

UK Onshore Scheme

Environmental Statement Volume 2 Document ES-2-C.08 Chapter 24

Socio-economics & Tourism (Proposed Converter Station)

VKL-08-39-G500-009

August 2017



Environmental Statement Volume 2				
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Figure 24.1 Proposed Converter Station and Public Rights of Way



Glossary & Abbreviations

Glossary of Terms			
Term	Meaning		
the Project	Viking Link, from the connection point at Revsing Substation in Denmark to the connection Bicker Fen Substation in Great Britain).		
the Scheme	UK Onshore Scheme from MLWS to the connection point comprising underground AC and DC cables, converter station and access road.		
connection point	The existing Bicker Fen 400 kV Substation; the point on the National Electricity Transmission System (NETS) where Viking Link connects.		
Proposed DC cable route	Electric power transmission in which the voltage is continuous. This is most commonly used for long distance point to point transmission.		
Converter station	Facility containing specialist equipment (some indoors and some potentially outdoors) for the purposes of converting electricity from AC to DC or DC to AC.		
Proposed converter station site	The complete site including temporary working areas. (approx. 30 ha)		
Proposed converter station zone	The permanent converter station area (approx. 5 ha)		
Proposed AC cable route	Electric power transmission in which the voltage varies in a sinusoidal fashion. This is the most common form of electricity transmission and distribution.		
The Contractor	Party or parties responsible for the detailed design and construction UK Onshore Scheme.		
Permanent access road	The permanent access to the converter station from the A52		

List of Abbreviation		
Abbreviation	Meaning	
ALC	Agricultural Land Classification	
BMV	Best and Most Versatile Agricultural Land	
BBC Boston Borough Council		
BRES Business Register and Employment Sur		
DMRB Design Manual for Roads and Bridges		
DMP Destination Management Plan		
ES	Environmental Statement	
FTE	Full Time Equivalent	
GVA	Gross Value Added	





List of Abbreviation	
Abbreviation	Meaning
HCA	Homes and Communities Agency
IMD	Index of Multiple Deprivation
JSA	Job Seeker's Allowance
KV	Kilo Volt
LSOA	Lower Super Output Area
MW	Mega Watt
NKDC	North Kesteven District Council
ONS	Office for National Statistics
PRoW	Public Rights of Way
SHDC	South Holland District Council
ZOI	Zone of Influence



1 Introduction

1.1 Introduction

- 1.1.1 This chapter has been prepared by Arcadis Consulting. It reports the results of baseline studies and the assessment of the potential impacts of the proposed converter station (including the proposed Alternating Current (AC) cable route and proposed permanent access road) on relevant Socio-economic and Tourism considerations. Table 24.1 sets out the structure of the Environmental Statement (ES) with respect to Socio-economics & Tourism. Reference should be made to other documents which form part of the ES as appropriate.
- 1.1.2 There is cross-over between some of the impacts identified in relation to socio-economics and tourism and other topics covered in the ES, notably landscape and visual amenity, traffic and transport, and noise and vibration (for example in relation to potential effects on amenity). Reference should therefore also be made to Landscape and Visual Amenity (Chapter 22 ES-2-C.06), Traffic and Transport (Chapter 25 ES-2-C.09) and Noise and Vibration (Chapter 26 ES-2-C-10) of this ES.

Table 24.1 Environmental Statement: Socio-economics & Tourism			
ES Reference	ES Volume	ES Chapter	Content
ES-2-B.09	2	13	Main Report: Proposed DC Underground Cable
ES-2-C.08	2	24 Main Report: Proposed Converter Station	
ES-3-B.01	3	13 Figures: Proposed DC Underground Cable	
ES-3-C.01	3	24 Figures: Proposed Converter Station	
ES-4-B.09	4	Technical Appendices: Proposed DC Underground Cable	
ES-4-C.08	4	24	Technical Appendices: Proposed Converter Station

1.2 Chapter Structure

- 1.2.1 The remainder of this chapter is structured as follows:
 - Section 2. Approach to Assessment. Describes the methodology that has been followed in undertaking the impact assessment.
 - Section 3. Basis of Assessment. Sets out the key assumptions which have been made in undertaking the impact assessment.





- Section 4. Planning Policy and Legislative Requirements. Summarises the key national, regional and local planning policy documents of relevance to socio-economics and tourism.
- Section 5. Baseline Conditions. Reports the results of desktop and field studies undertaken to establish existing conditions.
- Section 6. Potential Impacts. Identifies the potential impacts on socio-economics and tourism which may occur as a result of construction, operation and decommissioning.
- Section 7. Mitigation. Identifies proposed mitigation including measures which are incorporated into the siting, design and construction of the converter station.
- Section 8. Residual Effects. Reports the residual effects which remain taking into account proposed mitigation and identifies whether these are significant or not.
- Section 9. Cumulative Effects. Identifies the inter-project and intra-project cumulative
 effects which may occur in combination with other developments and of the proposed DC
 cable route and the proposed converter station.
- Section 10. Summary of Assessment. Provides a summary of the key findings of the impact assessment.



2 Approach to Assessment

2.1 Introduction

2.1.1 This section describes the approach to the identification and assessment of impacts resulting from the construction, operation and decommissioning of the proposed converter station, proposed permanent access road and proposed AC underground cable on socio-economics and tourism.

2.2 Summary of Consultation

Scoping Opinion Review

- 2.2.1 Scoping opinions received from individual stakeholders have been reviewed to identify any issues specific to this discipline. The principal issue identified in scoping responses received relates to the need to ensure that proposals appropriately consider recreation, incorporating measures so as not to discourage people from accessing the countryside for quiet enjoyment; consideration of relevant aspects of local authority green infrastructure strategies and Right of Way Improvement Plans (ROWIPs); and potential impacts of the Scheme on Public Rights of Way (PRoW).
- 2.2.2 Recreational routes potentially affected by the proposed converter station are identified within the baseline section of this chapter. Local authority strategies and plans of relevance are identified in the following section of this chapter.
- 2.2.3 Table 24.2 summarises the issues raised in the scoping opinion in relation to socio-economics and tourism and outlines how and where this has been addressed in subsequent chapters of the ES. A copy of the scoping opinion is included in Volume 4 of the ES (Appendix 4.1).

Table 24.2 Scoping Opinion (Socio-economics & Tourism)			
Consultee	Summary of Comment	How and where addressed	
Natural England	Potential impacts on public rights of way, National Trails and coastal access routes in the vicinity of the development should be considered, with appropriate mitigation incorporated as necessary. Relevant Right of Way Improvement Plans (ROWIPs) should be referred to as necessary.	Public rights of way in the vicinity of the Scheme have been assessed, with findings set out in the relevant chapters of the ES (Chapter 13 (Document ES-2-B.09) for the proposed DC cable route and Chapter 24 (Document ES-2-C.08) for the proposed converter station), as well as being considered in respect of other topics, notably Landscape and Visual Amenity (Chapter 22 (ES-2-C.06) of the ES).	



Additional Consultation

- 2.2.4 Consultation undertaken in relation to the socio-economics and tourism topic includes ongoing discussions with the landowner in respect of the proposed converter station and local businesses that may experience direct impacts as a result of temporary and permanent land-take.
- 2.2.5 The Rights of Way Officer at Lincolnshire County Council was informed of the extent and scope of recreational surveys undertaken at the proposed converter station site.

Table 24.3 Additional Consultation (Socio-economics & Tourism)			
Consultee	Nature of additional consultation	How and where addressed	
Lincolnshire County Council	Advised by email of proposed method for PRoW surveys in the vicinity of the proposed converter station site.	The methodology followed to undertake the PRoW surveys has been set out in this chapter.	

2.3 Scope of Assessment

Aspects to be assessed

- 2.3.1 The socio-economics and tourism topic covers the following areas of assessment:
 - Assessment of potential socio-economic impacts, specifically the direct and indirect employment created during the construction and operational phases, and impacts on the amenity of local residents (in relation to the latter there is an overlap with findings from other disciplines, notably noise and vibration; and landscape and visual amenity);
 - Tourism and recreation impacts, including impacts on tourism as a result of construction traffic (linking with findings from the traffic and transport discipline), impacts on tourism infrastructure as a result of negative visitor perception, and impacts on users of PRoW (linking here with findings from the landscape and visual amenity discipline).
- 2.3.2 Impacts on agriculture as a result of the Scheme are considered in Agriculture and Soils (Chapter 20 ES-2-C.04 of the ES).

Spatial Scope

- 2.3.3 The Zone of Influence (ZoI) for the socio-economic and tourism discipline has been selected to capture the likely significant effects that may occur. For the proposed converter station, the proposed AC cable route and permanent access road, the ZoI comprises the following local authority areas, for which baseline information is primarily disaggregated:
 - · South Holland District Council
 - · North Kesteven District Council
 - Boston Borough Council



2.3.4 Within this ZoI, the spatial scope for the identification of specific impacts (for example in relation to land-take or the severance of recreational routes) extends up to 500 m from the Scheme, which is considered through professional judgement to encompass impacts.

Temporal Scope

- 2.3.5 The assessment considers potential environmental effects during the construction phase (likely to be temporary impacts), as well as operational, longer term and permanent impacts.
- 2.3.6 Temporary impacts may relate to construction employment, impacts on residential amenity as a result of construction processes, and impacts on tourism and recreation (for example the temporary severance of PRoW).
- 2.3.7 Longer term, operational and permanent impacts relate primarily to the creation of employment for maintenance purposes.

2.4 Identification of Baseline Conditions

Desk Studies

- 2.4.1 A range of desktop studies and sources of information have been reviewed to help identify baseline conditions. These have included:
 - A review of relevant policy documents and strategies for the proposed converter station site. Documents have included the emerging Local Plans of the relevant local authorities, together with documents prepared as part of the supporting evidence bases; economic development strategies from relevant local authorities as well as that produced by the Greater Lincolnshire Local Enterprise Partnership; in addition to the latest Countryside Access and Right of Way Improvement Plan prepared by Lincolnshire County Council.
 - Population and demographic data (resident populations, patterns of change) identified from Census information (2011), including predicted demographic change. The data review has identified key demographic features.
 - Data relating to the labour force and employment (for example economic activity, employment by sector, unemployment, skills and qualifications) which is available from a variety of sources including 2011 Census data, Nomis (official labour market statistics), the Office for National Statistics (ONS) (Ref:24-1) and the Business Register and Employment Survey (BRES) (Ref:24-2).
 - Data relating to the volume and value of tourism to the local economy identified from internet and desktop research. Relevant sources of information have included Visit England data as well as national and regional statistics available from the Great Britain Tourism Survey, the Greater Lincolnshire Local Enterprise Partnership and Lincolnshire County Council.
- 2.4.2 Desk-top sources have also been used initially to identify relevant receptors within each of the local study areas. These relate to local businesses (including farm-related businesses), tourism businesses (for example accommodation providers and visitor attractions), community services



and facilities, and recreational routes. The findings of desktop data gathering and assessment work in relation to the location of receptors has been confirmed by site visits where necessary.

Field Studies

- 2.4.3 Field studies have also been undertaken to assist with the identification of baseline conditions. Survey work is described in the following paragraphs.
- 2.4.5 Surveys were undertaken along PRoW in the immediate vicinity of the proposed converter station site during August 2016, the purpose of which was to identify the level and purpose of usage.

2.5 Approach to Assessment

Assessment Guidance

2.5.1 There are no published guidelines or requirements for assessing socio-economic or tourism related impacts as part of an EIA. The assessment therefore seeks to identify and assess relevant changes which may arise from the UK Onshore Scheme, with resultant impacts on material assets. There is no specific guidance in relation to assessing the impact of interconnectors. The Design Manual for Roads and Bridges (DMRB) (Ref:24-3) has therefore been used as it is considered to be the most appropriate methodology as it is designed for assessing effects of linear schemes and includes guidance for assessing impacts on land use and the community impacts associated with infrastructure. The assessment has also been informed by the Homes and Communities Agency's (HCA) 'Additionality Guide', (Ref:24-4) which explains how to assess the additional impact of local economic growth for various interventions.

Assessment Criteria

Sensitivity of Receptors

- 2.5.1 The sensitivity of socio-economic receptors is primarily determined by reference to the nature of the activity that the human receptor is undertaking. A combination of quantitative and qualitative assessment, together with professional judgement, has therefore been used.
- 2.5.2 Receptors at the proposed converter station site include socio-economic and tourism infrastructure (for example businesses, visitor attractions, clusters of accommodation providers and recreational activities). Table 24.4 sets out how the sensitivity of individual receptors has been defined.



Table 24.4 Re	Table 24.4 Receptor Sensitivity (Socio-economics & Tourism)			
Sensitivity	Description			
Very High	Where the individual receptor is defined as being one of the following:			
	Of international importance;			
	Of very high recreational or tourism value; Having little or no capacity to absorb change without fundamentally altering its			
	present character;			
	A resource that cannot be re-provided within an accessible distance.			
High	Where the individual receptor is defined as being one of the following:			
	Of national importance;			
	Of high recreational or tourism value;			
	Having low capacity to absorb change without fundamentally altering its present character;			
	Individuals or groups experiencing the loss of access to a social or economic resource;			
	A resource that is scarce and not easily re-provided within an accessible distance.			
Medium	Where the individual receptor is defined as being one of the following:			
	Of regional importance;			
	Of moderate recreational or tourism value;			
	Having moderate capacity to absorb change without significantly altering its present character;			
	Individuals or groups experiencing restriction of access to a social or economic resource;			
	A resource for which an alternative is available within an accessible distance.			
	This level of sensitivity could also be applied where the loss of employment or			
	closure of multiple small businesses within an area could be deemed a regionally important issue.			
Low	Where the individual receptor is defined as being one of the following:			
	Of local importance;			
	Of low recreational or tourism value;			
	The receptor is tolerant of change without detriment to its character;			
	A resource for which several alternatives are available within an accessible distance.			
Negligible	Where the individual receptor is resistant to change, of low recreational or tourism value, or where there is a wide choice of alternatives within an accessible distance.			

Magnitude of Impacts

2.5.4 The significance of effects is a function of the magnitude of the impact and the sensitivity of the receptor. The assignment of magnitude of impact must involve an element of subjective judgement; however, in the determination of the magnitude of impacts of the project on socio-



- economic and tourism assets, regard is had to the advice and views of stakeholders and consultees.
- 2.5.5 The approach to evaluating magnitude of change as a result of the UK Onshore Scheme is set out in Table 24.5 below. The magnitude of change may be either beneficial or adverse and may be influenced by proximity as well as perceived or real linkages between the project and the receptor (for example a visitor attraction).

Table 24.5 Impact Magnitude Criteria (Socio-economics & Tourism)			
Magnitude	Description		
High	Where the extent of effects on receptors is large in scale (for example leads directly to closure or significant job losses within a business)) or leads to a significant reduction in a particular recreational activity/group of visitors, and/or will continue beyond the project construction period thereby constituting a permanent, long-term impact (over ten years) on baseline conditions.		
Medium	Where the extent of effects on receptors may be moderate (for example where businesses might lose income as a result of fewer visitors per annum/reduced recreational activity or where the reduction in visitor numbers is outside of what can be considered to be normal annual variability) and/or will continue beyond the project construction period thereby constituting an effect on baseline conditions over the medium term (between five and ten years).		
Low	Where the extent of effects on receptors is considered to be small (for example there may be a very minor reduction in annual visitor numbers/recreational activity, but this is considered to be within the parameters of normal annual variability and does not have an impact on jobs or overall income levels) and does not extend beyond the Scheme construction period.		
Negligible	Where very little change from baseline conditions takes place, approximating to a 'no change' situation.		

Assessing the Significance of Effects

2.5.6 Table 24.6 sets out how the significance of effects has been determined. Where one or other of two possible scores could apply to an effect, professional judgement has been exercised to determine the significance of the effect. A significant effect is considered to be where the effect is of moderate significance or above.



Table 24.6 Assessment of Significance (Socio-economics & Tourism)						
Magnitude	Sensitivity or Value of Receptor					
of Impact	Very High	High	Medium	Low	Negligible	
High	Major	Major	Moderate	Moderate	Minor	
Medium	Major	Moderate	Moderate	Minor	Negligible	
Low	Moderate	Moderate	Minor	Negligible	Negligible	
Negligible	Minor	Minor	Negligible	Negligible	Negligible	

2.5 Assumptions or Limitations

- 2.5.1 Baseline conditions have been established using data that is currently available and as up-todate as possible. Where available, directly comparable information has been obtained across local authority areas.
- 2.5.2 Detailed information regarding the catchment areas of community facilities has only been obtained in relation to schools where this is considered to be relevant; principally those schools in closest proximity to the UK Onshore Scheme. Assessments regarding community severance from other community related facilities such as employment areas have been made using professional judgement.



3 Basis of Assessment

3.1 The Proposed Converter Station

- 3.1.5 A full description of the construction, operation and decommissioning of the proposed converter station, the permanent access road and the proposed AC cable route to the existing Bicker Fen Substation is provided in The Proposed Converter Station (Chapter 17 ES-2-C-01 of the ES).
- 3.1.6 The assessment has also considered connection works necessary within the existing Bicker Fen 400 kV Substation.
- 3.1.7 Key design assumptions have been used to underpin the assessment for the proposed converter station site in order to ensure that a realistic worst case scenario has been considered.
- 3.1.8 The proposed converter station zone requires a building footprint of approximately 4.8 ha; for the purposes of assessment it has been assumed that the whole 30 ha field will be required for the construction phase.
- 3.1.9 In addition to the proposed converter station zone it is estimated that additional land would be required for temporary construction facilities, including a compound and laydown areas. The construction compound would be required for the duration of the construction period which is estimated to be between two to three years.
- 3.1.10 Construction is assumed to be continuous throughout the year. Whilst construction activities would usually be undertaken during daytime periods, there would be some activities where 24 hour working could be required. During operation, the proposed converter station is assumed to be operational 24 hours a day.
- 3.1.11 During the operational phase, the area for assessment is assumed to include the proposed converter station zone, the permanent access road, an area of car parking for approximately twenty vehicles, an area of hardstanding required for annual maintenance works and areas required for drainage infrastructure/landscape planting.

3.2 Permanent Access Road

3.2.1 The permanent access road will be 2.8 km long and 6 m wide on non-turning sections, with a 5 m working width either side of the carriageway, extending to 40 x 40 m working area for the bridge at Hammond Beck.

3.3 Proposed AC Cable Route

3.3.1 The proposed AC cable route connects the proposed converter station to Bicker Fen 400 kV Substation. The proposed AC route comprises up to six cables laid in two trenches, each trench is termed a circuit. The proposed route splits at the east of the substation with one circuit connecting to a bay at the south of the substation and second circuit connecting the north of the





substation. Further information on the route is provided in The Proposed Converter Station (Chapter 17 ES-2-C-01 of the ES).



4 Planning Policy and Legislative Considerations

4.1 National Planning Policy

National Policy Statements (NPS)

- 4.1.1 Overarching National Policy Statement for Energy (EN-1) (Ref:24-5) acknowledges that the construction, operation and decommissioning of energy infrastructure may have socio-economic effects at local and regional levels. EN-1 confirms that the likely significant social and economic effects should be set out as well as proposed avoidance or mitigation measures for those effects.
- 4.1.2 Policy Statement EN-1 recognises that 'energy is vital to economic prosperity and social well-being and so it is important to ensure that UK has secure and affordable energy' (paragraph 2.1.2) and that new infrastructure plays a vital role in ensuring secure energy supplies and supporting ongoing economic growth. Decision-makers can give substantial weight to the contribution which a proposed development would make towards satisfying this need.
- 4.1.3 EN-1 provides guidance in relation to the assessment of socio-economic impacts, confirming that socio-economic impact assessments should consider:
 - the creation of jobs and training opportunities;
 - the provision of additional local services and improvements to local infrastructure, including the provision of educational and visitor facilities (if a difference in baseline conditions in relation to demand for housing, accommodation or local services is anticipated);
 - effects on tourism;
 - the impact of a changing influx of workers during the different construction, operation and decommissioning phases of the energy infrastructure; and cumulative effects.
- 4.1.4 EN-1 also states that an assessment should be made of existing and proposed land uses including business operators and economic land uses, agricultural land quality and operations, local communities and community facilities (health, education and community gathering) and visitor attractions, accommodation and recreational areas. The dominant land use within and adjacent to the proposed converter station site is agriculture and reference should be made to Agriculture and Soils (Chapter 20 ES-2-C.04 of the ES) accordingly.

National Planning Policy Framework (NPPF)

4.1.5 The NPPF (Ref 24-6) seeks to support a prosperous rural economy and support sustainable rural tourism that benefits rural area, communities and visitors, and which respect the character of the countryside.



4.1.6 The objective 'Promoting healthy communities' seeks to deliver social, recreational and cultural facilities and services the community needs; planning policies and decisions should plan positively for provision of shared space and guard against the unnecessary loss of facilities.

4.2 Local Planning Policy

South East Lincolnshire Local Plan 2011-2036 (Publication Version March 2017)

- 4.2.1 The Local Plan (Ref:24-7) will replace the saved policies in the Boston Borough and South Holland District Local Plans. The Local Plan gives an effective spatial expression to the vision and aspirations of South East Lincolnshire's local communities and to those elements of the relevant strategies and programmes which relate to a development and use of land in the area. This should be coupled with a local interpretation of the requirements of the national planning policies, particularly the NPPF.
- 4.2.2 The Local Plan contains:
 - an overall vision for South East Lincolnshire which sets out how the area and places within it should develop;
 - a set of strategic priorities for the area focusing on the key issues that need to be addressed;
 - a set of strategic policies that address the strategic priorities;
 - · a suite of criteria-based policies to be taken into account when considering development;
 - a 'delivery' section containing sufficient detail in relation to allocated sites and any broad locations to provide clarity to developers, local communities and other interests about the nature and scale of development.

South Holland District Council Local Plan (Adopted 2006)

- 4.2.3 The South Holland Local Plan (Ref:24-8) was adopted on the 18th July 2006. It is a comprehensive statement of planning policies for the development and use of land in the District until the year 2021.
- 4.2.4 Many of the existing and proposed cycle routes in South Holland are associated with existing rights of way, riverbanks or disused railway lines. These areas are often valuable areas for nature conservation and other recreational uses such as walking. Policy TC2 seeks to protect existing and projected cycleways and create opportunities for future use. Development that would prejudice any element of existing cyclepaths or public rights of way (PRoW) would not be permitted. This is further enforced by Policy LT3 on recreational routes, PRoW and disused railway lines.

Boston Borough Local Plan (Saved Policies beyond 2007)

4.2.5 The Boston Borough Local Plan was adopted in April 1999. In accordance with the provisions of the Planning & Compulsory Purchase Act 2004, the Council secured approval from the Secretary



of State for Communities and Local Government for some of the policies in the adopted local plan to be saved beyond September 2007. These policies remain the adopted policies (Ref. 24-9). The policies that remain adopted include Policy CO1 which states that development will not be permitted in the countryside unless it is supported by other Local Plan policies. The plan makes allowance for development which benefits economic activity, or which meets particular social needs, while maintaining or enhancing the environment.

North Kesteven District Council Local Plan (2007)

- 4.2.6 The North Kesteven District Council Local Plan (Ref:24-10) was formally adopted in 2007 and amplifies the broad framework of the Lincolnshire Structure Plan, setting out detailed policies and proposals for the development of the District.
- 4.2.7 As a rural district, Policy C2 of the Local Plan states that proposals will be permitted providing that the environmental, economic and social value of the countryside is maintained and protects the character of the area.
- 4.2.8 All development will have an impact on people, premises and land. However, Policy C5 seeks to manage the effect of proposals on public amenities and community facilities.
- 4.2.9 Policy RST2 aims to protect existing public rights of way in the district. Planning permission will not be granted for proposals that will adversely affect an existing public right of way; this includes making the PRoW less attractive or convenient for users.

Boston Borough Interim Plan (2006)

- 4.2.10 The deposit draft of the Boston Borough Local Plan (Ref:24-11) was withdrawn from the statutory adoption process in February 2006. An Interim Plan was produced to guide changes in the use and development of land for the period between 27th February 2006 (when it was adopted) and the time when Local Development Framework (LDF) documents were adopted. It takes its lead from the Council's corporate priorities and objectives.
- 4.2.11 The Interim Plan's functions are to act as a spatial and land use planning embodiment, guide development control decisions, provide a basis for co-ordinating public and private investment in the development and use of land and bring issues concerning the use of land before the public and to involve them in the plan-making process.

4.3 Supplementary Guidance Documents

Greater Lincolnshire Destination Management Plan 2013-2020

4.3.1 The Greater Lincolnshire Destination Management Plan (Ref:24-12) is a facilitating document that aims to address the changes the visitor economy needs to maximise impact on the economy resulting in growth, wealth, employment and improved quality of life.





4.3.2 Boston is highlighted as a key driver in tourism growth in Lincolnshire. The proximity of Boston to the proposed converter station means the tourism value of the town must not be hindered by the construction or operational effects of the development.



5 Baseline Conditions

5.1 Study Area

- 5.1.1 The proposed converter station site lies approximately 1.2 km to the south/south west of the existing Bicker Fen 400 kilo Volt (kV) substation and is located at North Ing Drove within South Holland District Council (SHDC). The proposed converter station site is in agricultural land, bounded to the north, east and west by existing drains. North Ing Drove lies to the immediate south of the site and provides local access to fields and properties; the nearest residential property is at the western end of North Ing Drove, approximately 600 m to the west of the proposed converter station. The A52 lies approximately 1.7 km to the south of the site.
- 5.1.2 The ZoI for the assessment of socio-economic impacts is described in Section 2 of this Chapter and identifies that considerations such as impacts on the local economy will be defined on a local authority wide level. Local impacts (for example impacts on PRoW) are considered using a spatial scope extending up to 500m from the proposed converter station.

5.2 Overview of Socio-Economic Characteristics

Local Population

- 5.2.1 This section presents data relating to the local population, identified from Census information (2011), including information relating to gender and age profiles. South Holland is one of the most sparsely populated districts in the UK, with a population density of around 1.2 persons per hectare (compared to 2.9 for the East Midlands and 3.7 for England and Wales as a whole (Ref:24-13)).
- In the vicinity of the proposed converter station, settlements include the villages of Donington and Bicker. Donington is located approximately 1.8 km to the south-east of the proposed converter station site and has a population of just over 2,800 (Ref 24-1). The village is home to community facilities including shops and a post office, places of worship, a library, public house and local schools (both primary and secondary). The hamlet of Northorpe is located to the north of Donington and primarily comprises residential dwellings along Northorpe Road. Bicker is located just over 2 km to the east of the site; again the village has basic community facilities and an approximate population of just under 1,000 people. Nearby settlements to the proposed converter station site are illustrated on Figure 24.1 (found in Volume 3 of the ES (ES-3-C.01)).
- 5.2.3 The proposed converter station site is located close to the boundary of three local authority areas SHDC, Boston Borough Council (BBC) and North Kesteven District Council (NKDC)). Table 24.7 sets out broad characteristics of the population of each of these. The age profiles show that, for SHDC and NKDC in particular, a higher proportion of the population is aged over 65 than is the case for England as a whole.



Table 24.7 Local Population Characteristics					
Population Characteristics	South Holland	Boston	North Kesteven	Lincolnshire	England
Total population	88,270	64,637	107,766	713,653	53 million
Age profile (%)					
0-15	16.9	17.6	17.7	17.1	18.9
16-64	60.9	62.7	61.4	62.2	64.8
65+	22.3	19.7	20.9	20.6	16.4
Gender (%)					
Male	48.8	48.8	48.8	48.7	49.2
Female	51.2	51.2	51.2	51.3	50.8

Source: Population Estimates Census Data, Nomis 2011 (Ref:24-13)

Local Economy

5.2.4 This section describes the characteristics of the local economy, including information relating to economic activity, unemployment, qualifications levels and deprivation.

Table 24.8 Local Economy					
Local Economy Characteristics	South Holland	Boston	North Kesteven	Lincolnshire	England
Economic Activity (%)	69	70	70	68	70
Unemployment (%)	4	4	3	4	4
Claimant count	0.9	1.3	0.8	1.3	1.6
Qualifications					
No qualifications	30.8	32.7	21.7	26.1	22.5
GCSE and A level equivalent	41.8	39.1	44.3	42.8	40.9
Further and higher education	15.8	15.1	25.4	21.3	27.4
Other qualifications	7.9	9.9	4.2	5.5	5.7

Source: Lincolnshire Research Observatory, 2015 (Ref:24-14)



5.2.5 Economic activity rates, unemployment rates and the proportion of Job Seekers Allowance (JSA) claimants are broadly similar across each of the three local authority areas and are comparable to both county-wide and national levels.

Table 24.9 Deprivation					
Local Authority Area (total number of Lower Super Output Areas (LSOAs) for area in brackets)	No. of LSOAs in the 10% most deprived areas in England	No. of LSOAs in the 11-20% most deprived areas in England	Rank of average rank		
South Holland (49)	0	1	134		
Boston (36)	1	5	66		
North Kesteven (64)	0	0	266		
Lincolnshire (420)	29	29	90		

Source: English Indices of Deprivation, 2015 (Ref:24-15)

5.2.6 In the Index of Multiple Deprivation (IMD) showing overall deprivation (Ref:24-15), the 2015 data shows Lincolnshire ranked 90th out of 152 upper tier local authorities in England, where 1st is the most deprived. However, when looking at individual domains showing aspects of deprivation, Lincolnshire's ranking shows some variation. Table 24.9 shows that within the three districts under consideration, Boston has the most LSOAs in the 11-20% of the most deprived areas in England.

Tourism and Recreation

- 5.2.7 The value of Lincolnshire's tourism industry in 2015 was £1.35 billion, an increase of £80 million from 2014 and 33% more than its value in 2010 (Ref:24-16). The total number of visitor days to the county in 2014 was over 28 million, with an increase in the length of visitor stay of 3.3% between 2013 and 2014. Tourism visits in Lincolnshire in 2014 were estimated to have supported 18,907 Full Time Equivalent (FTE) jobs, with the majority of these (80.6%) being generated directly in the tourism sector (Ref:24-17).
- 5.2.8 A Destination Management Plan (DMP) has been prepared for Greater Lincolnshire for the period 2013-2020, which aims to support growth and investment, address fragmentation in the visitor economy and strengthen different functions and activities. The DMP sets out the value of tourism to the economy by district council area; revenue generated from tourism by SHDC, NKDC and BBC in 2012 equated to just over 20% of revenue to Lincolnshire as a whole. Strategic priorities for developing the visitor economy in Greater Lincolnshire include improvements to the tourism product, 'selling' the destination through new technologies such as social media, and destination image, branding and promotion. Tourism strengths of this area of South Lincolnshire are



- primarily focused around the natural landscape and recreational activities such as walking, cycling and use of waterways.
- 5.2.9 Visitor accommodation and infrastructure (such as food and drink establishments) are located in settlements in the vicinity of the proposed converter station site (for example there are bed and breakfast establishments in the nearby villages of Donington and Bicker).
- 5.2.10 Recreational routes and activities worth noting in the local area relate to the following:
 - On-road cycling routes inland towards Cumberworth, Willoughby, Burgh-le-Marsh and Wainfleet All Saints (all of which are over 40km to the north). Sustrans National Cycle Route 1 from Hull to Fakenham runs via Boston to the east of the proposed converter station (approximately 14km away).
 - The 'Water Rail Way' a traffic-free path along the former Lincoln to Boston railway, approximately 16km to the north-east
 - The Brown Fen Waterway Trail, a 66 mile circular route links Boston, Fosdyke, Spalding, Crowland and Donington. The route passes along the east bank of the South Forty Foot Drain.
 - The South Forty Foot Drain, also known as the Black Sluice Navigation, is an artificial drainage river that runs north-south to the west of the villages of Bicker and Donington, and which provides 19 miles of navigation into the west of Boston. The navigation was reopened in 2009. Above Donington Bridge, access is only possible for small unpowered boats such as canoes and kayaks. A public bridleway runs alongside the navigation.
- 5.2.11 Tourism and recreation facilities are identified on Figure 24.1 (found in Volume 3 of the ES (ES-3-C.01)).

5.3 Proposed Converter Station

5.3.1 This section describes baseline conditions specifically in relation to the proposed converter station site.

Settlement and Land-Use

5.3.2 The proposed converter station site is currently in agricultural use. The nearest residential property is at the western end of North Ing Drove, approximately 600 m to the west of the proposed converter station site. Other residential properties in the area include Northorpe Farm, approximately 1 km to the east of the proposed converter station site and on the edge of the red line boundary.

Tourism and Recreation

5.3.3 The South Forty Foot Drain is located approximately 500m to the west, of the proposed converter station and runs in a north/south direction. Bridleway Doni/16/2 runs adjacent to the Drain and also forms part of the route for the Brown Fen Waterway Trail. A site visit in August 2016



between 14:00 and 17:00 hrs on a weekday ascertained the condition and likely usage levels of the bridleway; although the bridleway was accessible at this time, no users were observed. Given that no users were observed during a peak holiday period, an off-peak survey was not considered necessary.

5.4 Permanent Access Road

5.4.1 This section describes baseline conditions specifically in relation to the permanent access road.

Settlement and Land-Use

5.4.2 The proposed route of the permanent access route is currently in agricultural use.

Tourism and Recreation

5.4.3 The proposed route of the permanent access road passes primarily through agricultural land, intersected by two PRoW, namely Doni/19/3 in the vicinity of Northorpe House and Doni/8/1 close to the outskirts of Donington near Park Farm. A site visit in August 2016 to this area noted that, although the footpaths were accessible, no users were observed.

5.5 Proposed AC Cable Route

5.5.1 This section describes baseline conditions specifically in relation to the proposed AC cable route.

Settlement and Land-Use

5.5.2 The proposed AC cable route is routed through agricultural land. In the wider area there is some settlement as well as electrical infrastructure such as Bicker Wind Farm.

Tourism and Recreation

5.5.3 There are no PRoW or other tourism/recreation receptors identified within the vicinity of the proposed AC cable route.



6 Potential Impacts

6.1 Temporary Construction Impacts

Local Economy

- 6.1.1 Construction of the proposed converter station, permanent access road and proposed AC cable route will have a range of impacts on the local economy, including job creation, the procurement of local services and materials, and spend within the locality.
- 6.1.2 Like other major utility and infrastructure projects, there will be a higher level of construction employment and a minimal level of operational employment. The labour force required for the work proposed will consist of a mix of highly specialised workers, semi-skilled staff and others. These personnel include specialist engineers and plant operators, inspectors and supervisors, and management staff. Although a large percentage of the staff employed by the Contractor and National Grid Viking Link (NGVL) will be drawn from the permanent staff of those organisations, it is normal practice on such projects that some local staff and site labour may be required which would be let on a sub-contract basis to local firms.
- 6.1.3 The construction period is anticipated to be of approximately two to three years duration and employ up to 150 personnel. Numbers will vary during the course of construction depending on the activities being undertaken. An assessment of the proportion of jobs likely to be lost to displacement and leakage (employment benefits created outside of the immediate area) has been undertaken.
- 6.1.4 Displacement relates to the proportion of employment that has been transferred from one place to another, rather than new job creation, so for example where construction workers have moved between construction schemes. Since the construction of the proposed converter station is not expected at this point to require labour, land or capital from other local firms or organisations, it has been assumed that displacement would be low for example, the Contractor may use local labour for some low-skilled activities which may come from within the local agricultural workforce.
- 6.1.5 Leakage refers to the proportion of employment benefits that are 'lost' from the immediate area. An example of this could be where more specialist construction techniques may not be able to be provided from within the local jobs market and appropriately skilled workers may need to be brought in from outside of the study area. A further point for consideration relates to the high mobility of construction workers. It is expected that a reasonably high proportion of employment benefits would be retained within the local area.
- 6.1.6 In addition to the creation of direct construction employment, construction of the proposed converter station could also generate indirect and induced employment opportunities. Indirect employment could arise from local firms providing services (i.e. haulage, fencing, landscaping), or the provision of goods, materials and local service staff during the construction phase (e.g. cleaning, security, catering, administrative). Induced employment results from the spending of incomes earned by those directly employed on construction and workers employed by



suppliers/subcontractors, for example on food or accommodation. Multipliers to calculate supply linkages and income expenditure are often combined into a composite multiplier. At a local level, the Additionality Guide (Ref 24-6) identifies composite multipliers of 1.05, 1.1 and 1.15 (low, medium and high). For the purposes of the proposed converter station, a low composite multiplier of 1.05 has been assumed in that local supply linkages are anticipated to be low.

6.1.7 Table 24.10 summarises employment impacts during the construction phase for the proposed converter station (including the permanent access road and installation of the proposed AC cable route).

Table 24.10Construction Employment			
Direct/Indirect Employment	Number of Jobs		
Direct employment	150		
Indirect employment	8		
Total	158		

- 6.1.8 There will be a requirement for temporary living accommodation within reasonable commuting distance of the project (such as rented housing, hotels, guest houses, bed and breakfast establishments/lodgings and official caravan parks). Expenditure in the accommodation sector will therefore be generated as a result of the development of the proposed converter station site, which will in turn create further local expenditure on services such as fuel, food and drink. It is considered that there is a sufficient range and quantity of accommodation within an acceptable commuting distance of the proposed converter station site for this not to adversely affect the local tourist trade.
- 6.1.9 The overall effect on the local economy, by virtue of job creation, impacts on the business supply chain (by virtue of the procurement of materials and supplies) and expenditure created in the local economy from construction workers, is considered to be **temporary** and **minor beneficial**. No significant negative effects are expected to arise.

Local Population

- 6.1.10 A further socio-economic effect of construction of the proposed converter station relates to impacts on the amenity of local residents and visitors. Impacts on residential amenity during construction may result from visual impact, noise and traffic impacts; these areas are assessed individually in Landscape and Visual Amenity (Chapter 22 ES-2-C.06), Traffic and Transport (Chapter 25 ES-2-C.09) and Noise and Vibration (Chapter 26 ES-2-C.10). An in-combination assessment of effects is described in Cumulative Assessment (Chapter 28 ES-2-C.11 of the ES).
- 6.1.11 The results of the assessment on visual amenity (Landscape and Visual Amenity Chapter 22 ES-2-C.06) identifies that receptors at the majority of viewpoints would experience minor or less, not significant residual effects in relation to visual amenity, with potential significant visual effects



limited to select receptor locations within 1 km of the proposed converter station. The results of the traffic and transport assessment indicate that impacts at all receptors are likely to be not significant, unless works take place on a Saturday, where some significant effects may be apparent (Traffic and Transport Chapter 25 ES-2-C.09). The noise and vibration assessment identifies negligible to minor effects on sensitive receptors and on users of PRoW, which are not significant.

6.1.12 Connection works within the existing Bicker Fen 400kV Substation are occurring within the footprint of the existing substation and as such there is not considered to be any impact on socioeconomic receptors.

Tourism and Recreation

- 6.1.13 Impacts on tourism and the visitor economy may derive from visual impacts of construction, impacts on general visitor amenity, the effects of construction traffic on the local road network and visitor journey time, potential impacts on tourism infrastructure in the area as a result of negative visitor perception during construction, and temporary diversions of PRoW in the vicinity of the proposed converter station site.
- 6.1.14 Chapter 25 of the ES (Traffic and Transport ES-2-C.09) assesses the temporary impacts of the percentage increase in traffic associated with the construction of the proposed converter station, proposed AC cable route and the permanent access road on the surrounding road network. Both summer and winter traffic flow surveys were undertaken to take into account seasonal variations. The assessment shows that impacts related to HGV construction traffic on weekdays are expected to be not significant; if deliveries were to take place on a Saturday during periods of peak construction traffic, a minor significant effect has been identified at two locations (A52 Bicker and A15 Folkingham). Chapter 25 notes however that the assessment very much considers a worst-case scenario and that it is proposed that the majority of HGV movements will take place on weekdays.in relation to impact of construction vehicles. The potential impact on tourism as a result of construction traffic is therefore likely to be **temporary** and **negligible**.
- 6.1.15 Impacts on tourism infrastructure in the area as a result of negative visitor perception are assessed as **temporary** and **negligible**. The proposed converter station site is located in a primarily agricultural area, with no significant tourist routes or destinations within the locality. Within the immediate vicinity of the proposed converter station site there are other energy-related installations, for example wind turbines and the Bicker Fen 400 kv Substation in fields to the north. The nearest visitor accommodation or facilities are located approximately 1.8 km to the south and 3 km to the east of the site in Donington and Bicker respectively.
- 6.1.16 The permanent access road from the A52 to the proposed converter station site crosses two PRoW Doni/19/3 in the vicinity of Northorpe House and Doni/8/1 close to the A52 and the outskirts of Donington near Park Farm. The survey work referred to in Section 3 of this chapter identified that the PRoW are accessible, but that level of use was low. Chapter 22 (Landscape and Visual Amenity ES-2-C.06) identifies that users of PRoW at three viewpoints (North Ing



- Drove, A52 Donington and South Forty Foot Drain, Bank End Farm) would experience moderate adverse (significant) effects during construction.
- 6.1.17 It is proposed that the footpath Doni/8/1 is permanently diverted around the permanent access road and its junction with the A52. The diversion would be of an additional 360 metres length compared to the existing. During the construction phase the impact on footpath Doni/8/1 is considered to be **minor adverse**. There may also be a need for the stopping up of footpath Don/19/3 during construction. Given the low number of users, this is assessed as **minor adverse**.

6.2 Longer Term, Operational and Permanent Impacts

6.2.1 For the purposes of this EIA operational, longer term and permanent effects are those which would occur as a result of the Scheme's land take or as a result of its operation.

Local Economy

6.2.2 Employment during the operational phase of the project would relate to staffing and maintenance of the proposed converter station. The converter station would be staffed 24 hours a day, with a minimum of two operators on site at all times; during normal operation there would be approximately six personnel on site daily, with more personnel likely during periods of routine maintenance. The impact of the operation of the proposed converter station on the local labour market through employment creation is therefore considered to be **negligible**.

Local Population

6.2.3 It is not considered that there would be any impacts on the local population once the proposed converter station is operational.

Tourism and Recreation

- 6.2.4 On completion of the construction works, it is not considered that there would be any impacts on tourism volume and value to the local area. Disrupted land (for example for the proposed AC cable route connection to Bicker Fen 400 kV Substation) would be reinstated to its former condition. The proposed converter station itself would be appropriately screened through design and planting.
- 6.2.5 Footpath Doni/19/3 in the vicinity of Northorpe House and Doni/8/1 close to the outskirts of Donington near Park Farm will be permanently crossed by the permanent access road, which will also be secured by fencing along both sides. Footpath Doni/19/3 follows a north/south direction and thus any permanent diversion route (either to the east through Bicker village or to the west along North Ing Drove and South Forty Foot Drain) would be long (approximately 5-6km). An alternative option would be for the permanent access road to be gated in the vicinity of the PRoW intersection (with appropriate signage) in order to allow users to cross at this point. Assuming as





- a worst case that the footpath needs to be permanently stopped up, the impacts are assessed as permanent and **moderate adverse**.
- 6.2.6 The diversion of footpath Doni/8/1 generally follows an east/west direction and will be permanently diverted in the vicinity of its intersection with the permanent access road and the A52 for a short additional distance of 360 metres. This is assessed as permanent and **minor adverse**.
- 6.2.7 Findings in relation to visual amenity for users of PRoW are set out in Landscape and Visual Amenity (Chapter 22 ES-2-C.06). The assessment identifies that, due to the close proximity of the proposed converter station and open nature of the view from viewpoints at North Ing Drove and South Forty Foot Drain, Bank End Farm, the residual effect during operation would be moderate adverse (significant). Taking this into account with the potential impact on footpath Doni/19/3 from the permanent access road, impacts on PRoW are therefore assessed as moderate adverse.

6.3 Decommissioning Impacts

6.3.1 The anticipated operational life of the proposed converter station is approximately 40 years. Should decommissioning be required, the activities to be undertaken would be similar in nature to and no worse than those described for construction and therefore effects are not considered to be significant.



7 Mitigation

7.1 Design Mitigation

7.1.1 These are measures incorporated into the design of the Scheme. All design mitigation is identified in The Converter Station (Chapter 17 ES-2-C.). This section summarises mitigation measures for the socio-economics and tourism topic.

7.2 Construction Mitigation

7.2.1 A Construction Environmental Management Plan (CEMP) will be completed prior to the start of construction and will specify how environmental management will be achieved during the construction phase. For example, good practice measures will be adopted during construction in order to minimise impacts on the amenity of local residents by virtue of visual impact, noise, dust, or construction traffic. Measures of relevance to the socio-economics and tourism topic are set out below.

Tourism and Recreation

- 7.2.2 Access to PRoW (footpaths Doni/19/3 and Doni/8/1) will be disrupted during construction. Where this is the case, NGVL will work to ensure that disruption is minimised, appropriate signage is used to clearly identify any temporary diversions that may be necessary and/or temporary closures that may be required during construction. An Outline Access Management Strategy summarising this information will be submitted with the planning application.
- 7.2.3 The permanent access road will be fenced along either side and is crossed by footpathDoni/19/3. As a worst case, it is assumed that the footpath would need to be permanently stopped up (a diversion along publicly accessible routes could be in the region of 5-6 km in length).



8 Residual Effects

8.1 Construction Effects

- 8.1.1 During the construction phase, no significant adverse residual effects have been identified.
- 8.1.2 Construction of the proposed converter station is predicted to generate jobs (direct and indirect employment). This is considered to result in a minor beneficial effect although not significant.
- 8.1.3 Connection works within the existing Bicker Fen 400kV Substation are occurring within the footprint of the existing substation and as such there is not considered to be any impact on socio-economic receptors.
- 8.1.4 Impacts on tourism (for example tourism infrastructure, visitor traffic) are considered to be temporary, **negligible** and **not significant**.
- 8.1.5 Temporary impacts during construction on users of the PRoW crossed by the construction of the permanent access track are assessed as **minor adverse** and **not significant**, taking into account findings of the assessment of visual amenity for users of PRoW in the vicinity of North Ing Drove and South Forty Foot Drain, Bank End Farm (refer to Landscape and Visual Amenity (Chapter 22 ES-2-C.06), but also considering the temporary nature of construction.

8.2 Longer Term, Operational and Permanent Effects

- 8.2.1 During the operational phase, a moderate and significant adverse residual effect has been identified on users of footpath Doni/19/3. Appropriate mitigation has been identified, for example signage; however the impact on users of PRoW in the vicinity of North Ing Drove and South Forty Foot Drain, Bank End Farm, as identified from the assessment above, as well as in Landscape and Visual Amenity (Chapter 24 ES-2-C.06), results in the residual impact being assessed as moderate and significant.
- 8.2.2 Employment created during the operational phase of the proposed converter station is considered to be **negligible** and **not significant**.

8.3 Decommissioning Effects

8.3.1 The anticipated operational life of the proposed converter station is approximately 40 years. Should decommissioning be required, the activities to be undertaken would be similar in nature to and no worse than those described for construction and therefore effects are not considered to be significant.



9 Cumulative Effects

9.1 Scope of Cumulative Assessment

9.1.1 An assessment of cumulative effects has been undertaken. Developments that have been taken into account as part of the cumulative assessment are identified in Chapter 28 (ES-2-C.11); the assessment has taken into account both spatial and temporal overlaps in relation to the socio-economics and tourism topic.

9.2 Cumulative Assessment (Inter-Project Impacts)

9.2.1 Construction of the proposed converter station, proposed AC cable route and the permanent access road may overlap with other development schemes, having the potential to contribute to an adverse cumulative impact in terms of amenity (disturbance and nuisance from construction activities) and the potential demand and supply for construction materials and workforce. A review of schemes that may come forward in the vicinity of the proposed converter station site has identified that there are not likely to be any significant cumulative effects from a socioeconomics and tourism perspective.

9.3 Cumulative Assessment (Intra-Project Impacts)

9.3.1 This section considers the intra-project impacts, which relate to activities combining the construction of the proposed converter station, proposed AC cable route and the permanent access road with the proposed DC cable route. Taking the proposed DC cable route into account, it is not considered that there would be any change in the significance of effects when considering the Scheme elements together.



10 Summary of Assessment

10.1 Summary

Overview of Baseline Conditions

- 10.1.1 The proposed converter station site is within one of the most sparsely populated districts in the UK. Local settlements include the villages of Donington and Bicker, and the hamlet of Northorpe. Analysis of local population characteristics shows a higher proportion of people aged over 65, particularly within SHDC (22.3% compared to 16.4% for England). Economic activity rates and employment rates are broadly comparable to county-wide and national levels. Levels of deprivation are relatively low within the districts of SHDC, BBC and NKDC.
- 10.1.2 Agriculture is a principal land use and employer within the ZoI the food and farming sector contributes most in terms of Gross Value Added (GVA) and employment to the three districts of South Holland, Boston and North Kesteven out of the seven Lincolnshire districts. Within South Holland, agriculture employs over 3,000 people directly and a further 10,000 people indirectly (approximately 15% of the population of the district).
- 10.1.3 The tourism industry is another important sector of the local economy, with strategic priorities for Greater Lincolnshire including improving the tourism product and selling the destination 'image'. Activity tourism walking, cycling and the use of the waterways for example is a particular strength in this area. There is a small amount of tourism infrastructure (visitor accommodation, food and drink establishments for example) within nearby settlements.
- 10.1.4 Recreation routes have been identified within 500m of the proposed converter station site. A site visit undertaken in August 2016 concluded that PRoW were accessible but that levels of use were low and likely to be restricted to local users.

Overview of Residual Effects

10.1.5 Residual effects identified in the assessment are summarised in Section 8. A significant residual effect has been identified for users of PRoW given the findings of the landscape and visual assessment and the impact of the permanent access road on Footpath Doni/19/3.

Residual Effects in South Holland District Council

- 10.1.6 Employment created as a result of construction of the proposed converter station site would generate jobs (both direct and indirect employment), a proportion of which would be created within the local economy. Further jobs would be created during the operational phase, as a result of operation and maintenance requirements, although this is likely to be relatively low.
- 10.1.7 Temporary and permanent land-take would be required for both construction and operation phases. Land-take within SHDC would be required for the proposed converter station zone and





- the permanent access track, however the quantity of permanent land-take is small relative to the size of landholdings.
- 10.1.8 During the operational phase, a moderate and significant adverse residual effect has been identified on users of footpath Doni/19/3. Appropriate mitigation has been identified, for example signage; however the impact on users of PRoW in the vicinity of North Ing Drove and South Forty Foot Drain, Bank End Farm, as identified from the assessment above, as well as in Landscape and Visual Amenity (Chapter 24 ES-2-C.06), results in the residual impact being assessed as moderate and significant.

Residual Effects in Boston Borough Council

10.1.9 Employment created as a result of construction of the proposed converter station site would generate jobs (both direct and indirect employment), a proportion of which would be created within the local economy. Further jobs would be created during the operational phase, as a result of operation and maintenance requirements, although this is likely to be relatively low.





Table 24.11 Summary of Assessment: Socio-economics & Tourism (Converter Station)				
Description of Receptor	Value/ Sensitivity	Description of Residual Effect	Significance	Significant
Residential properties	High	No residual effects on residential properties have been identified.	Negligible	No
Commercial property or land uses	High	No residual effects on commercial properties or land- uses have been identified.	Negligible	No
Community infrastructure	Low	No residual effects on community infrastructure have been identified.	Negligible	No
Local economy	Medium	Residual effects relate to direct and indirect employment creation during both the construction and operational phases.	Beneficial, minor	No
Tourism infrastructure	Medium	No residual effects on tourism infrastructure have been identified.	Negligible	No
	Low	Footpath Doni/8/1 will be subject to a short permanent diversion.	Minor	No
Recreation infrastructure (e.g. PRoW)	Low	Footpath Doni/19/3 may need to be permanently stopped up around the permanent access road.	Moderate	Yes



11 References

- Ref 24-1: Office for National Statistics, (2011) Census Data
- Ref 24-2: Office for National Statistics, (2015), Business Register and Employment Survey (BRES),
- Ref 24-3: Design Manual for Roads and Bridges (DMRB) Guidance (Volume 11, Section 3, Parts 3, 6, 8, 9 and 12).
- Ref 24-4: Homes and Communities Agency (2014), Additionality Guide (Fourth Edition)
- Ref 24-5: Department of Energy & Climate Change, (2011), Overarching National Policy Statement for Energy (EN-1)
- Ref 24-6: Department for Communities and Local Government, (2012), National Planning Policy Framework (NPPF)
- Ref 24-7: South East Lincolnshire Joint Strategic Planning Committee, (2017), South East Lincolnshire Local Plan 2011-2036 Publication Version March 2017.
- Ref 24-8: South Holland District Council, (2006), South Holland District Council Local Plan
- Ref 24-9: Boston Borough Council, (2007), Boston Borough Local Plan Saved Policies
- Ref 24-10: North Kesteven District Council, (2007), North Kesteven Local Plan
- Ref 24-11: Boston Borough Council, (2006), Boston Borough Interim Plan
- Ref 24-12: Greater Lincolnshire Local Enterprise Partnership, (2012), Greater Lincolnshire Destination Management Plan 2013-2020
- Ref 24-13: South Holland District Council (2013), South Holland Facts and Figures
- Ref 24-14: Lincolnshire Research Observatory, (2015)
- Ref 24-15: Department for Communities and Local Government, (2015), Indices of Deprivation
- Ref 24-16: http://www.lincolnshirelive.co.uk, accessed 12/01/2017
- Ref 24-17: http://www.sholland.gov.uk/article/3379/Local-economy, accessed 24/11/2016

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