



# THE POCKET SCOPE



The Institute of Electrical and Electronics Engineers, Inc.

Volume 52, Number 1

September 2001

## SCOPE NOTES

### September Houston Section News

**Where:**  
HESS (Houston Engineering and Scientific Society)  
5430 Westheimer @ Yorktown

**When:**  
Thursday, October 4, 2001  
6:00 - 6:30 p.m. Social  
6:30 - 7:30 p.m. Dinner  
7:30 - 8:30 p.m. Speaker

**Cost:**  
\$10.00 - IEEE Members with 48-hour advance reservations.  
\$20.00 - non-members  
**\$5.00 - students**  
Call (713) 207-IEEE to make your reservations.

See Page 2 for the Continuing Education Schedule!

IEEE WEB ADDRESS  
<http://www.ieee-houston.org>

IEEE Houston Section  
P.O. Box 460014  
Houston, Texas  
77056-8014



## The Chairman's Message

### Donald Dunn

On behalf of the Executive Committee, I want to extend our thoughts and prayers to those within the Houston Section that have been affected by the recent tragic events. The events on September 11, 2001 will be burned into our memories forever.

Our first section meeting of the year will be on October 4, 2001. The speaker for our September meeting will be D. Andrew Owens, PE; who serves as Market Manager for Entergy Solutions Ltd., a competitive retail electric provider and affiliate of Entergy Corp. He is responsible for managing a portfolio of energy products and services that deliver superior value to commercial & industrial customers. He graduated with distinction from Iowa State with a BSChE and received a MSMgt from Georgia Tech. The topic of discussion at the section meeting will be "**Electricity Deregulation in Texas**".

The Houston Section CED program is back in swing this year with several courses that cover new and exciting topics. Please take some time and visit the web site to see what will be offered this year. In addition, the volunteer organization of the IEEE is looking for individuals that would be interested in any capacity within the Houston Section and officer positions within our Technical Society Chapters (i.e. Power Engineering, Computer, Communication & Industry Applications). Please take the time to consider volunteering in some capacity, the return on time invested is well worth it.

Our employment section on the IEEE Houston Section website is growing. Take the time to visit the site and forward the information on to individuals within your companies that are seeking IEEE engineers <http://www.ieee-houston.org/>. Again, this feature is a service for the IEEE membership within the Houston Section and is at no cost to the individuals or companies placing the basic ads.

We are working on starting an IEEE GOLD Chapter here in the Houston Section. You may have seen the term "GOLD" before in IEEE literature. GOLD stands for "Graduates Of the Last Decade". We are seeking individuals that have graduated within the last 10 years. Contact Michael Forbes [mforbes@hou.asp.ti.com](mailto:mforbes@hou.asp.ti.com), Raul Olivas [Raul.Olivas@wsnelson.com](mailto:Raul.Olivas@wsnelson.com) or Gil Dolor [Gilroy.Dolor@Lyondell.com](mailto:Gilroy.Dolor@Lyondell.com) for more information. Stay tuned for upcoming announcements about the GOLD Chapter.

The Houston and Galveston Bay Sections are hosting the IEEE Region 5 Conference in April 2002. We are looking for volunteers from academia and industry to help with the student and technical programs. If you have, an interest please contact one of the Section Excom members.

The Executive Committee and I look forward to your feedback and comments. If you have suggestions and/or are interested in becoming active within the section or a local society chapter, contact one of us. Without the active participation and feedback from you the members, the programs and content of the IEEE would be lacking.

WHAT'S NEW @ IEEE FOR GOLD (Graduates Of the Last Decade)

VOLUME 2 NUMBER 9 SEPTEMBER 2001

An HTML version of this newsletter can be viewed on our online archive at

<http://www.ieee.org/whats-new/archive/>.

CONTENTS:

1. Growth of Electronic Services Drives 2002 Dues Increase
2. Work Relationships — Build Camaraderie, Build Your Career
3. How Do You Dress for Work?
4. IEEE E-Mail Aliases Block 35,000 Viruses in August
5. Is Your Car Connected?
6. Telecommuting — A View from the Trenches
7. Robust Designs for Digital Multiplexing
8. Proceedings of the International Symposium on Technology and Society
9. IEEE Spectrum Special Feature: Teaching from a Clean Slate

## IEEE CONTINUING EDUCATION ON DEMAND

## 2001-2002 REGISTRATION FORM

Name:

Company:

Mailing Address: (where certificate will be delivered)

City/State:

Zip:

Email:

Telephone Voice:

Telephone Fax:

IEEE Membership Number:

Mail a copy of your completed registration form along with your check payable to **IEEE CED SEMINARS** at the following address:

IEEE CED SEMINARS  
BEATRIZ REY  
ABB Power T&D Company  
P.O. BOX #42802  
HOUSTON, TX. 77242

Registration receipts will be distributed **at the seminar**.

For a cancellation refund, telephone by the Friday before the seminar:  
Contact Beatriz Rey at (713) 821-4027

IEEE Continuing Education On Demand Completion Certificate with Continuing Education Units (CEUs) is provided after receipt of both nightly questionnaires.

Please check the IEEE Houston Section website for the latest schedule and course information.

<http://www.ieee-houston.org>

## IEEE CONTINUING EDUCATION ON DEMAND

The purpose of IEEE Houston Section Continuing Education On Demand is to provide a two-year repeating program sequence of practical industrial power application topics that supplement the daily work activities of the practicing graduate electrical engineer.

The seminars are intended to stimulate further study and discussion for learning continuance throughout the working career. Topics apply to heavy industries: oil and gas, petro-chem, cogen, pulp and paper, etc.

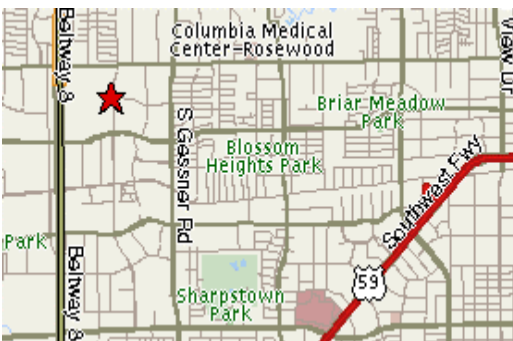
Instructors are application engineers, manufacturing specialists and expert consultants who provide a blend of diverse engineering perspectives.

The cost of each seminar is \$120.00 for IEEE members. "Early Signup" is \$60.00 and the **check must be received the Friday before** the seminar start date. The cost for non-IEEE members is \$200.00. Signup the week of the seminar does not guarantee seminar presentation documents or meals. For IEEE membership application information, contact Beatriz Rey at (713) 821-4027.

The following 2001-2002 seminar schedule defines the topics, dates and times. A course syllabus is available on request. Minimum class size is twenty for each seminar. Seating is limited and filled on an as received basis. Presentation documents are provided. A buffet is served from 5:00PM-6:00PM.

Seminar location:

ABB Power T&D Company  
P.O. BOX #42802  
HOUSTON, TX. 77242  
Contact Beatriz Rey  
(713) 821-4027



Seminar Title	Code	Date	Amount
Factory & Field	911	Oct. 2/3	\$
Standby Pwr Systems	115	Oct. 16/17	\$
Induction Motors	601	Oct. 30/ 31	\$
MV & LV Mtr Control	702	Nov. 13/14	\$
Safety by Design	114	Feb. 5/6	\$
Syn Generators	602	Feb. 19/20	\$
Governor Control	607	Mar. 5/6	\$
Excitation Systems	608	Mar. 19/20	\$
MV & HV Cable	113	Apr. 2/3	\$
MV Fuse & Interrupter Switches	315	Apr. 16/17	\$
Applying IEC Standards	801	Apr. 30 / May 1	\$
Total Paid:			\$

Enter amount for each seminar:

IEEE member registration: \$120.00  
IEEE member early signup: \$ 60.00  
Non-member registration: \$200.00

## 2001-2002 IEEE CED Seminar Schedule

**Factory & Field Transformer Testing (911)**  
**Waldemar Ziomek, Pauwels Transformers, Inc.**  
*Reviews Techniques and Industry Standards*  
Oct. 2/3, 2001 6:00-8:50PM  
[0.5 CEU]

**Standby Power Systems (115)**  
**Brad Roberts, S&C Electric Company**  
*Reviews Theory and Practical Applications*  
Oct. 16/17, 2001 6:00-8:50PM  
[0.5 CEU]

**Induction Motors (601)**  
**Charlie Pounds, LBS Engineers**  
*Reviews Practical Applications*  
Oct. 30/31, 2001 6:00-8:50PM  
[0.5 CEU]

**Medium & Low Voltage Motor Control (702)**  
**James Bowen, Powell Electrical Mfg. Co.**  
*Reviews Applications and Design*  
Nov. 13/14, 2001 6:00-8:50PM  
[0.5 CEU]

**Safety By Design (114)**  
**James Bowen, Powell Electrical Mfg. Co.**  
*Discusses Various Safety Issues*  
Feb. 5/6, 2002 6:00-8:50PM  
[0.5 CEU]

**Synchronous Generators (602)**  
**Charlie Pounds, LBS Engineers**  
*Reviews Theory and Techniques*  
Feb. 19/20, 2002 6:00-8:50PM  
[0.5 CEU]

**Governor Control (607)**  
**Peter Evjen, Solar Turbines, Inc.**  
*Reviews Theory and Applications*  
Mar. 5/6, 2002 6:00-8:50PM  
[0.5 CEU]

**Excitation Systems (608)**  
**Fred Wolf, Basler Electric**  
*Reviews Applications*  
Mar. 19/20, 2002 6:00-8:50PM  
[0.5 CEU]

**Medium and High Voltage Cable (113)**  
**Wayne Madden, Okonite Co.**  
*Theory, Applications, Field and Factory Testing*  
Apr. 2/3, 2002 6:00-8:50PM  
[0.5 CEU]

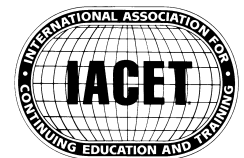
**Medium Voltage Fuse & Interrupter Switches (315)**  
**Neville Parry, Cutler Hammer**  
*Reviews Applications and Design*  
Apr. 16/17, 2002 6:00-8:50PM  
[0.5 CEU]



**IEEE  
Houston  
Section**

**2001-2002**

**Continuing  
Education  
On Demand**



**Spring 2002 IEEE Seminar Schedule**

# Section Meeting October 4, 2001

## *"Electricity Deregulation in Texas"*

Deregulation of the power industry is set to begin on January 1, 2002 in Texas. Other states in the region from Oklahoma to Florida are contemplating deregulating their energy markets. The outcome of these efforts will have a profound impact on Gulf Coast industrial facilities, particularly those in Texas. These impacts include freedom to choose a new power supplier, price volatility and transparency along with innovative new products and services coming to market.

The presentation will provide a summary of what electricity deregulation involves in Texas including the legal complexities and the timeline. The presentation will feature an overview of how the newly deregulated energy market will function including the role of different players in the supply chain. This section will also touch upon the convergence of the various energy markets (electricity, gas, oil, etc.) into a commoditized marketplace. Lastly, the presentation will address how this newly created energy marketplace will alter traditional regulated electricity pricing and result in numerous options and innovations in commodity-related products and services. If there is interest, we can also discuss where each of the other Gulf Coast states is in terms of proposing deregulation legislation.

### Biography

*D. Andrew Owens, PE serves as Market Manager for Entergy Solutions Ltd., a competitive retail electric provider and affiliate of Entergy Corp. He is responsible for managing a portfolio of energy products and services that deliver superior value to commercial & industrial customers. He graduated with distinction from Iowa State with a BSChE and received a MSMgt from Georgia Tech.*

**SEE FRONT PAGE FOR LOCATION AND RESERVATION INFORMATION**

## A MESSAGE FROM IEEE PRESIDENT JOEL SNYDER

Dear fellow IEEE member:

I'd like to tell you about an IEEE service that I've found to be invaluable in all aspects of my professional life. It's a selection of free email newsletters called "What's New @ IEEE." <http://www.ieee.org/whats-new> "What's New" provides the latest news on IEEE activities, industry trends, member benefits, career tips, and new IEEE products. There are 11 newsletters for engineers and other technology professionals. I subscribe to all of them, but you can select as many as you would like.

You can choose from the following "What's New @ IEEE" newsletters:

Circuits	Communications
Computing	Eye on Washington (USA)
Graduates of the Last Decade	Libraries
Members	Power
Signal Processing	Students
Wireless	

It's easy to subscribe or unsubscribe, so you control what information you receive. To subscribe, simply logon to <http://www.ieee.org/whats-new>. Then select one or more of the email newsletters, enter your email address and click "subscribe." Your email address will not be shared with anyone outside of IEEE.

I'm very pleased that IEEE has developed a service such as this. I encourage you to sign up for this free "What's New" email newsletter service and give it a try.

Sincerely,

Joel Snyder  
2001 IEEE President

## IAS MEETING

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### SOLID AND HIGH RESISTANCE GROUNDING METHOD

Mr. Tom Kanis of Post Glover Resistors Inc. will give presentation on "Solid and high resistance grounding methods". A graduate of Xavier University in Cincinnati, OH, Tom Kanis started his business career in 1972 when he returned from duty with the US Army. He spent 14 years in application, sales and marketing of Industrial Fans and Blowers. Switching to Electrical Apparatus, he worked as a Deputy Plant Manager for Westinghouse Industry Services Division, and followed it up with 4 years in Nuclear Power equipment. Today, Tom is the Key Accounts Manager of Post Glover Resistors Inc., a 109-year old company that provides about 65% of the USA's Power Resistors. Tom handles sales and marketing in the US and South America.

#### Below is an outline of the seminar:

1. Anatomy of a Ground Fault
2. Fault Causes:
3. Effects of Fault on Current
4. How Large is Fault Current?
5. Methods of System Grounding
6. Neutral Grounding Resistors (NGRs)
7. NGR Auxiliary Equipment
8. Neutral Grounding Monitors
9. Applications
10. NGR Specification Elements
11. High Resistance Grounding Equipment
12. HRG Operation

#### WHERE:

ABB Building  
3010 Briarpark Drive  
Houston, TX 77042  
Conference Room: Kilgore Conference Room  
Notes: Please park in the garage and check in with the Rear Door Security Desk.

#### WHEN:

Thursday, October 11, 2001  
5:30 - 6:00 PM, Refreshments  
6:00 - 7:30 PM, Seminar

#### RESERVATIONS:

Sunita Kulkarni @ 713 235 2833  
Email: [skulkarn@bechtel.com](mailto:skulkarn@bechtel.com)  
or  
Julia Dang @ 713 821 821 5196  
Email: [julia.dang@us.abb.com](mailto:julia.dang@us.abb.com)

## GLOBECOM 2001

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November 25-29, 2001

GLOBECOM 2001, worldwide communications conference will be held this year in the richly historic city of San Antonio, Texas. San Antonio serves as a wonderful conference location with many amenities, events, and unique places to enjoy.

The theme for the conference, "The Evolving Global Communications Network", awakens the true feeling that the world communications network is forming, changing, and growing at a tremendous rate. A global conference, GlobeCom, is critical to the industry by continuing to teach new ideas within traditional communications technology, while adding many of the next generation theories and practices.

Over 1500 technical papers have been received from authors in 52 countries, and about half will be presented and published at the conference. Authors will be notified in July. The principal topics are Broadband Wireless, Quality of Service, Voice Integration on Data Networks and Advanced Communications Theory.

Dr. Robert Lucky of Telcordia Technologies will be the Keynote Speaker, and Ross Ireland, CTO of SBC, will open conference. Numerous speakers from industry will host Business Applications Sessions to discuss current applications of these new technologies.

For more information go to: <http://www.globecom2001.com/src/start.shtml>

## NAPS 2001 PREVIEW

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The thirty-third North American Power Symposium (NAPS) will be held this year at Texas A & M University in College Station, Texas on October 15 and 16. The Symposium is sponsored by Texas A & M University with the IEEE Power Engineering Society as technical co-sponsor. The main purpose of the symposium is to provide a relaxed environment where university faculty and students together with industrial representatives working in the power engineering area can discuss and present their research ideas and results.

### History of the Symposium

NAPS grew from the Midwest Power Symposium (MPS), which was originally established in 1969 to provide an academic setting where students and faculty working in diverse areas of power engineering could discuss their research and education programs. The symposium started mainly with the participation of people from universities in the American Midwest. As more professors and students from other parts of North America started to consistently show interest and participate in MPS, it was decided to change its name to the current NAPS, to better reflect the origin of its diverse audience. Thus, NAPS started to be hosted by numerous universities throughout North America, including Canada.

NAPS has become a well-known international forum where university delegates, as well as industrial representatives, from all over the world present and discuss their research work.

### NAPS 2001

Since this year's conference is being held in the State of Texas where retail competition in the sale of electricity will begin on January 1, 2002; a special opening session will be held with speakers providing various perspectives on Texas retail competition. Also the paper presentations will address a wealth of issues and cutting edge research in the power engineering area.

As Texas A&M University has a rich history of research in the power engineering area, participants will be able to tour its power engineering laboratory facilities on Sunday afternoon and Tuesday afternoon.

### Location

Texas A & M University is a land-grant, sea-grant, and space-grant institution located in College Station, Texas. The university is 100 miles northwest of Houston and 90 miles east of Austin. The university's enrollment includes approximately 43,000 students with its Dwight Look College of Engineering ranking among the top producers of bachelor's degrees in engineering. The Electrical Engineering Department provides unmatched diversity and richness of educational and research experiences in eight focus areas. The power engineering program comprises faculty expertise in the areas of analysis, reliability, monitoring, control and protection of power systems, motor drives, power electronic converters, utility interface issues, active filters, and electric and hybrid vehicles.

The symposium will be taking place at the George Bush Presidential Conference Center on the Texas A&M University campus, just a 5 minutes ride from the symposium hotel. A shuttle service will be provided to the conference participants from and to the symposium hotel.

### Hotel

Accommodations for NAPS participants and guests will be provided by the LaQuinta Hotel, 607 Texas Avenue, College Station, Texas 77840. Tel: (979) 696-7777. Fax: (979) 696-0531. Toll free reservations number: 1-800-687-6667. Web <http://www.laquinta.com>. Please contact the hotel directly or at the toll-free number and mention the North American Power Symposium when making reservations. Reservations must be made by October 1, 2001 to guarantee special conference rates.

For more information, contact:

Dr. Karen Butler-Purry

NAPS 2001 Chair

Electrical Engineering Dept., 216G Zachary

3128 TAMUS

Texas A & M University

College Station, TX 77843-3128

979-847-9048, 979-845-6259 (fax)

Email: [klbutler@ee.tamu.edu](mailto:klbutler@ee.tamu.edu)

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The **Pocket Scope** is the newsletter of the Houston Section of the Institute of Electrical and Electronics Engineer (IEEE). The Houston Section address is: IEEE Houston Section, P.O. Box 460014, Houston, Texas 77056-8014.

The **Pocket Scope** is published eight times a year (monthly, September to May, except December). It is distributed to over 3000 professionals in the electrical engineering field in the greater Houston area.

**Advertising rates** are listed on the IEEE Houston Section website and include publishing in The Pocket Scope, ad on the website, and within the monthly e-mail update.

IEEE members make change of address notices via the IEEE website: [www.ieee.org](http://www.ieee.org).

## Newsletter Staff

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