

DOCKETED

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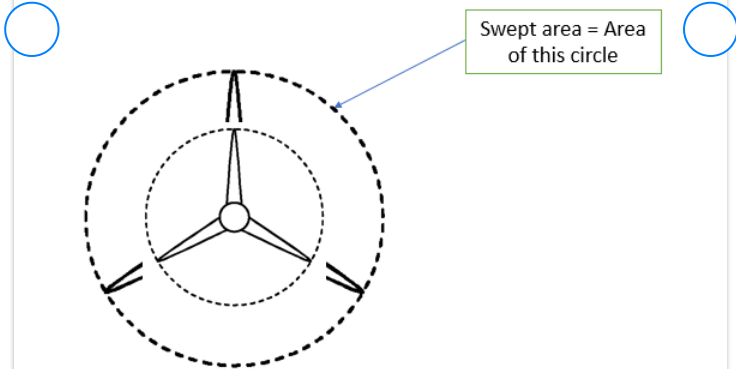
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Swept area of wind turbine The swept area of a wind turbine is the area enclosed within a circle subtended by the blades of the rotor. This depends on the effective radius of the blade. The effective radius of the blade is given by, $R_{eff} = R \cos(A)$ where A = Coning angle or swept angle. Baseline Design Wind turbine blade-Re-engineered NREL phase IV blade Number of blades on rotor-2 Radius of the blade-5.029 m Design point AoA - 7 degrees Wind speed-7 m/s Rotational speed-72 rpm Tip speed ratio-7.5

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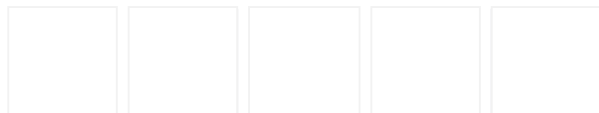
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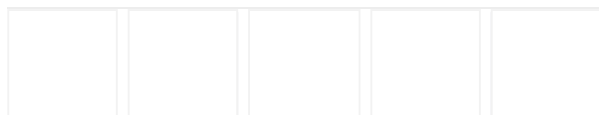
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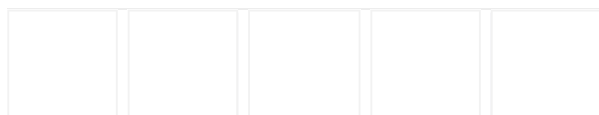
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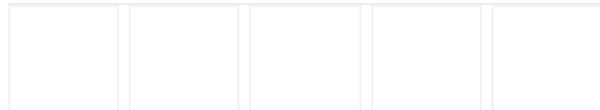
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