

Dynamic Voltage Regulation For The Evolving Grid





Executive Summary – Introduction



Pacific Volt

- Established and intends to expand a new market for Voltage Regulation technology.
- The company's groundbreaking products can future-proof the electric grid, increase energy efficiency and improve power quality.
- Founded by a small team of visionary engineers
- Installed base of over 3,000 units operating reliably in Australia, the UK, and North America
- Broad base of intellectual property including both patents and trade secrets

The Energy Transition

- Increasing penetration of rooftop solar
- Electric vehicle chargers
- New electrification loads such as heat pumps and on-demand electric water heaters
- Can readily take voltage out of regulatory compliance and increase volatility
- Negatively impacting both network operators and customers.

Market

- Pacific Volt is poised to become a leader in a multi-billion dollar global market
- Superior and low cost products
- Utilities
- Commercial & Industrial
- At present the company does not have direct competition in this superior voltage regulation methodology.
- No other technology is more efficient, simple, reliable, long-lasting, and affordable, all at once

Executive Summary – Key Attributes



Pacific Volt is a development stage company poised to meet increasing demand for Voltage Regulation and Smart- Grid Solutions in the Power Distribution Sector

Company and Management

- Acquired assets of MicroPlanet in 2017 including an installed base of 3,000 units
- Decades of technology development experience

Market Opportunity – Annual Addressable

- \$2.5 billion Utility Voltage Regulation
- \$30 billion Commercial / Industrial power quality
- Commercial & Industrial energy savings, reduction in electrical equipment maintenance

Products, Technology and Applications

- Pacific Volt manufactures and distributes Voltage Regulation products
- Provides solutions for the energy transition including rooftop solar and electric vehicle charging
- Products designed for utilities and commercial / industrial electricity consumers

Competitive Advantage

- Pure Voltage regulation provides superior performance with fewer components / lower cost
- Exceptionally high barrier to entry through development and use of trade secrets and technology patents

Growth Strategy

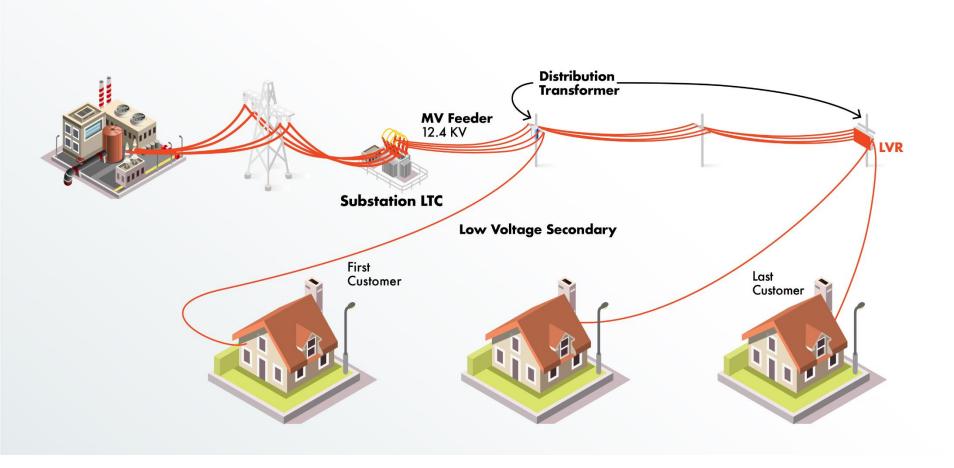
- Expand existing markets in Australia, US and UK
- Leverage VAR / distribution channels

Financial Forecast & Offering

- Significant sales trajectory \$1.6 MM in 2025 growing to over \$20 MM in 2028
- \$5MM Series A round



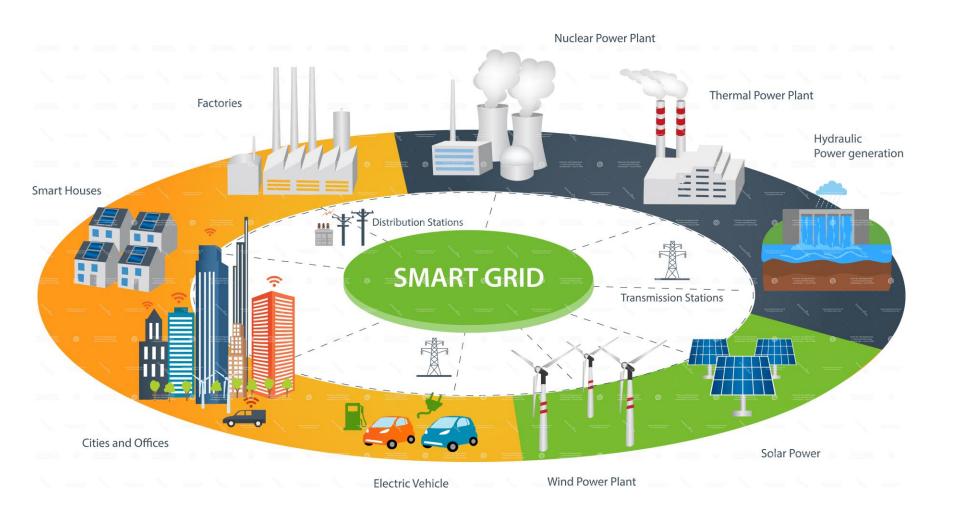
Grid 1.0



Evolution of the Grid



Grid 2.0

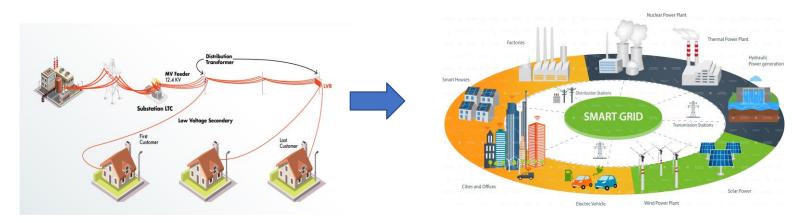


Markets – Evolution of the Grid



Smart meters are providing both consumers and utilities with more information further increasing the importance of power quality in low voltage networks.

In the US alone over \$1 trillion is expected to be invested in distribution grid upgrades to accommodate renewable energy and electric vehicle charging over the next 15 years. ^(a)
Globally it is estimated that USD \$14 trillion will need to be spent on grid related upgrades to support renewable energy sources. ^(b)



The complexity of the Smart Grid 2.0 provides increased need for voltage regulation technology.

a) Source: American Action Forum – 10 August 2021

Source: S&P Global Market Intelligence – 23 Feb 2021

Markets – Voltage Regulation / Power Quality



Voltage regulation is needed by both Utilities as well as Commercial & Industrial markets.

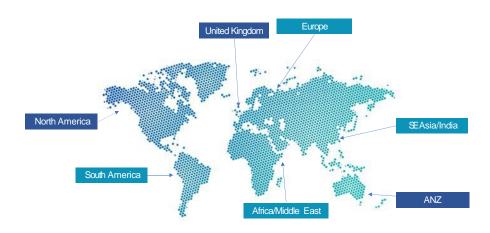
Worldwide utilities currently spend an estimated \$250 billion annually on their distribution networks. (a)

Based on a conservative estimate of 1% of total expenditures, the Voltage Regulation market itself will represent a TAM of \$2.5 billion. (b)

The power quality market for the Commercial & Industrial markets currently represents \$30 billion annually. (c)

Pacific Volt is currently focused on three markets, North America, Australia/New Zealand and the UK and will subsequently provide products worldwide.





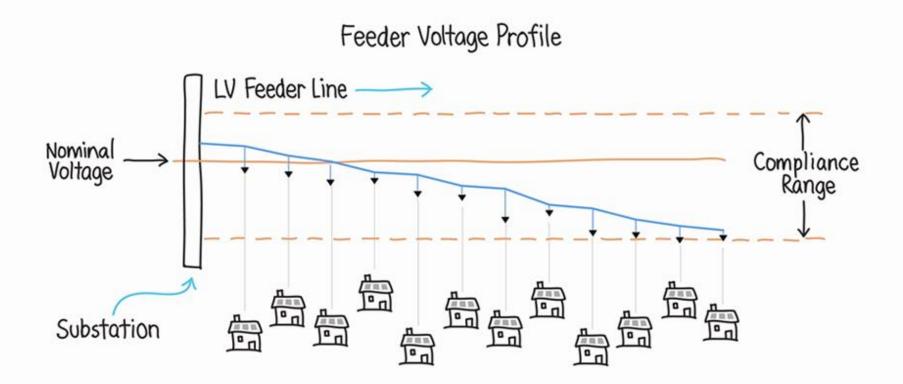
⁽a) INMR report – 09 November 2019

⁽b) Global Newswire – 11 August 2022

⁽c) Global Newswire – 31 August 2022

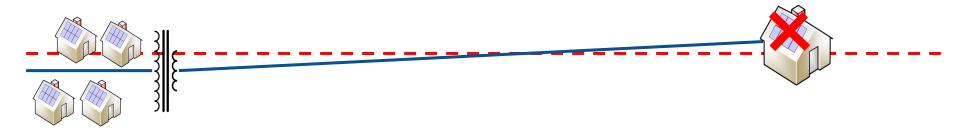
Application Utilities - Feeder Line - CVR





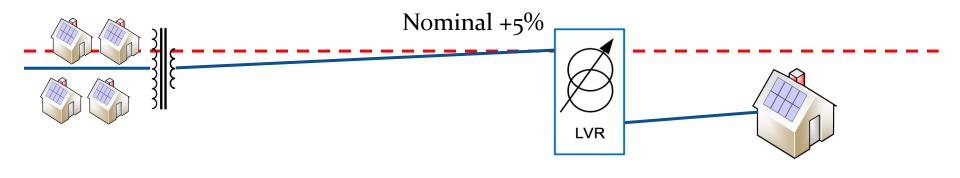
Application Utilities - Solar Enablement





Application Utilities - Solar Enablement

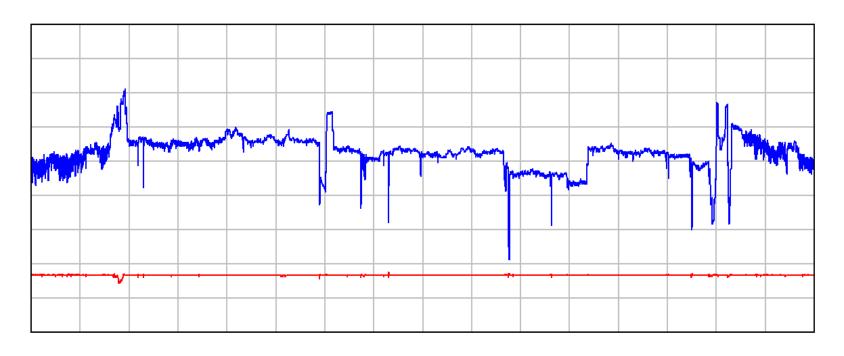




Nominal -5%



Voltage In – blue line

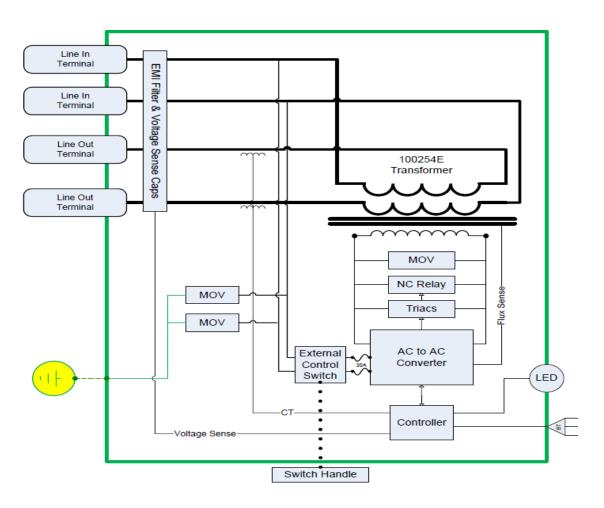


Voltage Out - red line

Technology – Overview



Pacific Volt's proprietary AC-AC Series Injection LVR Topology



Bi-directional sub-cycle regulation +/- 8% with line drop compensation

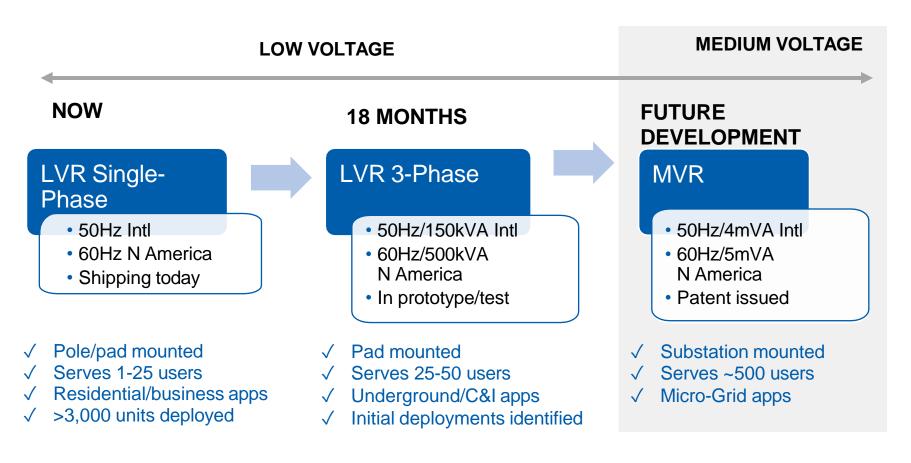
AC to AC converter controls voltage and polarity of voltage applied to the secondary winding of the series injection transformer. Reducing the magnetic flux density of the series injection transformer reduces the output voltage, and conversely increasing the flux density raises the output voltage.



The Company – Product & Development



Pacific Volt currently offers two versions of its LVR products and will be continuing to introduce new product categories to the marketplace:



The Company – Manufacturing



Pacific Volt maintains its headquarters and manufacturing in Poulsbo, WA.

- Product assembly with current capacity of 50 units per month
- Sub-assemblies built by specialty contract manufacturers
- Product QA testing
- Leased facility including 5,000 sq ft.
- Highly scalable with opportunity to outsource as needed with volume growth







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