

Cybersecurity and Wind Farms

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While climate change agendas drive increased global adoption of onshore and offshore wind energy, the lower levelized cost of energy (LCOE) remains a most compelling business case. Returns on cybersecurity investments are not easily quantified, though, and regulations aren't as stringent as in higher-output facilities such as nuclear power plants. Recent academic projects have illustrated that sophisticated turbine attacks may be feasible, but the biggest security risks renewable energy vendors see have more to do with fundamental shortcomings.

This talk will provide an overview of the threat landscape, attack surfaces, and defense in depth security strategy as applied to the basic wind farm architecture. We will review details of actual reconnaissance and exploitation activities, shedding light on the myths and realities of cyberattacks in general. Current industry efforts and applicable standards will be summarized, and audience engagement and questions is highly encouraged.