

The Clean Energy Sprint: A New Era for Onshore Renewables?

by Michael Bedford KC, Clare Parry and Jack Parker

Introduction

1. The new Government's commitment to developing renewable energy infrastructure is not in doubt. The Secretary of State for Energy Security and Net Zero, Ed Miliband MP, refers to a 'clean energy sprint' as "the national security, energy security, economic justice fight of our time." He has promised to "take on the blockers, the delayers, the obstructionists" and stated that "The faster we go, the more secure we become. Every wind turbine we put up, every solar panel we install, every piece of grid we construct helps protect families from future energy shocks."¹

2. But what role does the planning system play in all this? Tinkering with planning policy often seems to come at the top of a new Government's to-do list as a cheap and relatively quick way to achieve, or at least communicate, its political objectives. Those involved in planning on a day to day basis may sigh wearily, sceptical as to whether such tinkering makes any difference to outcomes in the long run.

3. An arguably more tangible and consequential indicator of whether a new Government is delivering on its rhetoric comes from its actual decision-making.

4. In the four and half months since the general election, five large solar farms have been approved, four by way of development consent orders made by the Secretary of State for Energy Security and Net Zero² and one by way of the grant of planning permission made on behalf of the Secretary of State for Housing, Communities and Local Government on a called-in planning application.³ While the development of onshore wind may take some time, given the previously restrictive policy framework in place, change is sure to come.

5. Compare that 'flurry' of activity and the strident statements made by Ed Miliband MP with the fact, for example, that no Solar Farm DCOs were approved by the outgoing Conservative

Government in the previous 12 months.⁴ Of course, reticence by the previous Government to approve development must be understood largely in the context of the Conservative Party's election strategy (i.e. to avoid any controversial planning decisions in the run up to the election). Nonetheless, the change in tone is very clear.

6. In this paper we look at:

- (1) the current position for onshore wind, the new Government's policy and the main planning issues that are likely to arise.
- (2) What we can learn from the Government's decision making on solar since the election and how, if at all, decision-making at a local level has been affected.
- (3) The framework for connecting renewable energy projects to the electricity grid and the issues posed by the current system.

(1) ONSHORE WIND

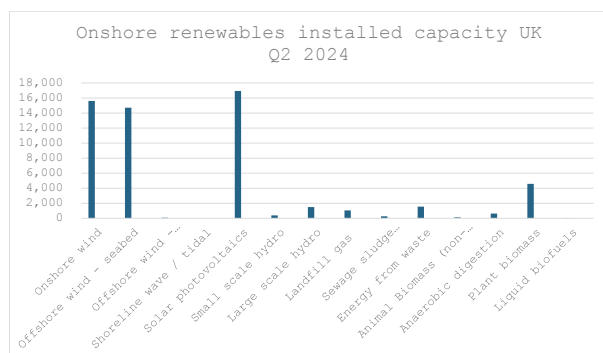
7. Onshore wind was one of the earliest forms of renewable energy to be harvested at a commercial scale. It has formed a growing part of the UK energy mix since the early 1990s and a significant part of the energy mix. By the end of Q2 2024 the cumulative onshore installed capacity for onshore wind was 15,613MW. The only technology with greater UK capacity is solar photovoltaics:

1. <https://www.gov.uk/government/speeches/energy-uk-conference-2024-keynote-speech-by-by-ed-miliband>

2. Sunnica Energy Farm in Suffolk/Cambridgeshire (EN010106); Mallard Pass Solar Farm in South Kesteven, Lincolnshire, and Rutland (EN010127); Gate Burton Energy Park in Lincolnshire (EN010131) and the Cottam Solar Project in Lincolnshire/Nottinghamshire (EN010133).

3. Land to the West of Honiley Road, Kenilworth (APP/T3725/V/23/3332671).

4. The last solar DCO to have been made before July 2024 was made in June 2023: Longfield Crow Solar Farm in Chelmsford (EN010118).



Taken from *Energy Trends* by DENZ, published 26 September 2024

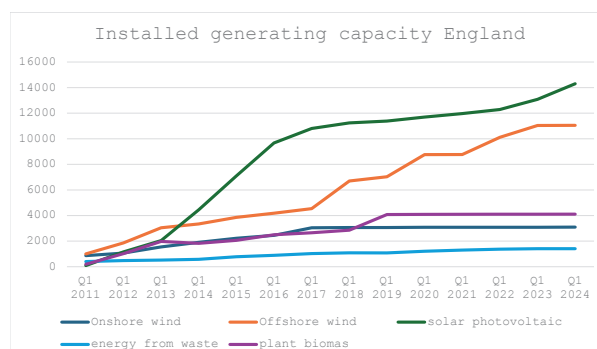
8. In 2023 onshore wind provided 11.2% of UK electricity generated. Of the renewable energies only offshore wind was higher at 17%. For context all renewables provided 46.4% of UK electricity generated.

9. Onshore wind is one of the cheapest forms of renewable energy and the cost of generating electricity this way is predicted to continue to fall.

		2025	2030	2035	2040
CCGT ⁵ H Class	High	116	141	167	181
	Central	114	139	165	179
	Low	113	138	164	178
Offshore wind	High	49	43	51	51
	Central	44	39	43	41
	Low	40	35	32	32
Onshore wind	High	43	40	40	40
	Central	38	36	36	36
	Low	33	31	31	31
Large-scale solar	High	48	43	38	36
	Central	41	37	32	30
	Low	37	32	28	26

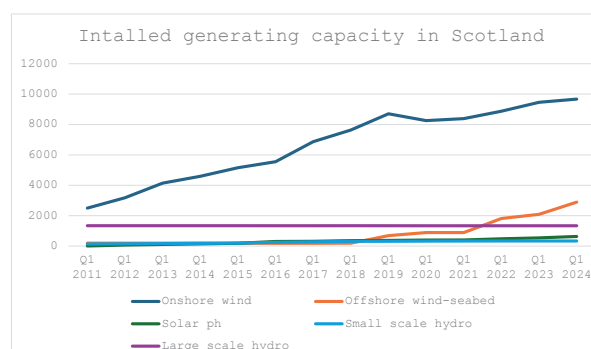
Levelised Cost Estimates⁶ for Projects Commissioning in 2025, 2030, 2035 and 2040, £/MWh, highs and lows reflect high and low capital and pre-development cost estimates, in real 2021 prices.⁷

10. While onshore wind has formed a growing part of the energy mix across the UK, its role in electricity generation in England has been significantly less.



Installed capacity is measured in MW, taken from *Energy Trends* by DENZ, published 26 September 2024 (largest 5 renewable generating sources only)

11. The position can be contrasted with other parts of the UK. In Scotland the picture looks like this:



Installed capacity is measured in MW, taken from *Energy Trends* by DENZ, published 26 September 2024 (largest 5 renewable generating sources only)

12. The most recent installed generating capacity for onshore wind therefore looks like this, broken down across the four nations of the UK:

	Installed generating capacity onshore wind by Q2 2024 (MW)
England	3108
Scotland	9756
Wales	1301
Northern Ireland	1448
Total UK	15613

Taken from *Energy Trends* by DENZ, published 26 September 2024

13. It is evident that the growth in onshore wind in the England has been limited compared to other parts of the UK, most notably Scotland. That is almost undoubtedly a result of the policy environment that has prevailed in England. On 18 June 2015 the then Secretary of State for Communities and Local Government (Greg Clark) changed the considerations to be applied to onshore

5. Combined cycle gas turbine.

6. The Levelised Cost of Electricity (LCOE) is the discounted lifetime cost of building and operating a generation asset, expressed as a cost per unit of electricity generated (£/MWh). It covers all relevant costs faced by the generator, including pre-development, capital, operating, fuel, and financing costs. This is sometimes called a life-cycle cost, which emphasises the "cradle to grave" aspect of the definition.

7. <https://assets.publishing.service.gov.uk/media/6556027d046ed400148b99fe/electricity-generation-costs-2023.pdf>.

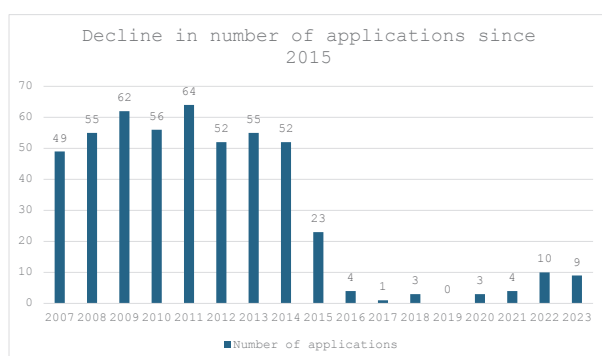
wind development.⁸ The effect was that when determining planning applications for wind energy development involving one or more wind turbines, local planning authorities were told they should only grant planning permission if (1) the development site is in an area identified as suitable for wind energy development in a local or neighbourhood plan; and following consultation and (2) it can be demonstrated that the planning impacts identified by affected local communities have been fully addressed and therefore the proposal has their backing. This policy approach has been incorporated as a footnote in the NPPF since July 2018.⁹

14. Allied to that change, the Infrastructure Planning (Onshore Wind Generating Stations) Order 2016 removed onshore wind farms with a generating capacity over 50MW from the NSIP regime. Onshore wind is not covered in the Energy Policy Statements.

15. In 2023 the then government very slightly ameliorated the policy position so that footnote 58 reads:

Except for applications for the repowering and life-extension of existing wind turbines, a planning application for wind energy development involving one or more turbines should not be considered acceptable unless it is in an area identified as suitable for wind energy development in the development plan or a supplementary planning document; and, following consultation, it can be demonstrated that the planning impacts identified by the affected local community have been appropriately addressed and the proposal has community support.

16. The effects of the above policy restrictions are clear from the number of applications for onshore wind development. Of the 48 applications submitted between 2015 and 2022 LPAs granted planning permission to 21 wind farms with 48 turbines in total and a combined installed capacity of 62MW.



Applications for onshore wind developments submitted in England 2007 to 2023. Taken from *Parliamentary Briefing Paper on Planning for Onshore Wind*.¹⁰

Change of policy

17. The new UK government has committed to doubling onshore wind by 2030,¹¹ which would mean reaching 30GW of onshore wind in the next six years.

18. On 8 July 2024 Rachel Reeves made a speech which paved the way for the return of onshore wind in England. In the speech Rachel Reeves announced that she is ending the “absurd ban on new onshore wind in England”.¹² This announcement was immediately followed by a policy statement on onshore wind which confirmed that the policy tests in footnotes 57 and 58 no longer apply.¹³ The consultation, “Proposed Reforms to the National Planning Policy and other Changes to the Planning System”¹⁴ consulted on:

- A proposal to reintegrate large onshore wind projects into the NSIP regime (question 72);
- A proposal to change the threshold at which onshore wind projects fall within the NSIP regime to 100MW (question 75).
- Proposed changes to the NPPF to give greater support to renewable and low carbon energy (question 73).
- Whether there should be additional protections or compensation mechanisms for peat habitats (question 74).

19. The proposed changes to the NPPF would further strengthen policy support for renewable and low carbon energy. This is covered elsewhere in the paper at paragraphs 45-47. The changes would also require an LPA to identify (rather than consider identifying) suitable areas for renewable and low carbon energy sources.

20. Also on 8 July Rachel Reeves announced that she would update relevant National Policy Statements (NPS) within the year. It does not appear that any steps to consult on new NPS have been taken.

21. Given the immediate and forthcoming changes there is bound to be a substantial increase in the number of onshore wind applications in England. In response to the lifting of the de facto ban RWE, one of the UK’s biggest wind developers, for example said it began identifying viable sites to develop ‘some time ago’ in anticipation of a Labour victory and expects its pipeline of new projects to develop ‘quite quickly’. Other companies have made similar statements.

22. As will be seen below, there is very little detailed technical guidance applicable to England that is presently available to assist in assessing these applications as they come forward. The original version of the NPS contained detailed guidance on wind farm applications but those were withdrawn and in any event are likely to be out of date given the policy changes and technological advancements since their publication.

8. <https://publications.parliament.uk/pa/cm201516/cmhansrd/cm150618/wmstext/150618m0001.htm#1506182000002>.

9. Footnote 49 in the July 2018 version, currently.

10. <https://researchbriefings.files.parliament.uk/documents/SN04370/SN04370.pdf>.

11. Labour party manifesto, <https://labour.org.uk/change/make-britain-a-clean-energy-superpower/>.

12. <https://www.gov.uk/government/speeches/chancellor-rachel-reeves-is-taking-immediate-action-to-fix-the-foundations-of-our-economy>.

13. <https://www.gov.uk/government/publications/policy-statement-on-onshore-wind/policy-statement-on-onshore-wind>.

14. <https://www.gov.uk/government/consultations/proposed-reforms-to-the-national-planning-policy-framework-and-other-changes-to-the-planning-system#chapter-8--delivering-community-needs>.

Issues

23. Given changes in technology in the last decade and the position on community benefits, it remains to be seen whether onshore wind energy will face the same level of local opposition as occurred in the early 2010s leading to the de facto ban. It is clear that while wind energy provides huge benefits it can also have significant environmental effects which will need to be carefully considered. The following issues are likely to arise:

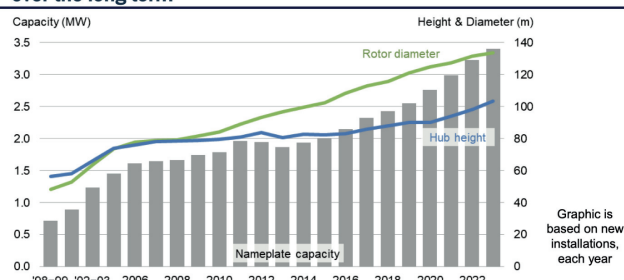
- Landscape and visual impacts (including cumulative impacts);
- Impacts on heritage assets;
- Noise;
- Shadow flicker;
- Ecological impacts;
- Peat;
- Transport;
- Community benefits;
- Grid

Landscape and visual

24. The landscape and visual effects of wind energy have long been one of its most controversial aspects. Wind energy resources tend to be best in upland, more remote areas. These are also often the areas most valued for their landscape qualities. Consideration of recent Welsh and Scottish decisions suggests that landscape and visual effects tend to be the cause of the relatively rare case where wind energy developments have been refused.¹⁵

25. One thing that has changed since the coming into effect of the de facto ban on onshore wind is the size and generation power of wind turbines. The following graphic is taken from installations in America but shows the trend towards larger turbines which generate greater power than their predecessors:

Turbine capacity, rotor diameter, and hub height have all increased over the long term



From *Berkley Lab Land-Based Wind Market Report 2024 edition*¹⁶

26. The trend towards larger but more powerful turbines will create new challenges in landscape and visual impact assessment. The more powerful turbines have been achieved not solely by

increasing height but by increasing rotor diameter. That said there are now some very tall turbines. The Scottish Government has recently consented an extension of a wind farm in New Cumnock which comprises 10 turbines, 7 with a maximum tip height not exceeding 251m and 3 with a maximum tip height not exceeding 235m. These exceedingly tall turbines (thought to be the largest so far consented in the UK) mean that the ten turbines can achieve a generating capacity of around 66MW.¹⁷

27. More powerful turbines will mean that fewer turbines will be required to achieve the same output. On the other hand the taller turbines will make it likely that their impact are widespread.

28. LPAs and Inspectors will have to grapple with other landscape and visual issues as well. In order to meet the government's ambitious targets it is very likely that there will be a need to take into account the cumulative effects of windfarm development. The PPG has some limited information on assessing cumulative impacts of wind energy development.¹⁸ It shows the breadth of effects that have to be considered:

The cumulative landscape impacts are the effects of a proposed development on the fabric, character and quality of the landscape; it is concerned with the degree to which a proposed renewable energy development will become a significant or defining characteristic of the landscape.

Cumulative visual impacts concern the degree to which proposed renewable energy development will become a feature in particular views (or sequences of views), and the impact this has upon the people experiencing those views. Cumulative visual impacts may arise where two or more of the same type of renewable energy development will be visible from the same point, or will be visible shortly after each other along the same journey. Hence, it should not be assumed that, just because no other sites will be visible from the proposed development site, the proposal will not create any cumulative impacts.

29. NatureScot has guidance on assessing cumulative landscape and visual effects.¹⁹ This is a version of the Scottish guidance that was prior to 2015 commonly used for assessing the cumulative landscape and visual effects of wind turbines in English decisions.

30. There will also be a need to examine the relationship between wind energy development and national parks/national landscapes. While it is less likely that energy development will be promoted in either of those areas, there may well be landscape and visual effects on those areas from development around them. Decision makers will have to grapple with the extent to which the benefits of wind energy development can justify harm to those areas.

31. A matter which appears to have caused some issues for wind energy development in Scotland is the need for turbines to have aviation warning lights, and the impact this would have on areas habitat if disturbance causes birds to avoid the wind farms and

15. According to Compass 3 applications/appeals refused since 2021, each largely on landscape and visual grounds (one decision also had significant heritage issues).

16. https://emp.lbl.gov/sites/default/files/2024-08/Land-Based%20Wind%20Market%20Report_2024%20Edition.pdf.

17. <https://www.energyconsents.scot/ApplicationDetails.aspx?cr=ECU00002221&T=0>.

18. Paragraph: 022 Reference ID: 5-022-20140306.

19. <https://www.nature.scot/doc/guidance-assessing-cumulative-landscape-and-visual-impact-onshore-wind-energy-developments>.

where dark skies are an important landscape characteristic.²⁰

Heritage assets

32. Given the height of turbines they can fall within the settings of a wide range of heritage assets. They can also impinge on historic landscapes. At present the PPG states “depending on their scale, design and prominence a wind turbine within the setting of a heritage asset may cause substantial harm to the significance of the asset”.²¹

Noise

33. The guidance on assessing noise from wind turbines remains the ETSU-R-97 guidance published in 1996 and used for assessment of noise from wind farms since then. In September 2023 the Department for Business, Energy and Industrial Strategy commissioned WSP to provide a report on whether that guidance should be updated. They concluded that it should be because since the guidance was published in 1996 the context has changed including the need for onshore wind energy becoming more urgent, technology having advanced, new research having been undertaken and understanding of turbine sound has advanced including in particular the potential effect of amplitude moderation.²²

34. The contract for updating the guidance has been let, with the procurement process identifying a delivery in around March 2025. Concern remains that this is too slow. For example the Chartered Institute of Environmental Health wrote to the government on 2 October 2024 saying:

*“ETSU-R-97 is outdated and unfit for purpose. Without clear and adequate guidance, the permitting of onshore windfarms could face major delays and lead to undesirable outcomes. New guidance should be developed as a matter of urgency, reflecting the latest British Standards, guidance from the World Health Organisation and the latest scientific evidence on the adverse effects of noise from wind turbines.”*²³

Shadow flicker

35. Shadow flicker is a specific impact which occurs within 130 degrees either side of north. In certain climatic conditions at specific times of the day and year it can cause a shadow to flicker over neighbouring properties. The methods of assessment of shadow flicker effects are well established and if necessary can be controlled by condition.

Ecological impacts

36. Wind turbines present risks to birds through collision (or interaction with turbine blades), direct habitat loss through wind

surroundings. NatureScot has developed a range of guidance including some species specific guidance and assessing the impacts on SPAs.²⁴

Peat

37. Many of the more remote areas suitable for wind turbines contain resources of peat. Development in those areas can release the carbon sequestered in the peat. On the other hand wind energy developments can give rise to a peat restoration programme which can assist with the ability of the peat to sequester carbon. The University of Aberdeen has developed a calculator to attempt to measure the carbon impacts of developing on peat which is used in Scottish decision making.²⁵ The Westminster government is consulting on whether there should be special rules about wind energy located on peat as part of their recent NPPF consultation (see above).

Transport

38. The locations for wind farms can be remote. This can cause particular difficulties given the need to deliver lengthy components which amount to abnormal loads.

Community benefits

39. At present decision makers cannot take into account the financial benefits fund put forward by promoters of wind energy development (R (Wright) v Resilient Energy Severndale Ltd [2019] UKSC 53). However there exists guidance on the provision of community benefits.²⁶ That guidance is to be updated ‘shortly’.

Grid

40. The grid issues are similar for both wind energy and solar energy and are addressed at paragraphs 68-82.

(2) SOLAR POLICY AND DECISION-MAKING SINCE THE ELECTION: WHAT CAN WE LEARN?

The Policy Framework

Nationally Significant Infrastructure Projects

41. Before examining the relevant decisions, it is worth noting that the policy framework for the delivery of large-scale solar farms (i.e. over 50MW) through the NSIP process had already been revised by the previous Government through updated national policy statements published in January 2024. The new Government is consulting on whether to increase the NSIP threshold (to 150MW for solar and 100MW for onshore wind) so as to keep more projects within the 1990 Act regime. However, so far as the substance of the policies themselves is concerned, it is notable that the new Government does not appear to see existing

20. See e.g. Narachan Hill, Argyll and Bute.

21. Paragraph: 019 Reference ID: 5-019-20140306.

22. <https://www.wsp.com/en-gb/insights/wind-turbine-noise-report>.

23. <https://www.cieh.org/media/vwtlhey/cieh-ies-joint-letter-to-steve-reed-mp-on-etsu-r-97.pdf>.

24. <https://www.nature.scot/professional-advice/planning-and-development-advice/renewable-energy/onshore-wind-energy/wind-farm-impacts-birds#:~:text=More%20specifically%20wind%20farms%20present,the%20wind%20farm%20and%20surrounds>.

25. <https://www.abdn.ac.uk/stories/peatland-windfarms/index.html#:~:text=Just%20one%20hectare%20of%20peatland,large%20holes%20in%20the%20land>.

26. <https://assets.publishing.service.gov.uk/media/61b87e3b8fa8f50384489ccb/community-engagement-and-benefits-from-onshore-wind.pdf>.

policy as any obstacle to the delivery of its renewable energy objectives or any immediate need for any further amendment of the NPSs (despite having raised the possibility of issuing new NPSs in its manifesto).

42. EN-1, the overarching policy statement, now provides that *“there is a critical national priority (CNP) for the provision of nationally significant low carbon infrastructure”*²⁷ (including solar farms), which means that substantial weight should be given to the need for this type of infrastructure in determining applications for DCOs.²⁸ Solar along with wind are identified as the primary sources of energy likely to provide a secure, reliable, affordable, net zero consistent system in 2050.²⁹ Part 4 of EN-1 provides the general principles to be applied to DCO applications, whilst Part 5 sets out generic policy on the assessment of impacts.

43. EN-3, the NPS for Renewable Energy Infrastructure, is concerned with impacts and other matters specific to renewable energy, including solar. Notably, it provides that the Secretary of State will take as a starting point that any significant adverse effects on designated areas³⁰ are clearly outweighed by the urgent need for renewable energy infrastructure.³¹

44. There is a specific section in EN-3 dealing with solar photovoltaic generation.³² The key points are:

- a. Site suitability is likely to be determined by factors including, in particular, irradiance levels, availability of network connections and the proximity to sensitive receptors.³³
- b. The two main impact issues that are likely to determine distances to sensitive receptors are visual amenity and glint and glare.
- c. Land type should not be a predominating factor in determining the suitability of the site location, although where possible, suitable previously developed land, brownfield land, contaminated land and industrial land should be used. Elsewhere, the NPS provides that priority should not be given to the use of previously developed land for renewable technology developments.³⁴
- d. Where the proposed use of any agricultural land has been shown to be necessary, poorer quality land should be preferred to higher quality land avoiding the use of “Best and Most Versatile” agricultural land (“BMVAL”) where possible.
- e. Technical considerations are set out in some detail by reference to such issues as site layout design and appearance, the project lifetime and decommissioning.
- f. The potential impacts are addressed by reference to issues such as biodiversity, landscape, visual and residential amenity, glint and glare, cultural heritage and traffic and transport.³⁵

NPPF

45. Significant changes are proposed by the Government to the National Planning Policy Framework in relation to renewable

energy development.

46. As it currently stands, the NPPF provides that applicants should not be required to demonstrate the need for renewable energy.³⁶ If the proposed changes are brought into force, they would, similarly to EN-1, require local planning authorities to support planning applications for all forms of renewable and low carbon development and *“give significant weight to the proposal’s contribution to renewable energy generation and a net zero future.”*

47. Also of significance for solar farm development is the fact that, in its current form, the NPPF provides, in footnote 63 that *“[t]he availability of agricultural land used for food production should be considered, alongside the other policies in this Framework, when deciding what sites are most appropriate for development.”* That sentence is proposed to be deleted, consistent with the view expressed by Ed Miliband MP that the claim that solar farms are a threat to food security, through the loss of BMVAL, is a “myth.”

Written Ministerial Statements

48. Land use considerations in relation to renewable energy projects, particularly solar, have been subject to several written ministerial statements over the past few years which (as set out below) continue to carry weight in decision-making.

49. One particular issue of concern on the part of the previous administration was the effect of the loss of BMVAL by reason of solar farm development.

50. To that end, the 2015 WMS provided that proposals for a solar farm involving BMVAL would need to be justified by *“the most compelling evidence”*. This requirement has often led to developers producing some form of alternative site analysis (albeit that there is no ‘sequential test’, as such, in policy) and schemes have been dismissed by reason of a failure to demonstrate that there are no suitable poorer quality areas of land in the study area that could accommodate proposed development.³⁷

51. A WMS dated 15 May 2024 was made to provide further detail in support of the BMVAL policy in the January 2024 NPS. The WMS made clear that the effect of the NPS policy was that *“due weight needs to be given to the proposed use of Best and Most Versatile land when considering whether planning consent should be granted for solar developments. For all applicants the highest quality agricultural land is least appropriate for solar development and as the land grade increases, there is a greater onus on developers to show that the use of higher quality land is necessary. Applicants for Nationally Significant Infrastructure Projects should avoid the use of Best and Most Versatile agricultural land where possible.”* The WMS also identified the need to consider potential cumulative effects in some rural areas.

27. Paragraph 4.2.4 of EN-1.

28. Paragraphs 3.2.6 – 3.2.7.

29. Paragraph 3.3.20.

30. For example, SSSIs, National Nature Reserves, National Parks, the Broads, Areas of Outstanding Natural Beauty, Registered Parks and Gardens, and World Heritage Sites.

31. Paragraph 2.3.6.

32. Section 2.10.

33. Paragraph 2.10.18 – 48.

34. Paragraph 2.3.9.

35. Paragraph 2.10.73.

36. Paragraph 164.

37. See, for example, the Lullington Solar Park. A challenge to the dismissal of the planning appeal was refused: *Lullington Solar Park Ltd v SSLUHC* [2024] EWHC 295 (Admin).

52. Notably, the new Labour Government has not sought to withdraw or otherwise water down either the 2015 or 2024 WMSs despite the scepticism expressed by Ed Miliband about concerns for food security. As noted below, the Secretary of State has had regard to those WMSs and given them weight in the planning balance.

Ministerial decision-making

53. Of the four decisions made to approve DCOs, Sunnica, Mallard Pass, Gate Burton and Cottam (see paragraph 4, above), the latter three were all recommended for approval by the Examining Authority. In respect of those latter decisions, therefore, it is not particularly surprising that they were approved and their significance derives as much from their timing (so soon after the election) as their outcome.

54. In each case, the Examining Authority identified that the proposed development would give rise to harms (including, variously, in the form of landscape and visual effects, harm to the historic environment and the loss of BMVAL among others) but that the benefits of the scheme were such as to outweigh the harm. So far, so conventional.

55. Nonetheless, the decisions are instructive insofar as each of the schemes could demonstrate access to a suitable grid connection, a factor that was accepted to be a significant one in the site selection process. Further, while the Secretary of State took into account the protections afforded to BMVAL afforded by EN-3 and the 2015 and 2024 WMSs on the part of his predecessor Ministers, he nonetheless concluded that the loss of BMVAL attracted at most moderate or, in one case (Cottam), limited negative weight in the balance (where less than 50 hectares of the site was BMVAL, some 4.1% of the overall site area).

56. As to Sunnica, where the Secretary of State approved the DCO contrary to the recommendation of the Examining Authority, the Secretary of State essentially disagreed with the overall planning balance struck by the Examining Authority.

57. The Examining Authority was *"firmly of the view that there would be substantial disbenefits resulting from the Proposed Development"* by reference harm to the setting of the Chippenham Park Registered Park and Garden, a designated heritage asset, extensive adverse impacts on the landscape setting of and views from the Limekilns, a non-designated but an especially valued landscape and the design of one element of the Scheme. The disbenefits were *"not outweighed by the public benefit of the provision of solar generating capacity despite its need and urgency."*

58. The Secretary of State disagreed. While he agreed that there would be harm to heritage assets, albeit temporarily, he ascribed this harm only moderate negative weight and moderate

negative weight to the landscape effects, contrary to the findings of the Examining Authority. Ultimately, the Secretary of State acknowledged that *"all nationally significant energy infrastructure projects will have some potential adverse impacts"* but, having considered both the benefits and adverse impacts, *"[o]verall, the Secretary of State has concluded that on balance the benefits, in particular in relation to the need for new generation capacity [...], outweigh the adverse impacts"* (see paragraph 7.219).

59. Interestingly in respect of BMVAL, there were differences between the parties as to how much BMVAL would be lost and the Examining Authority accepted that a 'Rochdale envelope' approach (i.e. a reasonable worst case) would have 'some merit.' The Applicant's position (with the support of Natural England), based upon Agricultural Land Classification surveys, was that a total of 37.3ha of BMV land would be used. Those opposed to the scheme had argued, by reference to NE's predictive BMV map, that as a reasonable worst case 82% of the scheme area was 60% or more likely to be BMV. The Secretary of State rejected the Examining Authority's findings and described the Rochdale envelope approach as *"unhelpful and incorrect."* There was no reason, the Secretary of State stated, to disagree with the conclusions reached by Natural England and the Applicant, based on ALC surveys (see paragraph 4.216).

60. As to the grant of planning permission on behalf of the Secretary of State for CLG for a 23.1MW scheme on Land west of Honiley Road, the decision was similarly made in accordance with an Inspector's recommendation for approval. Again, there was an available grid connection although notably, the scheme was in the Green Belt, attracting harm which was substantial, albeit temporary. Notwithstanding this harm (and various other harms), the benefits of the scheme were such as to constitute the very special circumstances needed to justify the grant of permission.

61. The Inspector's findings in respect of BMVAL are again worth noting, however. While the scheme demanded the use of only a very small amount of BMVAL (1.5% of the site area), the Inspector did not consider that the BMVAL would be lost at all as it would instead be used *"for a dual purpose for pastoral and solar farming during the life of the proposal."* (see IR136). While the overall amount of BMVAL required was so small that the issue was unlikely to be material to the overall planning balance in any event, it is notable that the Secretary of State did not explicitly disagree with the suggestion that the use of BMVAL for the duration of the project would not give rise to its 'loss', which arguably conflicts with the position adopted by his fellow Secretary of State in the DCO decisions above.

Local decision-making

62. And how about local decision-making? There is the added spice, of course, that not all local authorities share Ed Miliband's

zeal for granting permission for solar projects. The picture is therefore mixed, although some similar lessons can be learnt. Grid connections are key and there remains uncertainty about the proper approach to BMVAL and food security.

63. In August 2024, South Staffordshire Council granted planning permission for a 48MW solar farm on Green Belt Land near Wolverhampton (23/01083/FULM). The proposal would use 53.2 hectares of BMVAL (comprising 95% of the site area) which was identified by the Council to attract moderate negative weight in the planning balance. However, the scheme had an agreed and viable grid connection meaning it could deliver energy within 12 months of a grant of planning permission. The Council found that the benefits of the scheme were such as to amount to the very special circumstances required to outweigh the harm to the Green Belt such that permission should be granted.

64. Similar conclusions were reached by New Forest District Council in a decision to grant planning permission (Ref: 23/11213) for a 15MW scheme in the Green Belt notwithstanding the harm to visual amenity and the loss of BMVAL.

65. Conversely, other local authorities are taking a more 'obstructive' approach. Wiltshire Council has recently refused planning permission (PL/2023/10394) for a 30MW scheme against officer advice, with members referring to the lack of a grid connection and the fact that 50% of the site area would be BMVAL. Swale Borough Council also refused planning permission (Ref: 23/502210/FULL) for a 40MW Scheme notwithstanding the availability of a grid connection and despite it not being within the Green Belt, members citing the loss of 61.44 hectares of BMVAL. One member is reported to have stated that it was "*insane*" to put solar farms on "*very good land*", in view of the impact on food security.

What can we learn from these decisions?

66. Here are some key points:

- (1) Expect (many) further grants of DCO consent and planning permission on the part of the Secretary of State on the basis that the benefits of the scheme outweigh the harms.
- (2) The availability of a grid connection is likely to be key to justifying the selection of a site.
- (3) The approach to BMVAL is in flux and requires resolution so that decision-makers can have clarity about how to address it. It is unsatisfactory that the Government's rhetoric conflicts with WMSs on the part of the previous administration (which remain in force), that different decision-makers are taking a different approach to whether the use of BMVAL for time limited solar development amounts to its loss at all and, that local authorities should be refusing planning permission for schemes by reference to the loss of BMVAL if, as Ed Miliband thinks, the effect of solar

farms on food security is a 'myth'.

(4) Irrespective of the Government's support for renewable energy development, resistance at the local level is likely to be a significant obstacle to the Government's plans, even if the effect is to delay the delivery of projects. Given the Government's ambition, not only in terms of scale but terms of the timing of delivery of these projects, that delay may prove to be costly.

67. There is likely to be much work at a local level on schemes which will have significant policy support but come up against local resistance, particularly if the proper approach to significant issues is not clarified.

(3) GRID CONNECTIONS

68. Generating renewable energy (whether from solar or from wind, onshore or offshore) is not an end in itself. It only serves a purpose if that energy can be supplied effectively to users by being fed into either the transmission network (the National Grid in England and Wales) or a local distribution network. In both cases there is a need for a connection at the interface between the renewable project and the relevant network, which might be at an existing point on that network or at a proposed new connection point, either planned by the network operator or proposed by the renewable developer.

69. Neither the National Grid nor local distribution networks were initially designed on the basis that they would need to accommodate large amounts of power generated by a spatially wide-spread series of renewable projects, often in relatively underpopulated rural areas or offshore. The National Grid was based around the transmission of power from a few fixed generating points (largely coal- and gas- fired power stations and the previous generation of nuclear power stations) to the main centres of population. Most power stations were located close to where there was a ready supply of coal, so in England they are more prevalent around the coal seams of the Midlands and the North of England. Nuclear power stations were (and are) located away from large urban areas and generally on the coast, with access to a steady supply of cooling sea water.

70. The National Grid provides for the long distance transfer of power from generating source to a series of transmission substations within the system, via 400kV and 275 kV power lines (overhead cables for the most part with some undergrounding in sensitive areas). Local distribution networks were largely designed around needing to take power from the transmission substations to end users, via 132 kv or 230 v power lines (overhead cables in rural locations and generally undergrounding, often via the highway network, in urban locations). Even where networks are conveniently located for new generating sources, the existing network infrastructure may not have the capacity to accommodate

the power being generated, without reinforcement or upgrade.

71. Because of both the spatial ‘disconnect’ between these existing networks and the locational sources of renewable energy generation, and infrastructure capacity constraints, the National Grid is in a process of significant upgrade, known as the Great Grid Upgrade, with several NSIP-scale projects coming forward, promoted by National Grid Electricity Transmission, NGET (such as the recently approved Bramford to Twinstead Reinforcement between Suffolk and Essex, the proposed Norwich to Tilbury Reinforcement between Norfolk and Essex, and the proposed Sea Link Reinforcement including an offshore subsea ‘bootstrap’ to connect Suffolk and Kent via the North Sea). In all, some 17 projects form part of this Upgrade, but only limited elements have been undertaken so far and some will not be in place before the mid-2030s (the Yorkshire Green project is just beginning construction but is not planned to be operational until 2027, with an end to construction in 2028, and the other projects are still at the planning and consenting stages. The Eastern Green Links 3 and 4, to upgrade connections between Scotland and England, are not planned to be completed until after 2033).

72. The Government has plans to speed up the delivery of an improved transmission network. The Transmission Acceleration Action Plan (published by DESNZ in November 2023) seeks to halve the time taken to build new transmission infrastructure from a typical 12-14 years (from identifying the need to commissioning as available for use) to 7 years. The measures to achieve this ambition include the preparation of a Strategic Spatial Energy Plan (SSEP) and both short term and long term Centralised Strategic Network Plans (CSNPs) to ensure that a co-ordinated and integrated approach is taken to delivering improvements to energy infrastructure in line with projected needs. The SSEP is a high-level plan addressing all forms of energy and the CSNP is focused specifically on electricity provision. The SSEP, which will be prepared by the new National Energy System Operator (NESO), was intended to be published by 2025 but has now been delayed to 31 December 2026³⁸ due in part to the creation of NESO under the Energy Act 2023 as a separate and independent entity, in place of the electricity system operator being an arm of National Grid, and in part due to NESO also being tasked with providing DESNZ with “practical advice” on how the UK (or at least Great Britain) can achieve clean power by 2030. Similarly, the first CSNP, also to be prepared by NESO, has been delayed until 31 December 2027.³⁹ The purpose of both the SSEP and the CSNP is to provide a strategic framework for the decisions that need to be made on what need to be built, where, and when, to allow the transmission network to be effectively and holistically upgraded, and so the delay to these plans coming forward is likely to impact on the Government’s ambition to radically shorten the delivery timescale.

73. However, the land use implications for the time being are

that the renewable projects that do come forward necessarily, if they are to be realistically capable of delivery, have to relate themselves to the current (or clearly committed) transmission and distribution networks. Rather than taking a holistic spatial approach to the optimum locations for large and small scale renewable energy proposals (wind or solar), too much is determined by the existence and location of transmission and distribution networks designed for an entirely different world of energy generation. The Government’s reforms to introduce more strategic spatial plans are obviously welcome, but the lengthy (and delayed) gestation process means that they will make little difference in the short term.

74. As well as the challenges faced in ensuring that the transmission and distribution networks are fit for purpose as regards supporting the transition to renewable energy, there is a separate constraint on that objective by reason of the regulatory regime controlling the making of connections to the transmission network. Given its largely monopolistic nature, electricity supply is a regulated market, under the overall control of the Gas & Electricity Markets Authority, which acts via the Office of Gas & Electricity Markets (Ofgem). Prior to 2024, the electricity system operator (ESO) was obliged to make a connection offer to anyone who requested such a connection (and who provided the necessary information and paid the fees). There were limited requirements placed on those given connection offers to progress the projects that would make use of that connection, and this led to connection offers being sought by many speculative projects, especially in areas of supply constraint, so that projects could ‘bank’ their connection offer whilst working up the feasibility of their projects.

75. The connection offers regime for the transmission network effectively worked on a ‘first come, first served’ basis and this led to queues developing, with otherwise deliverable projects being delayed behind speculative projects which had received offers at an earlier point in time. In November 2023 Ofgem estimated that the overall queue of projects waiting to connect to the transmission system represented almost 400 GW of generation capacity.⁴⁰ NESO estimates that the queue will have increased to over 800 GW of generation capacity by the end of 2024.⁴¹ To put those figures into context, the UK has a total installed capacity of renewable energy of 57.5 GW.⁴² NESO has estimated that, without intervention, the queue would grow by some 20 GW a month.⁴³

76. The queue (strictly, there is more than one queue because connection offers are geographically bounded, so there are areas of higher demand and areas of lower demand) also means that there is a gap between a user’s requested connection date and the offered connection date. That gap was, on average, about 47 months (just under 4 years) in April 2024 and in many cases connection offers are not available until after 2030, with some as far out as 2037.⁴⁴

38. See condition C16.10 of NESO’s operating licence.

39. See condition C17.18 of NESO’s operating licence.

40. Ofgem Decision of 13 November 2023 on CMP376 modification for Queue Management.

41. P.18 of ESO’s CMP434 Proposal Form (April 2024).

42. DESNZ Energy Trends, p.14 (September 2024).

43. See footnote 4.

44. See footnote 4; para 1.12 of Ofgem’s Decision of 13 November 2023.

77. The Government is in the process of reforming this system, having recognised the drawbacks of the ‘first come, first served’ approach. The distribution network has already operated a queue management system, including termination of connection agreements for stalled projects, since December 2020.⁴⁵ The Connections Action Plan (CAP), published by DESNZ and Ofgem in November 2023 set out proposals for reform, including allowing NESO to alter the terms of existing connection offers in some cases, and moving to a system described as ‘first ready, first connected’ in new cases. Given the size of the queue, taking action in relation to existing connection offers will be critical to the ability to allow those with otherwise deliverable projects to take advantage of any released capacity if stalled projects lose their offers.

78. Through a change (CMP376) to the Connection and Use System Code that took effect in November 2023, Ofgem included a new queue management process. This applies to all new connection offers from 27 November 2023 but, probably more importantly, also to existing connection offers where the completion date (to complete the works necessary to take up the offer) is after 27 November 2025, and also to existing connection offers with earlier completion dates but where it appears to NESO that the project is not being progressed in line with its agreed construction programme. In other words, the changes introduce a ‘use it or lose it’ approach for some existing connection offers and for all new ones.

79. In addition to the Queue Management process, NESO has also proposed changes to the details of how a connection application is assessed, including limiting the making of applications to a 2 month time ‘window’ each year, and introducing specified performance ‘gateways’. Those proposals are set out in CMP434: Implementing Connections Reform (April 2024) and CMP435: Application of Gate 2 Criteria to Existing Contracted Background (April 2024). However, whilst it was intended that the proposals would be finalised so as to allow implementation by 1 January 2025, NESO has sought a delay in the programme (in part due to the issues raised in consultation responses) to Q2/2025. Ofgem is considering this request.

80. Ofgem has already expressed the view that the proposed changes to the connections regime alone will be insufficient to resolve the problem of the connections queue, or to enable the target of clean power by 2030 to be achieved. Ofgem considers that further changes to existing licence conditions governing how network companies offer connections to the networks will be needed. Ofgem is intending to reach a final decision on the necessary changes to codes and licences by Q1/2025.⁴⁶

81. The consequences of these issues for land use planning is that both project promoters and planning decision makers (whether local planning authorities or appeal Inspectors under the TCPA 1990 regime or the Secretaries of State under the PA 2008 regime) are faced with a sub-optimal position where the practical availability of a connection offer plays an undue role in site selection and site suitability. This is a particular issue for onshore renewable proposals (whether wind or solar), where proximity to a network connection point is a key determinant for the chosen site. Due to the lack of rigour in the regulatory regime for connection offers, there are simply too many ‘zombie’ projects sitting on connection offers which are unlikely to be delivered, but the existence of those offers precludes other projects from making use of those connection points, whatever their merits in terms of planning suitability. Whilst there are reforms underway, it will take a considerable time before the ‘zombie’ projects have been ‘washed out’ of the connections queue, and a more realistic spatial approach can then be taken to the selection of connection points on the transmission network.

82. A separate issue which frequently arises in renewable cases is the role of battery storage, which is often promoted as part and parcel of a solar or wind project. Battery storage plant tends to be utilitarian in appearance, can be on quite a large scale, and requires associated development (such as a stable platform and drainage) which may be less reversible than wind turbines or solar arrays. Battery storage facilities sit outside of the NSIP regime (unless they are treated as ‘associated development’ or there is a s.35 direction in place). They may or may not require hazardous substances consent, depending on their detailed specification, which may well not be known at the planning consent stage. The NPPF offers no specific guidance on how they should be assessed (there is a passing reference to the “supporting infrastructure” for renewable development in the policy making advice at para 160(b)). NPS EN-1 recognises the role of energy storage facilities but offers little meaningful guidance. NPS EN-3 on renewable energy infrastructure includes some brief mention of energy storage in the context of solar proposals but does not set out any detailed guidance on how they should be assessed. Para 2.10.16 suggests dealing with such facilities on a “case by case basis”, which is a great help. Para 2.10.71 calls for a flexible approach, including that applicants should put forward options “with and without storage” but if an applicant has considered an option without storage and rejected it as not meeting the needs of the project, there seems little that a decision maker can do to require that option to be pursued. Thus, if battery storage is proposed, the generic guidance in both EN-1 and in EN-3 will need to be considered.

45. Open Networks Project: Queue Management Guide, Energy Networks Association (December 2020).
 46. Ofgem open letter of 16 September 2024.



Michael Bedford KC



Clare Parry



Jack Parker