

DEVELOPMENTS IN LARGE BLADES FOR LOWER COST WIND TURBINES

by

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Abstract

WindPACT scaling and concept studies have looked at identifying issues and constraints associated with growing turbines from 1-10 MW. As part of the WindPACT project, the Blade System Design Studies developed innovations in manufacturing, materials, and design that would alleviate issues and provide breakthroughs in constraints identified for large blade production. This paper describes the recent and predicted trends in blade-size growth and new COE goals developed by DOE's wind program. It also provides sample results from WindPACT studies and associated blade research activities that facilitate larger blade development in ways that reduce COE.

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