

PRESS RELEASE

DNV's GreenPowerMonitor launches world's most innovative solution for stabilizing power networks

- Power Oscillation damping guards against fluctuations in the power supply
- New solution uses the power plants centralized control and eliminates the need for additional equipment, saving costs

BARCELONA, **Spain**, **28 June**, **2021**. GreenPowerMonitor, DNV's integrated solution provider for the management and maintenance of renewable power installations, today launches the world's most advanced solution to guard against power fluctuations in electricity grids. GPM Power Oscillation Damping (GPM POD) reduces oscillation and makes power transfer more stable, while reducing additional costs and supporting grid operators to meet regulations that ensure our power networks are ready to underpin the clean-energy transition.

Increased renewable generation and large, complex power networks means that different parts of the grid are not always perfectly synchronized, which can cause the power to fluctuate. To guard against fluctuations in power supply, traditional power grids have synchronous generators which can help mitigate oscillations due to their inertia. However, with the increasing penetration of inverter-dominated renewable power plants, the power grids inertia is decreasing. This can reduce the quality of the power and makes the network susceptible to power cuts.

Unlike conventional inverter POD control, the GPM POD functionality uses the power plants centralized control to perform the control directly, eliminating the need for extra equipment, which saves money for grid operators, which can stretch to hundreds of thousands of euros.

"Today's power grids are increasingly complex and more demanding. Our innovative new solution helps grid operators to meet regulations by ensuring grids are ready to integrate the large influx of renewable energy. Stable grid infrastructure will underpin the energy transition and our new POD capability will ensure the energy mix in our grids is a green as



possible." said Juan Carlos Arévalo, Director for Green Power Monitoring and Solutions, Energy Systems at DNV.

-ENDS-

Download images here

Note to the editors

More information about GPM PPC's power oscillation damping capability is presented in a technical whitepaper, *The future of grid stability: Advancements in power oscillation damping*. The results are based on dynamic Power System State Estimation (PSSE) simulations using the Abril plant parameters. The case study is based on the National Technical Systems (NTS) regulations, the inverter model was user defined and the PV plant is controlled by the GPM PPC. The full paper is available to download for free here.

About GreenPowerMonitor, a DNV company

GreenPowerMonitor, a DNV company (GPM) offers a market-leading integrated solution of software, hardware, and services for the management and maintenance of renewable energy installations.

Driven by its purpose, GPM provides digital tools to maximize the performance of renewable energy assets, optimize efficiency in the management of renewable energy portfolios, and contribute to having the greenest energy mix in the grid.

GPM has a long tradition and experience in successfully managing renewable assets and providing customized solutions for our clients' needs. Its monitoring, managing, and analytic solutions have helped more than 700 clients in 72 different countries.

About DNV

DNV is the independent expert in risk management and assurance, operating in more than 100 countries. Through its broad experience and deep expertise DNV advances safety and sustainable performance, sets industry benchmarks, and inspires and invents solutions.

Whether assessing a new ship design, optimizing the performance of a wind farm,



analyzing sensor data from a gas pipeline or certifying a food company's supply chain, DNV enables its customers and their stakeholders to make critical decisions with confidence.

Driven by its purpose, to safeguard life, property, and the environment, DNV helps tackle the challenges and global transformations facing its customers and the world today and is a trusted voice for many of the world's most successful and forward-thinking companies.

In the energy industry

DNV provides assurance to the entire energy value chain through its advisory, monitoring, verification, and certification services. As the world's leading resource of independent energy experts and technical advisors, the assurance provider helps industries and governments to navigate the many complex, interrelated transitions taking place globally and regionally, in the energy industry. DNV is committed to realizing the goals of the Paris Agreement, and supports customers to transition faster to a deeply decarbonized energy system.

Learn more at www.dnv.com

For more information please contact:

Pieter Schaffels - Head of Global Media Relations, Energy Systems

Email: <u>pieter.schaffels@dnv.com</u>

Tel: +31618410603