

THE INSTITUTE OF ELECTRICAL AND ELECTRONICS ENGINEERS, INC.

Volume 59— No. 10 http://www.ieee.org/fwcs October 2014 This Month's Meetings Inside This Signal... Tuesday, October 2: EXCOM Meeting, 5:30PM at TECO Plaza Page 2 *Choose Your Boss Not Your Job Register online at http://time2meet.com/fwcs-excom/index.html **Open to all FWCS Members** Page 3 * News from IEEE-USA **Choose Your Boss Not Your Job Details on page 2** Page 4 * OSHA CFR 1910.269 Electrical Safety Revisions Seminar News from IEEE-USA **Details on page 3 OSHA 29 CFR 1910.269 Electrical Safety Revisions** Page 5 **Details on page 4** *Robotics & Automation Society Meeting **Robotics & Automation Society Meeting** * FWCS Life Members Joint Meeting FWCS Life Members Joint Meeting with Consultants Network Affinity Group with Consultant Network Affinity Group **Details on page 5 IEEE PES Utility User's Group Meeting** Page 6 SP/Comm. Presents (5G MIMO) *IEEE PES Utility User's **Group Meeting Details on page 6** *SP/Comm Presents (5G MIMO) 2015 Tampa Bay Engineers Week Banquet Page 7 **Details on page 7** 2015 Engineers Week Banquet Sponsor/Vendor Information for 2015 Tampa Bay Engineers Week Banquet Page 8 Valpak Tour *Sponsor/Vendor Info for TBEWB **Details on Page 8** Valpak Tour ITI/GE Instrument Transformer Presentation and Plant Tour **Details on page 9** Page 9 *ITI/GE Instrument Transformer Calendar **Plant Tour Details on page 10 Page 10** *Calendar

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Choose Your Boss Not Your Job

By: Ceren Cubukcen

When you go to a job interview, you get the chance to meet with the people you will potentially be working with and have an idea of the culture of the company. Therefore, it is very important to work with coworkers that you can connect with since you will be spending time with them at least 40 hours a week in the same building.

Many job seekers think that the boss chooses them when they go to an interview but don't forget that you can choose as well. If you choose your boss wisely, you can progress in your career much faster and unlock your potential. Below you can find some tips which will help you choose your boss in your future workplace:

1. Connection: You immediately know if you connect with a person or not. During the interview, you can have an idea how that person behaves, talks and even you can understand his/her sense of humor. Therefore, you can feel if you can work with that person over the next two to four years. If you click right away, lucky you! Otherwise, it is best to consider other options.

2. Background: Ask the hiring manager his/her background. Why did s/he choose this position? How long did it take him/her to become a manager? What s/he likes and doesn't like about the company? These answers can give an understanding of the career path within the company. Also, ask about his/her goals. A good manager should have a vision. If s/he knows where s/he is heading, as s/he moves up the ladder, you can move up as well.

3. Communication Style: During the interview, pay attention how the manager speaks. Does s/he often start the sentence using the word 'I' or 'we' meaning the team or department? Does s/he talk about others working for him or compliment them or is s/he pretty self-focused? You can realize if the manager is a team-oriented or self-oriented person with the help of these questions.

4. Work Style: By asking the right questions, you can have an idea of the manager's work and management style. Ask what his/her priorities and expectations are. Look for clues to find out if s/he is micro-managing his/her employees or more of a hands-off style person. Also, try to learn if s/he is willing to teach you new skills. Otherwise, it would be difficult for you to move forward in your career.

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News from IEEE-USA

In September, IEEE-USA will offer "Leading and Managing Engineering and Technology -- Book 2: Developing Leaders and Managers" free to IEEE members.

This e-book examines how high-tech professionals at all levels should lead and manage, and introduces the Individual Professional Contributor (IPC)/knowledge worker. "Success in either of these two options depends on being authentic, being yourself, and recognizing your capabilities and limitations," author Gus Gaynor said.

Gaynor provides background information for managers and IPCs to make their own judgments regarding how to connect leading and managing -- different in an organization that promotes innovation -- from one focused only on today's performance.

"Only you can decide whether you meet requirements more effectively by managing and leading simultaneously or by considering managing and leading as two totally independent functions," he said.

"Leading and Managing Engineering & Technology – Book 2: Developing Leaders and Managers" can be downloaded at http://www.ieeeusa.org/communications/ebooks/files/sep14/n2n802/Leadi ng-and-Managing-Engineering-and-Technology-Book-2.pdf \$9.99 for

non-members.

October E-Book

IEEE-USA will offer "The Best of Backscatter from IEEE-USA Today's Engineer - Volume 2" by Donald Christiansen free to IEEE members in October.

Call for Authors

IEEE-USA E-books seek authors to write an e-book, or an ebook series, on career guidance and development topics. If you have an e-book idea that will benefit members on a particular topic of expertise, email your proposal to IEEE-USA Publishing Manager Georgia C. Stelluto at g.stelluto@ieee.org and IEEE-USA Communications

Committee Chair Gus Gaynor at g.gaynor@ieee.org.

IEEE-USA serves the public good and promotes the careers and public policy interests of more than 200,000 engineering, computing and technology professionals who are U.S. members of IEEE.







OSHA 29 CFR 1910.269 Electrical Safety Revisions

Date:	Friday November 14, 2014					
Time:	Registration: 8:30 A.M. Seminar: 9:00 A.M 2:30 P.M					
Speaker:	Thomas Blair, P.E., Engineering Fellow, Tampa Electric Company					
Location	Seminole Electric, 16313 N Dale Mabry Hwy, Tampa, FL 33618					
Cost:	Students with ID \$20, IEEE members \$100 Members , \$200 Non-Members					
PDH Credits:	4 professional development hours will be awarded. Be sure to provide your name as it appears on your Florida license and your license number to insure proper credit. Florida Provider #0003849					
RSVP:	Online at: <u>http://time2meet.com/fwcs-meetings/</u> (Select Reservations)					
	Make checks payable to IEEE FWCS and mail a check in advance to					
	IEEE PE/IA Chapter Treasurer:					
	PES/IAS Chapter 2593 Forest Run Court Clearwater, FL 33761-3716					
	Space limited to the first 40 registrants!!!					
Questions:	Tom Blair at 813-228-1111, ext. 48179 or <u>tom_blair@ieee.org</u>					

Your local IEEE PES/IAS Chapter is offering this seminar that will cover recent changes to the Code of Federal Regulations (CFR 29) 1910.269 – Electric Power Generation, Transmission, and Distribution.

The Occupational Safety and Health Administration (OSHA) published the final rule revising the Code of Federal Regulations (CFR) for power generation, transmission and distribution on April 11, 2014. The last revision was in 1994. The document is now available in the Federal Register at http://federalregister.gov/a/2013-29579. The document is free for download.

The document becomes law July 10, 2014, although OSHA has adopted delayed compliance deadlines for certain requirements including Fall Protection, PPE, new determination of MAD distances and arc flash hazard assessment. Substantial changes were made to the following sections of 1910.269;

Section (a)(2) Training

Section (a)(4) Contractors (i) Host... (ii) Contract...

Section (c) Job Briefing

Section (e) Enclosed Spaces

Section (g)(2) Fall Protection

Section (1) Working on or near exposed energized parts

Section (m) De-energizing lines and equipment for employee protection

Section (n) Grounding for the protection of employees

Section (p) Mechanical Equipment

Section (t) Underground electrical installations

Section (x) Definitions

This seminar will review the law and will focus on sections that have been modified during this latest update to the Code of Federal Regulations.

Thomas H. Blair graduated from the University of South Florida, Tampa, Fl. in 1991 with a BSEE degree and in 2001 with a MSEE degree. He is a senior member of the IEEE. He has over 25 years of industrial and utility experience. He is currently a Fellow Engineer at Tampa Electric Company and he is a licensed Professional Engineer in the State of Florida.

Thomas has worked as an adjunct professor at the University of South Florida and instructed courses in Electric Machine and Design & Energy Production Systems. Thomas Blair is an Engineering Fellow with Tampa Electric and works in the Generation Engineering department. He performs electrical system analysis and uses the results to specify electrical equipment ratings, protective relay settings, and electrical system arrangement. Mr. Blair is a Senior Member of IEEE.

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Robotics & Automation Society Meeting

You are invited to the Monthly Meeting of the IEEE Florida West Coast Chapter of the (RAS) Robotics and Automation Society. It is usually every third Tuesday at 6:30pm.

Location:	The Hive, 3rd Floor West John F. Germany Public Library, 900 N. Ashley Street, Tampa, FL
Date:	October 21, 2014
Time:	6:00 pm to 9:00 pm
Topics:	Megan Danak, Principal Librarian will be giving a tour of the Germany Library in Downtown Tampa introducing the facilities new Makerspace.

Ms. Danak says, "I would be happy to offer a tour to your group and speak a bit about the project here at the library. By October/November we hope to have even more equipment and services up and running in the makerspace! Thanks so much! We look forward to hosting IEEE-RAS at The Hive."

NOTE: Easiest access is to park in the Poe Garage next door on Ashley Dr. and take the elevated walkway over to the library. You can enter the library directly from the walkway on our Children's floor in the west building. Take the elevator up to 3 and you're at The Hive! If you can find an open space, parking at the meters near us (or any north of Kennedy Blvd.) is free after 6PM.

Please join us for exciting evenings of discussions on local robotics and how we can help schools throughout the Florida West Coast.

Sean Denny, Tampa Bay IEEE RAS Chapter Chair <u>venner20@ieee.org;</u> 727-678-0183

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FWCS Life Members Joint Meeting with Consultants Network Affinity Group

TOPIC: RESIDENTAL SOLAR MADE SIMPLE

Saturday, November 1, 2014 at 11:00 AM

LOCATION: PICCADILLY CAFETERIA, 11810 NORTH DALE MABRY HWY, TAMPA, FL.

SPEAKER: MICHAEL KOZDRAS, A FOUNDER OF "SOLAR PROFESSIONALS".

Meal is Dutch treat in the cafeteria line this is an open meeting for members, wives and guests.

Michael Kozdras is a founder of "solar professionals" group of companies, is a professional engineer who has created, developed and managed business operations serving clients on five continents and over 30 countries. Major projects have included tri-generation and solar photovoltaic systems. He is a graduate of the mechanical engineering program at university of waterloo, Ontario Canada. Michael's experience in solar pv includes grid tied and off grid hybrid distributed generation systems with and without battery back-up in ac coupled configurations.

RESERVATION: online at: http//time2meet.com/fwcs-meetings/

IF YOU HAVE ANY QUESTIONS PLEASE CONTACT GLEN COCK, CHAIR LIFE MEMBERS

PHONE: 813-689-4765 EMAIL: gcock@tampabay.rr.com



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IEEE FWCS PES UTILITY USERS GROUP MEETING

On Friday August 29, we held our third Local IEEE FWCS PES Utility Users Group meeting at Tampa Electric, Big Bend Station and it was a great success. We had 32 people involved in the utility industry attend. The engineering staff at Tampa Electric presented information on generator protection upgrades and utilized information from *IEEE C37.102 - IEEE Guide for AC Generator Protection* as a basis for the presentation. We discussed several lessons learned from previous generator protection modernization projects done in the past. We also discussed pilot wire protection enhancements and generator synchronizing relay upgrades. We would like to especially thank **Tampa Electric**, Engineering and Project Management department for sponsoring our meeting by providing the facilities for our meeting and providing lunch for our attendees. After lunch we toured the station and showed some of the generator protection relay improvements implemented over the past few years.



The local committee is looking for topics of interest for our members for our next meeting. We are looking for volunteers that have an engineering project or topic and that they would be willing to present their experiences to our group. If you have an interest or an idea on a future subject, please contact tom_blair@ieee.org or Serge.Beauzile@lakelandelectric.com and we will be glad to help you arrange the presentation.

Also the PES Executive committee that organizes these meetings meets the last Thursday of every month at 6am at the Village Inn Restaurant on Dale Mabry between I274 and Hwy 60 and we would welcome you to attend one of these meetings and support our fellow utility engineers. If you would like to be added to the email list for this meeting, please contact James.Howard@lakelandelectric.com.

Lastly, we want to thank all that attended the meeting and hope everyone found something in the meeting that will help them in their future endeavors. The goal of this group to help each of us by sharing useful information and lessons learned. We look forward to more learning experiences in the future.



SP/Comm. Presents – Software Defined Radio & Designing Next generation Systems (5G MIMO)

Topic:	Software Defined Radio and Designing Next Generation Systems (5G MIMO)				
Speaker:	Frank Makal from National Instruments				
Date:	Tuesday October 21st, 6 PM				
Location:	Largo STAR Center Corner of Bryan Dairy and Belcher7887 Bryan Dairy Road Largo, FL 33777				
Organizer:	For more specific information please contact: Chris Lambrecht. E-mail: chris.lambrecht@ieee.org, Phone: 727-458-9061Cost is \$2 for IEEE Member and \$4 for Non Members. Food and beverages will be provided.				
Reservations:	http://time2meet.com/fwcs-mtt/index.html				

FWCS SunCoast Signal

SAVE THE DATE

Tampa Bay Engineers Week Banquet February 27, 2015

Keynote Speaker:

Story Musgrave

Story was an NASA astronaut for over 30 years and flew on six spaceflights. He performed the first shuttle spacewalk on Challenger's first flight, was a pilot on an astronomy mission, conducted two classified DOD missions, was the lead spacewalker on the Hubble Telescope repair mission and on his last flight, he operated an electronic chip manufacturing satellite on Columbia.



Join us to what will surely be an entertaining and inspirational presentation from one of NASA's greatest astronauts.

This Engineers Week, the engineering societies of the Tampa Bay area have put together the fifth annual Tampa Bay Engineers Week Banquet on Friday, February 27, 2015, at the: <u>A La Carte Event Pavillion (4050 Dana Shores drive, Tampa, Florida, 33634)</u>

This premier event brings together local leaders and engineering professionals to recognize the outstanding achievements of Engineers, Science Teachers, Math Teachers, and Students in our community.

Additionally, awards will be presented to outstanding engineers in each discipline, as well as local engineering students excelling in their engineering related studies and Young Professionals. The banquet also features the Lignell Awards. These awards, named after a former Chairman for the Institute of Electrical and Electronics Engineers (IEEE), are given to local High School educators who are performing outstanding work in the instruction of the STEM topics (science, technology, engineering and math). The organizers of the event recognize the important role these individuals play in encouraging students to pursue technological degrees in college.

The banquet is a combination of efforts by all the Engineering Societies of West Central Florida This event brings together professionals in all fields from all around Tampa and Florida's west coast.

VENDOR/SPONSOR INFORMATION FOR TAMPA BAY ENGINEERS WEEK BANQUET

Platinum Level Sponsorship - \$1250 Donation

- Company logo displayed on signage at the event.
- Receives up to 10 tickets to the awards banquet
- Presents the Lignell Award.
- Receives recognition at Platinum Sponsor level on event slideshow & program.
- Receives recognition and link to website on the TBEWB website. Information about company and special acknowledgement will be made on the website.
- Display Table in Reception Area

Gold Level Sponsorship - \$900

- Company logo displayed on signage at the event.
- Receives up to 5 tickets to the awards banquet.
- Has company logo displayed at Gold Sponsor level on event slideshow & program.
- · Receives recognition and link to website on the TBEWB website.
- Display Table in Reception Area, (if space available)

Silver Level Sponsorship - \$600

- Company logo displayed on signage at the event.
- Receives up to 2 tickets to the awards banquet.
- Has company logo displayed at Silver Sponsor level on event slideshow & program
- Receives recognition and link to website on the TBEWB website

Vendor Level Sponsorship - \$400

- Receives display table to present company products during the Pre-Dinner Social.
- Receives recognition at Vendor level in program and on the TBEWB website
- Receives up to 2 tickets to the awards banquet

Donor Level Sponsorship - \$200 or More

- Donor Level individual names will receive recognition at Donor Level on event slideshow, TBEWB website and signage at the event
- All Donations are greatly appreciated
- All individual donors will be listed in the program unless requested

Friends Level Sponsorship - \$50 or More

 Friends Level individual names will receive recognition at Friends Level on event slideshow and will be listed in the program unless otherwise requested.

Speaker Sponsor - \$1,500

- Speaker will join you at your Company Table for the event!
- Company logo displayed on signage at the event.
- Receives up to 10 tickets to the banquet.
- · Company representative may participate in Lignell Award presentations.
- Recognized as Speaker Sponsor level in program and event slideshow (5 slides).
- Company Logo and link to website on the TBEWB website. Display Table in reception area.

IEEE PES/IAS Tour of Valpak October 24, 2014, 4 :00 p.m.



Headquartered in Largo, Fla., Valpak is one of the leading direct marketing companies in North America. It is owned and operated by Cox Target Media (CTM), a property of Cox Media Group. Atlanta-based Cox Media Group is a subsidiary of Cox Enterprises, Inc., one of the nation's top media companies with major holdings in newspaper, television, radio and cable. In 2012, CTM acquired Savings.com, an online coupon company based in California.

Valpak was founded in Clearwater, Fla. in 1968. Today, Valpak has about 170 franchises across the United States and Canada, and delivers savings and value to nearly 40 million households each month. Annually, Valpak will distribute some 20 billion offers inserted in more than 500 million of its signature blue envelopes.

Valpak is growing its business across print, digital and mobile platforms. It offers digital solutions with Valpak.com — an online site for free coupons, e-commerce and coupon codes — which has nearly 70 million offer views each month. In addition, Valpak has launched mobile coupon apps for smartphone platforms.

Date: Friday October 24, 2014 Time: 4:00 p.m. Tour (Photo ID is required) 8605 Largo Lakes Blvd., Largo, FL 33733 Location: **RSVP: Online at: http://time2meet.com/fwcs-meetings/ (Select Reservations)**







ITI/GE Instrument Transformer Presentation and Plant Tour

Date:	Thursday, October 16, 2014
Time:	Presentation begins at 3:00 PM followed by a Tour at 4:00 PM
Cost:	Free for Members, \$10 Non-Members and \$5 for Students
	Make checks payable to IEEE FWCS and mail a check in advance to IEEE PE/IA Chapter
	Treasurer: PES/IAS Chapter, 2593 Forest Run Court, Clearwater, FL 33761-3716
Speaker:	Claudio Morejon, Southeast Sales Manager for ITI/GE Instrument Transformers
Location:	ITI/GE Plant; 1907 Calumet Street, Clearwater 33765
RSVP:	Online at: http://time2meet.com/fwcs-pes2/index.html
	Space limited to the first 45 registrants!!!
Questions:	Steve Antman at 813-523-3161 or steveantman@gmail.com

Typical questions address in the presentation and tour:

- What is a CT and how does it work?
- How is a CT fabricated?
- How is a CT tested at the factory and what ANSI & IEEE test standards must be met?
- What is the difference between metering accuracy CTs and relay accuracy CTs?
- Can you have one that is both?
- What is the CT thermal rating factor and what does it mean?
- What are the different kinds of CTs? ...window; split core; wound; etc...
- What is the difference in construction between a multi-ratio CT and a single ratio CT?
- Is there any time when a single ratio CT is preferred over a multi-ratio CT?
- What are the specific considerations for high voltage equipment bushing CTs?
- What are the specific considerations for low voltage (600V) CTs applied for HV applications?
- How do the standards get used specific application examples

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12	13	14	15	16 ITE/GE Plant Tour, 3 pm Clearwater	17	18
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26	27	28	29	30 PES/IAS EXCOM Village Inn - 6am	31	1L1FE/CNAG Residential Solar Made Simple 11am