

THE S F PEN



#### THE SAN FRANCISCO POWER ENGINEERING NEWSLETTER Editor-in-Chief: Kris Buchholz

PUBLISHED BY THE IEEE SAN FRANCISCO POWER ENGINEERING SOCIETY Vol. 19, No. 2

#### **WINTER 2002**

NOTE: Please pass this on to interested non-PES members

# **GENERATORS** --**THEORETICAL &** PRACTICAL, **CURRENT & FUTURE**

By Ben Williams

Mark Your Calendars!! This Spring, the SF PES will be hosting a one day course on generators. The class is scheduled for May 11, 2002 (There is a remote chance that this date might change.) The course will be held at San Francisco State University.

This course is intended to be both a refresher course on theoretical and practical aspects of generator theory and design as well as a forum to discuss some of the more interesting issues related to current and future generating units.

Specifically, the course is expected to cover such topics as:

- electromechanical conversion theory
- practical aspects to consider when modeling generators for transient analysis
- generator testing
- comparison of the advantages and disadvantages of "central plant" vs. distributed generation strategies.

There will be a nominal fee for the course. Presenters for this course are currently being lined up and the topics are being finalized. (You may see a familiar past-Chairman as one of our speakers....) Be on the lookout for more information in the upcoming IEEE GRID or contact Ben Williams at BEW5@pge.com or (415) 9739473 to be sure you will receive a registration form.

Also, be on the lookout for information about a possible follow-up course in the fall that will cover considerations for new generator interconnections or distributed generator interconnections.

#### **2002 SF PES ELECTIONS** By Julian Ajello

The SF PES will hold elections for the 2002 officer positions at the April meeting, noon, April 9 at PG&E. The offices up for election are: Chair, Vice-Chair, Secretary, and Treasurer. All SF PES members are encouraged to come and vote.

SF PES invites and encourages all members to run for office. If you would like to run for office, please contact me so that your name can appear on the ballot.

SF PES ADCOM endorses the following candidates for office. Silvino Cruz (Chair), Siri Varadan (Vice-Chair), Chuck Magee (Secretary), and Chase Sun (Treasurer).

Election information will appear in the IEEE Grid or via direct mailing to the SF PES members.

### PLANNING FOR THE **SPRING BANQUET**

By Julian Ajello

This year's Spring Banquet will be June 21. [Yes, the first day of summer] at Sinbad's Pier 2 Restaurant. No-host cocktails start at 5:30pm, dinner starts at 6:30pm and the panel of speakers present from 7:30pm to 9:00pm.

As has become traditional, this will be our Public Affairs event where we will try to attract people from outside IEEE to show them how Electrical Engineers contribute to society. The theme will be The Electric Environment [Can Electricity and the Environment Co-exist?] We will invite a panel of speakers to talk about a variety of topics in keeping with this theme. Some suggested topics are health effects of electromagnetic fields, hybrid vehicles, and NOX reduction technology. Please contact Julian Ajello with suggestions for speakers and topics. [See the contact information at the back of The SF PEN.]

#### **CENTRAL AREA PACE 2002** By Pauline Tapia

The Employment and Career Services Committee (ECSC), a national committee of IEEE-USA, will be holding an all day meeting March 16th in Burlingame. Ken Doniger, former PACE Chair of Santa Clara Valley Section, now Region 6 representative on the ECSC has invited local PACE Chairs to attend the meeting.

The Central PACE Committee Taskforce has been formed to gear up for major career development programs for IEEE PACE related ideas for membership. Spring, Summer and Fall workshops are welcomed and can be communicated to the following individuals for consideration.

Pauline Tapia Central Area PACE Chair, 510-874-2656, PBT1@PGE.com

Matthew Collins PACE volunteer, 510-874-2670, MECN@PGE.com

Farshid Brojeni PACE volunteer, 510-874-2617, FVB3@PGE.com

#### THE INSTITUTE OF ELECTRICAL AND ELECTRONIC ENGINEERS, INC.



By Kris Buchholz

You will notice that *The SF PEN* is shorter this time. We are being cost effective and combining this issue with your April meeting flyer. Please make sure you save that page. Also, as a reminder to everyone, PLEASE call Jenny Diego for RESERVATIONS for the meeting so she can get your name to the guard desk for admittance to the meeting. I look forward to the day when we can return to our way of life before September 11<sup>th</sup>, but I am afraid that will be a long time....

At the Winter Power Meeting in New York, the T&D Committee made a decision on a "winter" meeting for 2003. You will remember that we just completed our *last* Winter Power Meeting and our *last* Summer Power Meeting will be July 21 -25 in Chicago, IL. After that the IEEE PES is going to just ONE General Meeting each year. In 2003 that meeting will be July 13 - 18 in Toronto, Ontario, Canada. The T&D Committee acknowledged that a second meeting must be held to allow for continuation of the work of the Working Groups and Task Forces. The T&D Committee will be holding a second meeting, in late January or early February 2003 in Las Vegas, NV. Watch for more news about this meeting.



#### By Sil Cruz

At a past meeting of Chapter Chairpersons. One of the problems that surfaced during the meeting was the difficulty of recruiting new volunteers to assist in planning and organizing activities. These monthly technical meetings are vital to the Chapter because they are the fabric which holds our global IEEE organization together.

Just exactly what are the benefits of volunteering your time with your Chapter's

### MAILING LIST ADDITIONS

If you are not regularly receiving *The SF PEN*, and would like to, fill out the form below and return to the Editor-in-Chief of *The SF PEN*. Or better yet, become a member of one of the San Francisco Bay Area's IEEE Power Engineering Societies and automatically receive *The SF PEN*. For PES membership information, call Trang Luu, (510) 874-2512 and FAX (510) 874-2507.

= = = = = = = = = = = = = = =		= = = DETACH HERE = = = = = = = = = = = = = = = = = =	
RETURN TO:	Kris Buchholz		
	PG&E		
	P.O. Box 770000, Mail Code H12A		
	San Francisco, CA 94177	FAX (415) 973-8147	
	e The SF PEN. Place me on your	mailing list to receive future issues.	
AFFILIATION:			
ADDRESS:			

activities? I don't even know how to begin listing the many tangible and intangible advantages of being active in the IEEE societies. We all know what those are: networking opportunities, continuing education, a chance to improve communication skills, professional development, and the list goes on...

Everyone you see or read about either in The Institute or any one of the numerous IEEE publications probably has different, if not unique, reasons for being active participants in IEEE. Many of those we know write illuminating articles for publications in society proceedings. There are also articles written by insightful authors who can predict just where the next technological hype is headed. Here's a trivia: Did you know that the palm pilot appeared in the IEEE Spectrum years before finding its way into Money magazine? In The Institute, I often see pictures of men and women honored for their many years of service to the IEEE and the electrical engineering profession as a Woolemay even have your own personal reason why you should become active in your local chapter's activities. Isn't it time to put your thoughts into action and find out how you can play an active role in your Chapter's activities? Please call any of our ADCOM members to get involved.

### 2002

### SAN FRANCISCO CHAPTER POWER ENGINEERING SOCIETY OFFICERS & COMMITTEE CHAIRS

Chairperson:	Silvino Cruz, P.E. E-mail address: silandtina@attbi.com
Vice Chairperson:	Dan Sparks, P.E., Xenergy Consulting Phone: (510) 891-0461, x4116, Fax (510) 891-0440 E-mail address: dan.sparks@ieee.org, dsparks @xenergy.com
Secretary/Treasurer:	Chase Sun, P.E., Pacific Gas and Electric Company Phone: (510) 874-2371, Fax: (510) 874-2507 E-mail address: <u>cts1@pge.com</u>
Public Affairs:	Julian Ajello, P.E., California Public Utilities Commission Phone: (415) 703-1327, Fax: (415) 703-1891 E-mail address: j.ajello@ieee.org
Membership Team Leader:	Trang Luu, P.E., Pacific Gas and Electric Company Phone: (510) 874-2512, Fax: (510) 874-2507 E-mail address: <u>tdl2@pge.com</u>
Publicity Team Leader:	Dan Sparks, P.E., Xenergy Consulting Phone: (510) 891-0461, x4116, FAX (510) 891-0440 E-mail address: dan.sparks@ieee.org
The SF PEN Editor-in-Chief:	Kris Buchholz, P.E., Pacific Gas and Electric Company Phone: (415) 973-3093, Fax: (415) 973-8147 E-mail address: <u>kkb1@pge.com</u>
Continuing Education:	Ben Williams, Pacific Gas and Electric Company Phone: (415) 973-9473, Fax: (415) 973-8616 E-mail address: bew5@pge.com
Program & Arrangements:	Jenny Diego, Pacific Gas and Electric Company Phone: (415) 973-3351, Fax: (415) 973-3479 E-mail address: ljdb@pge.com
Student Activities:	Jenny Diego, Pacific Gas and Electric Company Phone: (415) 973-3351, Fax: (415) 973-3479 E-mail address: ljdb@pge.com
PACE:	Pauline Tapia, Pacific Gas and Electric Company Phone: (510) 874-2656, Fax: (510) 874-2442 E-mail address: <u>pbt1@pge.com</u>
General Member:	Siri Varadan, P.E., Nexant, Inc. Phone: (415) 768-4478, Fax: (415) 768-6663 E-mail address: svaradan@nexant.com
General Member:	Charles Magee, P.E., California Public Utilities Commission Phone: (415) 703-4683, Fax: (415) 703-1891 E-mail address: cm1@cpuc.ca.gov

# Power Engineering Society



The INSTITUTE OF ELECTRICAL AND ELECTRONICS ENGINEERS, INC. San Francisco Chapter

# LIFE EXTENSION SOLUTIONS FOR LOW VOLTAGE AND MEDIUM VOLTAGE SWITCHGEAR by

**APRIL** 

# KEITH GRAY, PACIFIC BREAKER SYSTEMS

DATE & TIME: Tuesday, April 9, 2002 12:00 Noon

## PLACE: PG&E Building 245 Market St. Conference Rm. A San Francisco

# **RESERVATIONS:**

<u>Required</u> Due to increased security, PG&E requires an advanced list of guests. Please contact Jenny Diego at (415) 973-3351 to make reservations. On April 9, Keith Gray, Pacific Breaker Systems, will speak to the San Francisco Power Engineering Society about options available to replace or extend the life of switchgear with particular attention to the total cost associated with the process. This cost includes direct initial expenditures and as well as considering the financial impact of outages required to achieve the solution.

Mr. Gray's presentation will show examples of options to retrofit the individual cells of different types of switchgear, the provision of direct replacement circuit breakers, the conversion of the existing circuit breakers, and the overhaul and upgrade of circuit breakers. Specific installation examples will show how these different solutions are possible.

Keith Gray is Vice President and Chief Engineer with Pacific Breaker Systems. He obtained his Bachelors degree from Staffordshire College of Technology (Stafford, England) while serving an apprenticeship with English Electric. He has nearly 40 years experience in the design and development of distribution and transmission switching equipment. Mr. Gray has work for ABB, Siemens, and Joslyn before joining Pacific Breakers in 1997. He has been involved with switchgear standards development since 1976. He is a past Chairman of the IEEE Switchgear Committee and is currently Secretary of the PES Technical Council.