West Burton Solar Project

Environmental Statement Chapter 23

Summary of Significant Effects

Prepared by: Lanpro Services March 2023

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Issue Sheet

Report Prepared for: West Burton Solar Project Ltd. DCO Submission

Environmental Statement Chapter 23: Summary of Significant Effects

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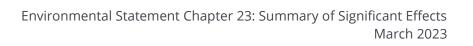
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23 Summary of Significant Effects

23.1 Summary and Introduction

- 23.1.1 West Burton Solar Project is a proposed solar photovoltaic (PV) array electricity generating facility and electrical storage facility, each with a total capacity exceeding 50 megawatts (MW), and an export connection to the National Grid (the Development).
- 23.1.2 An Environmental Statement (ES) has been prepared on behalf of the Applicant in relation to an application to be made to the Secretary of State (SoS) for Department for Energy Security and Net Zero (ESNZ), under Section 37 of the Planning Act 2008.
- 23.1.3 The Application is for a Development Consent Order (DCO) for the construction, operation and maintenance, and decommissioning of West Burton Solar Project. The Development is classified as a Nationally Significant Infrastructure Project (NSIP) under the Planning Act 2008. An Environmental Impact Assessment (EIA) has been undertaken for the Development and as such, the Infrastructure Planning (Environmental Impact Assessment) Regulations 2017 (the EIA Regulations) apply.
- 23.1.4 This Summary of Significant Effects forms part of the application to the Planning Inspectorate (PINS) for a DCO for the Scheme. Its purpose is to summarise significant residual effects of the Scheme identified within the technical chapters of the ES **[EN010132/APP/WB6.2]**.
- 23.1.5 Each technical chapter considers in detail the beneficial and adverse residual effects of the Scheme after the implementation of mitigation measures, both through the design of the Scheme ('embedded mitigation') and through further measures ('additional mitigation'). This assessment covers the construction, operation and decommissioning phases of the Scheme.
- 23.1.6 Each effect is described in the technical chapters in terms of the scale of the effect (for example, major or moderate), in terms of the nature of the effect (adverse, beneficial or neutral), and in terms of the significance of the effect (significant, not significant).
- 23.1.7 A summary of the significant residual effects identified in the technical chapters is set out in Table 23.1. This does not include effects the scale of which are 'negligible' or 'minor' nor effects which are 'neutral' in nature.



Table 23.1: Schedule of Significant Effects

ES Chapter	Phase of Development	Description of effect	Significance of potential effect prior to mitigation	Additional mitigation	Significance of residual effect
Climate Change [EN010132/APP/WB6.2.7]	Construction, Operation and Decommissioning	Generation of electricity with low GHG intensity	Major beneficial significant	None proposed	Major beneficial, significant
Landscape and Visual Impact [EN010132/APP/WB6.2.8]	Operation (Year 15)	RLCT 4a: Unwooded Vales landscape type: West Burton 1	Neutral/ Minor Adverse, Not Significant	New and augmented hedgerows and new shelterbelt and scattered tree planting; grassland	Moderate Beneficial, Significant
Landscape and Visual Impact [EN010132/APP/WB6.2.8]	Operation (Year 15)	LLCA Profile: 3 The Till Vale: West Burton 1	Neutral/ Minor Adverse, Not Significant	New and augmented hedgerows and new shelterbelt and scattered tree planting; grassland	Moderate Beneficial, Significant
Landscape and Visual Impact [EN010132/APP/WB6.2.8]	Operation (Year 15)	RLCT 4a: Unwooded Vales landscape type: West Burton 2	Neutral/ Minor Adverse, Not Significant	New and augmented hedgerows and new shelterbelt and scattered tree planting; grassland	Moderate Beneficial, Significant
Landscape and Visual Impact [EN010132/APP/WB6.2.8]	Operation (Year 15)	LLCA Profile: 3 The Till Vale: West Burton 2	Neutral/ Minor Adverse, Not Significant	New and augmented hedgerows and new shelterbelt and scattered tree planting; grassland	Moderate Beneficial, Significant



Landscape and Visual Impact [EN010132/APP/WB6.2.8]	Operation (Year 15)	RLCT 4a: Unwooded Vales landscape type: West Burton 3	Neutral/ Minor Adverse, Not Significant	New and augmented hedgerows and new shelterbelt and scattered tree planting; grassland	Moderate Beneficial, Significant
Landscape and Visual Impact [EN010132/APP/WB6.2.8]	Operation (Year 15)	LLCA Profile: 2 Trent Valley: West Burton 3	Neutral/ Minor Adverse, Not Significant	New and augmented hedgerows and new shelterbelt and scattered tree planting; grassland	Moderate Beneficial, Significant
Landscape and Visual Impact [EN010132/APP/WB6.2.8]	Operation (Year 15)	LLCA Profile: 3 The Till Vale: West Burton 3	Neutral/ Minor Adverse, Not Significant	New and augmented hedgerows and new shelterbelt and scattered tree planting; grassland	Moderate Beneficial, Significant
Landscape and Visual Impact [EN010132/APP/WB6.2.8]	Operation (Year 15)	Viewpoint Receptors: VP 8 and VP 24.	Moderate-Major Adverse, Significant	Planting and grassland reversion, reinforcement of existing woodland/scrub and hedgerow cover, additional hedgerow trees, woodland planting, tree and hedge planting adjacent to watercourses, planting along the boundary of substations and energy storage areas, 5m wide shelterbelts, planting along transport routes, footpaths and bridleways and hedgerow planting along field boundaries.	Moderate Adverse, Significant



Landscape and Visual Impact [EN010132/APP/WB6.2.8]	Operation (Year 15)	Viewpoint Receptors: VP 18, VP 26, VP 27 and VP 28.	Moderate Adverse, Significant	Planting and grassland reversion, reinforcement of existing woodland/scrub and hedgerow cover, additional hedgerow trees, woodland planting, tree and hedge planting adjacent to watercourses, planting along the boundary of substations and energy storage areas, 5m wide shelterbelts, planting along transport routes, footpaths and bridleways and hedgerow planting along field boundaries.	Moderate Adverse, Significant
Landscape and Visual Impact [EN010132/APP/WB6.2.8]	Operation (Year 15)	Transport Receptor TO09.	Moderate Adverse, Significant	Planting and grassland reversion, reinforcement of existing woodland/scrub and hedgerow cover, additional hedgerow trees, woodland planting, tree and hedge planting adjacent to watercourses, planting along the boundary of substations and energy storage areas, 5m wide shelterbelts, planting along transport routes, footpaths and bridleways and	Moderate Adverse, Significant



				hedgerow planting along field boundaries.	
Landscape and Visual Impact [EN010132/APP/WB6.2.8]	Operation (Year 15)	Transport Receptor TO10.	Moderate Adverse, Significant	Planting and grassland reversion, reinforcement of existing woodland/scrub and hedgerow cover, additional hedgerow trees, woodland planting, tree and hedge planting adjacent to watercourses, planting along the boundary of substations and energy storage areas, 5m wide shelterbelts, planting along transport routes, footpaths and bridleways and hedgerow planting along field boundaries.	Moderate Adverse, Significant
Landscape and Visual Impact [EN010132/APP/WB6.2.8]	Operation (Year 15)	PRoW Receptors: PR007 and PR038.	Moderate-Major Adverse, Significant	Planting and grassland reversion, reinforcement of existing woodland/scrub and hedgerow cover, additional hedgerow trees, woodland planting, tree and hedge planting adjacent to watercourses, planting along the boundary of substations and energy storage areas, 5m wide shelterbelts, planting along transport routes,	Moderate Adverse, Significant



				footpaths and bridleways and hedgerow planting along field boundaries.	
Ecology and Biodiversity [EN010132/APP/WB6.2.9]	Operational	Hedgerows and Trees - PV and BESS Sites	Neutral	Habitat reinstatement and enhancement	Beneficial, significant at District level
Ecology and Biodiversity [EN010132/APP/WB6.2.9]	Construction (medium-term)	Hedgerows and Trees – Cable Route Corridor	Adverse (medium- term	Implementation of protection and good practice surrounding hedgerow removal and reinstatement; buffer zones and enhancement measures	Adverse, significant at Site level
Ecology and Biodiversity [EN010132/APP/WB6.2.9]	Operational	Grassland: Arable Field Margins, and Floodplain Grazing Marsh	Neutral	Creation of the protective buffer zones; remediation of lowland meadow and floodplain grazing marsh grassland habitats	Beneficial, significant at District level
Ecology and Biodiversity [EN010132/APP/WB6.2.9]	Operational	Ditches and Watercourses – PV and BESS Sites	Adverse	Cessation of arable practices; creation and management of the protective buffer zones	Beneficial, significant at Local level
Ecology and Biodiversity [EN010132/APP/WB6.2.9]	Construction (medium-term)	Ditches and Watercourses – Cable Route Corridor	Adverse	Implementation of protection and good practice; reinstatement, reseeding and enhancement measures	Adverse, significant at Site level
Ecology and Biodiversity [EN010132/APP/WB6.2.9]	Operational	Ponds	Adverse	Creation of new ponds, enhancement of retained ponds	Beneficial, significant at Local level



Ecology and Biodiversity [EN010132/APP/WB6.2.9]	Operational	Bats	Neutral	Adoption of development free buffers at field boundaries; construction protocols; protocols for removal of trees; grassland, scrub, tree and hedgerow creation	Beneficial, significant at District level
Ecology and Biodiversity [EN010132/APP/WB6.2.9]	Operational	Otter and Water Vole	Neutral	Cessation of arable practices; creation and management of the protective buffer zones	Beneficial, significant at Local level
Ecology and Biodiversity [EN010132/APP/WB6.2.9]	Operational	Polecat and Hedgehog	Adverse	Grassland habitat creation and management, hedgerow and tree planting; field margin buffer zones	Beneficial, significant at District level
Ecology and Biodiversity [EN010132/APP/WB6.2.9]	Construction Operational	Harvest Mouse	Adverse	Grassland habitat creation and management, hedgerow and tree planting; field margin buffer zones	Adverse, significant at Site level
Ecology and Biodiversity [EN010132/APP/WB6.2.9]	Operational	Brown Hare	Neutral	Cessation of arable practices	Beneficial, significant at Local level
Ecology and Biodiversity [EN010132/APP/WB6.2.9]	Operational	Reptiles and Amphibians	Adverse	Grassland habitat creation and management, hedgerow and tree planting; field margin buffer zones	Beneficial, significant at Local level
Ecology and Biodiversity [EN010132/APP/WB6.2.9]	Operational	Breeding Birds: Skylark and Grey Partridge	Adverse	Creation of optimal foraging habitat of diverse grassland types; provision of areas of	Adverse, significant at Local level



				open, undeveloped land for set-aside habitat	
Ecology and Biodiversity [EN010132/APP/WB6.2.9]	Operational	Breeding Birds: Lapwing, Curlew and Yellow Wagtail	Adverse	Creation of wetland and grassland breeding habitats.	Neutral to Beneficial, significant at Local level
Ecology and Biodiversity [EN010132/APP/WB6.2.9]	Operational	Breeding Birds: Other Species	Adverse	Measures to be taken during the cabling work, including timing of work near potential nesting sites, monitoring, information to staff and buffering; planting of hedging, trees and woody vegetation	Beneficial, significant at Local to District level
Ecology and Biodiversity [EN010132/APP/WB6.2.9]	Operational	Overwintering Birds	Adverse	Measures to be taken to avoid causing undue disturbance	Adverse, significant at Site level
Ecology and Biodiversity [EN010132/APP/WB6.2.9]	Operational	Invertebrates	Adverse	Measures to minimise the risk of pollution, run-off and dust deposition; reinstatement of habitat losses; prescriptions on working methods; retained and protected buffer zones and the grassland habitats	Beneficial, significant at Local level
Ecology and Biodiversity [EN010132/APP/WB6.2.9]	Operational	Badgers	Adverse	Requirements for fencing installation; information provided to contractors; measures to reduce the	Beneficial, significant at Site level



				probability of incidental mortality			
Hydrology, Flood Risk and Drainage [EN010132/APP/WB6.2.10]	No significant resid	ual effects are predict	ted during constructior	n, operation and decommissioning	of the Scheme		
Ground Conditions and Contamination [EN010132/APP/WB6.2.11]	No significant resid	No significant residual effects are predicted during construction, operation and decommissioning of the Scheme					
Minerals [EN010132/APP/WB6.2.12]	No significant resid	ual effects are predict	ted during constructior	n, operation and decommissioning	of the Scheme		
Cultural Heritage [EN010132/APP/WB6.2.13]	Construction	Scheduled Monuments: The medieval bishop's palace and deer park, Stow Park (1019229)	Moderate Adverse, Significant (medium term, reversible)	No specific mitigation proposed due to location within Scheme	Moderate Adverse, Significant		
Cultural Heritage [EN010132/APP/WB6.2.13]	Construction	Non-Designated Archaeological Remains: AR13 (North Ingleby DMV)	Slight or Moderate Adverse, potentially significant	Informative trenching and possible strip, map and sample (SMS) excavation and 'preservation by record'	Slight or Moderate Adverse, potentially significant		
Cultural Heritage [EN010132/APP/WB6.2.13]	Construction	Non-Designated Archaeological Remains:	Neutral to Moderate Adverse, Significant	Strip, Map and Sample (SMS) excavation and 'preservation by record'	Neutral to Moderate Adverse,		



		AR25 (Undated enclosure)			potentially Significant
Cultural Heritage [EN010132/APP/WB6.2.13]	Construction	Non-Designated Archaeological Remains:	Unconfirmed - Neutral orLarge Adverse, Significant	Strip, Map and Sample (SMS) excavation and 'preservation by record'	Neutral or Large Adverse, potentially Significant
		AR26 (Possible ring ditch and field systems)			
Cultural Heritage [EN010132/APP/WB6.2.13]	Construction	Non-Designated Archaeological Remains:	Unconfirmed Slight or Moderate Adverse, potentially	Informative trenching followed by preservation in situ with embedded avoidance	Slight or Moderate Adverse, potentially Significant
	Deserted N	AR44 (Stow Park Deserted Med. Settlement)	Significant	mitigation if appropriate. Strip, Map and Sample (SMS) excavation and 'preservation by record'	
Cultural Heritage [EN010132/APP/WB6.2.13]	Construction	Non-Designated Archaeological Remains:	Moderate Adverse, Significant	Strip, Map and Sample (SMS) excavation and 'preservation by record'	Moderate Adverse, Significant
		AR64 (Rectilinear enclosure)			
Cultural Heritage [EN010132/APP/WB6.2.13]	Construction	Non-Designated Archaeological Remains:			Slight to Large Adverse, potentially Significant
		AR68 (Anomalies indicative of IA/RB			



		to med. period settlement)			
Cultural Heritage [EN010132/APP/WB6.2.13]	Operation	Scheduled Monuments: The medieval bishop's palace and deer park, Stow Park (1019229)	Large Adverse, Significant	Landscape mitigation proposals (e.g., planting of shelter belts and scattered trees, planting of new hedgerows, existing hedgerow reinforcement) which should reach maturity by Year 15	Large Adverse, Significant
Cultural Heritage [EN010132/APP/WB6.2.13]	Operation	Non-Designated Archaeological Remains: AR01 (Uncertain ditches and pits) AR08 (Uncertain ditch) AR11 (Windmill mound (site of)) AR17 (Ingleby Wood Farm (site of)) AR18 (Uncertain linear anomalies) AR19 (Uncertain circular anomaly)	Neutral to Moderate Beneficial, potentially Significant	No additional mitigation during Operational Phase	Neutral to Moderate Beneficial, potentially Significant



		AR20 (Possible IA features and finds) AR29 (Stow Park Cottage (site of)) AR30 (Brick kilns (site of)) AR50 (Med. ridge and furrow)			
Cultural Heritage [EN010132/APP/WB6.2.13]	Operation	Non-Designated Archaeological Remains: AR22 (Undated (RB?) enclosure) AR24 (IA/RB enclosure) AR34 (Stow med. deer park) AR44 (Stow Park Deserted Med. Settlement) AR46 (Possible undated enclosure)	Neutral to Large Beneficial, potentially Significant	No additional mitigation during Operational Phase	Neutral to Large Beneficial, potentially Significant



		AR47 (Possible undated ditch) AR48 (Uncertain linear and curvilinear anomalies) AR49 (RB settlement enclosures) AR51 (RB settlement enclosures) AR52 (Possible prehistoric ditch) AR54 (Undated ditches) AR55 (RB roadside settlement and possible industrial site)			
Cultural Heritage [EN010132/APP/WB6.2.13]	Operation	Non-Designated Historic Landscape: HLI21266 – Parliamentary Planned Enclosure	Moderate Adverse, Significant	Landscape mitigation proposals (e.g., planting of shelter belts and scattered trees, planting of new hedgerows, existing hedgerow reinforcement) which should reach maturity by Year 15	Moderate Adverse, Significant



		HLI20787 – Modern Fields HLI20791 – Ancient Enclosure HLI20860 – Parliamentary Planned Enclosure				
Cultural Heritage [EN010132/APP/WB6.2.13]	Decommissioning	Scheduled Monuments: The medieval bishop's palace and deer park, Stow Park (1019229)	Moderate Adverse, Significant	No specific mitigation proposed due to location within Scheme	Moderate Adverse, Significant	
Transport and Access [EN010132/APP/WB6.2.14]	No significant residual effects are predicted during construction, operation and decommissioning of the Scheme					
Noise and Vibration [EN010132/APP/WB6.2.15]	No significant residual effects are predicted during construction, operation and decommissioning of the Scheme					
Glint and Glare [EN010132/APP/WB6.2.16]	No significant residual effects are predicted during construction, operation and decommissioning of the Scheme					
Air Quality [EN010132/APP/WB6.2.17]	No significant residual effects are predicted during construction, operation and decommissioning of the Scheme.					



Socio-Economic, Tourism and Recreation [EN010132/APP/WB6.2.18]	Construction	Inbound workers to increase accommodation occupancy rates and resultant need for FTE in the accommodation sector.	Major-moderate beneficial, Significant.	None	Major-moderate beneficial, Significant.
Socio-Economic, Tourism and Recreation [EN010132/APP/WB6.2.18]	Construction	Impact upon the local area with regards to the uplift in occupation rates for accommodation units.	Major-moderate beneficial, Significant.	None	Major-moderate beneficial, Significant.
Socio-Economic, Tourism and Recreation [EN010132/APP/WB6.2.18]	Construction	Access to employment within the Local Impact Area.	Moderate beneficial, Significant.	None	Moderate beneficial, Significant.
Socio-Economic, Tourism and Recreation [EN010132/APP/WB6.2.18]	Construction	Access to education within the Local Impact Area.	Moderate beneficial, Significant.	None	Moderate beneficial, Significant.
Socio-Economic, Tourism and Recreation [EN010132/APP/WB6.2.18]	Construction	Landscape and visual impact on	Moderate Adverse, Significant.	Planting and grassland reversion, reinforcement of existing woodland/scrub and	Moderate Adverse, Significant.



		local tourist attractions		hedgerow cover, additional hedgerow trees, woodland planting, tree and hedge planting adjacent to watercourses, planting along the boundary of substations and energy storage areas, 5m wide shelterbelts, planting along transport routes, footpaths and bridleways and hedgerow planting along field boundaries.	
Socio-Economic, Tourism and Recreation [EN010132/APP/WB6.2.18]	Construction	Short-term temporary closure of the Trent Valley Way Long Distance Recreational Route.	Moderate Adverse, Significant.	Any crossing or traffic conflict points will be overseen by spotters or banksmen for HGVs. Diversions to routes will be appropriately signed, and the duration and length of diversions will be optimised to minimise impacts on accessibility and desirability. Other measures include: speeds to be limited to 10mph, drivers to give way to PRoW users, any damage to PRoWs etc.	Moderate Adverse, Significant.



Socio-Economic, Tourism and Recreation [EN010132/APP/WB6.2.18]	Construction	Short-term temporary closure due to cable burying upon National Byways.	Moderate Adverse, Significant.	Any crossing or traffic conflict points will be overseen by spotters or banksmen for HGVs. Diversions to routes will be appropriately signed, and the duration and length of diversions will be optimised to minimise impacts on accessibility and desirability. Other measures include: speeds to be limited to 10mph, drivers to give way to PRoW users, any damage to PRoWs etc.	Moderate Adverse, Significant.
Socio-Economic, Tourism and Recreation [EN010132/APP/WB6.2.18]	Decommissioning	Uplift in accommodation demand relating to the influx of temporary workers.	Moderate Beneficial, Significant.	None	Moderate Beneficial, Significant.
Soils and Agriculture [EN010132/APP/WB6.2.19]	Operation	Recovery of organic soil matter under extended fallow.	Moderate beneficial, significant.	None	Moderate beneficial, significant.



Soils and Agriculture [EN010132/APP/WB6.2.19]	Operation	Transfer of arable land to new diversified enterprise.	Moderate beneficial, significant.	None	Moderate beneficial, significant.
Waste [EN010132/APP/WB6.2.20]	No significant resi	idual effects are predic	ted during constructio	n, operation and decommissioning	of the Scheme
Other Environmental Matters: Human Health [EN010132/APP/WB6.2.21]	Construction	Access to employment within the Local Impact Area.	Moderate beneficial, Significant.	None	Moderate beneficial, Significant.
Other Environmental Matters: Human Health [EN010132/APP/WB6.2.21]	Construction	Access to education within the Local Impact Area.	Moderate beneficial, Significant.	None	Moderate beneficial, Significant.
Other Environmental Matters: Human Health [EN010132/APP/WB6.2.21]	Construction	Construction traffic impacts and short-term temporary closure of the Trent Valley Way, and National Byways long distance recreational routes.	Moderate Adverse, Significant.	Any crossing or traffic conflict points will be overseen by spotters or banksmen for HGVs. Diversions to routes will be appropriately signed, and the duration and length of diversions will be optimised to minimise impacts on accessibility and desirability. Other measures include: speeds to be limited to 10mph, drivers to give way to PRoW	Moderate Adverse, Significant.



				users, any damage to PRoWs etc.	
Other Environmental Matters:	No significant residu	ual effects are predict	ed during construction	, operation and decommissioning	of the Scheme
Major Accidents and Disasters					
[EN010132/APP/WB6.2.21]					