

DWEA
DISTRIBUTED WIND ENERGY ASSOCIATION

Virtual Webinar:

An Engineering-Level Vortex Induced Vibration Methodology for Parked-Load Assessment

Making vortex shedding and lock-in behavior prediction accessible to workstation level resources with open-source methods:
github.com/sandialabs/VorLap

Join Sandia National Laboratories for an insightful webinar focused on advancing the design-level assessment of parked-load effects, including vortex-induced vibration (VIV). This session will introduce the new VorLap–QBlade bridge methodology, a practical tool integrating vortex shedding load reconstruction directly into aeroelastic simulation workflows. Attendees will learn how this approach enables quantification of fatigue impacts under parked conditions, providing designers with a screening tool to identify critical cases and inform mitigation strategies. The webinar will cover the methodology, implementation details, and results from demonstration cases on an H-type vertical-axis wind turbine (VAWT). Whether you are involved in turbine design, structural analysis, or certification, this webinar will equip you with new insights and open-source AI-adaptable tools to improve parked-load prediction and enhance turbine reliability.

Date: Thursday, Oct. 29, 2026

Time: 12 to 1 p.m. MDT

Register for Zoom link here:

https://zoom.us/webinar/register/WN_Bfkz-Hv5QsCxBEtcSCcWyg

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Kevin Moore is a mechanical engineer developing and applying advanced computational methods for multidisciplinary fluid-structure interaction design, coupled-physics modeling, and control co-design. His work focuses on scientific software development, optimization, and high-fidelity simulation to enable the analysis and maturation of novel aerodynamic, structural, and power systems. He is particularly interested in integrating physics-based models, data, and optimization to accelerate concept development and improve system-level performance, robustness, and reliability.

The Sandia National Laboratories Distributed Wind portfolio, led by Dr. Rachid Darbali-Zamora, has expertise in topics including distributed wind interconnection standards, power converters, controls, and other power electronics testing and validation, aeroelastic modeling, and testing and automation.

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Sandia National Laboratories

U.S. DEPARTMENT of ENERGY

NNSA National Nuclear Security Administration

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