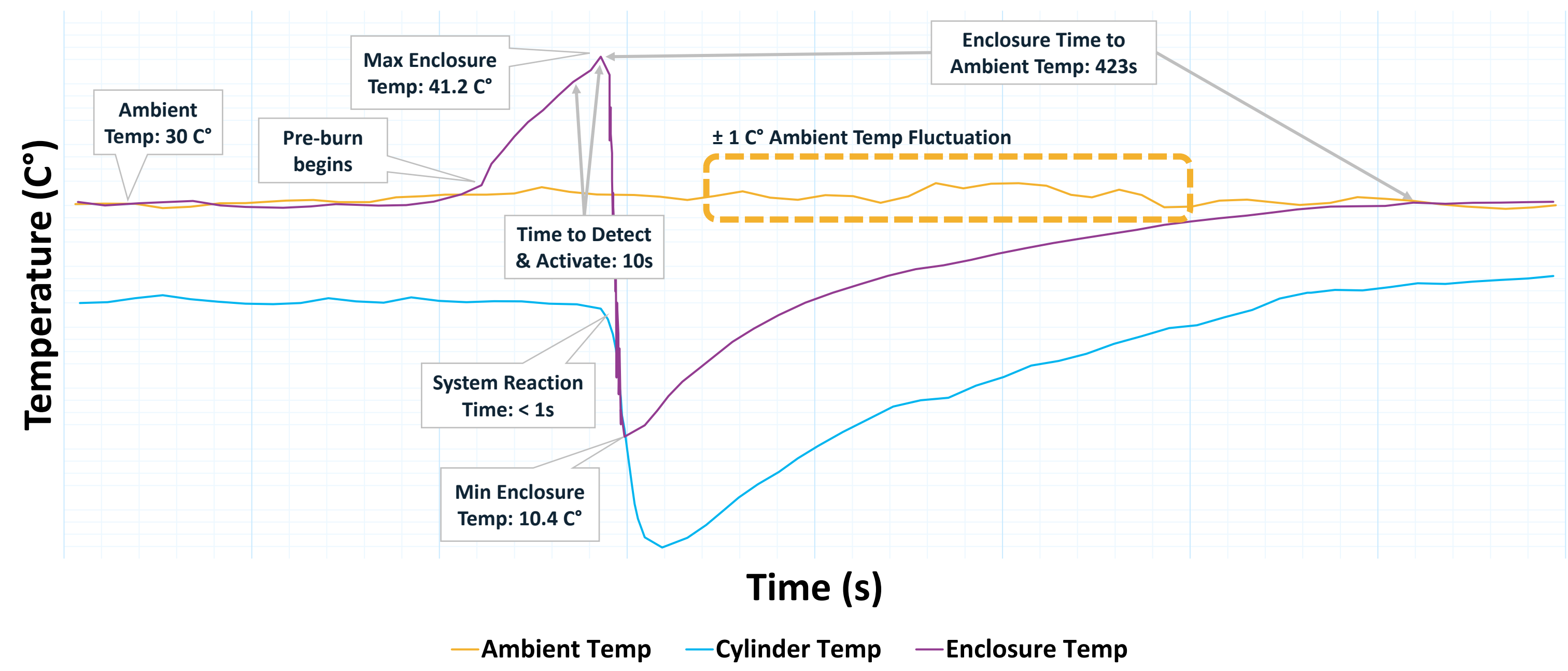


Wind turbine fire protection systems proven to reduce downtime & prevent catastrophic loss

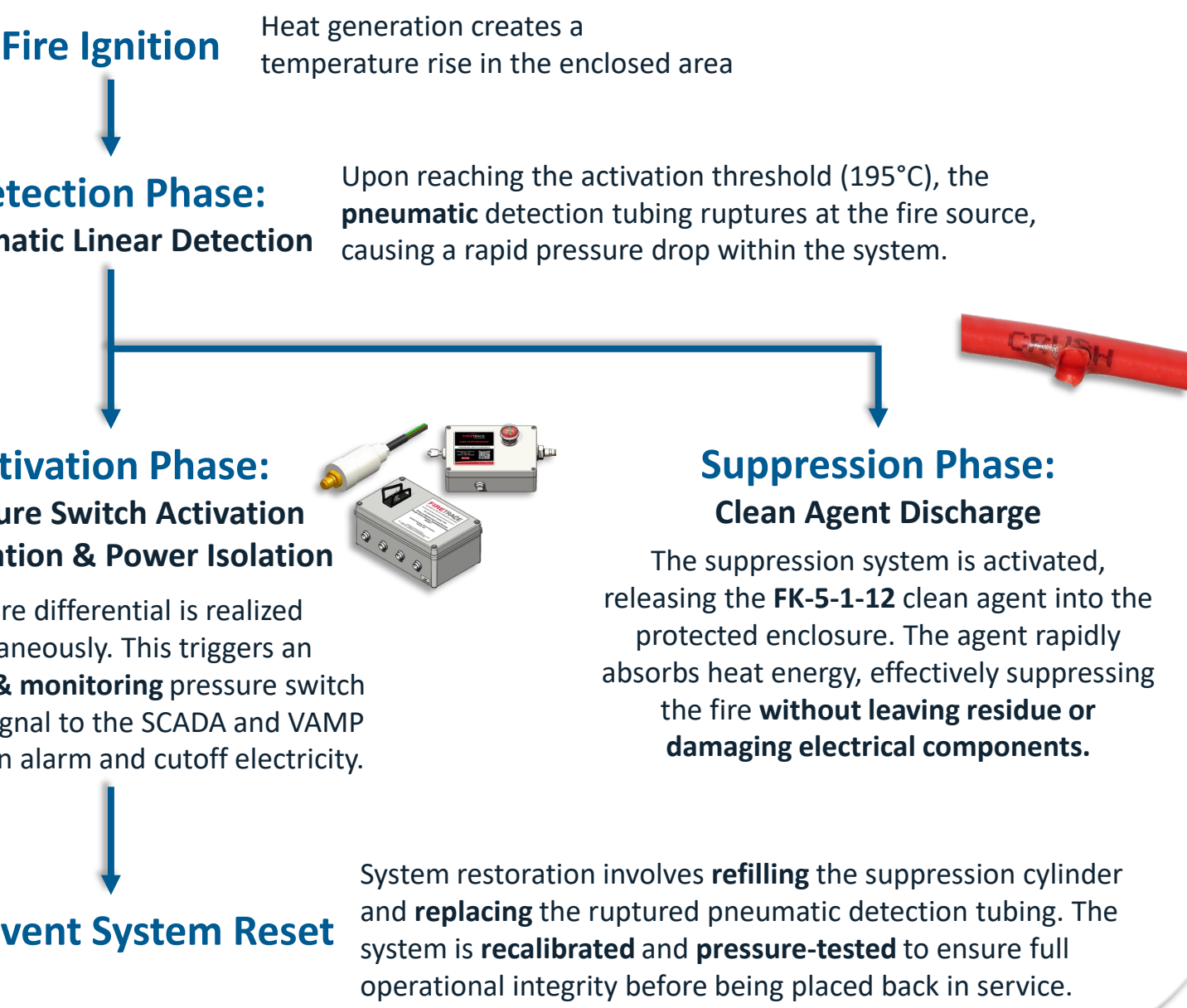
Firetrace secures wind farm resiliency with customized fire protection solutions.

Kishan Ponnadurai

Firetrace System Activation Test:
Temperature Response in a Transformer Room



How it Works



Our Method

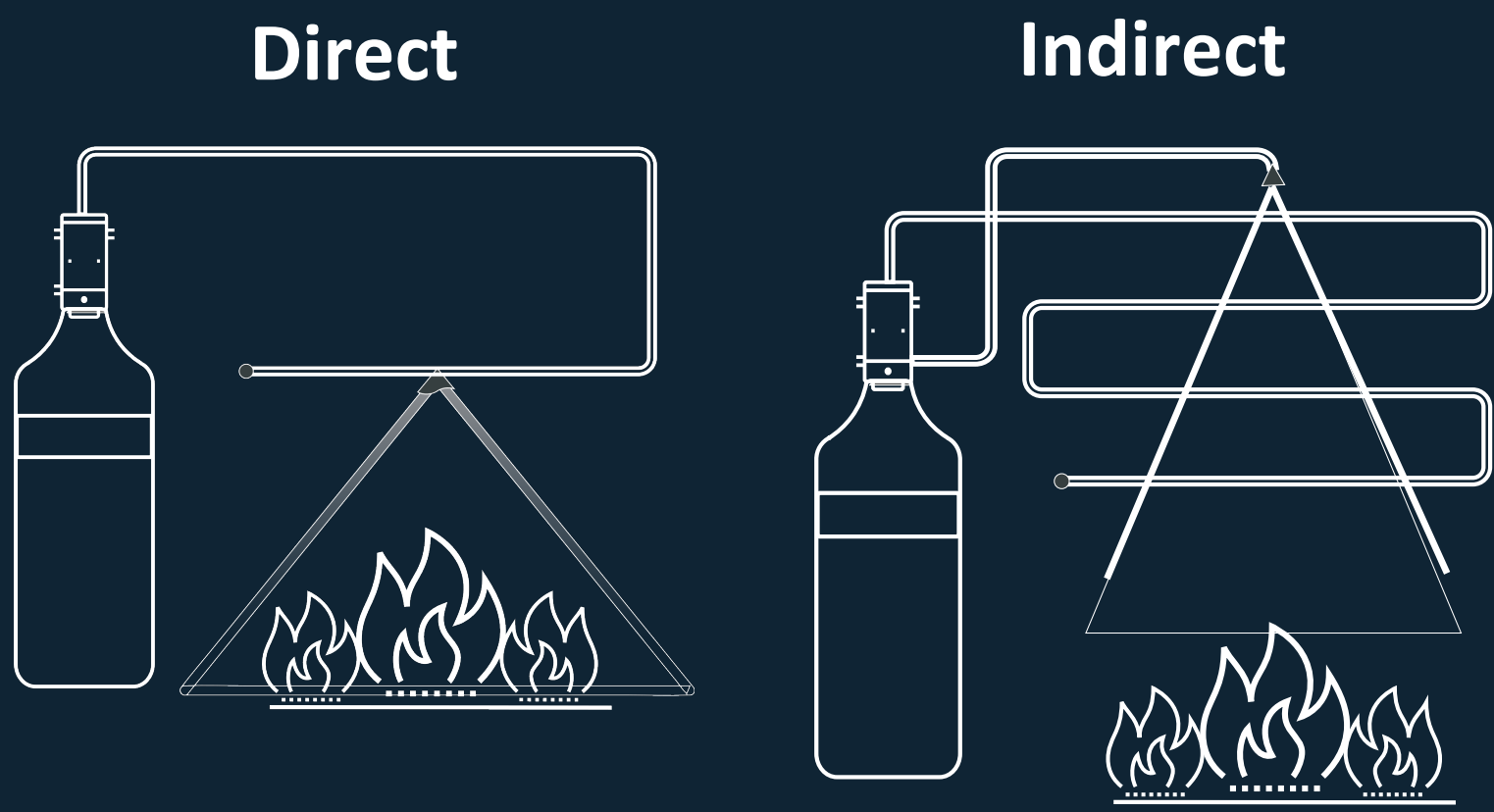
- Define Protection Zones & Risk Factors**
Measure protection areas
Evaluate openings & ventilation
- Calculate Optimal Suppression Agent Volume**
Determine concentration based on volume & airflow
Ensure compliance with NFPA safety standards
- Customize Hardware Installation**
Establish custom cylinder mounting locations
Map out discharge & detection network
- System Integration & Automation**
SCADA & switchgear signaling
Activation & monitoring pressure switches

Our Goal

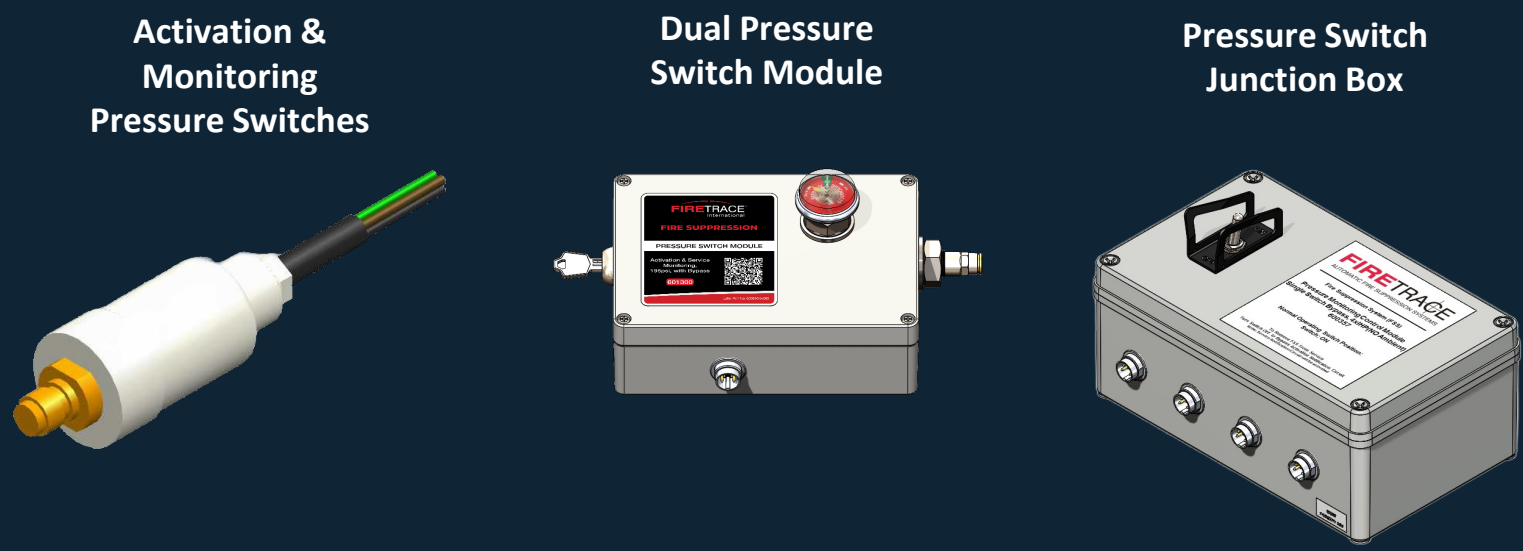
- Prevent fire spread & minimize damage**
Suppress fires before they reach critical components
Contain fire at its source, preventing structural loss.
- Eliminate Reignition Risk**
Rapid agent discharge removes heat energy from fire, preventing reflash.
Maintain the ambient temperature, mitigate temperature gain.
- Optimize Suppression for High-Risk Areas**
Targeted agent discharge ensures protection w/o unnecessary environmental exposure.
Transformer rooms and electrical cabinets are the highest risk areas
- Minimize Downtime & Financial Loss**
Ensure wind farms remain operational with minimal disruptions.
Reduced turbine damage.



System Types



How We Integrate

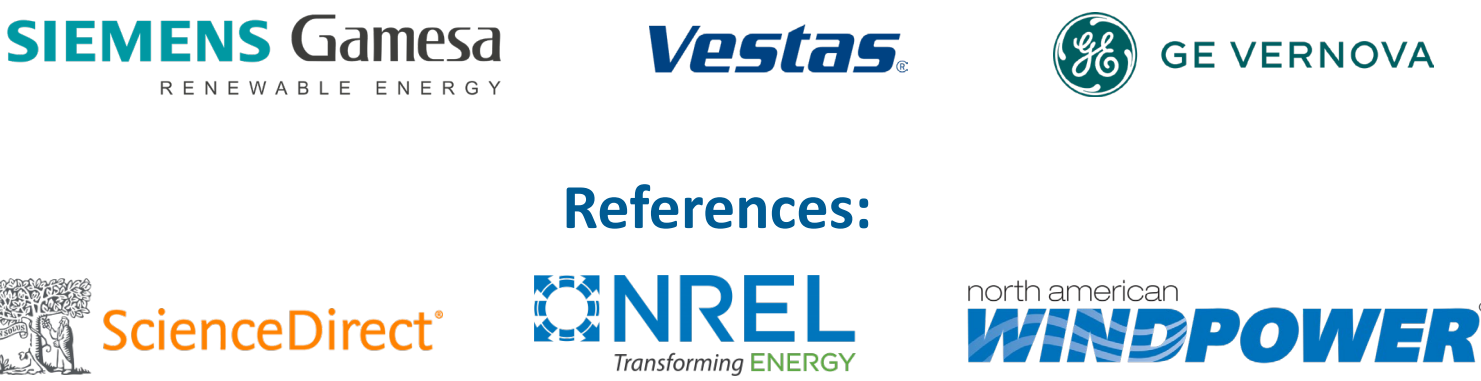


The Firetrace system utilizes a modular architecture to aggregate up to four independent pressure switch signals into a unified output. This output seamlessly integrates with SCADA for real-time alarm activation and interfaces with switchgear via VAMP protection relays to execute an automated power isolation sequence, mitigating electrical fire risks and ensuring rapid response in critical turbine infrastructure.

Facts & Figures

- 90%** of turbine fires lead to a catastrophic loss
- Electrical malfunctions are the **2nd** leading cause of fires behind lightning
- The financial impact of a total loss for a single 2MW turbine is on average **3-4 million** dollars.
- A catastrophic loss results in **12-18 months** of downtime for a single turbine

Special Thanks To Our Partners:



References:



See our product installed in VR/AR!

