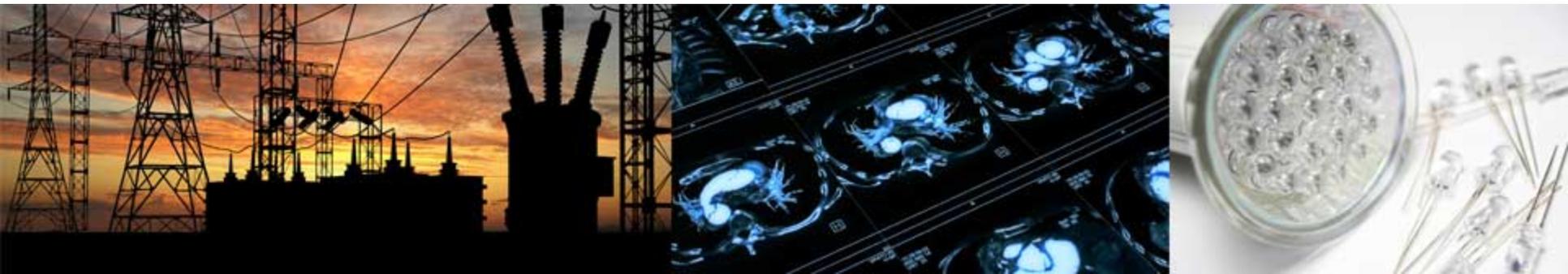


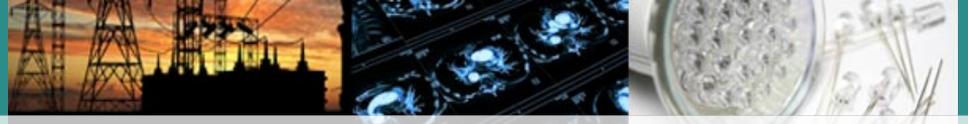
# NEMA Briefing

## March 22, 2011



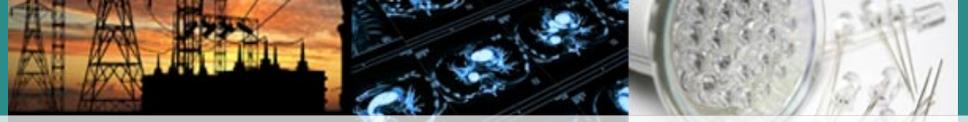
The Association of Electrical and Medical Imaging Equipment Manufacturers





# NEMA Mission

To help members expand the market for their products, technologies, and services by developing appropriate product and testing standards, advocating for beneficial public policies, providing valuable business information, and otherwise promoting member competitiveness.



# NEMA Business Operations

## Industrial Automation Division

1CM	Carbon/Manufactured Graphite
1EW	Arc Welding
1IS	Industrial Automation Control
1MG	Motor and Generator
1MG-6	Small Machine Motor Group
1PE	Power Electronics

## Lighting Systems Division

2BL	Ballast
2EM	Emergency Lighting
2LC	Lighting Controls
2LE	Luminaire
2LL	Lamp
2SL	Solid State Lighting

## Electronics Division

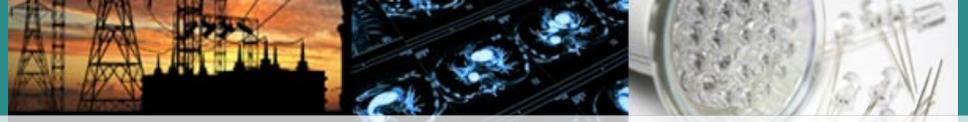
3DB	Dry Battery
3DC	Residential & Commercial Controls
3SB	Signaling Protection and Comm.
3SB-2	Health Care Communications
3TS	Transportation Mgt. Systems

## Industrial Imaging Division

4II	Industrial Imaging and Comm.
-----	------------------------------

## Building Systems Division

5CT	Cable Tray
5EN	Enclosures
5EVSE	Electric Vehicle Supply Equipment
5FB	Conduit Fittings
5FB-2	Cable Ties
5FU	Fuse
5HC	Health Care Facility Equipment
5HB	High Performance Buildings
5LVDE	Low Voltage Distr. Equipment
5OS	Outlet and Switch Box
5PP	Ground Fault Personnel Protect.
5PR	Pin & Sleeve Plug
5RN	Steel Rigid Conduit
5TC	Polymer Raceway Products
5VS	Low Volt. Surge Protective Devices
5WD	Wiring Device



# NEMA Business Operations, cont.

## Insulating Materials Division

6IM	Insulating Materials
6LD	Decorative Laminate
6MW	Magnet Wire

## Wire and Cable Division

7HW	High Performance Wire and Cable
7MO	Modular Wire
7WC-1	Building Wire
7WC-2	Power & Control Cable
7WC-3	Flexible Cords

## Power Equipment Division

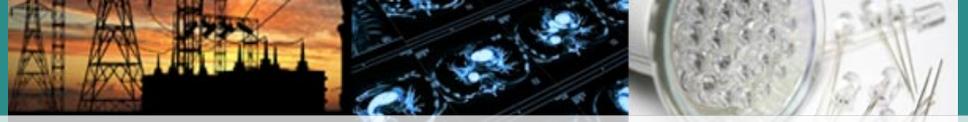
8CC	Electrical Connector
8CP	Capacitor
8EI-1	Electricity Metering Group
8EI-3	Meter Mounting/Test Equipment
8HV	High Voltage Insulator
8LA	Surge Arrester
8SG	Switchgear
8TP-1	Dry Type/Specialty Transformers
8TP-2	Liquid Filled Transformer

## Medical Imaging and Technology Alliance

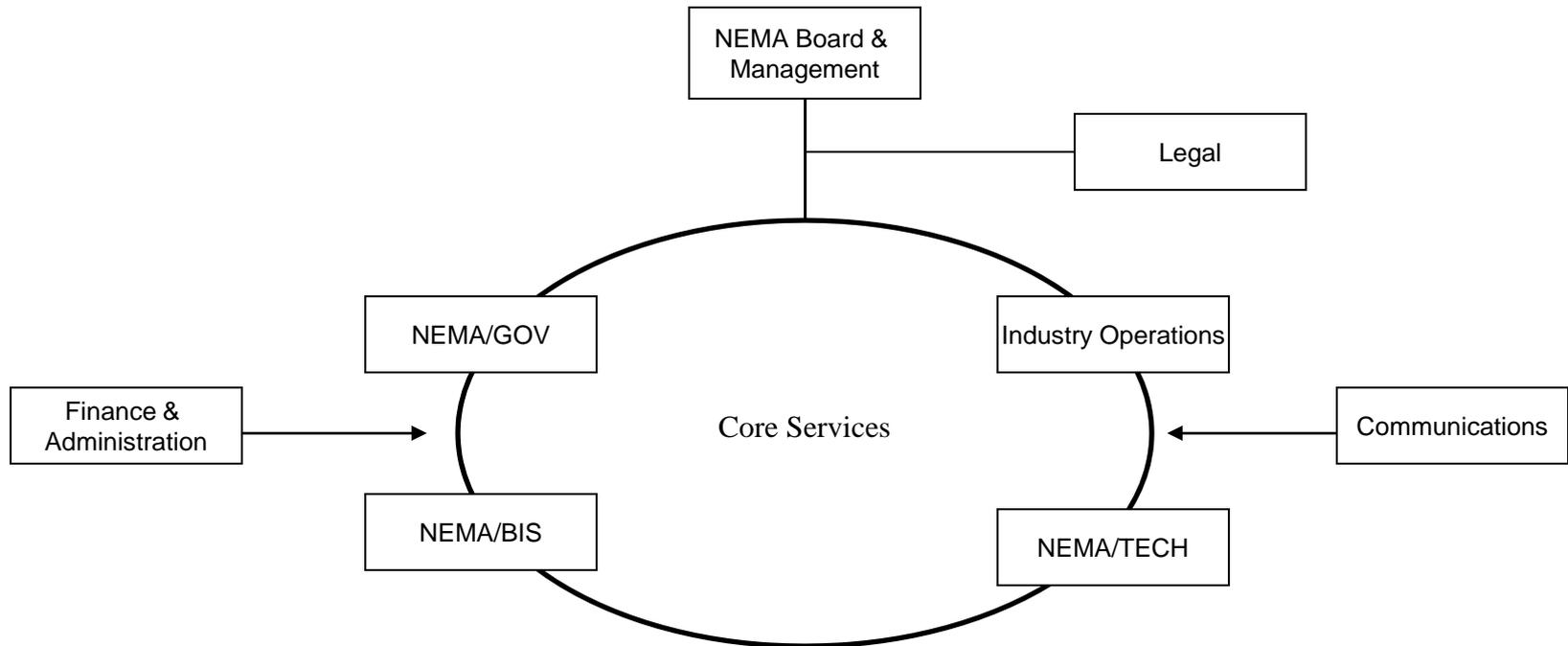
9MII	Medical Imaging Informatics
9MS	Magnetic Resonance
9MO	Molecular Imaging
9RT	Radiation Therapy
9UD	Ultrasound Imaging
9XR	X-Ray Imaging Products

## Councils

Energy Storage Council
High Performance Buildings Council
Smart Grid Council
Port Electrification Council

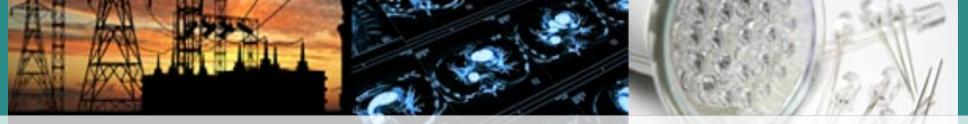


# NEMA Business Model



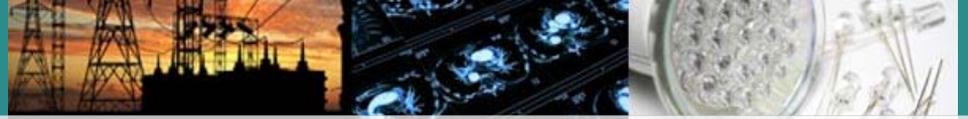


The Association of Electrical and  
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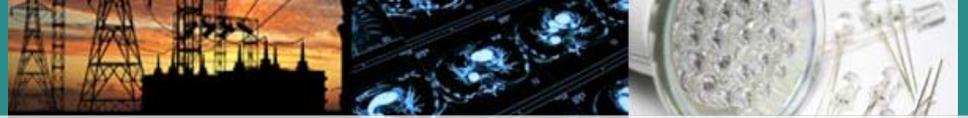
# NEMA Technical Services

Al Scolnik  
Vice President, Technical Services



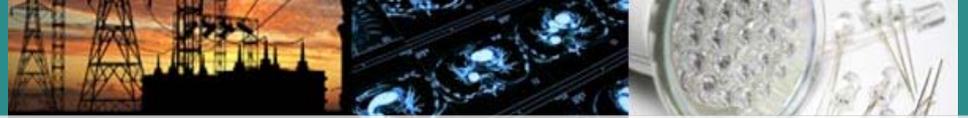
# NEMA Technical Activities

-  23 staff provide technical support to 45+ product sections
-  Promotes member technical positions
-  Leads in codes and standards development
-  Reaches out globally to ensure market access
-  Creates programs around emerging technologies
-  Educates inspection community via Field Program.



# NEMA Advocates Member Technical Positions

- 💡 Forum for members to coordinate with key organizations.
  - UL, CSA, NFPA, ICC, IEEE, ANSI, etc.
- 💡 Proactive participation in safety/installation codes:
  - NEC, Life Safety Code, Residential Building Code
- 💡 Support for international conformity assessment schemes:
  - IECEE CB and EX Schemes
- 💡 Interface with government on programs/issues
  - USTR, DOC, OSHA, DOD, DOT, DOE, DHS, TSA, other.



# NEMA Leads in Standards Development

-  Promotes development and maintenance of product standards—domestic, regional, international
  - 236 NEMA Standards Publications
  - 46 ANSI/NEMA Standards
  - 266 American National Standards
  - 72 CANENA harmonization projects supported by 24 Sections
  - 28 Tri-National and 13 Bi-National standards
  - 56 IEC and 6 ISO Technical Advisory Groups (TAG's)
  - 5 international Secretariats
-  300+ NEMA representatives on committees of other organizations

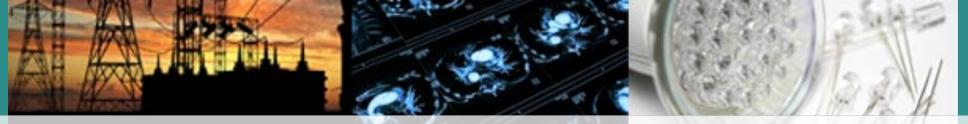


# NEMA Active in Emerging Technologies

 BOG Emerging Technologies Panel includes Chief Technology Officers of major member companies

 **Current focus on:**

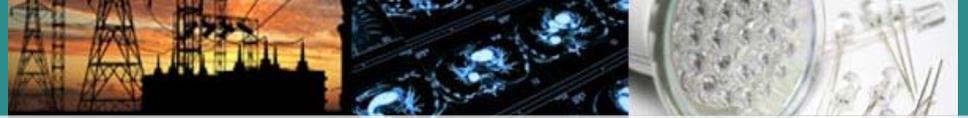
- High performance buildings
- Smart grid
- Intelligent transportation systems
- Energy storage
- Nanotechnology
- Cybersecurity
- Communications protocol for baggage scanning (2010)
- Communications protocol for full body scanning (2012)
- Pending protocols for trace detection, cargo scanning, border protection



# NEMA Government Relations

Kyle Pitsor

Vice President of Government Relations



# NEMA Government Relations

## Mission:

- To expand markets for the electrical and medical imaging industries through legislation, regulation, and public policies, as well as to prevent unwarranted regulation that would harm our industries.

## Eight Professionals in GR Department

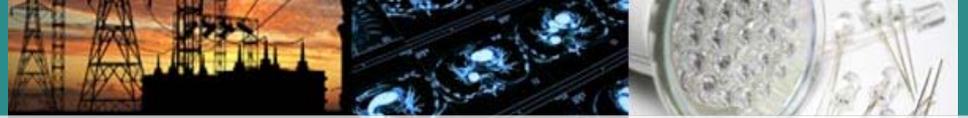
-Energy

-Trade & Commerce

-Environment

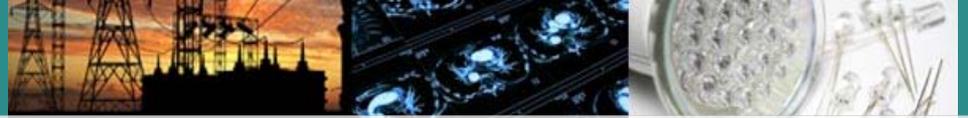
-Health & Safety

-International



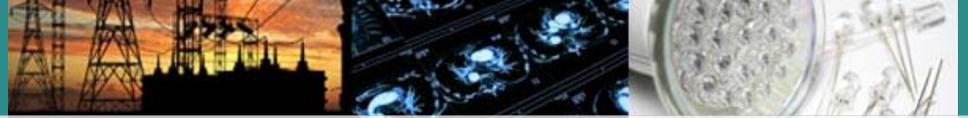
# Energy Efficiency

-  NEMA members are in the energy solutions business
-  Efforts to increase deployment and use of energy-efficient technologies to support our national energy security
-  Support industry consensus efficiency standards for federal adoption to ensure a uniform national approach and prevent a patchwork of conflicting state efficiency standards
-  Support consumer education in support of increased use of energy-efficient technologies
-  Support financial incentives that would accelerate the deployment of technologies
  - Improvement of the Commercial Building Tax Deduction
  - Performance based product and renovation incentives



# Electric Vehicle Supply Equipment

- 💡 Administration goal of 1 million all-electric vehicles (EVs) by 2015
- 💡 \$2.4 billion in federal funds towards this goal
- 💡 Deployment of EVs require electrical charging infrastructure:
  - Support multi-year extension of and expansion of Section 30C property tax credit (set to expire 2011)
  - Clarify eligible expenses in Section 30C to include installation and infrastructure costs that are necessary to deliver power to EVs



# Environmental Design & Stewardship

## Environmental Design Call-to-Action Initiative

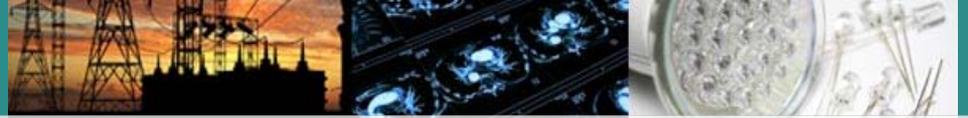
- Voluntary, industry-driven, global application
- Reduce or eliminate 6 ROHS substances by July 1, 2010 for covered NEMA products, with exemptions
- Industry to identify further actions on substance(s) and product coverage by July 1, 2014
- Mirrors approach in EU; but tailored for U.S.
- Establish national levels, prevent conflicting state requirements

## End-of-Life Management of Electrical Products

- Support policies that encompass “Shared Responsibility”
- Oppose “extended producer responsibility-only” policies

## Chemical Regulation -Toxic Controls Substance Act (TSCA)

- Regulation based on scientific, risk-based approach
- Reject application of “precautionary principle”



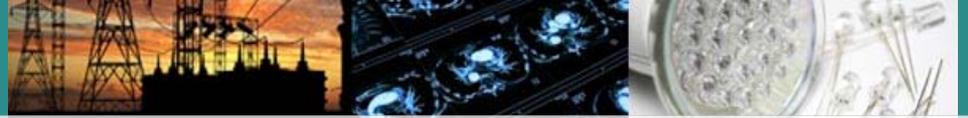
# Key Public Policy Activities

## Consumer Product Safety

- Consumer Product Safety Commission implementing the 2008 Modernization Act
- Focus Congress to provide oversight of the new public database on product complaints to ensure inaccurate/fraudulent reports are not included that would mislead the public

## Occupational Safety and Health

- Update OSHA regulations to incorporate the most current editions of national consensus standards
- Oversight to ensure that any proposals will be subject to thorough stakeholder involvement and public comment



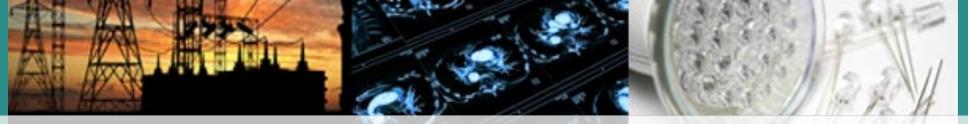
# Key Public Policy Activities

## U.S. Exports and Market Access

- Provide U.S. industry advice to trade officials
- Approve pending bilateral free trade agreements
- Support efforts to double U.S. exports through:
  - Compliance of existing trade agreements
  - Negotiate new agreements, including the Trans-Pacific Partnership agreement
  - Negotiation of a global trade agreement that further removes barriers and tariffs

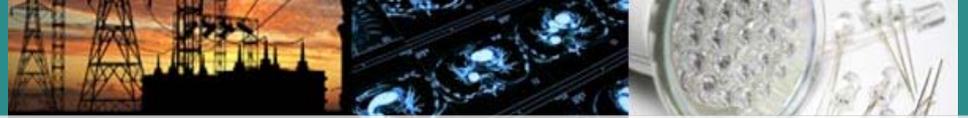


The Association of Electrical and  
Medical Imaging Equipment Manufacturers



# NEMA Business Information Services

Don Leavens  
Vice President and Chief Economist



# What Can NEMA/BIS Do For Your Business?

## Section Sponsored Activities

### ▪ Market Data Programs

- Sales and orders
- Geographic distribution
- Channel of distribution
- End-market
- Inventories

### ▪ Benchmarking

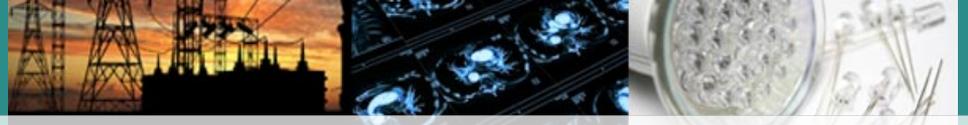
### ▪ Product Line Forecasting

## Subscription Products for Individual Companies

- Electroindustry Economic Outlook



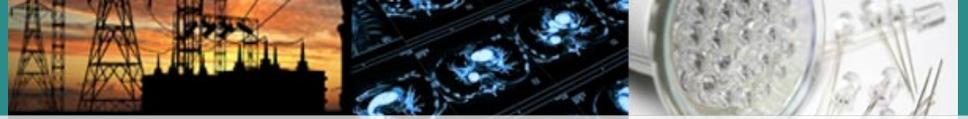
The Association of Electrical and  
Medical Imaging Equipment Manufacturers



# Medical Imaging & Technology Alliance

David Fisher

Managing Director, MITA



# MITA Overview

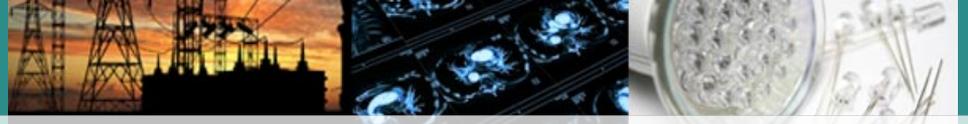
The Medical Imaging & Technology Alliance (MITA) is the collective voice of medical imaging and radiation therapy equipment manufacturers, innovators, and product developers. These technologies include:

- Medical X-ray equipment
- Computed tomography (CT) scanners
- Ultrasound
- Nuclear imaging
- Radiation therapy equipment
- Magnetic resonance imaging (MRI)
- Imaging information systems

MITA is made up of more than 60 companies ranging from very large, publically traded multi-nationals selling multiple imaging modalities to smaller privately-held firms focusing on a narrower set of products.



The Association of Electrical and  
Medical Imaging Equipment Manufacturers



# Strategic Initiatives

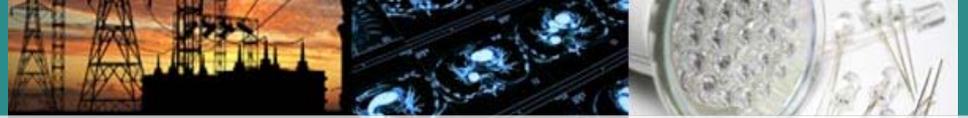
Paul Molitor

Assistant Vice President for Strategic Initiatives



# NEMA Strategic Initiatives

-  Smart Grid - Paul Molitor
-  High Performance Buildings - Jim Lewis
-  Public Policy Portal (P3) - Don Leavens
-  Carbon Footprint Analysis - Mark Kohorst
-  Port Electrification - Paul Molitor
-  Energy Storage - Jim Creevy



# Major Smart Grid Objectives for 2011

## Priorities

- Standards
  - NIST Priority Action Plans
    - Active in 9 of 17 standards priorities
    - Demand Response, User Info, Meter Networks, etc.
    - Leadership in NIST Smart Grid Interoperability Panel (SGIP)
- Legislative & Regulatory Policy
  - Intellectual Property, Open Testing & Cert., Governance of NIST/FERC Standards, International Harmonization, Financial Incentives, Backward Compatibility in Regulations, Funding Sources, Cybersecurity

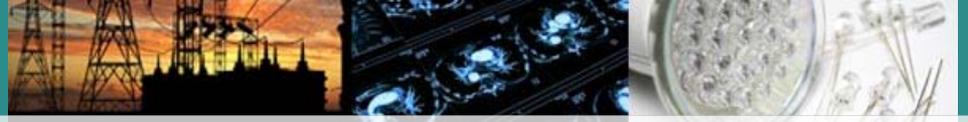
## Activities

- Conduct Demonstration Days
  - Targets include NARUC and GSA (primary), but also FERC, Dept. of Energy, Capitol Hill
- Secure Demonstration Projects for Members



# High Performance Buildings

- Government Relations
- Codes & Standards
- Industry Marketing



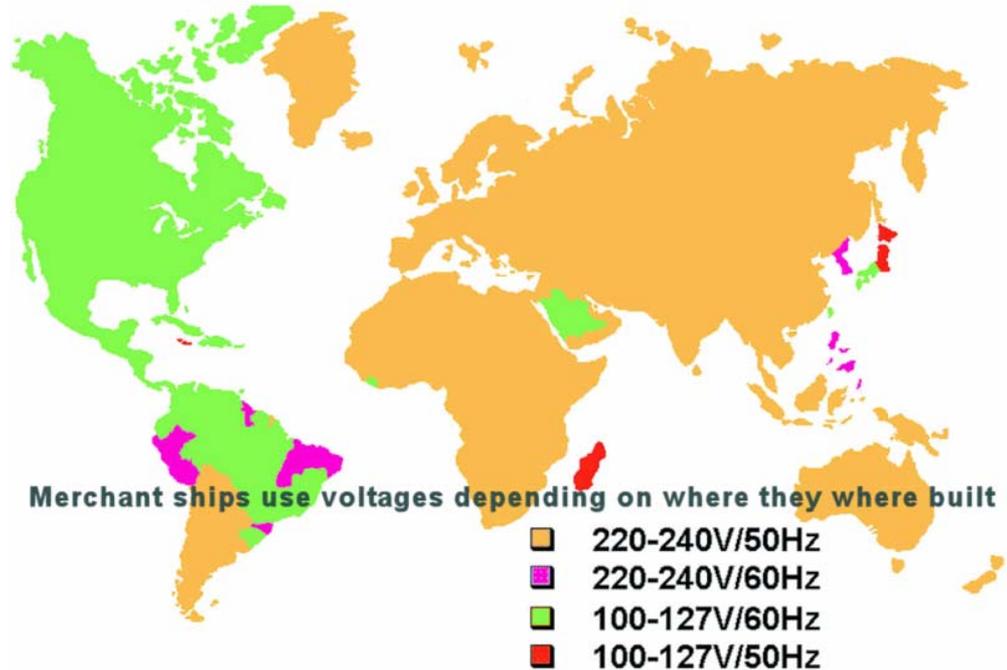
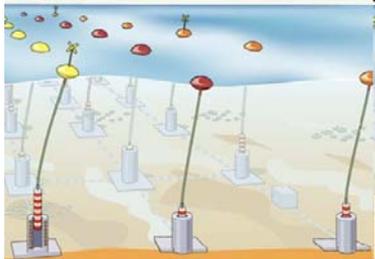
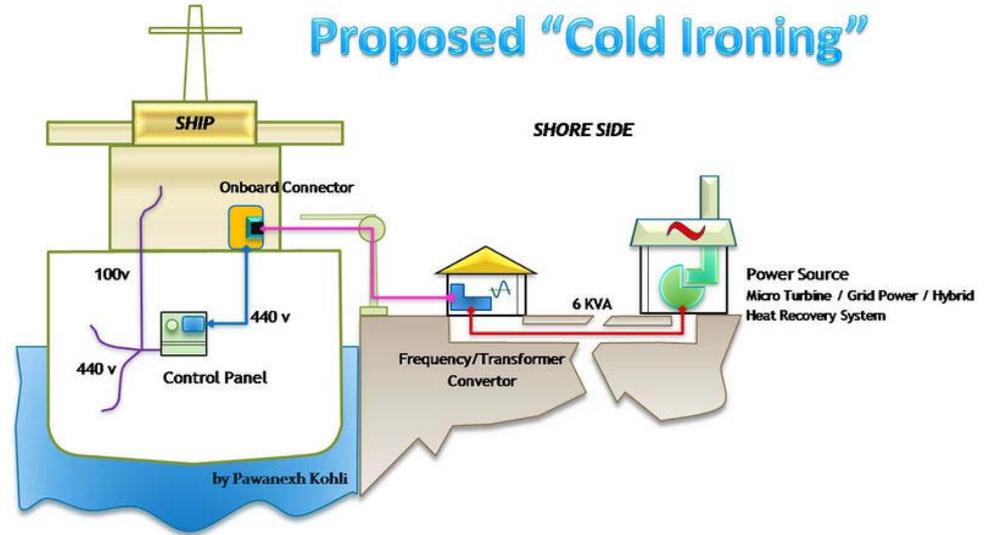
# NEMA Carbon Footprint Initiative

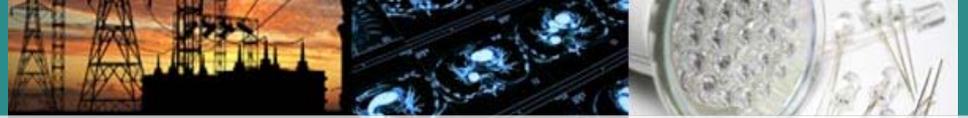
-  **Purpose:** To enhance the electrical product industry's understanding of and ability to influence its environmental impact.
-  **Description of Problem:** Regulatory trends and market dynamics spur manufacturers to measure and influence the environmental impacts of electrical products.
-  **Strategy:** Form Technical Advisory Group; Contract with expert consultants at MIT Materials Systems Labs to devise and test methodology, building off existing guidelines and standards
-  **Expected Outcome:** Methodology (or Guideline) to map product characteristics to environmental impacts, with focus on energy use and greenhouse gas emissions (“Product Attribute-to-Impact Algorithm”).
-  **Cost:** First year investment approximately \$200K



# Port Electrification

- 💡 Shorepower / Cold Ironing
- 💡 Integration of Renewables
  - Solar, Wind, Marine Power
- 💡 Electrification of cargo and materials handling





# Energy Storage Council

## Applications

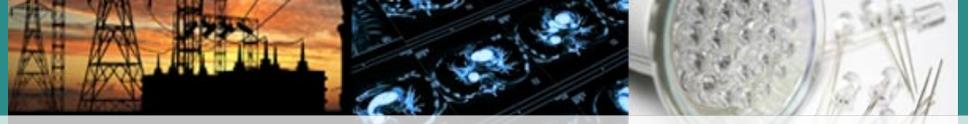
- Power quality, bridging, energy management
- Seconds....Minutes.....Hours

## Federal Energy Regulatory Commission Rulemakings

- Integration of Variable Energy Resources
- Compensation for Frequency Regulation Service
- Cost Allocation and Transmission Planning

## Regional Transmission Operators - Independent System Operators Stakeholder Processes

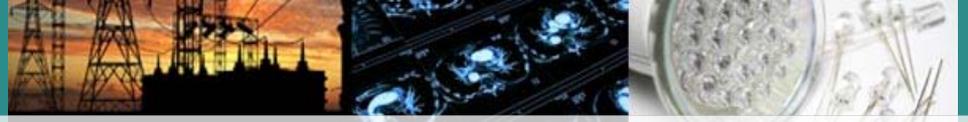
## Federal Legislation - STORAGE Act (Rep. Mike Thompson, Sen. Wyden)



# International Programs

Gene Eckhart

Senior Director, International Operations



# International Initiatives

- 💡 **MDCP 1 (2007-2010) (Department of Commerce Market Development Cooperator Program)**
  - Promote adoption of NEMA/North American standards in Latin America (Free Trade Partners), and prevent electrical counterfeiting.
- 💡 **MDCP 2 (2010-2013)**
  - Promote Smart Grid throughout North America.
- 💡 **USTDA 1 (2010-2013) (US Trade & Development Agency)**
  - Phase II of “Standards and Conformity Assessment Cooperation Program” to host a series of seminars on standards and technical issues for Chinese officials and businesses.
- 💡 **USTDA 2 (2010-2013) - Initial Stages**
  - “China Smart Grid” program to inform and educate officials and business leaders about technical requirements of Smart Grid, and to coordinate the development of Smart Grid standards between the US and China.