EMerge Alliance 2019 Highlights

Brian T. Patterson
President
EMerge Alliance

Tim Martinson
Vice President
EMerge Alliance
Reinventing Building, Campus & Community Power

A Non-profit Alliance Creating Standards for and promoting the commercialization of DC and Hybrid AC/DC Microgrid Power Systems
• World’s largest professional organization advancing the use of **direct current and hybrid ac/dc technology** in power systems and microgrids.

• Facilitate greater energy **resiliency, reliability, efficiency, safety and sustainability**

• Maximizing the potential use of clean, renewable **on-site** energy.

• **Open industry association** of collaborating commercial, government and academic organizations

• Developing DC & hybrid AC/DC microgrids standards for **Commercial, Residential, Industrial and Technical buildings**, for campus/community and/or remote location use.

http://www.emergealliance.org
CONSIDER JOINING THE INDUSTRY’S LEADING BUILDING POWER STANDARDS AND TRADE ORGANIZATION...

If your company is focused on the commercial and/or residential building industry, consider joining the EMerge Alliance today as a new era in power sourcing, distribution and management in buildings is underway. The EMerge Alliance promotes better and more practical ways of getting the most out of both AC and DC power systems.

The Alliance is a nonprofit open industry association established to promote the adoption of safe, low-voltage hybrid ac/dc microgrids and other evolving power collection and distribution systems used in buildings. The Alliance develops and maintains open standards that integrate power sources, wiring infrastructures, controls and a wide variety of load devices, such as lighting, HVAC, appliances, IT gear and the connected Internet of Things in a common platform that adds flexibility, resiliency, economy, safety and sustainability for new and existing buildings. EMerge is focused on the building side of the utility meter. With a keen eye on renewable and site based distributed energy sources, the Alliance is helping prepare buildings for new energy platforms as part of an evolving new energy network, or Enernet.
A Vanguard standard...

- Leads instead of follows market adoption
- Creates market leadership opportunities
- Captures the leading edge of technologies and new use cases
- Proceeds traditional Standards Development Organization (i.e. IEEE, IEC, NEMA, NFPA, etc.) standards (1-2 yr. vs 3-6+ yr. cycle)
- Subordinate to existing regulations and listing (code) requirements
- Used to trigger regulatory and other standards updates
- Recognizes existing technologies & products to highest degree possible
- Does not depend upon new science or future inventions
- Has a bias toward minimization of requirements
- Allows for the maximum opportunity for future innovation
BUSINESS OPPORTUNITY

In the next five years, Microgrids will grow into a $40+ billion market. And, the forecast of Solar powered systems in buildings is expected to grow into a $10+ billion market by 2020.

Smart Energy Microgrid Tradeshows

To ensure your company is leading the way, EMerge facilitated tradeshows will provide unique opportunities to showcase your products and systems that serve these growing markets.
2019 North America Smart Energy Week
September 23-26, 2019
Salt Palace Convention Center Salt Lake City, UT

SHOW FLOOR LAYOUT
AND PRIMARY SMART ENERGY - MICROGRID FEATURES
Smart Energy - Microgrid Show Floor Features

- Includes:
  - Live microgrid (fishbowl) incl. Power Flow Monitoring
  - Emerge Micro-pedia
  - Emerge .3D Virtual Microgrid Table Demo
  - NASEW Presentation Theater – 3 Days, 25+ presentations
  - Digital Power Demo
  - Networking area (inside Theater and in adjacent area)
  - Microgrid Power Fed (Smart Energy Exhibitors Space) Community (see floor plan)
  - Outdoor DER area (solar array, wind turbine, etc. – behind Theater)
  - SEPA/DoE Plug 'n Play Challenge DER ESI Demo
Excellerate MFG Exhibition Opportunities:

- Recommended Booth for WindStax® Energy: 5754
- 10 x 10 in the Distributed Wind Section of Smart Energy
- Adjacent to the Microgrid Demo and Theater Area
- Outdoor Space in Microgrid Area
- Scheduled/Guided tours of outdoor area
PV & Wind Outdoor Exhibit Space

Microgrid Theater & Indoor Demo
Smart Energy/Microgrid Theater Area Layout

- LEFT SIDE AISLE
- RIGHT SIDE AISLE
- FRONT AISLE
- MAIN AISLE

- Live Microgrid
- Seating
- Seating
- Seating
- Banner with Lights
- 3D Demo Table
- TV
- TV
- TV

- Microgrid Exhibitors
- SPI Exhibitors
- SPI Exhibitors
- Convention Hall Wall

POWERED BY SEIA, Smart Electric Power Alliance
Suggested WindStax® Energy Exhibit Layout
Featuring...

The Award Winning “LIVE Microgrid” Demonstration

Top 100 Tradeshows - Best Technology Integration Award
USGBC-GBCI/PEER Microgrid Performance Evaluation Demonstration – Platinum Capability
Evolution and Functionality of the “Grid of Grids” using the Virtual Microgrid 3D Demonstrator
Introducing at this year’s trade shows and conferences…

Virtual Microgrid Demonstration Table
Also introducing at this year’s trade shows and conferences...

The MICRO-PEDIA
An Electronic Self-directed Microgrid Encyclopedia
Major Tradeshow Participation

- Smart Energy Week 2019
- MJ Biz Con 2019
- IBS 2020
- Greenbuild 2019
- CES 2020
## Conference Participation

SEIA/SEPA Sponsored Regional Conferences:

<table>
<thead>
<tr>
<th>Region</th>
<th>Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>TEXAS</td>
<td>JUN 2019</td>
</tr>
<tr>
<td>COMMUNITY SOLAR POWER SUMMIT</td>
<td>JUL 2019</td>
</tr>
<tr>
<td>SEPA GRID EVOLUTION SUMMIT</td>
<td>JUL 2019</td>
</tr>
<tr>
<td>SOLAR POWER INTERNATIONAL</td>
<td>SEP 2019</td>
</tr>
<tr>
<td>ENERGY STORAGE INTERNATIONAL</td>
<td>SEP 2019</td>
</tr>
<tr>
<td>MIDWEST</td>
<td>NOV 2019</td>
</tr>
<tr>
<td>NEW YORK</td>
<td>DEC 2019</td>
</tr>
<tr>
<td>CALIFORNIA SOLAR &amp; STORAGE EXPO: NORTH</td>
<td>JAN 2020</td>
</tr>
<tr>
<td>NORTHEAST</td>
<td>FEB 2020</td>
</tr>
<tr>
<td>MEXICO</td>
<td>MAR 2020</td>
</tr>
<tr>
<td>CALIFORNIA SOLAR &amp; STORAGE EXPO: SOUTH</td>
<td>MAY 2020</td>
</tr>
<tr>
<td>SEPA UTILITY CONFERENCE</td>
<td>MAY 2020</td>
</tr>
<tr>
<td>FLORIDA</td>
<td>RETURNING IN 2020</td>
</tr>
<tr>
<td>PUERTO RICO</td>
<td>RETURNING IN 2020</td>
</tr>
<tr>
<td>SOUTHEAST</td>
<td>RETURNING IN 2020</td>
</tr>
</tbody>
</table>

Regional Conferences include EMerge Presentations, EMerge Virtual Microgrid and the EMerge Electronic Micro-Pedia™

Other Conference participation is ad hoc by invitation.
## Conference Participation

### National Tradeshow Events (with EMerge Involvement)

<table>
<thead>
<tr>
<th>Event</th>
<th>Start Date</th>
<th>End Date</th>
<th>Location</th>
<th>Industry</th>
<th>Sponsor</th>
<th>Show Mgmt</th>
</tr>
</thead>
<tbody>
<tr>
<td>NASEW/SPI</td>
<td>September 23, 2019</td>
<td>September 26, 2019</td>
<td>Salt Lake, Ut</td>
<td>Renewable/Distributed Energy</td>
<td>SEIA/SEPA</td>
<td>SETS</td>
</tr>
<tr>
<td>Cable-Tec</td>
<td>September 30, 2019</td>
<td>October 3, 2019</td>
<td>New Orleans, LA</td>
<td>Cable/Telecomm</td>
<td>SCTE/ISBE</td>
<td>Self</td>
</tr>
<tr>
<td>Greenbuild</td>
<td>November 19, 2019</td>
<td>November 22, 2019</td>
<td>Atlanta, GA</td>
<td>Green Building Industry</td>
<td>USGBC</td>
<td>Informa</td>
</tr>
<tr>
<td>NASEW/SPI</td>
<td>September 14, 2020</td>
<td>September 17, 2020</td>
<td>Anaheim, CA</td>
<td>Renewable/Distributed Energy</td>
<td>SEIA/SEPA</td>
<td>SETS</td>
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<tr>
<td>Greenbuild</td>
<td>November 4, 2020</td>
<td>November 6, 2020</td>
<td>San Diego, CA</td>
<td>Green Building Industry</td>
<td>USGBC</td>
<td>Informa</td>
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<tr>
<td>MJBIZcon</td>
<td>December 11, 2020</td>
<td>December 13, 2020</td>
<td>Las Vegas, NV</td>
<td>Marajuana Growers</td>
<td>Marajuana Business Daily</td>
<td>Self</td>
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<tr>
<td>Cable-Tec</td>
<td>TBD</td>
<td>TBD</td>
<td>TBD</td>
<td>Cable/Telecomm</td>
<td>SCTE/ISBE</td>
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<th>Show Mgmt</th>
</tr>
</thead>
<tbody>
<tr>
<td>2019 SEPA Grid Evolution Summit</td>
<td>July 29, 2019</td>
<td>August 1, 2019</td>
<td>Washington DC</td>
<td>Renewable/Distributed Energy</td>
<td>SEPA</td>
<td>SEPA</td>
</tr>
<tr>
<td>Smart Energy Midwest</td>
<td>November 14, 2019</td>
<td>November 15, 2019</td>
<td>Chicago, IL</td>
<td>Renewable/Distributed Energy</td>
<td>SEIA/SEPA</td>
<td>SETS</td>
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<tr>
<td>Smart Energy Northeast</td>
<td>February 19, 2020</td>
<td>February 20, 2020</td>
<td>Boston, MA</td>
<td>Renewable/Distributed Energy</td>
<td>SEIA/SEPA</td>
<td>SETS</td>
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<tr>
<td>Smart Energy Florida</td>
<td>March 12, 2020</td>
<td>March 13, 2020</td>
<td>Ft. Lauderdale, FL</td>
<td>Renewable/Distributed Energy</td>
<td>SEIA/SEPA</td>
<td>SETS</td>
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<tr>
<td>Smart Energy Midwest</td>
<td>November 17, 2020</td>
<td>November 18, 2020</td>
<td>Chicago, IL</td>
<td>Renewable/Distributed Energy</td>
<td>SEIA/SEPA</td>
<td>SETS</td>
</tr>
<tr>
<td>Smart Energy Canada</td>
<td>TBD</td>
<td>TBD</td>
<td>TBD</td>
<td>Renewable/Distributed Energy</td>
<td>SEIA/SEPA</td>
<td>SETS</td>
</tr>
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</table>
For Questions & Information

EMerge Alliance
225 Reinekers Lane, Suite 680
Alexandria, VA 22314
703-738-9460
E-mail: help@EMergeAlliance.org

Brian T. Patterson
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814-460-9633
Presented by MICROGRID Pavilion in association with SCTE·ISBE.
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How is EMerge funded?

- 100% by membership fees (See chart)
- Donations are accepted

What are the principle costs to run the Alliance?

- Admin Cost
  - Executive Office & G&A (volunteer – no salaries)
  - Officer out-of-pocket expense stipend
  - Contracted services – Website, IT, Marketing Support
  - Legal, Insurance
- Standards Work
  - Attendance at liaison meetings with IEEE, IEC, NEMA, NFPA, CABA, SEIA, SEPA, Universities, DoE, National Labs, etc. (Travel and fees only)
- Tradeshow and Education Work
  - Common Freight (varies by show/conference)
  - Engineering & Admin. support – T&E
  - Common Misc. Show Materials (printing, etc.)

What we receive as “Complementary” contributions:

- Commercial Office Space - courtesy of SETS in Alexandria, Va.
- Tradeshow floor space and services - SETS, Informa, SCTE•ISBE, CES, NAHB, MJBizCon
- Marketing Support – SETS
MEMBERSHIP IN THE EMERGE ALLIANCE

The EMerge Alliance has over 100 members representing a wide variety of industry stakeholders, including:

- Equipment Manufacturers
- Architecture/Design Firms
- Electrical and Mechanical Engineering Firms
- Sustainability & Energy Consultants
- Energy Providers/Utilities
- Building Owners/Developers/Contractors
- Related Trade Organizations
- Code & Regulatory Officials
- Government
- Academics

### EMerge Membership Benefits

The EMerge Alliance has created a variety of membership opportunities to create a robust ecosystem of organizations that influence the residential & commercial building arena.

| Governing Member: Founding and/or Board Members who provide significant resources to establish and grow the Alliance | Annual Membership Dues: $25,000 Regional; $50,000 Global |
| Rights: Full voting and membership rights, budget oversight, strategic planning, committee creation and chair appointments, final standards approval. Priority member promotion and media participation. | Requires approval by EMerge Board of Directors |

| Participating Member: Key suppliers of product and services in the domains covered by EMerge Standards | Annual Membership Dues: $1,000 - $10,000 * |
| Rights: Technical committee voting & full participation in committee proceedings, with a direct role in development of standards. Total access to all draft & final standards; Registered product listings and events/promotional activity participation in website, tradeshows and conferences; Committee Chair eligibility. Member promotion. |

| General Member: Organizations wanting to use existing Standards | Annual Membership Dues: $750 - $5,000 * |
| Rights: Access to completed standards provided prior to public availability; attend general meetings; registration and web listing of products. Member promotion. |

| Corresponding Member: Non-product manufacturers (including consultants/design and construction firms) | Annual Membership Dues: $500 - $2,000 * |
| Rights: Voice in development of Standards and access to all draft and completed Standards; proposal and comment but no voting rights; Member promotion. |

| Supporting Member: All others wishing to support and promote the EMerge platform | Annual Membership Dues: $350 |
| Rights: No voting rights, may attend general meetings as determined by Board; marketing recognition for your support of the Alliance mission. Organization Logo display. |

| Liaison Member: Designed for other standards organizations, government, academic, and not-for-profit organizations to facilitate mutual development, cooperation and integration of the EMerge Alliance standards. | Annual Membership Dues: No Charge |
| Rights: No voting rights; may attend meetings/serve on selected panels, officially listed as part of the Alliance. |

*Note: Fees are based on Gross Revenue. Consult the EMerge website or call for details for your organization.
## Introductory Bundle Offering:

- Pro-rated 2019 Membership
- Early-bird 2020 Membership Rate
- Special Newsletter Announcement
- New Website Announcement & Highlight
- NASEW & SCTE-ISBE Recognition
- New Print Collateral
- Preferential Tradeshow Opportunities

<table>
<thead>
<tr>
<th>Member Level</th>
<th>Participating</th>
</tr>
</thead>
<tbody>
<tr>
<td>Qualifying Annual Revenue</td>
<td>&gt;$100 Mil</td>
</tr>
<tr>
<td><strong>Introductory Bundle</strong></td>
<td>$ 2,500</td>
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<tr>
<td>Annual Fee</td>
<td>$ 10,000</td>
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<tr>
<td>Chair Eligibility</td>
<td>Yes</td>
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<tr>
<td>TSC Attendance</td>
<td>Yes</td>
</tr>
<tr>
<td>Marketing</td>
<td>Yes</td>
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<tr>
<td>Committee Proposals</td>
<td>Yes</td>
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<tr>
<td>Committee Voting</td>
<td>Yes</td>
</tr>
<tr>
<td>Product Listings</td>
<td>Yes</td>
</tr>
<tr>
<td>Service Listing</td>
<td>Yes</td>
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<tr>
<td>Product Display</td>
<td>Yes</td>
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<tr>
<td>Member listings</td>
<td>Yes</td>
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<tr>
<td>Event Discounts</td>
<td>15%</td>
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<tr>
<td>Web Site Listing</td>
<td>Yes</td>
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<tr>
<td>Print Collateral</td>
<td>Yes</td>
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<tr>
<td>Newsletters Subscription</td>
<td>Yes</td>
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<tr>
<td>Events Invites</td>
<td>Yes</td>
</tr>
<tr>
<td>Promotions (Ad Hoc)</td>
<td>Yes</td>
</tr>
<tr>
<td>Sponsor Banner Ads</td>
<td>Yes</td>
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</tbody>
</table>