



Proposed Crumhach Renewable Energy Development

Section 37CC(1) Design Flexibility Meeting with An Coimisiún Pleanála

Date 2nd December 2025



Meeting Agenda

- Background to Design Flexibility
- Design Flexibility Process
- Unconfirmed Details
- Requirement for Design Flexibility
- Assessment of Design Flexibility
- Assessment of Turbine Range in the EIAR
- Proposed Project Timeline
- Feedback & Discussion



Unconfirmed Details

- The details that will not be confirmed at the time of application are as follows:
 - Turbine total tip height
 - Turbine rotor diameter
 - Turbine hub height
- Range of turbine parameters to be sought:
 - Turbine tip height: 176.9m – 180m
 - Rotor diameter: 133.2m – 150m
 - Hub height: 102.5m – 110m

Requirement for Design Flexibility

- Design flexibility is required for wind farm projects given the lengthy timescales associated with projects. Several years often pass from the submission of the planning application to when construction begins.
- During that period, turbine manufacturers are continuously improving the efficiency of the models they produce.
- This leads to a degree of uncertainty as of which make/ model will be available on the market at the time of construction. It is therefore difficult to establish the exact turbine dimensions at the time of the application lodgement.
- The inclusion of a range of parameters in the application ensures that a turbine model can be selected through a competitive tender process.

Assessment of Design Flexibility

- Assessment of the turbine range in the EIAR.
- Plans and Particulars
 - Planning drawings prepared in line with 15(J) S.5 of the Regulations.
 - The requirement to provide plans and particulars may be complied with by providing:

'b) such information in respect of the parameters within which each detail will fall as is necessary to enable the planning authority or the Board to make a decision on the planning application.'

Assessment of Turbine Range in the EIAR

EIAR Chapter	Assessment	Assessment of Range of Turbine Parameters			
Chapter 5: Population & Human Health	Shadow Flicker Assessment	Three scenarios will be assessed for the Shadow Flicker Assessment, as part of the EIAR. Scenario 1: Maximum is the scenario that gives rise to the greatest modelled levels of shadow flicker. In order to verify that a precautionary approach has been taken in this assessment, 2 no. additional comparative shadow flicker scenarios have also been modelled to predict the potential effects of shadow flicker A Comparative Shadow Flicker Assessment is included in Chapter 5 which presents the modelling results of all scenarios presented.	Scenario 1: Maximum	Scenario 2: Median	Scenario 3: Minimum
			Tip Height: 180m Rotor Diameter: 150m Hub Height: 105m	Tip Height: 179.2m Rotor Diameter: 149m Hub Height: 105m	Tip Height: 176.9m Rotor Diameter: 133.2m Hub Height: 110m
Chapter 6: Biodiversity: Flora & Fauna	Bat Mitigation: Turbine Felling Buffer	Maximum is the scenario which gives rise to the largest felling radius for bat mitigation and is assessed within the EIAR.	Scenario 1: Maximum		
			Tip Height: 180m Rotor Diameter: 150m Hub Height: 105m		
Chapter 7: Biodiversity: Birds	Collision Risk Modelling (CRM)	Three scenarios are modelled in the Collision Risk Model, the outputs of which are included as an Appendix to Chapter 7 and assessed within the EIAR.	Scenario 1: Maximum	Scenario 2: Median	Scenario 3: Minimum
			Tip Height: 180m Rotor Diameter: 150m Hub Height: 105m	Tip Height: 179.2m Rotor Diameter: 149m Hub Height: 105m	Tip Height: 176.9m Rotor Diameter: 133.2m Hub Height: 110m
Chapter 12: Noise & Vibration	Operational Noise Modelling	A sound power level is developed based on a number of turbines within the turbine parameter range: for each wind speed, the highest sound power level across the turbine range is used. The resulting sound power levels are used in the noise model, setting the hub height to the highest among the scenarios (Scenario 1: Maximum). The lower end of the range is represented by a second noise model with the same sound power levels but at the lowest hub height (Scenario 2 Median) and assessed within the EIAR.	Scenario 1: Maximum	Scenario 2: Median	Scenario 3: Minimum
			Tip Height: 180m Rotor Diameter: 150m Hub Height: 105m	Tip Height: 179.2m Rotor Diameter: 149m Hub Height: 105m	Tip Height: 176.9m Rotor Diameter: 133.2m Hub Height: 110m
Chapter 13: Landscape & Visual / Chapter 14 Cultural Heritage	Landscape and Visual Assessment /Viewshed Analysis relative to Cultural Heritage Sites	The selected combination of rotor diameter and hub height termed Scenario 1 ('Maximum Hub Height and Maximum Rotor Diameter') has been identified as the most representative for assessment. However, for the avoidance of doubt, two alternative turbine configurations are presented for four selected viewpoints; these configurations are termed Scenario 2 (Median Tip Height, Minimum Hub Height, Median Rotor Diameter), and Scenario 3 (Minimum Tip Height, Maximum Hub Height, Minimum Rotor Diameter)	Scenario 1: Maximum	Scenario 2: Median	Scenario 3: Minimum
			Tip Height: 180m Rotor Diameter: 150m Hub Height: 105m	Tip Height: 179.2m Rotor Diameter: 149m Hub Height: 105m	Tip Height: 176.9m Rotor Diameter: 133.2m Hub Height: 110m
Chapter 15: Material Assets	Traffic Assessment	Maximum is the scenario which gives rise to the longest turbine blade for delivery and is assessed within the EIAR.	Scenario 1: Maximum		
			Tip Height: 180m Rotor Diameter: 150m Hub Height: 105m		

Proposed Project Timeline

Q4 2025

- Development of final design.
- Preparation of EIAR/NIS.
- Pre-planning consultation.
- Ongoing public engagement.

Q1 2026

- Finalisation of EIAR/NIS.
- Preparation of planning documents.
- Lodgment of planning application to ACP.



Thank you

091735611

info@mkoireland.ie

MKOireland.ie

