Nant Mithil Energy Park, Powys.
PEDW DNS Application Ref: DNS CAS-01907-D7Q6Z1.

CPRW-RE-think Chapter 2 on

Planning and Energy Policy

Nant Mithil Energy Park, Powys.
PEDW DNS Application Ref: DNS CAS-01907-D7Q6Z1.

Evidence by CPRW-RE-think on:

Planning and Energy Policy

Application for Planning Permission under the
TOWN & COUNTRY PLANNING ACT 1990 and PLANNING (WALES) ACT 2015

REPRESENTATION on behalf of **CPRW** the countryside charity and **RE-think**, a Third-Party Objector Groups of affected local residents, in relation to an application for a 'Development of National Significance' (reference number: CAS-01907-DZQ6Z1), under the Town and Country Planning Act 1990 as amended by the Planning (Wales) Act 2015 and the Developments of National Significance (Wales) 2016 (as amended) and subsequent Regulations, for 'the construction and operation of an energy park including wind energy developments and associated infrastructure and habitat management areas' on land 'approximately 9km east of Llandrindod Wells', Powys.

Prepared by Christopher D. Ford, BA, MBA, MSc, PhD, MRTPI.

Table of Contents

1. INTRODUCTION

1.1. This submission provides a **Representation** to the Application for a 'Development of National Significance' (reference number: CAS-01907-DZQ6Z1) (Application), under the Town and Country Planning Act 1990 as amended by the Planning (Wales) Act 2015 and the Developments of National Significance (Wales) 2016 (as amended) and subsequent Regulations, for 'the construction and operation of an energy park including wind energy developments and associated infrastructure and habitat management areas' consisting of 30 wind turbines with a tip height of up to 220m and associated access tracks (Proposal) on land 'approximately 9km east of Llandrindod Wells', Powys (Site).

1.2. The Representation is submitted jointly by **CPRW** [1], a charity established in 1928, which seeks protection and enhancement to the countryside and environment in Wales, and **RE-think**, a Third-Party Objector Group of affected local residents. Whilst both groups support the need for renewable energy to address climate change, both organisations feel that this Proposal does not address that is a way that is sympathetic to and in keeping with the need to sustain nature and the environment. This submission has been prepared by Dr Christopher Ford, a Chartered Town Planner specialising in the spatial aspects of energy systems and energy policy. Credentials for the author are set out in Appendix 1.

1.3. This Representation sets out and discusses the relevant planning and energy policies. It commences by considering Welsh Government planning and energy policy, with focus on those policies which have relevance to the Proposal, a DNS Application. This includes consideration of the Welsh energy targets and progress on these. The Local Development Plan (LDP) for Powys is then considered. Next UK Government energy policy is considered particularly in relation to new policy developments and the way this is leading to major changes in the way the energy system is being changed. Given the Welsh energy targets and the major reforms taking place in the energy system consideration is then given to where this Proposal sits in relation to the progress on the developments of onshore wind energy. Finally, summary conclusions are drawn.

1.4. This submission does <u>not</u> get to the point of considering the planning balance for the case. Whilst this document sets out the planning policy criteria which should be used to assess the merits of this case, it does not assess the merits of this case against that criteria. This submission is one of a suite of connected submissions being lodged by CPRW and RE-think. One of the other documents summarises the findings of the suite of submission and assesses the impacts of the Proposal. That submission, Chapter 20, weighs the planning balance and considers the Proposal in the light of the relevant policies.

[1] Campaign for the Protection of Rural Wales.

2. WELSH GOVERNMENT PLANNING & ENERGY POLICY

2.1. The Welsh Government's Planning and Energy Policy is encapsulated in the 2021 *Future Wales, The National Plan 2040* (FW2040) and the various Policy Statements together with other associated documents. *Planning Policy Wales* (PPW) supports FW2040 setting out the land use policies of the Welsh Government. These, together with a series of Technical Advice Notes (TAN) and related guidance form the Welsh planning policy framework.

2.2. Welsh planning policy, in the form of FW2040 and PPW, are considered here first, then the relevant energy aspect of planning policy, relevant to this Proposal, are considered. This section concludes by considering the various Welsh energy and emissions targets and ambitions.

Future Wales, The National Plan 2040 and Renewable Energy

2.3. Welsh planning policy for the Proposal is covered by the *Future Wales, The National Plan 2040* (FW2040), which provide the National Development Framework for Wales. It is a strategic plan and part of the statutory Development Plan. It contains a 'spatial plan' which "*sets a direction for where we should be investing in infrastructure and development for the greater good of Wales and its people*" (p6). FW 2040 identifies the priorities for Wales as the climate emergency, the ecological emergency, a sustainable and re-energised economy, and addressing the previous inequality of wealth and access to services.

2.4. FW2040 is supplemented by *Planning Policy Wales* (PPW) [2], which sets out the land use planning policies of the Welsh Government. PPW and FW2040 set out how the planning system in Wales can assist delivery at the national, regional and local level through a plan-led planning system which determines where development should be located. PPW sets out the key planning principles, covering strategic and spatial choices with 'active and social places', 'productive and enterprising places', and 'distinctive and natural places'.

2.5. FW2040 and PPG are supplemented by Technical Advice Notes (TANs) which provide technical advice to aid the delivery of planning policies. Previously this included a TAN on renewable energy (2005), which included identification of seven Strategic Search Areas (SSA), but this has been withdrawn. In 2021 the SSAs have been replaced following an assessment of 'priority area' for onshore wind and solar. In FW2040 some of these became "Pre-Assessed Areas" (PAA) for renewable energy.

2.6. FW2040 and PPW sets out general planning polices for sustaining Wales's economy whilst protecting its environment. These include spatial strategies and regional growth planning. This includes supporting the rural economy as well as urban settlements and

[2] Edition 12, published February 2024.

interconnectivity. Wales-wide specific policy topics include 15 – National Forestry, and Wales's Distinctive and Natural Places themes. The latter includes protection for the "*historic environment, landscape, biodiversity, geodiversity and habitats, … air quality, soundscape, water services, flooding and other environmental risks*" (PPW 6.01).

2.7. As the Proposal is a renewable energy development, in reviewing Welsh planning and energy policy this assessment focuses on policy in respect to renewable energy development, in FW2040 and then PPW. It then considers wider planning policy in these documents, which has some relevance.

2.8. FW2040 has two relevant policies on renewable energy development, Policies 17 and 18. Policy 17 deal with renewable energy and associated infrastructure Wales-wide, whilst Policy 18 focuses on renewable energy Developments of National Significance (DNS).

2.9. For developments of all scale, Policy 17 confirms the Welsh Government strongly supports renewable energy development in principle. Accordingly, FW2040 requires decision makers to "*give significant weight to the need to meet Wales' international commitments and our target to generate 70% of consumed electricity by renewable means by 2030 in order to combat the climate emergency*". It goes on:-

> " *In PreAssessed Areas for Wind Energy the Welsh Government has already modelled the likely impact on the landscape and has found them to be capable of accommodating development in an acceptable way. There is a presumption in favour of large scale wind energy development (including re-powering) in these areas, subject to the criteria in policy 18. Applications for large scale wind and solar will not be permitted in National Parks and Areas of Outstanding Natural Beauty and all proposals should demonstrate that they will not have an unacceptable adverse impact on the environment."*
>
> - Wales wide, *"Proposals should describe the net benefits the scheme will bring in terms of social, economic, environmental and cultural improvements to local communities. New strategic grid infrastructure for the transmission and distribution of energy should be designed to minimise visual impact on nearby communities. The Welsh Government will work with stakeholders, including National Grid and Distribution Network Operators, to transition to a multivector grid network and reduce the barriers to the implementation of new grid infrastructure.*

2.10. Policy 18, for DNS requires such developments to "*be permitted subject to Policy 17 and the following criteria:*

> *1. Outside of the PreAssessed Areas for wind developments and everywhere for all other technologies, the proposal does not have an unacceptable adverse impact on the surrounding landscape (particularly on the setting of National Parks and Areas of Outstanding Natural Beauty);*

2. There are no unacceptable adverse visual impacts on nearby communities and individual dwellings;

3. There are no adverse effects on the integrity of Internationally designated sites (including National Site Network sites and Ramsar sites) and the features for which they have been designated (unless there are no alternative solutions, Imperative Reasons of Overriding Public Interest (IROPI) and appropriate compensatory measures have been secured);

4. There are no unacceptable adverse impacts on national statutory designated sites for nature conservation (and the features for which they have been designated), protected habitats and species;

5. The proposal includes biodiversity enhancement measures to provide a net benefit for biodiversity;

6. There are no unacceptable adverse impacts on statutorily protected built heritage assets;

7. There are no unacceptable adverse impacts by way of shadow flicker, noise, reflected light, air quality or electromagnetic disturbance;

8. There are no unacceptable impacts on the operations of defence facilities and operations (including aviation and radar) or the Mid Wales Low Flying Tactical Training Area (TTA7T);

9. There are no unacceptable adverse impacts on the transport network through the transportation of components or source fuels during its construction and/or ongoing operation;

10. The proposal includes consideration of the materials needed or generated by the development to ensure the sustainable use and management of resources;

11. There are acceptable provisions relating to the decommissioning of the development at the end of its lifetime, including the removal of infrastructure and effective restoration;

The cumulative impacts of existing and consented renewable energy schemes should also be considered.

2.11. FW2040 then goes on to set some context for these policies. It confirms there are abundant opportunities to generate renewable energy in Wales and re-affirms the Welsh Government targets (see below).

2.12. For DNS, being onshore wind energy over 10MW, it requires the criteria-based Policies 17 and 18 to be taken into account in determinations, "*along with detailed advice on assessing benefits and impacts in PPW*" (p96) (see below). It reaffirms that "*Proposal should ensure there is no significant unacceptable detrimental impacts on the surrounding natural environment and local-communities and the developments delivers positive social, environmental, cultural and economic benefits*" (p96).

2.13. The extent of Pre-Assessed Area for onshore wind energy development is given on the map on page 94, with ten areas identified across Wales. "*In these areas the landscape*

effects have been considered and there is a presumption in favour of large-scale onshore wind energy development and the associated landscape change subject to the criteria in Policy 18. Outside these areas a positive policy framework still exist subject to policy 18" (p97).

2.14. Related to this FW20240 recognises that there are "*significant challenges that grid infrastructure and capacity will have on the potential for new onshore and offshore renewable energy development across Wales*" (p99).

2.15. Following on from FW2040 coverage of renewable energy and turning then to Planning Policies Wales (PPW), in relation to energy development, this sets a clear energy hierarchy for planning in Wales. That is; firstly, reduce energy demand; secondly, use energy efficiently; thirdly, renewable energy generation; fourthly, minimise carbon impact of other energy generation; and finally maximise the extraction of carbon intensive energy materials (PPW 5.7.13).

2.16. In respect to 'locational policies for renewable energy development' PPW says "*planning authorities should support and guide renewable energy development to ensure their area's potential is maximised*" (5.9.14). It calls for these developments to be identified by deploying clear criteria-based policies, including acceptance of landscape change, setting out detailed locational issues.

2.17. Specifically relating to large scale wind energy developments, such as this Proposal, PPW recognises the Wales has "*abundant wind resources*" (5.9.16). PPW confirms that the "*Welsh Government has already modelled the likely impacts on the landscape and has found them to be capable of accommodating development in an acceptable way*" and has identified 'Pre-assessed Areas' where there is a "*presumption in favour of large-scale wind energy developments subject to other criteria contained within the policy*" (5.9.17).

2.18. PPW requires that when determining applications the planning authority should take into account: the contribution of the proposal will make to meeting identified Welsh, UK and European targets; the contribution to cutting greenhouse gases emissions ; and the wider environmental, social and economic benefits and opportunities from renewable and low carbon development (PPW 5.9.19).

2.19. PPW states that planning authorities should also "*require suitable ways to avoid, mitigate or compensate adverse impact of renewable … energy development … which should take into account: the need to minimise impacts on local communities, such as from noise and air pollution, to safeguard quality of life for existing and future generations; the impact on natural and historic environment; cumulative impact; the capacity of , and effects on the transportation network; grid connections issues where renewable electricity energy development are proposed; and the impact of climate change in the location, design build and operation of renewable … energy*

development. In doing so, consider whether measures to adapt to climate change impacts give rise to additional impacts" (PPW 5.9.20).

2.20. In regard to local energy generation, having confirmed the presumption in favour of development in identified or Pre-Assessed areas for renewable energy development, PPW states, "*outside identified area, planning applications for renewable energy developments should be determined based on the merits of the individual proposal*" (5.9.15).

2.21. More generally in regard to energy developments PPW calls for the "*planning system* to *secure an appropriate mix of energy provision which maximises benefits to our economy and communities whilst minimising potential environmental and social impacts*" (5.5.6). Accordingly, the "*planning system should: integrate development with the provision of additional electricity grid network infrastructure; … optimise the location of new developments to allow for efficient use of resources; maximise renewable … energy generation*" (5.7.7).

2.22. In respect to electricity grid network PPW recognises that "*an effective electricity grid networks is required to fulfil Welsh Governments' renewable ambitions*". Accordingly, "*an integrated approach should be adopted towards planning energy developments and additional electricity grid network infrastructure, …* including *additional electricity grid … to support pre-Assessed Areas …* and *more generally* " (5.7.8).

WELSH ENERGY TARGETS

2.23. The Welsh Government policy has set various energy targets. These are: (a) "*for Wales to generate 70% of its electricity consumption for renewable energy by 2030;* (b) *for one Gigawatt of renewable energy capacity in Wales to be locally owned by 2030; and* (c) *for new energy projects to have a least an element of local ownership*" (PPW 5.7.14).

2.24. As well as re-affirming the Welsh Government targets, FW2040 confirms, on several occasions, that there are abundant opportunities to generate renewable energy in Wales. The Welsh Government gives positive support for onshore wind energy development and see this as the primary vehicle for achieving its renewable energy targets. Supporting this the Government has already identified ten Pre-Assessed Areas (PAA) where there is a presumption in favour of landscape change to deliver this target.

2.25. The question therefore arises whether the Pre-Assessed Areas (PAA) are sufficient to deliver the Welsh Governments renewable energy generation target.

2.26. In relation to Welsh Government target (a) 70% of Wales's electricity consumption to be met by renewable energy by 2030, it is necessary to know what the electricity consumption is in Wales, to be able to quantify this target. Welsh Government data

show that electricity consumption in Wales in 2021 was 14.1TWh. That equates to 14,100 GWh of electricity consumption per year. Or, an average of 1.6 GW of electricity consumption at any one moment in time (14100/365/24). The Welsh Government's target of 70% of this therefore equals 1.126 GW (1.6 * 0.7). Or 9.87 TWh per year.

2.27. The ten PAAs provides for 2,731.6 square kilometres of land for potential development of wind energy. The Proposal covers a land area of 18.37 square kilometres and has a stated generation capacity of 198MW. That equates to an energy density of 10.78 MW per square kilometre (198/18.37). Applying the Proposal's energy density to the PAA shows that were these to be fully developed they would have a generating capacity of 29,440MW (2731*10.78) or 29.4GW. This potential capacity is therefore substantially greater than would be required to fulfil the Welsh Government's target for generation in Wales.

2.28. Wind farms are intermittent generators of electricity only producing electricity when the wind blows. To calculate the actual annual output from a wind farm, a load factor needs to be applied. This is the percentage time of a year when the wind farm is producing is maximum potential. The load factor needs to be applied in order to quantify the annual output each year.

2.29. Data on the load factor for an operating wind farm in Wales is available for Pen y Cymoedd wind farm in south Wales in the Cynon Valley. It has a load factor of 34.5%.[3] Applying this load factor to the Proposal's energy density gives a net energy density (after adjusting for load factor) of an annual output of 3.72 MW per square kilometre (10.78 * 0.345). Therefore, the annual generation of electricity per square kilometre, from the Proposal, is estimated at 32,579 MWh per year (3.72 * 365 * 24).

2.30. Applying this figure to the area covered by PAA means that the potential annual generating from PAA can be calculated. The result is that 88,993,659 MWh per year (32,579 * 2731.6), or 88.9 TWh per year, is available from the PAAs.

2.31. Compared with the Welsh Government's target, the potential output from Pre-Assessed Area is therefore more than nine-fold greater than the Welsh Government's 70% of Wales's electricity consumption target (88.9 TWh / 9.87 TWh = 9.0). This confirms the Welsh Government's recognition that Wales has 'abundant wind energy resources' is indeed sound. It is therefore evident that the PAAs have plenty capacity to deliver the Welsh Government's target of meeting 70% of Welsh electricity consumption with renewable energy generation by 2030.

[3] Pen y Cymoedd has a maximum installed generating capacity of 228MW. With a 34.5% load factor is produces 689,061 MWh of electricity each year. That is 228 * 24 hours * 365 days at 34.5% load factor. Pen y Cymoedd has wind turbines with a maximum tip height of 145m. Experiences shows the more recent wind farm developments, with taller wind turbines (such as the Proposal) will have a higher load factor because they reach up higher into the air stream. Load factors of 40 to 45% have been achieved elsewhere.

2.32. In fact, it is plain that the PAAs have surplus capacity to meet all of the Welsh electricity consumption in 2030 and beyond. With Welsh electricity consumption at 14.1TWh per year, the PAAs have sufficient capacity to meet that need by more than six-fold more (88.9 / 14.1 = 6.3).

2.33. As the Welsh Government accepts that the PAA are areas with presumption in favour of wind energy development and these areas have plentiful capacity to more than meet Welsh electricity demand the observation that arises, it is evident that it not necessary to go outside these areas for renewable energy development.

2.34. The inevitable conclusion is that the PAA analysis means that the remainder of Wales, outside the PAA, are in someway not or less suitable for renewable energy development. Given the surplus of capacity in the PAAs there is no requirement to have renewable energy development outside the PAAs.

2.35. Most of the Site for the Proposal lies outside the PAAs. Approximately 12% of the Site lies within a PAA. Of the 30 turbines proposed only 6 lie with the PAA. These 6 turbines can be assessed for the effects other than the presumption of being acceptable in terms of landscape. The remainder of the Site and 24 turbines are not in areas where the Welsh Government has identified as suitable for wind farm development.

2.36. As Welsh Government Policy recognises, Wales has an abundant supply of opportunities for renewable energy. The analysis here confirms that and shows that only a very small percentage of the Welsh land area is needed to provide Wales with a 100% supply of clean power.

2.37. On this basis there is no need for the thresholds and planning criteria set out in FW2040 and PPW to be stressed to reach the energy objectives. As FW2040 explains Wales is a country with a beautiful natural environment, with a strong culture and heritage. Given the scale of opportunities for renewable energy elsewhere there is no need to sacrifice this to deliver a clean power system for Wales. Consequently, a high bar should be set when considering this Proposal against the planning criteria set out in FW2040 and PPW.

2.38. Planning judgements involve the balancing of the various factors for and against a development. It is plain that Wales's energy objective can be easily met. Therefore, the weight to be applied to the requirement for renewable energy should be limited. There is no need to sacrifice the environment and local communities.

3. LOCAL DEVELOPMENT PLAN POLICIES

3.1. This section sets out the local development plan policies relevant to the Proposal. The Proposal lies within Powys. The Powys Local Development Plan (PLDP) was adopted in 2018 and is due for replacement in 2026. As such it is reasonably out of date and imminently due for refresh. However, as is made clear in FW2040 (p96), DNS

developments are treated as national developments and "*must be determined in accordance with Future Wales*". The relevance of PLDP is therefore limited to the elements that it adds to the Development Plan. LPDP policies are therefore only briefly touched upon here.

3.2. The most relevant PLDP policies relevant to the Proposal is RE1 – Renewable Energy. This specifies that: RE1-1) proposal in Strategic Search Areas for wind farms over 25MW will be permitted subject to RE1 criteria 3 to 5; RE1-2 mostly relates to solar energy; RE1-3 says renewable energy developments should comply with other general PLDP policies; RE1-4 requires only satisfactory mitigation and eventual restoration, without specifying criteria; RE1-5 refers to additional compensation, but again without specifying criteria. Whilst the apparently most relevant PLDP policy, in practice RE1 offers little guidance. To the extent that this Policy refers to Strategic Search Areas, the Areas have been withdrawn by the Welsh Government and replaced by Pre-Assessed Areas.

3.3. Supporting PLDP RE1 is *Powys Supplementary Planning Guidance on Renewable Energy,* adopted in April 2019. This sets out the relevant PLDP policies relevant to renewable energy developments. It affirms policy RE1. It also confirms policies SP7 and DM13 are relevant. SP7 on Safeguarding of Strategic Resources and Assets provides: protection for international and national designated environmental protection; protection for heritage assets and recreational assets, and sustains valued landscapes, military training areas, mineral resources and strategic infrastructure routes. Policy DM13 on Design and Resources requires good quality design which respects amenity, infrastructure and resources. Developments are required to: complement and enhance the character of the surrounding area; preserve local distinctiveness, sustain Conservation Area; not adversely affect established tourism assets; not unacceptably affect local residents amenity; and other requirements. Section 9 of the Supplementary Guidance sets out a list of the factors that need to be considered in relation to renewable energy developments.

3.4. Other relevant generic PLDP policies are: DM2 on the Natural Environment, DM4 on Landscape, DM7 on Dark Skies and the Supplementary Guidance on Landscape (2019). These are referred for their precise terms. The Landscape Guidance reminds us that the PLDP Objective 13 is "*to protect, preserve and / or enhance the distinctive landscape of Powys*". This is supported by PLDP Polices SP7, DM4 and DM13.

4. UK GOVERNMENT ENERGY POLICY AND POLICY DEVELOPMENTS

4.1. Having considered Welsh policy this submission now turns to UK Government policy relevant to the Proposal. FW2040 recognises that "*the UK energy system is now undergoing significant change, with energy generation and delivery becoming more*

distributed in the communities and regions where the energy is used" (p99). It is therefore necessary to consider these changes, by looking at the 'significant change' being instigated by UK Government energy policy, and the resulting revisions to UK energy market regulation and related matters, as they affect consideration for this DNS Application. In any event, energy policy and the operation and regulation of the energy system is overseen by the UK Government.

4.2. This section of the Submission therefore sets out relevant UK energy policy, and considers recent UK policy developments including any change arising from the election of a new Government in July 2024. The section concludes by describing the changing situation for Welsh renewable energy development, which flows from the changing UK Energy Policy arrangements.

KEY UK ENERGY POLICY DEVELOPMENTS

4.3. Similar to Welsh Government policy, UK energy policy seeks to address climate change by decarbonising society as a whole. The Climate Change Act 2008, as amended in 2019, means the UK has a legally binding commitment to achieving Net Zero by 2050, with a reduction in greenhouse gas (GHG) emissions of 100% compared to 1990 levels. Key elements of this policy are the adoption of carbon budgets, setting out the record of progress and the areas where progress can be made to the delivery of Net Zero. This will ultimately mean decarbonising transport, heating, industry and society.

4.4. An early objective, for over a decade now, has been the decarbonisation of the electricity supply industry (ESI). Considerable progress has been made with this, by taking coal-fired generation out of use and the encouraging renewable electricity generation. In early 2025 renewables exceeded 50% of UK generation and through 2024 provided 42% of electricity across the year.

4.5. Prior to the election of the current UK Government (in July 2024) various long-term changes to energy policy and energy market regulations have been under development. Under Government direction, these were being driven by the regulator, Ofgem, and the National Electricity System Operator (NESO) (or the prior organisation: ESO). These are being continued and supported by the new UK Government. Three main areas of reform to the energy system are being applied.

4.6. **Firstly**, market regulatory reforms are being introduced to address the geographic imbalance of generation and demand, and thereby minimise the need for transmission investment. The key driver for these reforms is the statutory obligation to minimise costs to consumers [4]. This is being undertaken via a Review of Electricity Market Arrangements (REMA), commenced in 2022.

[4] Electricity Act 1989 (as amended), section 3A, 'The principal objective and general duties of the Secretary of State and the Authority'.

4.7. In 2024 the REMA Consultation stated that "*a range of underlying market failures and limitations of existing interventions mean current electricity market framework will not deliver the secure clean low-cost electricity system we need in the future*" (p9). The Consultation has four key topics of system reforms relating to: 'passing on the value of lower cost renewables', 'retaining CfDs' with revisions, moving away from unabated gas, and operating a renewable energy system cost effectively. Essentially these say that; use of unabated gas will in time fall away; Contract for Difference (CfD) support will continue, but needs revision; the Capacity Market should be retained; short and long duration storage is needed; and it is vital that the locational signals to the market are substantially strengthened (see Consultation pages 11 to 13).

4.8. The last of these recognises that the cost of the energy system to consumers is being considerably unnecessarily increased because renewable energy developments are being developed in locations that are a long way from centres of demand. As the REMA Consultation observes "*resolving this challenge [5] is therefore one of the most significant issues which needs to be addressed in our future energy system*" (p87).

4.9. This problem of 'geographic imbalance' arises where generation, such as this Proposal, is located far from demand. Siting wind farms in Mid Wales, for example, means that the energy has to be transported some 80km to the population and energy demand centre of South Wales. Where there are intervening nationally protected landscapes the transmission line would be need to 150km long.[6] Whereas wind farms in southern Wales, close to centres of population, would require a far shorter transmission distance and therefore cost consumers less.

4.10. The REMA Consultation gives further detail on the scale of the problems arising from locating renewables energy distant from demand. It states that NESO has had to take "*balancing actions at times exceeding 50% of national demand*" (p87). That is 50% of the UK's total national electricity consumption!

4.11. Under the REMA programme the UK Government has decided it needs to ensure developers have "*more efficient locational signals through electricity markets, introducing more efficient locational signals*" (p88). In July 2025 the Government announced it would provide the stronger signals to the market by introducing a 'Reformed National Pricing' and by directing new generation to suitable locations through a planned energy system (see below – second reforms). The Reformed National Pricing will introduce a transmission charge cost penalty to generators which locate far from demand.

4.12. The **second** area of energy system reform relates to the way decisions are made about the location for new generation. In the past, since ESI privatisation, developers of new

[5] '*This challenge*' refers to the need to substantially strengthen locational signals to the market so that the renewables-based energy system delivers cost effective energy by locating new development close to demand.

[6] Although not using the Towy Usk proposal could significantly reduce the length of transmission lines.

electricity generation have decided where they choose to locate their developments. They have been able to decide the technology they deploy (wind, gas, solar, etc), and the size of their power station as well as the location. Allied to this the generators have had a statutory right to be connected to the electricity network. Or rather, a requirement that the electricity network is provided to their chosen site with suitable infrastructure capacity. Since the cost of the electricity network is socialised, this means that generators do not bear the true financial cost of their commercial choice. It is this arrangement that has led to the 'geographic imbalance' of generation being located far from demand.

4.13. A further consequence of these post privatisation arrangements is that transmission and network infrastructure are built after generators have constructed their power station. Thus, there has been no co-ordination between network development and new generation construction.

4.14. Following a Review of Electricity Networks the Government decided to fundamentally change these arrangements.[7] Instead, the Government will, from now onwards, decide how much generation and storage is required in each part of the country. The Government will set the 'permitted capacity' of generation and storage for each technology, by region. The Government is being supported in this by NESO.[8]

4.15. As part of the change, from a market-led to a Government determined, energy system NESO will prepare strategic plans for future development of the energy system. NESO is currently preparing a Strategic Spatial Energy Plan (SSEP), which will be consulted upon and agreed by Government in 2026. Children of this Plan will be the Centralised Strategic Network Plan (CSNP) and Regional Energy Strategic Plans (RESPs). The prime objective of the SSEP and the related plans, is to co-ordinate the development of new generation with NETS network development. So that generation and network development go hand-in-hand. Consequently, speculative new generation developments unrelated to network capacity, such as this Proposal, will not arise in the future. Thus, NESO, on behalf of the Government, will determine where new generation should be located and tie this in to the expansion of the NETS.

4.16. The **third** area of change to the energy system is Connection Reform. A result of the old market-led arrangements is that a hiatus has arisen with applications by generators to connect to the electricity grid. As explained, generators used to be able to decide where to locate new generation and then demand a grid connection. This operated on a first come, first served basis and was leading to unnecessarily high levels of new network requirements. As a result, speculative 'zombie' projects [9] contributed to

[7] Nick Winser, Electricity Networks Commissioner Report, 2023.

[8] NESO themselves encapsulate the change taking place in the energy system. Previously this electricity system operator (ESO) was part of National Grid electricity transmission. Rather than being privately owned it now a Government agency.

[9] 'Zombie projects' are proposed new generation which were either purely speculative (to obtain a position in the grid connection queue) or, for various reasons, were unlikely to be built.

blocking the queue to obtain grid access , whilst important deliverable projects were (and are) being delayed. Ofgem states that the queue to connect to the grid is four times more than is needed. Consequently, most new generation projects are not needed.

4.17. Through Ofgem and NESO, the Government is introducing new arrangements for connecting generators to the grid. From summer 2025, new grid connection applications with be ordered, with priority given to: (i) those that are required by 2030; (ii) Then, with second level importance, those that could be needed for 2035; and (iii) All other grid connection applications will be "*deprioritised*".

4.18. The choice over whether each individual generation and storage project is required or not is being made by NESO, on behalf of Government. An assessment, positioning each project in the grid connection queue, is being undertaken at this time.[10] To make this assessment and award the priority level to each project, NESO will determine whether each project is ready to be developed, known as 'readiness', and whether each project is "*strategically aligned*". Strategic alignment is judged on where the project is located and whether the required "*permitted capacity*" for that region and technology has been or is being met or not. Where a project is 'ready' and 'strategically aligned' it will be awarded a 'Gate 2 offer'. This means it will be given priority for a grid connection. Remaining projects will be held in queue and in some cases will not be needed and thus not awarded a grid connection.

Clean Power 2030 Action Plan

4.19. Whilst these three major changes to the energy system have been under development for some years, these have been brought together in the Government's new primary energy policy. In December 2024 the Government announced the 'Clean Power 2030 Action Plan' [11] (CP30 [12]). This policy seeks to deliver a 'clean electricity system' by 2030. 'Clean power' means having an electricity system which is based on a '100% low carbon electricity generation 'when available'. It will therefore minimise the use of fossil fuel. 'When available' means when there is sufficient renewable electricity capacity to meet the usual winter and summer demand for electricity. As renewable generation is intermittent [13] it is expected that gas generation will still be required to step in to meet any shortfall in electricity generation. The Government expects that fossil fuels (gas) will only be required for less that 5% of annual electricity generation.

4.20. A key element of the CP30 policy is to implement the various energy system reform described earlier. This particularly applies to: (i) the move away from a market-led

[10] December 2025.

[11] DESNZ, Clean Power 2030 Action Plan: a new era of clean electricity. 13 December 2024.

[12] Sometimes also abbreviated to CPAP (though not here).

[13] Only generating electricity when the wind is blowing or the sun shining.

system to a planned and co-ordinated energy system (under SSEP); and (ii) to an energy system where the Government decides how much generation and storage is required by technology and for each region. The Government wishes to ensure that generation is located as close as reasonably possible to demand, so that the amount of transmission infrastructure required is minimised.

4.21. The primary goal of the Government's CP30 energy policy is to reduce electricity bills to consumers by: (a) reducing the dependency on international gas prices with more domestically produced renewable energy; (b) keeping generation close to centres of demand to minimise the cost of new transmission infrastructure; (c) avoiding wasteful investments in inefficient arrangements.[14]

4.22. Whilst the CP30 main documents sets out the broad policy, the CP30 Connection Reform Annex sets out the detailed requirement for the pathway to clean power in 2030 and beyond. It provides quantified details of the "*NESO-led process of connection reform*". Specifically, it gives the "*permitted capacities*" for "*generating technologies and regional breakdowns for onshore wind, solar and batteries*". It reaffirms that the Government will bring in legislation "*to ensure connections reforms aligns with strategic energy and network plans to support delivery of Clean Power by 2030*" (p4).

4.23. The Connection Reform Annex explicitly states its purpose is "*removing excess generation from the connection queue*". The Government says generation will be prioritised where it is most needed. Conversely generation that is not needed will be deprioritised.[15]

4.24. The CP30 Connection Reform Annex (CP30 CR Annex) sets out the regional 'permitted capacities' for each technology. The CP30 CR Annex splits these regional capacities between transmission network connected and distribution network connected generation. Required capacity for each region is given for each technology for 2030 and 2035. However, there is no regional split given for onshore wind for 2035. That is because beyond 2030 this will be subject to revision which will be carried out under the SSEP process. Table 6 in the CP30 CR Annex does gives a split for onshore wind for 2035, between Scotland, in one row, and England and Wales, in another.

4.25. In specifying that the Proposal will be connected to the grid, via the Green Gen Towy Usk project, which will connect to the 400kV NETS near Carmarthen, the Applicant is stating that the Proposal hopes to be connected to transmission network. Therefore, this Proposal falls into the 'Transmission connected — regional capacity breakdown'. This is shown in Table 2 of the CP30 CR Annex.

[14] This last point is particularly relevant to this Proposal and the Applicant's intention to connect to the NETS via the Towy Usk 97km 132kV OHL project, as this will result in significant energy losses which will fall on consumers rather that the Applicant (See the CPRW/ Re-Think submissions 'Introduction' for details).

[15] I.E. Not awarded a grid connection.

4.26. This Proposal is located in the T8 region which is named as 'S. Wales & the Severn' region and is shown in Table 3 'Mapping of transmission network region codes'. Table 2 shows that this T8 region has a 1,300MW 'permitted capacity' for onshore wind for 2030.

5. IS THIS PROPOSAL NEEDED

5.1. A central question for any development is whether that project is needed or not. Previously, under the market-led arrangements, there was a general presumption of need for any renewable generating project, anywhere. In recent years renewable energy has grown from being nascent to an established mainstream source of electricity generation. As the Clean Power Action Plan makes clear, the energy system being 'clean' is now within sight. The clean power energy system is now only four years away. So, the old free-for-all is no longer appropriate. Now, with a planned energy system, there is a new clarity as to what the capacity requirement is for each technology and where that is needed. Therefore, the old presumption of any renewable energy anywhere has gone. There is now clarity over whether each new generation project is need or not.

5.2. Most developers are still approaching energy development based on the old market led system, where they can go anywhere. Frankly, they have not adjusted to the changed arrangements and not recognised that the market-led approach has ended. However, decision making on renewable energy proposals should be based on the new planned energy system. This identifies how much of each technology is needed for each region and when this is needed.

5.3. Each proposal should be assessed against the Welsh and UK identified need. That identifies how much capacity is 'permitted' for each technology, for each region. Against that permitted capacity there is the known capacity which is already operating. NESO has also identified 'protected capacity', which are projects currently or shortly to be constructed. The remainder, after already operating and protected, is the 'required capacity' where additional renewable capacity is needed to meet the regional requirement.

5.4. This section of this submission now applies the new energy system arrangements, to assess whether this Proposal is needed. As set out above, the CP30 policy, particularly the Connection Reform Annex, together with the ongoing Connection Reform process, identifies specifically how much generating capacity is required. Under the Connection Reform process, in December 2025, NESO provided information on the required capacity for the T8 region, where this Proposal is located, along with a similar picture for the whole country.[16]

[16] NESO, Connection Reform Results, December 2025. (https://www.neso.energy/industry-information/connections-reform/connections-reform-results, accessed 13/12/25). (NB. This information is only available on the web and is not available in print format. It cannot therefore be lodged for this DNS examination).

5.5. As set out above, the Proposal is to be connected to the transmission NETS and located in the T8 'S. Wales and Severn' region. As given above, the planned capacity for this region of onshore wind generating capacity, by 2030 is 1,300MW.

5.6. The data released by NESO in December 2025 shows, for each technology and each region: (a) how much capacity has applied for 'gate 2' under the Connection Reform process; (b) which projects applied; and (c) how much of the applying capacity is required to deliver the 'permitted capacity' for 2030.

5.7. The recent NESO Connection Reform data for onshore wind for the T8 South Wales & Severn region shows that 2,227MW of onshore wind capacity applied for 'Gate 2' status. The region was therefore oversubscribed by 71% above what is needed for the region (2227 / 1300 =1.71). However, this does not take account of the exiting operating and protected capacity in the region. Taking account of this existing and protected capacity, of the 2,227MW that applied for 'Gate 2', NESO states that only 834MW is need for 2030. In other words, only 37% of the Connection Reform process application for onshore wind in 'South Wales and Severn' is needed for Clean Power in 2030 (834 / 2227).

5.8. By deduction from these figures, it is possible to quantify how much onshore wind capacity is already operating and under construction in the region. If the permitted transmission connected capacity for the region is 1,300MW and the required capacity is 834MW, this means there is 466MW of transmission connected onshore wind energy capacity are already operating or under construction in the region (1300 – 834).

5.9. Whilst the CP30 Connection Reform Annex does not give onshore wind permitted capacities for 2035 for each region of England and Wales, it is possible to estimate what those capacities would be. The 2030 regional breakdown for onshore wind in England and Wales is seen by NESO as proportionate to the long terms capacities each region is capable of providing. This provision takes account of the future transmission infrastructure capacity and the geographic suitability of the region to accommodate onshore wind energy.

5.10. The CP30 CR Annex shows that for England and Wales 8,600MW on onshore wind energy capacity is required by 2030. Of this 1,300MW, or 15%, is transmission connected generation in the T8 South Wales and Severn region. The CP30 CR Annex shows that an additional 7,000MW of onshore wind energy capacity is required in England and Wales, between 2030 and 2035. On a pro rata basis an additional 1,088MW will be needed for transmission connected generation in the South Wales and Severn region (7000 * 0.15).

5.11. As stated, the NESO December data shows that 2,227MW applied for Gate 2 for 2030. These are project that NESO now considers are capable of being delivered by 2030. Those projects not required to be delivered by 2030 will be held in the grid connection

queue for later delivery (if required). This queue is ordered by the date on which the developer applied for a grid connection. Under the new Connection Reform arrangements NESO has an obligation to treat application to connect to the grid in this chronological order, as long as each project is 'ready' and 'strategically aligned'.

5.12. As set out above, of the 2,227MW applying for 2030 Gate 2 status 834MW are required for delivery by 2030. This leaves 1,393MW of capacity in this region which remains in the grid connection queue (2227 – 834).

5.13. This analysis shows that for transmission connected onshore wind energy for the T8 South Wales and Severn region the requirement for 2035 is already more than fully met. The requirement for additional generating capacity, for the region, for delivery between 2030 and 2035 is 1,088MW. Yet, already waiting in the queue is 1,393MW. The queue exceeds the required 'permitted capacity' for 2035. Those projects already in the queue will be given priority over projects which apply later for a grid connection. It is notable that this does not include the Proposal.

5.14. Consequently, the wind energy generating capacity from **this Proposal is not needed**.

5.15. In summary, the purpose of the Government's energy system reforms are to move to a planned energy system and reform grid connection arrangements. Moving to a planned energy system means the Government has identified what the required generation and storage capacity is for each technology and each region. This is being phased over time, so as to specify what dates these permitted capacities are needed for. The objective of these new energy system arrangements are to deliver net zero in a cost-efficient way for consumers. In so doing the Government has moved away from the old market-led arrangements. It is perhaps understandable that some energy developers still think they can apply to build wind farms anywhere they wish. However, that is not the case.

5.16. As well as UK energy policy and energy system reforms, the Welsh Government has also set targets for renewable energy generation. As set out earlier, the Welsh Government policy is 'for Wales to generate 70% of electricity consumption from renewable energy by 2030'. This policy was proposed, as one of the key energy ambitions (see above 2.23), in 2017. However, the UK Government, only set a year ago, is more ambitious that this. The UK Government ambition is 100% Clean Power by 2030. This surpasses the Welsh Government's earlier target. Thus, if the UK government achieves Clean Power by 2030 this is more than meets the Welsh Government's 70% target.

5.17. Where the Welsh Governments target are in doubt is in relation to the objective to have 1GW of renewable energy locally owns and new energy projects to have at least an elements of local ownership. This Proposal does not assist that.

5.18. The CP30 analysis set out above relates to regions used by NESO and particularly the T8 South Wales and Severn region. This obviously does not include all of Wales and also includes areas outside of Wales [17]. However, other UK Government data does distinguish renewable generation in Wales. This shows that, as of 2025, Wales already has 1,220MW of onshore wind energy capacity currently operating, with a further 689MW already consented and undergoing or awaiting construction. This surpasses the 1,126MW required for Wales to generate 70% of Welsh consumption from renewables. Allied to this, the increase in onshore wind and solar capacity set out in NESO's December 2025 data shows that Wales is on course to achieve near 100% renewable energy by 2030.

6. CONCLUSIONS

6.1. This Submission, regarding the DNS Application for the Nant Mithil Energy Park, in Powys, has considered the energy and planning policy related to the Proposal on behalf of CPRW and RE-think. It has reviewed the Welsh Government planning policies; the local development plan polices; and the UK energy policies. The key Welsh Government policies are Policies 17 and 18 in Future Wales. These generally support renewable energy developments, such as this Proposal, subject to assessment against particular criteria. These criteria include: net benefits the scheme will bring; unacceptable landscape impacts; visual impacts on nearby communities and dwellings; protection ecology sites; adverse impacts on nature conservation, positive biodiversity; shadow flicker, light and air quality; transport impacts; sustainability; forestry; and cumulative effects.

6.2. In wider assessment requirements, from FW2040 and PPW, the Proposal needs to be considered for its efficient use of energy, from the energy hierarchy, and its value in terms of the potential contribution to meeting Welsh energy targets. FW2040 has identified Pre-Assessed Areas for onshore wind energy developments. However, this Proposal is mostly situated outside these areas. As explained here, these Pre-Assessed Areas provide sufficient land to meet Wales's future energy requirements. Whilst there is not an exclusion of wind energy developments outside these areas, it is clear that the Welsh Government considers these areas to be preferred and more suitable for wind energy developments and therefore better suited than this Proposal's Site. As FW2040 and PPW sets out, each proposal has to be judged on its own merits.

6.3. FW20240 also recognises that there are "*significant challenges that grid infrastructure and capacity will have on the potential for new onshore and offshore renewable energy development across Wales".* Matters related to the grid connection for this Proposal are covered in the Introduction to the suite of submissions being lodged by CPRW and RE-think. As set out there, the proposed grid connection for this Proposal is extremely problematic.

[17] The CP30 CR Annex regions relate to generating areas.

6.4. Welsh energy targets include: meeting 70% of Welsh energy consumption from renewable by 2030; 1GW of renewable energy capacity being locally owned; and renewable energy projects having at least "*an element of local ownership*". This Proposal fails to meet the last two of these. In respect to the 70% of consumption from Wales, the analysis here has shown that this target will be met without this Proposal. The UK Government's clean power by 2030 surpasses the older Welsh Government target.

6.5. This submission has also considered UK energy policy and the ongoing major changes in the energy system arising from that. The UK Government has now clearly established where renewable energy developments are required, by quantum, technology and timing. The quantified reporting here of NESO's stated permitted capacities and the supply of projects to meet that, shows that this Proposal is located in a region where there is already sufficient capacity to meet this requirement. Consequently, there is no need for this Proposal.

6.6. It is notable that the Applicant's submissions do not take account of the major changes in UK Energy Policy. These apply fundamental changes in policy and the energy system. Through the CP30 the old market-led system has ended and a planned energy system introduced. The Government now decides the capacity of generation permitted for each region, for each technology. Furthermore, under this, NESO has recently quantified the projects required to fulfil these permitted capacities. The Applicant has not taken account of this and therefore does not acknowledge that this Proposal is not needed.

6.7. The submission is part of a suite of documents being lodged against the Proposal by CPRW and Re-Think. In the summary to this suite of representation an assessment of the merits of this proposal is presented. That includes assessing the potential effects arising from the Proposal against Welsh Planning Policy criteria, weighing the Planning Balance, and consideration of wider merits and demerits of the Proposal. Their consideration is also given to need. However, it notable that the Applicant has not addressed the issue of need for the Proposal in their Application documentation. Need has been considered here and the circumstances regarding need are clear.

CDF
for RE-think & CPRW
February 2026

APPENDIX 1: Author Credentials

Biography: Dr Christopher Ford

Qualification:

BA (Hons): Town Planning.
MBA: Masters of Business Administration.
MSc (with Distinction): Renewable Energy.
PhD in Civil & Environmental Engineering.
MRTPI: Chartered Town Planner.

Experience and Background:

Dr Chris Ford is a Chartered Town Planner who specialises in the spatial aspects of the energy system and energy policy. His planning experience included development management, development plan preparation, policy and research.

Following study for an MBA, Dr Ford became an independent economic development and planning consultant, advising local authorities and enterprise agencies on business development, economic development and planning policies. For 15 years he ran various businesses in the textiles and information technology sectors.

With a long-term interest in energy and academia Dr Ford undertook an MSc and then a PhD in Renewable Energy. His doctoral thesis considers ‘how best to plan for dispersed energy’ assessing the most suitable approach to the delivery of net zero in the UK. This multi-disciplinary research considers renewables and energy network engineering, regulatory systems, energy policy and planning. His research applies planning principles to the energy system and seeks to identify the ‘right place’ for future energy developments. It takes account of: the efficiency of the energy system as a whole; the cost to consumers and local environmental effects.

Dr Ford has been active in the energy sector for over 15 years. Since 2017 he has supported local planning authorities, developers and communities considering or affected by energy projects. These projects include wind farms, solar farms, overhead lines, energy storage and intensive energy uses such as data centres. When caseload allows, he continues his academic research in the ‘spatial dimension of energy systems and energy policy’. Whilst the imperative of addressing climate change is clear, the arrangements we use to deliver this are blunt, often contradictory and frequently ineffective. An improved system can deliver net zero earlier, less expensively and with fewer local environmental effects.

Dr Ford is a Trustees for the New Lanark World Heritage Site, a member of the British Institute of Energy Economics, an associate member of the Energy Institute and a visiting lecturer on EIA at Strathclyde University.