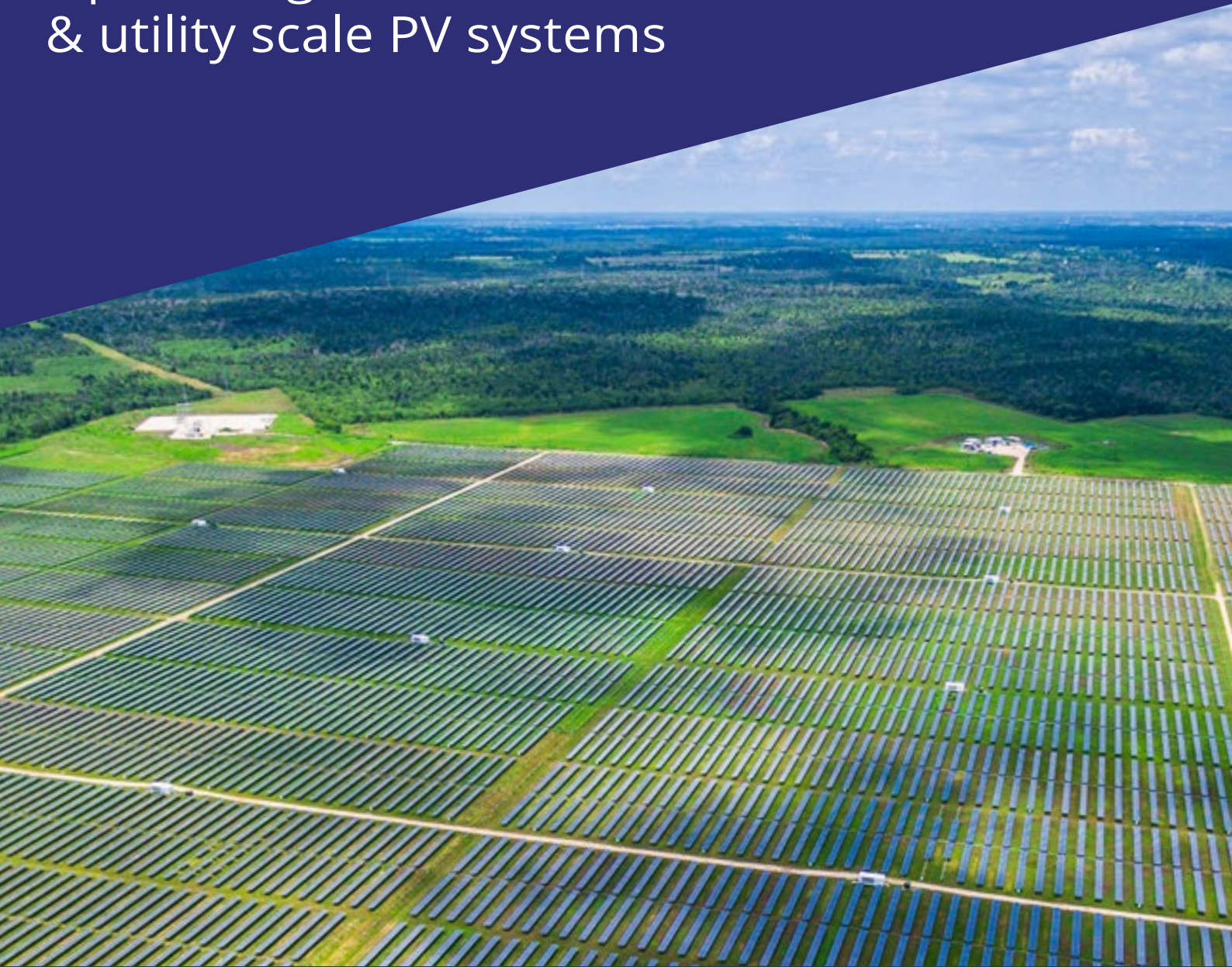




Optimizing commercial & utility scale PV systems



Improve your bottom line

The PV system market is maturing and therefore margins are going down. There is a growing need for optimizing your PV portfolio yield and efficiency. In case you are dealing with unreasonable power loss in your PV system – there is a good chance you may be experiencing a PID phenomenon in your system PV panels.

What is PID?

Potential induced degradation (PID) is a phenomenon that arises over time. It may be negligible in the system early stage but, after few years, becomes more noticeable and can cause significant power losses.

Main cause for PID

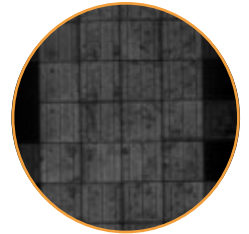
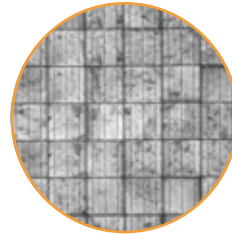
- ◇ Panel quality – material composition
- ◇ PV system configuration – strings length, inverter type, max voltage
- ◇ Environmental conditions – high temperature/humidity/irradiation

Outcome

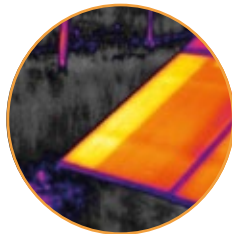
Without a preventive or prescriptive solution, any PV system is at risk of losing between **0.5%-25%** of its annual returns due to PID.

How to detect?

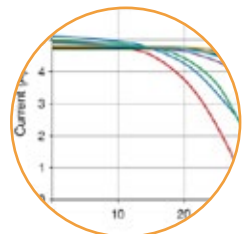
Electroluminescence (EL)



Infrared imaging (IR)



IV-curve tool



Protect your investment

Vigdu-P anti-PID solution



Cost effective

Low investment
High and fast return



Safety



Agnostic

Can work with all inverter and panel types:
multi-cell; mono-si; poly-si; N/P; thin film



Plug & play
installation

How does it work

Once voltage goes below a predefined threshold (in the evening), the Vigdu-P device changes the polarization and thus cures (overtime) the PID problem.



Technical specifications

- ◇ Solutions for
 - String inverters
 - Central inverters
- ◇ Can be connected to up to 11 independent inverters
- ◇ Supports 1000 VDC / 1500 VDC inverters
- ◇ Auto-mode function
- ◇ AC / DC inputs internally protected
- ◇ Grounding free (polycarbonate housing)
- ◇ Complies with inverter manufacturer specific requirements
- ◇ Connectivity to monitoring system: modbus RTU-RS485/ dry contact
- ◇ Certified (EMC, Safety EN, FCC)

Success stories

PV Plant

Panels: ET Solar
Inverters: SMA

YoY Comparison

August
September
October
November

Production Increase

+0.25%
+19.14%
+15.2%
+35.3%

PV Plant

Panels: ET Solar
Inverters: ABB

YoY Comparison

September
October
November
December
January

Production Increase

+16.4%
+25.9%
+28.2%
+26.5%
+35.1%

PV Plant

Panels: Confidential
Inverters: PVI

YoY Comparison

June
July
August
September
October

Production Increase

+5.2%
+11%
+17.7%
+21.1%
+18.5%

Active sales partnerships



About Vigdu

- ◇ Founded in 2014
- ◇ Over 3GW of energy protection and recovery
- ◇ 20+ team members
- ◇ Patent protected

www.vigdu.com

