







Tillbridge Solar Project EN010142

Volume 7

Joint Report on Interrelationships between Nationally Significant Infrastructure Projects Part 3 of 3 Appendix E: Review of Cumulative Effects

Document reference: EN010142/APP/7.6

Regulation 5(2)(q)

Infrastructure Planning (Applications: Prescribed Forms and Procedure) Regulations 2009

April 2024 Revision Number: 00

Gate Burton Energy Park Limited, West Burton Solar Project Limited, Tillbridge Solar Limited, Cottam Solar Project Limited

tillbridgesolar.com

Prepared for:
Gate Burton, West Burton Solar Project Limited, Tillbridge Solar Limited and Cottam Solar Project Limited.
Prepared by:
AECOM Limited
© 2024 AECOM Limited. All Rights Reserved.
This document has been prepared by AECOM Limited ("AECOM") for sole use of our client (the "Client") in accordance with generally accepted consultancy principles, the budget for fees and the terms of reference agreed between AECOM and the Client. Any information provided by third parties and referred to herein has not been checked or verified by AECOM, unless otherwise expressly stated in the document.

Gate Burton Energy Park Limited, West Burton Solar Project Limited, Tillbridge Solar Limited, Cottam Solar Project Limited

No third party may rely upon this document without the prior and express written

agreement of AECOM.







Executive Summary

- This Technical Note provides a summary of the review of information made 1.1.1 available subsequent to submission of the applications for the Gate Burton Energy Park, West Burton Solar Project, Cottam Solar Project and Tillbridge Solar Project Development Consent Orders (DCOs). The information reviewed is relevant to the cumulative assessments undertaken for each of the projects.
- The Joint Report on Interrelationships and this Appendix focus on the 1.1.2 interrelationships between the Gate Burton, Cottam, West Burton and Tillbridge schemes, because these are the projects with the greatest potential for cumulative effects, as well as being those geographically closest to each other. These schemes also share common features, including a shared grid connection corridor.
- At the point each application was submitted, cumulative assessments were 1.1.3 undertaken based on the information available at the time. Subsequent to the applications being made, updated information was made available via the submission of applications for relevant adjacent projects.
- 1.1.4 For each technical discipline, the purpose of the cumulative review was to identify whether there are any changes to the conclusions of the submitted cumulative assessments in terms of likely significant effects.
- A review of the now published ESs (with Tillbridge ES being the last ES to be 1.1.5 published) confirms that the cumulative effects reported within the Gate Burton Energy Park, West Burton Solar Project and Cottam Solar Project Environmental Statements as submitted remain unchanged.

2_ **Cumulative Review**

- 2.1.1 This Technical Note should be read in conjunction with Section 5 and Section 6 of the Interrelationships Report.
- 2.1.2 This Technical Note considers the four solar DCOs listed in Table 2-1. The Examination for the Gate Burton Energy Park commenced on 4 July 2023. Therefore, a review of other (non DCO) schemes either submitted, approved or under construction subsequent to January 2023 has been undertaken as part of the Examination process for the Gate Burton Energy Park and cumulative interactions considered. The conclusions of that review are provided Further Written within the Responses to Questions [EN010131/REP4-046] and the Technical Note: Additional Cumulative Schemes [EN010131/REP4-049] both submitted at Deadline 4. No changes to the conclusions of the Gate Burton Energy Park cumulative assessment were identified. A Technical Note on Cumulative Effects of Additional Schemes [EN010133/EX4/C8.2.11] was submitted to the Cottam Solar Project Examination Deadline 4 and equivalent an [EN010132/EX4/C8.2.5] was submitted to the West Burton Solar Project Examination at Deadline 4.

cumulative assessment.







Joint Report on Interrelationships Review of Cumulative Effects Table 2-2 sets out the cumulative effects identified for each environmental 2.1.3 discipline within the as submitted Environmental Statements. Following review

> of the subsequent information available (as defined in Table 2-1) a statement is provided as to whether there are any changes to the conclusions of the

Table 2-1 Cumulative Assessment Information Assessed

Project	Application Submitted	Information Assessed for the Application	Subsequent Information Reviewed (Cumulative Review September 2023)
Gate Burton Energy Park	27 January 2023	Cottam Solar Project PEIR (June 2022) West Burton Solar Project PEIR (June 2022) Tillbridge Scoping Report (October 2022)	Cottam Solar Project Environmental Statement (January 2023) West Burton Solar Project Environmental Statement (March 2023) Tillbridge PEIR (April 2023)
Cottam Solar Project	12 January 2023	Gate Burton Energy Park PEIR (June 2022) West Burton Project PEIR (June 2022) Tillbridge Scoping Report (October 2022)	Gate Burton Energy Park Environmental Statement (January 2023) West Burton Solar Project Environmental Statement (March 2023) Tillbridge PEIR (April 2023)
West Burton Solar Project	21 March 2023	Gate Burton Energy Park PEIR (June 2022) Cottam Solar Project PEIR (June 2022) Tillbridge Scoping Report (October 2022)	Cottam Solar Project Environmental Statement (January 2023) Gate Burton Solar Project Environmental Statement (January 2023) Tillbridge PEIR (April 2023)
Tillbridge Solar Project	10 April 2024	Gate Burton Solar Project Environmental Statement (January 2023) Cottam Solar Project Environmental Statement (January 2023)	







Project

Application Information Submitted for the Application

Assessed Subsequent Information Reviewed (Cumulative **Review** September 2023)

West Burton Solar **Project Environmental** Statement (March 2023)









Table 2-2 Cumulative Assessment - Review Against Now Published Environmental Information

	Gate Burton Environmental Statement	Cottam ES	West Burton ES	Tillbridge ES
Climate Change	Gate Burton Environmental Statement (January 2023) No signficant cumulative effects identified (Chapter 6: Climate Change, section 6.11 and Chapter 16: Cumulative Effects and Interactions, Table 16-4). Cumulative Review (September 2023) No changes identified.	Cottam Environmental Statement (January 2023) Major Beneficial cumulative effect in terms of Climate Change Resilience with West Burton, Gate Burton and Tillbridge during operation given that the combined effect of the renewable energy will serve to counter the effects of Climate Change (Chapter 7: Climate Change, section 7.11.8).	West Burton Environmental Statement (March 2023) Major Beneficial cumulative effect in terms of Climate Change Resilience with Gate Burton, Cottam and Tillbridge during operation (Chapter 7: Climate Change, section 7.11.11). Cumulative Review (September 2023) No changes identified.	Tillbridge PEIR (April 2023) No signficant cumulative effects identified within the PEIR (Chapter 17: Cumulative Effects, section 17.9) Tillbridge ES (April 2024) No significant cumulative effects identified within Section 18.8: Climate Change, Chapter 18: Cumulative Effects and Interactions of the ES.
		Cumulative Review (September 2023) No changes identified.	Statement Post Cottam Hearing (December 2023) Each scheme has concluded significant beneficial cumulative	
		Statement Post Cottam Hearing (December 2023) Each scheme has concluded significant beneficial cumulative	impacts for the respective scheme in isolation. For Cottam/West Burton a cumulative beneficial cumulative effect has been	







Burton Cottam ES

West Burton ES

Tillbridge ES

impacts for the respective scheme in isolation.
For Cottam/West Burton a cumulative beneficial cumulative effect has been identified as four solar projects being developed at the same time would result in a quicker reduction in CO₂e emissions from legacy sources than a single project alone.

This approach takes into account professional judgment and interpretation of the IEMA Guidance.

A more conservative approach has been taken by Gate Burton and Tillbridge and no additional cumulative beneficial effects have been identified as a result of their interpretation of the guidance. This interpretation takes 'cumulative effects' as not

identified as four solar projects being developed at the same time would result in a quicker reduction in CO₂e emissions from legacy sources than a single project alone.

This approach takes into account professional judgment and interpretation of the IEMA Guidance.

A more conservative approach has been taken by Gate Burton and Tillbridge and no additional cumulative beneficial effects have been identified as a result of their interpretation of the guidance. This interpretation takes 'cumulative effects' as not possible to assess for climate change given the national rather than local scale of the impact.







	Gate Bur Environmental Statem		Cottam ES	West Burton ES	Tillbridge ES
			possible to assess for climate change given the national rather than local scale of the impact. In light of this difference in interpretation, the SoS may decide to place limited weight on the beneficial CEA identified (albeit that there are beneficial effects for each Scheme assessed as assessed individually). Discussion between the different authors of the Climate Change Assessments for the projects has taken place to align to the above approach. Cumulative Review (February 2024) No changes identified.	In light of this difference in interpretation, the SoS may decide to place limited weight on the beneficial CEA identified (albeit that there are beneficial effects for each Scheme assessed as assessed individually). Discussion between the different authors of the Climate Change Assessments for the projects has taken place to align to the above approach. Cumulative Review (February 2024) No changes identified.	
Cultural Heritage	Gate Burton Environme Statement (January 202 No significant cumulative effects identified (Chapt 7:Cultural Heritage, sec	<mark>23)</mark> ve oter	Cottam Environmental Statement (January 2023) Slight adverse affects with the potential for up to	West Burton Environmental Statement (March 2023) Potential for up to Moderate Adverse cumulative effects (with	Tillbridge PEIR (April 2023) At this stage, it was not possible to confirm whether cumulative effects would be







Burton Cottam ES

West Burton ES

Tillbridge ES

7.13.6 and Chapter 16: Cumulative Effects and Interactions, Table 16-4).

Cumulative Review (September 2023)

No changes identified. The cumulative assessment did not identify any individual buried archaeological assets that would be affected by both the Gate **Burton Energy Park** together with West Burton, Cottam and Tillbridge Solar Parks, and as such, no cumulative effects were identified to buried archaeological assets. On the setting of designated and non-designated heritage assets, the Cultural Heritage ES chapters for Cottam and West Burton have been reviewed and it is confirmed that there are no changes to the cumulative impact assessment.

cumulative effects
depending on final design
(with West Burton and
Tillbridge) during operation
where views from the
Lincoln Cliff contribute to
the significance of the
following assets:
Roman villa west of
Scampton Cliff Farm
(NHLE 1005041)
Fillingham Castle (NHLE
1166045/NHLE 1000977)

1063348)
Former stables at
Glentworth Hall (NHLE
1166094)"
(Chapter 13: Cultural
Heritage, section 13.10.8)

Glentworth Hall (NHLE

Cumulative Review (September 2023)

Potential for up to Moderate Adverse cumulative impacts with West Burton at Roman Villa west of Scampton Cottam and Tillbridge) during operation where views from the Lincoln Cliff contribute to the setting of the asset on Roman villa west of Scampton Cliff Farm (NHLE 1005041) (Chapter 13: Cultural Heritage, section 13.10.8).

Cumulative Review (September 2023)

Potential for up to Moderate Adverse cumulative impacts with Cottam at Roman Villa west of Scampton (NHLE 1005041) depending upon the effectiveness of the landscape mitigation. Any additional cumulative impacts with the Gate Burton and Tillbridge Solar Schemes would be likely to be negligible. No significant cumulative impacts identifed for other heritage assets.

significant or not during construction.

Tillbridge ES (April 2024)

No significant cumulative effects identified within Section 18.9: Cultural Heritage, Chapter 18: Cumulative Effects and Interactions of the ES.







Gate Burton Cottam ES Environmental Statement

West Burton ES

Tillbridge ES

(NHLE 1005041)
depending upon the
effectiveness of the
landscape mitigation. Any
additional cumulative
impacts with the Gate
Burton and Tillbridge Solar
Schemes would be likely to
be negligible. No
significant cumulative
impacts identifed for other
heritage assets.

Cumulative Review (December 2023)

While ZTVs demonstrate that the Gate Burton, Tillbridge, West Burton and Cottam Schemes are theoretically visible from the location of the Scheduled Roman Villa west of Scampton (NHLE 1005041), direct visibility from the asset is filtered by existing hedgerow to the west and other features within the landscape, which also help provide

Cumulative Review (December 2023)

While ZTVs demonstrate that the Gate Burton. Tillbridge, West Burton and Cottam Schemes are theoretically visible from the location of the Scheduled Roman Villa west of Scampton (NHLE 1005041), direct visibility from the asset is filtered by existing hedgerow to the west and other features within the landscape, which also help provide screening. As a consequence, cumulative impacts to the Roman Villa west of Scampton (NHLE 1005041) have only been identified between the Cottam and West Burton Schemes; any additional cumulative impacts with the Gate Burton and Tillbridge Solar Schemes







Burton Cottam ES

West Burton ES

Tillbridge ES

screening. As a consequence, cumulative impacts to the Roman Villa west of Scampton (NHLE 1005041) have only been identified between the Cottam and West Burton Schemes; any additional cumulative impacts with the Gate Burton and Tillbridge Solar Schemes would be likely to be negligible. Following a site visit, during the winter period, when foliage coverage is at its lowest, and with consideration to the design proposals of the Cottam and West Burton Schemes, including landscape mitigation, it is considered that there would be a Slight Adverse cumulative impact at the Roman Villa west of Scampton (NHLE 1005041).

would be likely to be negligible. Following a site visit, during the winter period, when foliage coverage is at its lowest, and with consideration to the design proposals of the Cottam and West Burton Schemes, including landscape mitigation, it is considered that there would be a Slight Adverse cumulative impact at the Roman Villa west of Scampton (NHLE 1005041).

No significant cumulative impacts identified for any heritage assets.

Cumulative Review (February 2024)
No changes identified.







	Gate Burton Environmental Statement	Cottam ES	West Burton ES	Tillbridge ES
		No significant cumulative impacts identified for any heritage assets.		
		Cumulative Review (February 2024) No changes identified.		
Ecology	Gate Burton Environmental Statement (January 2023) No significant cumulative effects identified (Chapter	Cottam Environmental Statement (January 2023) Moderate Cumulative beneficial effect during	West Burton Environmental Statement (March 2023) Moderate Cumulative beneficial effect during	Tillbridge PEIR (April 2023) At this stage it was not possible to confirm the significance of cumulative

Cumulative Review September 2023

8 Ecology and Nature

Conservation. Section

8.13.5 and Chapter 16:

Cumulative Effects and

Interactions, Table 16-4).

No changes identified. All four solar projects have been designed to avoid, mitigate and compensate for ecological effects, as well as deliver ecological enhancements across the sites. The four schemes

beneficial effect during operation on reptiles and amphibians at District Level (Chapter 9: Ecology and Biodiversity, section 9.9.10).

Moderate cumulative adverse effect during construction and operation on skylark, yellow wagtail, grey partridge and quail at a local to District level (depending on what mitigation is adopted) (Chapter 9: Ecology and

beneficial effect during operation on reptiles and amphibians at District Level (Chapter 9: Ecology and Biodiversity, section 9.9.10).

Moderate cumulative adverse effect during operation on skylark, yellow wagtail, grey partridge and quail at a Local to District level (depending on what mitigation is adopted) (Chapter 9: Ecology and significance of cumulative impacts.

Tillbridge ES (April 2024)

No significant cumulative effects identified within Section 18.10: Ecology and Nature Conservation, Chapter 18: Cumulative Effects and Interactions of the ES. The difference in conclusions to Cottam and West Burton ESs is due to the different assessment methodologies and significance criteria applied.







Gate Burton Environmental Statement	Cottam ES	West Burton ES	Tillbridge ES
	Biodiversity, section 9.9.11). Cumulative adverse effect during construction is possible for hedgerows, trees, ditches and watercourses within the shared cable route (depending on final designs, methods, routing and duration/sequence) (Chapter 9: Ecology and Biodiversity, section 9.9). Cumulative Review September 2023 Moderate cumulative adverse effect during construction and operation on skylark, yallow wagtail, grey partridge and quail at	Biodiversity, section 9.9.11). Cumulative adverse effect during operation at Local scale is possible for overwintering birds with Gate Burton, Cottam and Tillbridge (Chapter 9: Ecology and Biodiversity, section 9.9.12). Cumulative adverse effect during construction is possible for hedgerows, trees, ditches and watercourses within the shared cable route (depending on final designs, methods, routing and duration/sequence) (Chapter 9: Ecology and	Tillbridge ES
	a District (rather than to Local to District) level with West Burton, Gate Burton and Tillbridge (Chapter 9: Ecology and Biodiversity,	Biodiversity, section 9.9). Cumulative Review September 2023 Moderate cumulative	

adverse effect during

section 9.9).



No changes identified.





Gate Environmental	 Cottam ES	West Burton ES	Tillbridge ES
	No other significant cumulative effects beyond those provided in the Cottam ES have been identified since the publication of the latest environmental information for the other three	construction and operation on skylark, yellow wagtail, grey partirdge and quail at a District level with Gate Burton, Cottam and Tillbridge (Chapter 9: Ecology and Biodiversity, section 9.9).	
	schemes. Cumulative Review	No other significant cumulative effects beyond those provided in the	
	December 2023 No changes identified.	Cottam ES have been identified since the publication of the latest	
	Cumulative Review (February 2024) No changes identified.	environmental information for the other three schemes.	
		Cumulative Review December 2023 No changes identified.	
		Cumulative Review (February 2024)	







	Gate Burton Environmental Statement	Cottam ES	West Burton ES	Tillbridge ES
Water Environment	Gate Burton Environmental Statement (January 2023) No signficant cumulative effects identified (Chapter 9 Water Environment, section 9.13. and Chapter 16: Cumulative Effects and Interactions, Table 16-4) Cumulative Review (September 2023) No changes identified. No significant cumulative effects are identified for the water environment in the Gate Burton Energy Park, Cottam Solar Project and West Burton Solar Project Environmental Statements.	Cottam Environmental Statement (January 2023) No signficant cumulative effects identified (Chapter 10: Hydrology, Flood Risk and Drainage, section 10.10) Cumulative Review September 2023 No changes identified. Cumulative Review December 2023 No changes identified. Cumulative Review (February 2024) No changes identified.	Based on review of emerging Gate Burton, Cottam and Tillbridge information: No signficant cumulative effects identified (Chapter 10: Hydrology, Flood Risk and Drainage, section 10.10) Cumulative Review September 2023 No changes identified. Cumulative Review December 2023 No changes identified. Cumulative Review (February 2024) No changes identified.	Tillbridge PEIR (April 2023) No signficant cumulative effects identified within the PEIR (Chapter 17: Cumulative Effects, section 17.12). Tillbridge ES (April 2024) No significant cumulative effects identified within Section 18.11: Water Environment, Chapter 18: Cumulative Effects and Interactions of the ES.
LVIA	Gate Burton Environmental Statement (January 2023) Cumulative moderate adverse effect with West	Cottam Environmental Statement (January 2023) In light of the correction of errors to make this section consistent with other	West Burton Environmental Statement (March 2023) No signficant cumulative effects identified (Chapter 8: Landscape and Visual	Tillbridge PEIR (April 2023) At this stage, and based on information at the time: Significant cumulative effects on landscape character at a







Burton Cottam ES

West Burton ES

Tillbridge ES

Burton Solar Project during operation.

Moderate adverse effect with West Burton, Cottam and Tillbridge during operation. (Chapter 10: Landscape Visual Impact Assessment section 10.12.6 and 10.12.7, Chapter 16: Cumulative Effects and Interactions, Table 16-4).

Cumulative Review (September 2023)

No changes identified. The latest information (West Burton and Cottam ES and Tillbridge PEIR) has been reviewed and does not change the ES conclusions in relation to cumulative effects in relation to the main Solar and Energy Storage Park site nor the grid connection corridor as the nearest elements to the Gate Burton scheme remain

Chapter 8 LVIA documents. there are cumulative significant effects identified in Chapter 8: Landscape and Visual Impact Assessment Revision A [REP2-008].

Moderate adverse effects at construction and operation (Year 1) on Land Use, Topography and Watercourses and Communications and Infrastructure for the Cottam Sites 1, 2, 3a and 3b.

Moderate adverse effects at construction and operation (Year 1) on Regional Scale LCT 4a Unwooded Vales for the Cottam Substation Sites 1 West A, 1 West B, 2, 3a and 3b.

Moderate adverse effects at construction and operation (Year 1) for Viewpoint Receptor LCC-C-D: Blackthorn Lane.

Impact Assessment, section 8.10).

Cumulative Review September 2023

No significant cumulative effects identified (Chapter 8: Landscape and Visual Impact Assessment, section 8.10) [APP-046].

Cumulative Review December 2023

No changes identified.

Cumulative Review (February 2024)

No changes identified.

local level or potentially at a wider (National Character Area) level during construction and operation.

Tillbridge ES (April 2024)

Section 18.13: Landscape and Visual Amenity, Chapter 18: Cumulative Effects and Interactions of the ES identifies the following likely significant cumulative effects during construction:

- Temporary moderate adverse (significant) effect on the following local landscape character areas (LLCAs):
 - LLCA2c Lincoln
 Cliff Open
 Farmland
 - LLCA5a Trent
 Valley
 Meadowlands
- Temporary large adverse (signfiicant) effect on







 Gate Environmental Sta		Cottam ES	West Burton ES	Tillbridge ES
very similar as those considered at the properties application. Sufficient information was profor West Burton and Cottam at PEIR and Tillbridge at Scoping make a qualified cumulative assess that time.	oint of ent ovided d d g to	Cumulative Review September 2023 No changes identified. Cumulative Review December 2023 No changes identified. Cumulative Review (February 2024) No changes identified.		LLCA3a Till Vale Open Farmland. • Temporary moderate adverse (significant) effect on six representative viewpoints and large adverse (significant) effect on two representative viewpoints. Section 18.13: Landscape and Visual Amenity, Chapter 18: Cumulative Effects and Interactions of the ES identifies the following likely significant cumulative effects during operation:
				 Long term large adverse (significant) effect on LLCA3a Till Vale Open Farmland (in Year 1 and Year 15). Short term moderate adverse (significant) effect on two representative viewpoints and large adverse (significant) effect







Gate Burton Cottam ES Environmental Statement

West Burton ES

Tillbridge ES

on two representative viewpoints in Year 1 during winter before planting has been established. Of these, one long term moderate adverse (significant) effect and one large adverse (significant) would remain, following the maturing of planting (Year 15).

Section 18.13: Landscape and Visual Amenity, Chapter 18: Cumulative Effects and Interactions of the ES identifies the following likely significant cumulative effects during decommissioning:

 Temporary moderate adverse (significant) effect on the following LLCA3a Till Vale Open Farmland.

The difference in conclusions to Cottam ES is due to the different assessment







	Gate Burton Environmental Statement	Cottam ES	West Burton ES	Tillbridge ES
				methodologies and significance criteria applied.
Noise and Vibration	Gate Burton Environmental Statement (January 2023) No signficant cumulative effects identified (Chapter 11: Noise and Vibration, section 11.13 and Chapter 16: Cumulative Effects and Interactions, Table 16-4). Cumulative Review (September 2023) No changes identified. Tillbridge Solar Project PEIR states that mitigation will be implemented such that the cumulative effects will not be significant. Therefore, assuming this mitigation is identified and secured, the Gate Burton ES conclusions in relation to cumulative noise and vibration effects remain unchanged.	Cottam Environmental Statement (January 2023) No signficant cumulative effects identified (Chapter 15: Noise and Vibration, section 15.9) Cumulative Review (September 2023) No changes identified. Cumulative Review (December 2023) No changes identified Cumulative Review (February 2024) No changes identified.	West Burton Environmental Statement (March 2023) No signficant cumulative effects identified (Chapter 15: Noise and Vibration, section 15.9) Cumulative Review (September 2023) No changes identified. Cumulative Review (December 2023) No changes identified Cumulative Review (February 2024) No changes identified.	Tillbridge PEIR (April 2023) No signficant cumulative effects identified within the PEIR (Chapter 17: Cumulative Effects, section 17.15). Tillbridge ES (April 2024) No significant cumulative effects identified within Section 18.14: Noise and Vibration, Chapter 18: Cumulative Effects and Interactions of the ES.







Gate Burton Cottam ES Environmental Statement

n ES West Burton ES

Tillbridge ES

Socio-Economics

Gate Burton Environmental Statement (January 2023)

No signficant cumulative effects identified (Chapter 12: Socio-Economics, section 12.3 and Chapter 16: Cumulative Effects and Interactions, Table 16-4).

Cumulative Review (September 2023)

No changes identified.
During Examination,
further assessment and a
Technical Note has has
been submitted in relation
to the cumulative impact
on Best and Most Versatile
(BMV) Agricultural Land.
The Technical Note
concluded no significant
cumulative effects.

Cottam Environmental Statement (January 2023)

Peak cumulative medium-term temporary moderate beneficial effect, significant at Local level on construction sector employment construction and decommissioning with West Burton, Gate Burton and Tillbridge (Chapter 18: Socio-Economics and Tourism and Recreation, section 18.10.9 and 18.10.59)

Peak cumulative medium term temporary major-moderate beneficial effect, significant at Local level on accommodation sector employment during construction and decomissioning with West Burton, Gate Burton and Tillbridge (Chapter 18: Socio-Economics and

West Burton Environmental Statement (March 2023)

Peak cumulative medium-term temporary moderate beneficial effect, significant at Local level on construction sector employment construction and decommissioning with Cottam, Gate Burton and Tillbridge (Chapter 18: Socio-Economics and Tourism and Recreation, section 18.10.9 and 18.10.59)

Peak cumulative medium term temporary major-moderate beneficial effect, significant at Local level on accommodation sector employment during construction and decomissioning with Cottam, Gate Burton and Tillbridge (Chapter 18: Socio-Economics and

Tillbridge PEIR (April 2023)

There is potential for cumulative adverse effects on community severance, should scheme impacts occur at the same time during construction. This will be considered further in the ES (Chapter 18: Cumulative Effects)

Potential cumulative adverse impact on users of PRoW in the local area, should impacts occur at the same time.

Tillbridge ES (April 2024)

Section 18.15: Socioeconomics and Land Use, Chapter 18: Cumulative Effects and Interactions of the ES identifies the following likely significant cumulative effects during construction:

 Moderate beneficial (significant) cumulative effect at local scale due to construction employment.







Gate Burton Environmental Statemen	Cottam ES	West Burton ES	Tillbridge ES
	Tourism and Recreation, section 18.10.11 and 18.10.62).	Tourism and Recreation, section 18.10.11 and 18.10.62).	No other significant cumulative effects are identified. The difference in
	Peak cumulative medium-term temporary moderate beneficial effect, significant at Local level on Economic activity and Employment during construction and decommissioning with West Burton, Gate Burton and Tillbridge (Chapter 18: Socio-Economics and Tourism and Recreation, section 18.10.14 and 18.10.65).	Peak cumulative medium-term temporary moderate beneficial effect, significant at Local level on Economic activity and Employment during construction and decommissioning with Cottam, Gate Burton and Tillbridge (Chapter 18: Socio-Economics and Tourism and Recreation, section 18.10.14 and 18.10.65).	conclusions to Cottam and West Burton ESs is due to the different assessment methodologies and significance criteria applied.
	Peak cumulative medium-term moderate beneficial effect, significant at Local level on accommodation stock (housing) during construction with West Burton, Gate Burton and Tillbridge. (Chapter 18: Socio-Economics and	Peak cumulative medium-term moderate beneficial effect, significant at Local level on accommodation stock (housing) during construction with Cottam, Gate Burton and Tillbridge (Chapter 18: Socio-Economics and Tourism	







Gate Environmental Sta	Cottam ES	West Burton ES	Tillbridge ES
	Tourism and Recreation, section 18.10.17)	and Recreation, section 18.10.17).	

Peak cumulative medium-term temporary major-moderate beneficial effect, significant at Local level on Access to employment (IMD) during construction with West Burton, Gate Burton and Tillbridge (Chapter 18: Socio-Economics and Tourism and Recreation, section 18.10.18)

Peak cumulative medium-term temporary moderate beneficial effect, significant at Local level on Access to education (IMD) during construction with West Burton, Gate Burton and Tillbridge (Chapter 18: Socio-Economics and Peak cumulative medium-term temporary major-moderate beneficial effect, significant at Local level on Access to employment (IMD) during construction

with Cottam, Gate Burton and Tillbridge (Chapter 18: Socio-Economics and Tourism and Recreation, section 18.10.18)

Peak cumulative medium-term temporary moderate beneficial effect, significant at Local level on Access to education (IMD) during construction with Cottam, Gate Burton and Tillbridge (Chapter 18: Socio-Economics and Tourism and Recreation, section 18.10.19)







Burton Cottam ES

West Burton ES

Tillbridge ES

Tourism and Recreation, section 18.10.18)

Peak cumulative medium-term moderate beneficial effect, significant at Local level on construction economy during construction and decommissioning with West Burton, Gate Burton and Tillbridge (Chapter 18: Socio-Economics and Tourism and Recreation, section 18.10.21 and 18.10.68)

Peak cumulative medium-term temporary moderate beneficial effect, significant at Local level on accommodation economy during construction with West Burton, Gate Burton and Tillbridge (Chapter 18: Socio-Economics and

Peak cumulative medium-term moderate beneficial effect, significant at Local level on construction economy during construction and decommissioning with Cottam, Gate Burton and Tillbridge (Chapter 18: Socio-Economics and Tourism and Recreation, section 18.10.22 and 18.10.68).

Peak cumulative medium-term temporary moderate beneficial effect, significant at Local level on accommodation economy during construction with Cottam, Gate Burton and Tillbridge (Chapter 18: Socio-Economics and Tourism and Recreation, section 18.10.24)







Burton Cottam ES

West Burton ES

Tillbridge ES

Tourism and Recreation, section 18.10.23).

Peak cumulative medium-term temporary moderate beneficial effect, significant at Local level on economic prosperity, and resident and working population income during construction and decommissioning with West Burton, Gate Burton and Tillbridge (Chapter 18: Socio-Economics and Tourism and Recreation, section 18.10.26 and 18.10.77).

Peak cumulative short to medium-term temporary moderate adverse, significant at Local level on local lanndscape attractions during construction with West Burton, Gate Burton and Tillbridge (Chapter 18: Socio-Economics and Peak cumulative medium-term temporary moderate adverse, significant at Local level on the tourism and visitor economy during construction with Cottam, Gate Burton and Tillbridge (Chapter 18: Socio-Economics and Tourism and Recreation, section 18.10.25)

Peak cumulative medium-term temporary moderate beneficial effect, significant at Local level on economic prosperity, and resident and working population income during construction and decommissioning with Cottam, Gate Burton and Tillbridge (Chapter 18: Socio-Economics and Tourism and Recreation, section 18.10.27 and 18.10.76).







Burton Cottam ES

West Burton ES

Tillbridge ES

Tourism and Recreation, section 18.10.28).

Peak cumulative short to medium-term temporary moderate adverse, significant at Local level on long distance recreation routes during construction with West Burton, Gate Burton and Tillbridge (Chapter 18: Socio-Economics and Tourism and Recreation, section 18.10.31).

Long-term cumulative moderate adverse, significant at Local level on energy sector employment during operation and decomissioning with West Burton, Gate Burton and Tillbridge (Chapter 18: Socio-Economics and Tourism and Recreation.

Peak cumulative short to medium-term temporary moderate adverse, significant at Local level on local landscape attractions during construction with Cottam, Gate Burton and Tillbridge (Chapter 18: Socio-Economics and Tourism and Recreation, section 18.10.29).

Peak cumulative short to medium-term temporary moderate adverse, significant at Local level on long distance recreation routes during construction with Cottam, Gate Burton and Tillbridge (Chapter 18: Socio-Economics and Tourism and Recreation, section 18.10.32).

Long-term cumulative moderate adverse, significant at Local level on energy sector







	Gate Burto Environmental Statemen	n Cottam ES it	West Burton ES	Tillbridge ES
		section 18.10.34 and 18.10.60) Cumulative Review (September 2023) No changes identified. Cumulative Review December 2023 No changes identified. Cumulative Review (February 2024)	employment during operation and decomissioning with Cottam, Gate Burton and Tillbridge (Chapter 18: Socio-Economics and Tourism and Recreation, section 18.10.35 and 18.10.60). Cumulative Review (September 2023) No changes identified.	
		No changes identified.	Cumulative Review December 2023 No changes identified. Cumulative Review (February 2024)	
			No changes identified.	
Transport and Access	Gate Burton Environment Statement (January 2023) No significant cumulative effects identified (Chapter 13: Transport and Access	Statement (January 2023) No significant cumulative effects identified (Chapter	West Burton Environmental Statement (March 2023) No significant cumulative effects identified (Chapter	Tillbridge PEIR (April 2023) No significant cumulative effects identified within the PEIR (Chapter 17:







Gate Burton Environmental Statement	Cottam ES	West Burton ES	Tillbridge ES
section 13.13 and Chapter 16: Cumulative Effects and Interactions, Table 16-4).	14: Transport and Access, section 14.9).	14: Transport and Access, section 14.9).	Cumulative Effects, section 17.17).
Cumulative Review (September 2023) No changes identified. A technical note has been prepared to review the potential cumulative effects on Transport and Access. The maximum worse-case two flow flows from each the projects' recently published ES's/PEIRS are considered. The results show that the total worst-case cumulative traffic flows fall well below the 30% impact threshold defined by Rule 1 of the IEMA Guidelines. Therefore, the cumulative effects are considered to be not significant and the findings of the Gate Burton Energy Park ES remain	Cumulative Review (September 2023) No changes identified. Cumulative Review (December 2023) No changes to ES conclusions. Cumulative Review (February 2024) No changes identified.	Cumulative Review (September 2023) No changes identified. Cumulative Review (December 2023) No changes to ES conclusions. Cumulative Review (February 2024) No changes identified.	Tillbridge ES (April 2024) No significant cumulative effects identified within Section 18.17: Transport and Access, Chapter 18: Cumulative Effects and Interactions of the ES.
unchanged.			



No changes identified.





n ES Tillbridge ES
March 2023) March 2023) March 2023) March 2023) Mo signficant cumulative effects identified within the PEIR (Chapter 17: Cumulative Effects, section 17.13). Tillbridge PEIR (April 2023) Mo signficant cumulative effects identified within the PEIR (Chapter 17: Cumulative Effects, section 17.13). Tillbridge ES (April 2024) No significant cumulative effects identified within Section 18.12: Human Health, Chapter 18: Cumulative Effects and Interactions of the ES. In difference in conclusions to Cottam and West Burton ESs is due to the different assessment methodologies and significance criteria applied. Review 2023) Identified. Review 2023)









	Gate Burton Environmental Statement	Cottam ES	West Burton ES	Tillbridge ES
		Cumulative Review (December 2023) No changes identified.	Cumulative Review (February 2024) No changes identified.	
		Cumulative Review (February 2024) No changes identified.	G	
Air Quality	Gate Burton Environmental Statement (January 2023) No significant cumulative effects identified (Chapter 15: Other Environmental Topics, section 15.3.98 and Chapter 16: Cumulative Effects and Interactions, Table 16-4) Cumulative Review (September 2023) No changes identified.	Cottam Environmental Statement (March 2023) No significant cumulative effects identified (Chapter 17: Air Quality, section 17.9) Cumulative Review (September 2023) No changes identified. Cumulative Review (December 2023) No changes identified.	West Burton Environmental Statement (March 2023) No significant cumulative effects identified (Chapter 17: Air Quality, section 17.9) Cumulative Review (September 2023) No changes identified. Cumulative Review (December 2023) No changes identified.	Tillbridge PEIR (April 2023) No significant cumulative effects identified within the PEIR (Chapter 17: Cumulative Effects, section 17.8). Tillbridge ES (April 2024) No significant cumulative effects identified within Section 18.7: Air Quality, Chapter 18: Cumulative Effects and Interactions of the ES.
		Cumulative Review (February 2024) No changes identified.	Cumulative Review (February 2024) No changes identified.	





17.18.3).



	Gate Burton Environmental Statement	Cottam ES	West Burton ES	Tillbridge ES
Glint and Glare	Gate Burton Environmental Statement (January 2023) No signficant cumulative effects identified (Chapter 15: Other Environmental Topics, section 15.4.30	Cottam Environmental Statement (January 2023) No signficant cumulative effects identified (Chapter 16: Glint and Glare, section 16.10)	West Burton Environmental Statement (March 2023) No signficant cumulative effects identified (Chapter 16: Glint and Glare, section 16.10)	Tillbridge PEIR (April 2023) No signficant cumulative effects identified within the PEIR (Chapter 17: Cumulative Effects, section 17.18.2).
	and Chapter 16: Cumulative Effects and Interactions, Table 16-4) Cumulative Review (September 2023) No changes identified.	Cumulative Review (September 2023) No changes identified. Cumulative Review December 2023 No changes identified.	Cumulative Review (September 2023) No changes identified. Cumulative Review December 2023 No changes identified.	Tillbridge ES (April 2024) No significant cumulative effects identified within Section 18.18: Other Environmental Topics, Chapter 18: Cumulative Effects and Interactions of the ES.
		Cumulative Review (February 2024) No changes identified.	Cumulative Review (February 2024) No changes identified.	
Ground Conditions	Gate Burton Environmental Statement (January 2023) No signficant cumulative effects identified (Chapter 15: Other Environmental	Cottam Environmental Statement (January 2023) No signficant cumulative effects identified (Chapter 11: Ground Conditions and	West Burton Environmental Statement (March 2023) No signficant cumulative effects identified (Chapter 11: Ground Conditions and	Tillbridge PEIR (April 2023) No signficant cumulative effects identified within the PEIR (Chapter 17: Cumulative Effects, section

Topics, section 15.5.25







	Gate Burton Environmental Statement	Cottam ES	West Burton ES	Tillbridge ES
	and Chapter 16: Cumulative Effects and Interactions, Table 16-4)	Contamination, section 11.11)	Contamination, section 11.11)	Tillbridge ES (April 2024) No significant cumulative effects identified within Section 18.18: Other Environmental Topics, Chapter 18: Cumulative Effects and Interactions of the ES.
	Cumulative Review (September 2023) No changes identified.	Cumulative Review (September 2023) No changes identified.	Cumulative Review (September 2023) No changes identified.	
	·	Cumulative Review December 2023	Cumulative Review December 2023	
		No changes identified.	No changes identified.	
		Cumulative Review (February 2024) No changes identified.	Cumulative Review (February 2024) No changes identified.	
Major Accidents and Disasters	Gate Burton Environmental Statement (January 2023) No signficant cumulative effects identified (Chapter 15: Other Environmental Topics, section 15.6.32 and Chapter 16:	Cottam Environmental Statement (January 2023) No signficant cumulative effects identified (Chapter 21: Other Environmental Matters, section 21.6.59)	West Burton Environmental Statement (March 2023) No signficant cumulative effects identified (Chapter 21: Other Environmental Matters, section 21.6.61)	Tillbridge PEIR (April 2023) No signficant cumulative effects identified within the PEIR (Chapter 17: Cumulative Effects, section 17.18.7).
	Cumulative Effects and Interactions, Table 16-4) Cumulative Review (September 2023)	Cumulative Review (September 2023) No changes identified.	Cumulative Review (September 2023) No changes identified.	Tillbridge ES (April 2024) No significant cumulative effects identified within Section 18.18: Other Environmental Topics,







	Gate Burton Environmental Statement	Cottam ES	West Burton ES	Tillbridge ES
	No changes identified.	Cumulative Review (December 2023) No changes identified.	Cumulative Review (December 2023) No changes identified.	Chapter 18: Cumulative Effects and Interactions of the ES.
		Cumulative Review (February 2024) No changes identified.	Cumulative Review (February 2024) No changes identified.	
Telecommunications	Gate Burton Environmental Statement (January 2023) No signficant cumulative effects identified (Chapter 15: Other Environmental Topics, section 15.7.14 and Chapter 16: Cumulative Effects and Interactions, Table 16-4) Cumulative Review (September 2023) No changes identified.	Cottam Environmental Statement (January 2023) No signficant cumulative effects identified (Chapter 21: Other Environmental Matters, section 21.3) Cumulative Review (September 2023) No changes identified. Cumulative Review (December 2023) No changes identified. Cumulative Review (February 2024) No changes identified.	West Burton Environmental Statement (March 2023) No signficant cumulative effects identified (Chapter 21: Other Environmental Matters, section 21.3) Cumulative Review (September 2023) No changes identified. Cumulative Review (December 2023) No changes identified. Cumulative Review (February 2024) No changes identified.	Tillbridge PEIR (April 2023) No signficant cumulative effects identified within the PEIR (Chapter 17: Cumulative Effects, section 17.18.8). Tillbridge ES (April 2024) No significant cumulative effects identified within Section 18.18: Other Environmental Topics, Chapter 18: Cumulative Effects and Interactions of the ES.







Burton Cottam ES

West Burton ES

Tillbridge ES

Waste

Gate Burton Environmental Statement (January 2023)

No signficant cumulative effects identified with West Burton, Cottam and Tillbridge (Chapter 15: Other Environmental Topics, section 15.8.31 and Chapter 16: Cumulative Effects and Interactions, Table 16-4)

Cumulative Review (September 2023)

No changes identified.

Rule 17 December 2023: the Gate Burton materials and waste assessment was undertaken using the same methodology (the W1 methodology from the Institute of Environmental Management & Assessment (2020) Guide to Materials and Waste in Environmental Impact

Cottam Environmental Statement (January 2023)

Moderate or large adverse effect on landfill waste handling in Nottinghamshire during the decommissioning phase with West Burton, Gate Burton and Tillbridge. (Chapter 20: Waste, section 20.10.16)

Cumulative Review (September 2023)
No changes identified.

Cumulative Review (December 2023)
No changes identified.

Cumulative Review (February 2024)
No changes identified.

West Burton Environmental Statement (March 2023)

Moderate or large adverse effect on landfill waste handling in Nottinghamshire during the decomissioning phase with Gate Burton, Cottam and Tillbridge. (Chapter 20: Waste, section 20.10.16)

Cumulative Review (September 2023)

No changes identified.

Cumulative Review (December 2023)

No changes identified.

Cumulative Review (February 2024)

No changes identified.

Tillbridge PEIR (April 2023)

No signficant cumulative effects identified within the PEIR (Chapter 17: Cumulative Effects, section 17.18.14).

Tillbridge ES (April 2024)

No significant cumulative effects identified within Section 18.18: Other Environmental Topics, Chapter 18: Cumulative Effects and Interactions of the ES.







Gate Burton Cottam ES Environmental Statement

West Burton ES

Tillbridge ES

Assessment) as the Cottam and West Burton ES. The assessment is provided within a Technical Note submitted at Gate Burton Deadline 6 (21st December 2023). The Technical Note concludes that the Gate Burton assessment is in agreement with the assessments for Cottam and West Burton solar projects at the regional level (i.e. the East Midlands). However, the Cottam and West Burton projects also report impacts at the sub-regional level (Nottinghamshire) and identify a moderate or large (and therefore significant) effect on "landfill waste handling" in Nottinghamshire (but not Lincolnshire) during the decommissioning stage. Given the location of the Gate Burton main solar PV







	Gate Burton Environmental Statement	Cottam ES	West Burton ES	Tillbridge ES
	site on the boundary of Nottinghamshire and Lincolnshire, the regional scale is considered appropriate. Therefore, the conclusions of the Environmental Statement as submitted remain unchanged.			
Soils and Agriculture	Gate Burton Environmental Statement (January 2023) No signficant cumulative effects identified (Chapter 12: Socio-Economics and Land Use, section 12.13.10 to 12.13.12)	Cottam Environmental Statement (January 2023) No signficant cumulative effects identified (Chapter 19: Soils and Agriculture, section 19.11)	West Burton Environmental Statement (March 2023) No signficant cumulative effects identified (Chapter 19: Soils and Agriculture, section 19.11)	Tillbridge PEIR (April 2023) No signficant cumulative effects identified within the PEIR (Chapter 17: Cumulative Effects, section 17.16.16). Tillbridge ES (April 2024) No significant cumulative effects identified within Section 18.16:Soils and Agriculture, Chapter 18: Cumulative Effects and Interactions of the ES.







3. Conclusion

- 3.1.1 This Technical Note provides a summary of the review of information made available subsequent to submission of the DCO applications for the Gate Burton Energy Park, West Burton Solar Project, Cottam Solar Project and Tillbridge Solar Project. Review of the now published ESs (with Tillbridge ES being the last one of the ESs to be published) confirm that the cumulative effects reported within the Gate Burton Energy Park, West Burton Solar Project and Cottam Solar Project Environmental Statements as submitted remain unchanged.
- 3.1.2 It is noted that for a number of disciplines there are differences in the cumulative effects reported between projects. For example, the assessment of socio-economic effects for Gate Burton and Tillbridge versus Cottam and West Burton feature differences in their conclusions on significant effects. This is due to the difference in assessed impact area, with Gate Burton and Tillbridge defining a 60 minute travel area, whereas Cottam and West Burton have assessed the combined West Lindsey and Bassetlaw district areas. This has resulted in the magnitude of impact being of a much greater comparative scale. While the differences in the conclusions between the ESs are apparent, it is not deemed that these assessment outcomes are in conflict with one another due to the variance in their methodologies.