





For Immediate Release

May 3, 2024

## California Utilities Explore Fault-Managed Power Systems for Direct Current (DC) Power Distribution

CalNEXT selects study on energy savings and electrification benefits for commercial, industrial, and agricultural buildings

SAN FRANCISCO, CALIFORNIA, May 3, 2024 – CalNEXT, a statewide initiative to identify, test, and grow electric technologies and delivery methods to support California's decarbonized future, has selected Energy Resources Integration (ERI) to study the benefits of innovative electrical infrastructure for non-residential buildings. The study will produce a technology roadmap for California's electric utilities. ERI's "Enabling Non-Residential Electrification and Efficiency with Fault Managed Power Systems (FMPS)" study will identify new rebate programs for utilities to support commercial, industrial, and agricultural facility owners and property managers with Fault-Managed Power Systems (FMPS). The project focuses on providing direct current (DC) power to DC-driven devices via FMPS and investigates energy savings potential and barriers to adoption across the California non-residential buildings market.

The goal of the study is to establish a baseline of power distribution equipment and operations in existing California non-residential buildings, understand the barriers to FMPS technology adoption, demonstrate the performance of FMPS technologies, and identify key solutions to accelerate technology transfer and maximize energy savings.

A market assessment will explore market potential and assess how Fault-Managed Power Systems (FMPS) can reduce the barriers to electrification efforts by reducing the complexity and cost of electrical infrastructure upgrades across non-residential (commercial, industrial, and agricultural) customer segments. Building owner and facility manager surveys, interviews, and site visits will be conducted May 2024 – August 2024. Manufacturer partner Voltserver will support two field demonstrations to showcase energy savings from FMPS power distribution equipment and DC-powered devices from September 2024 – April 2025.

This project is funded by <u>CalNEXT</u> and will be implemented by Energy Resources Integration and Voltserver. Collaborations with industry leaders such as Voltserver, the inventor of the

first FMPS, Digital Electricity™, are crucial to support the field demonstrations and ensure the research team produces research-based insights utilities can use to create new programs.

"The ERI team is thrilled to lead this groundbreaking project aimed at revolutionizing the buildings industry in California. Our study on Fault-Managed Power Systems underscores our commitment to creating lasting change by significantly reducing energy expenditure in commercial, industrial, and agricultural facilities. This project marks ERI's second collaboration with the CalNEXT initiative, and we are eager to contribute to innovative advancements in energy efficiency in California's non-residential buildings. This project will help forge a new path for efficient power distribution and load management in these energy intensive facilities and create a new target for the industry," shares Eric Noller, Principal and Founder of ERI.

"Electrification of buildings is a cornerstone of achieving decarbonization goals, as evidenced by the increasing adoption of 'All-Electric Building' ordinances throughout California and across the nation. At VoltServer, we are committed to facilitating this transition by radically simplifying the installation of electrical and smart control infrastructures through our innovative Digital Electricity™ technology. We are thrilled to collaborate with leading organizations like ERI and CalNEXT, who share our vision and dedication to advancing sustainable building practices," said James Eaves, Director of Indoor Agriculture at Voltserver.

## **About CalNEXT**



CalNEXT identifies, tests, and grows electric energy technologies and delivery methods that have the potential to make major impacts on achieving California's climate goals. The goal is to provide support and resources for 170 projects over the next six years. CalNEXT's team of experts identify and resource ideas to advance the state's priorities for decarbonization through electrification, utility grid priorities such as load flexibility, new measures for utility programs, and engaging hard-to-reach customers and disadvantaged communities. Project categories include research and development addressing appliances, HVAC, lighting, process loads, water heating, and whole buildings. Selected projects are tested and potentially incorporated into investor-owned utility programs. The initiative is funded by California ratepayers. The CalNEXT team is led by Energy Solutions, and includes expert partners AESC, VEIC, UC Davis, TRC, and The Ortiz Group.

CalNEXT is also dedicated to removing barriers so that all Californians have access to the benefits of clean and healthy environments. Through this initiative, we hope to engage

members of the community to provide insight into how to support equity and inclusion in delivering these technologies.

To learn more, visit the CalNEXT website.

## **About ERI**



Founded in 2011, Energy Resources Integration (ERI) is an energy engineering firm based in San Francisco. ERI is known for helping clients meet energy and sustainability goals, while bridging the gap between utility programs with customer needs. Specializing in energy efficiency engineering, ERI provides a range of services including energy action plans, utility incentive program support, and emerging technology studies. ERI has a diverse team of engineers and energy professionals dedicated to reducing energy consumption and greenhouse gas emissions. Notably, ERI excels in efficient controlled environment agriculture (CEA) strategies, offering tailored solutions for facilities such as greenhouses and vertical farms. Recent CEA projects include technology assessments, utility incentive program implementation, and market studies. ERI's commitment to environmental responsibility and operational efficiency ensures sustainable solutions that benefit both clients and communities. Contact the project manager of the study at gretchen@eripacific.com.

## **About Voltserver**



As electricity needs continue to grow and evolve, VoltServer is solving the world's power distribution demands through its patented and intelligent Digital Electricity solutions. From state-of-the-art venues to vertical farms and beyond, it delivers proven power distribution solutions that are intelligently efficient, inherently safe, and setting a new standard for reliability, resiliency, and reach. Learn more at www.voltserver.com.