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THE SUNCOAST IEEE SIGNAL



THE INSTITUTE OF ELECTRICAL AND ELECTRONICS ENGINEERS, INC.

<http://ewh.ieee.org/r3/floridawc>

Volume 45 - No. 5

May 2002

Power Quality Seminar

Presented by Your PE/IA Chapter
in conjunction with the
Florida Electric Cooperatives Association

4

PDH

Will Be Awarded

Date/Time: Tuesday, May 7, 2002 8:30am - 3:00pm
Registration/continental breakfast at 8:00
Lunch on your own

Location: Adams Mark Hotel
430 S. Gulfview Blvd.
Clearwater Beach



RSVP: Ray Trusik, FECA, at (850) 877-6166, ext. 5 or
Email rtrusik@fecacom
Make your reservation now! – Seating is Limited
**Please provide your name as it appears on your PE license, as well
as your PE number if you desire to receive PDH credit.**

Cost: \$85 Members
\$150 Non-Members
\$70 Student Members

Speaker: Mike Kotch, P.E., CPQ
Senior Engineer, Power Quality
Tampa Electric Company



This will be your opportunity to not only gain an understanding of Power Quality, but obtain your four (4) required technical Professional Development Hours (PDH) for your PE renewal, all at a low price.

Topics covered will include terms and definitions; utility power quality; customer power quality; power quality monitors and monitoring methods; data interpretation; power quality investigation; power quality solutions; and case studies.

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Chair's Comment

By Quang Tang

I am proud to report that we have won two out of three Florida Council Awards. Congratulations to Dr. Dunleavy and Dr. Nauda. Please read the article below about the awards.

The Students have done it again. They got the First place in website competition and 7th in the hardware competition at Southeastcon 2002 last month in Columbia, South Carolina. Congratulations to Anthony, Scott, and Steve!

I would also like to congratulate Dr. Murty V.V.S. Yalla. Dr. Yalla, V.P. of Research and Development/Engineering, received a Technical Committee Working Group Recognition Award early this year in Dana Point, California. This award is presented annually to groups producing outstanding papers. His paper, entitled "Application of Multifunction Generator Protection Systems", was published in Vol. 14, No. 4 of the IEEE Transactions on Power Delivery. Dr. Yalla has been Vice-President of Research and Development/Engineering for Beckwith Electric for 13 years. He is a Senior member and active in Power System Relaying Committee of the PES.

Two FWCS Section Members Receive Florida Council Awards

By Jim Beall

Dr's Dunleavy and Nauda were recognized with awards on Saturday April 13. The Awards were presented during the Wireless & Microwave Technology 2002 Forum at the Embassy Suites Hotel on the USF Campus

Professor Lawrence Dunleavy was recognized as the Outstanding Engineering Educator for 2001. DR Alexander Nauda was recognized as the Outstanding Engineer for 2001.

Dr. Dunleavy is a Professor in the Electrical Engineering Department of the University of South Florida and was the organizer of Saturday's Forum. Many of his students were present for the presentation.

Dr Nauda is currently Manager, Research and Advanced Technology at Raytheon Company, ECI Division, St. Petersburg, FL with responsibility for Division research and advanced technology development

These prestigious Awards were presented by the IEEE Florida Council, which represents almost 10,000 IEEE members living or working in Florida.

Tour of Seminole Electric Payne Creek Generating Station

Presented by Your PE/IA Chapter

Date/Time: Wednesday, May 15, 2002, 5:00 PM

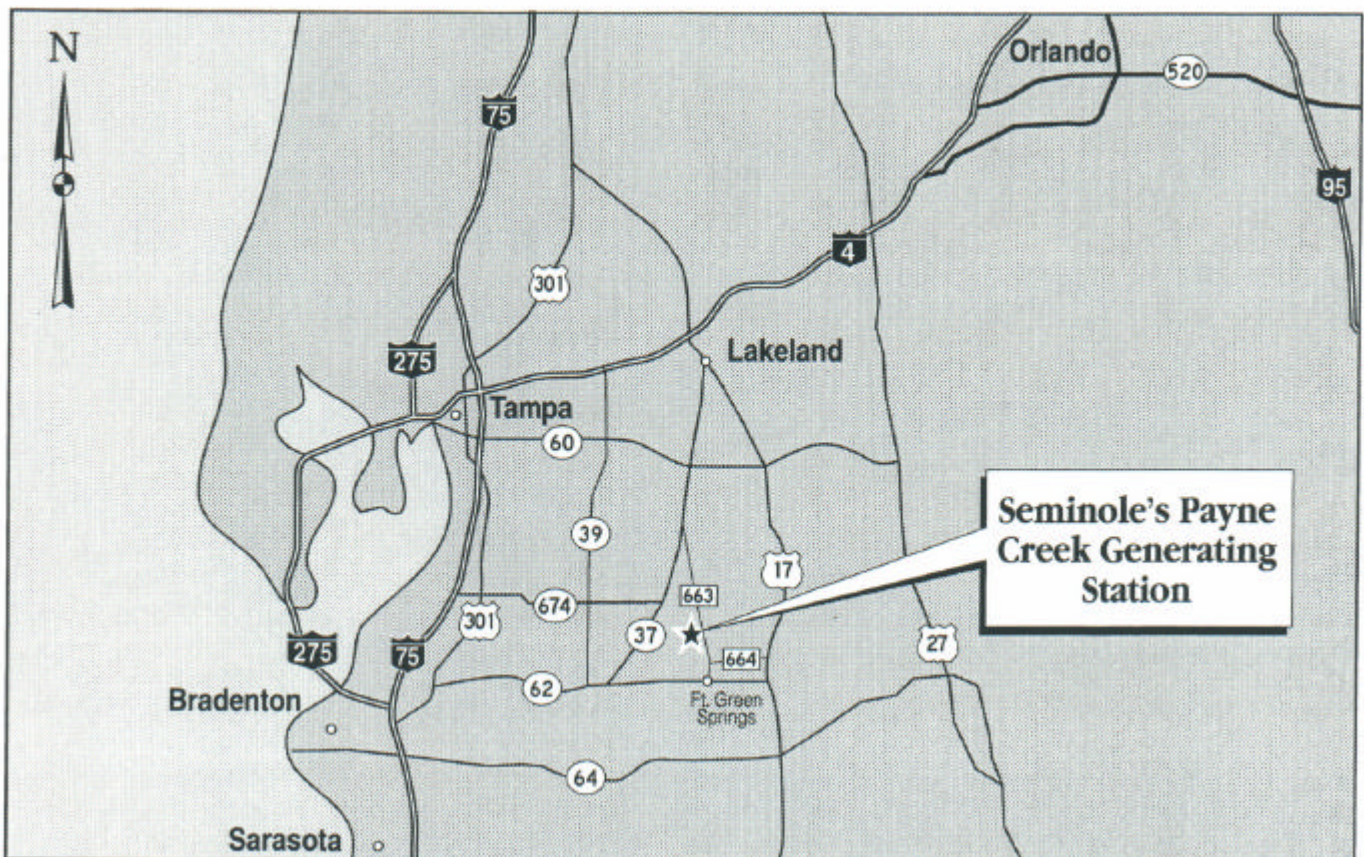
Location: Payne Creek Generating Station
6697 N County Road 663
Bowling Green, FL 33834-6817

RSVP: Contact Ghaff Khazami at gkhazami@seminole-electric.com
or 813-739-1221 or online at <http://www.ewh.ieee.org/r3/floridawc/>

Come and join your fellow members to tour Seminole Electric Payne Creek Generating Station. This is a 500MW class combined cycle unit began commercial operation on January 1 this year. This is a tour only. No dinner is planned for this meeting tour. See map below for location and call Ghaff Khazami at (813) 739-1221 for directions to location and car pool information.

Upcoming PES/IAS Meetings:

- June 2002 – Elevator Motor and Control Systems
- July 2002 – Tour S.D. Meyers Company Transformer Facility in Palmetto
- August 2002 – Distinguished Lecture
- October 2002 – Tour of a Waste to Energy Facility



Students' Corner

With Southeastcon now behind us, the IEEE student branch is still celebrating its many awards and accolades netted at the conference. Our chapter website, (<http://org.eng.usf.edu/IEEE-EE/>) which has become a permanent fixture in these signal articles, was awarded first place in the website competition. The IEEE student branch congratulates its webmaster, Carlomagno Dionson for his work in earning this recognition. The student chapter website is now slated to compete at an international level, and continued success is expected.

Congratulations are also in order for our chapter president, Anthony Webster, who received honorable mention at Southeastcon. IEEE student members entered in the hardware design competition at this year's conference, finished 7th in a field of 28 participating teams, and all chapter members join in saluting the team in its accomplishment. Special recognition at Southeastcon was also given to the IEEE T-shirt design, an achievement we can now have a part in for the price of \$10 at the IEEE office!

Student turnout at the Wireless and Microwave Forum held in April was also positive and the IEEE student branch recognizes the contribution of its members in making the Forum a success. The student branch also extends its congratulations to Dr. Larry Dunleavy, for the special recognition he received at the event.

To graduating seniors, the Student Branch extends its best wishes for the future. For the summer, while no events are as yet planned, we hope to remain active and always searching for our next award.



Brain Teaser Challenge Column

By Butch Shadwell

April BTC Solution

The right and wrong answers I received to this one were split 50/50. You don't suppose that all the respondents just guessed, do you.

The strain gauge bridge discussed last month, is basically the same as any other resistor bridge. The voltage at the output nodes is directly related to the voltage across the input nodes. Using a current source would result in the voltage on the input nodes varying continuously as the resistors change temperature. If all of the elements of the bridge have the same temperature coefficient and are thermally coupled, then there would be no change at the output with a voltage source excitation supply.

Maybe this BTC will lead to an important evolution in the garbage storage industry.

May BTC

If you've never been to France, you should go. There's the Eiffel Tower, the Arch of Triumph, the rest of Paris, and a seemingly endless supply of French people. I was especially impressed with the varieties of French pastries too. I found the people very friendly. Also, one might think that the fact that most of the people speak French would be a problem. But actually, that couldn't be further from the truth. Fortunately, many French people are very considerate about speaking English when they encounter the Anglophone. If you feel up to it, the French language is not that difficult. I have found the secret to good pronunciation is to not open your mouth too widely while speaking. Try it, you'll see what I mean.

To aid in the learning of new languages I've been working on a pocket sized spectrum analyzer, to offer a visual display of the vocal signal. The device has an 8 bit A/D converter at the input and a sample rate of 32 ksps. If the signal band of interest is 4 kHz, how many poles of low pass filtering are needed to keep the aliasing noise voltage to less than one bit. We will put the knee (-3db) at 4 kHz and assume a Butterworth response. Bon appetit!

Questions or comments to the Brain Teaser Challenge, please contact Butch Shadwell at 904-223-4465 (voice), 904-223-4510 (fax), b.shadwell@ieee.org (email), 3308 Queen Palm Dr., Jacksonville, FL 32250-2328. <http://www.se.mediaone.net/~butchs/>

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May 2002 Calendar of Events

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
			1	2	3	4
5	6	7 <i>EXCOM at TECO Center Guest are always Welcome!; PQ Seminar</i>	8	9	10 <i>Material Due For the Signal</i>	11
12	13	14	15 <i>PES/IAS Payne Creek Generating Station Tour</i>	16	17	18
19	20	21	22	23	24	25
26	27 <i>Memorial Day</i>	28	29	30	31	

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