

The EMerge Alliance in a member organization comprised of commercial, academic and government members and liaison affiliates helping resource and lead the rapid adoption of safe, resilient, economical, and sustainable DC and hybrid AC/DC distributed energy microgrid power systems for buildings, neighborhoods, and communities that integrate well and can support the successful operation of existing power grid assets. It was founded in 2008 as a 501C part 3 non-profit NGO industry trade organization registered in California, with headquarters in Alexandria VA. Its primary means of accomplishing its mission has been by collaboratively developing vanguard technical specifications and system-level standards for its stakeholders and by promoting overall market development by providing education and live demonstrations of representative multi-vendor microgrid systems at industry trade events. The EMerge management team is comprised of a representative cross-section of its members. (See Item 1 for details.)

While there are many similarly organized organizations working in the electric power field, EMerge has taken the unique approach of not trying to compete with these organizations, but rather complementing them by focusing on anticipated or enabling issues that represent gaps in current standards and/or the technologies addressed therein. It also creatively engages the whole of the industry through its 'live' demonstrations and education/awareness efforts. It concentrates most on system infrastructure, connectivity, interoperability, and compatibility issues and less on individual components or pieces of equipment. Its standards are designed to be completely subordinate to existing safety standards and to the requirements of recognized authorities having jurisdiction. Where appropriate it has either taken the lead or has collaboratively participated in getting 'enabling' revisions to the national electrical code, ANSI and other industry and government recognized SDO standards. (See Item 2 for additional details.)

The Alliance's end goals for overall power system level include:

- Facilitating the greatest use of renewable energy sources, particularly that which is located at the fringe of the grid, both in front of and behind the meter, as a primary way to reduce existing power production's impact on the environment;
- Reducing the vulnerability of current electric systems and grids to costly and disruptive faults/outages and power quality issues;
- Better enable increased "clean" electric power production for the electrification of the transportation, agriculture and information/communications industries without increasing its impact on the environment;
- Provide greater opportunity to stabilize or reduce the cost of electricity to end-users;



• Improve access to inexpensive "clean" electricity to help underwrite more equitable economic and social development opportunities.

The collaborative member and liaison resources of the Alliance include:

- Leading original equipment developers and manufacturers of both power and related information/communications technologies
- Power system designers and related service providers
- Power system modeling and metering engineering and related service providers
- Electric utilities
- Leading university engineering research groups
- Federal and State agencies and laboratories
- Electrical Contractors
- System Integrators
- System Installers
- Other related industry trade and union organizations
- Tradeshow, conference and educational service providers

(See Item 3 for additional details.)

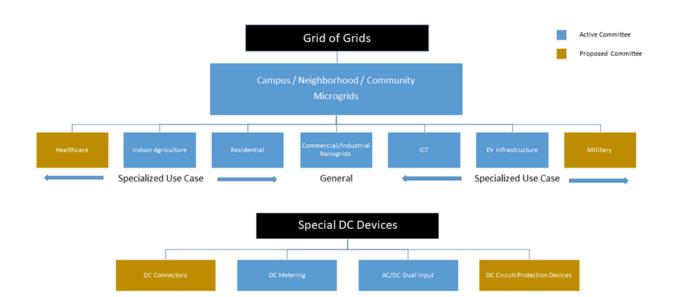
The alliance has an industry reputation of professionalism and accomplishment. Its unique way of directly partnering with other trade organizations and tradeshow/conference organizers has put it in a unique market-facing and influencing position. It has been as much a thought leader and catalyst to other organizations as it has been a provider of its own work products.



1. EMerge Management:



2. List of technical standards committees in EMerge:





- 3. List of members, liaison, partners & collaborating Organizations.
- Commercial Organizations
 - o ABB
 - Accuenergy
 - Aclara
 - o Acuity Brands
 - o Agile Fractal Grid
 - o Alencon Systems LLC
 - o AlLee Consulting
 - Alternate Energy Source
 - o Anderson Power Products IDEAL
 - APEX Engineering
 - o API Technologies Corp
 - o Architectural Engineering Design Group
 - Arda Power Inc
 - Armstrong World Industries
 - ASSA ABLOY
 - o B. L. Coliker Associates LLC
 - o BINAY OPTO ELECTRONICS PVT. LTD.
 - Brock Glasgo
 - o BYRNE
 - Carling Technologies
 - o CE+T America
 - o Cisco Systems Inc.
 - Cobotix
 - Cooper Lighting
 - Comcast
 - o Darnell Group
 - o Delta Power Solutions
 - o Dodds Enterprises LLC
 - DTE Energy
 - o Duke Energy
 - o Dynamic Supplier Alignment, Inc.
 - o E. J. Curtis Associates



- Echola Systems
- Egret Consulting Group
- o Electro Plastics, Inc.
- o Elecyr Corporation
- Elevatenergy
- o ElSafe Australia Pty LTD
- o Eltek AS
- o Emera Corporation
- Emera Technologies
- o Emerson Network Power Energy Systems
- Enedo Power
- Sandia National Laboratories Engineering Services of Vermont
- o GE Critical Power
- Gensler
- o Greenville Light & Power System
- o Grid-IoT
- o GVA Lighting, Inc.
- Heila Technologies
- o Informa Connect
- Instant Access Networks
- o IP Utilinet
- o JB Electrical Design, PC
- o JLC-Tech LLC
- Kluber Architects
- Kroger Company
- Lauren Illumination, LLC
- Lighting Energy Depot
- LumaNEXT
- o Lumen Cache, Inc.
- Lutron Electronics
- Morstar Electric
- o T. E. Martinson Associates
- o M-Trigen Inc.
- Measurlogic
- o Nextek Power Systems
- NextEnergy Center



- Nicholson and Sun LLC
- NOVO Technologies Pvt Ltd NTT - Facilities
- o OE ElSafe o Osram Sylvania
- Paladino and Company
- Peabody Architects
- o Philips Electronics, N.V.
- PNC Financial Services Group, Inc.
- Power Analytics
- Power Measurements
- o Power Panel Inc.
- o PQ Logic Corporation
- o Radian Research
- o Radium Engineering LLC
- Rectify Solar, LLC
- o Renesas Electronics America Inc.
- o Robert Bosch, LLC
- Robert Cruickshank
- Schurter Engineering
- sg++ smart grid consulting
- o Shell New Energies US LLC
- Solar Cultivation Technologies
- Solar Energy Tradeshows, LLC
- Southern California Edison
- Southwire Company, LLC
- o TDK Lambda
- TE Connectivity
- o TOGGLED
- **Turner Construction**
- o Underwriters Laboratories Inc
- Universal Electric Corp Starline DC Solutions
- Universal Lighting Technologies
- VoltServer Inc.
- VP Energy LLC
- Worldwide Environmental Services LLC
- Xyleminc



• Trade, NGO & SDO Organization Liaisons

- o 7X24 Exchange
- AIA
- o Alliance for Sustainable Colorado
- Alliance to Save Energy
- o ANSI
- ASHRAE
- BACnet International
- CABA
- o CLASP
- o Connected Vehicle Trade Association, Inc.
- o Electric Power Research Institute
- o EnOcean Alliance, Inc.
- Electric Reliability Council of Texas
- o Forth
- Galvin Electricity Initiative
- o Go 15 PJM, MISO, CAISO
- o Green Grid
- o IBEW
- o IEC
- o IEEE
- o ITU
- National Electrical Manufacturers Association
- o NFPA
- o NIST
- o NRRI
- PASSIVE HOUSE INSTITUTE US
- o Power Sources Manufacturers Association
- o Renewable Energy & International Law
- o Renewable Energy and Energy Efficiency Partnership
- Society of Cable and Telecommunications Engineers



- o Smart Electric Power Alliance
- Solar Energy Industry Association
- o USB Implementers Forum
- USGBC
- o ZigBee Alliance

• Academic Organizations

- Aalborg University
- Binghamton University
- California Lighting Technology Center
- o CASE Western Reserve
- Clemson University
- Georgia Tech
- o IIT Madras
- Los Angeles Community College District
- o MIEE
- New Mexico State University
- o Penn State University
- Purdue University
- University of Pennsylvania
- o Princeton University
- o University of California Davis
- University of California San Diego
- o University of North Carolina NC FREEDM Systems Center
- University of California
- University of Pittsburgh
- o University of Texas Arlington
- o University of Texas Austin
- University of Toledo
- o Villanova University
- Virginia Tech
- o Yale Center for Business and the Environment
- Yale Climate and Energy Institute

• Government Organizations

- o Argonne National Lab
- o California Public Utilities Commission
- o California Institute for Energy and Environment
- o Lawrence Berkeley National Laboratory
- o National Renewable Energy Laboratory
- o NYSERDA
- o Pacific Northwest National Laboratory
- o US Department of Energy
- o US General Services Administration