2022/0578/EIAS EIA Screening Opinion Request for a Proposed Solar Farm on Land at Frocester

Case Officer: Helen Cooper

Good Morning Helen

Frocester Parish Council (FPC) wishes to make the following response to the EIA Screening Opinion Request published by Dalcour Maclaren (DM) on behalf of Novus Renewables (NR).

The DM statement that the proposal is not deemed to have significant effects on the environment by virtue of its characteristics or location is wholly incorrect. In the opinion of FPC, the proposal has very significant negative effects on the Frocester Parish environment, its inhabitants, and its ecology.

The site size and power output make this proposed solar farm very significant. When considered in conjunction with the existing Hill House Farm solar farm, the approved Moreton Valence solar farm, the proposed Arlingham solar farm, the cumulative effect on agriculture, food production, ecology, and the visual landscape in this small area of Stroud district is devastating. There is still a green corridor viewable from Coaley Peak to the River Severn, with the Frocester solar farm this will be gone forever.

The loss of best and most versatile farmland, the loss of food production, the loss of viable tenanted farms is not sustainable for a small rural community. *Frocester is among the most sparsely populated parishes in the District with no defined settlements and a strong rural character.* The late Michael Hope, historian and landscape archaeologist at Marlborough College, considered it *the only place in England where over five thousand years of continuous occupation and farming has conclusively been proved through archaeological and documentary evidence.*

The highly significant environmental sensitivity of the proposed Frocester solar farm demands that a full Environmental Impact Assessment is undertaken and published before any planning application.

In support of the opinions expressed above, FPC has commented on specific paragraphs contained in the EIA Screening Opinion Request in the following report.

Yours sincerely

Paul Verey Clerk to Frocester Parish Council clerk@frocesterpc.org.uk

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Comments from Frocester Parish Council – Paragraph references below relate to paragraphs in the *Dalcour Maclaren document* 2022_0578_EIAS-EIAS_REQUEST-2921471.pdf

1.2 Site Location and Characteristics

1.2.1

It is important that the site location and size is put into perspective. The site size and power output is 105ha (250 acres) & 50MWp, it stands squarely within the parish of Frocester and is not as described 1.5km away from Frocester. This is a very large solar farm, for comparison a list of the largest solar farms in the UK includes:

- Shotwick 250 acres 72MW
- Lyneham 213 acres 69MW
- Owl's Hatch 212 acres 51MW
- Wroughton Airfield 165 acres 50MW
- West Raynham 225 acres 49MW

Three of these installations have been constructed on airfields, one was constructed specifically for a paper mill, and only one was constructed on eight fields of agricultural land.

The impact of such a large development on one of the smallest parishes in the Stroud District cannot be underestimated. The area being lost to farming represents approximately sixteen agricultural fields which is approximately 15 percent of the whole parish.

It should be noted that the power output capacity in the EIA Screening Request is stated to be 40MW, the power output stated in later correspondence¹ is 50MWp.

This proposal does not indicate how it might comply with the single most important policy covering development in the countryside, CP15. Stroud District Local Plan 3.15 states *Frocester is among the most sparsely populated parishes in the District with no defined settlements and a strong rural character*. This policy has prohibited new development in the parish for decades.

1.2.3

The National Planning Policy Framework (NPPF) requires the presence of best and most versatile (BMV) agricultural land (defined as land in grades 1, 2 and 3a of the Agricultural Land Classification) to be considered alongside other sustainability considerations.

NPPF Footnote 58 Where significant development of agricultural land is demonstrated to be necessary, areas of poorer quality land should be preferred to those of a higher quality.

The Frocester site is characterised as BMV grade 3, which demands the most compelling arguments to allow such a development. *It should be pointed out that the grade 3 classification*

¹ Meeting invitation email from William Griffiths, Novus Renewables Services Ltd, 26 October 2022

was allocated as a default for large rural areas with no tests done, in practice it could be higher.

The NR website makes the selling point that renewable energy developments offer landowners long terms, dependable income more than agricultural rates secured for up to 40 years. The argument that a solar farm will provide better financial rewards compared to farming tenancies is not compelling. There is considerable impact to Frocester Parish given the size of the development, it calls into question the viability of the farms involved, not to mention the impact on families and businesses in the parish concerned with local food production.

The landowner does not personally farm the land, the construction of a solar farm would significantly impact the viability of tenant farmers who do farm the land.

1.3 Site Selection

1.3.1

The presence of a PoC within the area is not a compelling reason for choosing this site for a solar farm. The presence of a grid connection point should also consider other proposed solar farms, currently 110 acres, on the same 132kV power line.

1.3.3

For very large solar PV installations (50-100ha) the landscape sensitivity is defined as Moderate, or three on a five-point scale. The impression given in this paragraph is that the landscape sensitivity is lowest landscape sensitivity (Low) which is not the case.

1.3.4

The plan does not support the statement that *the proposed Site area was refined from the wider landholding following site visits, taking into account proximity to sensitive receptors such as residential dwellings and access.* The proximity to Lower Downton Farm will have an adverse impact on the operation of the milking parlour through the sensitivity of the herd.



The development being adjacent to the M5 does not consider the impact on humans and animals using the EFR32 underpass below the motorway. This connection of paths on the east and west sides of the M5 is extremely important and should be better understood.

1.4 Proposed Development

1.4.1

The statement that the proposed development is likely to occupy 75ha (189 acres) is contrary to the area, 223 acres, stated in later correspondence². As such, the size of the proposed development is highly significant in comparison with the total parish farmed area.

1.4.5

The assumption that all hedges and trees are the property of the landowner is not correct. Tenant farmers own hedges and trees that have been planted in the last fifteen years.

1.6 Request for Screening Opinion

1.6.1

The proposed site has a very significant effect on the environment. This area can demonstrate two thousand years of continuous agricultural use that has created a diversity of wildlife that has not yet been documented. A solar farm cannot be described in any sense as agricultural diversification. Stroud District Local Plan 3.15 states *Frocester is among the most sparsely populated parishes in the District with no defined settlements and a strong rural character.* A solar farm is an industrial activity. A significant part of the rural village will be gone forever and the likelihood of returning to farmland is minimal.

1.7 Indicative EIA Screening Threshold

1.7.4

The size of the proposed development is approximately 15 percent of the whole parish, 40 years is a generation, a solar farm is industrial, the impact on farms and associated local food businesses is significant. The conclusion must be that the development is *screened in*.

1.7.5

The impact on the environment from a solar farm is far higher than an equivalent conventional installation that is rated with a *thermal output* of 50MW. Schedule 2 does not provide an explicit provision for solar generation and the general category that the proposed development falls under does not include size as a sensitive criterion. Evaluation of both power output and size must make this development *screened in*.

1.7.8

The proposed site is two hundred times above the threshold and, as such, is expected to have an impact on the environment. NPPF Paragraph 8(c) an environmental objective – *to protect and enhance our natural, built and historic environment; including making effective use of land, improving biodiversity, using*

² Meeting invitation email from William Griffiths, Novus Renewables Services Ltd, 26 October 2022

natural resources prudently, minimising waste and pollution, and mitigating and adapting to climate change, including moving to a low carbon economy.

1.8 Ecology

1.8.1

A single site walkover in January is insufficient to properly appraise the site.

The present farms have created areas of set aside land that contain flora and fauna which is not yet documented. The hedgerows are also managed not only to be stock proof but to also provide bird nesting sites through cutting at pre-determined times of the year.

Fallow deer and muntjac deer are common in the proposed solar farm area and freely move across the fields. The proposal describes boundary stockproof fencing but makes no mention of mammal gates. Neither does the proposal make any mention of deer and wildlife corridors.

Barn owls have nested in boxes at Lower Downton Farm for the past twenty years. Birds of prey are a common sight feeding and roosting in the area including buzzards, kestrels, hawks, kites and peregrine falcon.

Otters are present in the area and make use of the brooks on the proposed site. The provision of mammal gates to help these small animals is not discussed.

1.8.5

Within the area of the application are ponds some of which are documented to be 500 years old. There are several other ponds in Frocester with Great Crested Newts.

1.8.7

There are four badger sets within the proposed solar farm site. There are other badger sets in fields adjacent to the site. The stockproof fencing will have a serious impact on the ability of the badgers to move freely across the fields.

1.8.8

Bats are present in the farm buildings which are shown to be surrounded by solar arrays. Bats do not only roost in trees. Bats also roost in underground sites. All the roosting sites must be surveyed to get a clearer picture of the likely disturbance caused by the solar farm.

1.9 Heritage & Archaeology

1.9.18

It should be pointed out that the strip, map and record trial trenching being undertaken to provide archaeological mitigation covers less than half the proposed site area.

1.9.15

As its name suggests and as is evidenced by the many archaeological sites found within its boundaries, Frocester is an ancient parish, these boundaries being settled before those of neighbouring parishes. It encloses one of the larger areas of gravel hill wash and Severn gravel terraces in the Berkeley Vale, and over lies Lias Clay. This easily worked and fertile soil attracted farming communities from the end of the Mesolithic onwards, through the Neolithic, Bronze and Iron Ages, the Roman and Saxon occupations, right through to the present day. The ruin of St Peter's Church in the Fields overlies a large Roman villa and Saxon Minster. As the work of E. G. Price³ suggests in his four-volume study on the parish of Frocester it is possible that the boundaries of the Roman Estate survived into Saxon and later times, and occupies some of the fields within the area of the proposed solar farm. The name of the settlement was recorded as Frowecestre in the Domesday book, a settlement near the river Frome.

In 823 Mercian royalty granted the whole of Frocester to St. Peter's Abbey in Gloucester (now the Cathedral) and it was held by them until the dissolution of the monasteries after 1536. Since then the area within the application has been owned by only five mainly absent landlords:- Warwick to 1803, Graham-Clarke to 1962, Newcastle to 1992 and the present owners. The late Michael Hope, historian and landscape archaeologist at Marlborough College, considered it *the only place in England where over five thousand years of continuous occupation and farming has conclusively been proved through archaeological and documentary evidence*.

Monastic Court rolls provide the earliest reference to the occupational name 'peasant' known in the UK. The medieval centre of the estate at Frocester Court just over 1km away from the proposed solar panel site, survives where there are four monastic buildings including the Grade I estate barn. The solar farm site threatens the farming and natural landscape as well as the archaeological integrity of the area.

The area covered by the solar farm is on the site of the hamlet and farms of Medieval Downton. As elsewhere within the parish Saxon field names survive there and may suggest as yet undiscovered occupation. Previously unknown Iron Age occupation has already been found by the archaeological team excavating trial trenches within the application's boundaries, while nearby are the sites of five farms, all except one, documented as being there in the mid 1500's. Only two of these survive today (Upper and Lower Downton Farms) but another site called The Ark has surviving masonry above ground level. The names of all the farming occupiers of Upper Downton farm are known back to 1266. The proposed development would take about 70% of this farm and in total would constitute about 15% of the farmable land in Frocester. Such a large development would surely alter the character of the village.

The construction of a solar farm in this area will bring to a halt the ongoing exploration of this historic area. Preservation by record is simply not good enough. The development *will* give rise to significant effects on the archaeological investigation of the historic and important parish of Frocester.

1.10 Agriculture

 ³ 2000 Frocester. A Romano-British Settlement, its Antecedents and Successors. Vol 1 The Sites
2000 Frocester. A Romano-British Settlement, its Antecedents and Successors Vol 2 The Finds
2008 Frocester. A Romano-British Settlement, its Antecedents and Successors Vol 2 The Village
2010 Frocester. A Romano-British Settlement, its Antecedents and Successors Vol 3. (Includes the rest of Frocester)
1980 Survivals of the Medieval Monastic Estate of Frocester. BGAS Trans. Vol 98
Presidential Address. Frocester, Landscape and settlement from the 5th century to modern times. Vol 116

1.10.1

The National Planning Policy Framework (NPPF) requires the presence of best and most versatile (BMV) agricultural land (defined as land in grades 1, 2 and 3a of the Agricultural Land Classification) to be taken into account alongside other sustainability considerations.

The NPPF Footnote 58 states Where significant development of agricultural land is demonstrated to be necessary, areas of poorer quality land should be preferred to those of a higher quality.

It should be pointed out that the grade 3 classification for Frocester was allocated as a default for large rural areas with no tests done, in practice it could be higher.

Given the world situation and the pressure on food supplies, the current emphasis is on using good quality land for growing food. Accurate agricultural land classification is a requirement before any decisions are made.

1.10.2

The opportunity for diversification of agricultural land is not obvious for the proposed solar farm. Grazing animals under solar arrays is only suitable for small livestock as stated on the NR website. This restricts the options available to the tenant farmers. Sheep are small enough to move below the panels whereas pigs and cattle are too disruptive and too large to graze successfully. The existing businesses focus on cattle and pigs. In addition, the pasture under the solar arrays deteriorates quickly with no grazing, no organic fertilisers allowed or re-seeding. This can happen within four years. The site is also included in the plans for long term crop rotation along with other fields outside the site area. Thus, the solar site has an impact on land beyond its boundaries creating a much wider land management problem and affecting the viability of the tenanted farms.

The statement that agriculture will continue alongside diversification into power generation on the land taken for the solar farm is not correct.

There is a choice to be made between inefficient power production (wind power is far more efficient) and food production. The solar farm will significantly impact the viability of three tenanted farms. There will be a significant loss of milk production. 1,250,000 litres to be lost each year at a time when shortages of milk are predicted in the next 18-36 months.

The rural economy must be taken into consideration where a change of use to a non-employment generating use occurs and where there is a loss of agricultural use.

1.10.3

Forty years is not a short time, it is a generation.

1.11 Landscape and Visual

1.11.1

The solar farm site is not situated in the Cotswold AONB but it is highly visible from the escarpment including Frocester Hill, Coaley Peak, National Trust view point and the Cotswold Way.

Frocester parish runs Northwest from the Cotswold Escarpment, where half of the picnic site and the Cotswold Way is within the parish, down to the A38, 6km away. It covers 757 hectares. It is a very rural parish and with the outlying parts of Leonard Stanley, Eastington, Coaley, Slimbridge and Frampton On Severn easily forms the largest area of undeveloped open countryside (c.10km long by c.4km wide) from the Cotswold escarpment to the River Severn within the Stroud District Councils jurisdiction. This acts as a buffer to the modern housing and industrial developments of Stonehouse, Dursley and Cam each encroaching from either side. As such, it should be protected from any adverse development including the solar farm which will be highly visible from the picnic site and Coaley Peak view point to the detriment of the many visitors to this popular site who come to admire the scenic view.

The impact on Coaley Peak viewpoint cannot be stressed enough. With other solar farm developments including Hill House Farm (Cambridge) and Arlingham, the last green corridor from the peak to the River Severn, with no intermediate built up areas will be gone.

The Hill House Farm solar farm is approximately 500m from the proposed Frocester solar farm, the cumulative effect will be devastating on the views from the Cotswold edge. With the addition of Moreton Valence (116ha 49.9MWp) the total ruination of the landscape views is complete.



The proposed Frocester solar farm is 2.15km wide, north east to south west and directly in the line of sight from Coaley Peak to the River Severn and the hills beyond.



1.11.3

The public footpaths are not disconnected by the M5, there is a underpass below the motorway connecting EFR32 on the east with EFR1 on the west. These footpaths are used.

1.11.4

For very large solar PV installations (50-100ha) the landscape sensitivity is defined as Moderate, or three on a five-point scale. The impression given in this paragraph is that the landscape sensitivity is lowest landscape sensitivity (Low) which is not the case.

1.13 Noise and Air Quality

1.13.2

Lower Downton Farm is surrounded on three sides by solar panels causing the welfare of the milking herd to be questioned.

1.13.3

There are two farms near the solar site.

1.15 Planning Policy Review

1.15.9

As in paragraphs 1.3.3 and 1.11.4 the site is not lowest landscape sensitivity, it is medium.