the rights of way because the landscape in much of this area is not enclosed or blocked by woodland. Thus, whether mitigated or unmitigated, many of the public rights of way face an incongruous change to their setting.

10.1.9. Fundamentally, these changes will reduce the use of these public rights of way. This will have an impact on tourism as it will reduce the desirability of the area for recreational uses (along with the more general change to the setting). But it will also reduce the use of such ways by residents. This can be seen below in the specific discussion of the Limekilns (which has permissive use) but also SNTS expects such evidence to be part of the local community evidence. Simply, people will use rights of way less if the setting is degraded. And, as was noted in the communities section, the drop in use of connections between villages will degrade the local sense of community.

10.1.10. To pick up specifically on U6006 Badlingham Lane (discussed further below in the context of traffic). The issue of this route has been identified also in the LIRs, and because of its history and likely connection to the Icknield Way, the placing of solar panels on either side of the way will be a significant and negative addition to the setting. This is not just a public right of way but is a heritage asset and this needs to be responded to appropriately.

10.1.11. To also pick up specifically on the Limekilns, it is notable that the combined ZTV **[REP1-013]** indicates that one of the few places from which both sites are visible to a visual receptor is at the Limekilns. Considering the significant harm that the scheme will have on this important landmark (important from both a horse racing, but also a recreational perspective), it particularly problematic that this is the case.

10.1.12. It is also noted that draft NPS EN-3 suggests that public rights of ways should be kept open even in the construction phase where practicable and safe. SNTS notes that there is a rolling scheme of closures and queries whether more could have been done to keep such ways open.

Social Value

10.1.13. The social value of some of the recreational footpaths affected by the Sunnica proposal has been calculated using the Historic England - Outdoor Recreation Valuation tool (ORVal). The examples are:

- Footpath W-398/003/0 River Lark, Isleham. ORVal estimates 44,845 visitors per year, Estimated recreational value £176,063 per year
- Footpath W-257/002/0 and bridleway W-257/002/X. Mortimer Lane, Freckenham. ORVal estimates 6,079 visitors per year and recreational values of £13,668 per year.
- U6006 Badlingham Lane, Freckenham-Worlington. ORVal estimates 38,925 visitors per year and a recreational value of £186,978 per year.
- Blanding's Farm footpath W-257/003/0, Freckenham. ORVal estimates the Welfare Value of this path at £12,822 per year and visitor numbers at 5,061 per year.

10.1.14. The total recreation value from these four paths alone is £389,531 per year, with users estimated at 94,910 per year. This should be compared with the income per year of the parish councils affected of

- Isleham PC - £109K budget 2022/23
- Snailwell PC - £5.7K received 2021/22
- Worlington - £17.5K precept (Street lighting bills around £2.5K, budget £3k for replacement units)
- Chippenham PC - £10.6K received 2021/22
- Freckenham PC - £14.4K budget 2022/23 (Street lighting bills around £3.7K)

10.1.15. Consequently, the recreational value of £389,531 dwarfs the relevant parish council income of £157.2K.

Specific evidence, including in WRs, at OFHs and at ISHs

10.1.16. Attached to this Written Representation in **Appendix J** are a number of statements provided by those who use the Limekilns for recreation. Aside from its crucial horse racing credentials, from lunchtime onwards, there is access granted to the public to enjoy walking on the Limekilns.

10.1.17. The description from those who enjoy the Limekilns is of enjoying the history of the place and the exceptional views of the countryside as they walk. Both the legendary status of the Limekilns and the ability to look far into the countryside are appealing to the people who walk this land. It is one of the few elevated walks. The scheme will remove these views from the enjoyment of this land for the reasons that have been expressed above several times. It is clear from the statements provided that this will represent a significant downgrading of the quality of the recreational use of the Limekilns.

10.1.18. Harm to recreation is, necessarily, something that locals that are part of this Examination process can speak to most pertinently. The areas around the scheme are their lives and their communities, and their voices are critical. They can speak to these issues in their Written Representations and at OFHs and ISHs on this specific issue. Similarly, the Parish Councils, which represent the villages and small towns around the area, are engaged in the Examination. Thus, again it would be expected that evidence pertinent to these issues will be advanced by them in their Written Representations.

10.1.19. With this in mind, SNTS notes that the evidence due to come in at the Written Representation stage will be particularly pertinent to this issue. SNTS will expand more on the specifics of the case at the comments on the WRs stage, considering that this will provide the best opportunity to collate and bring together the experiences and views of locals and local communities across the area.

10.1.20. While these specifics are, thus, put off until after Written Representations are made, this does not in any way detract from the more general points concerning the scheme advanced above.

Conclusion

10.1.21. Recreation is an important aspect of life for both communities and tourism. It is important that it is protected and enhanced, as is envisaged by the applicable planning policies.

11. Impact on Tourism

11.1.1. Newmarket is unique and how it is dominated by the Horse Racing Industry and is known worldwide as the Jewel in the Crown of International Horse Racing and Breeding.

11.1.2. The history of Newmarket is covered in the reports on Landscaping **Annex A** and Heritage **Annex B**, especially the importance to the Horse Racing Industry of views from famous Limekilns Gallops. These two reports link very nicely into the area to show why it is a valued tourist attraction, and this is partly the subject of this section.

11.1.3. A statement by the main Tourism body for Newmarket – Discover Newmarket – is provided in **Appendix G.** **Annex K** also includes information on the importance of Tourism in association with racing.

11.1.4. The damage the Sunnica Energy farm proposal would have on tourism in the area will be significant, the villages that are affected and the major semi-permanent (40 year) harmful change in the landscape from open fields and agriculture to an industrial landscape with millions of solar panels, compounds of battery containers and up to 10m high electrical substations. The area is not currently industrialised to any significant degree.

11.1.5. Tourists not only visit Newmarket Town but also the studs, training yards, gallops, pubs, village shops and tourist attractions such as the historic Chippenham Park and its award-winning Garden. The track to the Park and Garden is breath-taking to walk or ride along in summer, with its long mature tree-lined avenue leading from the world-famous Limekiln gallops. Rows of solar panels are proposed along part of its length north of the A14, stretching up the hill towards Snailwell and across the fields towards La Hogue.

11.1.6. The statistics referred to above conclude that 2017 saw a record-breaking year for the home of Horseracing, with Newmarket welcoming over 1.6 million visitors, which boosted the economic value of tourism in the town by 6% to a total in excess of £73million.

11.1.7. The number of day trips to the town increased by 7.3% from 2016 up to 1,651,000 and overnight trips to the town by 8.3% to 39,000 trips in 2017.

11.1.8. The economic benefit of the horse racing industry is dealt with in **Section 7** of this representation.

11.1.9. The 2017 Report also found that visitors to Newmarket contributed over £9.5m to the local economy.

11.1.10. The horse racing calendar runs from April to November at the 2 famous courses with a total of 39 races and in addition to the thousands who attend those race meetings, in the Summer each week on a Friday, are concerts by visiting celebrities which in themselves attract a 20,000 audience. Out of season are regular exhibitions and conferences held at the Rowley Mile course which again attract high numbers of visitors.

11.1.11. The annual September weekend event when trainers and stud farms open their premises to the public for charity is visited by people from all over the UK. In 2021 the highest number of yards opened with record crowds raising £60,000 for the events chosen charity partners.

11.1.12. One of the most luxurious stud farms and training facilities that opens to the public for that weekend is the world-famous Godolphin facility in the road leading from Newmarket to Kentford. Busloads of people travel from Newmarket town centre by special coaches to Godolphin situated on the Bury Road opposite the Limekilns gallops, one of the most successful thoroughbred racing stables and breeding operations in the world. It also has gallops north of the A14, linked to the Limekilns by the bridleway along the Avenue to Chippenham Park.

11.1.13. This route overlooks the Limekilns Gallops and the views over to Ely Cathedral. These historic views would be disturbed by the Sunnica proposal with the consequent loss of this attraction to visitors.

11.1.14. Tourism in Newmarket attracts visitors and therefore expenditure that it and the UK Horse Racing Industry relies on from all over the world as well as high numbers from this country and Ireland. Tattersalls is the world's oldest horse auction house and the largest in Europe dating back 250 years with sales annually now more than 300 million guineas.

11.1.15. Over the last decade, the former National Horse Racing Museum has been transformed through a major investment (upwards of £15 million). This has been achieved through a combined effort from local public and private sectors, including Forest Heath District Council and Suffolk County Council, supported by just under £5 million from the Heritage Lottery Fund and a similar amount from private racing sources.

11.1.16. The high number of visitors means there is a great demand throughout the year for overnight accommodation. There are insufficient rooms in Newmarket to meet demand during many summer weekends, and many visitors prefer, in any event, to travel out to neighbouring villages to stay in pubs with rooms and hotels located in the charming historic villages of the area. These include to the north-west:

a. Worlington. Worlington Hall Hotel and the Walnutree motel.

b. Barton Mills. The Bull Hotel and the Travelodge.

c. Tuddenham. Tuddenham Mill Hotel.

d. Kentford. The Bell Inn.

e. Freckenham. The Golden Boar Inn.

11.1.17. All the above villages or their settings and environs are affected by the Sunnica Proposal to varying degrees. The countryside between them has remained much as it is in productive agricultural use for centuries, with the river Lark to the north on the edge of the Fens and the Newmarket gallops, including the Limekilns to the south. The Sunnica proposals extend in large blocks within some 2500 acres, much of which is to be filled with solar panels and large battery containers or substation machinery, like that found next to a container port, not in the heart of the Suffolk and Cambridgeshire countryside.

11.1.18. It will industrialise the gaps between the villages of Isleham, West Row, Worlington, Badlingham, Barton Mills, Red Lodge to the north and east, Fordham to the west, Snailwell to the southwest, with Chippenham and Freckenham partially surrounded in or near the centre. The impact will come almost all at once, over a short period of time, transforming the open agricultural countryside. The proposed landscaping will be unable to fully mitigate the industrialisation, and any mitigating trees and hedges planted will take years to mature to make any effect. Some areas, including the views from the Limekilns towards Ely Cathedral, cannot be mitigated and will be ruined for decades.

11.1.19. It will, without a doubt, have a huge negative effect on tourism in the area, and the village pubs and businesses reliant on tourism in this area will be hard hit and will be unable to recover. They are struggling financially now, some are finding life difficult and are already on the edge, and this could well cause some to close as they rely upon visitors to top up

their income from locals, with negative effects on the village communities which rely on them for social meeting places and gatherings of local residents. The Sunnica proposals extend their impact well beyond the ugliness of solar panels and industrial compounds in the countryside.

11.1.20. The value of tourism to Newmarket and the surrounding area must not be underestimated. If the Sunnica scheme is consented long term, severe damage would be done to tourism of this important and unique tourist attraction and the businesses and communities that rely upon it by the Sunnica proposals.

12. Carbon Lifecycle and Need

Introduction

12.1.1. As was noted at the beginning of these Written Representations, SNTS is not opposed to renewable energy generally, or solar power in particular. SNTS understands the policy imperative to reduce carbon emissions and to move towards net zero. These are all important aims in the context of the climate crisis. Thus, insofar as the policy that the applicant refers to in its Statement of Need **[APP-260]** meets this laudable aim, SNTS is entirely in agreement.

12.1.2. SNTS also accept the general point that government policy indicates in favour of the construction of new renewable energy capacity. This is one of the mechanisms that the government is using to meet the aims expressed in policy to reduce carbon emissions and move towards net zero.

12.1.3. However, what SNTS does take issue with is the need for justification for this specific scheme. Some of this is considered in the section on the assessment of alternatives further below. However, here SNTS engages with the argument advanced by the applicant that the scheme is imperative for meeting the government's policy demands and the needs of the world in response to climate change. In short, SNTS takes issue with *this* scheme in *this* location. As we have expressed earlier, we believe the application to be an example of bad solar.

12.1.4. Indeed, SNTS say that on all reasonable assessments of the scheme currently proposed, the scheme is a carbon net emitter when compared to the operational intensity of the National Grid now and in the future. This is because of specific design decisions that the applicant has made about the scheme, thus making it an unusually emission-heavy example of solar generation. In this regard, SNTS has obtained a report from Cranfield University assessing the generating capacity along with a carbon lifecycle assessment of the scheme (**Annex F**)

12.1.5. As an important final section to this part, SNTS also briefly comments on the issue of food security. SNTS's view, already expressed above, is that close to 1000 hectares of land, including BMV farmland, is being removed from production. Thus, it is important the ExA

consider the need basis for the scheme considering the policy imperative now in place for food security.

12.1.6. The remainder of this part of the written representations is broken down into the following sections:

n. Policy.
o. The Cranfield Report.
p. Food security.
q. Conclusion.

Policy

12.1.7. SNTS does not dispute the policy indicating in favour of renewable generation generally. Insofar as sections 3.2, 3.3 and 6.3 of the Statement of Need **[APP-260]** set out such policy in general, SNTS does not disagree with this. However, it is the suggestion spotted through the statement of need such as '*[t]he Scheme is a critical step in the development of large-scale solar capacity in the UK*' (para 6.3.11) and para 7.8.15:

12.1.8. The Scheme, as a leading large-scale solar scheme in GB, could be regarded an essential steppingstone towards the future of efficient decarbonisation through the deployment of large-scale, technologically and geographically diverse low-carbon generation assets.

12.1.9. In SNTS's submission, for the applicant to rely on these policies and principles, it must actually be shown that the scheme achieves the policy objective. Put simply, the scheme cannot rely on a policy in favour of decarbonisation unless it does, in fact, successfully decarbonise the grid.

12.1.10. This is not a failure to apply the general policy in NPS EN-1 para 4.1.2 but a specific application of the principle in para 4.1.3. Simply put, this is a case where the adverse impacts not only weigh against the scheme but actually directly contra-indicate against a policy objective.

12.1.11. In assessing the carbon lifecycle of the scheme, it is important to recognise that the general approach is one of considering the scheme on its reasonable worst case. This is the approach adopted by the applicant in choosing to adopt the *Rochdale* envelope approach. This is also made out on NPS EN-1 itself, where para 4.2.8 provides:

12.1.12. Where some details are still to be finalised the ES should set out, to the best of the applicant's knowledge, what the maximum extent of the proposed development may be in terms of site and plant specifications, and assess, on that basis, the effects which the project could have to ensure that the impacts of the project as it may be constructed have been properly assessed.

12.1.13. Considering the policy objectives discussed in the Statement of Need **[APP-260]** there is an important feature in respect of the policy concerning BESS. The policy considerations which indicate in favour of the construction of BESS in the UK (which SNTS accepts is indicated) does not provide justification for the co-location of BESS with solar. Put another way, the policy factors indicating in favour of BESS cannot be used to distract from or misdirect the planning difficulties of the BESS (and particularly their massive addition to the embedded carbon within the scheme).

12.1.14. The most recent extant policy on solar is set out in the British Energy Security Strategy, published in the wake of the war in Ukraine. On page 19 the following section is included (emphasis in original):

> *For ground-mounted solar, we will **consult on amending planning rules** to strengthen policy in favour of development on non-protected land, while ensuring communities continue to have a say and environmental protections remain in place.*
>
> *We will continue supporting the effective use of land by encouraging large scale projects to locate on previously developed, or lower value land, where possible, and ensure projects are designed to avoid, mitigate, and where necessary, compensate for the impacts of using greenfield sites.*

12.1.15. SNTS note that this policy indicates in favour of the co-location of solar and storage. However, this is from a land use efficiency perspective. Sunnica have not advanced a land use efficiency basis for the BESS in this scheme; indeed, it is hard to see how that justification would work in a scheme of close to 1000 hectares that is not in itself an efficient use of land.

12.1.16. Matters of effective land use, in this case are crucially important because of the use of agricultural land for much of the solar panels. Food security is an increasingly important policy objective in the UK, not least because of the war in Ukraine. Of note very recently is

the following resolution of the House of Commons following a debate on the national food strategy and food security on 27 October 2022:

> *That this House recognises that food security is a major concern to the British public and that the impact of the covid-19 pandemic, the cost of living crisis and the conflict in Ukraine has made UK food security more important than ever before; further recognises the strain on the farming sector due to rising farming and energy costs; supports the Government's ambition to produce a National Food Strategy white paper and recognises the urgent need for its publication; notes that the UK food system needs to become more sustainable; and calls on the Government to recognise and promote alternative proteins in the National Food Strategy, invest in homegrown opportunities for food innovation, back British businesses and help future-proof British farming.*

12.1.17. Finally, before considering the Cranfield report, it is useful to consider some of the guidance offered in draft by NPS EN-3. This paper provides some specific and useful details about solar generation. First para 2.48.8 provides:

12.1.18. It should also be noted that the DC installed generating capacity of a solar farm will decline over time in correlation with the reduction in panel array efficiency. Light induced degradation affects most solar panels and on average panels degrade at a rate of up to 1% each year. Applicants may account for this by overplanting solar panel arrays. Therefore, AC installed export capacity should not be seen as an appropriate tool to constrain the impacts of a solar farm. Other measurements, such as panel size, total area and percentage of ground cover should be used to set the maximum extent of development when determining the planning impacts of an application.

12.1.19. Second, paragraph 2.49.9 comments on the typical life of a solar farm (which might be usefully contrasted against the position in this scheme):

12.1.20. Solar panels typically have a design life of between 25 and 30 years, although this can sometimes be longer. Solar panel efficiency deteriorates over time, and operators may elect to replace panels during the lifetime of the site. Applicants may apply for consent for a specified period based on the design life of the panels. Such consent, where granted, is described as temporary because there is a finite period for which it exists, after which the project would cease to have consent and, therefore, must seek to extend the period of consent or be decommissioned and removed.

12.1.21. SNTS notes the concerns expressed in the LIRs about the lifetime of the scheme, and in particular the departure from the typical position on the lifetime of the solar panels (see para 10.10 *et seq*). Clearly, the draft policy assists in understanding these submissions. Indeed, for the reasons suggested below, if a wholesale replacement of the PV cells is ever undertaken, this will have significant embedded carbon consequences (among a host of other issues).

Cranfield Report

12.1.22. SNTS has commissioned a report from Cranfield University (**Annex F**) on the Carbon impacts of the scheme.

12.1.23. The Cranfield Report undertakes a review of the Sunnica scheme considering both its productive capacity and its lifetime carbon emissions. The assessment has been undertaken applying a reasonable case and, where appropriate, making assumptions. However, as the authors note throughout, they have not undertaken a reasonable worst case assessment and, thus, if they were to do so the calculations would render a worse result for the carbon emissions of the scheme (para 3.5).

12.1.24. The high level conclusion of the report is that 'contrary to the claim of Sunnica, the Scheme cannot reach net zero carbon emissions within its lifetime and is, in fact, a net-emitter of CO2' (para 6.2.9). This arises out of findings that Sunnica both overestimate their generation capacity over a 40-year period (assuming a field peak of 500 MW) and underestimates their carbon emissions (see e.g. the abstract). There findings are crucial as it means, compared to the operational intensity of the grid over the period, the scheme is a net emitter.

12.1.25. There are various reasons discussed throughout this report for the net emitter status of the scheme. One such reason is that the significant number of batteries that are included means the scheme is '*highly battery lifetime dependent*' (para 6.3.6). It is also worth noting that the battery emissions are calculated using Sunnica's own figures (see para 3.3.1). That figure gives a GHG benchmark measured against kWh; thus, for the figures discussed at the draft DCO hearing (where the figure of 2 GWh was discussed using C4 batteries) the carbon emissions may be even higher. It is only in exceptional circumstances that no batteries are replaced (which would mean the batteries are functionally inoperable after

20 years – para 6.3.6) and the scheme battery capacity is kept to the lower end that the scheme can become net negative.

12.1.26. This is a significant finding which sets the Sunnica scheme apart from most other solar schemes; it is by its poor design a carbon net emitter. This, so say SNTS, arises entirely from the design of the scheme. This is a matter to which the ExA must give weight, considering that the policy justification of the scheme is directed to the carbon emission status of renewable energy. Put shortly, the scheme will *'not reach net zero in its lifetime and can be considered a carbon emitter*' (para 7.3.3).

12.1.27. At this point SNTS will let the Cranfield Report speak for itself. However, there are a couple of additional points to note:

r. The 625 MWp case considered by Cranfield could be a case of 'overplanting' which is described in footnote 43 to NPS EN-3. Even if that is the case, this does not remedy the carbon emissions difficulty that Sunnica faces.
s. The degradation factor used for the scheme is 0.55%. Cranfield do not challenge this. However, draft NPS EN-3 indicates that the degradation could be up to 1%. If that is the case, the overall generation of the scheme will decline with greater speed.
t. Draft NPS EN-3 identifies that this scheme has an unusually long life: 25-30 years compared to the stated 40 years by the applicant. Again, if the lifetime is shorter this will have a further negative impact on the carbon emissions.

Food Security

12.1.28. In circumstances where the scheme fails to meet the policy objectives which underpin the applicant's need case, the countervailing policy factors must be given more weight. In this case, the scheme takes considerable agricultural land (and, indeed, SNTS's case is that much of that is BMV land – **Section 5**). Considering policy in favour of food security, a scheme which does not even meet net zero overall becomes a scheme for which it is hard to justify the land take from agricultural use. This must be a factor which weighs against the scheme in the planning analysis; food security is an important part of government policy and it would be an error to ignore it in light of the Cranfield report.

Conclusion

12.1.29. SNTS understands the policy objective that the government seeks to achieve in respect of renewable generation and carbon neutrality. However, due to poor design, SNTS say that the scheme does not fall into the category of generation that benefits from those policy objectives. A reasonable assessment of the scheme predicts that the scheme will produce more carbon than it saves over its lifetime compared to the grid over the same period (be carbon net positive). In those circumstances, the ExA should not take weight from the policy guidance said in the Statement of Need to be supporting the scheme.

12.1.30. In circumstances where the need justification has significant difficulties, other countervailing policy concerns must attract greater weight. One such policy, say SNTS, is the increasing policy objective in favour of food security.

13. BESS as Associated Development

Introduction

13.1.1. In this section, SNTS makes representations about the inclusion of BESS in the scheme in principle. This focuses on the size of the BESS, its uses, and whether it can be lawfully consented as associated development pursuant to the Planning Act 2008. The planning considerations which arise out of the inclusion of the BESS in the scheme (e.g. from a landscape and visual impact perspective) are included elsewhere in these written representations. BESS safety is also not considered in this section.

13.1.2. SNTS's position is that, considering the land available for BESS in the scheme, the available power and capacity of the BESS will far outstrip the normal operating generation of the PV cells. In respect of the use of the BESS, SNTS say that the BESS will be used for a host of purposes outside of those directly related to the electricity generated by the PV cells. As a result, SNTS say that the BESS cannot currently be considered to be associated development for the Planning Act 2008, and cannot be justified on the need basis advanced by the applicant.

13.1.3. The remainder of this section is broken down into the following sections:

a. An introduction to BESS and its inclusion in PV generation schemes.
b. The size of the BESS.
c. The use of the BESS.
d. Whether the BESS is associated development.
e. Remedies and the terms of the DCO.
f. Conclusion

13.1.4. In writing this section of the Written Representations, SNTS has been assisted by a report from Alex Dickinson of Pebben Ltd, a company dealing with renewable energy and energy supply. This report is **Annex H** to this representation

13.1.5. At the ISH on the draft DCO on 1 November 2022 the applicant indicated that (1) the capacity of the BESS on its view might be up to 2GWh (plus leeway) using C4 batteries; (2) that the applicant may be open to limiting the power of the scheme to 500 MW formally in the DCO; and, (3) that further documentation to support the case for the BESS being associated development is forthcoming. It is unfortunate that this information was not

available earlier, particularly considering the delays that have already occurred in the timetable. However, at the appropriate time SNTS will comment further on these incoming documents; SNTS reserves the right to take new points as is necessary to respond to these new documents. Until those documents become available, SNTS has maintained its position in this section and the expert reports, and asks that the ExA consider it in that light.

An introduction to BESS and its inclusion in PV generating schemes

13.1.6. Before considering the BESS proposed to be included in Sunnica, it is useful to consider BESS in the abstract along with the justifications for including it in PV generation schemes.

13.1.7. Battery energy storage systems are complete systems designed to store electrical energy. To understand BESS for the purposes of this examination, it is important to understand three measures:

g. The power of the BESS: this is the instantaneous power measured (typically) in Megawatts. It describes the power output of the BESS at a particular point of time. For example, you might have a BESS rated at 10 MW. You might consider this the width of the opening of a water tap.
h. The C rating of the battery: this describes the amount of time that it takes for a battery to be fully charged or fully discharged. A 2C (or C0.5) battery can discharge fully in 30 minutes; a C battery can discharge fully in 1 hour; a C2 battery can fully discharge in 2 hours. You might consider this how long you can run your water tap at full flow.
i. The capacity of the BESS: this describes the maximum amount of electrical energy that can be stored in the BESS. It is calculated by working out how long you could run a full battery at its power rating before the battery is fully discharged. It is (typically) measured in Megawatt Hours. It is calculated by multiplying the power against the C rating of the battery. You might consider this the size of the tank that stores the water to the water tap. To take three examples:
    i. BESS 1: 50 MW; 2C battery. 50 MW x 30 minutes = 25 MWh.
    ii. BESS 2: 50 MW; C battery. 50 MW x 1 hour = 50 MWh.
    iii. BESS 3: 50 MW; C/2 battery. 50 MW x 2 hours = 100 MWh.

13.1.8. It is important to understand the above to realise that batteries of the same power rating may have considerably different capacity ratings. This also means their relationship to any

attached generating capacity is significantly different. If you have a generator that has a constant power output of 5MW, assuming no losses in the system it would take 5 hours to fully charge BESS 1, 10 hours to fill BESS 2 and 20 hours to fill BESS 3.

13.1.9. In the preceding paragraph the assumption is included of 'no losses'. However, losses in BESS systems can be significant. This is primarily because BESS operates in direct current. If a BESS is charged from, and must discharge to, a system operating in alternating current, the electricity must be converted to DC to charge the batteries and from DC to return to the system. This would be the case, for example, if BESS were charged directly from the National Grid. To undertake the AC to DC conversion a rectifier must be used. To undertake the DC to AC conversion an inverter must be used. Importantly, the losses of electrical energy in the rectification and inversion of electricity is significant. The losses in inversion and rectification can be up to 20% each (**Annex H** at para 4.3.3).

13.1.10. In the UK BESS is often built as a freestanding storage system. Such storage can provide a number of important services to the National Grid. This can include artificial inertia in the system; grid balancing; and, black start capacity. The benefit of using BESS for these uses is that it provides near instantaneous power, and can be manipulated in such a way as to artificially replicate the inertia of (say) a spinning turbine or come onto the grid at a precise frequency to aid in balancing. The storage can also be used for storage of electricity generally, and for sale and purchase of capacity. It is possible to sell and buy capacity without it actually being used.

13.1.11. BESS can also be built alongside generation schemes. In the sphere of PV generation, schemes have been applied for or consented with no express restriction on BESS power (Cleve Hill[8]), with restrictions on BESS power (Little Crow[9]), or with no BESS included at all (Mallard Pass[10]). This is important to note as, contrary to the suggestion in Q1.0.10 of the ExA's first questions **[PD-017]**, BESS is not 'needed' in the sense of inclusion of BESS in the

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1.1.1. [8] As included in the DCO granted by the Secretary of State. See appendix.

1.1.2. [9] As included in the DCO granted by the Secretary of State. Note that this is a 150 MWp PV generating scheme with 90 MW of BESS. While the DCO provides for two BESS sites, section 3(3) permits only one of them to be built limiting the power to 90 MW. See appendix.

1.1.3. [10] Currently at the pre-application stage. The PINS NSIP website notes that the application is due to be received in 2023. See appendix.

scheme being a necessity. However, it may well be desirable (see also **[APP-020, para 2.4.5]** quoted below, which notes that the solar farm is not dependent on the BESS).

The size of the BESS

13.1.12. At this stage, it is necessary to turn to the BESS proposed as part of the scheme. Because of the application of the *Rochdale* envelope approach to the scheme, no attempt has been made to define the power, capacity, C-rating, layout, or chemistry of the BESS. Of this approach, the applicant stated in the explanatory memorandum to the DCO that **[APP-020, para 2.4.6]**:

13.1.13. It is not considered that imposing an upper limit is desirable or necessary. The DCO includes reference to the means by which the parameters of the Scheme will be constrained (for example, the area in which Works Nos. 1 and 2 are to be located is clearly identified on the Works Plans and the Order will require those works to be constructed only in those areas and it is on this basis which the EIA has been undertaken, as is set out in the Environmental Statement.

13.1.14. Thus, the applicant's position is that the maximum constraint on the BESS is the land made available in the scheme for such installation.

13.1.15. As the ExA will be aware, when assessing a scheme using the *Rochdale* envelope it is necessary to consider the reasonable worst case in understanding the scheme. As this section deals with the uses to which the BESS will be put and whether it is associated development, the reasonable worst case assessment is to consider what the maximum capacity that could be installed in this area is. That is what our expert on BESS has done as part of **Annex H**. In doing so he has had to make a number of assumptions about the scheme as the information is so limited.

13.1.16. The possible capacity on site is calculated in the **Annex H** at para 4.2. Based on the land available, Mr Dickinson concludes on a power rating of 1,555 MW. Thus, if the scheme used C batteries, the overall BESS capacity would be 1,555 MWh. If, instead, the scheme used the now common C2 batteries, the overall BESS capacity would be double at 3,110 MWh. As increasingly higher C-ratings of battery becomes available and utilised in the industry, the BESS capacity on site will have scope to increase even further.

13.1.17. It is necessary to make such an approximation because the information has not been forthcoming from the applicant. Considering the myriad considerations, including the legal question of associated development, and the BESS's relevant to the overall planning analysis, SNTS is of the view that greater detail must be provided by the applicant. Without such detail, the appropriate approach is to consider the power, capacity, C-rating, layout, and chemistry of the BESS on a reasonable worst case basis. Using C2 batteries, SNTS is of the view that such a capacity figure is 3,110 MWh.

The uses of the BESS

13.1.18. This section has already provided some detail about the uses to which BESS can be put in the abstract. However, as part of the application specific detail about the use of the BESS is set out. First, the explanatory memorandum to the DCO explains at **[APP-020, para 2.4.5]**:

13.1.19. Work No. 2 has a direct relationship with Work No.1 because it will take any over generation of electricity produced in times of peak capacity and store it until it needs to be released. This increases the efficiency of the solar farm and permits the most effective capture of energy thereby supporting its operation as a generating station and the export of electricity to the national grid. The battery energy storage system would not be constructed without the solar farm and whilst the solar farm is supported by the battery energy storage system, it is not dependent upon it.

13.1.20. The description in this section appears to most closely support the proposal of 'trickle charging' and (possibly) managing constraining of export to the grid described in **Annex H** at paras 2.7 and 4.6.

13.1.21. However, further detail on the use of the BESS is then discussed in the statement of need at **[APP-260, Table 10-1, page 103]**. This page has been reproduced as an annex to this section, with a comment attached to each of the services included. Importantly, as Sunnica recognises at para 10.4.13: '*[c]olocation of* energy *storage within solar generation schemes is not essential for either asset to make a significant contribution to the future operation of NETS…*'.

13.1.22. Indeed, it is telling that section 10.4 of the Statement of Need **[APP-260]** makes the case for electrical storage generally, but has limited comment on the connection of BESS with

solar generation. There are good policy justifications for the construction of BESS in the UK (it is of note that the paper describes the UK's largest battery currently as 50MW /75MWh – para 10.4.26). However, those justifications do not go to colocation. Indeed, the main justification for the colocation is provided by table 10-1, and the purposes directly linked to the PV generation certainly cannot provide any reasonable reason for a large capacity of BESS. As is explained in the response to table 10-1, the '*additional operational capabilities*' referenced in para 10.4.13 are limited or illusory. It is crucial to draw the distinction between services directly related to the PV generation, and services provided to the grid without reference to the PV generation (which could be supplied by freestanding BESS).

13.1.23. It bears repeating the point already made above; a number of these services are already undertaken by standalone BESS. Three such standalone systems are consented near Burwell substation (with one being in the process of being built). There are a number of operators in the field that are engaged in building a number of these standalone BESS installations across the country. This includes Zenobé and Anesco. These are services which are not subordinated to the main purpose of the scheme: electrical generation.

13.1.24. Considering again **[APP-020, para 2.4.5]** quoted above, the suggestion is that the BESS will accommodate times of over generation. It is also suggested that the BESS would not be constructed without the solar farm. As is noted in the expert report produced by Cranfield University on Carbon Neutrality in **Annex F,** it is unclear what peak power output the scheme proposed to be. A description of 500 MWp has been used (which accords with the export capacity of the grid connection), but both Cranfield and **Annex H** consider that a generation of 600 MWp or more may be required such that the 500 MW grid connection can be saturated (respectively, due to over calculation of the generating capacity, and consideration of losses in inversion).

13.1.25. The meaning of peak output must be considered. This is the theoretical maximum power output of the scheme if all conditions are optimal. We would expect the scheme to hit this at certain points in the year when the weather was particularly accommodating. However, this would be exceptional, and typically the scheme would be producing less than its peak production. Indeed, one might expect to see such peak generation only on the sunniest days of the year, and only then for a couple of hours in the middle of the day (as generation

would decrease as the sun rose and fell). How this leads to an 11% full load equivalent is discussed in the **Annex H** at para 2.2.

13.1.26. With all of this in mind, the evidence suggests that the maximum capacity of the BESS is way out of proportion with the generating capacity of the scheme. This is what **Annex H** concludes at para 4.4. Indeed, even if the scheme were to store all energy generated in a day (which would mean the grid connection was entirely unutilised for that period), it is unlikely the 3,110 MWh could be filled. In any event, such an approach would be commercially illogical. The available maximum capacity is entirely consistent with the idea that the vast majority of the capacity will be for uses unrelated to the PV generation of the scheme. This is the conclusion also reached by **Annex H** from para 5.1 *et seq*.

13.1.27. There is one further note to take from the Statement of Need in section 10.4 **[APP-260]**. That section explicitly notes that many of the services that Sunnica says are provided by the BESS can *also* be provided by the inverters, which are necessary for converting the DC generated by the PV cells to AC required for the grid. Such inverters are essential, and the Statement of Need itself recognises they can provide inertia and black start capabilities.

Whether the BESS is associated development

13.1.28. This matter has already been touched upon at the ISH on the draft DCO held on 1 November 2022. In short, the question of whether the BESS is associated development for the purposes of s.115 of the Planning Act 2008 is a legality issue; if it is not associated development then it cannot be consented as part of the DCO applied for.

13.1.29. As a preliminary point, SNTS say that the lack of information about the BESS as a result of the application of the *Rochdale* envelope principle means that the ExA cannot be satisfied that the BESS is associated development save for in the circumstances where a reasonable worst-case assessment would still lead to a BESS design which was associated development. Indeed, with the only available information being the available area for the batteries, it is very difficult to even estimate a reasonable worst case (although **Annex H** has attempted this). Thus, the ExA may not even be satisfied that it can reach a conclusion on the associated development issue.

13.1.30. In SNTS's submissions prior to the ISH on the draft DCO **[ref]**, a number of questions were set out. As examples of the information still lacking they are repeated here again:

a. Any indication as to the power of the proposed BESS
b. Any indication as to the proposed capacity of the BESS.
c. Sufficient indication as to the form of connection between the PV cells and the BESS (in particular, whether the PV cells will be able to directly charge the BESS without passing through an inverter and/or a rectifier).
d. Sufficient explanation as to why the scheme requires up to 500MW upload and download capacity to the national transmission network (to which see Q1.0.9 in the ExA's questions **[PD-017]**).
e. Sufficient explanation as to why Sunnica proposes to use the BESS for a purpose independent of the PV generation, namely: trading of storage capacity, grid balancing, frequency response, and energy reserve operation[11] (to which see Q1.0.10 in the ExA's questions **[PD-017]**.
f. Indication of whether the scheme can be constrained by National Grid (as **Annex H** notes, this is less common for schemes connecting at 400 kV – see para 4.3.2).

13.1.31. As a side note, the answer to the form of connection between the PV cells and the BESS may be provided by the *Alternatives and Design Evolution* section of the Environmental Statement **[APP-036]**. In that section at page 4-15 there is a discussion of DC-coupling and AC-coupling for the BESS. The design chose AC coupling. This would appear to suggest that prior to charging the BESS, even electricity generated through the scheme will have to go through both inversion and rectification (and the associated losses).

13.1.32. **Law and Policy:** To determine whether the BESS is associated development, it is necessary to consider the applicable law and policy. Section 115 of the Planning Act 2008 itself provides no useful elucidation of the principle of associated development. However, the Department for Communities and Local Government issued guidance on associated development applications for major infrastructure projects in April 2013 (**the AD guidance**).

[11] Statement of Need **[APP-260]** page 103. It is unclear whether trading of storage capacity would include arbitrage without use of the available capacity.

13.1.33. The AD guidance provides various core principles against which the question of whether something is associated development can be assessed. Associated development must have a '*direct relationship*' with the principal development, in that it must '*support*' the principal development in some form (para 5(i)). It should '*not be an aim in itself but subordinate*' to the principal development (para 5(ii)). Associated development must not be '*only necessary as a source of additional revenue for the applicant, in order to cross-subsidise the cost of the principal development*' (para 5(iii)).

13.1.34. As BESS concerns, in large part, the question of capacity, the issue of proportionality is important. Para 5(iv) provides (emphasis supplied):

> *Associated development should be proportionate to the nature and scale of the principal development. However, this core principle should not be read as excluding associated infrastructure development (such as a network connection) that is on a larger scale than is necessary the principal development if that associated infrastructure provides capacity that is likely to be required for another proposed major infrastructure project. When deciding whether it is appropriate for infrastructure which is on a larger scale than is necessary to serve a project to be treated as associated development, each application will have to be assessed on its own merits. […].*

13.1.35. Para 5(iv) is important because it identifies the question of proportionality between the associated development and the principal development. In addition, when considering infrastructure that is larger than is *necessary*, this can be permitted assuming it will support another infrastructure project. Thus, this suggests the question of whether something is associated development is to consider whether the scale is necessary to support the principal development (so that it is indeed proportionate) or whether it goes beyond what is necessary.

13.1.36. The AD guidance goes on to set out the standard position for determining whether something is associated development in para 6:

13.1.37. 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, for example (where consistent with the core principles above), a grid connection for a commercial power station.

13.1.38. Applicable case law considers the meaning of necessary in planning, albeit in a different context. As this is a summary, we do not propose to address this here. However, we would note that the test of something being reasonably necessary is understood in planning terms to mean reasonably required or requisite[12].

13.1.39. SNTS view is that the BESS, assessed on a reasonable worst-case basis, is not associated development. Three main points go to substantiate this view.

13.1.40. First, as has already been noted, there is a vast disproportion between the proposed generating capacity of the PV cells on the one hand and the capacity of the BESS on the other. Even if Sunnica stored 100% of the energy it produced in a day (which is highly unlikely as it would leave the grid connection with little utilisation), it is difficult to see how the BESS could be filled. It is hard to foresee practical circumstances where this would arise anyway. Not only is the disproportionate size not necessary for the BESS, it does not even appear to be useful for the BESS. This is strongly supportive of the conclusion that the capacity is being made available for other purposes which (1) raise money for the scheme independent of the PV generation; and, (2) are completely unrelated to the PV generation.

13.1.41. Second, there are the uses that are included in the Statement of Need to which the BESS could be put. As has been noted in the attached table, a couple of the uses described may be subordinated to the PV generation, but (if this were the uses that the BESS were put to) the capacity provided for would be in considerable part redundant. The majority of the uses included in that table are an ends in themselves as they provide services to the grid which could be entirely serviced by freestanding BESS. Indeed, it is telling in this regard that two such freestanding BESS are being constructed near to Burwell substation.

13.1.42. Third, there is the 500 MW capacity to download energy from the grid. Taken with one of the purposes being '*trading*', and the disproportion between the BESS and the PV generation, this strongly supports the conclusion that the BESS is going to be used to trade energy by downloading it from the grid at times of high production and uploading it at times of low production (thus to maximise revenue). Indeed, the scheme also has scope for arbitrage, where there is simultaneous purchase and sale of energy or capacity in order

[12] Jones v Metropolitan Borough of Stockport (1985) 50 P&CR 299 (CA).

to make profit from the tiny differences in the asset's listed price. These features are wholly independent of the PV generation.

13.1.43. The reasons to regard the BESS as not associated development go even further than this. **Annex H** goes into significant detail in similarly concluding that this scheme is not associated development. Overall, the BESS included in the scheme is far out of proportion with the overall generation, and other purposes unrelated to that generation can be clearly identified to justify the size. In this context, the reasonable conclusion is that the BESS is an ends to itself rather than being directly related and subordinated to the PV generation.

Remedies and the terms of the DCO

13.1.44. The issue of amendments to the DCO was also explored at the ISH on the draft DCO. In principle, including limits in the DCO on the BESS would allow the ExA to examine and set a maximum against which the question of whether the BESS is associated development can be answered.

13.1.45. As was noted above, Sunnica has made no attempt to impose an upper limit on the BESS, preferring to limit it by land area. SNTS is of the view that the applicant should provide a draft which proposes some constraint on the power, capacity, or use of the batteries. For example, the Little Crow scheme limited the power of the BESS in the DCO to 90 MW (appendix 4 – Schedule 1, definition of Works 2A and 2B[13]).

13.1.46. SNTS propose that the draft DCO could limit the BESS in the following ways:

a. Power: 'The BESS within the scheme shall not exceed [XXX] MW of power output as calculated by the sum of the stated power output on any included battery cells.'
b. Capacity: 'The BESS within the scheme shall not exceed [XXX] MWh of capacity as calculated by the sum of the stated capacity on any included battery cells.'
c. Use: 'The BESS within the scheme shall only be charged using power generated by the principal development constituted by Works No. 1.'

[13] Only one of which is permitted to be built – see section 3(3).

d. The land available to Works No. 2 could also be altered to constrain the available land for BESS.

13.1.47. The restriction on use would most directly limit the BESS to a use associated with the PV cells, and most strongly indicate associated development. If another limit is preferred, is not possible for SNTS to pick appropriate MW, MWh, and hectare limits at this stage because of the dearth of information in the application on the BESS. Importantly, in the current position with the current draft DCO, SNTS is of the view that the BESS cannot lawfully be consented as associated development under the 2008 Act.

13.1.48. The inclusion of these representations is not to detract from elsewhere in this Written Representations where difficulties with the planning justification or safety aspects of the BESS are discussed. It may be that, as a result of the problems identified therein, the BESS cannot be consented in any event (or, further constraints in the text of the DCO are required). This section merely addresses possible ways of managing the pure legal issue of whether the BESS can be consented at all under the Planning Act 2008.

Conclusion

13.1.49. The question of whether the BESS is associated development is required to be answered as it is a legal requirement for the consenting process under the Planning Act 2008. For the reasons SNTS has identified here, the lack of information about the BESS as a result of the *Rochdale* envelope approach makes it difficult (indeed, arguably impossible) for the ExA to answer this question. Even if they conclude they can answer it, the evidence supports the conclusion that a likely capacity of the BESS will be around 3,110 MWh. That capacity is far out of proportion with the generating capacity of the scheme and, also considering those other uses the applicant admits it will put the BESS to, the evidence indicates the BESS as requested currently as part of the application is not associated development. On that basis it cannot lawfully be consented.

13.1.50. Independent of this legal issue, SNTS say there are also reasons as a matter of safety and planning judgment which make the BESS inappropriate in this scheme. These are dealt with elsewhere. It is important to note, however, that the associated development approach allows the applicant to bring into the NSIP process BESS which would otherwise typically be dealt with by Local Planning authorities. Also, typically, freestanding BESS is not built on greenfield sites, but instead brownfield near to grid connections. It is

important that the ExA take care in considering this unusual case of a disproportionately sized BESS proposed to be built in a broadly unusual context.

13.1.52. [**APP-260**, Table 10-1, page 103] with SNTS comment

Service	Sunnica Explanation	Sunnica Applicability	SNTS Comment
Trading	Selling energy at market prices	The backbone of renewable generation asset investment cases. Storage reduces energy market risk as output can be directed from lower-price to higher-price periods. This helps reduce curtailment of otherwise useful low carbon generation, and provides additional revenues to the asset.	Insofar as such trading is confined to energy generated by the scheme, this appears to be directly related to the PV generation. However, with a 500MW incoming capacity on the grid connection, and a disproportionately sized capacity for the BESS, this suggests Sunnica will purchase and store energy from the grid. This is not a purpose related to the PV generation. It also provides opportunity for arbitrage which is not a purpose related to the PV generation.
Balancing Mechanism	Being available to NGESO to balance supply and demand at delivery	Renewable generators can provide downward flexibility, but at the "cost" of carbon-free energy. Renewables plus storage both provide upward and downward flexibility, potentially	Insofar as this involves absorbing electricity which would otherwise be constrained off as part of balancing, this appears directly related to Sunnica. However, with a 500MW incoming capacity on the

		without 'losing' any low-carbon energy. This can be dispatched over varying timeframes, from milliseconds to hours, depending on available technology.	grid connection, and a disproportionately sized capacity for the BESS, this suggests balancing going beyond this and not subordinated to Sunnica. Indeed, it is common for freestanding BESS to provide this service.
Frequency Response	Changing output minute by minute to help maintain system frequency at the statutory level of 50Hz		This is a service provided to the grid; it is not a service provided to support the PV generation. It is common for freestanding BESS to provide this service.
Reserve Operation	Changing output over minutes and hours to rebalance supply and demand following a fault or other unforeseen event on the electricity system		This is a service provided to the grid; it is not a service provided to support the PV generation. It is common for freestanding BESS to provide this service.
Reactive Power	Locational service which allows power to "flow" from source to destination	A mandatory service for all transmission connected assets, delivered by renewable and/or storage assets as part of the DC to AC conversion.	The applicability section recognises this is not specific to the BESS. This is a service provided to the grid; it is not a service provided to support the PV generation. It is common

			for freestanding BESS to provide this service.
Inertia	A service which helps slow the rate of change of the whole electricity system in response to an unforeseen event, stopping critical faults from occurring.	Inverters installed on solar sites are able to provide synthetic inertia, storage devices are also capable of this provision. Both will be important as the traditional sources of inertia (large fossil fuelled assets) close prior to 2025.	The applicability section recognises this is not specific to the BESS. This is a service provided to the grid; it is not a service provided to support the PV generation. It is common for freestanding BESS to provide this service.
Black Start	A locational service which would help 'turn back on the lights' if an event caused the national electricity system to fail	Solar alone is not capable of providing Black Start services, but standalone storage is. Colocated renewable generation plus storage may be able to provide a more robust Black Start service than standalone storage.	Black start simply requires the BESS to be charged. There is nothing about co-location which assists in this. This service is a service provided to the grid; it is not a service provided to support the PV generation. It is common for freestanding BESS to provide this service.
Constraint Management	Changing output in response to local energy supply, demand and transport issues, to ensure locational	Solar can provide important downward constraint management services, and solar plus storage can provide services in both	Insofar as this involves absorbing electricity which would otherwise be constrained off, this appears directly related to Sunnica. However, with a

	adequacy at all timescales.	directions. Because of its proposed connection location, The Scheme will be highly unlikely to cause constraints on the local NETS.	500MW incoming capacity on the grid connection, and a disproportionately sized capacity for the BESS, this suggests balancing going beyond this and not subordinated to Sunnica. Indeed, it is common for freestanding BESS to provide this service.
Infrastructure Costs	By connecting generating assets where they are needed, less electricity transmission and distribution infrastructure needs to be built out, making national savings for electricity users	Renewable generation and electricity storage can help with reducing new infrastructure requirements, although their benefits may be higher if co-located than if located separately.	There is nothing about co-location which avoids infrastructure costs for others. Indeed, freestanding BESS can provide this better by being built at critical locations; the BESS accompanying Sunnica has not been built with such critical locations in mind. Indeed, the infrastructure at Burwell has additional capacity (which is part of Sunnica's need case) so this justification is difficult to understand. There is nothing about co-location which assists in this. This service is a service provided to the grid; it is not a service provided to

			support the PV generation. It is common for freestanding BESS to provide this service.

14. BESS, Planning and Safety

Introduction

14.1.1. This section deals with the remaining issues arising out of the BESS. Already discussed above is the policy basis for BESS, the carbon lifecycle position of the BESS, and the question of whether the BESS is associated development for the purposes of the Planning Act 2008. What remains is a discussion of the planning justifications for the BESS and the safety of the BESS. In respect of the planning justifications, the various harms of the BESS are already addressed as part of the broader assessment of harms (e.g. landscape and visual amenity; heritage) elsewhere.

14.1.2. SNTS is of the view that there is little support in planning terms for the co-location of the BESS, considering the policy justifications for BESS are not so restricted (and, in actuality, simply make a case for the construction of BESS in the UK). In addition, whether or not the size of the BESS is associated development, it remains the case that the present planning harms are heightened because of the maximum area for the construction of BESS as part of the development (being over 31 hectares).

14.1.3. In addition, the position of safety of the BESS is in dispute. At the first Issue Specific Hearing on the draft DCO on 1 November 2022 two new matters became apparent. First, the applicant indicated that a new Outline Battery Fire Safety Management Plan was going to be produced at deadline 2. It is unfortunate that the applicant has not made this available earlier, as expert review has been undertaken on the plan as submitted. Secondly, the applicant indicated an awareness that hazardous substances consent may be required for the scheme. It is understood that a further paper will be produced at deadline 2 setting out the applicant's position on hazardous substances, but in any event, it indicated that any hazardous substance consent required would be obtained out of the DCO process. In light of these two new events, SNTS will limit its comment here expecting these new documents to become available in the future.

14.1.4. The remainder of this part can be broken down into the following sections:

a. Policy.
b. Planning justification for the BESS.
c. Safety and BESS.

d. Conclusion

Policy

14.1.5. In respect of policy applying to the BESS, this has already been set out elsewhere. The issue of the introduction of the BESS engages all of those difficulties about 'good design' that SNTS has flagged about the scheme overall. Indeed, while part of the decision on the capacity of the batteries to install is one of design, capacity is still an issue insofar as higher capacity batteries entail planning harms that are more significant. Thus, SNTS does not repeat these policy considerations here.

14.1.6. In respect of HSE consenting, the position in the current NPS EN-1 at section 4.12 (mirrored in the draft NPS EN-1 at section 4.13) address the requirements to consult HSE in such circumstances. Considering the discussions arising at the ISH on the draft DCO, the following footnote is pertinent:

> *Hazardous substance consent can also be applied for subsequent to a DCO application. However, the guidance in 4.13.1 still applies i.e. the applicant should consult with HSE at the pre-application stage and include details in their DCO.*

14.1.7. Para 4.13.1 requires that HSE and the Hazardous Substances Authority be consulted if it is 'likely' the scheme will require hazardous substances consent. Para 4.13.2 makes clear that '*HSE will assess the risks based on the development consent application*'.

Planning justification for the BESS

14.1.8. For these Written Representations, SNTS made estimates as to the capacity and power of the BESS. The applicant at the hearing on the draft DCO has indicated some further detail on power may become available (that it will be limited to 500 MW). Whatever the position, information is still lacking.

14.1.9. For the reasons that have been discussed above in the section on need, while government policy does support the construction of BESS, that policy does not indicate its support specifically for co-location. This is important because freestanding BESS are typically built on brownfield sites rather than the greenfield sites proposed here. Further, as was discussed in the section on the BESS as associated development, as the capacity increases, the uses to which the BESS are put will increasingly not be related to the PV generation.

14.1.10. This is an important interaction: as the BESS capacity of the scheme becomes higher, the justification for co-location reduces (as the BESS becomes proportionally more utilised for services not related to the power generated by the scheme). Thus, the justification for its construction in green-field land as part of a solar scheme similarly reduces. As is noted above in the section on associated development, the applicant accepts that BESS is not necessary for the construction of the PV generating part of the scheme. Thus, it essentially becomes a planning decision whether to fit increasingly large amounts of BESS within the 31 hectares designated for that part of the scheme.

14.1.11. In SNTS's submission, the ExA should take care not to conflate the need justification for the PV generation with the BESS part of the scheme. There is limited justification for the building of a large capacity BESS as part of the scheme (as opposed to in some more sympathetic location). SNTS say that, whether the capacity must be limited or not because of the requirement for it to be associated development, a capacity limit should be imposed to ensure that it is a planning appropriate size for the location. Such limits are discussed in SNTS's summary submissions for the ISH on the draft DCO **[REP1-041]**. SNTS will comment on that limit (and any other restriction to be applied to the BESS) once the applicant has made its further papers on BESS available.

Safety and BESS

14.1.12. In respect of the Outline Battery Fire Safety Management Plan, SNTS has obtained a report commenting on the safety of the scheme as originally proposed see **Annex L** to this representation. This is relevant to any subsequently issued outline plan. As necessary, SNTS will comment on that plan, although the Christensen report speaks for itself on safety matters.

14.1.13. From the planning perspective, it is necessary for the ExA to consider the safety of the scheme. This is true on its own terms, but also because the mitigations required to manage the safety of the scheme will have a planning impact. SNTS's position is that there were serious flaws in the original Outline Battery Fire Safety Management Plan, and that as a result significant work would be required to mitigate the risks. Those would further exacerbate the already significant visual appearance of the scheme. Thus, the safety concerns identified in the report weigh negatively in themselves, but the mitigations required must also be added as a negative pressure in the planning balance.

14.1.14. Considering the matter of hazardous substance consent, SNTS cannot itself speak expertly to such matters, although it supports the general comments of Dr Fordham. The applicant has now indicated that it may seek hazardous substance consent in the future. Importantly for that purpose, it is necessary following footnote 78 in NPS EN-1 that details for such an application are included in the overall DCO application. This is not currently provided.

14.1.15. This is not merely a procedural flaw. This failure matters because items such as the Outline Battery Fire Safety Management Plan will be approved as part of the DCO process. Aspects such as this (and other matters included in the text of the DCO) cannot be amended without appropriate application. In any assessment for hazardous substance consent, HSE would have to take a view on the application and whether the requirement for such containment and management could be met. Thus, it is important that footnote 78 is complied with, and that the details required to be included at an early stage are so included. They are missing from the application as currently written, which is a significant flaw for any hazardous substance consent application.

14.1.16. SNTS will comment further when more documents become available and reserves its position in that regard.

Conclusion

14.1.17. From a planning perspective, the harm of the BESS is significant. Much of this comes from its proposed size (which is linked to its capacity). SNTS say that the policy justifications for a large capacity BESS are significantly less than small BESS connected to a PV site (or a large BESS situated on brownfield land). Thus, SNTS say that this should negatively weigh against the scheme in the planning balance. SNTS has also included comments on safety and hazardous substance consent above. In respect of all these matters, SNTS look forward to the documents that the applicant proposes to provide as part of the next deadline.

15. Decommissioning

Introduction

15.1.1. As part of the justification for the scheme, the applicant argues that it is temporary and thus any planning (or other harm) is limited temporally. Whether or not the scheme can be described as actually temporary, the decommissioning of the scheme and its return to the prior state is crucial to any suggestion that the planning harm is temporally limited.

15.1.2. As currently drafted, SNTS say that the decommissioning neither ensures nor makes likely a return to the prior state of the land across the site. Without such assurances, the ExA must regard the planning harm as permanent whether or not 40 years is to properly be regarded as temporary. Further, SNTS identify significant flaws in the recycling provided for in the scheme, and note that this is a further and significant negative against the climate change and environmental justifications for the scheme.

15.1.3. The remainder of this section is broken into the following parts:

a. Decommissioning in principle.
b. Specifics of the Outline Plan.
c. Contingency.
d. Recycling.
e. Requirements
f. Conclusion.

Decommissioning in Principle

15.1.4. The consideration of decommissioning as part of the scheme is a limited one. While a Framework Decommissioning and Environmental Management Plan is provided **[APP-125]** this is confined solely to environmental impacts of deconstruction and restoration. Further, it is in outline and provides no sufficient assurance as to the quality of decommissioning and crucially the return of the land to agriculture. SNTS say that unless the land is returned to agriculture, excluding any ecological and landscape mitigation areas, then the use cannot be considered by the ExA to be temporary. If the use is not temporary, then the harm must be considered permanent harm.

15.1.5. Decommissioning is also addressed in the draft DCO in para 22 to Schedule 2 which explains the steps to be taken at the end of the scheme and how the framework plan is implemented as a final plan. SNTS has already made submissions at the draft DCO Issue Specific Hearing 1 on some of the terms of this paragraph, which are maintained.

15.1.6. Thus, currently, the scheme lacks a general decommissioning plan (even in a framework form) and does not have parameters against which successful decommissioning will take place. Such a plan is crucial as, currently, the ExA cannot be satisfied that decommissioning will return the site to its prior nature and use. It can only be satisfied that this will be done from an environmental perspective in compliance with the Framework Decommissioning and Environmental Management Plan. Various issues thus arise.

15.1.7. First, there is insufficient requirement to return the land to the pre-existing use. For much of the site this includes agricultural land of high quality. Whether or not SNTS's case on the land being broadly BMV is accepted (which is addressed elsewhere), this land is valuable in the range of crops that it can grow and the yields it can produce. To not secure such a return is to fail to meet the aims of the Government's *Food Strategy* (published 13 June 2022). It would also not accord with the *British Energy Security Strategy* [14] at p.19 and the considerations that (emphasis supplied):

> *We will continue supporting the effective use of land by encouraging large scale projects to locate on previously developed, or lower value land, where possible, and ensure projects are designed to avoid, mitigate, and where necessary, compensate for the impacts of using greenfield sites.*
>
> *We will also support solar that is co-located with other functions (e.g. agriculture, onshore wind generation, or storage) to maximise the efficiency of land use. We have also included solar in the latest Contracts for Difference auction round and will include it in future rounds.*

14 https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/1069969/british-energy-security-strategy-web-accessible.pdf

15.1.8. Taken in the round, it would be an ineffective and inefficient use of land, which minimises its value, to leave the land damaged and unusable for its original purpose following the decommissioning of the scheme. From a local planning perspective if the land is not returned to agriculture, it is then previously developed land. Previously developed land is then more vulnerable to follow on development making the overall impact of the scheme a matter of permanent change.

15.1.9. Aside from the generality of returning much of this land to agriculture, there is also the specific consideration that the quality of the agricultural land should be returned to its prior state. As has been noted elsewhere in this Written Representation, degradation is a significant problem which will lower the ALC rating of the land. In addition, significant portions of the land had extensive infrastructure installed to maximize its output and support high quality production. There is nothing in the decommissioning provisions in the application to ensure a return to the same land quality, nor nothing to require the applicant to replace and reinstall lost infrastructure. This is not a trivial manner; over 40 years pipework for irrigation will degrade entirely and likely require to be replaced. These are significant matters.

15.1.10. This return to agriculture is also important financially. Whether or not the economic benefits for the local community advanced by Sunnica do in fact eventuate, when the scheme comes to an end, fallow land with no agricultural future will leave a dearth of employment. Thus, the return is necessary not only to ensure effective use of the land at the end of the scheme, but also to support local communities and avoid permanent impact and decline.

15.1.11. Secondly, it is unclear from the information available that the decommissioning will secure the complete removal of all elements of the scheme (save for those permanent elements related to environmental mitigation). Indeed, while para 2.1.1 of the Framework Decommissioning and Environmental Management Plan **[APP-125]** refers to such equipment being removed, it does not go on to say what this will include. For the same reason as has been identified for land use, the ExA must be satisfied that the site will actually be returned to its prior state. It would be inappropriate and a permanent change to the site to leave (for example) below ground structures in place. It is imperative that there is clarity about this issue to avoid differences of opinion in 40 years' time.

15.1.12. Thirdly, it is imperative that there is clarity about this issue. Most people involved in developing this application and drafting the DCO will not be available in 44 years' time to advise on what is meant by decommissioning. It should not be left to a future generation to try and enforce what was meant in the DCO when this is not explicitly set out. If the development is temporary then it should be clearly defined, in the context of the Works consented by the DCO, what is temporary and is to be completely removed and the land reinstated to its previous use and condition at the end of the consenting period, and what is permanent as it will remain at the end of the consenting period and is change of use that is permanently consented.

Specifics of the Outline Plan

15.1.13. The Outline Plan **[APP-125]** refers to all **equipment** being removed and recycled, but there is no definition of what comprises equipment. A common understanding would be that it would include such items as PV arrays, transformers, switchgear, inverters, cables and the like.

15.1.14. By common understanding equipment SNTS says equipment would not comprise concrete bases, foundations, access roads, hard-standings, and buildings. There is a reference to the cables to Burwell remaining in-situ which indicates that it is not in the applicant's mind to remove all items from the site. It should not be taken that by default that a cable remaining means that everything else is removed.

15.1.15. There needs to be greater clarity of what will be removed and what will remain and in the case of what is removed how it might be removed. For example, removing the PV array equipment could mean just cutting off supports at ground level and not removal of below ground elements.

15.1.16. SNTS refers the ExA to the Outline Decommissioning Strategy for **Little Crow Solar Park**[15] which does contain details of decommissioning activities in outline to be developed. These take the form of brief method statements setting out the approach to be taken. SNTS does not disagree that detailed method statements will need to be prepared before

[15]https://infrastructure.planninginspectorate.gov.uk/wp-content/ipc/uploads/projects/EN010101/EN010101-000240-Document%20Ref%207.9%20LC%20TA4.2%20ODS.pdf

commencing decommissioning. SNTS only says that more detail on decommissioning is needed in this application for the ExA to be satisfied that the use is truly temporary and that it can and will be fully restored to agriculture.

Contingency

15.1.17. The cost of decommissioning will be significant, and this has not been disclosed. SNTS says that there is a real risk of the operator going into administration at some point in the lifecycle with no funds with which to decommission the site and restore the land. SNTS also say that there is a real risk of the operator "walking away" from decommissioning due to the cost of doing so if higher than expected costs arise. By 2065 the site may have been sold on through several successor businesses and imposing a DCO Requirement on a company that may no longer be operating in the UK having abandoned its investments may be fruitless.

15.1.18. SNTS also say that the DCO should include a Requirement that if the solar farm has not generated any energy for a period which SNTS say should be a maximum of 2 years that this will trigger decommissioning. SNTS say this on the basis that the proposed use is temporary and if energy market conditions in the UK or advances in technology were to make solar energy un-economic the site should be decommissioned rather than waiting to the end of the 40-year operating period.

15.1.19. In the UK there have been insolvencies in the renewable sector. In February 2013, Neptune Renewable Energy Ltd, a tidal stream power generation specialist, entered insolvency proceedings leaving a disused, 150-tonne tidal power generator in the River Humber. In 2014, Pulse Tidal Ltd, a company that specialized in sourcing energy from shallow waters and sector leader, Pelamis Wave Power Ltd, were placed into insolvency proceedings and in October 2015, Aquamarine Power Ltd followed suit. Renewables is a fast-evolving sector with high risk of business failure as operating circumstances change. The Sunnica scheme is planned to operate for a longer period than most UK solar facilities (40 years instead of 25). Solar panels currently last about 25 years (batteries much less) making it likely that during its lifetime the solar farm will be refitted.

15.1.20. SNTS says that these are very real risks, and a decommissioning bond must be provided to avoid the costs of decommissioning in the event of business failure falling on local communities and the public purse.

15.1.21. Solar Energy UK (SEUK) is a trade organization representing over 300+ member companies operating in the UK energy sector and beyond. SEUK publishes a sample decommissioning strategy plan with includes provision for a Decommissioning Fund. This is reproduced at **Appendix F**

Recycling

15.1.22. The only reference to recycling is in DEMP 2.8 and Table 3-11 and then only as separation of waste streams for recycling or disposal at a waste facility. While goals are referred to it is not clear what these goals are. As solar panels are made from a wide range of materials they require to be disassembled, a labour-intensive process. Currently only 10% of solar panels in the US are recycled.

15.1.23. It should be noted that, aside from the issue of GHG emissions, appropriate recycling and disposal of the products used on site is important to understand and estimate to obtain the overall impact on the environment. While SNTS do not assess this matter due to the limited information available, SNTS notes that safe disposal of PV modules and batteries can be difficult, costly, and damaging to the environment.

15.1.24. Sunnica have said they do not want to go into detail about decommissioning and recycling as 40 years on, everything will have changed and they do not want to be restrained from using newer more efficient technology, however the lack of detail means the ExA cannot reliably assess the full impact of the development.

15.1.25. The US Environmental Protection Agency refers to reuse of solar panels for secondary purposes once no longer suitable for grid generation. Overall, the DEMP is extraordinarily weak on commitments to recycling and reuse at end of life with an attendant risk that recycling doesn't happen. The wording of the Requirement and the framework DEMP does not secure recycling, does not obligate recycling, and leaves the issue of waste from decommissioning of this scheme to a future generation.

15.1.26. At present, only the European Union (EU) has adopted PV-specific waste regulations. Most countries around the world classify PV panels as general or industrial waste. In limited cases, such as in Japan or the US, general waste regulations may include panel testing for hazardous material content as well as prescription or prohibition of specific shipment, treatment, recycling and disposal pathways. Based on the extended-producer

responsibility principle, the EU Waste Electrical and Electronic Equipment (WEEE) Directive requires all producers supplying PV panels to the EU market (wherever they may be based) to finance the costs of collecting and recycling end-of-life PV panels put on the market in Europe. Following Brexit this regulation was adopted in UK law. It is not clear in the DCO how the costs of decommissioning more than 1 million PV panels will be secured. With the UK Govt now seeking to roll back inherited EU regulation there is a risk that the UK may follow the rest of the world and treat PV panels as industrial waste. The DEMP by being weak on commitments to recycling fails to provide confidence that the PV panels will not end up in landfill.

15.1.27. The waste from PV power generation is a growing concern with by 2050 estimates indicating 78 million Tonnes of PV panel waste globally according to the International Renewable Energy Agency (IRENA).

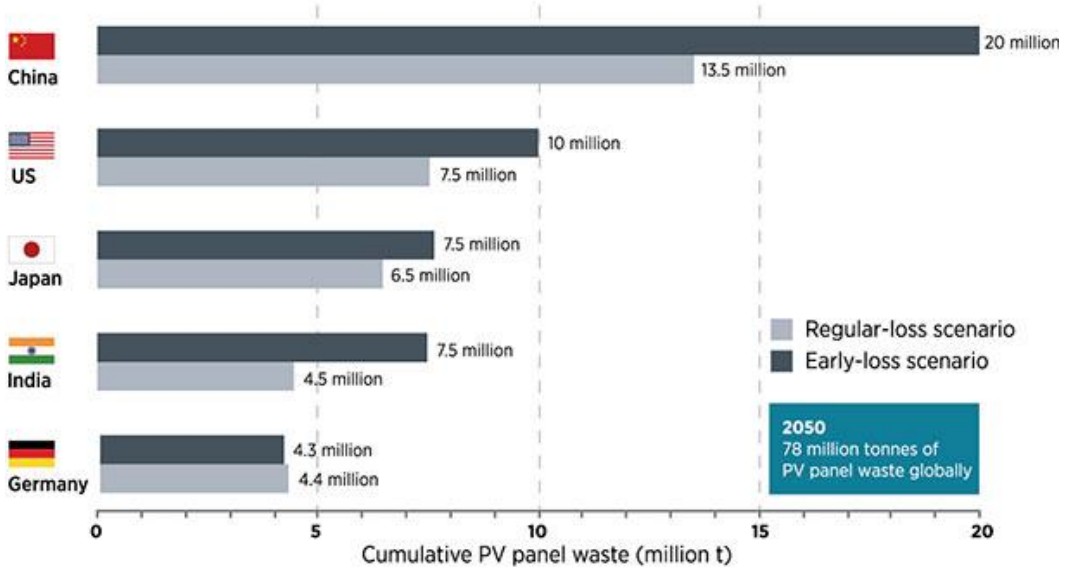


Figure 3 – 2050 Annual PV Waste (IRENA)

15.1.28. Robust policies are needed to address the potential volume of waste from decommissioning PV panels in the volume that Grid Scale Solar will generate. There is a lack of UK policy in this respect except for oil and gas, and lessons need to be learned in respect of planning and design for decommissioning. The DCO and DEMP as drafted fails to secure robust planning for decommissioning PV panels and associated equipment.

15.1.29. Some elements of decommissioning are hazardous, such as decommissioning batteries and dealing with toxic metals in the PV panels. These are not dealt with specifically in any way.

15.1.30. It is not clear how the ability to recycle will be built into the scheme through selection of materials and equipment. This is the starting point of planning to recycle.

15.1.31. The Waste Management Plan for England[16] 2021 says:

> *The Resources and Waste Strategy sets out our ambitions for maximising the value of resources and minimising the waste we create by moving towards a circular economy. It sets out how reusing products preserves the energy and materials embedded in them during their production and how adopting a 'lifecycle' approach requires us to focus not just on managing waste responsibly, but on preventing its creation in the first place. It places a stronger emphasis on sustainable production, emphasising that we need to rethink how we design and make products in order to be more efficient in the way we use our stock of natural resources.*

15.1.32. It is not clear how the DEMP establishes this circular economy by only focusing on the end stage of decommissioning. The yet to be developed Decommissioning Resource Management Plan (DRMP) will set goals and how waste streams will be identified. SNTS says that these goals should be stated now and must inform the design process to ensure that when decommissioned recycling rather than disposal can be maximised.

DCO Requirement

15.1.33. Requirement 22 in the draft DCO **[APP-019]** contains the following shortfalls:

15.1.34. It does not specifically require the land to be restored to agriculture. There is therefore no legal obligation on the part of the applicant or successor to return the land to agriculture as distinct from simply decommissioning.

16 https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/955897/waste-management-plan-for-england-2021.pdf

15.1.35. It only requires the submission of a Decommissioning Environmental Management Plan. It does not require submission or approval of the scope of decommissioning and hence leaves this at large. The Requirement does not secure a standard of decommissioning or restoration.

15.1.36. At (2) it requires the DEMP to be substantially in accordance with the relevant part of the framework DEMP which will have been approved 40 years earlier. There is no requirement for compliance with best practice or regulatory functions that may be in place in 40 years' time, and which may have superseded the current Framework DEMP.

15.1.37. The complete removal of all elements of the development that do not constitute agriculture or previous land use. For example, removal of below ground structures as well as above ground. There is only a reference to equipment in the DEMP (2.1.1). It could be considered that differences of opinion may arise in the future of the extent of removal and what was reasonably foreseeable at the time the DCO was made.

15.1.38. The restoration of the land to a condition suitable for agriculture including the restoration of irrigation and land drainage. If left with the burden of reinstating land drainage and irrigation the landowner may not be able to return the land to agricultural use despite this being the obvious intent of the occupation of the land being "temporary". If the land is not restored to agricultural use meaning the use prior to the land being occupied for development, then the development should be regarded as in effect permanent as the change of use is permanent.

15.1.39. At 1.1.10 in the DEMP there is a reference to the Applicant being responsible for compliance with Requirements of the DCO. The Applicant (Sunnica Ltd) may not be in business in 40 years' time, the DEMP should refer to the Undertaker.

15.1.40. The DEMP is devoid of measures of success of decommissioning or any objective measure of what decommissioning means. It treats decommissioning as being the reverse of construction and having similar effects.

15.1.41. There is no commitment to the following reasonable requirements of decommissioning:

15.1.42. It is patent than certain elements of the consented scheme cannot be restored or decommissioned, these being environmental mitigation. The DCO does not as drafted secure these from being "decommissioned" or otherwise removed.

15.1.43. If decommissioning is considered to mean restoration (and this is not clear) then this could be considered to include contouring of land levelled for construction purposes such as compounds to a profile more suitable for agriculture and the removal of mounds, bunds, and the like.

15.1.44. SNTS Proposes the following revisions to Requirement 22 on a without prejudice basis (Changes highlighted):

22.—(1) Not less than 6 months before the 40th anniversary of the first export date or within 6 months of the 2nd anniversary of the authorised development ceasing to generate electricity, a decommissioning and site restoration scheme together with a decommissioning and restoration environmental management plan must be submitted to the local planning authorities for their approval. The decommissioning and site restoration scheme(s) must be in accordance with the outline decommissioning strategy.

(2) The decommissioning and site restoration scheme(s) must include provision for— (a) removal of all above and below ground elements of the relevant parts of the authorised development, (b) removal of any cabling below ground level; (c) restoration of the areas disturbed by the relevant part of the authorised development; (d) re-grading and levelling and (e) restoration of the land to agriculture.; except as agreed with the local planning authorities.

(3) The scheme and plan submitted and approved pursuant to sub-paragraph (1) must be substantially in accordance with the relevant parts of the framework decommissioning environmental management plan and the outline scheme for decommissioning and restoration.

(4) The scheme and plan submitted and approved pursuant to sub-paragraph (1) must include a resource management plan that includes details of proposals to minimise the use of natural resources and unnecessary materials.

(5) No decommissioning or restoration works must be carried out until the relevant planning authority or both relevant planning authorities (as applicable) has or have approved the scheme and plan submitted under subparagraph (1) in relation to such works.

(6) The scheme and plan submitted and approved pursuant to sub-paragraph (1) must be implemented as approved.

(7) This requirement is without prejudice to any other consents or permissions which may be required to decommission any part of the authorised development.

(8) The decommissioning of the authorised development and the restoration of the land affected by the authorised development must be undertaken within the time period set out in accordance with the approved decommissioning and site restoration scheme(s).

Conclusion

15.1.45. SNTS says there is inadequate detail in the application on decommissioning and that decommissioning must include restoration of land to agriculture and not just the removal of elements. The determination of what was meant in 2025 for decommissioning should not be left to future generations in 2065 to interpret, notwithstanding that detailed planning may take place closer to decommissioning.

15.1.46. It is also said by SNTS that there is inadequate security against decommissioning with a real risk of the project being abandoned in place with the cost of decommissioning falling on the local community and public purse.

15.1.47. The level of commitment to recycling of the equipment including PV panels is unclear and non-specific. SNTS say there should be an obligation to design for recycling and to purchase equipment that maximum possibility of being recycled.

15.1.48. The DCO should include a Requirement that in the event of the consented facility ceasing to generate electricity then after a period of not more than 2 years decommissioning is automatically triggered.

15.1.49. SNTS says that the existing Requirement in the draft DCO is inadequate and needs to be strengthened to require restoration to agriculture with the exception of ecological mitigation areas.

16. Assessment of Alternatives

Introduction

16.1.1. This section addresses the assessment of alternatives made as part of the application. It primarily addresses the **[APP-036]** *Alternatives and Design Evolution* and **[APP-054]** Alternative *Sites Assessment* of the Environmental Statement. SNTS say that the process and outcome of the alternative sites assessment was flawed. As a result, SNTS says that no weight should be given to the applicant's need case to use this specific site for this purpose; the existence of reasonable alternatives minimising the harm of the scheme should weigh significantly against the granting of permission.

16.1.2. The following chapter is broken down into these sections:

a. Policy and Law
b. Representations – Policy and Law
c. Representations – Process
d. Representations – Outcome
e. Representations – Alternatives
f. Conclusion

Policy and Law

16.1.3. The applicant sets out the relevant provisions of NPS EN-1 on assessment of alternatives at **[APP-036, para 4.2.1 *et seq*]**. The Planning Inspectorate's Advice Note 7 sets out that PINS considers that a good ES is one that, amongst other things '*explains the reasonable alternatives considered and the reasons for the chosen option taking into account the effect of the Proposed Development on the environment*'.

16.1.4. The scheme is a Schedule 2 development under para 3(a) of Schedule 2 of the Infrastructure Planning (Environmental Impact Assessment Regulations 2017/572 **[APP-033, para 1.3.6]**. Among the various requirements contained in the 2017 Regulations, the applicant must provide an Environmental Statement (**ES**) which includes a description of certain matters (reg.14(2)(d)). A more detailed summary is provided in Schedule 4 of the 2017 Regulations. Para 2 of Schedule 4 requires:

16.1.5. A description of the reasonable alternatives (for example in terms of development design, technology, location, size and scale) studied by the developer, which are relevant to the proposed project and its specific characteristics, and an indication of the main reasons for selecting the chosen option, including a comparison of the environmental effects.

16.1.6. NPS EN-1 itself refers to certain circumstances where policy imposes a requirement to consider alternatives. These are in sections 5.3 (biodiversity and geological conservation), 5.7 (flood risk) and 5.9 (landscape and visual). While each of these are relevant, most pertinent is para 5.3.7:

16.1.7. As a general principle, and subject to the specific policies below, development should aim to avoid significant harm to biodiversity and geological conservation interests, including through mitigation and consideration of reasonable alternatives (as set out in Section 4.4 above); where significant harm cannot be avoided, then appropriate compensation measures should be sought.

16.1.8. The requirement for a proper options assessment (as part of the appropriate assessment) also arises pursuant to the Conservation of Habitats and Species Regulations 2017.

16.1.9. As has already been referred to elsewhere, NPS EN-1 identifies a hierarchy of importance for sites protected for biodiversity. Those at the top of this hierarchy are those protected through international conventions, European Directives (including Habitats Regulations). This will include listed Ramsar sites (see NPS EN-1 para 5.3.9). As is explored in the substantive section on ecology and biodiversity **Annex D** many such sites are impacted on by the scheme.

16.1.10. The law on the assessment of alternatives has recently been considered in *R (on the application of Save Stonehenge World Heritage Site Limited) v Secretary of State for Transport* [2021] EWHC 2161 (Admin). In that case Holgate J held that the case was a wholly exceptional one where the relevant merits of the alternative tunnel options (under Stonehenge) were obviously material so that it was irrational for the Secretary of State to not assess them. In those cases where such consideration of alternatives is not mandatory, para 52-53 of the judgment of Sullivan LJ in *R (Langlew Park School for Girls Governing Body) v Bromley LBC* [2009] EWCA Civ 734 was cited with approval:

16.1.11. [52] […]. The starting point must be the extent of the harm in planning terms (conflict with policy etc) that would be caused by the application. If little or no harm would be caused by granting permission there would be no need to consider whether the harm (or the lack of it) might be avoided. The less the harm the more likely it would be (all other things being equal) that the local planning authority would need to be thoroughly persuaded of the merits of avoiding or reducing it by adopting an alternative scheme. At the other end of the spectrum, if a local planning authority considered that a proposed development would do really serious harm it would be entitled to refuse planning permission if it had not been persuaded by the applicant that there was no possibility, whether by adopting an alternative scheme, or otherwise, of avoiding or reducing the harm.

16.1.12. [53] Where any particular application falls within this spectrum; whether there is a need to consider the possibility of avoiding or reducing the planning harm that would be caused by a particular proposal; and if so, how far evidence in support of that possibility, or the lack of it, should have been worked up in detail by the objectors or the applicant for permission; are all matters of planning judgment for the local planning authority.

16.1.13. In addition, NPS EN-1 provides principles that assist in the assessment of the weight that should be given to alternatives in the planning analysis (see para 4.4.3). These are not repeated here, although will be referred to later. SNTS does not dispute the general point that the assessment of alternatives should be carried out in a proportionate manner.

16.1.14. For an options assessment that is compliant with policy and law, the assessment must set out what reasonable alternatives have been considered, the main reasons that the option taken forward was chosen, and a comparison of the various environmental effects between the options. The typical approach to such selection might be likened to a 'funnel' where the applicant begins with a large number of options which are filtered down against relevant criteria. At the final stage, the common practice is to set out a shortlist of options in table form against relevant criteria to compare the approaches. From this process, the best-performing option against the criteria may then be selected. Whatever process is adopted, there must be a comparison of environmental effects.

16.1.15. The intensity with which the ExA must consider the options assessment is a matter of planning judgment. In the context of a scheme with serious environmental and planning harm, the ExA must consider the alternatives and whether there was an alternative which

avoided or reduced harm (*Langlew Park School for Girls Governing Body* at [52]). Indeed, in the context of a scheme with serious environmental and planning harm, SNTS say that the assessment of alternatives must be of a high quality. If it is not, the ExA cannot place any weight on the need case that this is the only reasonable place for the scheme (because it cannot be satisfied that this is the case). Indeed, in the face of the serious harm involved in this scheme, the availability of *possible* alternatives should be enough to weigh against this proposal in the planning balance.

16.1.16. The Sunnica scheme is an unusual and exceptional case. As proposed, it is the largest solar farm in the UK (and, indeed, one of the largest in Europe). It is also of an unusual design using connected islands throughout the landscape. This sets it apart from the Little Crow and Cleve Hill schemes which sit as one broadly self-contained scheme in the landscape. Considering the first bullet point of para 4.4.3 of NPS EN-1, it is clear that a proportionate assessment of alternatives, in this case, would be an extensive one with a close-grained analysis of other options across the UK.

16.1.17. As has already been noted, the scheme is an exceptional case. Being such an exceptional case, SNTS presses the view that this is a case similar to *Save Stonehenge World Heritage Site Ltd*. It is a case where alternatives are obviously material. A failure to set out properly an alternative sites assessment would be an overt flaw in the Environmental Statement; a failure in the Secretary of State to consider those alternatives would be an error of law.

16.1.18. Finally, in respect of policy, there is the question of the level of detail that objectors need to put forwards in respect of other alternatives. This, again, is a matter of planning judgment (*Langlew Park School for Girls Governing Body* at [53]). This is a massive scheme using the *Rochdale* envelope approach. Thus, much of the scheme remains vague. Indeed, the *Rochdale* envelope sets out a maximum window for the proposed scheme, but does not tell us the specifics of the scheme. Thus, SNTS say that this lack of information makes it difficult for it to work up reasonable alternatives. SNTS should not be criticised or disadvantaged in circumstances where the applicant has not provided information, and the Action Group itself is a small group of individuals with limited resources. Thus, while SNTS has provided some alternatives at the end of this section, this is a case where the planning balance indicates against SNTS having to work up these alternatives in any significant detail.

Process

16.1.19. In assessing the process, it makes sense to begin at the top of the funnel and consider high level options. In that regard, SNTS agree that the no-development scenario is reasonably discarded **[APP-036, para 4.2.7]**.

16.1.20. However, SNTS does not agree with the rejection of a smaller development as an alternative to the scheme **[APP-036, para 4.2.8]**. The applicant references its need statement for this conclusion **[APP-260, section 9.3]**. In that section the author of the report argues that the levellised cost of electricity (LCOE) increases and carbon emissions savings decrease as the number of sites increases to provide the same area of solar generation. Arguably that may be true; it is hard to judge either way as no calculations accompany the analysis. However, whether or not that is true generally, it fails to consider two things: (1) other factors relevant to a decision to break the scheme into smaller individual schemes; and (2) the specifics of the Sunnica proposal.

16.1.21. Breaking a scheme into smaller individual schemes provides an opportunity to site each on land with a higher peak irradiance, and with optimal topography. This will maximise irradiance thus maximising generation (which will reduce the LCOE). In circumstances of higher peak irradiance, the number of PV cells required to be installed for the same power output will also decrease, which will be valuable in reducing embedded carbon. In addition, the breaking up of the scheme into smaller ones placed more appropriately in the landscape would provide to *avoid* planning or environmental harm rather than calling for its mitigation or compensation. This is a valuable factor in building a generation scheme and accords appropriately with the hierarchy for managing planning and environmental harm. As the statement of need recognises, there is scope for smaller schemes to come online with greater speed (paragraph 9.3.3), which would maximise the opportunity for delivery.

16.1.22. Stepping away from generality, Sunnica is also an unusual case. The author of the Statement of Need does not say that his calculations are based specifically on the Sunnica scheme (he says the '*characteristics*' are the same, but it is unclear what this means – para 9.3.5). Thus, it does not appear that the nature of Sunnica as broken into many sites strung across the landscape is taken into account. In the Cranfield Report **Annex F** it is explicitly noted that such a spread out scheme will produce a greater carbon burden than one self-

contained scheme. Indeed, because of the spread nature of Sunnica, the constraint described in para 9.3.13 also appears to apply to this scheme and not be confined to smaller schemes as described.

16.1.23. It is clear to see for Sunnica as kilometres of additional cabling, multiple on-site substations, and additional ancillary equipment are all needed to maintain the various separate but connected sites. This is before considering the loss of efficiency from shadowing and mitigation requirements which comes with such a large scheme. These all entail more carbon and more expense. From an expense and embedded carbon perspective, it is of note that BESS has not been included (para 9.3.10). For the reasons advanced in **Annex F** the batteries included in the Sunnica scheme have a significant negative impact on embedded carbon.

16.1.24. This is not a case similar to Cleve Hill or Little Crow, where the solar farm is combined as one self-contained unit. Indeed, one might count six sites (or more; the matter is one of judgment) which are essentially independent but connected. Thus, the applicant's suggestion that smaller schemes could not provide the same infrastructure capacity is only correct if one constrains the question to one such scheme. In essence, the applicant's scheme makes itself one scheme by applying for consent for one joined up site. That constraint is not justified and alternatives applying this approach should have been adopted. For the reasons set out below, SNTS's view is that this joined up single scheme has been formed in this way because of land ownership considerations. No real attempt has been made to minimise planning harm as part of this options assessment.

16.1.25. The Red Amber Green (RAG) Assessment used to discount other PDAs was flawed and should not have been relied upon to inform the site selection process because:

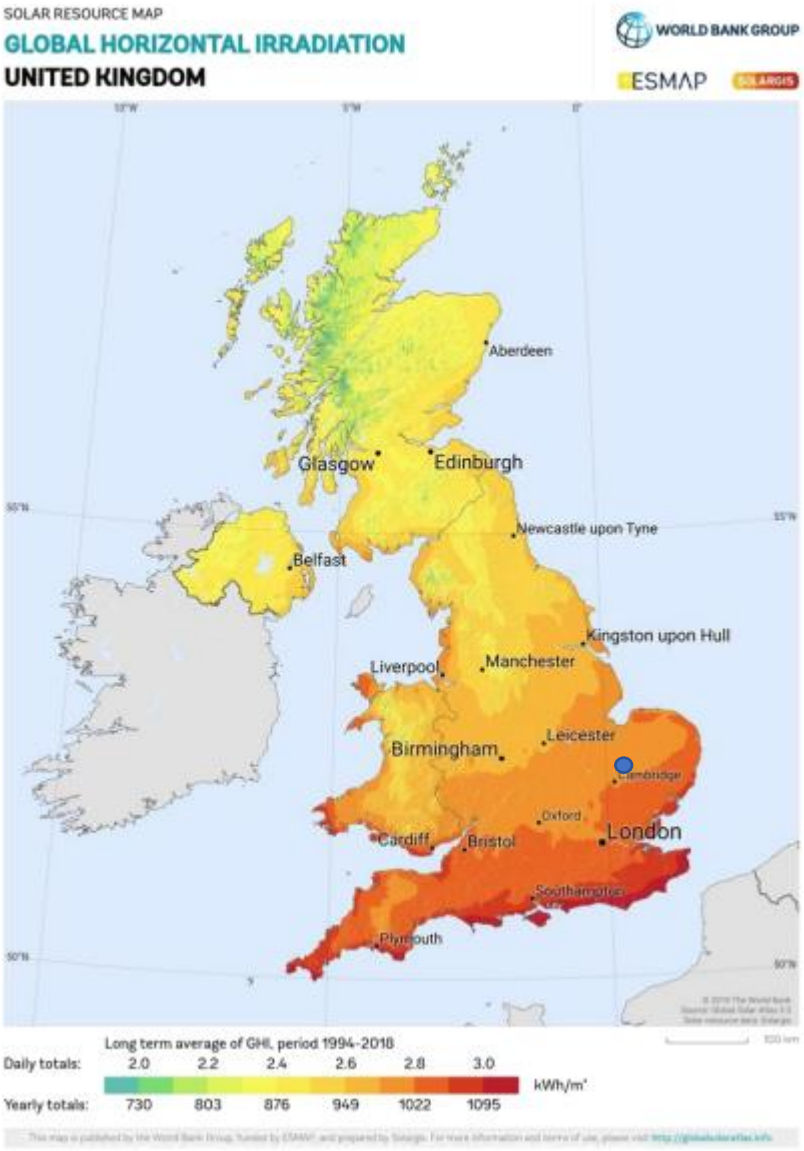
- The landscape and visual criteria were inadequate.
- Aspects such as Green Infrastructure were ignored.
- Key viewpoints, such as those at Limekilns Gallops were ignored.
- Despite the fragmented and dispersed nature of the development and the extensive area that it covers (981 ha), it was assessed as a single site.

- There was no consideration of the cumulative impacts of the development, which is a uniquely harmful aspect of this proposal compared to other PDAs considered.
- There is a general lack of transparency.

16.1.26. For those reasons (and others), the premise underpinning the size of this scheme is not made out on its own terms. Sunnica is an unusual case; the Statement of Need is too general to properly justify the advanced scheme. Sunnica has erred in failing to consider a smaller development which, combined with other such developments (advanced by the applicant or others), provides the same infrastructure capacity (per the quote from NPS EN-1 at **[APP-036, para 4.2.8]**.

16.1.27. The alternative sites assessment is then said to have followed a staged approach (similar to that of funnelling identified above). The details of this assessment are in the *Alternative Sites Assessment* **[APP-054]**.

16.1.28. **Stage 1 – Solar Irradiation and Topography:** In the *Alternative Sites Assessment* **[APP-054, paras 2.2.1-2.2.2]** the applicant states that East Anglia is the optimal region in the UK to locate a large-scale solar farm due to high levels of irradiation compared to other parts of the UK and that it is characterise by large flat open land. The applicant goes on to say that East Anglia is located near high demand centres for electricity e.g. Cambridge and London. The applicant includes in the Statement of Need a chart of solar irradiation reproduced here as Figure 1 with the location of the scheme as a blue dot.



16.1.29. The approximate location of the Sunnica Scheme is on the dividing line between two areas. Neither of these is the area of highest solar irradiation. The area to the north of Cambridge extends up to the Humber and across to Wales. The area to the south of Cambridge extends towards the south coast and west to Cornwall and Devon. Figure 2 shows the distribution of solar farms in the UK in 2015.

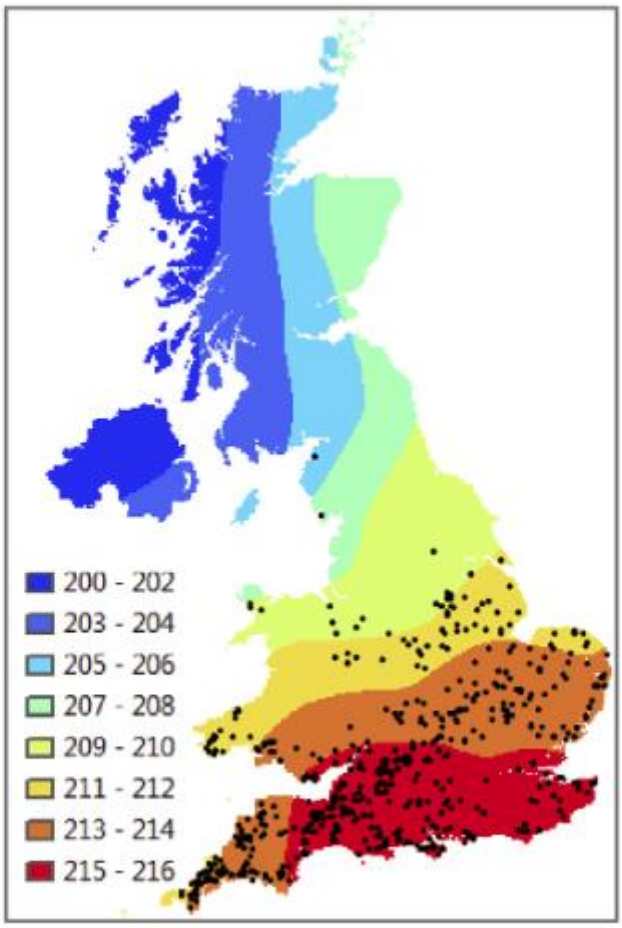
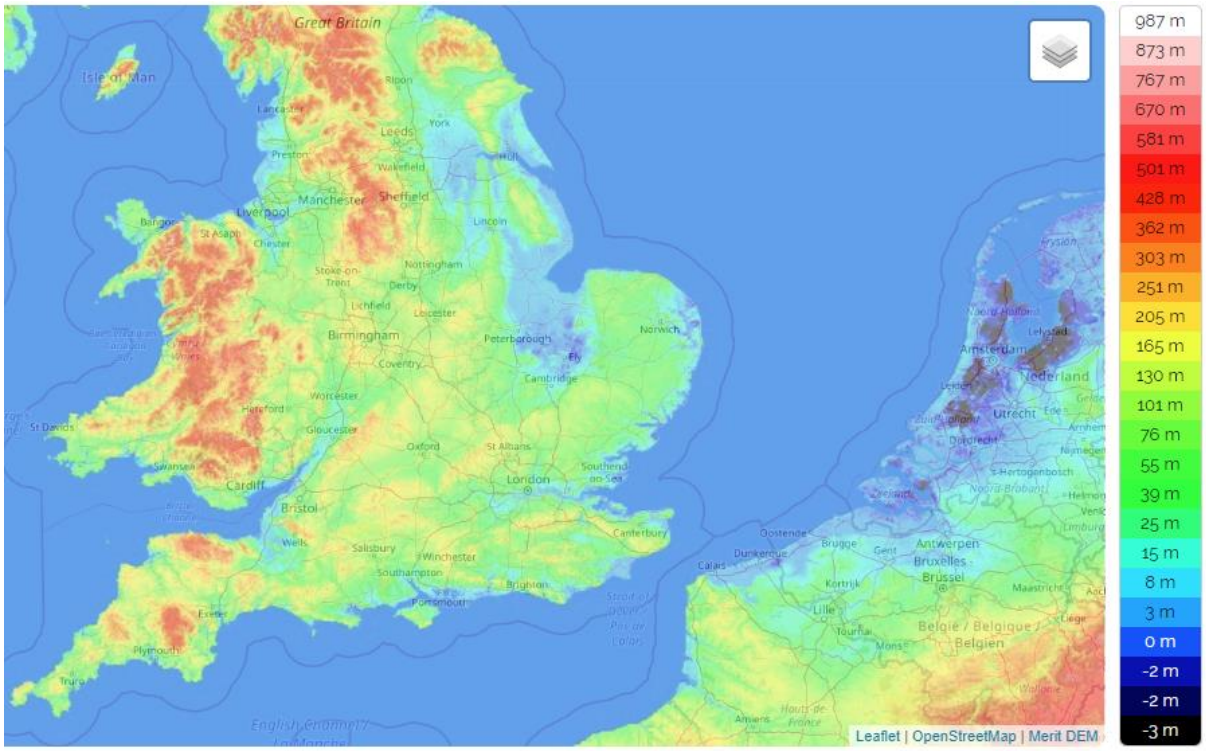


Fig. 4. Current solar farms (REPD 2015) compared to interpolated average hourly GHI Wh/m^2 (calculated from 5106 recorded irradiation values for 2015).

16.1.30. The topography of the UK is shown in Figure 3.



16.1.31. Relatively low-lying land extends up the east coast towards the Humber estuary and across the south of the UK. East Anglia is not, therefore, the only region in the UK with a combination of high solar irradiation and relatively flat topography. There is no comparison made in terms of generation capacity per unit of area between the location of Sunnica and any other area in the south of the UK possessing similar levels of solar irradiation and flat topography. Indeed, as the map above shows, East Anglia is far from the location with the highest concentration of solar farms. Thus, the reason for constraining the search to East Anglia at this stage is not explained; the correct approach would have been to consider all areas where a suitable combination of irradiation and topography exist, and then take those areas to the next step in the process.

16.1.32. **Stage 1 – Grid Connection:** at **[APP-054, para 2.2.3]** the applicant states that the scheme must be located where the National Grid has capacity. It is unclear whether this is only a consideration of connection to the national transmission system, or whether connection to the distribution network has been considered. In the Statement of Need, reasons have been advanced for connection to the NATS **[APP-260, chapter 8]**.

16.1.33. NPS EN-5 at 2.3.5 says:

The IPC should also take into account that National Grid, as the owner of the electricity transmission system in England and Wales, as well as Distribution Network Operators (DNOs), are required under section 9 of the Electricity Act 198910 to bring forward efficient and economical proposals in terms of network design, taking into account current and reasonably anticipated future generation demand. National Grid is also required to facilitate competition in the supply and generation of electricity and so has a statutory duty to provide a connection whenever or wherever one is required

16.1.34. In consequence, no weight can therefore be given to the availability of grid connection at Burwell as a criterion for site connection. National Grid has a statutory duty to provide a grid connection wherever one is required.

16.1.35. In his decision on two applications by Sawston Solar Farm Limited: Land North Of Dales Manor Business Park, West Way (APP/W0530/W/15/3012014 & APP/W0530/W/15/3013863), the Secretary of State agreed with the Inspector that no weight attaches to the assertion that a connection to the national grid is an essential site requirement. Thus, in principle, SNTS say that a determination by National Grid to offer connection at this one site cannot in and of itself explain the failure to undertake a wider assessment of alternatives across the UK. In any event, the choice of substation appears to have been connected to land agreements rather than planning concerns.

16.1.36. No proper assessment of the distribution network is made. There is no prohibition of connecting generators of this size to the distribution network, not least as the load factor for solar is around 11% overall (see the Cranfield Report **Annex F** utilisation of the grid connection will be highly variable.

16.1.37. The primary reason why Burwell was chosen seems to be included later in **[APP-054, para 2.2.3]** when the applicant notes that: '[t]he availability of land was important as the UKPN requires the Applicant to demonstrate that there was agreement in principle for land to be used for a large scale solar farm in order to obtain a grid connection agreement'. Rather shortly, this denotes the backwards manner in which the site was selected; it was selected on the basis of agreements in principle on the land rather than a proper assessment of the available options. This is considered more below. Fundamentally though, this backwards approach is a flawed way to undertake an assessment of alternative sites, and difficulties

with UKPN cannot remedy that flaw. In any event, the ExA has no real evidence of this UKPN policy, nor any indication of whether connections elsewhere were sought.

16.1.38. In addition, the decision to connect to the national transmission system may be explained by a desire in the applicant to provide services unrelated to the PV generation (e.g. grid balancing and/or capacity arbitrage) to that system. This is explored in **section 13** That view is supported by the reasons for connecting to the NATS included in the Statement of Need **[APP-260, section 7.5, 7.6, 8.1]**. Thus, it would appear the likely basis for excluding connection to the distribution network is a use of the BESS in the scheme which indicates against such batteries being associated development for the purposes of the Planning Act 2008.

16.1.39. As to the suggestion of positioning the scheme close to high-use areas, the purpose of the National Grid is to distribute power nationally to where it is needed, irrespective of the location of generation capacity. Historically coal-burning power stations have been in the north of England close to coal reserves. Nuclear power stations are mostly coastal or estuarial for cooling purposes. There is no need for a power station to be close to centres of consumption as it is the purpose of the electricity grid to convey power from where it is generated to where it is used. UK Government data[17] for 2020 places Cambridge in 133rd place of Local Authorities by annual electricity consumption. In terms of annual consumption the East of England is similar to the South East and South West.

16.1.40. Proximity to London and Cambridge or any other area local to a scheme is not demonstrated to be a valid criterion for site selection unless the power generated by an electricity scheme is exclusively for that area. As far as the Newmarket area is concerned, the Sunnica scheme causes detriment and harm with no local energy benefits whatsoever, as well as being contrary to the wishes of the residents and democratically elected councils of the area most affected. In theory, a connection to the local distribution network may well have provided some benefit to Newmarket (either from the PV generation directly, or from the other grid services that the BESS can offer). This is not the approach that the

17 https://www.gov.uk/government/statistical-data-sets/regional-and-local-authority-electricity-consumption-statistics .

applicant has adopted. The suggestion otherwise in the Statement of Need does not stand up to scrutiny **[APP-260, para 8.1.5]**.

16.1.41. If the choice of a site were undertaken properly, we would expect to see a list of possible connections to the National Grid and distribution network in areas identified as suitable for solar as a result of irradiance and topography. Instead, there is no assessment. The applicant refers to Figure 1 as identifying Burwell as the location which has the available capacity for the scheme with reinforcement that could be completed within a reasonable timeframe and cost. The only substation shown on Figure 1 is Burwell. Again, the reason for not considering other options has no justification that can be rationalised in planning terms.

16.1.42. The applicant has then defined 15km with a distance factor of 1.5 as being the maximum distance defined by cost from Burwell within which a site could be found **[APP-054, para 2.2.4]**. The distance factor allows for cables not to run in straight line so the maximum cable length is 22.5km. The degree to which cables may or may not run in a straight line is a function of connection type (overhead vs underground) and site location. Overhead lines tend to run in straighter lines than underground as they are less constrained by obstacles, but may have greater impact.

16.1.43. The distance from a connection is an entirely economic one for the applicant. There is no electrical reason why longer distances cannot be adopted, particularly if they bring other sites within the area of search for consideration. In adopting this approach, the applicant also excludes the possibility of considering opportunities outside of the radius to Burwell. Such opportunities might have included supplying the distribution network, or connecting to local industry. Many other abandoned WW2 airfields exist in East Anglia.

16.1.44. SNTS is of the view that Sunnica should explain the economic imperative behind 15km being set as the limit on an economic basis. Considering the current expense of lithium-ion batteries and PV-generating cells, SNTS is of the view that the cabling connection expense will be dwarfed by the main scheme expenses. In actuality, the use of this distance radius from Burwell appears to instead be aimed at achieving the desired outcome of excluding other valuable options nearby to the substation.

16.1.45. Overall, SNTS is of the view that the process set out in section 2.2 of **[APP-054]** is a poor one. The proper process for assessing locations would not be a difficult one, requiring a

desk-based assessment in the first instance. There is nothing to suggest this would have been difficult or disproportionate to the magnitude of this scheme. That the applicant has failed to properly rationalise its decisions is indicative of the backwards manner adopted in selecting Burwell as the substation.

16.1.46. **Stage 2 – The exclusion of planning, environmental, topographical and spatial constraints:** At Figure 2 in Appendix 4A to the ES **[APP-054]** the applicant identifies environmental constraints within 15km of Burwell substation. These constraints include green belt around Cambridge, built up areas, and various grades of agricultural land from 1 to 3. The total area of search is 707 square kilometres.

16.1.47. Figure 3 then shows unconstrained land after applying Stage 2 Planning and Environmental Constraints. Of note is that it excludes large swathes of the land included in the scheme at this stage (apparently because it is grade 3 ALC land). Figure 4 (goes on to show unconstrained land with less than or equal to 3% gradient. This criterion is unreasonably restrictive as solar panels can be installed on south facing land of greater gradient. There is a range of application with maximum slope ranges from <2% to <11%[18] . It is accepted that at higher slopes visual impact might be greater and construction/access more challenging. The use of a 3% criterion for site selection is unduly restrictive and the lower bound gradients primarily based on limiting visual impact rather than solar efficiency. It might be expected that a wider range of potential sites on land with higher gradients would be selected and potential candidates then discarded based on site specific visual impact screening taking into account other features and intervening obstructions.

16.1.48. Figure 8 (APP-054) shows potential development areas for solar development which meet the selection criteria. Of note is that there is almost no overlap between the site selected for the scheme and the land identified as possibly complying with the criteria included in the options assessment. Put another way, if the land had been selected using the options

[18] The future scope of large-scale solar in the UK: Site suitability and target analysis - Centre for Renewable Energy Systems Technology (CREST), Loughborough University, Fraunhofer Center for Silicon-Photovoltaic (CSP) and EMW. This is provided as an appendix.

assessment methodology, the scheme simply would not fall to be built in the location that has been selected.

16.1.49. Also tellingly, while most of the land covered in the scheme was excluded on the basis of its ALC (as the applicant excluded the land it identified as grade 3 en-masse, instead of excluding just grade 3a), Figure 10H makes the point that large areas of the scheme would have also failed on the basis of the gradient being above 3% *in any event*. Most notably, that would include the large area of solar panels at Sunnica West A (W03, see **[APP-136]**). Thus, in the process of selecting the possible other sites the applicant has applied criteria that its own scheme would not pass.

16.1.50. **Stages 3– Identifying potential alternative solar development areas:** at this stage of the process, the applicant then constrained the search by applying a criterion of a minimum area of 38Ha of land being needed for large scale solar without any evidence to justify this figure or other selection criteria. It has then been postulated that these individual areas of 38Ha then form part of a network of sites covering an area of 1000 Ha. It is not clear on what basis the 1000 Ha has been established as a criterion, except that the Scheme is a total of 981 Ha. In SNTS's view, the reasons advanced in the Statement of Need **[APP-260]** are insufficient to properly justify this requirement (see cross-reference).

16.1.51. The 38Ha/1000Ha criterion has been used to exclude brownfield sites based on available size and that the NPPF prioritises residential and other commercial uses on previously developed land. It is disputed that this is a reasonable conclusion of NPPF Chapter 11 which sets out that "*Strategic policies should set out a clear strategy for accommodating objectively assessed needs, in a way that makes as much use as possible of previously-developed or 'brownfield' land*" and "*give substantial weight to the value of using suitable brownfield land within settlements for homes and other identified needs*". It is clear that the guidance applies at the strategic level in formulating the Local Plan and that the guidance is not exclusive to housing or conventional commercial development. A key theme in the NPPF and the very recent British Energy Security Strategy White Paper April 2022 and is to support the effective and efficient use of land[19]. The White Paper seeks to

[19] See particularly p.19 – the report is appended to these Written Representations.

maximise the efficiency of land use by solar (Page 19). It has not been demonstrated that large-scale solar here is a more effective or efficient use of land than agriculture.

16.1.52. The Government strategy is to encourage large-scale projects to locate on previously developed, or lower value land, where possible. The area of search and methodology adopted by Sunnica do not prove that it is impossible to use previously developed land or lower-value land.

16.1.53. The brownfield map in Figure 4 of Appendix 4A appears to identify very few brownfield sites, all of which are small and unrepresentative of opportunities available to locate solar elsewhere other than on high-yielding productive agricultural land. The criteria used to identify brownfield sites are based on the official Brownfield Site Register. This register lists only brownfield sites that have been deemed by local planning authorities as being suitable for housing development with planning approval in principle for housing. The criteria for doing so are defined in Regulation 4 of the Town and Country Planning (Brownfield Land Register) Regulations 2017. These are:

> *the land has an area of at least 0.25 hectares or is capable of supporting at least 5 dwellings;*
>
> *the land is suitable for residential development;*
>
> *the land is available for residential development; and*
>
> *residential development of the land is achievable*

16.1.54. In can be seen therefore that the official Brownfield Site Register is not a useful resource for identifying sites suitable for large scale solar development. These sites are limited, allocated for housing and manifestly not available for solar development.

16.1.55. The definition of brownfield should be regarded as previously developed land that has previously had stuff built on it or that has been altered by human activity (but not including farmland). One can see how this definition may include disused industrial sites or airfields in a way that the Brownfield Register does not.

16.1.56. Indeed a feature of East Anglia and Lincolnshire is former WW2 airfields, many of which retain runways, taxiways and hard standings otherwise than their soils being in agricultural

use. Further, the geology of East Anglia lends itself to gravel and mineral extraction. Former borrow pits used for construction of the A11 and for landfill south of Red Lodge do not feature on the brownfield map. There is no consideration of alternatives using commercial buildings and existing development where suitable.

16.1.57. **Stage 4: Further evaluation of potential solar development areas considered suitable for development:** at this stage, the applicant identified PDA 1-7 as the options arising out of the assessment undertaken. **Annex E** then undertakes an assessment of these potential areas measured against the Sunnica site. Of by far the most significance is PDA3 which is a 928ha area of land to the East and South of Red Lodge. The point of distinction between PDA 3 and the site is on land use: the former receives a red classification whereas the application site indicates orange.

16.1.58. Per the grid provided at Annex B **[PD-054]** the distinction is that the land use clash on PDA 3 is difficult to avoid whereas that on the site is not. Comparing them, it is notable that the section discussing Sunnica does not identify planning permissions and land uses concerning the AD Plant at Worlington, the polytunnels application, and the use of Worlington Quarry. It is hard to understand comparing them what moves PDA 3 into being a red-rated area whereas the site remains amber.

16.1.59. Going further, on SNTS's assessment other items in this assessment should have been rated red for the scheme. Most notably, this should be the cultural heritage section (which suggests harm to Chippenham Park can be mitigated) and landscape and visual impact (where impact on Chippenham Park and the Limekilns is entirely ignored). Indeed, when the ExA consider the substantive aspects of the scheme, they must consider how increasingly the difficulties identified indicate against the site chosen in favour of another site (most notably PDA 3).

16.1.60. However, returning to the point above, there remains a fundamental issue about the land used for the scheme as assessed under this options assessment in any event. Had the site for the proposal been chosen through a properly managed options assessment, the land now proposed for the scheme itself *would not have made it* to the PDA assessment stage. This is the fundamental flaw in this assessment and the identification of the site, and must weigh against the selection of the land for this scheme in the planning analysis. Indeed, essentially the conclusion of the entire assessment is that there is no land within a 15km

radius of Burwell substation that by the applicant's own assessment would be suitable to accommodate a large-scale solar development. Without considering how land ownership has played a part in identifying the land for this scheme, it appears hard to rationalise how the site was in fact chosen.

Outcome

16.1.61. The outcome of the assessment was that the applicant concluded '*there are no obviously more suitable locations within the area of search than the proposed Sites*' **[PD-054, para 4.1.6]**. This is notwithstanding the fact that (1) the scheme does not comply with the filtering criteria identified by the applicant; (2) the approach to the options assessment was a poor one, particularly in the exclusion of sites outside the 15km radius and in other parts of the UK; and, (3) the exclusion of PDA 3 is difficult to justify. The options assessment is flawed, and it would be irrational to suggest that this options assessment weighs in favour of the scheme.

16.1.62. These are all generalisations and assertions and not based on any specific facts or a CoBA (Cost Benefit Analysis). The costs (input) can be comparatively minimal for a site where the output and gain in monetary terms is high and lasts for 40 years. Many solar site cabling is required to cross roads and can be through industrial and urban areas, for example. SNTS does not consider the matter of cabling to be a constraint on location, and considers the 15km radius selected to have been chosen to just enclose the desired site and exclude sites further distant.

16.1.63. These are also potentially highly misleading points without facts relating to the actual scheme and a CoBA and risk analysis again of the actual proposal. The proposals also contradict some of the criteria too – e.g. battery proximity to the grid, grid connection, environmental impact (this is comparative and the site chosen for the panels can be environmentally harmful, as here), importation – no evidence. Remote substations point – this in fact proves the poor location and design of the Sunnica scheme here cf other sites and locations without remote solar and batteries. The end of the Sunnica scheme at Isleham is some 13.5 miles from Burwell in a loop around Newmarket and the villages.

16.1.64. The design is poor – large circumference and lack of grouping, disaggregation of solar sites and batteries, impact on farms, equestrian and tourism as well as local facilities, communities and villages, social and environmental harms, ecological harm, historical

cultural harm, high visual intrusion and substantial adverse impact on the landscape. None of these are monetarised or mitigated/compensated sufficiently, and are to be weighed in the balance against these monetary costs which are of no significant weight without evidence and CoBA of comparative sites.

16.1.65. In understanding why the site was picked, it is in SNTS's view useful to return to the quotation at **[APP-054, para 2.2.3]** when the applicant notes that: '*[t]he availability of land was* important *as the UKPN requires the Applicant to demonstrate that there was agreement in principle for land to be used for a large scale solar farm in order to obtain a grid connection agreement*'. In SNTS's view, this reflects the actual manner in which the scheme site was selected: it was based wholly on land ownership considerations.

16.1.66. Insofar as the options assessment does anything, in SNTS's view it was designed to remove alternatives so as to make the scheme land look more probable. This explains the unusual criteria selected for excluding land, and the odd result that PDA 3 appears to better comply with the main criteria for the scheme than the land actually proposed to be used in Sunnica. Arguably, such an approach indicates this options assessment is perfunctory and defective, and indicates a flaw that challenges the suggestion that the Environmental Statement is a proper one. SNTS says this, although it need not go that far. In any event, this approach to site selection cannot be sanctioned as a proper method for such selection, and can be given no weight in the planning analysis. Indeed, in circumstances where the scheme does not comply with Sunnica's own criteria, the ExA should actively weigh it against the scheme.

Alternatives

16.1.67. As was noted at the introduction to this section, the application of the *Rochdale* envelope makes it difficult to propose alternatives. The applicant holds a significant amount of technical information which is pertinent to placement of the scheme. In addition, SNTS is an action group with limited resources. It is not feasible for it to undertake a substantial options assessment on its own. That is the role of the applicant.

16.1.68. If the applicant were to have approached site selection properly, we are of the view that it should have begun with an assessment of the whole of the south of England. It should have then considered all of the available national transmission system grid connections, and indeed the distribution network grid connections (no good reason for not connecting

to the distribution network is provided). Planning constraints could then have been overlaid onto this map, and sites with sufficient proximity to a grid connection could have been properly identified. There is no difficulty in this approach; this could have been done as a desk-based study with the use of GIS. That the applicant has failed to take this approach, and instead adopted one constrained to achieve a specific outcome, is indicative of the flaws in this assessment. Such an approach would have opened up a wide range of options across the UK.

16.1.69. However, SNTS is conscious that NPS EN-1 para 4.4.3 indicates that some alternatives should be considered. Various such alternatives have been voiced at different stages in the non-statutory and statutory consultation processes as part of the applicant advancing the scheme. As such, it is unlikely any of these proposals are new to the applicant. However, SNTS would particularly draw attention to the following:

a. Sunnica refer to the availability of capacity on the Pelham to Walpole 400kv transmission line as being an argument in favour of Burwell. This capacity arises from the decommissioning of fossil fuel power stations in the Humber area. It follows that these former power station sites are potentially attractive for renewable energy development being already connected to the national grid. There is no assessment of these sites.
b. In East Anglia there are a large number of abandoned WW2 airfields, some still retaining infrastructure. The use of such has not been considered.

16.1.70. What is important to understand about these alternatives is the relative uniqueness of the site that the applicant has currently chosen. Landscape and visual amenity, the horse racing industry (and particularly the Limekilns), ecology and biodiversity, and agricultural land use all make this location an especially bad one for the scheme. SNTS say it is sufficient for the purposes of the ExA to note that far less constrained locations have been disregarded on a flimsy basis. Thus, the ExA should give no weight to the need basis for the land; indeed, the availability of other options which have not been considered should weigh against the scheme as a whole.

Conclusion

16.1.71. In the round, SNTS is of the view that the site for the scheme was picked primarily with land ownership considerations in mind. The assessment of alternatives has been

undertaken in a manner to constrain the options available for the scheme, thus making the land chosen appear optimal. However, even applying the applicant's own criteria to the land chosen for the scheme, there are significant flaws which (on the applicant's own approach) would have disqualified that land from selection. Other options, while in a nascent form, are available. In those circumstances, no weight should be given to the need argument for this land; and, indeed, the assessment of alternatives should weigh against the scheme in the planning balance. While SNTS does not need to go so far, it is also of the view that this procedure for the assessment of alternatives is a flaw in the overall Environmental Statement also.

17. Consultation

Introduction

17.1.1. Flaws in respect of the applicant's approach to consultation have been a consistent feature of this scheme. SNTS recognise that, in itself, flaws in consultation are rarely a basis to deny the DCO. However, what SNTS does say is this: many of the flaws in the scheme (avoidable or otherwise) would have been identified at an earlier stage if the applicant had engaged in proper consultation with locals. As locals have been deprived of that proper consultation, the applicant (and, ultimately, the ExA) have been deprived of the fruits of a proper and successful consultation. This may have permitted the applicant to design the scheme in a way which avoids some of the significant harms now identified as part of these Written Representations, or at the very least, develop the scheme closer to the spirit of good design and with better and more effective mitigation. It may also have made the applicant aware of some of the features of Newmarket and the surrounds which appear to have been missed (e.g. the centrality of the horse racing industry to the area).

17.1.2. From the perspective of law, it is useful to consider the standard formulation advanced for a lawful consultation. The headline of a legally adequate consultation are set out by Lord Woolf MR in *R v North and East Devon Health Authority, ex parte Coughlan* [2001] QB 213 at [108][20]:

17.1.3. To be effective, consultation must be undertaken at a time when proposals are still at a formative stage; it must include sufficient reasons for particular proposals to allow those consulted to give intelligent consideration and an intelligent response; adequate time must be given for this purpose; and the output of consultation must be conscientiously taken into account when the ultimate decision is taken.

17.1.4. SNTS do take the view that the poor approach to consultation in total has led to a position where locals could not give proper and intelligible replies to the consultation. At the very least, this has deprived the applicant of quality responses which would have assisted it in

[20] Approved by the Supreme Court in *R(Moseley) v Haringey LBC* [2014] UKSC 56 (see particularly para 24).

avoiding the harms of the scheme (and, where appropriate introducing appropriate mitigation).

17.1.5. The remainder of this section is broken up into the following parts:

c. SNTS reports on the flawed consultations.
d. Conclusions.

SNTS reports on the flawed consultations

Included as appendixes to these Written Representations are papers produced by SNTS commenting on the quality of the statutory consultation **Annex G** and the consultation undertaken on the additional option for connecting to the substation at Burwell in **Appendix L** The contents of those reports are not set out again here.

17.1.6. As the ExA will see on an examination of these papers, both consultations undertaken as part of advancing this application have been flawed. The flaws have both concerned the people who have been consulted, and the quality of that consultation. SNTS are of the view that engagement with the application, and the quality of the replies, have been significantly hampered by the difficulties that locals have faced in making their views known. For the reasons already advanced above, SNTS say that this deprived the applicant of quality responses which could have been taken into the development of the scheme, and ultimately deprived the ExA of information that it would have found valuable in making an assessment on whether to recommend the making of the DCO.

Conclusions

17.1.7. Overall, SNTS says that locals have been deprived of an opportunity to give intelligent consideration and an intelligent response to the scheme in the consultation stage. Indeed, the flaws in the consultation process make it unsurprising that so many locals only realised the significance of the scheme, and its harm once they became involved in the Examination itself. Those flaws were significant in the statutory consultation, and many of them were repeated as part of the new consultation held in 2022 (concerning the change of the approach to connection to Burwell).

17.1.8. Emerging Government policy is towards community involvement in the planning of renewable energy schemes to ensure local acceptance. The flawed consultation deprived local people of being able to meaningfully contribute.

17.1.9. SNTS is of the view that many of the flaws in the application, and failures to properly avoid serious planning harm, can be attributed to the failure to consult properly. Particularly in respect of impact on local communities, impact on recreation, impact on tourism, and impact on the horseracing industry, the failure to consult properly left the applicant insufficiently sighted on these difficult issues. Even on the broader issues of landscape, heritage, and agriculture (among others), consultation would have provided an opportunity for a community led approach. A community led approach is likely to create a scheme which responds more effectively to local needs, minimising harm through avoidance and mitigation. Such an approach would be better placed to attain good design. It would also allow the ExA to consider local views, to note how they have been taken into the design, and better see how avoidance and mitigation of harm has taken place. Thus, in operating a substandard consultation, the applicant has deprived itself and the ExA of useful contributions which would have minimised the planning harm of the scheme.

18. Traffic

18.1.1. SNTS recognise that they are not well placed to address the issue of traffic arising out of the scheme. This is primarily a matter for the local highway authorities. In that respect, SNTS considers that the harm and flaws identified by the Councils in the LIRs **[REP1-024]** must be responded to by the applicant. However, SNTS still make some general comments here as, for many locals, traffic over the construction period will be a significant harm that they face for a two-year period. Indeed, as NPS EN-1 recognises at para 5.13.1, the impacts that may be caused can be '*economic, social and environmental*'.

18.1.2. As has been considered in the sections above on harm to local communities and recreation, significant vehicle movements (including HGVs) will cause some notable harm. This is because residents will be faced with busy roads and HGVs travelling through their communities. For reasons of safety and comfort, residents will choose not to venture out into their villages and the surrounding areas. This will be bad for resident health; the health of the relationships in the communities; and overall degrade the social fabric of the rural surrounds of Newmarket. It is critical that such harm is avoided as much as possible, as 2 years is a significant period for permanent harm to be caused.

18.1.3. In some locations, the applicant has proposed permanent changes to the road to allow for vehicle movements. These changes are important as, once Sunnica has finished in construction, these changes will not be replaced. SNTS say that these changes will have a propensity to cause harm as they will (1) make the roads more amenable to the passage of other HGVs, thus permanently changing the traffic makeup in the rural villages around the scheme; and, (2) allow for higher speed access around these villages (e.g. through the widening of road junctions) thus encouraging rat-running and decreasing resident safety and quality of life. It is imperative that any changes that Sunnica makes to the roads are as limited as is necessary; and that appropriate traffic management changes are made to the roads to ensure that permanent harm does not arise out of Sunnica's proposed temporary use in the construction stage.

18.1.4. In documents there is also the proposal for the use of Badlingham Lane (also known as U6006) as an access. This is a way of significant value, likely being part of the prehistoric Icknield Way. Because of its history, it is imperative that this way be used under no circumstances for any access or vehicle movements along or across this lane, and indeed

that steps are taken to protect the heritage of this way. SNTS associates itself with the discussion of U6006 in the LIRs generally, with a particular focus on para 10.203 **[REP1-024]**. This way is considered further as a heritage asset.

18.1.5. Finally, SNTS responds with direct comments on the presentation of construction traffic in the Framework Construction Traffic Management Plan and Travel Plan **[APP-118]**

HGV Traffic

18.1.6. Sunnica have provided a table of volumes of construction traffic **[APP-118 Table 2-1]:**

Table 2-1: Summary of Forecast Daily HGVs (Vehicles, Single Direction) per Construction Month

	Months																							
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
Sunnica East Total (Sunnica East Site A & B)	35	57	53	53	42	31	27	19	18	18	18	20	31	41	31	39	36	33	25	14	21	23	12	4
Sunnica West Total (Sunnica West Site A & B)	25	45	48	34	30	51	52	38	34	27	21	19	17	16	15	12	11	11	10	4	14	14	0	0
Burwell National Grid Substation Extension Total	0	0	9	9	9	8	8	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
HGV Total (Sunnica East Site A & B, Sunnica West Site A & B and Burwell National Grid Substation Extension)	60	102	110	96	81	90	87	58	52	45	39	39	48	57	46	51	47	44	35	18	35	37	12	4
Grid Connection Total (Route A and Grid Connection Route B)	-	44	45	46	45	44	44	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Total (Sunnica East Site A & B, Sunnica West Site A & B, Burwell National Grid Substation Extension, Grid Connection Route A and Grid Connection Route B)	60	146	155	142	126	134	131	58	52	45	39	39	48	57	46	51	47	44	35	18	35	37	12	4
Average	119								38															

18.1.7. Construction is shown to take a total of 24 months. There is an initial 7/8-month period during which Burwell National Grid substation is constructed (if Option 2 proceeded with) and the grid connection is constructed. This is unusual in that the solar PV will presumably not be commissioned until the end of the 24-month construction period. Consequently, for 16 months, the substation and grid connection would be unused and not be income-earning. The higher level of construction traffic to the other areas East A/B and West A/B in this initial period, suggests that the onsite substations and BESS are also being constructed at this time.

18.1.8. Logic would suggest that high-investment elements such as substations and the grid connection would be installed late in the programme such that the whole scheme could be commissioned as one. It is possible that the approach set out for early construction would permit the PV element to be brought online in phases, but it would take time for

enough PV to be installed to make the cost of installation and commissioning to be worthwhile. Consequently, it suggests that the intent of Sunnica is to commission the BESS at the end of the first 8 months and to start energy trading from the national grid while the solar PV is installed over the remaining 16 months. This is the reverse of Cleve Hill (**Figure 4)** where peak construction traffic was towards the end of the construction period.

18.1.9. HGV Traffic is estimated daily by month, then averaged over a longer period. So, a peak daily flow is presented of 155/day (310 two way) then averaged to 119/day (238 two way) over the first 8 months. However, except in month 1 and month 8, local areas will experience a higher daily level of traffic. The picture in the remaining 16 months is similar, traffic is averaged to 38/day, a figure which is brought down by low levels in months 20, 23 and 24. While mathematically correct, the approach underestimates the general level of traffic to be experienced in the local area over most of the construction period.

18.1.10. These are single direction movements (trips), measured as 2-way traffic the figures should be doubled. This approach artificially reduces the apparent impact by failing to present 2-way traffic. Most journeys (but not all) are likely to be reciprocal, a vehicle will return by the same route by which it arrived. An observer on that route will see 2 HGV movements for each delivery.

18.1.11. The maximum daily HGV traffic (single direction) for Sunnica East is 57. For Sunnica West it is 52. Expressed as 2-way traffic this is 114 and 104 respectively.

> *"It is anticipated that, during the peak of construction, up to 80 two-way HGV movements (40 vehicles) will be required per day. The peak is expected to last for four weeks starting around week 27 of construction"* ***[APP-118 para 2.7.4].***

18.1.12. This seems likely to coincide with peak activity in constructing substations and BESS.

18.1.13. A comparison has been made of the traffic assessment for the Cleve Hill NSIP, which is more detailed - **Figure 4**.

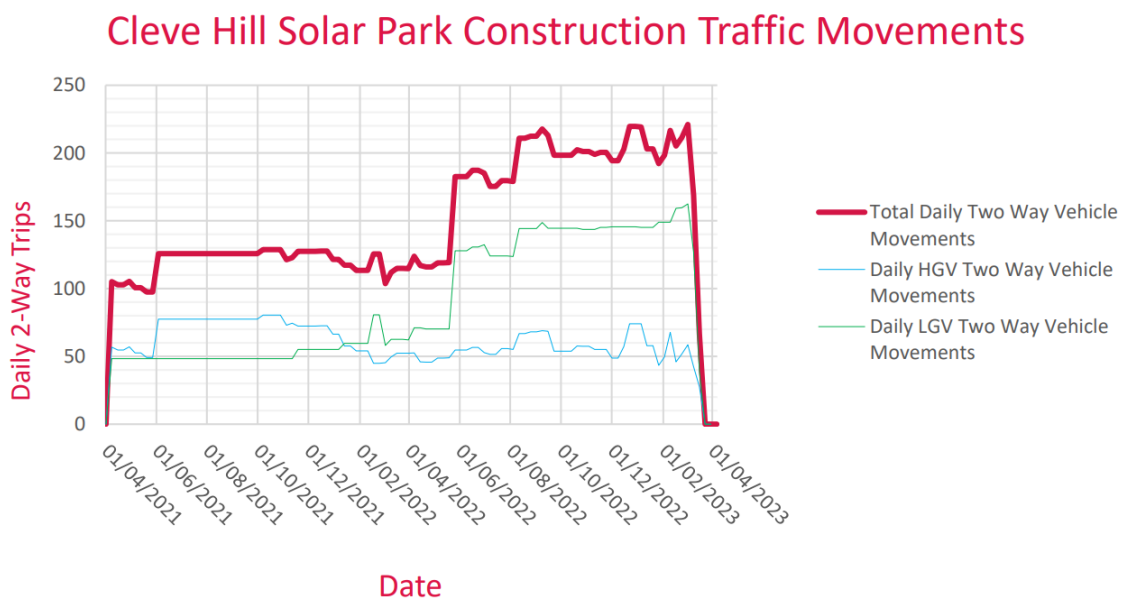


FIGURE 4 - CONSTRUCTION TRAFFIC IN CLEVE HILL DCO APPLICATION

18.1.14. Cleve Hill estimated daily 2-way HGV movements to be in the range 50 to 160. However, Cleve Hill is approximately 1/2 the size of Sunnica, with a similar 2-year construction period. It could therefore be estimated that Sunnica requires between 2 and 3 times the level of construction activity. Based on staff numbers the output for Sunnica is roughly 2.5x that for Cleve Hill (980 staff vs 400). However, the maximum of 160 for Cleve Hill is only 50% that of Sunnica. This suggests that compared to Cleve Hill construction traffic for Sunnica is underestimated. It is reasonable to relate construction output to numbers of staff as every activity requires people. If there are twice the number of excavators, then there must be twice the number of drivers and so on.

Control Measures

18.1.15. Sunnica propose to use ANPR and GPS as part of a Delivery Management System (DMS). This will monitor compliance with the HGV routes and time restrictions. Such a system is likely to be resource intensive and to present, when implemented over a large area, numerous false positives when vehicles owned by a haulier make legitimate deliveries in the same area but not to Sunnica. The same will result when local people report an HGV they believe is delivering to Sunnica but it is not. Each incident will require interrogation

of ANPR and GPS data against the DMS to confirm whether the vehicle was delivering to one of the Sunnica sites. The burden of false positives on top of the administration burden is likely to result in the system not being policed effectively, and SNTS say this must be adequately resourced.

18.1.16. There is no detail on how the DMS will be implemented and managed. Given that the sites are spread over a large rural area the net of ANPR will be large to cover all possible routes. The volume of ANPR data will be enormous given the total traffic (not just Sunnica) in the area. It will not be possible to apply ANPR only to site traffic, consequently the Contractor will amass details of every vehicle and its route through the ANPR net. It will be possible to identify when and where a vehicle index plate entered the net boundary, and when and where it left. This creates a significant data protection issue and potential intrusion to personal privacy.

Alternative Transport Modes

18.1.17. It is not agreed that the location of the scheme is too far from rail connections to allow for long- distance rail transport of materials. The scheme will require a significant portion of imported materials from destinations as far as Felixstowe, Immingham, and the Port of London. The site is located amongst others, within c. 10km south- east of the Ely Queen Adelaide Sidings, for example, where a significant variety of businesses operate, serving the local area and all connected to the major ports in the country by rail. It is therefore considered likely that there is a viable alternative for some long-distance HGV trips, through the transferring of imported materials to the site. No viability discussions are presented in this regard. The scheme is therefore not in line with the NPS. Whilst it is accepted that this would require last- mile deliveries to the various parts of the site by the more traditional road vehicles, avoiding long-distance HGV trips between ports and the local area would be beneficial.

18.1.18. The scheme is close to the Ely to Felixstowe railway line and sidings (if disused) exist at both Kentford and Fordham. The Ely line connects to the East Coast Main Line at Ely and from there to the Midlands and West Coast Main Line at Birmingham. The site is well served by potential rail connections.

18.1.19. Sunnica have said that the scheme will require 1.1 million solar panels all of which will in all likelihood be imported. A typical panel might weigh 20kg. This means 22,000 T of

panels to be imported plus mounting systems and associated equipment. This could amount to say 55,000 T of materials for the PV alone. It could be assumed that these would be delivered in containers and the maximum payload for a standard 40' shipping container is 26.7T. Consequently at least 2000 containers would be required if the weight and not packaging size is the limiting factor.

18.1.20. Unless containers are delivered direct to site, trans-shipping to delivery vehicles would be needed which could easily be done at a remote location.

18.1.21. SNTS say that more consideration should be given to the use of rail transport.

Staff Traffic

18.1.22. The approach is set out for people working on site to be required to park in one of the two centralised car parks and then travel to work sites by mini-bus. The use of internal access roads is referred to, and it is likely the site will have several 4x4 for site use. It is unlikely that engineers who may need to visit multiple locations during the day will find mini-bus services convenient and there will be periods when works in progress obstructs access through the site. Complete rigid application of centralised parking seems ambitious and will be difficult to enforce.

18.1.23. Staff traffic is forecast to reach a peak of 937/day averaging at 653/day in a single direction. For 2-way traffic the numbers should be doubled. Vehicle occupancy has been estimated at 1.5/vehicle which is higher than Government data which suggests in 2020 an occupancy closer to 1.1 (for commuting). While Sunnica propose a travel plan encouraging the use of non-car modes and car sharing, given the paucity of public transport in the area, the rural nature of the site and the area over which the site is spread, it is not certain that 1.5 can be achieved. Sunnica refer to requiring this level, and the use of a parking permit system to control parking. This may control traffic using the central car parks proposed, but it is not clear how this can restrict car use across the whole site.

18.1.24. It is highly probable, therefore, that the permit system will result in nuisance parking in nearby villages where workers who do not have a permit will park to be picked up and hence achieve the mandated occupancy on arrival. It is also highly likely that close to construction activity where parking controls will not operate, that there will be on road parking.

18.1.25. The central parking proposed will have limited benefit. Bussing up to 1000 staff around the site with tools and PPE will be a challenge. It is possible that this will prove unworkable and maximum efficiency of construction will be achieved without it.

18.1.26. SNTS say that monitoring of the efficacy of the scheme is needed and monitoring of fly parking is required.

Potential Trip Generation

18.1.27. The overall peak number of staff visiting the site is assumed to be of 980 staff visiting the site per day. If it were assumed that all workers are being shipped by mini-bus, the 980 workers, would fill up more than 60 mini-buses at the start and stop of each working period. This level of traffic generation by itself would constitute a significant level of movement, even within urban areas, let alone on narrow rural lanes. This calculation assumes that each mini-bus will run full, and that one can fit 16 construction site operatives plus a driver, as well as any tools and equipment within each mini-bus, which is considered an unlikely scenario.

18.1.28. It is highly unlikely that the needs of site transport will neatly manage to fill every min-bus. It is more likely that some mini-buses will not be full as the disposition of workers may not make it efficient to fill every bus. However, 60 might be a reasonable estimate considering that some staff will be working in site offices or in locations within walking distance of the central car parks.

18.1.29. The Transport Assessment also states that an internal mini-bus service will be provided within the site to link up between the site car parks and the respective work areas within the site. The TA continues that there will be an investigation of using mini-bus services to potentially pick up staff from local nearby centres before the start of the 7am and after the end of the 7pm construction phase working times. However, with few large population centres and a very diverse rural site, it is unlikely that such a service would be more attractive than driving to work.

18.1.30. Sunnica uses traffic generation data based upon the Sizewell C Project scheme DCO application, as well as the Hinkley Point C Power Station DCO. It is not agreed that the scope of the construction work for a Solar Farm and a Nuclear Plant are very similar. Whilst nuclear plants are mostly formed of large central buildings with connecting buildings, on a

compact site (typically less than 500m x 500m in size), the Solar Farm under consideration is spread over an area extending approximately 11km by 8km in size. Therefore, whilst it would make sense to provide central facilities for workers during the construction phase of the former, the remote nature of various parts of this site, would probably make such facilities unviable, or certainly less viable for the same number of staff.

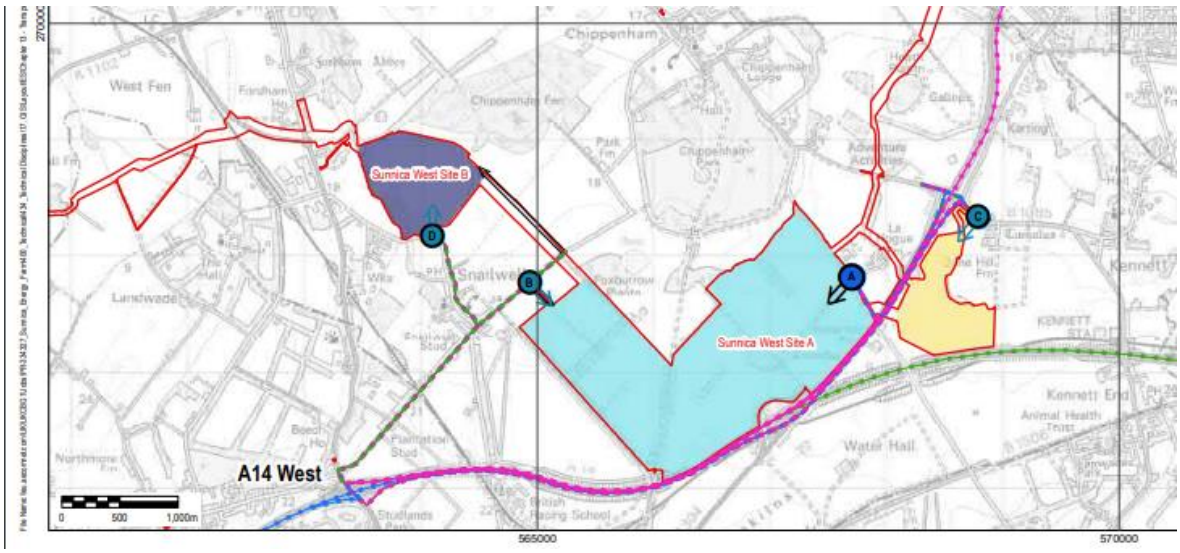
18.1.31. The Construction (Health, Safety and Welfare) Regulations require reasonable provision of welfare facilities, including washrooms, toilet facilities, rest rooms, and drying rooms wherever people are working. While mobile welfare units can be provided, on large sites it is common to have messing facilities where workers can obtain hot food and drink. The assessment therefore also fails to break down the staff movements both after arriving and before departing the site, as well as between the different parts of the site parcels. For example, an employee arriving at the site may travel from a nearby urban area, to either of the main car parks. They will then have to travel between the site car park (potentially using a mini-bus, but not strictly being the only way), to the land parcels (which may include the use of the public highway) where they will be assigned for the day to start their work. They will then stop for lunch and use the mini-bus to go back to the compound for messing. From there they could drive to the local shops for a quick lunch or buy some essentials. This route is therefore then taken in reverse, to get back to their working area, and complete their day, prior to heading back to the parking compound, to leave the site for the day.

18.1.32. Based upon such a simple working day, each employee on site could typically require up to eight vehicular trips. A minimum of 4 trips per day per employee are thereby more realistic than the two daily trips per employee envisioned in this regard. It is hard to envision a way where staff can be forced to limit their movements when they are working on parcels away from the main parking compounds. Considering the number of people working on such a site, it is likely that staff will need to be ferried in between the main compounds and the working sites continuously throughout the day. People may need to go to the main compounds for various reasons, including visits to the administration buildings, to the on-site storage places, to first aid facilities, and staff arriving late/requiring going home arrive for personal reasons, for example. Whilst the Transport Assessment takes into consideration the trips being made during staff arrival and departures times, it should also quantify movement throughout the day.

Site Accesses

Sunnica West

18.1.33. There are several site accesses proposed. The plan below (extract from APP-118 60589004_ES_CTMP_005 Rev 0) shows a primary access to Sunnica West on La Hogue Road with secondary accesses on Fordham Road, Snailwell, Chippenham Road, Snailwell, and Dane Hill Road, Kennett



18.1.34. Access to the secondary accesses in Snailwell is proposed to be via Short Road, Snailwell from the A142. The junction with the A142 has poor visibility and this road in the main is narrow and is not marked over most of its length with 2 lanes. Sunnica have used a criterion of 4.8m as being the minimum width for a car to pass and HGV (Manual for Streets). While this is correct, the criteria is normally applied to housing developments with low speeds (< 30mph). The use of Manual Streets should not be considered to be applicable to all roads. Encountering an HGV on a 4.8m wide road is likely to be intimidating and for vulnerable road users it will be difficult for HGV to comply with highway code recommendations on passing separation. It is likely that considerable damage will be incurred to road edges.

18.1.35. Figure 5 shows the blind approach to the railway bridge from the A142 on Short Road; overhanging trees are likely to force HGV towards the centre of the road, creating a hazard for vehicles coming the other way.

FIGURE 5

18.1.36. It is not clear how much traffic will use this route and at what times. For the construction of Sunnica West B - Fordham Road, Snailwell will be the only access except for along the cable route.

18.1.37. Estimated HGV traffic to Sunnica West (both areas) is a maximum of 104/day (2-way). No indication is given of the split between West B and West A. The majority of arrivals are likely to be at the main access on La Hogue Road with an intent to access West B through the site. It is not clear if the routes through the site will be all-weather and for what periods they will be available.

18.1.38. The area of West B is roughly 16% of the whole of Sunnica West ignoring the cable route. With an estimated 104 HGV movements/day to Sunnica West this suggests that 17 are ultimately destined for West B. The existence of an access route from the A14 is for when access is not available through the site from the main access. In the absence of more detailed information, this suggests therefore that up to 17 HGV/day are possibly at some point during construction going to be using Short Road, Fordham Road and Chippenham Road in Snailwell.

18.1.39. The use of an unsuitable unclassified road for access creates a potential safety problem when HGV pass vulnerable users such as cyclists and horse riders. In addition, the Plantation Stud is on Short Road with buildings and fields both sides and a need

consequently for both people and horse to cross the road. Snailwell Stud is also located on Short Road. Short Road is used by horse riders seeking to avoid busier roads.

18.1.40. There is a shorter and more convenient route for construction traffic to West B by means of the cable route from the A142. The western edge of West B is within 600m of the roundabout on the A142. A haul road will be needed for cable laying in any case, but a temporary crossing of the River Snail will be needed. Temporary bridges can be easily constructed at moderate cost, and this would be much preferable to routing HGV traffic along Short Road and through Snailwell village. This is shown on Figure 6.

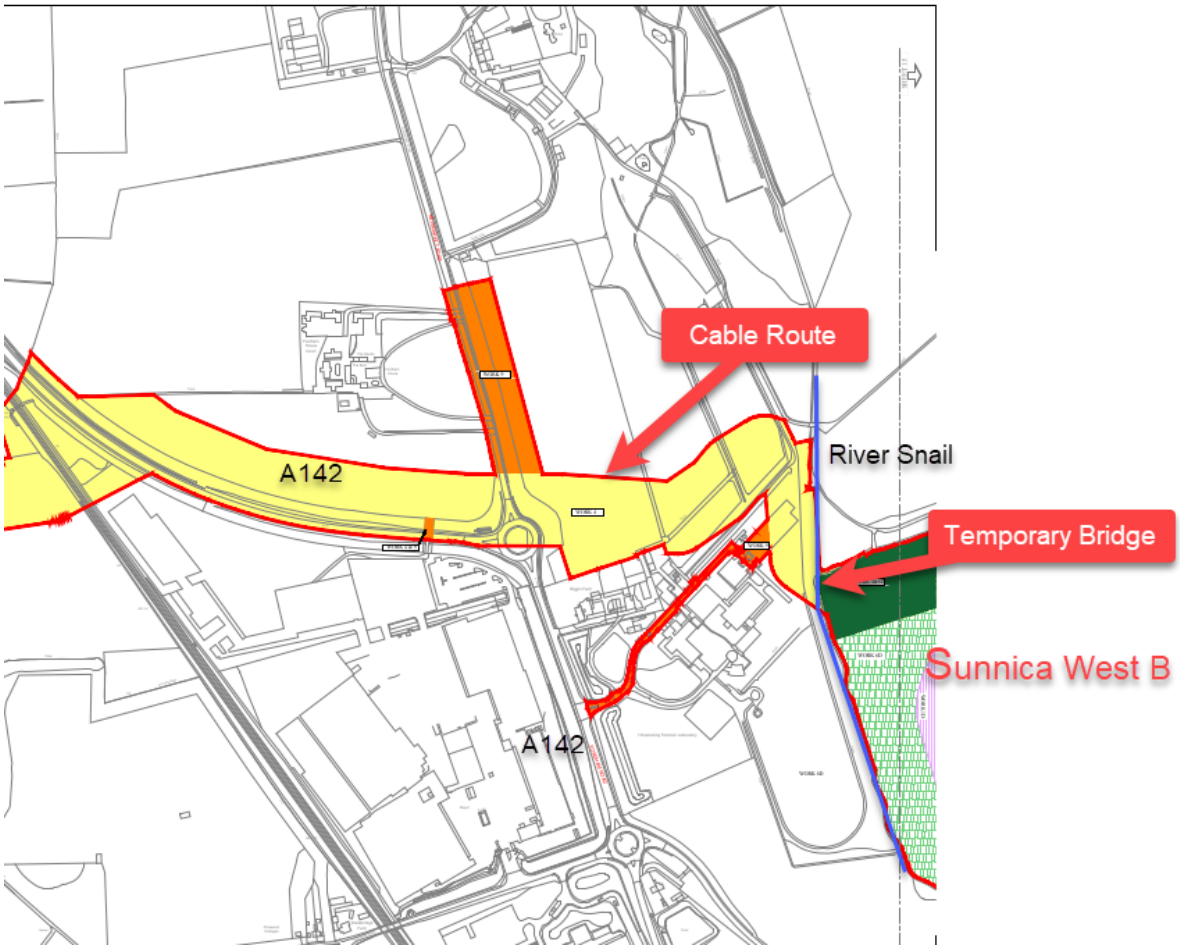


FIGURE 6 - ALTERNATIVE ACCESS TO SUNNICA WEST B

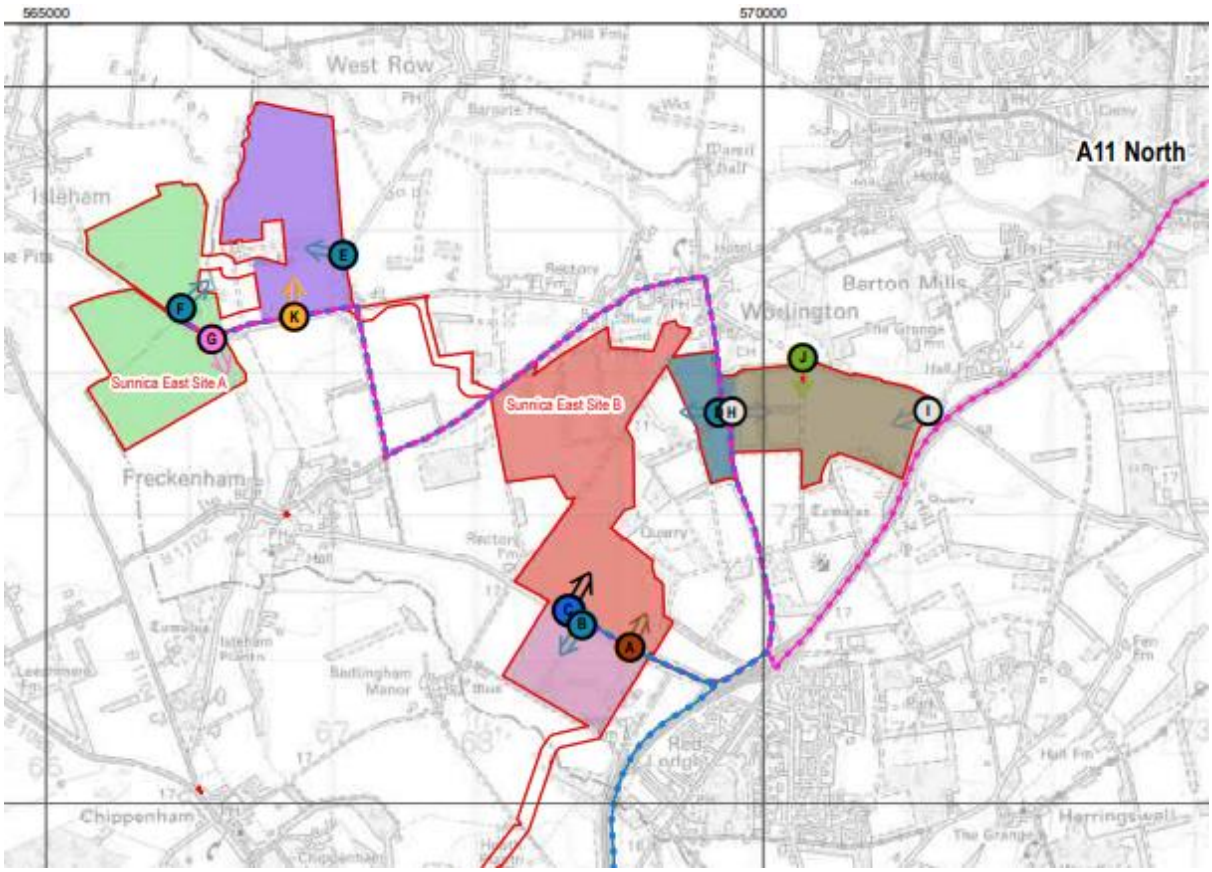
18.1.41. Bridges such as in Figure 7 can carry vehicles weighing up to 45T and can be quickly erected and removed, resting on simple foundations at each end.

FIGURE 7 - TYPICAL TEMPORARY HGV BRIDGE

18.1.42. The area east of the A11 at Dane Hill is 11% of the total area and cannot be accessed through the site. Therefore, all deliveries to this location will have to be made via the A11 Dane Hill junction on the B1085, a total of 12 HGV/day. Access from Kentford is restricted by a 3T GVW limit on the railway bridge at Kennett Station.

Sunnica East

18.1.43. Similarly, for Sunnica East the access routes are shown on the extract from extract from APP-118 60589004_ES_CTMP_006 Rev 0 below.



18.1.44. The primary access is from Elms Road with secondary access points on Golf Links Road and Newmarket Road, Worlington, and Beck Road and unnamed roads, Isleham. Access routing from the A11 to Sunnica East A is via Newmarket Road to Worlington then via the B1102, Freckenham Road to the Road between Freckenham Road and Isleham Road/Beck Road. The junction between Newmarket and Freckenham Road in Worlington has restricted visibility.

18.1.45. East A is roughly 40% of the total of Sunnica East excluding the cable route. It would therefore be expected of the 114 HGV/day destined for Sunnica East that 46 HGV/day are destined for East A. While Sunnica intend that use would be made of routes through the site the access route via Worlington will be used when this is not possible. In the absence of more detailed information, this suggests therefore that up to 46 HGV/day are possibly at some point during construction going to be using Newmarket Road and Freckenham Road, Worlington.

18.1.46. The routing of construction traffic through Worlington is unjustified when traffic could be routed through the site via the cable route. The only reason for not doing so would be

cost which would be moderate, requiring only that the haul road required for the cable route construction be semi-hardened for serviceability in all weathers.

18.1.47. Road schemes are often built by means of longitudinal haul roads along which all traffic must pass and in narrower widths than much of the cable route. A typical haul road is shown in **Figure 8**.

FIGURE 8

18.1.48. Such a facility is most probably being constructed anyway for cable laying as shown in **Figure 9** (construction of a 275 kV cable link):

FIGURE 9

Conclusions

18.1.49. The planned parking control system needs to be developed so as to prevent fly parking with off-road parking available at work sites. It also needs to be enforced which requires adequate resources.

18.1.50. The proposed ANPR system for controlling routes used by HGV is welcome, but it needs to be adequately resourced and enforced.

18.1.51. SNTS say that use of internal haul roads should be maximised, and use of unclassified roads minimised. Short Road, Snailwell should be banned for use by construction traffic.

19. Justification for Compulsory Purchase

19.1.1. SNTS refers to the finance reports attached at **Annex I** that have reviewed the financial standing of the applicant Sunnica Ltd and its funder Solaer Holding and the adequacy of the Funding Statement **[APP-023]**. SNTS has significant concern over the ability of Sunnica Ltd to fund the development and discharge financial obligations such as compensation to be paid to landowners whose land may be compulsorily acquired.

19.1.2. In this context SNTS refers to the Planning Act 2008 – Guidance Relating to the Compulsory Acquisition of Land[21] paragraph 18.

> *Applicants should be able to demonstrate that adequate funding is likely to be available to enable the compulsory acquisition within the statutory period following the order being made, and that the resource implications of a possible acquisition resulting from a blight notice have been taken account of.*

19.1.3. The Funding Statement contains little detail on the calculation of the estimated cost and given the lack of detail in the application the cost estimate must be regarded as only provisional. It is not possible to in any validate the adequacy of the estimate or allowances for risk. While it is stated to include an estimate of liabilities for Compulsory Acquisition, no amount is provided.

19.1.4. Similarly, the Funding Statement contains little detail on the availability of funding and how this would be raised. The ExA cannot be assured based on the information provided that Solaer Holding will fund Sunnica Ltd as there is only a reference to the assets held by Solaer Holding and no visible commitment from Solaer Holding to fund the project beyond its existing commitment.

19.1.5. There is no transparency over funding, Sunnica Ltd has no funding ability, and Solaer Holding has a negative operating cashflow. A statement that Solaer Holding will be able

21 https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/236454/Planning_Act_2008_-_Guidance_related_to_procedures_for_the_compulsory_acquisition_of_land.pdf

to fund Sunnica from its own resources when the amounts are unknown is of no reassurance to the ExA.

19.1.6. SNTS has commented on the Assessment of Alternatives in **Section 16** of this representation. The assessment of alternatives undertaken by the applicant is not sufficient to demonstrate that there is no alternative. Indeed, Sunnica Ltd in their letter to the ExA of 28 April 2022 said at 3.2:

> *If Option 1 is discounted, Option 2 can be taken forward. However, Sunnica is aware, from attempted negotiations with the landowner, that no voluntary agreement is likely to be reached with this landowner. Compulsorily acquisition of the Option 2 land can only occur if Sunnica can demonstrate that there are no reasonable alternatives.*

19.1.7. SNTS Says that the Applicant has not demonstrated that there are no reasonable alternatives for other elements of the scheme.

Conclusions

19.1.8. Based on lack of information on Compulsory Acquisition liabilities and the inadequate Funding Statement the ExA must recommend against granting the Compulsory Acquisition element of the Development Consent Order.

19.1.9. This is also the case in respect of the Applicant failing to adequately demonstrate that there are no reasonable alternatives and the ExA must similarly recommend against granting the Compulsory Acquisition element of the Development Consent Order.

20. Noise and Light

20.1.1. On the matter of Glint and Glare SNTS is unable to present expert evidence on this point and although these issues are of concern to the local communities and SNTS members, SNTS defers to the local planning authorities and the Local Impact Report.

21. Glint and Glare

21.1.1. On the matter of Glint and Glare SNTS is unable to present expert evidence on this point and although these issues are of concern to the local communities and SNTS members, SNTS defers to the local planning authorities and the Local Impact Report in the main.

21.1.2. However, SNTS notes that only one receptor on the Limekilns has been modelled (Figure 9 **[APP-121]**) and this receptor does not appear to be the most sensitive receptor as views of Sunnica West A are possible further east along Wellbottom. Indeed, SNTS would say that there is a greater exposure to Sunnica West A than from the receptor used.

21.1.3. There are no receptors on Railway Field despite views of West A being possible.

21.1.4. The risk to racehorses being startled by a glint or glare is acute on both the Limekilns and Railway Field and a more comprehensive assessment should have been done. The risk of injury to horse and/or rider in the event of a bolt has both welfare and cost implications that are significant.

21.1.5. SNTS queries the receptor on Long Hill Gallops in Figure 9 **[APP-121]** given that this location has no visibility of Sunnica. The assessment at 7.11 in **[APP-121]** is challenged as no refection possible is stated on the basis of a single receptor.

21.1.6. Glint and glare are also a major consideration for recreational riding in the area, and Baldingham lane is a good example where panels are shown on both sides of the lane making it dangerous for riding.

22. Hydrology, Flooding and Drainage

22.1.1. SNTS notes the impacts of climate change and impact of rainfall and consequent impacts on local water courses, and this is a matter of significant concern locally.

22.1.2. It is also noted that in a letter from the Environments Agency dated 14 July 2022 (**Appendix I**) it is said that winter fill reservoirs enable the Agency to manage unwanted flooding by abstracting water for irrigation during periods of high flow in winter. The reservoirs then empty when crops are irrigated in the summer. This activity will cease or reduce in respect of two winter fill reservoirs. One is located south of Elms Road within Sunnica East. The other is located south of Chippenham Road close to Sunnica West A.

22.1.3. If winter filling ceases then the risk of flooding will increase, exacerbated by climate change. The section on Flood Risk **[APP-041]** refers to both reservoirs (9.6.26 and 9.6.54) but considers these only as water bodies and the risk to the bodies from Sunnica. Reference is made to using the reservoirs for cleaning water, but if the reservoirs are no longer drawn down then water abstraction into them must cease.

22.1.4. However, on the matter of Hydrology, Flooding and Drainage SNTS is unable to present expert evidence on this point and although these issues are of concern to the local communities and SNTS members, SNTS defers to the relevant statutory bodies, local planning authorities and the Local Impact Report.

23. Planning Balance

23.1.1. Before concluding, it is necessary for these Written Representations to return to the idea of cumulative impact. This was considered at the beginning of these Written Representations in the context of the intrinsic cumulative impact arising from the size, shape and design of the scheme. However, it is also necessary to consider the cumulative impact of the effects identified throughout these Written Representations.

23.1.2. At NPS EN-1 (in the context of environmental statements, although the concept of cumulative impact is relevant more broadly) it is noted at para 4.2.6 that:

> *The Secretary of State should consider how the accumulation of, and interrelationship between, effects might affect the environment, economy, or community as a whole, even though they may be acceptable when considered on an individual basis with mitigation measures in place.*

23.1.3. Thus, it is necessary to consider the effects identified in the round. That is what the table on the next page seeks to achieve. The ExA must consider this combination of effects, and thus amplification of the harm that has been identified, to best assess where the planning balance lies in this case:

Effect	Overall Impact
Intrinsic cumulative impact	**High** as a result of its unusual and spread-out design.
Landscape and visual amenity	The susceptibility of the local landscape, comprising the site and its context is considered to be **high**. Local topography and its impact on the visibility of the development from the Limekilns and the role of the site in providing a rural setting to the Limekilns and Waterhall Gallops and Chippenham Park are key factors increasing susceptibility. As outlined above, the local landscape in which the site is located has high value and the overall sensitivity of the local landscape to the change proposed is **high**. The magnitude of change would be **medium/high** and given the high sensitivity the overall effect upon the character of the local landscape would be **major adverse**, which is significant
Heritage	The construction of the Sunnica Energy Farm will have a **negative impact** upon the significance of a number of designated and non-designated heritage assets, either directly or via changes to their settings. The Applicant's own assessment identifies that several of these impacts are of sufficient magnitude to be considered '**significant**' and, as set out above, in many cases it is apparent that the Applicant's assessments understate the full extent of the impact. It is also apparent from the

	submitted documents that the Applicant does not consider their proposed landscape mitigation scheme will reduce the scale of this impact further.
Agriculture	The classification of the land has been incorrectly assessed. The productive nature of the land at least 50% of which is BMV has hence been ignored, both in terms of impact on agriculture and economic impact. No case has been made for the development being necessary on BMV land and therefore it fails to comply with NPPF.
Ecology and Biodiversity	The Applicant's submissions on ecology: a) fails to present a sufficiently accurate representation of the baseline ecological interest present within the proposed order limits, and b) are not therefore sufficiently reliable for robust decision-making. The correction of the errors identified calls into question the overall compliance of the scheme with national policy. The mitigation and compensation proposals offered in the applicant's submission material, being founded on an incomplete understanding and/or representation of the baseline position and an, at best, optimistic view of the delivery challenges they will face, cannot in their present form be relied

	upon by decision makers as a safeguard to avoid the project ultimately giving rise to **significant net loss of biodiversity**.
Impact on Horse Racing Industry	The impact on horse racing has not been assessed by the applicant. The key policy, in the East Cambridgeshire Local Plan, states unequivocally that development that would threaten the long-term viability of the horseracing industry will not be permitted. Further, the West Suffolk Local Plan, also offers a high level of protection for the horseracing industry and stipulates that the benefits of development must significantly outweigh the harm the development would cause for it to be permitted. Had the proposed development's impact been assessed by the applicant it would have been shown to be significant and, at the very least, it would have been shown to threaten the long-term viability of the industry.
Impact on Local Communities	The development is only temporary in the sense that it is one day planned to be decommissioned; It will be in operation for over a generation and for anyone over a certain age, then in all probability they will not see it decommissioned in their lifetime.

	The harm to local communities is significant. These factors should weigh heavily against the scheme in the planning balance.
Impact on Recreation	At the highest level, the changes to setting throughout the area will influence and (so say SNTS) damage the use of recreational open areas. The evidence suggests that this will harm the recreational use of the area around the scheme as people feel it is no longer rural. The harm to public rights of way by the scheme is considerable.
Impact on Tourism	If the Sunnica scheme is consented long term severe damage would be done to tourism of this important and unique tourist attraction and the businesses and communities that rely upon it by the Sunnica proposals
Carbon Lifecycle and Need	A reasonable assessment of the scheme predicts that the scheme will produce more carbon than it saves over its lifetime compared to the grid over the same period (be carbon net positive). In those circumstances, the ExA should not take weight from the policy guidance said in the Statement of Need to be supporting the scheme.

BESS, Planning and Safety	The scheme may require Hazardous Substances Consent which the Applicant proposes to be a post-consent activity. The presence of a potential for hazardous substances consent matters because items such as the Outline Battery Fire Safety Management Plan will be approved as part of the DCO process. They are missing from the application as currently written, which is a significant flaw for any hazardous substance consent application.
Decommissioning	There is insufficient obligation to return the land to the pre-existing agricultural use. Much of the site includes agricultural land of Best and Most Versatile quality. This land is valuable in the range of crops that it can grow and the yields it can produce. To not secure such a return is to fail to meet the aims of the Government's Food Strategy. Taken in the round, it would be an ineffective and inefficient use of land, which minimises its value, to leave the land damaged and unusable for its original purpose following the decommissioning of the scheme.
Assessment of Alternatives	The assessment of alternatives is flawed and approached from a pre-determined outcome which as the unusual design is based solely on land availability.

	The ExA should give no weight to the need basis for the land; indeed, the availability of other options which have not been considered should weigh against the scheme as a whole.
Consultation	Engagement with the application, and the quality of the replies, have been significantly hampered by the difficulties that locals have faced in making their views known. Locals have been deprived of an opportunity to give intelligent consideration and an intelligent response to the scheme in the consultation stage. This is contrary to the direction of travel for Government in community involvement with renewable energy schemes.
Justification for Compulsory Purchase	The finances of Sunnica Ltd and its funder Solaer Holding give concern as to the certainty of the project progressing should it be given consent. Further the lack of a robust alternatives assessment fails to prove that there is no alternative to compulsory acquistion.
Traffic	The scheme fails to use the most suitable routes for HGV.

23.1.4. Taken in the round the planning balance is strongly against the granting of development consent for this scheme. There are few benefits.

23.1.5. The scheme is not carbon neutral, nor even carbon negative. Impacts on landscape, heritage, agriculture, the local economy have either been underestimated or not assessed at all. There is scant attention to returning the site to agriculture on decommissioning and a risk it may never be decommissioned. The “temporary” nature of the scheme, in operation for 40 years, should be given little weight against the impacts on the local community.

23.1.6. The ExA must conclude that the scheme weighs poorly in the planning balance and that the disbenefits, many of which have been underestimated or inadequately assessed fail to outweigh the relatively few benefits. The scheme is a poor fit to extant policy and lacks community support.

24. Conclusions

24.1.1. There is no doubt that this application is flawed. It is based on an incorrect assessment of agricultural land classification indicating a low proportion of BMV land when the opposite is the case.

24.1.2. The landscape and visual impact is also badly flawed. The heritage assessment consistently underestimates the impact on heritage features.

24.1.3. The Applicant has incorrectly assessed the ecology and biodiversity and significantly over-estimates the biodiversity net gain of the development.

24.1.4. No account has been taken of the dominant economic activity in the area, that of horse racing and breeding and the unique dependency of Newmarket on this industry to the exclusion of others. Concomitant with racing is tourism and the value created by tourism activity on the back of the racing heritage and unique landscape.

24.1.5. The scheme causes because of its unusual design harm to local communities that cannot be mitigated.

24.1.6. A major driver of the scheme is said by the Applicant to be achieving carbon neutrality and assisting in UK travel towards "Net Zero". Yet the scheme is not carbon neutral over its lifetime, in fact over the 40 years it will be in operation it will generate more carbon emissions than it saves.

24.1.7. The scheme provides for an unquantified amount of Battery Energy Storage. SNTS considers the quantity to not be consistent with Associated Development under Planning Act 2008.

24.1.8. Inadequate attention has been given to decommissioning and how the site will be restored. The ExA cannot accept the scheme as being temporary without assurance that it will be fully restored to agriculture.

24.1.9. The assessment of alternatives is weak and lacks any sense of a sequential assessment as options are funnelled down to a short list. The assessment is transparently based on a pre-

determined outcome and the resulting unusual site layout is entirely the result of land availability criteria and nothing else.

24.1.10. Based on the financing concerns and the lack of a robust demonstration that there is no reasonable alternative, the ExA must recommend against granting compulsory acquisition powers.

24.1.11. The scheme weighs poorly in the planning balance and the disbenefits, many of which have been underestimated or inadequately assessed fail to outweigh the relatively few benefits. The scheme is a poor fit to extant policy and lacks community support. It must therefore not be granted development consent.

Appendices

Appendix A

List of Largest Solar Plants in the World

Source List.Solar accessed 10/11/2022

Name	Country	Capacity
Bhadla Solar Park	India	2245
Huanghe Hydropower Hainan Solar Park	China	2200
Pavagada Solar Park	India	2050
Benban Solar Park	Egypt	1650
Tengger Desert Solar Park	China	1547
Noor Abu Dhabi	United Arab Emirates	1177
Mohammed bin Rashid Al Maktoum Solar Park	United Arab Emirates	1013
Kurnool Ultra Mega Solar Park	India	1000
Datong Solar Power Top Runner Base	China	1000
NP Kunta	India	978
Longyangxia Dam Solar Park	China	850
Villanueva Solar Park	Mexico	828
Mount Signal Solar	United States	794
Rewa Ultra Mega Solar	India	750
Solar Star (I and II)	United States	747
Charanka Solar Park	India	690
Kamuthi Solar Power Project	India	648
Dau Tieng Solar Power Project	Vietnam	600
Copper Mountain Solar Facility	United States	552
Topaz Solar Farm	United States	550
Desert Sunlight Solar Farm	United States	550
Three Gorges Golmud Solar Park	China	500
Three Gorges Delingha Solar Park	China	500
Huanghe Hydropower Golmud Solar Park	China	500
Núñez de Balboa photovoltaic plant	Spain	500
Sunnica	United Kingdom	500
Longfield	United Kingdom	500
Roadrunner Solar Project	United States	497
Mula Photovoltaic Power Plant	Spain	494
Trung Nam Thuan Nam solar power plant	Vietnam	450
Springbok Solar Farm	United States	443
Agua Caliente Solar Project	United States	410
Techren Solar Project	United States	400
Pirapora Solar project	Brazil	400

Mesquite Solar project	United States	400
Galiveedu solar park	India	400
Ananthapuramu - II	India	400
Yanchi Solar Park	China	380
Prospero Solar Park	United States	379
Loc Ninh Solar Park	Vietnam	350
Cleve Hill	United Kingdom	350
Greasewood Solar Farm	United States	347
Misae Solar Park	United States	324
Limondale Solar Farm	Australia	313
Sakaka PV IPP	Saudi Arabia	300
Cestas Solar Park	France	300
Nova Olinda Solar Farm	Brazil	292
Beacon Solar Project	United States	291
Great Valley Solar	United States	281
California Flats Solar Project	United States	280
Garland Solar Facility	United States	272
GA Solar 4 Project	United States	261
Don José Solar Farm	Mexico	260
Tranquillity Solar project	United States	258
Ituverava Solar Farm	Brazil	254
Stateline Solar	United States	250
Silver State South Solar Project	United States	250
Moapa Southern Paiute	United States	250
McCoy Solar Energy Project	United States	250
Mandsaur Solar Farm	India	250
California Valley Solar Ranch	United States	250
Kadapa Ultra Mega Solar Park	India	250
Little Crow	United Kingdom	150

Appendix B

Comparison of UK Solar Schemes > 50MW

List dated 2021 accessed November 2022, UK plants >= 150 MW added from UK Gov Renewable Energy Planning Database

(https://www.gov.uk/government/publications/renewable-energy-planning-database-monthly-extract)

Operator (or Applicant)	Sunnica	Longfield Solar Energy Farm Limited (part of EDF Renewables)	Cleve Hill Solar (Hive Energy/ Wirsol Energy)	INRG Solar	NextEnergy Capital LLP	Statkraft UK Limited	Wentlooge Farmers' Solar Scheme	Green Energy International
Site Name	**Sunnica Energy Farm (East and West)**	**Longfield**	**Cleve Hill Solar Project**	**Little Crow Solar Park**	**Llanwern Solar Farm & Battery Storage**	**Elwy Solar Energy**	**Wentlooge Renewable Energy Hub**	**Frodo Solar and Battery Energy Development**
Technology Type	Solar Photovoltaics	Solar Photovoltaics	Solar Photovoltaics	Solar Photovoltaics	Solar Photovoltaics	Solar Photovoltaics	Solar Photovoltaics	Solar Photovoltaics
Installed Capacity (MWelec)	500	500	350	150	75	62	62.5	60.1
Mounting Type for Solar	Ground	Ground	Ground	Ground	Ground	Ground	Ground	Ground
Development Status	Planning Application Submitted	Planning Application Submitted	Planning Permission Granted	Planning Permission Granted	Operational	Planning Application Submitted	Planning Permission Refused	Planning Application Submitted
Address	Land 4.5km East of Burwell and Land 2.5km South-West of Mildenhall	North east of Chelmsford and North of the A12 between Boreham and Hatfield Peverel	Graveney, Whitstable	Land located 0.6km to the east of the British Steel site at Scunthorpe,	S/o Whitson Electricity Substa, Broad Street Common, Nash, Newport,	Land at Gwernigron Farm, The Roe, St Asaph,	Land SW of St Brides on the Gwent Levels	Frodo Solar Farm, Crimond, Fraserburgh
County	Cambs/Suffolk	Essex	Kent	Lincolnshire	Gwent	Denbighshire	Gwent	Aberdeenshire
Region	Eastern	Eastern	South East	Yorkshire and Humber	Wales	Wales	Wales	Scotland
Country	England	England	England	England	Wales	Wales	Wales	Scotland
Planning Authority	The Planning Inspectorate - National Infrastructure	The Planning Inspectorate - National Infrastructure	The Planning Inspectorate - National Infrastructure	The Planning Inspectorate - National Infrastructure	Welsh Government (NSIP)	Welsh Government (NSIP)	Welsh Government (NSIP)	Scottish Government (S36)

Planning Application Reference	EN010106	EN010118	EN010085	EN010101	DNS/3213968	DNS/3247619	DNS/3216558	ECU00003345
Planning Application Submitted	18/11/2021	28/02/2022	16/11/2018	04/12/2020	20/02/2018	22/03/2021	07/05/2020	16/03/2022
Planning Permission Refused							10/09/2021	
Planning Permission Granted			28/05/2020	05/04/2022	13/11/2018		Appeal	
Under Construction					01/06/2020			
Operational					01/03/2021			
Gross Area (Ha)	981	453	491.2	226	72	121	162	106
BESS Size	>50mw	>50MW	> 50MW	<=90 MW	Circa 200MW (Secondary Application)	Possibly 12 mw	62.5 (Separate application under TCPA)	50
Approx Distance to Nearest Settlement (Order Limits)	600m (Isleham), 590m (Freckenham), 0km (Worlington), 316m (Red Lodge), 1.4km (Fordham), 240m (Snailwell), 1km(Chippenham), 210m (Badlingham)	500m (Flacks Green), 315 m (Fuller Street), isolated houses closer	1.25km (Faversham), 0km (Country View Park), 0.65km (Graveney)	0.93 km (Broughton)	1.3 Km (Pontardulais Road), isolated dwellings and farms on perimeter.	0km	340m (Marshfield), 360m (Outfall Lane)	850m (Crimond)
Aggregated	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes

Aggregated means that the development is a large single site and not connected multiple sites

Appendix C

Sunnica Farms Budget

Sunnica Farms Budget - Cropping Year 2023

Total Farm Area	**Acres**	2424.051	
	Hectares	981	

Basic Rotation	**Area**	**GM**				
Wheat Winter	123	£	1,477	£	181,117	
Potatoes Maincrop	110	£	8,079	£	891,619	
Wheat Winter	123	£	1,477	£	181,117	
Sugar Beet	123	£	1,402	£	171,920	
Wheat Winter	123	£	1,477	£	181,117	
Maize	123	£	420	£	51,503	
Wheat Winter	123	£	1,477	£	181,117	
Onions	110	£	4,767	£	526,098	*10% reduction*
		Total		**£**	**2,365,608**	**£** ***2,129,047***

Fixed Costs £/ha (Best in Show)	**Cereals**	**Pots/Onions**			
Labour	£ 105	£	1,250	£	340,284.38	
Power & Machinery (incl Dep)	£ 321	£	1,720	£	576,460.13	
Administration	£ 52	£	188	£	73,378.80	
Property	£ 36	£	534	£	139,939.65	
Finance	£ 20	£	20	£	16,677.00	*10% increase*
Total	**£ 534**	**£**	**3,712**	**£**	**1,146,740**	**£** ***1,261,414***

Net Margin (Pre BPS)			**£**	**1,218,868**	**£** ***867,633***
BPS (2023)	**£**	**119**	**£**	**116,739**	**£** ***116,739***
Net Margin Incl BPS	**£**	**1,361**	**£**	**1,335,607**	**£** ***984,372***
Net Profit	**Total**		**£**	**1,335,607**	**£** ***984,372***
Excluding rent	**Per Ha**		**£**	**1,361.48**	**£** ***1,003.44***
	Per Acre		**£**	**551**	**£** ***406***
Net Profit	**Total**		**£**	**850,796.78**	**£** ***499,561.99***
Including a £200/acre rent	**Per Ha**		**£**	**867.28**	**£** ***509.24***
	Per Acre		**£**	**350.98**	**£** ***206.09***

	Total Production	
T/ha	**Total Tons**	
8.25	1012	
65	7174	
8.25	1012	
85	10423	
8.25	1012	
42	5150	
8.25	1012	
52	5739	
Total	**32532**	

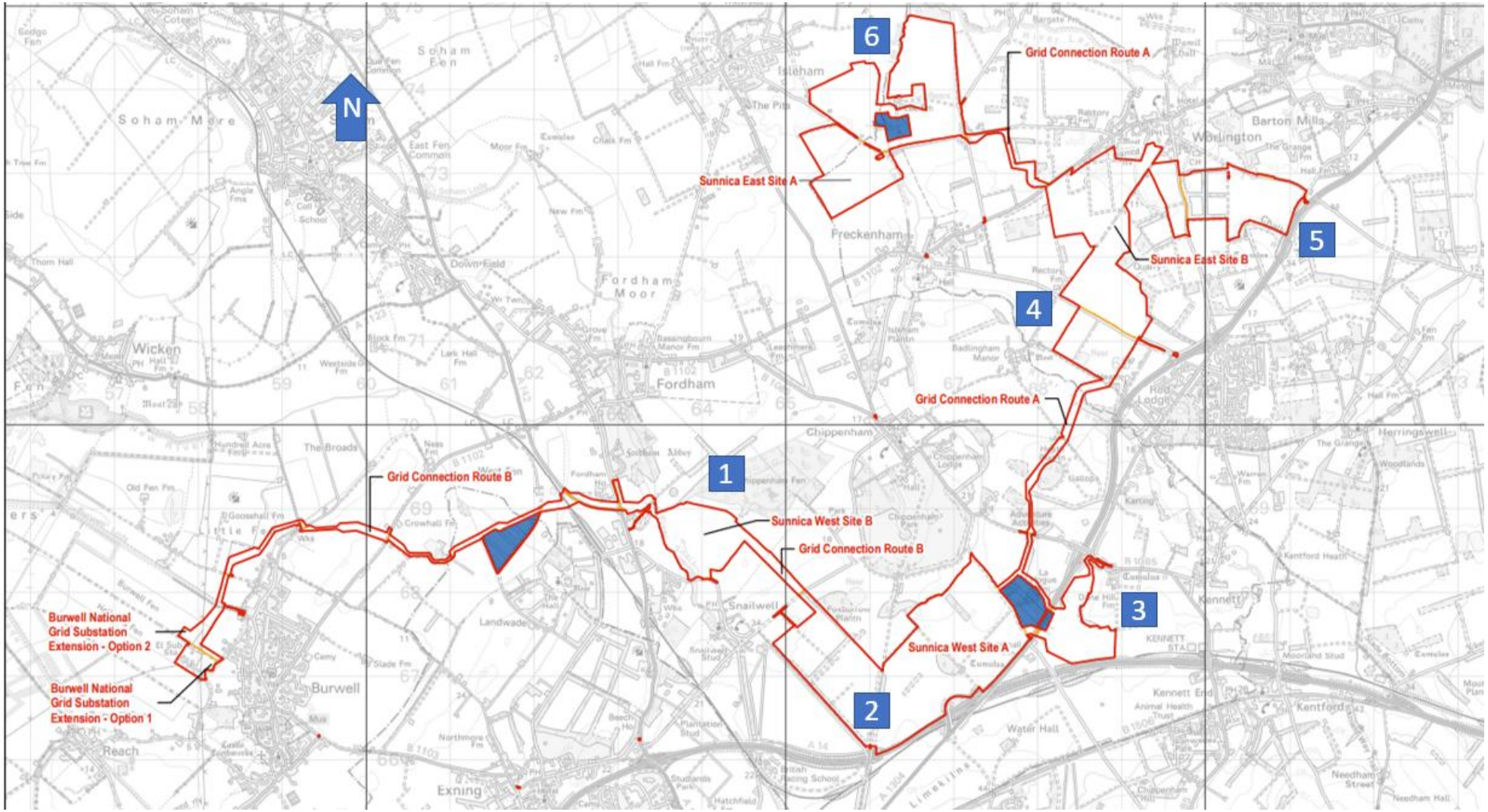
Assumptions

All land owned with no borrowings

No borrowings for infrastructure

Appendix D

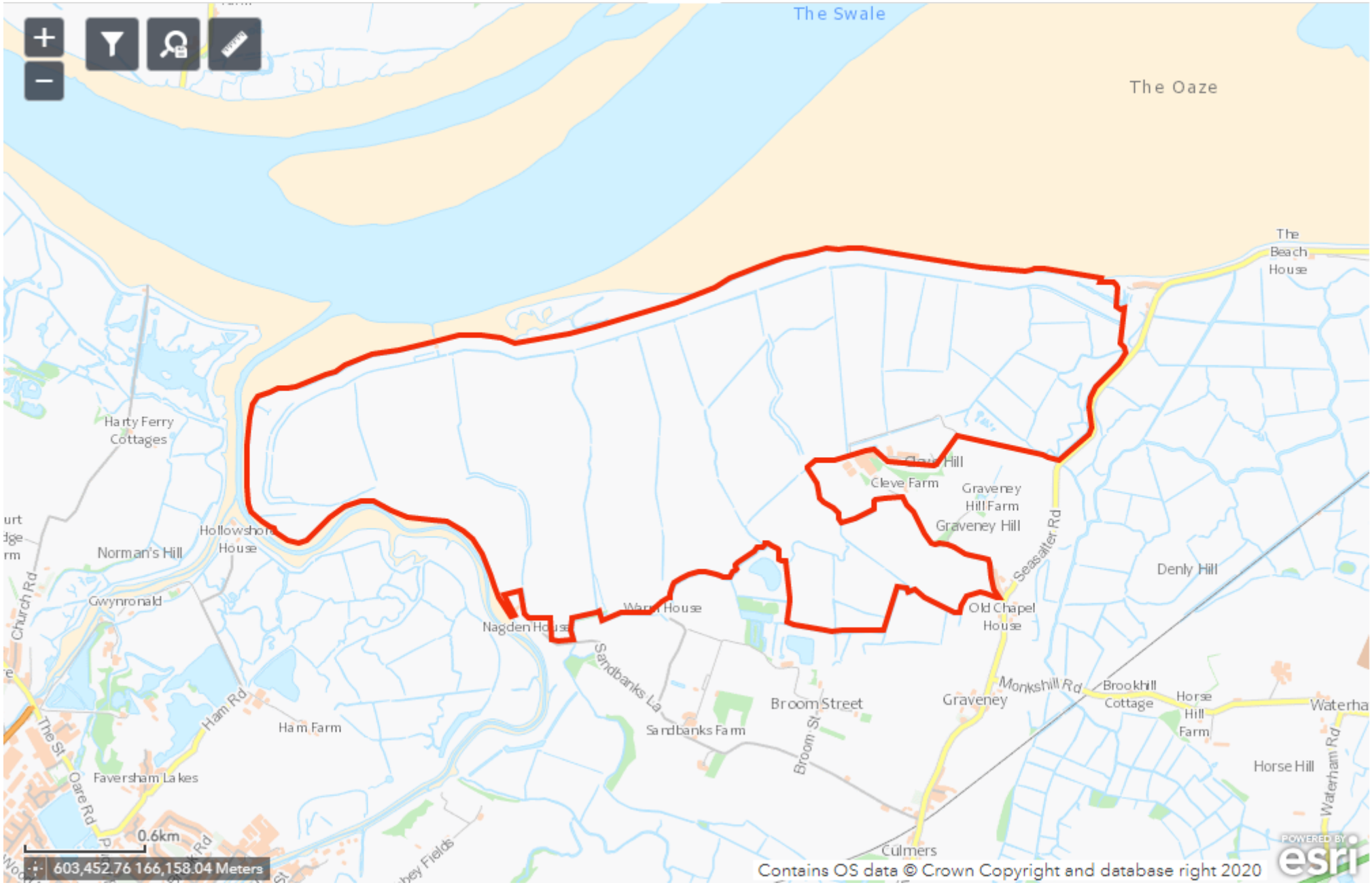
Number of Discrete Sites

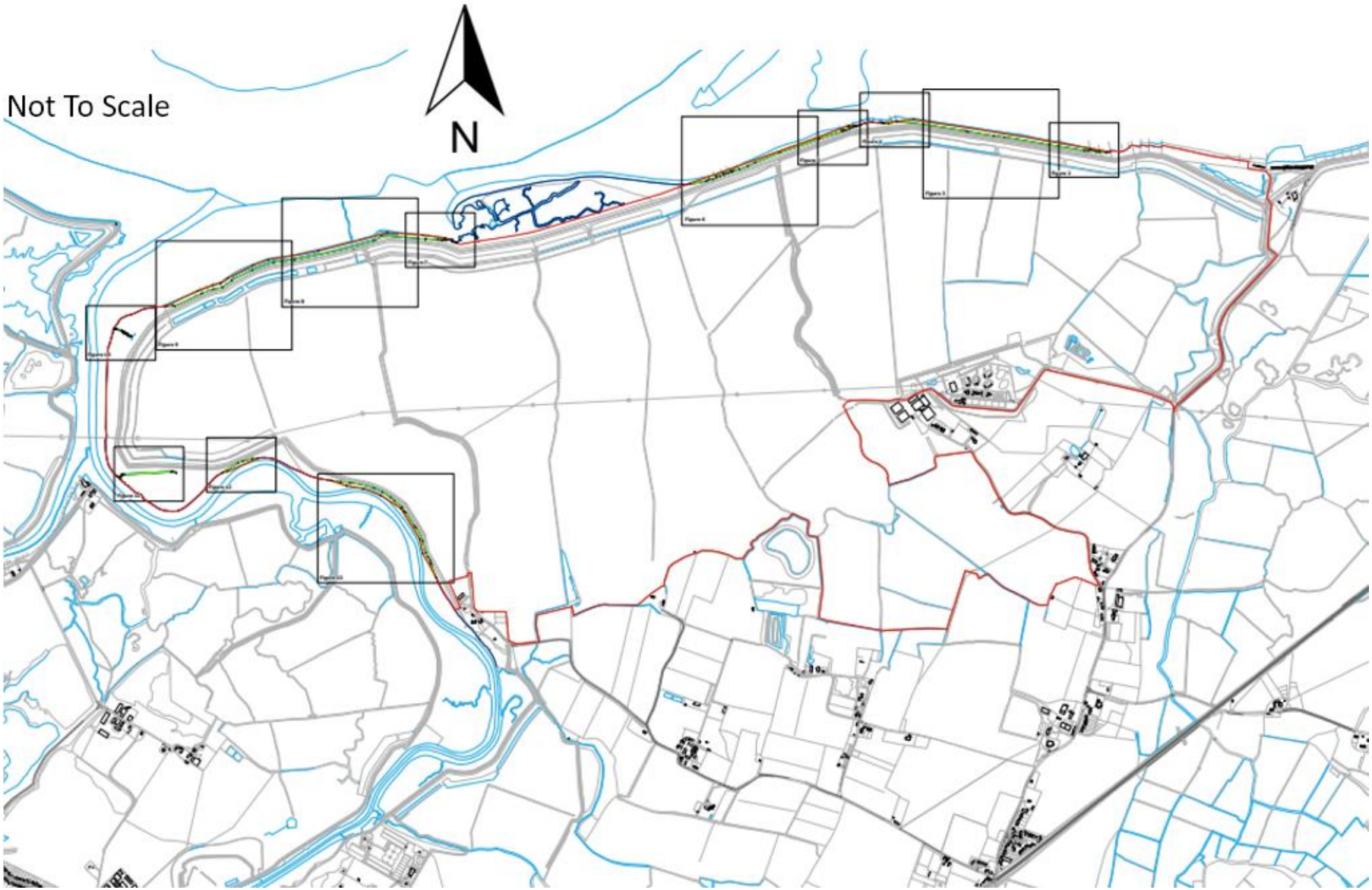

N
6
Grid Connection Route A
Sunnica East Site A
Sunnica East Site B
5
4
Grid Connection Route A
1
Grid Connection Route B
Sunnica West Site B
Grid Connection Route B
3
Sunnica West Site A
2
Burwell National Grid Substation Extension - Option 2
Burwell National Grid Substation Extension - Option 1
Soham Mere
Soham Fen
Isleham
Barton Mills
Freckenham
Wicken
Fordham Moor
Fordham
Chippenham
Herringswell
Snailwell
Landwade
Burwell
Reach
Exning
Kennett
Kentford
Water Hall

Appendix E

Cleve Hill Order Limits

Source: https://pa.midkent.gov.uk/online-applications/applicationDetails.do?activeTab=map&keyVal=RF0BSKTY0YW00


The Swale
The Oaze
The Beach House
Harty Ferry Cottages
Cleve Farm
Graveney Hill Farm
Graveney Hill
Seasalter Rd
Denly Hill
Old Chapel House
Norman's Hill
Hollowshore House
Gwynronald
Church Rd
Nagden House
Sandbanks La
Sandbanks Farm
Broom Street
Broom St
Graveney
Monkshill Rd
Brookhill Cottage
Horse Hill Farm
Horse Hill
Waterham Rd
Ham Rd
Ham Farm
The St
Oare Rd
Faversham Lakes
Culmers
0.6km
603,452.76 166,158.04 Meters
Contains OS data © Crown Copyright and database right 2020
esri

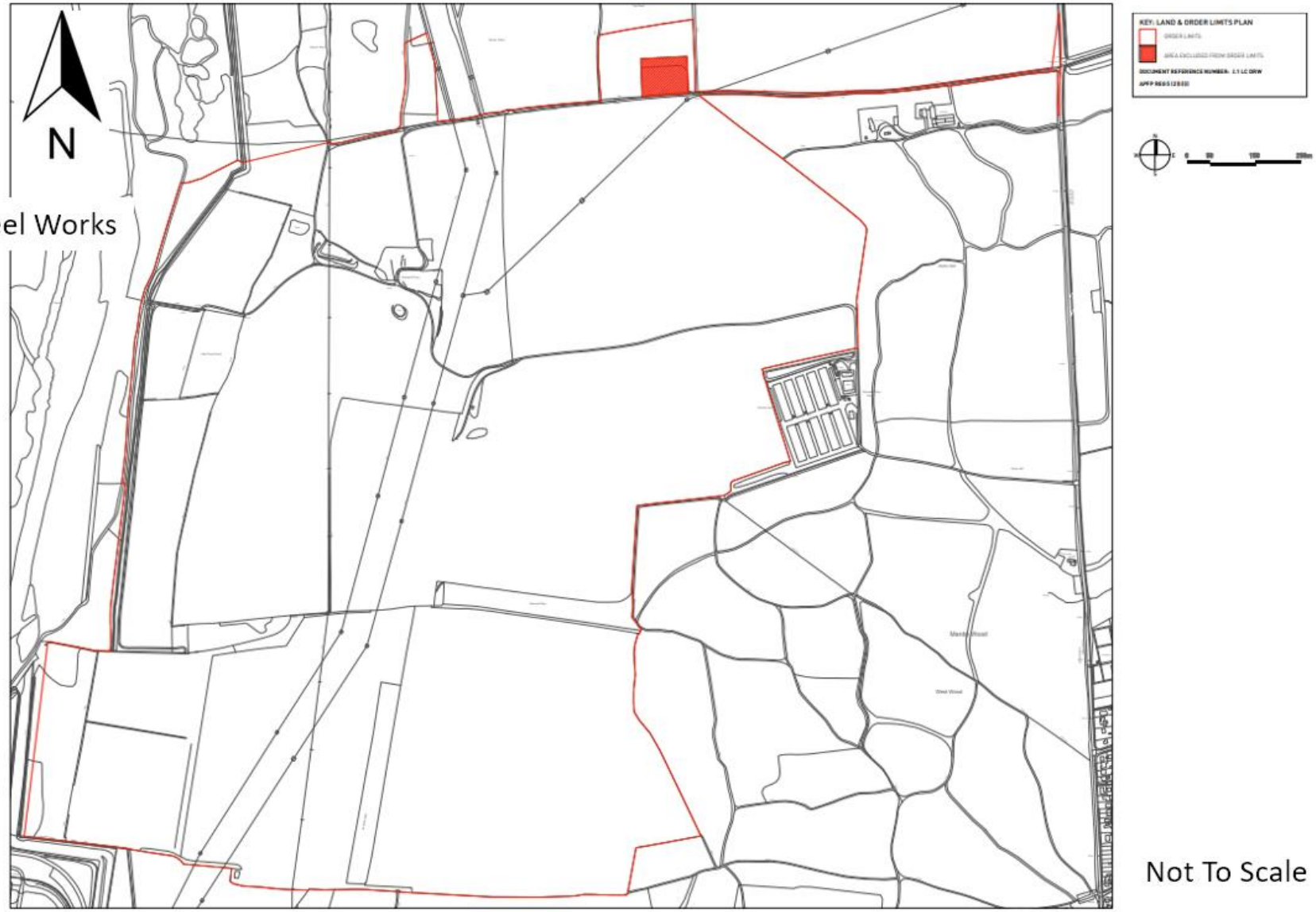

Not To Scale
N

Little Crow Order Limits

Source:

https://infrastructure.planninginspectorate.gov.uk/wp-content/ipc/uploads/projects/EN010101/EN010101-000292-Document%20Ref%202.1%20LC%20DRW%20Land%20Plan%20Order%20Limits.pdf

Scunthorpe Steel Works



Not To Scale

Appendix F

Sample Solar Decommissioning Plan

Appendix G

Newmarket Tourism

Source: Discover Newmarket Website – Accessed 10/11/2022

Newmarket's tourism boost

30/10/2018

2017 saw a record-breaking year for the Home of Horseracing with Newmarket welcoming over 1.6 million visitors, which boosted the economic value of tourism in the town by 6% to a total in excess of £73 million.

Statistics from Discover Newmarket, the tourism hub and official tour guide for the town, show that figures for overnight and day trips to the town have risen from 2016 by 7.8%, and that the overall value of tourism to the town increased by more than £4.2m in the space of one year.

The number of day trips to the town increased by 7.3% from 2016, up to 1,651,000, and overnight trips to the town also increased by 8.3%, seeing 39,000 trips taken in 2017.

The visitor spend from these trips hit a high of £61.8m and helped to grow tourist related employment in the town to 1,363, an increase of 6%.

Newmarket's unique offering as the Home of Horseracing in the UK, gives visitors an experience unlike any other town when visiting. With a host of tours designed to give you the opportunity to meet the organisations, trainers and the staff behind champion racehorses, as well as give you the opportunity to see equine stars at work, Discover Newmarket is leading the way for tourism in the town which is known as Horseracing's HQ.

Noel Byrne, Chairman of Discover Newmarket and Chief Executive of The Bedford Lodge Hotel and Spa:

"This fantastic result for Newmarket truly showcases the profile that the town has achieved as a destination. I'm sure I echo the businesses and the community of Newmarket's thoughts when I say that we look forward to seeing this growth continue in the future."

Discover Newmarket consistently looks to increase its offering to the local community as well as those visiting from further afield, and in 2017 added a number of new tours to help bolster its offering, including The Cheveley Park Stud Tour, the one-off Enable Tour and a John Gosden and Golden Horn Tour.

In June of 2018, to celebrate the new daily direct flight from Dubai into London Stansted Airport, Discover Newmarket helped to bolster relationships and promote Newmarket to the Middle East by hosting a familiarisation trip for 16 Global Travel Leaders to the town. The tourism hub for Horseracing HQ has also been working with the Discover England Fund for its Horseracing – The Sport of Kings campaign, which looks at promoting luxury sporting breaks, horseracing and heritage to target audiences in the U.A.E. Discover Newmarket will continue to target international audiences into 2019 and evolve its tour offering for future visitors to the town.

Megan Pollexfen, Manager of Discover Newmarket, said:

"It's encouraging to see that tourism is greatly contributing to the economy in the town, having risen so much in 2017. There is already so much in Newmarket to engage and entice the regional community as well as national and international audiences, but we are working hard to boost this for the future to generate further economic growth.

"The increase in visitor spend within the town is a strong tool which we are working hard with businesses and attractions in the town to utilise for reinvestment into Newmarket.

"As we're coming towards the end of 2018, we're confident that visitor numbers will have risen this year, and we already have a number of plans in place to help increase the proposition of the town for 2019. At Discover Newmarket, we implemented a new tour for 2018, the Shadwell Tour, and we evolved one of our very special tours, the Frankel Tour with the assistance of Lady Jane Cecil, who kindly led our Frankel Tours in 2018.

"We can only see the numbers growing in the future and the results of this for the town, as well as the community which surrounds it, are nothing but positive."

Appendix H

Biodiversity Net Gain Dialogue with Applicant

SNTS Letter dated 31 August 2022

Say No To Sunnica Action Group Ltd

Badlingham Farm, Chippenham, Ely, Cambridgeshire, CB7 5QQ

31 August 2022

Dear Sirs,

Application by Sunnica Ltd for an Order Granting Development Consent for Sunnica Energy Farm

Biodiversity Net Gain Calculations

You will be aware from direct correspondence from ecological consultants Bioscan that Say No to Sunnica Action Group Ltd commissioned them to undertake an independent review of Sunnica Ltd's ecological impact assessment and supporting material, as contained within the ES and its supporting documents.

Bioscan have now completed an initial review and have produced a report (attached) exposing shortfalls in the completeness and accuracy of the ecological information, and the impact assessments based upon it. We intend to bring these matters to the attention of the Examining Authority in due course, but in the interests of seeking to narrow the scope of disputed matters before they take up examination time and resources, we are sending you an advance copy and inviting your response on the issues raised.

Note that while Bioscan were commissioned in the spring, their report was delayed due to waiting on yourselves for a copy of the metric 3.0 BNG figures, with these ultimately received on 13th July.

We ask that you provide us with a response by 15th September in view of the latest thinking on examination timescales and procedural deadlines. Matters not resolved at that point will become the basis of submissions.

Yours sincerely

N Wright (Director)

Electronically signed.

Say No To Sunnica Action Group Ltd – Registered in the UK - Company Number 13804465
Registered Office Address - Si One, Parsons Green, St Ives, England, PE27 4AA

RE: Application by Sunnica Ltd for an Order Granting Development Consent for Sunnica Energy Farm Ecological Impact Assessment

The Applicant welcomes the review carried out by Bioscan and commissioned by Say No to Sunnica of the ecological information included as part of the DCO submission.

Our response is structured around the five matters to which Bioscan draws attention:

- field surveys of habitat and flora
- protected species
- calculation of biodiversity net gain
- misuse of the Rochdale Envelope approach
- viability of proposed habitat creation

Field surveys of habitat and flora

The production of a baseline for habitats and flora for the Scheme began with an extended Phase 1 Habitat survey in autumn 2018. As would be normal for a Phase 1 Habitat survey, this has been informed by the red line boundary and changes to it, aerial photography, data from the local environmental records centres and MAGIC including any agri-environment schemes noted on MAGIC. With respect to the latter, e.g. stewardship schemes, MAGIC does not provide any detail concerning habitats or species nor are the data necessarily comprehensive or up to date. As this is not standard practice, we do not normally make reference to this aspect of MAGIC in our reporting.

The Applicant's ecological impact assessment provides a comprehensive appraisal of the ecological features within the Scheme and its zone of influence, following recognised methods to ensure an appropriate level of coverage. Its adequacy has been recognised by Natural England and the Environment Agency. Our ES can be considered adequate and robust on the basis of the data we have submitted.

We recognise that we are working in a changing environment and parts of the Phase 1 Habitat survey have been kept up to date since 2018 and yet further surveys had been planned for 2022 some time ago to ensure the data are up to date. We have used and continue to use aerial photography to assist in this process. It is useful to have received the information in Table 1 of Bioscan's report (pages 7-9) and we will integrate the locations identified into ongoing habitat surveys.

The Phase 1 Habitat survey along with the significant knowledge of the Site built up from undertaking a range of surveys is used to inform the decisions as to which habitats and areas require more detailed survey, i.e. Phase 2 Habitat classification.

Changes to habitats within the site picked up in the Phase 1 Habitat survey have identified locations that need Phase 2 Habitat survey and, again, surveys had been planned for 2022 some time ago.

The results of these update surveys will be reported in a technical note which will be shared with all stakeholders through submission to PINS during the Examination for Deadline 1.

Protected species

Bioscan comment on certain aspects of protected species. These and the associated responses are summarised in Table A.

Table A. Summary of comments made in Bioscan review on protected species

Issue	Response
Great crested newt	
Bioscan note that there is a licence return record from the southern part of Chippenham Fen, indicating the presence of great crested newt at that site in 2014 [National grid reference: TL 650 690] (2.2.10). In view of the fact that the location of this record is from a contiguous wetland complex that extends to within 250m of proposed construction areas, we suggest there may at the very least need to be revision to the applicant's assessments of risk of impact to this species in this part of the project area (Sunnica West Site B) (2.2.11)	The location for the record is at least 514 m from the Order Limits, 572 m from the Developable area and 584 m from the nearest PV solar panel (see Figure 1 in Appendix). Whilst some of this distance is part of the wetland complex and SSSI, the latter half is across arable field fields. It is unknown whether this is a reliable record and it has been our understanding from the Natural England site manager, that great crested newt is unknown from Chippenham Fen, in light of previous monitoring of amphibian species. Irrespective of this, great crested newt was not recorded within the Sunnica West Site B (APP-082 6.1 Environmental statement Appendix 8F - Great Crested Newt Survey Report) and along with standard mitigation measures to be secured through the CEMP (APP-123 Environmental Statement - Appendix 16C - Framework Construction Environmental Management Plan) and avoidance of known great crested newt habitats within the Order Limits, even if present at low densities, impacts to great crested newt can be appropriately avoided.
Hobby	
Hobby was heard calling in Sunnica East Site B on 13th July 2022. It is noted that this Schedule 1 species, which appears likely on the strength of this record to nest in field boundary pines south of Worlington is not mentioned in App-085 (ES Appendix 8I: Report of survey for breeding birds, but its presence within the order limits in a breeding	**Hobby was recorded as breeding on Sunnica East Site B**(Appendix 8I - Report on Surveys for Breeding Birds). **Bioscan's observations are therefore consistent with the Applicant's baseline assessment**(APP-085 6.2 Environmental Statement - Appendix 8I - Report on Surveys for Breeding Birds).

capacity is acknowledged and assessed in ES Chapter 8. It is unclear if our record on this date is consistent or inconsistent with the baseline conditions for this species reported in the ES and related submission material. … (2.6.1)	
Stone-curlew	
Stone curlew *Burhinus oedicnemus* was also present in Sunnica East B on 13th July 2022, using fields which are identified for solar rays. Due to the (understandable) redactions in EA Appendix 6.6: Offsetting Habitat Provision for Stone Curlew Specification APP-258. It is unclear whether our record on this date is consistent with the baseline conditions for this species reported in the ES and related submission material. …	**Stone-curlew was recorded as breeding on Sunnica East Site B** (Appendix 8I - Report on Surveys for Breeding Birds). **Bioscan's observations are therefore consistent with the Applicant's baseline assessment** (APP-085 6.2 Environmental Statement - Appendix 8I - Report on Surveys for Breeding Birds)..
Farmland birds	
Attention is drawn in 3.3.2 and a footnote on p. 16 to: a. the need to give full and balanced consideration to those declining species of open arable farmland known to be present	a. The Scheme has embedded sufficient 'undeveloped' land for the creation of biodiverse grassland to offset the loss of arable farmland and avoid significant effects either alone or in-combination with other schemes (APP-040 6.1 Environmental Statement - Chapter 8 - Ecology and Nature Conservation). As **part of the Scheme, this grassland will be better managed than they currently are and** support richer invertebrate assemblages and more permanent nesting habitat that will increase density and productivity of species such as skylark. Other farmland species such as corn bunting and linnet, rely on well managed margins and hedgerows for breeding and an over-wintering seed resource, all of which will be enhanced by the Scheme (APP-040 6.1 Environmental Statement - Chapter 8 - Ecology and Nature Conservation. See sub-section ***Creation of replacement grassland habitats*** **of** APP-108 6.2 Environmental statement – Appendix 10I - Landscape and Ecology Management Plan (LEMP) **and paragraphs**

b. the apparent absence of an assessment of the cumulative impacts on local and regional populations of these species from the multiple solar projects in Cambridgeshire and Suffolk acting in combination which has the potential to drastically reduce the available habitat for these species. c. limitation of the biodiversity net gain metric in that it does not take into account the use animals make of a habitat, in this case, of farmland birds; an arable field which regularly supports breeding lapwing and stone curlew is afforded the same *de minimus* score as an arable field supporting neither species.	**1.7.12 *et seq.* outlining how grassland will be managed for breeding farmland birds.** b. A thorough a review was undertaken of plans and projects which in combination with the Scheme might have an impact on important ecological features. The former is presented in Table 8-14 in APP-040 6.1 Environmental Statement - Chapter 8 - Ecology and Nature Conservation. No plans or projects identified in Table 8-14 are considered in combination to impact important ecological features identified in this assessment including farmland birds (APP-040 6.1 Environmental Statement - Chapter 8 - Ecology and Nature Conservation). c. Notwithstanding the use of the BNG metric, the Applicant has taken account of the baseline data in relation to protected and other species in developing our enhancement proposals, e.g. well-managed grasslands with an increase in habitat for farmland birds (as described in (b) above); and that as such the Applicant will be providing a gain for such species (APP-040 6.1 Environmental Statement - Chapter 8 - Ecology and Nature Conservation) as well as achieving a calculated BNG by applying metric 3.1 in line with the requirements of Natural England, and we note this approach is supported by the Environment Act.
<u>Bats</u>	
It is at best unclear whether the assessments of impact on bats account fully for the magnitude of tree loss likely to be occasioned by the project. There appears to be a degree of incongruity between the conclusions of the tree constraints study, in terms of the number of trees identified for removal, the assumptions used as the basis for the assessment of impacts on bats in the ES Chapter 8 and Appendix 8J, and the amount of latitude sought by the applicant in respect of construction working areas, especially those around road crossings along the cable routes. Given the acknowledged presence of barbastelle in the locality, the	The Applicant is currently working on a vegetation removal plan along with an Arboricultural Impact Assessment (AIA) and this will be brought forward **at detailed design and will inform the Detailed LEMP pursuant to the LEMP (**APP-108 6.2 Environmental statement – Appendix 10I - Landscape and Ecology Management Plan**).** The working assumption is that this will avoid trees with bat roost suitability or confirmed roosts. There should be no need for substantial tree removal, including in the cable corridor (predicted as a maximum of 0.46 ha in the Biodiversity Net Gain calculations) (APP-259 6.7

importance of trees to this species and its habitual use of roost features considered low suitability for other species, this introduces a degree of uncertainty that the Examining authority might wish to be addressed by further information.	Environmental Statement - Biodiversity Net Gain Assessment) or any loss of ancient/veteran trees. Barbastelle forage throughout Suffolk and Cambridgeshire and will roost in suitable woodland trees and occasionally buildings. Proposed mitigation measures encompass the needs of barbastelle as well as other bat species (APP-040 6.1 Environmental Statement - Chapter 8 - Ecology and Nature Conservation and APP-108 6.2 Environmental statement – Appendix 10I - Landscape and Ecology Management Plan (LEMP)). Where necessary, updated surveys prior to commencement will be undertaken to confirm the position presented in the ES (APP-040 6.1 Environmental Statement - Chapter 8 - Ecology and Nature Conservation).
Brown hare	
3.3.1 Although brown hare (which we noted frequently on 13th July 2022) is 'assumed' to be present within the order limits in the ES, there is no assessment of the potential impact on the priority (NERCA [NERC] Act S41) species, which could be at risk of a certain (potentially significant) quantum of displacement effects from the change in habitat structure associated with the scheme. We consider this to be an omission.	Brown hare is **common in all habitats in Suffolk (Bullion, 2009) and Cambridgeshire except for the fens where they are less common (Hows *et al*. 2016). Whilst brown hare will be displaced from the Scheme during construction, it will re-establish itself and, given that brown hare is most common in grassland habitats and at woodland edges, favouring a mosaic of arable fields, grasses and hedgerows, it will benefit from the landscape provided by the proposed Scheme. This achieves a better balance for this species between arable and grassland than exists at present** (APP-040 6.1 Environmental Statement - Chapter 8 - Ecology and Nature Conservation**) and includes** gaps at the base of security fencing to maintain movements of small-medium sized mammals between the Scheme and the wider landscape. **To put this into context, a change to winter-sown cereals has led to a reduction in higher quality food in early summer in Suffolk, leading to food shortages and a lower leveret survival rate (Harris, 2008). Large numbers of hares are still regularly shot in Suffolk as part of organised**

	meetings (Bullion, 2009), an activity which will not occur on the Scheme. Brown hare is assessed as being of local importance and will not be significantly impacted by the Scheme.
Hedgehog and harvest mouse	
3.3.1 The same [see Brown hare above] applies to hedgehog, which is also a priority species. No consideration whatsoever is given to the priority species harvest mouse. The latter two species are however likely to be at less risk of negative effects.	The hedgerow habitat and associated margins used by hedgehog will largely be retained within the Order limits (APP-040 6.1 Environmental Statement - Chapter 8 - Ecology and Nature Conservation). Coupled with the increase in grassland and the absence of insecticides and mollusicides, this should result in an increase in hedgehog population. Grassland management on the site will include habitat suitable for harvest mouse, again, the expectation being an increase in the population of this species. Hedgehog and harvest mouse are assessed as being of local importance and will not be significantly impacted by the Scheme.

Biodiversity net gain

Further to the comments from Bioscan on the Phase 1 and Phase 2 habitat baseline data, we have already planned to:

- update the data following the update and gap filling surveys; and
- use the most up to date metric for the calculation, i.e. metric 3.1 having used the current 3.0 metric at the time of the original calculation.

It is recognised that the habitats score may decrease as a result of the new metric and the revised data. This should be put in the context of an anticipated requirement for future development projects to achieve a BNG score of 10% or above.

The results of these update surveys will be fed into the calculation of BNG using metric 3.1, which will be reported in a technical note which will be shared with all stakeholders through submission to PINS during the Examination by Deadline 1.

Misuse of Rochdale Envelope approach

Bioscan's assertion regarding the extent to which the Rochdale Envelope approach has been rigorously applied by the Applicant (section 3.2.13) is not correct. Whilst the Applicant is seeking flexibility in the design, the maximum parameters are set out in APP-035 6.1 Environmental Statement - Chapter 3 - Scheme Description of the Environmental Statement and APP-264 7.3- Design and Access Statement. These have been the worst-case scenario assessed in the ES. Should the DCO be consented, then these will be the parameters against which the Scheme will be built.

Viability of proposed habitat creation

The Applicant recognises the challenges associated with the habitat creation that is planned. Forward planning has commenced in terms of sourcing seed mixes, soil amelioration and grassland management. An important element in assuring targets are met is a robust monitoring and surveillance programme over the life of the Scheme including implementation of contingency and remedial measures (APP-108 6.2 Environmental Statement - Appendix 10I - Landscape and Ecology Management Plan). This will be overseen by the Sunnica Ecology Advisory Group and it will be important to use the feedback and Group to:

- guide implementation of remedial measures;
- use the monitoring to improve the enhancement measures; and
- learn from other similar projects
- to achieve the biodiversity enhancement predicted.

References

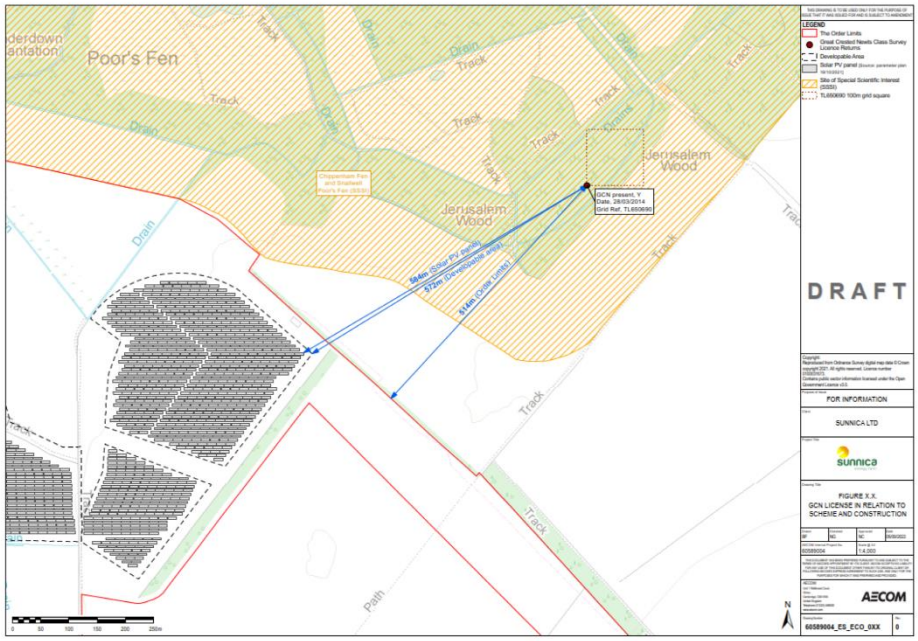
Bullion, S. 2009. The mammal of Suffolk. Suffolk Wildlife Trust and Suffolk Naturalists' Society, Ipswich.

Harris, S. 2008. Hares: The East West divide. Transactions of the Suffolk Naturalists' Society, 44, 9-15.

Hows, M., Pilbeam, P., Conlan, H. and Featherstone, R. (compiled by) 2016. Cambridgeshire Mammal atlas. Cambridgeshire Mammals Group.).

Appendix

Figure 1. Location of great crested newt record (2014) with respect to the Order limit



Appendix I

Environment Agency Letter – Winter Fill Reservoirs

Environment Agency

14th July 2022

I confirm that the Environment Agency, East Anglia Area, support the principle of constructing winter fill reservoirs to collect water during periods of high river flow/water level through the winter. The abstracted water can be stored in reservoirs and used to irrigate high value vegetable crops during the drier summer months.

The Environment Agency control when water is taken for the reservoirs by the issuing of abstraction licences. Winter fill licences only allow for the abstraction of water during periods of high river flow/water level when surface water has reached a certain point in rivers and drains to allow for abstraction while also keeping enough water in the rivers and drains to protect local habitat. This process helps the Environment Agency to manage water levels in periods of river flow/water level during the winter when abstraction is most sustainable and makes best use of it for producing high quality high value crops and can help protect against unwanted flooding.

Many Thanks,

Andrew Chapman

Senior Officer Water Resources (Ant, Broads & Marshes)
East Anglia Area
Environment Agency
Mobile: 07825 202821
Email: andrew.chapman@environment-agency.gov.uk

BAME Network Supporting racial equality A 'gold medal' organisation Mind rated our mental health support as gold for the third year in it's Workplace Wellbeing Index.

Appendix J

Impact Statements

Gavin Hunter, Lives in Chippenham Park

"Many years ago, as a teenager I arrived in Newmarket to start my career in the Horseracing Industry. And now in my eighties I have returned, maybe in my so-called twilight years, to spend time in the same wonderful area with my memories, and to enjoy seeing my relatives and my many friends. One of my great pleasures is to walk with my beloved dog on the Limekilns where once I used to ride as a youngster from the very start at the Boys Grave to the top where the Bury Road joins the off-ramp from the A11 which heralds the start of this famous town steeped in the history of famous names both human and equine. To be able to gaze across at gallops and studland and beautiful farmland is one of my great pleasures as I know it is to so many other walkers.

But now I hear to my horror and dismay of plans to destroy these views by constructing vast areas of solar panelling which will border the very edge of this renowned area of racing heritage, preserved for so long by so many dedicated persons. Should this horrendous planning application be approved by the relevant authorities, large areas of the adjacent land will disappear for good and eventually leave behind a devastation only fit for possible housing which is unlikely to be required in the area for any good reason.

Please, dear God, do not allow this planning application to be approved."

Jane George – Lives in Newmarket on the Bury Road, a Director of Newmarket Racecourse

"To Whom It May Concern

I write with much concern about the proposed Sunnica project proposed around the Newmarket area. In particular, with regard to the countryside we currently have the access to in this area, which will soon be blighted should this proposal be allowed.

Proud to be born and bred in Newmarket, and part of the racing community, I have enjoyed the wonderful country walks in the area, and lucky enough to be able to enjoy the land owned by the Jockey Club Estates where so many Champion racehorses have and are being trained in this unique town.

My favourite is the walk (outside racehorse training times which are restricted) on the training area known as the Limekilns. This is a famous turf training area which stretches across to the Waterhall training area. It is a stunning piece of historical turf, which enjoys uninterrupted views across all the Suffolk countryside and across to Ely Cathedral. The thought of solar panels so close by and totally appalling and I would object to the strongest terms.

You only have to read Dick Francis's epic book "Bonecrack" to understand the importance of this - the Limekilns features prominently in this best seller.

Yours sincerely,

Jane George"

Karin Dobbie, Lives in Chippenham Park

"To whom it may concern.

For many years I have enjoyed walking my dogs in the afternoon on the Limekilns in Newmarket. We are very privileged to be allowed to walk there on the famous training grounds with the large expanses of grass, covered in spring with wild flowers, intermingled with small woods. As you walk you can enjoy the lovely views of the Suffolk/Cambridgeshire countryside all around you. For this reason I am horrified to learn that if the proposed plan by Sunnica goes through we will be looking at fields of glass solar panels and maybe high batteries.

Surely solar panels would be more suited to roofs or brownfield sites rather than ruining arable land and our beautiful countryside.

Hoping that sense will prevail.

Karin Dobbie"

Rebecca Dunlop – Lives on the Fordham Road in Newmarket

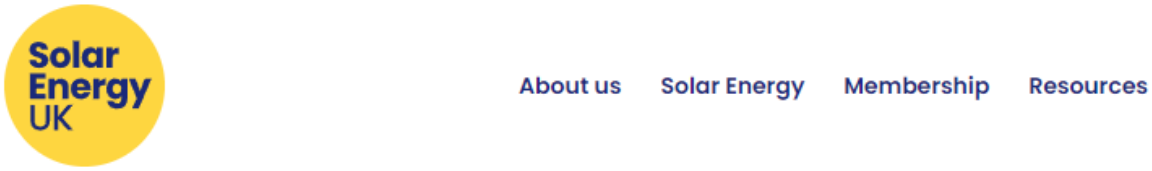
"I walk on the limekilns almost every day with my dogs and constantly enjoy the natural beauty of these famous gallops and the beautiful surrounding countryside. I also meet lots of other fellow walkers who enjoy spending their afternoons exercising their dogs or walking themselves. This view will be desecrated by Sunnica Ltd's plan to cover the area in Solar Panels. I have three whippets who love to run and this area is one of the only areas with vast open space which allows both my dogs and I to enjoy the outdoors.

My husband trains racehorses in Newmarket and our owners come to watch their horses galloping on the Limekilns often. Each one comments on the amazing experience they have on these historic gallops when they visit. There are wonderful paintings and pictures throughout history of famous racehorses on these gallops. Please do not destroy this beautiful place."

Images

Appendix K

Solar Energy UK Commitments



Home > Resources > Briefing > Solar Energy UK: 11 Commitments on Solar Farms

Solar Energy UK: 11 Commitments on Solar Farms

Solar farm developers, builders or tenants who are members of Solar Energy UK will comply with the following best practice guidance:

1. We will develop on non-agricultural land or land which is of lower agricultural quality where this is available.

2. We will enhance the biodiversity and natural capital value of all solar sites, being sensitive and complementing nationally and locally protected landscapes and nature conservation areas.

3. We will deliver multi-functional land use by proposing co-location with agriculture and/or nature recovery projects for solar and energy storage developments.

4. We will minimise visual impact where possible, making visual enhancements, and including appropriate screening, such as tree planting and restoring hedgerows, throughout the lifetime of the project. These will be managed through landscape and visual impact assessments.

5. We will accommodate needs for rights of way and sites of archaeological importance

6. At the end of a project's life, we will ensure full decommissioning of the equipment and return the land in a similar or improved state as before.

7. We will engage with the community in advance of submitting a planning application.

8. We will support the local economy through local business rates, diversification of farm income and encouraging as many employment and training opportunities locally as possible.

9. We will act considerately during construction and ensure all health and safety issues are addressed throughout the lifetime of the project.

10. We will engage and provide detailed information to the local community and listen to their views and suggestions, including the provision of specific community benefit schemes, or use of the site as an educational opportunity, where appropriate.

11. We will work towards the highest supply chain standards possible, working with the UK and European solar industry to do so. Please note that more information on this will be made public in Autumn 2022.

Appendix L

Consultation on the Grid Connection Change

L1. This is a commentary on the adequacies of the consultation by Sunnica over the proposed revised grid connection between 6 June and 6 July 2022. The change proposal to introduce Option 3 affected all areas of the scheme by changing substation transformers and introducing a shunt reactor in Sunnica East B which is in Suffolk. The changes proposed were not confined to Cambridgeshire.

Sunnica June-July 2022 Grid Connection Consultation Inadequacies

Consultation Booklets

L2. Consultation booklets outlining the proposed changes to the application in June 2022 were not sent to households in all villages within Consultation Zone 1 (i.e. the same households that were targeted during the Statutory Consultation, outlined in Sunnica's Statement of Community Consultation). Sunnica instead did a much smaller mailing of booklets to selected households in selected locations. Sunnica Ltd did not declare where these locations were to the communities, only saying that they were "posted to properties in the vicinity of the proposed changes and to prescribed individuals and organisations that were notified at the relevant representations stage (email dated 22ng June 2022). This made it difficult to know who had and who hadn't received a copy and caused confusion. Without consultation booklets, most people didn't even know there was a further consultation happening.

L3. Isleham – residents had no booklets, Red Lodge – residents had no booklets, Worlington – residents had no booklets. In a survey 77% of people confirmed they had not received consultation booklets (Appendix L3; 220 responses received).

L4. Correspondence between Sunnica and the ExA in May 2022 indicated a very limited consultation zone around Burwell substation **[AS-233]**. This comprised some 140 households to which Sunnica would write directly. It is unclear if these were the only recipients of the consultation booklet, but this is in stark contrast to the 10,000+ households that were consulted on the DCO application. It is unclear why they had only chosen to write to those in an area where elements of the scheme would be reduced (i.e. removal of the substation expansion at Burwell), but not to areas of the scheme that would see additional / different infrastructure being proposed (e.g. those areas around the 3 x BESS and substation compounds). This is also in contrast to where Sunnica outlined the changes would be (see later point – Sunnica's own consultation materials actually declared the areas affected by the new Option 3 as being East A, East B and West A)

L5. Sunnica were obliged to contact everyone who had been notified of the application under Section 56 of the Planning Act 2008 this covers the whole area of the development not selected areas.

L6. Catherine Judkins contacted Sunnica (email 9th June 2022) to point out that many residents cannot access online information so need hard copies of consultation materials. Their response was received as follows 13 days later (22nd June 2022) already almost half-way through the consultation period:

> *"Consultation booklets have been posted to properties in the vicinity of the proposed changes and to prescribed individuals and organisations that were notified at the relevant representations stage.*
>
> *Hard copies of the booklet are available to anyone on request (with a limit of one per household), if you know of anyone who would like one, do encourage them to contact us directly.*
>
> *Booklets are also available to take away from two deposit locations:*
>
> *St Margaret's Church, High Street, Chippenham CB7 5PP*
>
> *Burwell Library, Village College, The Causeway, Burwell, CB25 0DU*
>
> *Consultation booklets have not been posted to all addresses in Consultation Zone 1 (as set out in our published Statement of Community Consultation from the Statutory Consultation), as the scope of this consultation is significantly more limited and focussed on a few areas.*

L7. The last statement is contrary to the ExA requirement to notify everyone notified under PA 2008 56.

L8. Having them available on request relies on people knowing there is a consultation running in the first place – the trigger for which would be the receipt in the post of a consultation booklet indicating that changes to the scheme were being proposed. Those residents with no online access would have no trigger to contact Sunnica to get a booklet about proposed changes as they would not know about them.

L9. Sunnica's consultation maps in the booklets indicated the "areas for Change 3" as being the BESS/substation compounds at East A, East B and West A. So, on the maps they are stating these areas are affected by the changes. But in the consultation methods they are limiting consultation to the area around Weirs drove in Burwell.

L10. No consultation booklets were made available in Suffolk despite Sunnica East B being in Suffolk.

L11. No booklets were available at St Margaret's Church in Chippenham, contrary to this being listed as a deposit location in the 'Find out more' section of the June consultation booklet, as well as in Sunnica's email dated 22nd June 2022.

Exhibitions

L12. Letters notifying of public exhibitions dated 13th June were sent out to those in consultation zone 1. For some this was the first time they were made aware of the proposed changes for the reasons outlined above (didn't receive consultation booklet, hadn't received online information etc). The letters were received in Isleham on Weds 15th June, Worlington on Weds 15th/Thurs 16th June – more than halfway through the consultation. And the exhibitions themselves were planned the following week (22nd/23rd June), during the working day, giving very little time to decide to attend. In a survey 53% of the 217 responders said they had not received letters about exhibitions.

L13. The exhibitions provided the first opportunity to fully discuss the changes proposed with Sunnica and new information was made available at these. But having this over half-way through the consultation period, left little time to digest the information and submit comments

L14. No public events at all in Suffolk – bearing in mind these communities had also not received any booklets nor had any exhibition events nearer to them. Scott (from Sunnica) told Red Lodge parish clerk that they had chosen the 2 locations they thought would have most impact. But this is a matter for debate. Taking away something at Burwell arguably means that Burwell has less impact. Bolstering the substations across East A and B and West A means they will have more impact. Especially in the case of East B with a new shunt reactor proposed (additional noise impact and likely visual impact with the introduction of a 9.5m high, 40m long isolation barrier at East Site B). There is also one at West Site A. It is unclear why they only chose to exhibit at Burwell and Chippenham. But not in Suffolk – and especially in Red Lodge which is closest to East B.

L15. Feedback on timings of exhibition (see survey results Appendix L3):

L16. The latest-ending event (Burwell 7.30 pm) was the furthest from residents in Suffolk. So anyone working in Suffolk would have difficulty getting across to Burwell in time to attend. Sunnica had called Red Lodge clerk and quizzed where she knew if many people were going to be able to attend. She told him that she didn't know of anyone and explained it was difficult to get to the locations via public transport and the timings were not great. It's not easy to get from one village to the next via public transport. So unless people in Suffolk could finish work early and drive to the two exhibition locations in Cambridgeshire they would not have been able to get there.

L17. According to Chippenham PC, Chippenham village hall was free on Monday, Tuesday and Wednesday, both afternoon and evening of the week commencing 20 June 2022. Sunnica chose to book the Thursday which

already had a previous booking for the evening which meant a shorter consultation event with an early finish (ended at 6.30pm).

L18. 88% of people in a SNTS survey said they did not attend the exhibitions (219 responses). Of the reasons given for not attending (118 comments – see Appendix L3), 35% (41) said their dd not go because they didn't know about them.

L19. The exhibitions offered little extra information. The pop-up displays were just reprints of the booklet. The only new material was 5 planning drawings (see note below). Sunnica still don't know if option 3 is technically feasible at the time (per Bill Gregory, Aecom rep). They are still waiting to hear from NGET why Option 1 was not considered technically feasible (per Bill Gregory).

L20. Sunnica reps came unprepared to the exhibitions. No laptops to help clarify points, pull up reports etc. Asked about increased noise from the shunt reactor – they said they had a report on a laptop, but didn't have it with them so they couldn't access the reports about noise. But they vaguely remembered that the noise increase was 'about 2 dB'. They did not come to these events with the intention of sharing info and answering questions.

Quality of Information/ Responses provided

L21. The only new information available at the exhibitions were 5 planning drawings showing what looked like a front (or maybe side?) elevation for the West A substation and a side (?) elevation for East B and East A. Bill Gregory (Sunnica rep) could not explain these drawings. He wasn't sure which rotation they were in. He thought it showed the substation housing/ warehousing, but wasn't sure where in the compound it would be located. Asked if the substations would be the structure that people would see from the roads as they move around the areas, or if they were further back from the roads, he was not sure. He said that it was likely that this would be clarified in the final design…i.e. after DCO is granted, which is too late to assess their impact.

L22. When asked how people could gauge the visual impact he said he appreciated it was difficult, but offered no solution. Bearing in mind that these substation structures are 10 m high and 85 m wide and 130 m long (East B and West A) and 55m x 85m x 10m high (East A) , so will have a significant visual impact, especially in the more exposed sites on East A and B, and from the elevated position of the Limekilns out to West A. This did not allow any residents the ability to gauge the impacts on them or feed back any helpful suggestions as part of the consultation. Nigel Chalmers was also asked for visualisations but did not offer any.

L23. If Sunnica and/or representatives cannot explain their plans, it makes it difficult for local residents to interpret them. Paul Kelly (Newgate PR) stated that the new planning diagrams of the substations were 'hot off the

press' (3/4 through the consultation period) and would help us to understand the substation proposals, but then conceded that they did little to help people to visualise what these would actually look like or how they would be sited.

L24. Sunnica (Paul Kelly) was asked why they have started the consultation before having all the information about the changes, including the planning elevations for the substations available and said that it was because PINS needed to adhere to a strict timetable, so they had to make a start on the consultation, even without all the information. This is in contrast to their correspondence with PINS in April in which it seemed that it was Sunnica who proposed the timetable and were asking PINS to consider it.

L25. Sunnica (Bill Gregory) were asked why the 400Kv option hadn't been considered before, and he said he didn't know. When asked what the differences between the 132kV and 400 kV options were, he said that with 132kV there are 4 cables. If 1 were to fail there is contingency and still ability to deliver energy to the Grid. With the 400 kV option everything is in 1 cable. There is no contingency. So if the cable was damaged or faulty, there would be no ability to deliver energy to the gird. Previously Sunnica were not prepared to take that risk, but it seems that now they are. There was no explanation why they have had a change of mind – the risk still stands, but is suddenly deemed acceptable. Asked if this was normal practice for solar farms these days to use 400 kV cables, Bill said he wasn't sure. He didn't appear to know much about the changes being proposed.

L26. Sunnica were asked for photographs of shunt reactors to help visualise. Asked why shunt reactor at Site East B, why not at West A as it was nearer to National Grid – Sunnica said that it was more central but could not offer how they assessed alternatives.

L27. In the email dated 9th June Catherine Judkins asked for visualisations of the substation compounds to help people understand the changes being suggested. The response from Sunnica dated 22nd June was:

> *"As the proposed change is within the parameters as assessed within the Environmental Statement, we are not anticipating any additional impacts from the changes in the arrangement of the substations at Sunnica West Site A, Sunnica East Site A and Sunnica East Site B. The maximum footprint and height of the substations will remain as it is in the DCO application*
>
> *The photomontages are based on the maximum parameters set out within the Environmental Statement and not the illustrative design; therefore, the photomontages presented within the Environmental Statement are still valid in demonstrating the potential visual impact."*

L28. Catherine replied and requested directions to where these photomontages of the substations are stored and received a reply on 29th June (7 days before the end of the consultation period) directing her to Viewpoints

12a, 15a, 18, 33, 38, 41. None of these photomontages are visualisations of substations. None of them provide any detail about where the BESS and substation would be. They did not answer the question and did not allow residents assess the changes to the scheme.

General

L29. Nick Wright met with the Travellers on Elm Road on 11th July 2022, 6 days after the Grid connection consultation closed. They were unaware of the proposed changes to the scheme. They said they had not been contacted by anyone from Sunnica about a new consultation, despite them being the closest residents to Sunnica East B. On a previous occasion, Sunnica had put a stake in the ground at the end of their driveway with a laminated document attached to it. They said that no stake or any other form of document had been seen. They say they are feeling discriminated against.

L30. Not related to Grid change consultation, but following Sunnica's comments at the Red Lodge PC meeting on 9th March 2022 that they had indicative layouts of the BESS compounds (which they had used to set out the safety parameters for their outline battery fire safety management plan and plume dispersion modelling), Sunnica were asked during the meeting if we could at least see a copy of these indicative plans. Accepting the caveat that these would be subject to further change, but they would at least provide some indication of what the BESS compounds might look like and how the plume modelling had been done. Sunnica said to Catherine Judkins during the meeting that if she left her contact details, they would send these. She left her email address. Nothing received. She had taken Nigel Chalmer's email address as part of this discussion and contacted him via email on 20th March 2022 to obtain the indicative plan. No reply was received. She raised this again with Sunnica on 6th July 2022. Still no indicative plans have been received.

Questions were submitted via email during the consultation period and not responded to:

L31. Mr Nick Wright said: I emailed the address 'info@sunnica.co.uk' on the 9th /28th /29th June and 2nd July with questions about the proposed changes and never received an acknowledgement or a reply. Sunnica only responded to one of his emails dated 6th July shown in Sunnica's consultation response Appendix M **[AS-273]**

L32. Mr Jo Cant: Sent an email asking questions about the changes on 23rd Jun 22. No reply received from Sunnica to inform her assessments of the impact, but they had received her email since it is included in Sunnica's Appendix M **[AS-273]**

L33. Mr Mark Fletcher – sent email to Sunnica 4th July asking questions about the scheme. No reply received. Not included in Appendix M **[AS-273]**

L34. Mr Peter Knowles – posted a letter on 27th June 2022 asking for further details about the scheme. It was received by Sunnica (included in Appendix M **[AS-273]**) but his questions were unanswered.

L35. Mr Brenda Knowles posted a letter on 28th June 2022 asking questions about the scheme. It was received by Sunnica (included in Appendix M **[AS-273]**) but her questions were unanswered.

L36. Mrs Julia O'Dwyer sent an email, Sunnica replied on 4th July. She sent an additional response with questions on 5th July no answer received. Dialogue with Julia O'Dwyer not included in Appendix M **[AS-273]**

L37. Mrs Alexandra Hunt: email sent to Sunnica 5th July with Questions, reply received 6th July. Additional email sent on 6th July – not acknowledged or replied to. Mrs Hunt's responses were not included in Appendix M **[AS-273]**

L38. Mrs Mehreen Qayum Millard sent email to Sunnica on 23rd June. Reply received but not acknowledged in consultation report Appendix M **[AS-273]**

L39. Mr Andrew Munro wrote on 17 June as follows:

> *I am responding to your consultation on the revised connection to Burwell. There is insufficient information on the changes for me to respond effectively.*
>
> *Please provide the following information.*
>
> *The increase in size of a 400kv transformer compared to a 132kv and the increase in noise output.*
>
> *The increase in size of 400kv switch gear compared to 132kv.*
>
> *The reduction in visual and other impacts at Burwell and if these are significant.*
>
> *The purpose of a shunt reactor and its size and noise output.*
>
> *The reasoning for a 400kv connection to the national grid compared to a 132kv direct connection to the distribution grid which would avoid the majority of changes while still eliminating the Burwell substation.*
>
> *I look forward to receiving these in good time so I can respond before 6 July.*

L40. Sunnica responded on 8 July after the consultation closed with

Apologies for the delay in replying to your email. Please find responses to your points below. If you wish to submit further comments to us, please note that we will accept any response received from yourself prior to 11:59pm on 17 July 2022.

1. The exact dimensions of any 400kV transformers used within the Scheme will be finalised at the detailed design stage. The maximum height and footprint at all three on site substations will not change from the original height and footprint stated in our Development Consent Order (DCO) Application.

The maximum footprint of each of the substation areas will therefore remain as follows:

• Sunnica East Site A: 85m by 55m footprint, 10m in height

• Sunnica East Site B: 85m by 130m footprint, 10m in height

• Sunnica West Site A: 85m by 130m footprint, 10m in height

We are currently undertaking work to confirm that there are no additional negative environmental effects as a result of including Option 3 within our application. We will present updated environmental information that will form part of the change application that we submit to the Examining Authority. This will include an appraisal of noise impacts. If this application is accepted into the Examination, the application documents will be available to view and comment on as part of the Examination process.

2. The exact dimensions of any 400kV switch gear used within the Scheme will be finalised at the detailed design stage. The maximum height and footprint at all three on site substations will not change from the original height and footprint stated in our Development Consent Order (DCO) Application.

3. Any potential change in landscape and visual amenity impacts at Burwell will be presented in the updated environmental information that will form part of the change application that we submit to the Examining Authority.

4. The purpose of the shunt reactor will be to ensure that the voltage of the energy generated remains at a suitable level to be used in the national electricity grid. The exact dimensions of the shunt reactor would be finalised at the detailed design stage but would be within the maximum substation area footprint as outlined in 1. The change application that we submit to the Examining Authority will include an appraisal of noise impacts. We have uploaded an illustrative elevation of the Sunnica East Site B substation site with shunt reactor to our website. This is available to view here: https://sunnica.co.uk/wp-content/uploads/2022/06/Sunnica-East-B-Substation-Elevation.pdf

5. The Scheme has secured a Bilateral Connection Agreement (BCA) with the NGESO (National Grid) at Burwell. The BCA enables the Scheme to connect to the transmission network and thereby directly assist the transmission network in the supply of low-carbon power over the widest possible geography. A connection to the distribution network through a Distribution Network Operator (DNO) brings with it additional technical design constraints and potential system charges.

L41. Mr Munro responded on 16 July with

Thank you for the additional information and responses to my questions.

As you are working on updating the impacts I will reserve my position until I can review the changes to the application.

L42. This chain of communication is not recorded in **[AS-273]**

Appendix L1 – Method statement of consultation proposed by Sunnica to the ExA

EN010106-002466-Sunnica - Method Statement consultation on proposed changes to DCO application.pdf (planninginspectorate.gov.uk)

Appendix L2 – Email thread between Catherine Judkins and Sunnica June 2022

2) Visualisations of the substation at East A in the existing DCO application, compared with visualisations of how this would look if Option 3 goes ahead.

3) Visualisations of the substation at East B in the existing DCO application, compared with visualisations of how this would look if Option 3 goes ahead.

4) In addition, please also provide images / visualisations (including dimensions) of the cables that would have been used in the existing DCO application and images and dimensions of the new proposed cables.

Other than the size of these cables, are there any other differences between them? Heat emitted? Noise emitted? Depth of cable laying, etc?

Since the booklets have already been distributed to some households, please can these visualisations and additional information be provided on your website, along with hard copies of visualisations to the parish and town councils in consultation zone 1 (as defined in the SoCC of the Statutory Consultation).

I look forward to all residents receiving these new booklets and to receiving the visualisations as soon as possible so that we can review and comment

Many thanks,

Dr Catherine Judkins

As the proposed change is within the parameters as assessed within the Environmental Statement, we are not anticipating any additional impacts from the changes in the arrangement of the substations at Sunnica West Site A, Sunnica East Site A and Sunnica East Site B. The maximum footprint and height of the substations will remain as it is in the DCO application The photomontages are based on the maximum parameters set out within the Environmental Statement and not the illustrative design; therefore, the photomontages presented within the Environmental Statement are still valid in demonstrating the potential visual impact.

The changes application that we make to the Examining Authority will include an assessment of the likely effects of these changes and will set out whether this requires changes to any of the application documents that have been accepted by the Examining Authority.

We have prepared illustrative elevations of the revised substation arrangements for our changes application and will have these for reference at our exhibition events. We can share these with you following the events.

Kind regards,

Rebecca

(Sent for and on behalf of Sunnica)

----- Original Message -----
From:
"Catherine Judkins [redacted]

To:
"Sunnica Co Info" <info@sunnica.co.uk>
Cc:

Sent:
Thu, 9 Jun 2022 11:20:27 +0000 (UTC)
Subject:
June Consultation Booklet

Dear Sir/Madam,

I understand that a new consultation booklet (image attached) has been distributed in order to consult towns and villages affected by the Sunnica proposal on the proposed changes to the Grid connection.

I have been contacted by a number of people saying they have not received a copy. I have also not received one.

As you know, up to one third of residents in these villages do not have ready access to computers to view copies online, so are very much reliant on printed materials to allow them to provide feedback. Please can you ensure that these new booklets are sent to all households who would have received the statutory consultation booklets in autumn 2020 (i.e. those in 'consultation zone 1'), plus any new houses that have been built since that time?

This is causing considerable confusion as people are waiting to receive their booklets before responding and I am conscious that the timescale to consult is incredibly short (responses due by 6th July) and that the clock is already ticking.

In addition, I have looked at the online booklet. It contains a lot of technical terms which are difficult to understand (shunt reactors, various voltage cable types etc). Please can you provide easy to understand information about these, as well as visualisations to make it easier for people to interpret the changes. At the very least these should include:

1) Visualisations of the substation at West A in the existing DCO application, compared with visualisations of how this would look if Option 3 goes ahead

"The maximum footprint and height of the substations will remain as it is in the DCO application. The photomontages are based on the maximum parameters set out within the Environmental Statement and not the illustrative design; therefore, the photomontages presented within the Environmental Statement are still valid in demonstrating the potential visual impact. "

I am not sure I have seen these so would like to be able to review and comment as part of this consultation.

Many thanks, Catherine

On Wednesday, 22 June 2022, 13:19:06 BST, <info@sunnica.co.uk> wrote:

Dear Dr Judkins,

Thank you for your email.

Consultation booklets have been posted to properties in the vicinity of the proposed changes and to prescribed individuals and organisations that were notified at the relevant representations stage.

Hard copies of the booklet are available to anyone on request (with a limit of one per household), if you know of anyone who would like one, do encourage them to contact us directly.

Booklets are also available to take away from two deposit locations:

- St Margaret's Church, High Street, Chippenham CB7 5PP
- Burwell Library, Village College, The Causeway, Burwell, CB25 0DU

Consultation booklets have not been posted to all addresses in Consultation Zone 1 (as set out in our published Statement of Community Consultation from the Statutory Consultation), as the scope of this consultation is significantly more limited and focussed on a few areas.

We recognise the interest that many have in the proposals and the request by the Examining Authority to consider holding a public event, we have written to Consultation Zone 1 to notify people of two public exhibitions to be held next week.

These are at the following dates at times:

- Wednesday 22 June, 3:30pm to 7:30pm, Mandeville Hall, Reach Road, Burwell CB25 0AR
- Thursday 23 June, 2:30pm to 6:30pm, Chippenham Village Hall, Scotland End, Chippenham CB7 5PR

Copies of the booklet will be available to take away at each event.

Our consultation enquiry lines remain open for anyone who wishes to find out more information about technical aspects of the proposed changes. The team at the public exhibitions will also be able to provide further information about this. Visualisations of the cable route do not form part of our DCO application. We have provided illustrative cross sections of typical cable cross section options that could be used in the Scheme. These are as follows:

- Environmental Statement Figure 3-7a: https://infrastructure.planninginspectorate.gov.uk/wp-content/ipc/uploads/projects/EN010106/EN010106-001885-SEF_ES_6.3_Figure%203-7a%20Illustrative%20Onsite%20Cable%20Cross%20Sections.pdf
- Environmental Statement Figure 3-7b: https://infrastructure.planninginspectorate.gov.uk/wp-content/ipc/uploads/projects/EN010106/EN010106-001886-SEF_ES_6.3_Figure%203-7b%20Illustrative%20Cable%20Route%20Cross%20Section.pdf
- Environmental Statement Figure 3-8: https://infrastructureplanninginspectorate.gov.uk/wp-content/ipc/uploads/projects/EN010106/EN010106-001887-SEF_ES_6.3_Figure%203-8%20Illustrative%20Non-Intrusive%20Cable%20Route%20Cross%20Section.pdf

The change in the proposed cables under Option 3 will require that the above figures are updated as there would be a single cable rather than a double set. The parameters required to install the cabling will be within those assessed within the Environmental Statement, such as depth, construction methodology etc. It is expected that the noise and vibration effects during the construction of the cable corridor will be unchanged from those identified under the existing proposed cable option.

Re: June Consultation Booklet

From: info@sunnica.co.uk (info@sunnica.co.uk)
To: [redacted]
Date: Wednesday, 29 June 2022 at 14:38 BST

Dear Dr Judkins,

Thank you for your email.

My apologies for the typo in my last email - I meant to reference the public exhibitions that occurred last week. I do apologise for any confusion caused.

Following the public exhibitions, we have uploaded the illustrations of what the revised substation layouts could look like onto our website. These can be viewed and downloaded on our website's homepage: Sunnica Energy Farm - Homepage

The photomontages were submitted as part of our DCO Application which are available to view and download on the Planning Inspectorate's website.

The viewpoints most relevant to the substations are as follows:

Viewpoints 12a, 15a, 18, 33, 38, 41.

The locations of these viewpoints are shown on Figure 10-13 for reference.

Kind regards,

Rebecca

(Sent for and on behalf of Sunnica)

----- Original Message -----
From:
"Catherine Judkin [redacted]

To:
"info@sunnica.co.uk" <info@sunnica.co.uk>
Cc:

Sent:
Fri, 24 Jun 2022 23:12:08 +0000 (UTC)

Subject:
Re: June Consultation Booklet

Dear Rebecca

Thank you for this. Please do let me know the dates of the public exhibitions next week and I'll put them in my calendar.

Please can you also direct me to the photomontages of the substations that you mentioned below

Appendix L3 – Post Consultation Survey responses July 2022

Survey data. 220 responses received

Q1. Are you aware of the Sunnica solar and battery proposal?

98% aware of Sunnica 2% not

Q2 Did you receive a notification letter from Sunnica about the extra consultation on proposed changes to their scheme (consultation on Grid connection changes, which ran from 6th June – 6th July)?

60% said yes, 40% no

Q3 Did you receive a consultation booklet from Sunnica outlining their proposed changes to the scheme?

77% No, 33% Yes

Q4. Were you aware of the same information on the Sunnica website (Sunnica.co.uk)?

25% Yes, 75% No

Q5 Did you receive a letter about the two public exhibitions held by Sunnica outlining the changes to the scheme (one exhibition in Burwell June 22nd 15:30 - 19:30, one in Chippenham June 23rd 14:30 - 18:30)?

53% said no, 47% said yes

Q6 Did you attend any of these exhibitions?

88% said No