

EMerge Alliance Completes New Data/Telecom Center Standard at Greenbuild 2012 New standard continues to open doors for DC power and net-zero-energy buildings

SAN FRANCISCO, CALIF. (November 13, 2012) – <u>The EMerge Alliance</u> – an open industry association leading the rapid adoption of safe direct-current (DC) power distribution standards for commercial buildings – today announced the completion of the EMerge Alliance Data/Telecom Center Standard at Greenbuild 2012.

The EMerge Alliance Data/Telecom Standard creates an integrated, open platform for power, infrastructure, peripheral device and control applications to facilitate the hybrid use of AC and DC power within data centers and telecommunications central offices. This change in power distribution architecture involves making a single conversion of the incoming line of AC voltage to 380VDC, and then distributing it directly to rack-mounted ICT equipment, simplifying the otherwise unnecessarily complex power management provisions generally used in today's AC-powered data centers.

According to Dennis Symanski, senior project manager at the Electric Power Research Institute (EPRI) and chair of the Alliance's technical standard committee for data and telecommunications centers, using DC power distribution in data centers significantly improves reliability and reduces equipment and operating costs.

"The benefits are clear. By requiring fewer components and conversions than their AC counterparts, DC power systems in data centers suffer fewer heat related failures and require less space, energy, and maintenance to operate," said Symanski. "DC power collection and distribution systems also simplify the use of locally generated power, providing an effective integration of on-site energy generation and storage with direct delivery of controlled power."

A demonstration of the EMerge Alliance Data/Telecom Center Standard will be on display at the EMerge Alliance's booth #2015S at Greenbuild. Products illustrating components of data centers and the benefits of using DC power in data centers will be demonstrated, including: ABB circuit protection, APP connectors, Delta rack power distribution units, Emerson Network Power NetSure[™] 4015 400VDC Power System uninterruptible power supply, Hubbell connectors, NEI 380VDC server and Starline DC Solutions overhead track power systems. The display will also highlight a server demonstration from Intel, providing a side-by-side look at the benefits of using DC versus AC power.

"The EMerge Alliance Data/Telecom Standard was designed to integrate with our other standards to form a family of area-specific DC microgrids that, when interconnected, create a resilient and versatile building or campus energy network," said Alliance Chairman Brian Patterson. "DC power is a key component in net-zero-energy buildings, and our growing organization of more than 100 members continues to make progress with standards for the occupied space, data and telecommunications centers, building services, and outdoor applications to achieve our vision for improved energy efficiency, flexibility and sustainability throughout buildings."

The Alliance's Greenbuild booth will present all four areas of the EMerge Alliance vision for DC power distribution. In addition to the data center display, visitors can see a working demonstration of several <u>EMerge Alliance Registered products</u> built using the EMerge Alliance Occupied Space Standard, including: Acuity Lithonia Lighting TLED and VTLED fixtures, Armstrong World Industries DC FlexZone ceiling grid, Cooper Metalux Ovation 2RDI fixture, JLC-Tech LLC T-BAR LED Smartlight[™], Nextek Power Systems power supply module, RLC22 LED 2'x2' Luminaire from OSRAM SYLVANIA, Philips Lightolier Calculite downlights, ROAL Electronics safe energy server and TE Connectivity LVDC cables. The display will also feature an ENCELIUMTM demonstration of a lighting control system accessible iPad by OSRAM SYLVANIA.

A total of 21 of EMerge Alliance members will be exhibiting at Greenbuild in San Francisco, including:

- ABB 2401S
- Armstrong Ceiling Systems 3969N
- Acuity Brands, Inc. 2121S
- BACnet International 326S
- Cooper Industries 1437S
- Crestron Electronics, Inc. 907S
- Delta Products Corp. 5316W
- EnOcean Alliance, Inc. 207S
- GE Lighting 2301S
- Hubbell Building Automation 3779S
- JLC-Tech LLC 4186N
- Johnson Controls 4161N
- OSRAM SYLVANIA 2009S
- Passive House Institute US T21
- Philips Lighting 3675N
- Project Frog, Inc. 1807S
- Southern California Edison 1533S
- Turner Construction 1427S
- Underwriters Laboratories Inc. 4263N
- USAI Lighting 2230S
- Webcor Builders 5301W

The EMerge Alliance's Growing Standards Portfolio

The EMerge Alliance continues to work toward completing new DC power standards to achieve netzero-energy buildings. The EMerge Alliance Occupied Space Standard creates an integrated, open platform for power, interior infrastructures, controls and a wide variety of peripheral devices to facilitate the hybrid use of AC and DC power within commercial buildings. The EMerge Alliance Data/Telecom Center Standard provides a practical guide for the hybrid use of DC power in data centers, offering improved reliability and efficiency, smaller footprint, and lower capital and installation costs. Currently in development, the Campus Microgrid Standard will focus on establishing a standard for the integration of DC microgrids throughout whole buildings and the Task Level/Furnishings Standard will connect DC power to desktop technologies and applications. Moving forward, the Alliance will continue its vision by developing future standards for building services, such as HVAC, and outdoor applications, such as electric vehicle charging.

About the EMerge Alliance

The EMerge Alliance is an open industry association leading the rapid adoption of safe DC power distribution in commercial buildings through the development of EMerge Alliance standards. These innovative standards integrate interior infrastructures, power, controls and devices in a common microgrid platform to facilitate the hybrid use of AC and DC power throughout buildings for unprecedented design and space flexibility, greater energy efficiency and improved sustainability. The nonprofit Alliance is accepting new members at various levels. For more information, please visit www.EMergeAlliance.org.

Contact: Christi Chesner for EMerge Alliance 214-635-3023 media@EMergeAlliance.org

###