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The  **IEEE**

MONITOR

PUBLISHED BY THE NEW YORK SECTION OF THE INSTITUTE OF ELECTRICAL AND ELECTRONICS ENGINEERS



Engineering at its Best

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**PERIODICAL
TIME SENSITIVE
MATERIAL**

Chairman's Column



Our annual Awards Dinner-Dance will be held this year on Saturday evening February 21 at the New York Hilton. It is the major social event of the year

for the New York Section and is the venue in which we honor the engineers who have made technical and educational contributions to our profession.

We honor the recipients of IEEE's highest personal technical achievement recognition- the IEEE Fellow. These individuals have enhanced our engineering profession by leading us with innovative thinking and ideas. They excel in their quest to advance our knowledge and improve our lives. Congratulations to all of this year's Fellows!

We hold this annual affair to honor the many individuals who give of their time and effort to the New York Section. The members of the Executive Committee, as well as the individuals on the various Chapter organizations, work throughout the year to bring to the area engineers exciting technical and professional programs. These efforts require hours of preparation for finding topics and speakers, publicity, registration, facility

rooms and refreshments. I want to thank each individual for their help!

Exemplary contributions to our Section and Region are recognized through the presentation of special awards at the Dinner. The critical factor in sustaining excellent volunteer participation is the recognition and rewarding of individual contributions. Again, congratulations to the Award winners!

This Dinner receives major support through company attendance at this affair. The companies that fill the tables are showing their support for our efforts and realize the importance of our mission. 'Thank you' to the companies that are participating this year!

Finally, I want to thank the Special Events Committee for planning and running this Dinner-Dance. Ralph Tapino, Bill Perlman and their committee are working diligently to give us an outstanding evening of fine food, dancing and socializing!

As you can see, we have a lot to be thankful for! For those engineers who have not yet gotten involved—give me a call. Your ideas and time can help us get even better!

SEE YOU AT OUR DINNER-DANCE!!!

Benjamin Schall
Chairman, IEEE NY Section

The  IEEE
MONITOR

Vol. 52 No. 2

February, 2004

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RECRUITING AND RETAINING VOLUNTEERS, PART IV

What volunteers need: “A task that matches interests and reasons for volunteering*.” Individual motives for volunteering are varied. Motives can include fulfilling social needs, looking for a challenge, self-improvement, or even being bored with the line-up of programs on television.

How can you find out what would motivate your Section’s members to volunteer? Ask them. You can survey all Section members to start and then create a questionnaire for new members to complete when welcoming them to the Section. Your survey should be sent to a member list filtered by location and member grade, keeping in mind that not all grades are qualified to serve in Section officer positions. The survey should include the types of positions available, the skills needed to fill them and the time commitment involved. Also include a choice of the best days and times for volunteer activity. [If your Section has successfully completed such a survey, we would appreciate it if you would send a copy to Vicki Waldman at v.waldman@ieee.org so it can be shared with other Sections.]

To encourage a higher response rate to your survey, try the method that worked for the Cincinnati Section when they did a survey to determine members’ meeting preferences. They entered respondents in a random drawing to win a \$25 gift certificate at a local technology store and received a much better rate of response than with past surveys. (*from “Volunteers: How to Get Them, How to Keep Them” by Helen Little; page 19, Panacea Press, Inc. Naperville IL., 1999)

Editorial –

The cover of this issue is by now the well recognized Freedom Tower. This monument of design will reach skyward some 1776 feet to commemorate the date of the Declaration of Independence from Britain. This is the height as originally proposed by Daniel Libeskind. Mr. David Childs revised the design to include an unoccupied section at the top, housing broadcast antennae and windmills, which could generate 20% of the building’s energy. Mr. Childs stated that “It must be iconic. Simple and pure in its form, a memorable form that will reclaim the resiliency and the spirit of our democracy.” It will be the worlds tallest building with a 276-foot spire and the antenna rising to more that 2,000 feet. The torqued tower with the east and west sides twisting as they rise and the spire meant to echo the Statue of Liberty in New York Harbor will have a concrete core and be encased in a steel cable netting that will brace the building. Ground breaking will be by next September, which coincides with the Republican National Convention in New York City and the third anniversary of the attacks. Estimate completion will be within five years. The Port Authority of New York and New Jersey is committed to occupy as much as a third of the building. The cost is estimated at \$ 1.5 billion, or \$ 1 million per 500 square feet. Truly this is Engineering at its Best.

Calendar of Upcoming Events

February 10, 2004 (Tuesday) PES/IAS Program Committee Meeting is scheduled to being at 5:30 PM at the Con Edison Executive, 19th floor, Dining Room, 4 Irving Place, NYC. , Speaker: Lt. John K. Hahn, Operations Officer, US Department of Homeland Security, US Coast Guard. Subject: Making New York Harbor Safe, RSVP to John Michelsen at (914) 968-8400 or Michael A. Miller by email at MillerM@ConEd.Com or at (212) 460-4911

February 10, 2004 (Tuesday) LI Chapter – Electromagnetic Compatibility Society is presenting a lecture titled RF Safety Analysis versus EMC (call or email for location on LI). The Speaker is Mr. Richard Strickland, Founder of RF Safety Solutions LLC. The presentation will begin at 6:30 PM, refreshments at 6 PM, RSVP to Richard Mohr or Sandy Mazzola at (631) 262-8367 or at <http://www.ieee.li/emc.htm>

February 12, 2004 (Thursday) The Metropolitan Engineering Society Council of NYC presents an Engineer's Week Celebration at the NY Academy of Sciences, 2 East 63rd Street, at Fifth Avenue. The speaker will be Terry N. Adams, PhD, the topic: "Thermal Process: Turning Organic Waste into Resources" the cost is \$ 45.00 which includes refreshments, contact: www.mescnyc.org

February 19, 2004 (Thursday) PES / IAS Technical Discussion Group and the Edison Engineering Society – Present: Cutler Hammer discussing grounding in the Con Edison Executive Dining Room, 4 Irving Place, 19th Floor, New York, NY For information or Reservation call : Sukumar Alampur Sukuman@JRLA.comn or 212 563 7400 / Jim Nucito J.R.Nucito@IEEE.org or 732 380 1100 Ext. 4149

February 21, 2004 (Saturday Evening) 2004 Awards Dinner Dance, Trianon Ballroom, New York Hilton Hotel and Towers at Rockefeller Center, 1335 Avenue of the Americas (between 53rd and 54th Streets) Contact: William Perlman (908) 810-8555 W.Perlman@IEEE.Org

March 18, 2004 (Thursday) PES / IAS Technical Discussion Group and the Edison Engineering Society – Present: Alan Bradley discussing Variable Frequency Drives (VFD's) in the Con Edison Executive Dining Room, 4 Irving Place, 19th Floor, New York, NY For information or Reservation call : Sukumar Alampur Sukuman@JRLA.comn or 212 563 7400 / Jim Nucito J.R.Nucito@IEEE.org or 732 380 1100 Ext. 4149Cutler Hammer / Alan Bradley

April 29, 2004 (Thursday) at 6:00 PM, Vehicular Technology Society, "RF Communications for Communication Based Train Control (CBTC)" presented by Dr. Alan Rumsey and Mike Fitzmaurice, Cisco Systems, Inc., One Penn Plaza, New York City, 5th Floor, For information call Mr. Joern Fellenberg at 212-672-4052 or by e-mail at Joern.Fellenberg@IEEE.Org

2003 REGION 1 AWARDS

Jack A. Buchsbaum;1E, New York Section

For outstanding commitment to Electrical Engineering Management and the promotion of the ideals of the IEEE

Bradley P. Craig, P.E.; 1E, New York Section

For outstanding commitment to Electrical Engineering Management and the promotion of the ideals of the IEEE

David Keith Horn; 1E, New York Section

For outstanding commitment to Electrical Engineering Management and the promotion of the ideals of the IEEE

David M. Weiss; 1D, New York Section

For enhancement of the IEEE in industry and community service through his leadership in the Vehicular Transportation Society

Professional Activities Information Page

This page dedicated to member professional activities information

New York Section PACE Calendar of Upcoming Events: The following are proposed Section activities. Dates and locations will be announced in future issues when they become available. Please plan to attend at a meeting or seminar.

February 11: General Meeting

March 10: General Meeting

March TBD: Financial Seminar

If you have suggestions on areas of professional activities that interest you please contact me.

Peter Greco PACE Chairman
Tel.: 212-614-3357 Fax: 212-529 5237
email: p.j.greco@ieee.org

IEEE-USA's and IEEE Job Site:

This highly rated job listing service was replaced by a new internet-based job site, and is sponsored by IEEE-USA and IEEE Spectrum. The site allows the active and passive job seeker more control over the recruiting process. For more details go to www.ieee.org/jobs.

**IEEE EMPLOYMENT
ASSISTANCE
WEB SITE: <www.ieeeusa.org>**

The Employment Assistance Web Site brings together dozens of job-search resources in a single location. The site includes the following:

Entry-Level Employment Assistance Site:

If you are an engineering graduate, recent graduate, or IEEE Student Member looking for the first job this is one of the best places to begin your career. Special entry-level

employment services include job listings, links to company sites and job-search tips and techniques:

<www.ieeeusa.org/EMPLOYMENT/entry.html>

IEEE-USA's New Resume Referral Service:

Put your resume for maximum exposure! IEEE-USA in cooperation with Resume-Link has established a members-only Resume Referral Service which IEEE members may register, FREE of charge via web registration or by hard copy. Your resume will stay on file for six months (with an option to renew the listing up to a year). Make sure you check out this great new service to promote your credentials! For hard copy registration forms, contact Resume-Link at 614-923-0600 or <socmember@resume-link.com>.

EMPLOYMENT AND CAREER ENHANCEMENT PUBLICATIONS

The Engineers Guide to Lifelong Employability

This is a practical complete resource book on locating and obtaining good jobs throughout your career. Features over 200 pages of in-depth text that will allow you to master the engineering job search.

IEEE Members: \$19.95

Engineering Careers into the 21st Century

Offers strategies and insights for engineers working in today's dynamic professional environment **IEEE Members: \$20.00**

AIEE, IRE, IEEE.....Home Sweet Home by Melvin Olken, Historian

At the 1902 AIEE annual dinner Andrew Carnegie was the speaker. Charles F. Scott, the then AIEE President, broached the subject of the need for a single building to house the engineering societies and bring about greater professional unity in the engineering profession. To his great surprise, the next day Carnegie invited Scott and others to call on him. He requested to see the plans for this building, which were nonexistent. The following week this group returned with ideas somewhat solidified, and Carnegie suggested a donation by him of \$1,000,000 “more or less.” In 1904 the “more” became an additional \$500,000 to complete the building.

A site was chosen at 33 West 39th Street in New York, and plans were made to accommodate ASCE (Civil), AIME (Mining and Metallurgy), ASME (Mechanical) and the AIEE in a 13-story building. These organizations were to become known as the “Founder Societies,” the first societies in the engineering field in the US. It was to this group that Carnegie made his gift.



33 West 39th Street- The Engineering Societies Building 1907-1961 (AIEE)

The civil engineers (ASCE) soon asked to drop out of the project. The society at that time occupied an adequate building of its own (located on the site of the present day Gramercy Theater on East 23rd Street), and many of its members felt that if unity was desired, it should occur within the ASCE. AIEE President Scott, by inviting several smaller societies to join, managed to show sufficient unity to maintain Carnegie’s interest in the completion of the project. The building was dedicated in April 1907, it served until the move to a new engineering societies building at 345 East 47th Street in 1961. In 1917, the civil engineers decided to come unto the building, paying \$250,000 to finance the building of two additional floors for their use. The building still stands today and it has been converted to residential real estate.



345 East 47th Street- The Engineering Societies Building 1961-2000 (IEEE)

At the time of the AIEE/IRE merger and the birth of IEEE in 1963, AIEE was headquartered in the 47th Street building and IRE had a rather substantial investment in several buildings at 79th Street and Fifth Avenue, a collection of former mansions that were beautiful in both architecture and furnishings to which the former IRE staff had developed a strong attachment.

In 1964 a buyer was found for the IRE properties at what was considered a fair

price. The sale was made and the staff was transferred to 47th Street. Time and air conditioning took care of the nostalgia and the staffs were integrated.



The Brokaw Mansion-Fifth Avenue and 79th Street (IRE)

The steady growth of membership and the consequent requirements for increased staff put a strain on the space available to IEEE at the Engineering Center. After expansion to two additional floors, IEEE began to study the feasibility of building a service center in Piscataway, New Jersey. Land was acquired and the center was constructed and occupied in the mid 1970s. As time passed, further expansion occurred at the Piscataway site; a second building was added in 1988 and a third in 1993. Today the Piscataway facility, renamed the IEEE Operations Center, houses a staff of

some 700 people and is bursting at the seams.



IEEE Operations Center, Piscataway, NJ

The 47th Street property remained the home to a very small IEEE cadre, primarily Spectrum editorial staff and, because IEEE is a corporation licensed in New York, was the corporate headquarters site. In the mid 1990's ASCE moved its operations to the Washington area and, with the absence of one of the "Founder Societies" and with the physical deterioration of the structure itself, the decision was made to sell the building. The site is now home to the latest addition to Donald Trump's edifice complex.

ASME and the small IEEE cadre that had remained in New York (most are Spectrum related staff) are now tenants at 3 Park Avenue, which is the official corporate address of IEEE.

POSTSCRIPT

In the Chair's Column for December 2003 I omitted names of some new volunteers. I want to make sure they are recognized for their efforts and contributions to the IEEE NY Section.



Yuval Kossovsky of Hunter College volunteered to work in reactivating the Broadcast Technology Society NY Chapter. I appointed him Vice Chair of the BTS Chapter to assist Warner Johnston of ABC TV, who was appointed Chapter Chair. Yuval is presenting developing the Broadcast Technology Chapter website and assisting Warner in scheduling BTS Chapter meetings.

Subsequent to writing my last column Dr. Gordon Silverman, Professor and Chair of the Electrical & Computer Engineering Department at Manhattan College volunteered to Chair and help re-activate the Instrumentation and Measurement Society (IMS) NY Chapter. Dr. Silverman holds seven

patents and has authored seven books in the computer, instrumentation and biomedical engineering fields. He is a member of the National Science Foundation review panel for Course, Curriculum, and Laboratory Improvement, the Director and Chief Scientific Officer, of PhysMed

Continued on Page 8

Anxiety and Sugar Metabolism
What is the Connection ?



Professor Joel Levitt

The speaker at our December 23, 2003 EMB meeting was Professor Joel Levitt. Professor



Levitt holds four degrees from Columbia University and has been a member of the faculty of Pratt Institute for over 25 years. He is

serving his 11th year as Chairman of this EMBS chapter. He is the Director of the Anxiety & Hypoglycemia Relief Institute in NYC and teaches a health related course for the Brooklyn College IRPE (senior citizen) group. He has lectured at Rockefeller University on sugar metabolism issues: "Domestic Violence and Sugar Metabolism- What's the Connection" (May 25, 1995), "Fighting Anxiety, Depression, and Fatigue, Without Drugs" (Jan. 20, 1994) and "Panic Attacks and Sugar Metabolism- What's the Connection?" (Oct. 17, 1990).

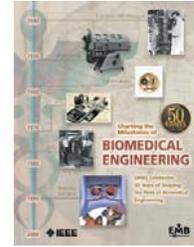
Continued from page 7

Networks, Inc. and Founding Partner, President & CEO of Interactive Remote Site Technology, Inc. Dr. Silverman is planning a number of interesting IMS meetings for 2004 and some interdisciplinary meetings with Broadcast Technology, Engineering in Medicine & Biology Society and Power Engineering & Industrial Applications Society.

In addition to an IMS Chair, my advertisement in the IEEE Monitor requested a Women in Engineering Chair. Darlene Rivera, P.E. has volunteered to Chair the Women In Engineering Affinity Group of the NY Section. Darlene is presently ITS Project Manager for MTA, Bridges and Tunnels in New York. She is a registered Professional Engineer in NY State, holds B.S. and M.S. Degrees in Electrical Engineering, and an M.S. Degree in Computer Engineering. Ms. Rivera is a member of the Institute of Transportation Engineers and Women Transportation Seminars. She is eager to become active in the NY Section and to encourage young women engineers to get involved at work and at the various society meetings.

The reactivation of the Broadcast Technology, Instrumentation & Measurement and Women In Engineering Chapters are major achievements for the New York Section. I'd like to thank all of our new professional volunteers for accepting new challenges and responsibilities to enhance the IEEE NY Section and the engineering profession.

Robert M. Pellegrino
Past Chair, IEEE NY Section



In non-technical terms, he described the relation between the common type hypoglycemia (low blood sugar) and anxiety (from "free-floating" to "panic").

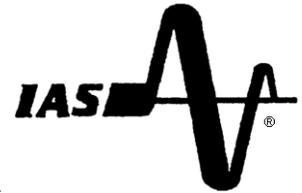
Some of the things that were discussed included:

1. Why a person with periodic bouts of low blood sugar must AVOID sugar.
2. Symptoms of hypoglycemia.
3. The Feedback Control System Concept.
4. The Fight or Flight response and the role of adrenaline as related to anxiety.
5. Hypoglycemia vs. Diabetes.
6. Dietary manipulation and supplementation benefits, including high-level vitamin C.
7. Why people who react badly to chromium supplementation may be the ones who need it the most.

Prof. J.H. Levitt currently gives classes in New York City on "Conquering Anxiety, Depression, and Fatigue Without Drugs". There are four different lectures sub-titled "The Sugar Connection", "The Allergy Connection", "The Nutrient Connection" "The Toxins & Infections Connection" that can be purchased on his web site: <http://www.tranquil.info/>



**POWER ENGINEERING SOCIETY AND
INDUSTRIAL APPLICATIONS SOCIETY
NEW YORK & LONG ISLAND CHAPTER**



**YOU ARE INVITED TO A JOINT MEETING
of the IEEE and Edison Engineering Society
February 19, 2004**

**PRESENTING:
Power System Grounding Design**

This Month's meeting will feature David Shipp, P.E., Product Line Manager and Principal Engineer for Cutler-Hammer Engineering Services and Systems Division. Dave has over 31 years of experience and is an IEEE Fellow. He is an active member of several of the IEEE working groups that publish the IEEE Color Book Series. Power System grounding is the most misunderstood aspect of power system design.

Presentation will cover:

- The characteristics of different power system grounding techniques
- Industry practices
- NEC requirements
- Ground Fault Protection and Detection
- Special generator grounding requirements
- Switchgear ground fault testing requirements
- Electronic Grounding, Ground mats, etc.

February 19, 2004

Refreshments: 5:15 pm

Program: Starting at 5:45 pm

**Location: Con Edison Executive Dining Room, 19th Floor
4 Irving Place, NY 10003**

Nearest Subway: Union Square



**Reservation Required to :
Sukumar Alampur @ 212-563-7400
Jim Nucito @ 732-380-1100 x4149**

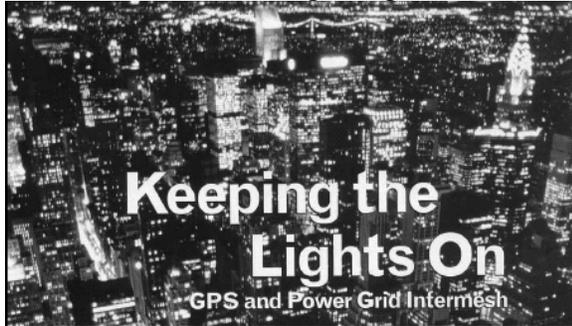


All Invited !



THE INSTITUTE OF ELECTRICAL AND ELECTRONICS ENGINEERS, INC.

Phase Matching using GPS



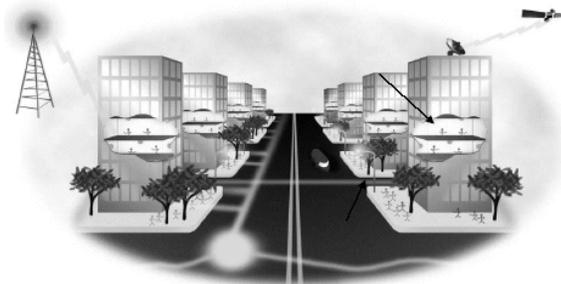
The December 16, 2003 Program Committee Meeting featured Phase Matching using GPS. The speakers were Paul Stergiou and David Kalokitis.



David Kalokitis (left) & Paul Stergiou

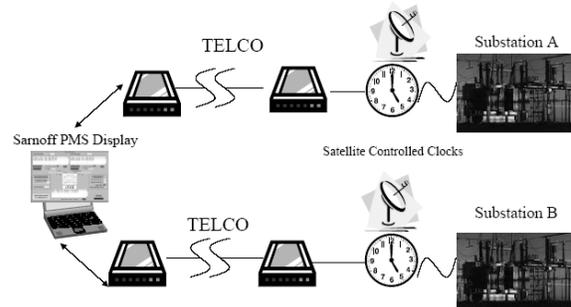
They discussed the planning, coordination, development, and operation of the new GPS-clocked intermesh solution used to transfer Manhattan's power supply grid to the newly constructed Seaport #1 substation in the aftermath of the 9/11 attack.

GPS Phase Matching System



The process used GPS (Global Positioning Satellites) linked to the electrical distribution system in a novel and technically intuitive method measuring geographically separated sine waves, comparing them as to phase-angle

displacement and voltage magnitude in real time. The traditional intermesh method for bringing substations on line required dedicated copper phone lines, connecting each substation to the Energy Control Center at West End Ave and a time consuming process of alignment. The traditionally copper phone lines were no longer available since the phone companies upgraded to fiber. Phase displacement cannot be easily measured by optical transmission technologies. To avoid a power outage during an intermesh it is necessary to adjust the phase displacement between stations to within 0-3 degrees based on a 60Hz sinusoidal phase relation. Simple instrumentation routinely accomplishes this except that these stations lie miles apart with no direct path to connect instrumentation.



Con Edison with Sarnoff determined that GPS timing could serve as the independent reference for measuring the absolute phase displacement. The typical GPS clock provides a 1-pulse-per-second output accurate to 1 millisecond. The phase of a 60Hz signal advances 21.6 degrees in a millisecond. This would not be sufficient for the accuracy required.



David Kalokitis solved this problem using higher accuracy available with an internal

processor of the GPS clock giving accuracy to 1 microsecond or a phase measurement to about 0.3 degrees.



Because the power engineers would have their hands full controlling the intermesh process the Phase Measurement System (PMS) had to be user-friendly. A single screen centralizes control of all operations and displays data in multiple formats. On the morning of April 27, 2002 the intermesh load transfer was completed flawlessly. This amazing accomplishment involved a great deal of engineering expertise and highlights the work of engineers throughout the world. The presentation was well received by all who attended.



Call for Presentations

The New York Section of the Computer Society is in the process of setting up the 2004-2005 schedule of presentations for its members. We are seeking presentations in the following and related areas:

- Software Research and Production Projects,
- Web Technology,
- Programming Languages,
- Software Development Methodologies and
- Software Testing.

Currently, we plan to conduct presentations at Con Edison in Union Square, Manhattan around 6:00 PM, during the week.

If interested, please send a short description of your presentation to George Hacken, Secretary of the New York Section of the IEEE Computer Society, at:

George Hacken
New York City Transit
130 Livingston Street, Room 7026 E
Brooklyn, NY 11201
Phone: 718-694-1782

Email: "George Hacken" <GeHacke@nyc.com>

IEEE Broadcast Technology Chapters Meeting Schedule

Contact: Warner W. Johnston, ABC TV, 212 456 2547, 212 456 4472 (fax), email: ntsc@atsc.ws

3/2/04 March: Medium Frequency 29.97KHz - 1.2GHz

5/4/04 May: High Frequency: 550GHz - Light

7/17/04 - Saturday July: Social (details forthcoming)

9/7/04 September: Administrative - Presentation on Standards Work

11/9/04 - November: Graphics and Automation

1/4/05 - Joint meeting with IMS

Principals of Investing

The IEEE New York Section PACE presented a Financial Seminar featuring Jeremy A. O'Brien, Financial Advisor with UBS Financial Services Inc.



Jeremy A. O'Brien
Investment Management Consultant

Jeremy covered the areas of Investment Concepts, Goals, Objectives, Developing Financial Strategies for Estate and Retirement Planning and as a special topic: Managing Your Investments in Volatile Markets.



Peter Greco, PACE Chair made the introductions

Some interesting facts were presented:
Based on the average rate of inflation for the 4th Quarter, 2002, a 6 month CD yielded 1.48%, while inflation was 1.8%
The best performing asset class since 1925 has been Common stocks by a large margin. The basics of sound investing have not changed:

- Define Specific Goals
- Diversify Among Types
- Stay Invested
- Periodically Review Portfolio

For each bullet, Jeremy explained the objectives, like for Specific Goals:

- Plan ahead – i.e. College Expenses
- Security – i.e. Retirement

UBS forecasts the future as of 11/10/03:

- Near-term: Current rally to continue, S&P 500 to reach 1,150 within 12 months.
- Long-term: Market to flatten by 2nd Qtr '04 with downside risk

Questions were answered on an individual basis after the presentation:



PACE, Professional Activities Committee for Engineers, is dedicated to providing informative and interesting activities for our members. PACE is a grassroots network of IEEE volunteers and committees organized at the section and chapter level in the United States with support from their respective regions and the IEEE-USA. It encompasses employment opportunities, career enhancement and lifelong goals through counseling and education. There is a resume referral service, employment assistance, job fairs, listings, searches, tips, and techniques for advancement. PACE promotes the professional interests of IEEE's US members and provides a mechanism for communication of members' view on their professional needs. Contact: Peter Greco, PACE Chair, New York Section at Phone: 212 614-3357, FAX: 212 529-5237 or email at: p.j.Greco@ieee.org
See the Professional Activities Information Page in this Issue of the Monitor for more details.

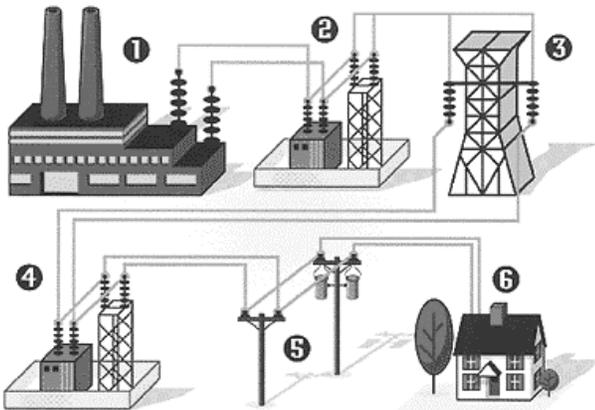
How The Power System Works

The PES / IAS NY & LI Chapter continues in its effort to reach out and develop new student chapters. This effort is headed by Neil Weisenfeld, Student Activities Chair and Membership Chair.

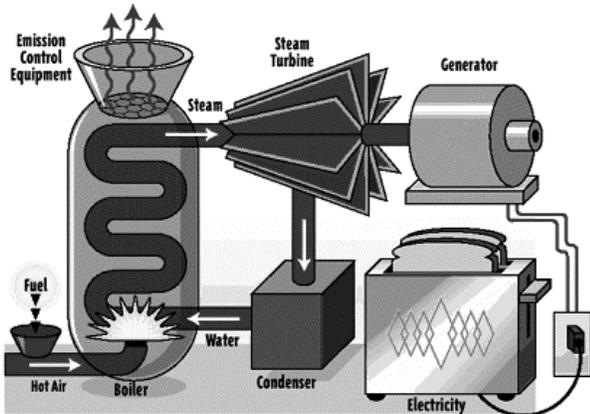


Neil Weisenfeld, P. E.

Neil presented on November 4th, 2003 to students at City College. The Presentation at the City College of New York covered the ins and outs of the Power System including design



and structure from generation to delivery. This presentation included 39 slides, choreographed



in an unmatched, amazingly diverse repertory that provided the technical and interpretive challenges of today's power delivery system.

For power companies across the country, Con Edison, remains the gold standard. Neil gave the classical version in a vocabulary easily understood and containing limitless possibilities for these students to choose a career in power engineering. The industry



reflects bold dissonance and jagged rhythms of



an intricate design and Neil graphically, with a contemporary edge, scored the grandeur of what Edison envisioned at the turn of the Century. He put life into the schematics and added romantic theme to the eclectic collection of parts comprising the energy delivery system that drives our nation. The students were mesmerized with interest.

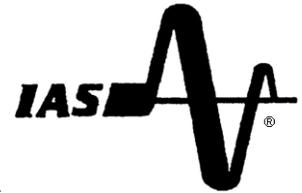
Next year the PES / IAS has elected Balvinder Blah as Student Activities Chair.



Balvinder Blah



**POWER ENGINEERING SOCIETY AND
INDUSTRIAL APPLICATIONS SOCIETY
NEW YORK & LONG ISLAND CHAPTER**



**YOU ARE INVITED TO A JOINT MEETING
of the IEEE with Edison Engineering Society
Tuesday, February 10, 2004**



PRESENTING: Making New York Harbor Safe

The speaker at our February meeting will be Lt. John K. Hahn, Operations Officer, U. S. Department of Homeland Security, United States Coast Guard. Lt. Hahn is an Eagle Scout. He graduated from the Virginia Military Institute (V. M. I.) with a BA in economics in 1990. He then joined the United States Army Corps of Engineers and served for 3 years plus 1 year in South Korea at the DMZ. He then went to Kuwait for a year of peace keeping following operation Desert Storm. He then returned to the National Guard as the commanding officer of "C" company, 229th Engineer Battalion, 29th infantry division for 4 years. From there he transferred to the US Coast Guard's counter drug operation in the Caribbean on a 270 foot law enforcement cutter for the next 2 years. The Coast Guard then stationed him in Louisiana with a unit whose job it was to protect the off shore oil and gas industry's platforms in the Gulf of Mexico for 3 years. Lt. Hahn is now the operations officer for the US Department of Homeland Security, US Coast Guard.

He will speak on the activities of Homeland Security - Are there real threats to our safety

Safety in the New York Harbor - - - What the security alerts really mean

The War on Terrorism and how it affects our daily lives

Tuesday, February 10, 2004

Refreshments: 5:15 pm

Program: Starting at 5:45 pm

**Location: Con Edison Executive Dining Room, 19th Floor
4 Irving Place, NY 10003**

Nearest Subway: Union Square

**Reservation to : John Michelsen @ 914 968-8400 or
Michael A. Miller @ 212 460 4911**

Please Post

Please Post

All Invited !



THE INSTITUTE OF ELECTRICAL AND ELECTRONICS ENGINEERS, INC.

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THE METROPOLITAN ENGINEERING SOCIETIES COUNCIL

RESERVATIONS REQUIRED

Date: Thursday, February 12, 2004

Time: Light Buffet: 5:30 PM

Program: 7:00 to 9:00 PM

Where: The New York Academy of Sciences
2 East 63rd Street
New York, NY 10021

Keynote Speaker: Terry N. Adams, Ph.D.
Chief Technology Officer
Changing World Technologies, Inc.

Subject: "CWT's Thermal Process: Turning Organic Waste into Resources"

Proclamation: The Mayor's Proclamation on Engineers Week will be presented.

Cost: \$45.00 – mailed reservations and check required by February 5, 2004

No "At Door" payment due to limited seating

Please mail your check made payable to MESC and mail with the tear-off below to:

MESC, PO Box 1981, Church Street Station, New York, NY 10008-1981

February 12, 2004 ENGINEERS WEEK CELEBRATION

Fee Enclosed: _____ Phone #: _____

First Name: _____ Last Name: _____

Company: _____ Society: _____

Address: _____

City: _____ State: _____ Zip: _____

FOR ADDITIONAL INFORMATION, CONTACT WASYL KINACH, e-mail:

info@mesenyc.org, Tel: (212) 669-2203; FAX: (212) 669-2253

THE NEW YORK SECTION'S 2004 AWARDS DINNER DANCE



The 2004 NY Section Awards Dinner Dance honoring the Section's Awardees will be held on Saturday evening, February 21, 2004.

This year, our dinner dance (black tie optional) will be held in the beautiful Trianon Ballroom, located on the third level (coat check is on the second) of the New York Hilton Hotel and Towers at Rockefeller Center, 1335 Avenue of the Americas (between 53rd and 54th Streets).

Festivities will begin at 6:30 P.M. with crudite and cocktails in the Petit Trianon. Here we will have a chance to relax, get acquainted and reacquainted.

You will have the opportunity to pamper your palate with a choice of either a succulent filet mignon or a delicious fresh salmon steak. Each gourmet entree will be accompanied by an appetizer, salad and dessert. There will be a brief awards ceremony after dinner and dancing to the sounds of the New Horizon Orchestra.

For those wishing to spend the night, hotel reservations can be made on-line at any web service provider or directly at 212-586-7000.

Reservations for the affair may be made by completing the coupon below and forwarding it to William Perlman at the address indicated before February 1, 2004. Corporate Sponsors: Table of 10 at \$ 1,700.00

*** A special non-transferable rate of \$90 for each ticket is available to IEEE members.
Note that this rate is for the attending IEEE member and a guest only.**

**Organizations wishing to be Industry Sponsors or non-IEEE members
may obtain additional information and cost by contacting:
Ralph Tapino (718) 761-5104
William Perlman (908) 810-8555**

RESERVATION FORM

Send to: William Perlman
267 Richmond Avenue
South Orange, NJ 07079

Please indicate meal selections:
Filet Mignon _____
Salmon Steak _____

Name: _____

Company: _____

Address: _____

City: _____ State: _____

Zip Code: _____ Telephone: _____

IEEE Member # _____ * No. Of Tickets @ \$90.00 Circle number 1 or 2 Sponsor's Table @ \$ 1,700.00 _____

Non - IEEE Member _____ No. Of Tickets @ \$170.00 _____

Amount Enclosed \$ _____

MAKE CHECK PAYABLE TO: IEEE, NY Section