Visibility Before Vulnerability

You can't manage what you can't measure - inertia, system strength, and oscillations in an evolving grid

Who We Are

Reactive Technologies (RTL) is a global Grid-Enhancing Technologies (GETs) company at the forefront of addressing the challenges created by electrification, accelerating load growth, and an increasingly dynamic power system, by measuring power grid inertia and system strength in real-time and providing advanced oscillation monitoring.

With our proven, first-of-its-kind GridVerix® platform, formerly known as GridMetrix®, we provide real-time, high-performance power grid measurements and data-driven insights into grid stability and reliability. This enables grid operators and utilities worldwide to plan and operate with greater visibility, efficiency, and resilience as the grid continues to evolve.

What We Offer

GridVerix combines a distributed network of ultra-high-definition Grid Edge IoT devices with an advanced, cloud-based data processing platform. The devices measure grid stability parameters at up to 48,000 times per second. Built on deep digital signal processing (DSP) expertise, the platform converts noisy grid-edge measurements into usable stability metrics. Together, they create a high-precision measurement overlay that enables real-data-driven network planning and operations, complementing existing grid OT systems.

Designed for fast deployment with a fully vendor-managed end-to-end data service, GridVerix allows customers to start collecting actionable, real-time data from day one - minimizing upfront cost, simplifying operation, and accelerating return on investment.

Global Footprint

RTL works alongside some of the world's most advanced power system operators and system-level organizations, including New York Independent System Operator (NYISO) in the United States, National Energy System Operator (NESO) in Great Britain, Australian Energy Market Operator (AEMO) in Australia, the National Grid SA in Saudi Arabia, and the Western Electricity Coordinating Council (WECC) across the Western Interconnection, US, while continuing to expand our footprint globally across Europe, Australia, and the wider Asia-Pacific region. By delivering high-performance measurement, RTL enables a more efficient and reliable power system.

Key Capabilities

Enhanced System Strength Monitoring
GridVerix provides critical, real-time insights into system strength metrics, enabling grid operators to be aware of and manage the reliability of the grid.

Direct Inertia Measurement
GridVerix directly measures real-time inertia beyond what models alone can capture, revealing sizeable behind-the-meter contributions to avoid unnecessary curtailment and costly reinforcement.

Advanced Oscillation Monitoring
GridVerix extends oscillation observability beyond traditional monitoring coverage, capturing and characterizing dynamics from mHz to kHz to support localization and post-event analysis.

Benefits

Real-Data-Driven Planning & Operations
Align planning and operational decisions with real-time system measurements to improve situational awareness and day-to-day system performance.

Dynamic grid modeling
Use real-world system measurements to validate, calibrate, and optimize dynamic grid models, improving accuracy and confidence in system analysis.

Unlock Grid Capacity
Identify and utilize existing system headroom more effectively, reducing unnecessary constraints and helping defer costly network reinforcement.

Our Awards

Sustainable Innovation Award Winner SEAL 2026

Platts Global Energy Awards
Winner of the 2025 Grid Edge Award

BusinessGreen UK Green Business Awards 2025
Winner of the 2025 Renewable Energy Project of the Year

COP28 UAE
Clean Power Energy Transition Changemaker at COP28

FT
Financial Times Energy Tech Champions 2023

BNEF pioneers 2022
Winner of the 2022 BNEF Pioneers by Challenge

Trusted by

NESO National Energy System Operator · NEW YORK STATE OF OPPORTUNITY. NYSERDA · New York ISO Independent System Operator · KAHRAMAA · نقل الكهرباء National Grid SA · TAQA Transmission · 台灣電力公司 TAIWAN POWER COMPANY · AEMO · ほくでん

Ensuring the safe and reliable large-scale deployment of renewables to meet NY State targets

Real-time measurements support increased integration and reliable deployment of renewables to advance NY State Climate Goal for Carbon-free Power Grid by 2040.

Background

New York State has set ambitious climate targets under The Climate Act, aiming to quadruple offshore wind capacity, double distributed solar deployment, and deploy significant energy storage by 2030. In support of these goals, Reactive Technologies collaborated with utilities across New York, including National Grid US, Coned INC, Avangrid, and Long Island Power Authority, backed by NYSERDA, the New York Independent System Operator, and the New York Power Authority. The project objective is to deploy Reactive's real-time inertia measurement service to ensure the safe and reliable integration of renewable generation resources.

Benefits

Enables efficient utilization of existing grid infrastructure capacity to meet NYS CLCPA targets. Minimizes operational risk by offering accurate real-time data and grid visibility, enhancing operational decision-making. Highlights actual needs, reducing the cost of providing unnecessary ancillary services or excessive grid reinforcement.

"NYISO is pleased to work with Reactive Technologies and NYSERDA as a Technical Advisor to explore the applicability of their groundbreaking technology in New York as we work to deliver the grid of the future."

Rana Mukerji, Former Senior VP, Market Structures at NYISO

Award-winning deployment of the world's first inertia measurement technology in collaboration with NESO, Great Britain

Launched officially in 2021, National Energy System Operator (NESO) deployed RTL's GridVerix inertia measurement service across Great Britain to achieve for the first time, a real-time power grid stability insight and support higher proportions of renewable energy safely running on GB's national power grid.

The implementation of Reactive's GridVerix technology was proven to mitigate renewable curtailment, significantly cut greenhouse gas emissions, and strengthen grid stability. The results highlight a tremendous potential for global impact in reducing CO2 emissions across power grids.

30%+

Extra grid capacity for renewables integration unlocked

£122m

Cost savings between Feb 2024 and Mar 2025, exceeding the original five-year projection of £72m

~18M

Tonnes of CO2 saved annually in GB alone

~5.5%

Of total GB CO2 emissions eliminated annually

"The positive experience of our collaboration has been transformative, showcasing the power of direct measurement innovation in advancing the energy transition. We take pride in pioneering this Net Zero enabling technology with Reactive, which now offers a replicable model that can materially contribute to clean energy systems worldwide."

Julian Leslie
Strategic Energy Planning Director and Chief Engineer at NESO

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