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# THE SUNCOAST SIGNAL

THE INSTITUTE OF ELECTRICAL AND ELECTRONICS ENGINEERS, INC.

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## *FWCS Meets Retention Goal for 2017*

Once again, the Florida West Coast Section has been recognized by IEEE for meeting its retention goal for the 2017 membership year. Membership retention goals are determined annually based on the Section's three-year performance. Thank you to each section member—your membership renewal is key to keeping our section vital. And speaking of membership renewal, if you haven't already done so, please visit [www.ieee.org/membership](http://www.ieee.org/membership) and help repeat this important section performance recognition next year!



**2017 Outstanding Section Membership  
Retention Performance  
Florida West Coast Section**

## *FWCS Anniversary Celebration*

Yes the Florida West Coast Section (FWCS) has been around for 61 years! Thanks to a dedicated group of volunteer through the years, we have continued to be a successful section, with multiple chapters. Please join us to as we celebrate our members by presenting IEEE Service Anniversary pins or certificates to recognize the members years of IEEE membership.

Date: Saturday December 2, 2017

Time: Noon—3:00pm

Location: South Florida Museum  
201 10th St. W  
Bradenton, FL 34205

Please sign up at <http://time2meet.com/fwcs-section/index.html> so we have an accurate count for food planning, etc.



## *Upcoming Meetings*

### *61st Florida West Coast Section Anniversary Celebration*

Saturday December 2, 2017 Noon—3:00PM

Details—Page 1

### *EXCOM Meeting*

Tuesday, December 5, 2017 5:30PM at TECO Plaza

Register online at <http://time2meet.com/fwcs-excom/index.html>

Open to all FWCS Members

### *ITI/GE Instrument Transformer Presentation & Plant Tour*

Friday December 8, 2017 2:30PM

Details—Page 4

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## PE Corner

Art Nordlinger, PE, Senior Member

### Continuing Education Content

For many, if not most of us, you renewed your license earlier this year and are now on a continuing education vacation. As a result, sometime early-to-mid next year you'll be gearing up to get those sixteen technical continuing education hours. There are lots of online and live opportunities to satisfy this requirement for your next renewal. But will the experience be satisfying? Clearly, you can just look for the cheapest, easiest route to get those hours and be done with it. Satisfying? Probably not. So what courses or seminars will both satisfy your continuing education requirements and be satisfying for you as well?

As you know, your local IEEE chapter is a continuing education provider in Florida and presents seminars that are eligible for continuing education hours. Generally, the content presented is determined by what your leaders think others would be interested in hearing, combined with the constraint that someone qualified will need to be able to teach that topic. Naturally, it is the hope of these leaders that the content is satisfying to broad range of folks. This process would certainly be enhanced by having your input as to what you would like to have presented; what you would find to be satisfying.

Before the emails fly, however, let's review the constraints that the Board's rules put around what technical content qualifies for continuing education hours. Section 61G15-22.022 of the Florida Administrative Code states, "*Topic pertinent to the practice of engineering: For purposes of meeting the continuing education requirements, a topic pertinent to the practice of engineering is any topic that falls within the definition of the practice of "engineering" as defined in Section 471.005(7), F.S. Topics on marketing, foreign language skills, and basic math skills below the requirements set forth in paragraph 61G15-20.007(1)(a), FAC are not acceptable and are excluded.*" From my perspective, that leaves a pretty broad area for technical content that qualifies for continuing education hours.

Additionally, I will remind you that section 61G15-22.001 Continuing Education Requirements says, "*(1) Each licensee shall complete eighteen (18) continuing education hours during each license renewal biennium as a condition of license renewal. Four (4) hours shall relate to the licensee's area(s) of practice; one (1) hour must be related to professional ethics; and one (1) hour shall relate to Chapter 471, F.S., and the rules of the Board. The remaining hours may relate to any topic pertinent to the practice of engineering as defined in Rule 61G15-22.002, FAC.*" You can use the "remaining" twelve hours to learn something that interests you, as long as it is "pertinent to the practice of engineering."

Let us hear from you! What seminar topics, within the constraints that the Board provides, would you find satisfying? Contact your chapter officers and let us know.

Whether you are a PE looking to attain required CEHs, or an engineer looking to learn something new or keep current with the latest trends in the profession, IEEE has seminars that will meet your needs. Better start earning those CEHs now!

## Pinellas Waste-to-Energy Tour

Sixteen members of the PES/IAS joint chapter had a tour of the Pinellas County Solid Waste Disposal and Recycling Facility on Thursday October 19, 2017. **Bill Embrey**, the Chief Engineer, provided a comprehensive overview of the recycling portion of the facility, which reclaims both ferrous and non-ferrous metals from the furnace to sell smelters for recycling. The ash from the furnace is used for landfill cover.

By burning the 3,000 tons of garbage collected daily in Pinellas county before burying it in the landfill, up to 75 MW of electricity can be generated and the volume of the trash is reduced by 90%, which conserves precious landfill capacity.

The plant uses some of the electricity it generates, but about 60 MW is sold to Duke Energy and serves as part of Duke's energy supply portfolio. The power generation portion of the facility is currently undergoing a \$243 million upgrade. This portion of the facility must conform to very stringent environmental regulations to limit discharge of various pollutants to the environment.

Also on the county solid waste site is an industrial water treatment facility, providing process water for the waste-to-energy plant's cooling towers. This facility reduces demands which would otherwise be placed on the municipal water system, which both conserves a valuable resource and reduces costs.



Pinellas county is interested in spreading the word about the invaluable service provided by the Solid Waste Disposal and Recycling Facility. Tours are made available to school groups and other organizations interested in learning about what the facility does. These tours help educate the public, particularly about recycling efforts. If you missed this tour opportunity, keep your eyes open for another opportunity in the future.

## Hold the Date!

Thursday February 26, 2018 will be the date of the 2018 E-Week banquet. The upcoming event will be held at TPepin's Hospitality Centre, 4121 N. 50th St., Tampa, FL 33610.

The annual celebration of Engineers Week will feature Engineering, Student, and Teacher awards, as well as a keynote speaker. Details will be forthcoming. Watch the Signal or <http://tbewb.org/> for details.



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## Renewal Time!

It's that time again — time to renew your IEEE membership! All memberships expire December 31, so renew now to prevent a lapse in your member benefits. Visit [www.ieee.org/membership](http://www.ieee.org/membership) to renew.

And attention all professional engineers: even though your license does not expire until February 28, 2019, it's not too early to start earning continuing education hours (CEHs) to apply to your next license renewal. The Florida West Coast Section offers numerous seminars throughout the year which carry CEHs. These seminars are a convenient and cost-effective way to accumulate the necessary CEHs while learning about a topic of value to you (see this month's *PE Corner*). If you have an idea for a seminar topic or would like to present a topic, please contact a section officer, listed on page 2 of this *Signal*.



 IASA IEEE INDUSTRY APPLICATIONS SOCIETY	 IEEE	 IEEE PES Power & Energy Society™
<b>Upcoming Events</b>		

## *ITI/GE Instrument Transformer Presentation and Plant Tour*

**Date:** Friday, December 8th      **Time:** Presentation begins at 2:30 PM followed by the Tour!

**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:  
Jim Howard  
3133 W Paris Street  
Tampa FL 33614-5964

**Speaker:** **Claudio Morejon** | Southeast Sales Manager for ITI/GE Instrument Transformers

**Location:** GE Plant; 1907 Calumet Street, Clearwater FL 33765

**RSVP:** Online at: <http://time2meet.com/fwcs-pes2/index.html>

**Space limited to the first 45 registrants!!!**

**Questions:** Steve Antman at (863) 701-4170 or [steveantman@gmail.com](mailto:steveantman@gmail.com)

## *Reactor Seminar*

**Date:** Friday, January 19, 2018

**Time:** Registration & Breakfast: 8:30AM-9:00AM

**Seminar:** 9:00AM – 2:00PM

**Speaker:** David Caverly, VP Business Development – Coil Products

**Location:** FRCC 3000 Bayport Dr. #600, Tampa, FL 33607

**Parking:** Use parking lot for Hyatt (North side only).

**Cost:** \$100 Members, \$200 Non-Members, \$20 Students. Includes Breakfast and Lunch.

### **Agenda Part I**

1. Introduction
2. Overview: Reactor Applications & Trench Capabilities
3. General Update – What's New
4. Quick Summary: Design and Construction
5. Innovations
  - § Improvements in Sound Performance
  - § New Coil Construction Technologies
  - § High Voltage Shunt Reactors

### **Agenda Part II**

- (a partial selection from the following menu as time permits)
6. Reactor Applications\*
    - § Shunt Reactors (Tertiary and High Voltage)
    - § Current Limiting Reactors
    - § Power Flow Control Reactors
    - § Capacitor Switching (Damping) Reactors
    - § Harmonic Filter Reactors
    - § SVC Reactors and HVDC Reactors
  7. Design, Construction, Installation, Testing, Standards and Specifications

 IASSE IEEE INDUSTRY APPLICATIONS SOCIETY	 IEEE	 IEEE PES Power & Energy Society <sup>®</sup>
<b>IEEE 1547, Standard for Interconnecting Distributed Resources with Electric Power Systems</b>		

**Date:** Friday, February 16, 2018

**Time:** Registration & Breakfast: 8:30AM-9:00AM  
Seminar: 9:00AM – 2:00PM

**Speaker:** **Babak Enayati PhD, PE** - Lead Research Development and Demonstration Engineer at National Grid, Waltham, MA

**Location:** FRCC 3000 Bayport Dr. #600, Tampa, FL 33607  
Parking: Use parking lot for Hyatt (North side only).

**Cost:** \$100 Members, \$200 Non-Members, \$20 Students. Includes Breakfast, Lunch.

**CEH Credits:** 4 Professional development hours will be awarded. Be sure to enter your name and PE number on the signup website as it appears on your license.

**RSVP:** Online at: <http://www.ewh.ieee.org/r1/floridawc/> (Select Reservations)  
Make checks payable to: IEEE FWCS  
Send checks to: Jim Howard, IEEE FWCS Treasurer  
3133 W. Paris Street  
Tampa, FL 33614-5964

**Questions:** **Serge Beauzile** at 813-207-7982, or [serge.beauzile@ieee.com](mailto:serge.beauzile@ieee.com)

Due to the increasing amount of DER interconnections with the Electric Power System, the IEEE 1547<sup>TM</sup> standard is going through a major revision to address some of the technical issues associated with high penetration of DERs- i.e., grid support functionalities, etc.

The participants will learn about the major changes to the IEEE 1547<sup>TM</sup>, i.e., voltage regulation, response to abnormal system conditions (including voltage and frequency ride through), power quality, islanding, interoperability, etc. They will also learn about utility concerns/solutions to adopt the revised IEEE 1547<sup>TM</sup> standard. In addition, participants will learn the impact and considerations for those having jurisdiction. Attendees will also gain a better understanding of the difference between a type test and a commissioning test as defined in the IEEE 1547.1<sup>TM</sup> standard.

**Babak Enayati, PhD, PE** received his PhD in Electrical Engineering from Clarkson University, Potsdam, NY in 2009. He is currently a Lead Research Development and Demonstration Engineer at National Grid, Waltham, MA. He joined IEEE in 2006 and currently is Senior Member, IEEE and the IEEE PES Governing Board Member-At-Large. Babak is the Vice Chair of the IEEE Standards Coordinating Committee 21 (SCC21) and IEEE 1547, Standard for Interconnecting Distributed Resources with Electric Power Systems. Babak is also the Chair of IEEE PES Distributed Resources Integration working group. Babak is a registered Professional Engineer (PE) in the state of Massachusetts.



*Advertising Section*

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## Advertising Section



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## Advertising Section



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Contact Ratings	DSP-DFM: Trip Contacts- Form "C" SPDT 10 Amp., 240 V AC resistive
	DSP-DPS: Alarm Contacts- Form "C" SPDT 8 Amp., 240 V AC resistive
	IEC-60950
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*Florida West Coast Section, Tampa*

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**December 2017 Calendar of Events (For more information see P. 1) in this Signal...**

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
					<b>1</b>	<b>2</b> 61st FWCS Anniversary Cele- bration <i>Details—P. 1</i>
<b>3</b>	<b>4</b>	<b>5</b> <i>EXCOM Meeting</i> 5:30 <i>TECO Plaza</i>	<b>6</b>	<b>7</b>	<b>8</b> ITI/GE Instrument Xfmr Mtg / Tour <i>Details—P. 4</i>	<b>9</b>
<b>10</b>	<b>11</b>	<b>12</b>	<b>13</b>	<b>14</b>	<b>15</b>	<b>16</b>
<b>17</b>	<b>18</b>	<b>19</b>	<b>20</b>	<b>21</b>	<b>22</b>	<b>23</b>
<b>24</b>	<b>25</b>  <i>Merry Christmas</i>	<b>26</b>	<b>27</b>	<b>28</b>	<b>29</b>	<b>30</b>
<b>31</b>						