

# CAPS 10<sup>th</sup> Anniversary CELEBRATION AND WORKSHOP

*The Road Ahead for NGIPS, Energy & Microgrid Systems*



## CENTER FOR ADVANCED POWER SYSTEMS (CAPS) 10TH ANNIVERSARY CELEBRATION AND WORKSHOP

OCTOBER 14-15, 2010 ♦ TALLAHASSEE, FL

The Road Ahead for NGIPS, Energy & Microgrid Systems 2010 Workshop will bring together representatives from government, industry and academia and feature panel discussions of ongoing and planned initiatives in areas that include naval power systems, alternative energy systems and micro-grids.

Naval representatives will present the updated NGIPS Roadmap that reflects changes in naval ship acquisition programs and the Energy Roadmap that details aggressive programs to improve energy efficiency in naval systems. DoE and utility representatives will discuss alternative energy systems, and their impact upon the electric grid with emphasis on distributed generation, interface, control and communication issues. At the conclusion of this Workshop recommendations will be presented for cross-fertilization and dual use opportunities.

### **Confirmed Participants:**

- Mr. Dan Ton, Program Manager, Smart Grid R&D, U.S. Department of Energy
- Dr. Gerald FitzPatrick, NIST Smart Grid Team
- Dr. John Pazik, Director, Ship Systems and Engineering S&T Division, ONR
- The Honorable Patricia Hoffman, Assistant Secretary, Office of Electricity Delivery and Energy Reliability, U.S. Department of Energy
- Mr. Thomas W. Hicks, Deputy Assistant Secretary of the Navy for Energy
- Dr. John Amy, Senior Advisor EMALS Integration, ASN (RDA)

### SUPPORTED BY



### PRINCIPAL CORPORATE SPONSOR



Marine & Power Systems

[www.navalengineers.org/CAPS2010](http://www.navalengineers.org/CAPS2010)

# CAPS 10<sup>th</sup> Anniversary

**CELEBRATION AND WORKSHOP**  
CENTER FOR ADVANCED POWER SYSTEMS (CAPS)



*The Road Ahead for NGIPS, Energy & Microgrid Systems*

## THURSDAY OCTOBER 14

- 1200 Registration Opens (Turnbull Center)
- 1300 **Workshop Welcome and Introductions**  
**Dr. Steinar Dale, Chairman**
- 1320 **Keynote Address**  
**RADM(s) Thomas J. Eccles, Chief Engineer and Deputy Commander for Naval Systems Engineering, Naval Sea Systems Command (*Invited*)**
- 1340 **NGIPS Roadmap**  
**Dr. Timothy McCoy, Director, Electric Ships Office (PMS 320)**
- 1430 Break
- 1445 **Navy Energy Roadmap**  
**Mr. Thomas W. Hicks, Deputy Assistant Secretary of the Navy for Energy**
- 1530 Adjourn Day 1
- 1600 **CAPS Open House and Tour (*Shuttle Service Available*)**
- 1830 **CAPS Reception and Dinner with Speaker at Mission San Luis (*Shuttle Service Available*)**  
**RADM Nevin P. Carr, Jr., USN, Chief of Naval Research**

## FRIDAY OCTOBER 15

- 0730 Registration and Coffee (Turnbull Center)
- 0800 **Panel Session I – *Dual Use Distribution Systems***  
**Moderator: Mr. Dan Ton, Program Manager, Smart Grid R&D, U.S. Department of Energy**
- *Shipboard Distribution Systems: Present and Future* – Dr. Norbert Doerry, NAVSEA
  - *Smart Microgrids: Characteristics and Experience in Utility Applications* – Dr. Tom Bialek, Sempra (SG&E) (*Invited*)
  - *A Naval Ship System as a Smart Microgrid* – Mr. Edward Bowles, GA
  - *Advantages and Challenges of DC Systems* – Dr. Mischa Steurer, FSU CAPS
- 0905 **Panel Session II – *Energy Security***  
**Moderator: Dr. John Amy, Senior Advisor EMALS Integration, ASN (RDA)**
- *Opportunities of Hybrid Systems and Full IPS* – Mr. Tom Dalton, BMT Syntek
  - *Energy Recovery in Utility Systems* – Mr. Burak Ozpineci, Oak Ridge National Laboratory
  - *Energy Storage and High Power Density Applications* – Dr. John Boyes, Sandia NL (*Invited*)
  - *Potential of Alternate Energy Sources* – Ms. Sharon Beerman-Curtin, ONR

1010 Break

1030 **Panel Session III – *Distributed Generation***

**Moderator: Dr. Gerald FitzPatrick, NIST Smart Grid Team**

- *Power Quality Issues and Needs* – Mr. Mark Stephens, EPRI
- *Energy Management, Controls and Cyber–Security* – Dr. Marija Ilic, Carengie Mellon University
- *Dynamic Islanding of Microgrids* – Dr. David Cartes, FSU
- *Integration and Coordination in Complex Systems* – Dr. Sid Suryanarayanan, Colorado State University

1135 **Panel Session IV – *Future Technology and Opportunities***

**Moderator: Dr. John Pazik, Director, Ship Systems and Engineering S&T Division, ONR**

- *Switched Mode Power Supplies and Pulse Power Systems* – Mr. Peter Steimber, ABB (*Invited*)
- *All Power Electronic Control of Smart Microgrids* – Dr. Alex Huang, North Carolina State University
- *Cruise Ship Experience and Future Plans* – Mr. Brian Pope, L-3 Communications
- *Educational Needs and Challenges* – Dr. Ned Mohan, University of Minnesota

1245 Lunch

1315 **Luncheon Address**

**The Honorable Patricia Hoffman, Assistant Secretary, Office of Electricity Delivery and Energy Reliability, U.S. Department of Energy**

1400 **Panel Reports, Wrap-Up**

1450 **Closing Remarks**

**RADM(s) Thomas J. Eccles, Chief Engineer and Deputy Commander for Naval Systems Engineering, Naval Sea Systems Command (*Invited*)**

1500 Adjourn

## CAPS RECEPTION AND DINNER

On the evening of the Oct. 14, a reception and dinner will be held marking the tenth anniversary of CAPS. This event will highlight key events in the establishment and growth of CAPS and will be an opportunity to recognize all those who have been and continue to be responsible for the success of the program.

### SCHEDULE OF EVENTS

1600 CAPS Open House and Tour (*Shuttle Service Available*)

1830 CAPS Reception and Dinner with Speaker at Mission San Luis (*Shuttle Service Available*)

1930 Speaker: **RADM Nevin P. Carr, Jr., USN, Chief of Naval Research**

### CONFIRMED VIPS

- Dr. Eric J. Barron, President, Florida State University
- VADM Paul G. Gaffney, II, USN (Ret.), President, Monmouth University
- The Honorable Jay M. Cohen, Principal, Chertoff Group
- The Honorable Allen Boyd, U.S. Congressman, FL
- The Honorable Patricia Hoffman, Assistant Secretary, Office of Electricity Delivery and Energy Reliability, U.S. Department of Energy

# VENUE INFORMATION

## FLORIDA STATE UNIVERSITY TURNBULL CONVENTION CENTER

555 West Pensacola Street

Tallahassee, FL 32301

Phone: (850) 644-3801

Web: [www.learningforlife.fsu.edu/conference](http://www.learningforlife.fsu.edu/conference)

Please see the CAPS 10th Anniversary Celebration and Workshop website for more information on room rates and how to reserve your room today.

[www.navalengineers.org/CAPS2010](http://www.navalengineers.org/CAPS2010)



## QUESTIONS

For the latest agenda and additional symposium details, visit [www.navalengineers.org/CAPS2010](http://www.navalengineers.org/CAPS2010) or contact ASNE at (703) 836-6727 or email [meetings@navalengineers.org](mailto:meetings@navalengineers.org).

## AMERICAN SOCIETY OF NAVAL ENGINEERS

ASNE

1452 Duke Street

Alexandria, VA 22314

Phone: (703) 836-6727

Fax: (703) 836-7491

Web: [www.navalengineers.org](http://www.navalengineers.org)



# RATES & REGISTRATION

October 14-15, 2010 • FSU Turnbull Convention Center • Tallahassee, FL

Please return this registration form to:

American Society of Naval Engineers • 1452 Duke St. • Alexandria, VA 22314  
(Phone) 703-836-6727 • (Fax) 703-836-7491 • [registrations@navalengineers.org](mailto:registrations@navalengineers.org)

To register online, go to [www.navalengineers.org/CAPS2010](http://www.navalengineers.org/CAPS2010)

Please Print Clearly or Type All Information

Name \_\_\_\_\_

Organization \_\_\_\_\_

Position \_\_\_\_\_

Address \_\_\_\_\_

City/State/ZIP \_\_\_\_\_

Phone \_\_\_\_\_ Fax \_\_\_\_\_

E-Mail \_\_\_\_\_

Special Needs (Physical, Dietary, etc.) \_\_\_\_\_

Your name and organization will appear on your badge. Please write your name (including title, rank and/or nickname) as you would like it to appear on your badge.

**CANCELLATIONS, TRANSFERS, AND REFUNDS:** Cancellations must be in writing and cannot be accepted after October 1, 2010. A \$75 administrative fee will be applied to all refunds and transfers.

Registration includes: Technical Program • Luncheons • Breakfast/Breaks/Reception • Online Proceedings

## (Through October 1)

- Member @ \$250  
 Non-Member (Attend Only) @ \$300  
 **Non-Member (Join & Attend)** @ **\$385**  
 Student (Full-Time Undergrad) @ \$0

## (After October 1)

- Member @ \$300  
 Non-Member (Attend Only) @ \$350  
 **Non-Member (Join & Attend)** @ **\$435**  
 Student (Full-Time Undergrad) @ \$0

## Advance Payment is Required

Please check method of payment:

- Enclosed check or money order made out to "ASNE"     Approved Purchase Order is attached  
 Bill to my:     Mastercard     VISA     American Express     Discover

Credit Card Number: \_\_\_\_\_ Exp. Date: \_\_\_\_\_

Signature: \_\_\_\_\_



# BECOME AN ASNE MEMBER

Not an ASNE member yet? You can join ASNE and register for the CAPS 10th Anniversary Celebration and Workshop all for one reduced rate. Just check the Join and Attend rate in the registration above. ASNE membership offers such benefits as subscription to the Naval Engineers Journal (NEJ), lower rates at technical symposia and workshops and networking opportunities through direct participation on ASNE committees.