Fenndyke Solar Farm

Planning Statement:

Revision 1

September 2014



Submitted on behalf of Fenndyke Solar Farm Limited

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PLANNING APPLICATION

SUBMITTED ON BEHALF OF FENNDYKE SOLAR FARM LIMITED

SOLAR FARM DEVELOPMENT:

AREA LOCATED IN THE PARISH OF SUTTON ST JAMES IN LINCOLNSHIRE, APPROXIMATELY 1.6km WEST OF THE VILLAGE OF SUTTON ST JAMES

PLANNING STATEMENT (REV 1) IN SUPPORT OF PLANNING APPLICATION TO SOUTH HOLLAND DISTRICT COUNCIL

SEPTEMBER 2014

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GLOSSARY OF ABBREVIATIONS

AONB	Areas of Outstanding Natural Beauty
BERL	BE Renewables Limited Limited
CA	Conservation Areas
DCLG	Department for Communities and Local Government
DECC	Department of Energy and Climate Change
EA	Environmental Agency
ER	Environmental Report
Ha	Hectare
KM	Kilometers
LDF	Local Development Framework
LLP	Limited Liability Partnership
M	Metres
MM	Millimetres
MW	Megawatt
MWh	Megawatt hour
MWp	Megawatt 'peak'
NE	Natural England
NPPF	National Planning Policy Framework
PV	Photovoltaic
RSS	Regional Spatial Strategies
SHDC	South Holland District Council
UK	United Kingdom
WP	Watts of Power

CHAPTER ONE: INTRODUCTION

1.1 Overview:

This Planning Statement has been prepared by BE Renewables Limited (BERL) (the 'agent') on behalf of Fenndyke Solar Farm Limited (the 'applicant'), to support the submission of a planning application for the development of a solar photovoltaic (PV) power plant of up to 17.55 Mega Watt peak (MWp) known as 'Fenndyke Solar Farm' (referred to in this document as the 'project' or the 'site').

The planning application is a resubmission of the documents for planning application ref: H20-0017-14 which was unanimously rejected at the South Holland District Council (SHDC) Planning Committee Meeting under Decision Notice dated 11th July 2014.

Following the rejection of the application - BERL held a meeting with SHDC's Mr Richard Fidler and Mr Paul Jackson. BERL proposed an amended development boundary. It was agreed that rather than proceed to an appeal against the rejection of the previous planning application, BERL would prepare a revised scheme based upon the amended boundary for consideration by SHDC Planning Department and subsequent Planning Committee. This Planning Statement is prepared to accompany this amended planning application for the revised scheme.

1.2 The Agent:

BERL is a UK based renewable energy developer specialising in the delivery of utility scale renewable energy infrastructure, primarily commercial solar farms. BERL has secured funding for their developments established for the purposes of developing, funding and operating commercial scale solar PV projects within the UK. BERL is currently developing several commercial scale solar PV farms across the UK.

1.3 Planning Application Documents and Drawings:

There are a range of documents and drawings that accompany the planning application, to assist SHDC in its consideration of this proposal:

- **Appendices** *from Previous Application (Planning Ref: H20-0017-14)*:
  - Appendix 7 – Typical Access Gate
  - Appendix 8 – Typical Cable Trench Details
  - Appendix 12 - Screening Response Letter
  - Appendix 19 - Annex D: Renewable Energy Statement of Need
  - Appendix 20 – Cassini Map 1805 – 1874
  - Appendix 22 – Environmental Agency – Flood Risk Assessment Enquiry
  - Appendix 23 – Public Consultation Display Boards
  - Appendix 24 - Greater Lincolnshire Nature Partnership - Habitats, Statutory and Non-Statutory Sites
  - Appendix 27 - Schedule Monuments Research

- **Revised Appendices** *from Previous Application:*
  - Appendix 1 – Site Location Plan Rev 1

- Appendix 2 – Site Layout Plan Rev 1
- Appendix 3 – Typical Inverter Rev 1
- Appendix 4 – Typical Substation Rev 1
- Appendix 5 – Camera Mounting System Rev 1
- Appendix 6(a) – Wooden Post, Stock proof Fence Rev 1
- Appendix 6(b) – Wattle Fence Rev 1
- Appendix 9 - Proposed Grid Connection Route Rev 1
- ~~Appendix 10 – Location of CCTV, Inverters, Substation and Proposed Access Route Rev 1 REMOVED~~
- Appendix 11 – Biodiversity and Habitat Management Plan Rev 1
- Appendix 13 – PV Framework Elevations Rev 1
- Appendix 14 – Typical Front and Piled Front Elevations Rev 1
- Appendix 15 – Access Track Elevations Rev 1
- Appendix 16(i) – (v): Typical Hedgerow Boundary and Solar Farm Sectional Elevation Rev 1
- Appendix 17 – Topographical Survey Rev 1
- Appendix 18 – Traffic Management Schematic Rev 1
- Appendix 21 – Visual Amenity Plan Rev 1
- Appendix 25 – Phase ONE Plan Rev 1
- Appendix 26 – Landscape Plan Rev 1

- Appendix A – ALC and Soil Survey
- Appendix B – Glint and Glare Study
- Appendix C – LVIA
- Appendix D – FRA
- Appendix E – Archaeological Impact Assessment

- **New Appendices:**
  - Appendix F – ALC Impact Assessment and Sequential Test
  - Appendix F(i) – Development Zone Constraints Map

1.4 Involving the Community:

Consultation with key statutory and non-statutory bodies is recognised as being critical to the planning application process. A Public Consultation exercise was held on Thursday 11th July 2011 between 3-8pm in Sutton St. James Village Hall, prior to the submission of the planning application. The exhibition was widely publicised and 76 people attended, including local parish councillors and members of the public. 35 attendees completed a consultation questionnaire at the exhibition. Of the 35 people who completed a questionnaire, twenty one (60%) were supportive of the plans and three (9%) are undecided. Eleven (31%) were opposed. For more details regarding the public consultation, and to see the visuals that were on display, please refer to the Statement of Community Involvement submitted as part of the planning application.

Dialogue has been maintained throughout the planning application process for the application ref H20-0017-14 and most recently we attended a meeting to advise the local community and the Sutton St James Parish Council of the plans and proposals to re-submit an amended

scheme that reduced the land area so that the agricultural land used within the solar farm was predominantly Sub-Grade 3b.

CHAPTER TWO: NEED FOR RENEWABLE ENERGY

2.1 The Need for Renewable Energy:

Global climate change is widely recognised as being one of the greatest environmental challenges facing the world today[1]. Most of the observed increase in global average temperatures since the mid-20th century is very likely due to the observed increase in anthropogenic greenhouse gas concentrations. The principal cause is a rise in the concentration of carbon dioxide (CO_2) in the atmosphere, a major contributor being the growing use of fossil fuels to generate electricity[2].

Renewable sources of energy are those that are not based on finite reserves stored within the earth. In recent years, the Government has given its support, and emphasised the benefits of, renewable energy and the need to develop future capacity within the UK. This has been demonstrated through policies and targets designed to increase renewable energy generation provision in the UK.

Targets to reduce greenhouse gases and increase renewable electricity capacity continue to be endorsed by the Coalition Government at a National level, with Local and Regional targets also agreed. The principal of emission reduction is most evidenced by the legally binding agreement between the EU and its Member States to agree a percentage reduction by 2015 in their CO_2 emissions. The UK Government has set targets to reduce Greenhouse Gas (GHG) emissions by at least 12.5% by 2012 and 60% by 2050 compared with the baseline emissions of 1990[3].

In April 2013 David Cameron said, '*when I became Prime Minister I said I wanted Britain to have the greenest government ever and I am as committed to that today as I was then'*[4]. The development of Fenndyke Solar Farm will provide an important contribution towards achievement of these renewable energy targets, both locally and nationally throughout the UK. In addition to installing a renewable energy development, the project will also provide valuable inward investment into the local community during the development and construction stages. Inward investment will progress during the operational stage as current agricultural activity continue as well as operational and maintenance works sourced from local providers and companies. The opportunity for Fenndyke Solar Farm Limited to make a long-term contribution to the community will not be overlooked but occur through the establishment of a 'Community Benefit Fund'. We consider that the investment opportunity derived through the development of Fenndyke Solar farm will underpin the economic viability

[1] **Council on Foreign Affairs -** http://www.cfr.org/climate-change/global-climate-change-regime/p21831
[2] **United Nations Intergovernmental Panel on Climate Change. Fourth Assessment Report** –www.whatsyourimpact.eu.org/index-references.php
[3] **UK Greenhouse Gas Emissions: Are We On Target? -** www.ucl.ac.uk/environment-institute/research/dispatches
[4] **Gov.Uk – Doing Solar Business in the UK -** www.gov.uk/government/speeches/doing-solar-business-in-the-uk

of the agricultural business with the local community benefitting through the local investment through the 25 year period.

2.2 Site Selection:

The project scope is to develop a solar PV power plant of up to 17.55 MWp, to be known as 'Fenndyke Solar Farm'. The project will be on approximately 19.2 hectares (Ha) of arable farming land located in the parish of Sutton St. James in Lincolnshire, approximately 1.6km west of the village of Sutton St James. The National Grid Reference (NGR) for the centre of the site is TF375172 (Appendix 1 – Rev 1: Site Location Plan).

The site is within a rural location selected to minimise its proximity to sensitive receptors and provide sufficient available land for the project. The site is well located for solar gain since it is relatively flat and free of any buildings or landscape features which could cause overshadowing. The site itself does not fall within any statutory or local areas designated for landscape quality or nature conservation. The nearest residential dwellings to the proposed site are situated on Broadgate located approximately 50m from the site boundary.

The proximity of a site to a substation that has capacity is essential to the proposed solar farm development. Generated electricity will be exported to the National Grid via underground cabling laid from the location of the proposed substation at Fenndyke solar farm to the South Holland substation located at Jiggles Gate (Appendix 9 – Rev 1) However, please note, this may vary as final decision of grid connection route is decided by Western Power Distribution (WPD).

The site is also close to the highway network; located approximately 1 km by road south west of the B1165, which is the main road connecting Sutton St James with the wider network. Good road access is essential for the construction and decommission phases of the solar farm, as well as the occasional operational maintenance requirement.

2.3 Benefits:

The National Planning Policy Framework (NPPF) points out that in determining an application for renewable energy developments (paragraph 93), '*planning plays a key role in helping shape places to secure radical reductions in greenhouse gas emissions, minimising vulnerability and providing resilience to the impacts of climate change, and supporting the delivery of renewable and low carbon energy and associated infrastructure. This is central to the economic, social and environmental dimensions of sustainable development'*[5].

According to Paragraph 7 of the NPPF there are three parts of Sustainable Development: economic, social and environmental. Each part gives rise to the need for the planning system to perform a number of roles:

- ***'an economic role*** *– contributing to building a strong, responsive and competitive economy, by ensuring that sufficient land of the right type is available in the right places and at the right time to support growth and innovation; and by identifying and coordinating development requirements, including the provision of infrastructure;*

[5] **National Planning Policy Framework –** www.gov.uk/government/uploads/system/uploads/attachment_data/file/6077/2116950.

- ***a social role*** *– supporting strong, vibrant and healthy communities, by providing the supply of housing required to meet the needs of present and future generations; and by creating a high quality built environment, with accessible local services that reflect the community's needs and support its health, social and cultural well-being; and*
- ***an environmental role*** *– contributing to protecting and enhancing our natural, built and historic environment; and, as part of this, helping to improve biodiversity, use natural resources prudently, minimise waste and pollution, and mitigate and adapt to climate change including moving to a low carbon economy'.*

At the core of the NPPF is the '*presumption in favour of sustainable development*.'

Potential benefits of Fenndyke Solar Farm contributing to Sustainable Development include;

ECONOMIC BENEFITS	Direct Job Opportunities	Throughout the construction and management phase as well as the operational maintanence of the solar farm.
	Indirect Job Opportunities	Production of components for the solar farm (Eg., modules, mechanical works, inverters, substations, transformers, swithgear, etc.,)
	Increased Reliability and Security of Supply	Increased diverse sources and technology types, more distributed generation closer to the point of use, distances reduced so less power wasteage in transmission.
	Possibilities of Indirect Benefit through Marketing	The local area is 'green', improves the image of the area – possibility of inward investment by related technologies.
SOCIAL BENEFITS	Community Benefit	To be decided with the local community, via the Parish Council (Eg., Community fund to support good causes; reduced electricity costs, apprenticeships)
	Educational Opportunities	Wider awareness of renewable energy, specifically solar, increased interest in environmental issues.
	Quality of Life Benefits	Protection of properties, surrounding area and biodiversity through mitigation of the effects of climate change.
ENVIRONMENTAL BENEFITS	Small Loss of Agricultural Land	Only approx. 57% of the area is covered by solar panels. The remaining land will still be used in agricultural activity, such as sheep grazing.
	Increased Biodiversity	Planting of hedgrows will encourage and increase flora and fauna in the local area.
	Reduction of Carbon Emissions	Helping to meet the UK targets. Moving towards a low carbon economy.
	Air Quality Improvements	Indirect benefit – as solar (renewable) energy reduces fossil fuel emissions.

CHAPTER THREE: NATIONAL AND LOCAL POLICY

3.1 Planning Policy Context:

The UK is currently facing three major challenges in energy policy;

1. The need to tackle climate changes by reducing greenhouse gas emissions.
2. Ensure a secure, diverse and clean energy supply, reducing the country's dependence on imported energy.
3. Ensure the UK has energy that is affordable[6]

Solar farm projects such as the proposed Fenndyke Solar Farm development are required to ensure diverse, secure, economic and sustainable energy supply. Global emphasis is currently being placed on the latter. This section assesses the principle of the proposed development against policies contained within National and Local Planning Policy.

3.1.1 CLIMATE CHANGE AND GREENHOUSE GASES

In recent years, interest in the threat of climate change on the global economy, as well as environmental and social impacts, has moved the issue up the political agenda. Internationally, discussions are on-going to assist migration towards a low-carbon global economy, including the annual United Nations Climate Change Conference, most recently hosted in Doha[7].

The composition of the atmosphere affects how heat, which the earth absorbs from the sun, is re-radiated back out to space. Should the gas composition in the atmosphere change and suppress the re-radiation then the global temperature will slowly rise. Given that it is atmospheric temperature that rives creation and circulation of the earth's weather systems, then a consequence of changing global temperature is the modification of weather patterns. This has serious environmental, social and economic consequences. Observational evidence from all continents and all oceans shows that many natural systems are being affected by regional climatic changes, particularly temperature increase[8].

For the next twenty years, a warming of about 0.2^{o}C per decade is projected for a range of emission scenarios. Even if concentrations of all greenhouse gases and aerosols had been kept constant at year 2000 levels, a further 0.1^{o}C per decade would be expected. Research shows that the average annual temperature, in a UK context, may rise between 2^{o}C and 3.5^{o}C by the 2080's, with this degree of warming dependent on future levels of global gas emissions[9].

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[6] **DBERR (2009)** - Energy Market Outlooks
[7] **United Nations Climate Change Conference (2010)** - 16th Conference of the Parties on Climate Change (COP 16), Cancun
[8] **IPCC (2007)** - www.ipcc.ch/
[9] **DEFRA (2004)** - www.gov.uk/government/organisations/department-for-environment-food-rural-affairs

High profile reports have also been published, including a report by the Intergovernmental Panel on Climate Change (IPCC)[10] and the Stern Review[11] which highlights the economic effects of global warming and the need for immediate action to reduce carbon emissions… *'the scientific evidence is now overwhelming; climate change is a serious global threat, and it demands an urgent global response… the benefits of strong and early action far outweigh the economic costs of not acting'.* International research and agreements greatly influence policy set at an international, national and local level.

3.2 International Policies:

The effect that industrial societies' emissions of greenhouse gases are having on the atmosphere and global climate were recognised in the 1992 United Nations Framework Convention on Climate Change[12] which has been ratified by over 190 countries. This treaty, put into force by the UK in March 1994, recognised that human-induced changes to the atmosphere were affecting the climate and set out to ensure that the so-called greenhouse gases are stabilised at a safe level.

The United Nations Framework Convention on Climate Change (UNFCCC) established a foundation upon which specific actions and targets could subsequently be constructed. The key building block that has been added so far is the Kyoto Protocol of 1997. The Kyoto Protocol sets legally binding targets and timetables for cutting emissions from developed countries.

3.3 European Union Policies:

European Union (EU) leaders have committed to transforming Europe into a highly energy-efficient, low carbon economy. The EU has set itself targets for reducing its greenhouse gas emissions progressively up to 2050 and is working successfully towards meeting them[13];

- **2008 – 2012**: Under the Kyoto Protocol, the EU are committed to reducing their collective emissions to 8% below 1990 levels. In 2011, the latest year for which comprehensive data are available, EU emissions stood 14.9% below 1990 levels. This meant that the EU was on course to over-achieve its Kyoto target.
- **2020**: The EU has committed to cutting its emissions to 20% below 1990 levels. This commitment is one of the headline targets of the Europe 2020 growth strategy and is being implemented through a package of binding legislation.
- **2050**: EU leaders have endorsed the objective of reducing Europe's greenhouse gas emissions by 80-95% compared to 1990 levels as part of efforts by developed countries as a group to reduce their emissions by a similar degree. The European Commission has published a roadmap for building the low-carbon European economy that this will require.

[10] **Intergovernmental Panel on Climate Change (2007) –** Fourth Assessment Report of the IPCC.
[11] **The Stern Review on the Economics of Climate Change (2006)** - www.hmtreasury.gov.uk/media/4/3 Executive_Summary.pdf
[12] **United Nations Framework Convention on Climate Change** - www.theccc.org.uk/tackling-climate-change/the-legal-landscape/climate-change-act-and-uk-regulations/
[13] **European Union** - http://ec.europa.eu/clima/policies/brief/eu/index_en.htm

3.4 National Policies:

In May 2012 David Cameron demonstrated his support of renewable energy**,** saying it's vital for the future of the country and needs to become financially sustainable. He addressed ministers at the Clean Energy Ministerial and said the UK was already playing '*a leading role at the forefront of the green energy revolution… I passionately believe the rapid growth of renewables is vital to our future. Renewable energy is not just good for our environment but we believe it's very good business too'*[14].

The UK has set itself a target of cutting CO2 emissions by 80% by 2050. The UK Energy White Paper 'Our energy future – creating a low carbon economy' was published in February 2003. The Energy White Paper sets a goal of cutting the UK's CO2 emissions by 60% by around 2050, with real progress to be made by 2020. In addition it sets the target of achieving 10% of electricity production from renewables by 2010 and proposes that renewables share of electricity generation in 2020 should be double the 2010 target and set at 20%[15].

Since 2003, a number of annual reviews of the Energy White Paper have taken place, in addition to a government Energy Review (2006) which reaffirmed the government's commitment to reducing emissions and support of renewable energy technologies through the production of 'Annex D: Renewable Statement of Need' (Appendix 19).

'*New renewable projects may not always appear to convey any particular local benefit, but they provide crucial national benefits. Individual renewable projects are part of a growing proportion of low-carbon generation that provides benefits shared by all communities both through reduced emissions and more diverse supplies of energy, which helps the reliability of our supplies. This factor is a material consideration to which all participants in the planning system should give significant weight when considering renewable proposals. These wider benefits are not always immediately visible to the specific locality in which the project is sited. However, the benefits to society and the wider economy as a whole are significant and this must be reflected in the weight given to these considerations by decision makers in reaching their decisions.*

If we are to maintain a rigorous planning system that does not dis-incentivise investment in renewable generation, it must also enable decisions to be taken in reasonable time. Decision makers should ensure that planning applications for renewable energy developments are dealt with expeditiously while addressing the relevant issues'.

The Climate Act 2008 was passed at the end of 2008 which seeks to commit to the actions outlined in 2003 Energy White Paper. This was supported by the Energy Act 2008 which underpins the long term delivery of energy and climate change strategy.

The UK Renewable Energy Roadmap[16], most recently updated December 2012, delivered a welcome boost for the solar industry after it was named as a key technology in the UK's quest to meet its binding environmental targets. '*Solar now joins onshore and offshore wind, marine*

[14] **All Renewables** - www.allrenewables.co.uk/renewable-energy-blog/renewable-energy-is-the-future-of-uk-cameron/
[15] **Energy White Paper** - http://webarchive.nationalarchives.gov.uk/+/http://www.berr.gov.uk/energy/whitepaper/2003/page21223.html
[16] **UK Renewable Energy Roadmap -** www.gov.uk/government/uploads/system/uploads/attachment_data/file/48128/2167-uk-renewable-energy-roadmap.pdf

energy, heat pump and renewable transport technologies as key technologies identified by the Department of Energy and Climate Change (DECC) as integral to achieving the UK's legally-binding 2020 emission targets'[17].

According to the UK Renewable Energy Roadmap, the Government states, '*to demonstrate their commitment to solar PV as a large scale generation source in the UK, the Government currently provides financial support for the technology through the Renewables Obligation. The rate is set so that solar PV can be supported and contribute to large-scale renewables generation and to encourage cost reduction to improve its competitiveness against more established technologies'*.

3.5 National Planning Policy Framework:

The Government's NPPF provides the overarching planning framework for decision-making that is required to meet the challenges that have been identified as a result of climate change. DECC is tasked with working on the Governments three long term challenges of ensuring the UK has energy that is affordable, secure and sustainable.

The NPPF, published in March 2012[18]sets out the Governments policy guidance for securing sustainable development. MP Greg Clarke, in the foreword of the document states, '*development that is sustainable should go ahead, without delay, a presumption in favour of sustainable development that is the basis for every plan, and every decision'*. Planning decisions *'must reflect and where appropriate promote relevant EU obligations and statutory requirements'.* This is most relevant with regards to the Governments binding commitments to:

- Generating renewable energy (15% of the UKs energy consumption from renewable sources by 2020)[19]
- Reducing carbon emissions (the UKs legally binding target under the Kyoto protocol to cut greenhouse gas emissions by 12.5% below 1990 levels by 2008-2012)[20]
- Climate Change Act 2008 (to cut emissions of greenhouse gas emissions by 80% below 1990 levels by 2050)[21]

NPPF paragraph 6 highlights that '*the purpose of the planning system is to contribute to the achievement of sustainable development. The policies in paragraphs 18 to 219, of the NPPF, taken as a whole, constitute the Government's view of what sustainable development in England means in practice for the planning system'*.

According to NPPF paragraph 7, there are three parts of sustainable development: economic, social and environmental. Each part gives rise to the need for the planning system to perform a number of roles:

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[17] **Solar Power Portal -** http://www.solarpowerportal.co.uk/news/in_brief_updated_renewable_energy_roadmap_boosts_uk_green_confidence_2356

[18] **National Planning Policy Framework -** www.gov.uk/government/uploads/system/uploads/attachment_data/file/6077/2116950.pdf

[19] **European Commission** – http://ec.europa.eu/energy/renewables/index_en.htm

[20] **Committee on Climate Change -** www.theccc.org.uk/tackling-climate-change/the-legal-landscape/climate-change-act-and-uk-regulations/

[21] **Climate Act 2008** – http://www.legislation.gov.uk/ukpga/2008/27/contents

- ***'an economic role*** *– contributing to building a strong, responsive and competitive economy, by ensuring that sufficient land of the right type is available in the right places and at the right time to support growth and innovation; and by identifying and coordinating development requirements, including the provision of infrastructure;*
- ***a social role*** *– supporting strong, vibrant and healthy communities, by providing the supply of housing required to meet the needs of present and future generations; and by creating a high quality built environment, with accessible local services that reflect the community's needs and support its health, social and cultural well-being; and*
- ***an environmental role*** *– contributing to protecting and enhancing our natural, built and historic environment; and, as part of this, helping to improve biodiversity, use natural resources prudently, minimise waste and pollution, and mitigate and adapt to climate change including moving to a low carbon economy'.*

At the core of the NPPF is the '*presumption in favour of sustainable development*.' This presumption is seen as the 'golden thread' running through the process of plan-making and the decision-taking, '*the NPPF does not change the statutory status of the development plan as the starting point for decision making. Proposed development that accords with the up-to-date Local plan should be approved*'.

The implications of the NPPF decision taking are set out in paragraph 14.

3.5.1 PLAN-MAKING:

- *Local planning authorities should positively seek opportunities to meet the development needs of their area;*
- *Local Plans should meet objectively assessed needs, with sufficient flexibility to adapt to rapid change, unless:*
    - *Any adverse impacts of doing so would significantly and demonstrably outweigh the benefits, when assessed against the policies in this Framework taken as a whole; or*
    - *Specific policies in this Framework indicate development should be restricted.*

3.5.2 DECISION-TAKING:

- *Approving development proposals that accord with the development plan without delay; and*
- *Where the development plan is absent, silent or relevant policies are out‑of‑date, granting permission unless:*
    - *Outweigh the benefits, when assessed against the policies in this Framework taken as a whole; or*
    - *Specific policies in this Framework indicate development should be restricted.*

Paragraph 17 sets out the core planning principles that should guide plan and decision making,

- The fifth principle promotes recognition of '*the intrinsic character and beauty of the countryside and supporting thriving rural communities within it*.'
- The sixth principle states that planning should 'su*pport the transition to a low carbon future in a changing climate, taking full account of flood risk and coastal change… encourage the use of renewable resources… by the development of renewable energy'.*
- The seventh principle states that planning should '*contribute to conserving and enhancing the natural environment and reducing pollution. Allocations of land for development should prefer land of lesser environmental value, where consistent with other policies within the Framework'*

Paragraph 28 shows how the NPPF encourages the development and diversification of agricultural and other land-based rural businesses in order to support a prosperous economy. '*Planning policies should support economic growth in rural areas in order to create jobs and prosperity by taking a positive approach to sustainable new development'*.

Paragraph 93 reaffirms that '*planning plays a key role in helping shape places to secure radical reductions in greenhouse gas emissions, minimising vulnerability and providing resilience to the impacts of climate change, and supporting the delivery of renewable and low carbon energy and associated infrastructure. This is central to the economic, social and environmental dimensions of sustainable development'.*

Planning authorities, as outlined in paragraph 24, are requested to seek and adopt '*proactive strategies'* to mitigate and adapt to climate change. In doing so the local council has an important role to the delivery of renewable energy projects and its projects and policies to support such proposals.

Paragraph 97 states, '*to help increase the use and supply of renewable and low carbon energy, local planning authorities should recognise the responsibility on all communities to contribute to energy generation from renewable or low carbon sources. They should:*

- *Have a positive strategy to promote energy from renewable and low carbon sources.*
- *Design their policies to maximise renewable and low carbon energy development while ensuring that adverse impacts are addressed satisfactorily, including cumulative landscape and visual impacts.*
- *Consider identifying suitable areas for renewable and low carbon energy sources, and supporting infrastructure, where this would help secure the development of such sources.*
- *Support community led initiatives for renewable and low carbon energy, including developments outside such areas being taken forward through neighbourhood planning; and*

- *Identify opportunities where development can draw its energy supply from decentralised, renewable or low carbon energy supply systems and for co-locating potential heat customers and suppliers*.'

Paragraph 98 further advises that local planning authorities should when determining applications, '*not require applicants for energy development to demonstrate the overall need for renewable energy or low carbon energy and also recognize that even small-scale projects provide a valuable contribution to cutting greenhouse gas emissions'*. It continues that they are to '*approve the application if its impact are (or can be made) acceptable……*'

The NPPF further clarifies that if the applicant has demonstrated the need to deliver renewable energy by addressing the potential impacts of the proposed development (including landscape and environment) then if there are matters by which the effects of the proposed development could be further mitigated, the local authority should look to identify solutions, working to approve the application.

Paragraphs 109 to 125 discuss how the planning system should contribute and enhance the natural and local environment. Paragraph 110 emphasizes the requirement that development should minimize pollution and paragraph 113 concerns the protection to sensitive wildlife, biodiversity and landscape areas from inappropriate development, highlighting the relevance of the hierarchy of international, national and local designations. Paragraph 115 refers to the necessity of giving great weight to the need to conserve the landscape and scenic beauty of the National Parks, the Broads and Areas of Outstanding Natural Beauty (AONB). Included in the Environmental Report is a 'Landscape and Visual Assessment' (Chapter Two) and 'Phase 1 Extended Habitat Survey' (Chapter Three). These identify the potential impacts of the proposed development on the landscape and the natural environment.

Paragraph 129 discusses the conservation and enhance of historic environment and the effects of any new development of heritage assets, '*Local Planning Authorities should identify and assess the particular significance of any heritage asset that may be affected by a proposal (including by development affecting the setting of a heritage asset) taking into account of the available evidence and any necessary expertise. They should take this into account when considering the impact of a proposal on a heritage asset, to avoid or minimize conflict between the heritage asset's conservation and any aspect of the proposal'*. This reports also includes an assessment of potential cultural effects which concludes that there would be no detrimental or material harm to the identified heritage assets in the vicinity of the development.

The Department for Communities and Local Government (DCLG) published the 'Planning practice guidance for renewable and low carbon energy' in July 2013. It provides advice on the planning issues associated with the development of renewable energy and should be read alongside the NPPF.

According to this guidance, *'the deployment of large-scale solar farms can have a negative impact on the rural environment, particularly in very undulating landscapes.*

However, the visual impact of a well-planned and well-screened solar farm can be properly addressed within the landscape if planned sensitively'. The proposed development is well planned and well screened, please refer to Chapter Two: Landscape and Visual Assessment for more detailed information regarding this.

Other factors that need to be considered according to DCLG include;

- *encouraging the effective use of previously developed land, and if a proposal does involve greenfield land, that it allows for continued agricultural use and/or encourages biodiversity improvements around arrays*

The proposed development at Fenndyke allows for continued agricultural use between and under the mounted solar panels. Sheep-grazing will be encouraged here. Proposed screening of hedgerows will also encourage biodiversity improvements around the arrays.

- *that solar farms are normally temporary structures and planning conditions can be used to ensure that the installations are removed when no longer in use and the land is restored to its previous use*

The solar farm is a temporary development. After 25 years the installation will be removed and the land returned to its former arable agricultural use.

- *the effect on landscape of glint and glare and on neighbouring uses and aircraft safety*
- *the extent to which there may be additional impacts if solar arrays follow the daily movement of the sun*

There is negligible impacts associated with glint and glare from solar farms. Please refer to Chapter Four of the Environmental Report for more details.

- *the need for, and impact of, security measures such as lights and fencing*

Lighting is not required for the proposal. Fencing would be associated with the solar farm, however it is not expected that these would impact upon the surrounding area. Please refer to the Environmental Report for more details.

- *Great care should be taken to ensure heritage assets are conserved in a manner appropriate to their significance, including the impact of proposals on views important to their setting. As the significance of a heritage asset derives not only from its physical presence, but also from its setting, careful consideration should be given to the impact of large scale solar farms on such assets. Depending on their scale, design and prominence, a large scale solar farm within the setting of a heritage asset may cause substantial harm to the significance of the asset*
- *the potential to mitigate landscape and visual impacts through, for example, screening with native hedges*
- *the energy generating potential, which can vary for a number of reasons including, latitude and aspect*

Chapter Two of the Environmental Report discusses the Landscape and Visual Impact Impacts and Chapter Six includes an assessment of potential Cultural Effects. They conclude that there would be no major landscape and visual impact nor detrimental or material harm to the identified heritage assets in the vicinity of the development.

3.6 Local Policies:

Planning applications have to be determined in accordance with the provisions of the Local Planning Authority (LPA) development plan (unless other material considerations suggest otherwise). This application is consistent with the development plan with this section identifying the policies relevant to the proposed solar farm at Fenndyke.

The South Holland Local Plan 2006[22] was formally adopted in July 2006. A saving direction was issued by the Secretary of State in July 2009 in which a number of the policies within the local plan were saved. However, in the context of the proposal at Fenndyke, many of the environmental policies, including those relating to renewable energy, protecting the natural environment and cultural heritage, have now expired. Of the remaining policies, those of most relevance are set out below identifying the overall strategy and general policies for the district.

- Policy SG1 – General Sustainable Development
- Policy SG4 – Development In The Countryside
- Policy SG13 – Pollution And Contamination
- Policy SG17 – Protection Of Residential Amenity
- Policy SG18 – Landscaping Of New Development
- Policy EC4 – Farm Diversification Projects

3.6.1 POLICY SG1 – GENERAL SUSTAINABLE DEVELOPMENT

'Planning permission for development will be granted where the Council is satisfied that the proposal is consistent with the principles of sustainable development, and where the quality of life for residents is unimpaired or enhanced; reasonable measures have been taken to conserve energy and natural resources; and South Holland's essential character and main environmental assets are not damaged'.

Our proposal complies with Policy SG1 as evidence throughout the accompanying documents. Solar PV is key to creating a sustainable and mixed generation capacity for the UK, which is vital in tackling the need to reduce carbon emissions. Solar schemes are a model for sustainability that uses a blend of energy efficient measures. The completion of the impact assessments has shown that there is no evidence that the quality of life for residents will be impaired as a result of the development. Further there is no appropriate conclusion that can be drawn that indicates the essential character and the main environmental assets of SHDC will be damaged. Indeed the local ecology and bio-diversity will be a valuable enhancement to the area.

3.6.2 POLICY SG4 – DEVELOPMENT IN THE COUNTRYSIDE

[22] **South Holland Local Plan** - www.sholland.gov.uk/localplan/text/06_en_environment.htm#en1a

'Planning permission will only be granted for development in the open countryside which is essential in the proposed location and cannot reasonably be accommodated within defined settlement limits. Development proposals that would result in an unacceptable impact upon the landscape character of an area, either individually or cumulatively, will only be permitted where; 1. The need for the development in that location outweighs its impact; 2. No other site or solution exists to accommodate the proposed development'.

Agricultural classification of the site indicates that the land ranges from Grade 2 to Sub Grade 3b. An important consideration within the proposal is that it will also support diversification of agricultural land by helping to sustain an agricultural enterprise since it is possible to retain agricultural usage of the land on which solar farms are sited due to the spacing of solar arrays. Large scale commercial arable application, as existing would generally prove difficult, however, grazing does remain possible within array fields and indeed is particularly synergistic as it prevents plant growth which may in due course shadow the solar arrays. The land will remain in agricultural production and continue to support the local agricultural economy as today. Solar farms have the potential to increase the biodiversity value of a site if the land was previously intensively managed. Sheep grazing or an autumn cut with removal of grass cuttings could increase the botanical diversity of the site.

The selected site is outside any designated area and the Environment Agency confirm that there is no risk for the site to flood (Please refer to Chapter Nine of the Environmental Report for more details).

3.6.3 POLICY SG13 – POLLUTION AND CONTAMINATION

'Planning permission will only be permitted for development proposals which; 1. Do not cause unacceptable levels of pollution of the surrounding area by noise, light, toxic or offensive odour, and airborne pollutants or by the release of waste products; 2. Provide, as necessary, appropriate treatment of land to clean up pollution and contamination'.

The solar farm will not cause unacceptable levels of pollution. Solar panels are designed to absorb, not reflect, irradiation. They are therefore responsible for only limited levels of either 'glint' or 'glare'. Glint may be produced as a direct reflection of the sun onto the surface of the PV solar panel, but will be substantially reduced by the anti-reflective coating that the modules incorporate to maximise the light capture of the solar cells. Glare is a continuous source of brightness, relative to diffused lighting. This is not a direct reflection of the sun, but rather a reflection of the bright sky around the sun. Glare is significantly less intense than glint.

Solar arrays will be installed using screw piled supported systems. They therefore cause no adverse impact on the ground and no contamination.

Solar cells are inert solid state devices which convert light into electricity. The systems therefore produce virtually no noise and no emissions. The inverters require some

cooling, so there is a slight fan noise perceptible only if standing immediately adjacent to the housing. Otherwise there are no moving parts.

The panels do not give rise to any emissions which will impact on air quality.

3.6.4 POLICY SG17 – PROTECTION OF RESIDENTIAL AMENITY

'Planning permission will be granted for development which would not cause material harm to residential amenity. In considering proposals the following criteria will be taken into account; 1. The extent of any overlooking or loss of privacy. 2. The extent of any overbearing or overshadowing effect. 3. Potential noise nuisance including that associated with vehicular activity. 4. The levels of smell, emissions and pollutants'.

There is a moderate degree of visual containment to the site and although the immediate context of the site consists of large open fields, the relatively flat topography, hedgerows and the low elevation of the proposals restrict views from the wider landscape. As a result, the site is only visible from locations in the immediate local area. Those residential dwellings nearest to the site of the proposed development are typically well screened by pre-existing surrounding boundary trees and vegetation; combined with the perimeter screening proposed by the applicant the visual impact upon these receptors is considered extremely low. We refer you to the discussions regarding noise in chapter four of the Environmental Report and consider that the impact of noise on the closest receptors will be negligible.

3.6.5 POLICY SG18 – LANDSCAPING OF NEW DEVELOPMENT

'Proposals for new development should, where appropriate, incorporate landscaping proposals as an integral part of their design and layout and a landscaping strategy will be required to support all major development proposals. Particular attention will be paid to; the protection of any existing trees and hedgerows, and any other attractive landscape features. The provision of strategic tree planting of indigenous species to improve the setting of development within the wider landscape. The maintenance and establishment of wildlife habitats and corridors'.

Solar farms do not create adverse environmental impacts, only the physical and visual impacts of solar systems, mostly the solar array, will affect the landscape of the site. However our proposed designs minimise such impacts by;

- **LIMITING THE HEIGHT OF THE SOLAR ARRAYS**: The highest part of the solar panel will be less than 2 metres above ground level, often no higher than surrounding hedgerows.
- **ROWS OF ARRAYS CAN BE ARRANGED TO FOLLOW LOCAL TOPOGRAPHY**: The arrangement of discrete array blocks at staggered intervals and with spacing in between breaks up any potential visual monotony and avoids undue wind concentration or turbulence.
- **VALUABLE ADDITIONAL HABITAT:** The development provides valuable additional habitat through the proposed soft landscaping.

- **PROVISION OF HIBERNACULA:** This will provides habitat for invertebrate.
- **PROVISION OF BAT BOXES AND BIRD NESTING HABITAT**: This will result in a significant increase in the bio-diversity value of the area.

3.6.6 POLICY EC4 – FARM DIVERSIFICATION PROJECTS

'Proposals for farm diversification projects will be permitted provided that all of the following criteria are met: The proposed activity is compatible with agricultural operations on the farm and would not prejudice the efficient functioning of surrounding land uses.

The approach taken by the applicant indicates that the proposals offer opportunities for integrating the solar farm activity with ongoing commercial agricultural enterprise on the land, ensuring the use of the land is both beneficial in terms of supporting the existing ongoing agricultural business and also continuing to support the wider agricultural community.

Existing or redundant rural buildings are utilised wherever it is practicable to do so. Where a proposal involves utilising existing buildings which are of architectural or historic merit, the design, materials and detailing of any alterations or additions must be sympathetic to the character and appearance of the building. It does not result in excessive expansion and encroachment of building development into the open countryside. It does not result in an unacceptable traffic impact on roads servicing the site The development would not result in an adverse impact on neighbouring residential properties or the local landscape and environment'.

The approach in the design and layout of the project has been directed throughout to ensure that the scheme does not create an unacceptable impact to either the use of the road network or on the surrounding properties.

Policy EC4 outlines 6 key points that new developments will be judged against which the proposed development meets comfortably. The development will allow agricultural activities to continue on the land in a variety of differing forms and the land will be retained in agricultural use. Traffic increases will only be a concern during the construction period as there is minimal traffic associated with the maintenance of the site. During construction there will be a traffic plan and marshalling system in operation to mitigate any issues that may arise.

CHAPTER FOUR: CONCLUSIONS

There are vast amounts of evidence that carbon emissions are having a detrimental effect on the environment. If such emissions continue to increase there shall be very serious consequences for biological and social systems worldwide. Therefore there is a clear need, both nationally and regionally, for additional renewable energy generating infrastructure, such as solar farms, if the UK is to meet its commitments to reducing CO_2 emissions. The development of the proposed site at Fenndyke will provide a significant contribution towards renewable energy targets, maximising environmental and economic benefits, minimising local impacts. Avoidance of these matters will create far greater harm to our environment than those created through the development of appropriately sited and design solar farms.

As shown within this Planning Statement (and the other accompanying documents submitted with the planning application), BERL has provided sufficient evidence to show that the proposed Fenndyke Solar Farm is compliant with the aims and objectives established in national and local planning policy.

In particular, the NPPF, published in March 2012 set out the Governments policy guidance for securing sustainable development. MP Greg Clarke, in the foreword of the document states, '*development that is sustainable should go ahead, without delay, a presumption in favour of sustainable development that is the basis for every plan, and every decision'.* Sustainable Development looks at the economic, social and environmental impacts of a proposal. The proposed development can be efficiently connected to the national grid infrastructure, reducing its environmental impacts. It will provide valuable inward investment into the local community (social impact) as agricultural activity will be able to continue on the land, with the overall economic viability of the agricultural business enhanced by the investment. The inter-row areas and the grass buffer zones will be established to encourage the establishment of important populations of many of the British native species of wildlife that are in decline within the countryside.

The proposed development is considered to be in accordance with all recently-issues government planning policy and related policy documents. It would have positive benefits in that it will make a valuable contribution to cutting carbon dioxide (CO_2) emissions arising from energy generation and so assist in meeting regional, national and international targets for CO_2 reduction through increasing energy supply from renewable sources.

Recent statements and publications have been presented as evidence that government are concerned at the use of agricultural land for the development of solar farms because of their understanding that this results in the loss of land for agricultural use. The applicant is not responsible for submissions or developments made by other parties and can only be accountable for developments for which they have a responsibility. Through our commitments and beliefs we seek to ensure that ALL of our solar developments provide both an enhancement to the local community and provide a long-term viable and sustainable solution to ensuring that the land remains in agricultural use and provides a viable source of crop or grazing support for alternative farming activity. Working with our partners and stakeholders we support the use of the inter-row gaps for production of rotation root crops on a low density and non-intensive basis. Our projects are not designed to support large-scale highly mechanised commercial farm enterprises, they are designed to support the smaller farm enterprises. From mediaeval times through to today the farming of the Fens has changed considerably and will

continue to do so, with the ambition to do so in a sustainable manner. To achieve this will require the use of new and innovative solutions so that land, whether the best and most versatile agricultural land can be retained in agricultural production and do so without creating significant impacts to the character of a landscape or unacceptable visual impacts. The proposed solar farm at Fenndyke meets these objectives and complies with the saved policies of SHDC.