

# The Open Channel



IEEE Hampton Roads Section Newsletter  
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April 2011

## Selective Coordination with Low Voltage Circuit Breakers

**Speaker:** Ed Larsen

**Date/Time:** Thursday, April 28, 2011 6:30PM  
**Location:** Old Dominion University  
E.V. Williams Engineering and Computational  
Sciences Building (ECSB)  
Room 1202  
Norfolk, VA 23508  
**Meal Cost:** Members and guests \$10  
**Presentation:** Free

6:00PM - EXCOM  
6:30PM - Social  
7:00PM - Dinner  
8:00PM - Presentation

**Abstract:** Participants will learn about the NEC requirements for selective coordination and the challenges in achieving short circuit selective coordination with low-voltage circuit breakers. System design guidelines will be presented along with a review of the printed resources and product solutions available from the circuit breaker manufacturers.

**Biography:** Ed is the Manager of Industry Standards for Circuit Protection for Schneider Electric USA. He is responsible for managing company activities relating to product standards for overcurrent protective devices, including circuit breakers, and resides in Cedar Rapids, Iowa, USA. He holds a Bachelor of Science degree in Electrical Engineering Technology and a Master of Science degree in Engineering Management from Milwaukee School of Engineering.

As an employee of Square D/Schneider Electric, Ed has served in various positions over the past 36 years. His responsibilities as an application engineer and marketing manager for control products involved contactors and starters, combination motor controllers, overload relays, pilot devices, relays and timers. As a product planning manager, product line manager and engineering manager, he participated in the development of low voltage circuit breakers, electronic trip units and ground fault relays. He also served as the director of engineering at Heinemann Electric Company, where he was responsible for the design of circuit protection products.

See [Meeting](#), page 2

### Reservations:

- vtools: [http://meetings.vtools.ieee.org/meeting\\_view/list\\_meeting/4065](http://meetings.vtools.ieee.org/meeting_view/list_meeting/4065)
- Jason Naramore at [officers-r3-hamptonroads@ieee.org](mailto:officers-r3-hamptonroads@ieee.org) or William LaBelle +1 757 619 9050].

**Checks:** Checks should be made out to IEEE and brought to the meeting.

**Directions:** See page 3

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### Upcoming Events

- Apr 2** Tidewater Science Fair @ The TED  
**Apr 28** Meeting  
**May 19** Meeting

## 2011 IEEE Executive Committee Hampton Roads Section

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All materials for THE OPEN CHANNEL are due by the 22<sup>th</sup> day of the month proceeding the issue month. Address all correspondence to:

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## From the Chair



Thank you to Muhlbauer in Newport News for the tour and demonstration of their manufacturing equipment in March. Everyone could relate to the products that their equipment is used to manufacture, from driver's licenses and passports to subway tickets. It was interesting to see the new applications for RFID and

other technologies on display for die sorting.

In April we will meet at ODU for a technical presentation from Ed Larsen of SquareD on NEC requirements for low-voltage circuit breakers. This is an excellent opportunity to hear from an industry expert in this area. Mr. Larsen is involved in IEEE standards as well as other standards organizations.

IEEE is still looking for a volunteer for the Secretary position, please contact the officers list ([officers-r3-hamptonroads@ieee.org](mailto:officers-r3-hamptonroads@ieee.org)) if you are interested and would like to get involved.

Regards,

Jason Naramore  
2011 Chair  
IEEE Hampton Roads Section  
[jason.naramore@ieee.org](mailto:jason.naramore@ieee.org)

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## Meeting

*Continued from Page 1*

Ed authored a chapter in the Blue Book, the IEEE Recommended Practice for Applying Low Voltage Circuit Breakers Used in Industrial and Commercial Power Systems and has presented papers on selective coordination. He has also authored articles on various low voltage circuit protection topics in several trade journals.

Ed is a senior member of the IEEE and is also a member of the NFPA, IAEI, CANENA, IEEE Standards Association and Standards Engineering Society. He is a member of or chairs several UL, CSA, IEEE, ACBMA and NEMA technical committees and is a member of NEC Code Making Panel 11.

## Directions to Old Dominion University

### From the North:

1. Take **I-95 south** toward Richmond
2. Take the **left exit 84A** onto **I-295 S**, following signs for "Norfolk/Virginia Beach"
3. Remain on **295** for approximately **14 miles**, then exit at **28A (I-64 E)**
4. Stay on **I-64 E** for approximately **75 miles** until you reach **exit 276, VA-406/NAVAL BASE/TERMINAL BLVD**
5. Once on the exit ramp, **stay right** as it splits. Once on **I-564**, **stay right** again, following the **first exit for Terminal Blvd.**
6. Continue straight through two traffic lights, and at the third light, turn **left** onto **Hampton Blvd.**
7. Follow **Hampton Blvd.** to **43rd St.** (approximately **3.25 miles**)

### From the South:

1. Take **I-85 north** or **I-95 north** to **Route 58 east**.
2. Follow **58 east** to **I-264 east** toward Portsmouth/Norfolk.
3. Go through **Downtown Tunnel** and follow signs to **St. Paul's Blvd.**
4. Make a **right** onto **St. Paul's Blvd.**
5. At the third light, make a **left** onto **Brambleton Ave.**
6. Follow **Brambleton Ave.** until you see signs for **Hampton Blvd./ODU.**
7. Bear **right** onto **Hampton Blvd.**
8. Follow **Hampton Blvd.** to **43rd St.** (approximately **3 miles**)

Parking is available in Garages A/B and C. We will be meeting in ECSB. Check ODU's interactive map at <http://www.odu.edu/oduhome/campusmap.shtml> or download the PDF at <http://www.odu.edu/af/parking/ODU%20PARKING%20MAP%202009-2010.pdf>



Garage  
A/B

Old Dominion University  
Hampton Blvd.  
Norfolk, VA

Garage C

## The HR-PES Short Circuit

The March meeting on Arc Flash has been rescheduled for May 3<sup>rd</sup>, same AI Fresco in Newport News venue.

The Speaker, Adeeb

Hamzey safely returned to the States later than planned, but is back into his normal routine. That meeting will start earlier than the regular PES routine, so that Adeeb can return to the Richmond area that evening.

South East Con was enlightening on opportunities to help Section and Chapter membership grow. Not grow in membership numbers, but grow our members as professionals in the engineering community. One focus is to increase the number of members who elevate in grade from Member to Senior Member. May newsletter will have criteria to elevate, and in June PES will schedule a couple of nights to support submitting all interested and eligible IEEE members of the section (PES Members is not a requirement for this). Contact [jennifer.ammentorp@ieee.org](mailto:jennifer.ammentorp@ieee.org) if you would like to support this effort. More details and eligibility criteria will

See **Short Circuit**, page 4



## Short Circuit

*Continued from Page 3*

be posted in the May segment of the PES Short Circuit.

Another area important to the Section is engagement with our Student sections. This can be a win<sup>5</sup> situation for the student, the member, the school, and the employer; as a mentor to even one of our 5 student sections. Dr. Nare at Hampton University illustrated many benefits to mentoring a student section. This access to entry level engineers is an excellent opportunity for the employer, having a more personal exposure to job candidates. Students get insight into the business culture through contact with mentors from the professional sector, and can improve the skills for entry into the job market. Universities win with an increased number of graduates getting hired, and the company acquires a job candidate who recognizes the value of investing in self development. The section sees higher retention of first year and GOLD members, stimulating the Section program and activities. Two hours a quarter from one member can make a significant difference in Section and Chapter activities.

Thank you for your participation in IEEE. HR-PES is open to suggestions for meeting topics and venues that interest you!


Jennifer Ammentorp  
Chair, HR-PES  
jennifer.ammentorp@ieee.org

## Upcoming Conferences

2011 IEEE Electric Ship Technologies Symposium (ESTS) <http://ests11.wordpress.com/>, IEEE Sponsors: DEI, IA, OE, PEL, PES, SEN, SYSC, and VT; 10 Apr – 13 Apr 2011, Westin Alexandria, Alexandria, VA ; POC: D’Nese L. Moore, [d.l.moore@ieee.org](mailto:d.l.moore@ieee.org), +1 732 465 6641

2011 Systems and Information Design Symposium (SIEDS) <http://web.sys.virginia.edu/sieds11>, IEEE Sponsor: Systems, Man, and Cybernetics Society (SMC); 29 Apr 2011, University of Virginia, Charlottesville, VA; POC: Jayne Weber, [jef2f@virginia.edu](mailto:jef2f@virginia.edu), +1 434 924 5393, +1 434 982 2972 (fax)

2011 Integrated Communications, Navigation and Surveillance Conference (ICNS) <http://i-cns.org>, IEEE Sponsor: Aerospace and Electronic Systems Society (AES); 16 May – 20 May 2011, Westin Dulles, Herndon, VA; POC: Ellis Hitt, [stratsystems@sbcglobal.net](mailto:stratsystems@sbcglobal.net), +1 614 882 7499, +1 614 499 6595



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AECOM is searching for - Electrical Engineer IV:

Design building power, lighting, communication, fire alarm and security systems. Supervise the Electrical Engineers in project design and development tasks, including drawings, calculations, cost estimates, and specifications, respond to client questions and comments, review contractor submittals, and provide clarifications during construction. Review electrical department design documents for completion and ensure department personnel adhere to accepted industry and company standards. Assist in the development of company quality standards and procedures. Work closely with management and electrical department leadership to develop and implement electrical short- and long-range manpower and production plans to meet project objectives. Assist the Business Development Department in pursuing new work including participation in client presentations. Perform other duties as assigned.

**Job Requirements:**

- BS in Electrical Engineering, accredited program
- 10+ years experience with an consulting engineering firm designing building power, lighting, communication and security systems
- Licensed Professional Engineer
- A thorough understanding and knowledge of the architectural and engineering industry, including the Federal, State, and local laws and regulations that pertain to the industry
- Travel as required to meet training and project requirements
- Strong oral and written communication skills
- Experience using Outlook and Microsoft Office (or similar software).
- Working knowledge of AutoCAD and SKM PowerTools or similar software

**Preferred:**

- Holder of National Council of Examiners for Engineers and Surveying (NCEES) Council Record RCDD Certification
- LEED Accredited Professional
- Working knowledge of Revit
- Ability to obtain a security clearance