



Cooloo Wind Farm Co. Galway

Design Flexibility Consultation – An Coimisiún Pleanála

10th July 2025



Meeting Agenda

- Introduction
- Unconfirmed Details
- Rationale for Design Flexibility
- Assessment of Unconfirmed Details
- Application Timeline
- Feedback & Discussion



Unconfirmed Details

- Turbine rotor diameter
- Turbine hub height
- Range of turbine parameters to be sought:
 - Rotor Diameter: 150m - 162m
 - Hub height range: 99m - 105m

Rationale 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 manufactures 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 Unconfirmed Details

- 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
 - Environmental Impact Assessment Report (EIAR) Overview
 - Table Summary of Assessment of Turbine Range in specific EIAR Chapters

Assessment of Turbine Range in the EIAR

EIAR Chapter	Assessment	Assessment of Range of Turbine Parameters	Assessment Parameters Detail					
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. A Comparative Shadow Flicker Assessment is included as an Appendix to Chapter 5 which presents the modelling results of Scenario 2: Median and Scenario 3: Minimum, all of which are assessed within the EIAR.	Scenario 1: Maximum		Scenario 2: Median		Scenario 3: Minimum	
			Rotor Diameter: 162m	Hub Height: 99m	Rotor Diameter: 155m	Hub Height: 102.5m	Rotor Diameter: 150m	Hub Height: 105m
Chapter 6: Biodiversity	Bat Mitigation: Turbine Felling Buffer	Scenario 1: Maximum is the scenario which gives rise to the largest felling radius for bat mitigation and is assessed within the EIAR.	Scenario 1: Maximum					
			Rotor Diameter: 162m	Hub Height: 99m				
Chapter 7: 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	
			Rotor Diameter: 162m	Hub Height: 99m	Rotor Diameter: 155m	Hub Height: 102.5m	Rotor Diameter: 150m	Hub Height: 105m
Chapter 12: Noise & Vibration	Operational Noise Modelling	Sound power levels for a number of turbines within the turbine parameter range have been preliminarily modelled. The model with the highest noise levels at any windspeed is selected and the noise modelling is run for the highest hub height (Scenario 3: Minimum) and the lowest hub height (Scenario 1: Maximum) and assessed within the EIAR.	Scenario 1: Maximum		Scenario 2: Median		Scenario 3: Minimum	
			Rotor Diameter: 162m	Hub Height: 99m	Rotor Diameter: 155m	Hub Height: 102.5m	Rotor Diameter: 150m	Hub Height: 105m
Chapter 13: Landscape & Visual	Landscape and Visual Assessment	Three scenarios are assessed for the Landscape and Visual Assessment, as part of the EIAR. Scenario 3: Minimum is the turbine presented in all photomontages in the Photomontage Booklet. Scenario 1: Maximum, and Scenario 2: Median are also presented for three selected viewpoints at short-range, mid-range and long-range views, all of which is assessed within the EIAR.	Scenario 1: Maximum		Scenario 2: Median		Scenario 3: Minimum	
			Rotor Diameter: 162m	Hub Height: 99m	Rotor Diameter: 155m	Hub Height: 102.5m	Rotor Diameter: 150m	Hub Height: 105m
Chapter 15: Material Assets	Traffic Assessment	Scenario 1: Maximum is the scenario which gives rise to the longest turbine blade for delivery and is assessed within the EIAR.	Scenario 1: Maximum					
			Rotor Diameter: 162m	Hub Height: 99m				

Proposed Project Timeline

Q2 2025

- Development of final design
- Preparation of EIAR / NIS
- Pre-planning consultation
- On-going public consultation

Q3 2025

- Preparation of EIAR / NIS
- Preparation of planning documents
- On-going public consultation
- Lodgement of planning application



Thank you

Discussion & Feedback

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