



## Silicon Power Corporation Empowering uninterrupted operations for critical facilities

Mr. Perry Schugart  
Sr. Executive

### About the Sr. Executive

Mr. Perry Schugart is a Sr. Executive, Business Development of the company. He has completed his B.S. in Physics from the University of California, Santa Barbara. He has over three decades of delivering advanced technologies and solutions to meet the business, market, and customer needs and has held several leadership positions with organizations including ABB Switzerland and AMSC where he focused on Marketing and R&D. While at ABB he was a Division Leader for the Lean R&D best practices team (ABB's World Class Operations). He is the creator of the Agnesium Marketing Protocol and Founder of Agnesium Marketing and has multiple publications and patents.

**S**ilicon Power Corporation is a globally recognized technology developer and solutions provider for design, development, testing, and manufacturing of high-power semiconductor devices, high-power pulsed-power modules, and high-power utility-applicable systems. We managed to have a conversation with Mr. Perry Schugart, Sr. Executive, Business Development of Silicon Power Corporation.

#### ***Brief us on the history of Silicon Power Corporation. How has the company developed over the years?***

Silicon Power Corporation (SPCO), founded in 1994, is a globally recognized technology developer and solutions provider in the

design, development, testing, and manufacturing of high-power semiconductor devices, pulsed-power modules, and utility-applicable systems. SPCO is a vertically integrated company that spans the design and manufacturing of semiconductor devices through large industrial/utility power systems. Our capabilities include leading-edge semiconductor devices and modules (Si and SiC) through our facilities in Bend, Oregon (SiCamore Semi) and joint venture in Gujarat, India with Ruttonsha International Rectifier, and large industrial/utility power systems through our Innova™ Power Solutions Group. SPCO fielded the world's first medium voltage, sub-cycle transfer switch in 1995, and has since remained the market leader in this product and technology.

SPCO's Innova Power Solutions Group

is a global leader in medium voltage, sub-cycle switching technology and solutions. The Innova product portfolio is focused on increasing the resilience of electrical power networks for critical facilities and utilities, empowering higher levels of power reliability and performance. We have deployed this solution to solve sensitive load issues in various industries and utilities for over 20 years.

#### ***Detail us about Innova Power Solutions Products and their advantages.***

Our Innova Power Solutions product portfolio includes medium voltage, sub-cycle transfer switches (Innova STS) that can switch between medium voltage feeds in a quarter-cycle. Typically, they are used at critical facilities where uninterrupted

operations are essential. Examples include semiconductor, airport, automotive, pharmaceutical, chemical, and data/financial applications. The focus is on providing uninterrupted operations to a whole facility, protecting the people, property, and profit our customers rely on.

The Innova STS comes out as the most cost-effective solution with substantially lower upfront and lifecycle costs, smaller footprint, and higher efficiency compared to energy storage systems. Without the additional costs associated with batteries, their maintenance, replacement, and disposal, the Innova STS is the best economic and environmental solution.

For applications where two power feeds aren't available, our Innova SDS sub-cycle disconnect switches are the fastest medium voltage, AC disconnect switches available. They are ideal for large energy storage systems and microgrids that require quick isolation or islanding. This is a great enabler for distributed energy resources, such as solar and energy storage. To sum it up, our Innova product portfolio increases the resilience of power networks, empowering higher levels of power reliability and performance.

***Tell us about how your solutions support the information needs of the future.***

Powering the platforms of the future will require more refined energy

management; that is, the fidelity of power will play a more important role as the needs for data increase. We've been seeing this trend for some time, and it's becoming more pronounced as we move forward. To put some perspective to it, we're seeing multiple trends that are creating events that were previously very infrequent or didn't exist. These trends include a power grid that has less rotational inertia, making it less resilient to counteract faults on the grid; increased use of data in everything, including our Wi-Fi routers, refrigerators, manufacturing equipment, security systems, and healthcare; and the increased need for information to be available anytime and anywhere.

A common thread we see in avoiding this situation is the need to bridge the gaps in energy management that were previously acceptable but are now disruptive. This includes the ability to select, or switch to, a source of higher power quality without the risk of disrupting operations; this is what our Innova STS sub-cycle transfer switches have been doing for over 20 years. Quoting a customer, the Innova STS *"makes utility events invisible to our daily operations"*. Conventional transfer switches are too slow to meet today's microprocessor-based systems' and platforms' power quality needs.

The platforms of the future will have higher fidelity and resiliency needs for both power and data. Our Innova Power Solutions portfolio provides a key component for assuring power resiliency.

***What are your core business segments?***

We are focused on mission-critical applications that you find in many different and diverse markets, such as pharmaceutical, industrial, financial, transportation, and utility markets. We are also seeing more interest coming from other areas like universities, research labs, and military installations where more and more critical operations are taking place that can't afford power-related disruptions. The growing power needs of data-centric platforms that we use in our daily lives, both directly and indirectly, are creating new areas of critical operations/facilities that can take advantage of our solutions.

***Do you want to include any ending thoughts?***

SPCO is both a pioneer and a leader in providing power resiliency solutions that protect the people, property, and profit our customers rely on. This year marks twenty-five years since we fielded the world's first medium voltage, sub-cycle transfer switch. We have worked with industry leaders such as Ford and Novartis to help eliminate the power-quality-related business disruptions they were experiencing. I know there are many more organizations/critical facilities out there that are experiencing power-quality-related disruptions and aren't aware of us, I encourage anyone seeking uninterrupted operations to contact us, or me directly.

***"For over twenty years clients have depended on Silicon Power for the design and development of component and system solutions to meet a broad range of applications derived from long-term commercial relationships and government contracts."***