DEADLINE 8

CLOSING SUBMISSION ON BEHALF OF RHYL FLATS WIND FARM LIMITED ("RFWFL")

1. Introduction

RFWFL operate the Rhyl Flats wind farm ("RF") to the south of the proposed Awel Y Mor wind farm. Work No.2 still intrudes into the 250m restriction zone around the perimeter of the areas leased by the Crown Estate Commissioners to RFWFL for the operation of RF. The restriction zone exists to ensure that other proposed developments do not adversely affect the operation of RF. The Crown Estate Commissioners have covenanted with RF not to grant any lease, licence or consent (other than where the lease requires that RF's consent is obtained) for the construction of any works within the restriction zone.

2. Protective Provisions

The Applicant and the RFWFL have negotiated a set of protective provisions which (other than in relation to the issue of wake loss) will ensure that works proposed within the 250m restriction zone can be regulated so as to control and minimise impacts. This aspect of RFWFL's objections has therefore been satisfactorily addressed.

3. Property Issues

The issue of wake loss impact remains a significant issue of dispute between the parties. It is understood that the Applicant is seeking to submit that the wake loss issue is unconnected to the need for RFWFL's consent to the Crown Estate lease; and that, provided the protective provisions are included in the DCO, there is no reason why consent should not be forthcoming.

Essentially, the Applicant is arguing that, when deciding whether to consent to the lease, RFWFL is limited to considering the works within the zone for which the consent is required and must shut its mind to the potential impact of works outwith that zone. Without prejudice to the outcome of a prejudice to a decision on any formal request for consent, RFWFL does not necessarily agree with this categorisation of the scope of the issues which they may consider in determining whether to give such consent.

4. Wake Loss

Standing that agreement has been reached on protective provisions, the remainder of this submission relates to the outstanding issue of wake loss.

5. Legal and Policy Context

Section 104(3) of the Planning Act 2008 requires the Secretary of State, subject to certain exceptions, to determine a DCO application in accordance with any relevant national policy statement.

The relevant national policy statements for AyM are EN-1 (Overarching National Policy Statement for Energy) and EN-3 (Renewable Energy Infrastructure). The key provisions for current purposes are in paragraphs 2.6.176 - 2.6.188 of EN-3. These set out policy on how potential impacts of proposed offshore wind farms on oil, gas and other offshore infrastructure and activities should be considered. EN-3 recognises that offshore wind development may be proposed in locations where existing offshore activities may be taking place and provides guidance on how potential conflict should be managed. The most relevant sections of EN-3 are:-

a) "Where a potential offshore wind farm is proposed close to existing operational offshore infrastructure, or has the potential to affect activities for which a licence has been issued by Government, the applicant should undertake an assessment of the potential effect of the proposed development on such existing or permitted infrastructure or activities. The assessment should be undertaken for all stages of the lifespan of the proposed wind farm in accordance with the appropriate policy for offshore wind farm EIAs." (2.6.179)

b) "Applicants should engage with interested parties in the potentially affected offshore sectors early in the development phase of the proposed offshore wind farm, with an aim to resolve as many issues as possible prior to the submission of an application to the IPC." (2.180)

c) "Where a proposed offshore wind farm potentially affects other offshore infrastructure or activity, a pragmatic approach should be employed by the IPC. Much of this infrastructure is important to other offshore industries as is its contribution to the UK economy. In such circumstances the IPC should expect the applicant to minimise negative impacts and reduce risks to as low as reasonably practicable." (2.6.183).

d) "...the IPC should be satisfied that the site selection and site design of the proposed offshore wind farm has been made with a view to avoiding or minimising disruption or economic loss or any adverse effect on safety to other offshore industries. The IPC should not consent applications which pose unacceptable risks to safety after mitigation measures have been considered.)(2.6.184)

e) "Where a proposed development is likely to affect the future viability or safety of an existing or approved/licensed offshore infrastructure or activity, the IPC should give these adverse effects substantial weight in its decision-making." (2.6.185)

f) "Detailed discussions between the applicant for the offshore wind farm and the relevant consultees should have progressed as far as reasonably possible prior to the submission of an application to the IPC. As such, appropriate mitigation should be included in any application to the IPC, and ideally agreed between relevant parties. (2.6.187)"

The following key points can be taken from EN-3:-

a) Applicants are expected to assess the potential impact of proposed offshore wind development on existing infrastructure;

b) Applicants should engage with existing operators with the aim of resolving matters before submission;

c) Site design should seek to minimise disruption, economic loss or safety to other offshore operators;

d) The Applicant is expected to minimise negative impacts to existing infrastructure;

e) Mitigation should be included in the application and ideally agreed with other parties; and

f) If there are unacceptable safety implications after mitigation is applied then the application should not be consented.

6. Key Points in Dispute

RF is an operational offshore windfarm and constitutes existing offshore infrastructure. The provisions of paragraphs 2.6.176 – 2.6.1 are therefore engaged in relation to the potential impact of AYM on RF. As matters currently stand, RFWFL consider that the Applicant has not followed the guidance in the relevant parts of EN-3. Consent should not be granted until the impact of the proposed development on RF is properly assessed and appropriate provision is made to minimise negative impacts, disruption and economic loss to RF as required by EN-3.

The Applicant has sought to argue that (first) that paragraphs 2.6.176 - 2.6.188 do not apply to offshore wind farms; (second) that if they do then there is no policy requirement to address wake loss; and (third) even if wake loss requires to be addressed, they have minimised impacts as far as can reasonably be required. None of these arguments stand up to scrutiny.

7. Application of Paragraphs 2.6.176-2.6.188.

The Applicant points out that the title of the relevant section of NPS-EN-6 does not include a reference to offshore wind farms and that there is no reference to impacts on offshore wind farms within this section of NPS-EN-3. Indeed, their response ExQ3.19 a) goes further and suggests that that 2.6.176 - 2.6.188 do not apply to the assessment of impacts on any form of existing electricity generating infrastructure.

The title of the section does not just cover oil and gas and is clearly intended to cover other types of offshore infrastructure which may interact with offshore wind. There is no logical reason why the title would cover offshore wind any more than any other type of offshore infrastructure. The lack of reference to offshore wind in the title is of no consequence.

The Applicant's suggestion that it is not just existing offshore windfarms that are excluded from this section of the NPS but any existing electricity generation development would have serious implications for how the compatibility of existing and new offshore electricity generation operations would be treated in terms of the NPS. For example, there would be no requirement in terms of the NPS to assess the impact of a proposed offshore wind farm on offshore infrastructure associated with a nuclear power station. That cannot have been the policy intention and is not a credible interpretation of the policy.

The Appellant's interpretation is contradicted by paragraph 2.6.177 of NPS-EN-3 which acknowledges the potential for other offshore technologies (such as wave and tidal power and carbon storage) to interact with offshore wind farms. Contrary to what the Appellant submits, paragraph 2.6.177 (when properly read with the rest of this section) clearly contemplates that the impacts of a proposed offshore wind farm on existing offshore energy development will require to be assessed. Again, it needs to be recognised that the types of development referred to in paragraph 2.6.177 are simply examples of the sorts of technology that may interact with an offshore wind farm. (The paragraph uses the phrase "such as.."). It is not an exhaustive list and could include other offshore technologies including other forms of marine renewable energy generation such as offshore wind.

The Applicant's approach relies on an overly-legalistic interpretation of policy which would give rise to nonsensical results.

The position taken by the Applicant also contradicts the position taken in their own NPS Tracker [REP-003]. It is clear that the references in the NPS Tracker to compliance with the NPS in relation to offshore wind farms is not limited to reference to good practice on consultation. The whole purpose of the Tracker table is to demonstrate how the project has complied with the NPS. The reference to

consultation here is to demonstrate that the Applicant has complied with the consultation requirements with affected offshore operators, including operating of existing offshore wind farms. It is not a generic reference to good practice.

Furthermore, the Tracker makes express reference to paragraph 2.6.179 of NPS-EN-3 and explains how Chapter 12 of the ES assesses impacts on other marine operators. Chapter 12 includes the assessment of impacts on existing offshore wind projects. Reference to this section of the ES is relevant because the Tracker was clearly seeking to demonstrate compliance with the NPS on this point, including in relation to existing offshore wind.

8. Requirement to Address Wake Loss

It is accepted that there is no express reference to wake loss in the NPS. However, neither is there reference to any other specific types of impact so that is not of any consequence. This section of the NPS clearly contemplates a need to address and minimise economic loss. There is express reference to minimising economic loss in paragraph 2.6.184 and to minimising negative impacts more generally in 2.6.183. As the ExA have pointed out, paragraph 2.6.188 recognises the potential for arbitration as a means of how adverse impacts on other commercial activities will be addressed. The whole point of this section of NPS-EN-3 is that it recognises that new offshore wind farms have the potential to impact on existing offshore infrastructure. It seeks to ensures that such impacts are properly assessed and minimised as far as reasonably practicable. Reduction of energy production through wake loss is clearly on impact on existing offshore infrastructure. There is nothing here which supports the Applicant's suggestion that wake loss is a matter which doers not require to be assessed.

In the apparent absence of assessment by the Applicant, RFWFL has commissioned DNV to provide an opinion on wale loss. Based on their experience of similar configurations of new and existing sites, DNV are of the opinion that there may be a wake loss of up to 2%. This is not challenged by the Applicant. Indeed, we now know from their answer to EXQ3.19(j) [REP-7-004] that the Applicant has included their estimate of wake loss to RF in their calculation of the Proposed Development's predicted electrical output. The Applicant therefore accepts that there will be a wake loss impact. They have assessed this impact but have chosen not to share the terms of this assessment with the ExA.

The potential level of wake loss will be tangible and would impact on the economics of RFWFL, particularly in the later years of the wind farm when subsidy is no longer available. RFWFL have carried out an independent structural assessment of their development and the expected operational life is expected to be a minimum of 30 years with a potential 12 years of overlap with the operations of the proposed development. A 2% wake loss would amount to 5,700MHh per annum which cannot reasonably be regarded as "minor."

9. Minimisation of impact

The Applicant submits that wake loss is "regulated" through compliance with the Crown Estate site licensing criteria. As per RFWFL's deadline 5 submissions (REP5-041), the position of the Crown Estate here cannot be considered to be that of a regulator. The Crown Estate's submission (REP7-060) confirms that whilst the buffer zone takes matters such as wake loss into account, it is a "commercial arrangement." It is not a regulatory process akin to Environment Agency licencing. There is simply no basis for assuming that Crown Estate leasing will adequately cover impacts on existing offshore interests. The buffer zone is clearly aimed at avoiding large scale impact but it is a blunt instrument. Site specific impacts still require to be assessed by the Applicant and considered by the Secretary of State.

The Applicant also submits that it is not possible to reduce the extent of the array area without a significant reduction in the output of AyM. In support of this submission, they make reference to their response to ExQ1.17.25 (REP1-007). These documents, however, refer to the practicality of addressing landscape impacts by reducing the scale of the development. It does not follow that, because it not practical to reduce the scale of development to reduce landscape impacts therefore it is not practical to reduce the scale of development to reduce wake loss impact. The impacts are completely unrelated. Nothing has been supplied by the Applicant to explain what modifications could be made to the design of the development to reduce wake loss or why this is impractical. There is no evidence before the examination of how the Applicant has sought to reduce wake loss impact other than by reference to the Crown Estate licensing criteria which, as explained earlier, is not sufficient.

There is simply no evidence before the ExA to demonstrate that the Applicant has made any effort to minimise the negative impacts of wake loss on RFWFL's interest which the Applicant apparently now seems to acknowledge will occur. There is therefore no basis on which the ExA can be satisfied in terms of paragraph 2.6.183 of NPS-EN-3 that the applicant has sought to "minimise negative impacts and reduce risks to as low as reasonably practicable."

10. Wake Loss as an Important and Relevant Comsideration

Even without the terms of EN-3, if the operation of AYM would result in a drop in energy yield from RF then that would affect the net contribution which AYM would make towards renewable energy targets. That in itself would be an important and relevant consideration to which the Secretary of State would require to have regard in terms of section 104(2)(d) of the 2008 Act. Whilst it appears that the Applicant has taken wake loss impacts into account in calculating the Proposed Development's predicted electrical output, no information has been supplied to the ExA on this to enable them to come to a view on the impact.

11. Conclusion on Wake Loss

Paragraphs 2.6.176 – 2.6.188 of NPS-EN-3 require the consideration of the impact of proposed farms. The Applicant is required to demonstrate that they have minimised negative impacts. There is no basis for wake loss impacts being excluded from this requirement. There is no dispute that there may be a wake loss impact on RFWFL of up to 2%. There is no evidence that the Applicant has done anything to minimise wake loss to RFWFL. The Applicant has not complied with 2.6.176 – 2.6.188 of NPS-EN3 and the ExA cannot be satisfied that they have minimised wake loss in terms of paragraph 2.6.183.

12. Proposed Protective Provision on wake loss

In the absence of any proposal from the Applicant, RFWFL has proposed an additional protective provision on wake loss. This would require a methodology for assessment of wake loss to be agreed with RFWFL. The assessment would then be carried out in terms of the agreed methodology and compensation paid for loss of revenue. Any dispute arising would be addressed in terms of the arbitration provisions of the DCO. Notwithstanding the lack of compliance by the Applicant with the terms of 2.6.176 – 2.6.188 of NPS-EN3 to date this provision would allow the ExA to be satisfied that there is a mechanism for controlling wake loss and ensuring that negative impacts are minimised. The DCO should not be made without this provision being included as an additional protective provision for the benefit of RFWFL.