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Season's Greetings

Visit our web page at
http://www.ewh.ieee.org/r1/new_york/

PERIODICAL
TIME SENSITIVE MATERIAL

Chairman's Column



I was forewarned when I took this position that one of the hardest jobs (for engineers) would be to write this monthly Monitor article. I now see one of the reasons why. As I write this not only have we not yet celebrated

Thanksgiving, but we haven't even reached Halloween, and I am attempting to write the December holiday article. Soon I'll start to rake leaves, but when you do read this, I want to wish you all happy holidays and a healthy and happy New Year.

This is a good time to reflect on the past year. As in so many areas, there were some good things and some not so good. We had our usual good time and honored some very worthy people at the Fellows' Award Dinner Dance, put together some informative courses, had some active chapters with good attendance at their courses and discussion groups. Our Profession Activities Committee, PACE, ran several seminars to aid our members. Some of them were Retirement Planning, Financial Planning and a Career Transition Workshop. On the other side of the ledger, we lost a long-time friend in Bill Terry. Bill was active in IEEE for over 70 years, and his guidance will be sorely missed.

We tried to hold a Y2K conference and had an impressive array of speakers scheduled to come in from around the country, but regrettably, there seemed to be little interest. With so few registered, we had to cancel the conference. I'm still not sure I understand that one. We will, however, keep planning informative courses and hope that we can interest some of you some of the time. Watch for a one-day session on Fuel Cells to be held during the Winter Power Meeting.

Another action of which you should be aware is that the IEEE-USA has been lobbying against the increase and expansion of the H-1B visa program. Congress is still considering (as of this writing) H.R. 3736, a bill to raise by 190,000 the number of foreign high-tech guest workers who will be permitted to work in the United States over the next four years. "The increase is too large and too long and the worker safeguards too lax to prevent harm to our high-tech workforce and the long-term vitality of the U.S. technical infrastructure", according to IEEE-USA President John R. Reinert. "In the last few months, more than 150,000 jobs have been cut by technology companies and the unemployment rate for electrical engineers has nearly tripled". More information can be retrieved at a new Web site – at URL <http://congress.nw.dc.us/ieee/> where you can also compose a letter, identify your congressional representative by zip code, and send them the letter electronically or via snail mail.

IEEE-USA promotes the careers and public-policy interests of the 220,000 U.S. members of IEEE, the world's largest technical professional society. A number of you have asked me in the past, "what does IEEE do for me?" This is one of the things that IEEE does for all of us.

If there is anyone out there who would like to get more involved, either on the Section or the Chapter level, please let me know. There is always room for someone with new or different ideas or someone who just wants to help. Let us know your interest or an area in which you want to assist and I'm sure we can satisfy both your needs and ours. But nothing will happen until and unless you contact us.

William Perlman, Chairman
New York Section

1998 IEEE ANNUAL ELECTION RESULTS ANNOUNCED

Following are the results of the 1998 Election, validated by the IEEE Tellers Committee on November 5, 1998. Please note that the results of this election are unofficial until the IEEE Board of Directors accepts the Report of the IEEE Tellers Committee at its meeting on November 15, 1998.

OFFICE OF PRESIDENT-ELECT, 1999: Bruce A. Eisenstein

VICE PRESIDENT, TECHNICAL ACTIVITIES, 1999: Michael S. Adler

VICE PRESIDENT-ELECT, TECHNICAL ACTIVITIES, 1999: Robert A. Dent

OFFICE OF DIVISION DELEGATE/DIRECTOR, 1999-2000

Division II: Barry C. Brusso

Division VI: Luis T. Gandia

Division X: Janie M. Fouke

OFFICE OF DIVISION DELEGATE-ELECT/DIRECTOR-ELECT

Division V, 1999: Doris L. Carver

OFFICE OF REGION DELEGATE-ELECT/DIRECTOR-ELECT

Region 2, 1999-2000: Marc T. Apter

Region 4, 1999-2000: Myron F. Wilson

Region 5, 1999: Joseph V. Lillie

Region 6, 1999-2000: Lawrence M. Hamerman

OFFICE OF IEEE-USA PRESIDENT-ELECT, 1999: Merrill W. Buckley, Jr.

OFFICE OF IEEE-USA MEMBER-AT-LARGE, 1999-2000: Michael C. Mulder

CONSTITUTIONAL AMENDMENT.

A vote of at least two-thirds of all ballots cast, provided the total number of those voting is not less than 20 percent of the total number of members eligible to vote, in favor of an amendment is necessary for adoption.

The total number of ballots mailed: 237,556

The total number of ballots returned: 51,483

The percentage of ballots returned: 21.67 percent

A two-thirds majority of 20 percent of those ballots returned: 31,675

Number of Votes FOR amendment: 42,475

Number of Votes AGAINST amendment: 5,846

All requirements for the Constitutional amendment have been met.

Professional Activities Information Page

This page dedicated to member professional activities information

The Engineering Career Paradigm is Changing. Are You?

The need has changed from the development of engineering work force to the development of self-reliant engineers. Engineers work in a world that has changed so much in the past few decades that their careers cannot survive if they remain dependent on the activities that made them successful in the past. They must learn to carefully plan and navigate their own careers, and they must become professionals who apply what they have learned.

The above paragraph is an introduction to an abstract on the subject article by Vern R. Johnson who is associate dean of the College of Engineering at the University of Arizona. Vern is active in the IEEE and one of his main focuses is preparing engineers, new and old for successful careers. The following is a continuation of the abstract:

In addition to what has always been present in engineering career planning, it is now necessary to add five elements:

1. Learning-to-learn

- from others
- from experience
- by reflecting on what is already known

2. Setting personal education and career goals.

3. Managing career and education activities

4. Assessing progress

5. Using a mentor

In addition, learning professionals must make three paradigm shifts to maintain career growth

1. Become and maintain technically vital.

- Move from being a learner of knowledge to one who applies knowledge. (*Intelligence*)
- Switch expertise from the fields of past successes to promising new technical fields. (*Flexibility*)

2. Become intellectually mature.

- Move from teacher dependent learning to self dependent learning (*Self reliance*)

3. Increase his/her sphere of influence.

- Move from being an individual contributor to one who contributes through others. (*Team leadership*)

Universities are learning to include this information into the curricula of prospective engineers, but it is more important that those who are beginning or mature in the profession include these elements in their careers.

The following is a schedule of up-coming PACE Activities:

December 9: General Meeting
January 13: General meeting

Peter Greco PACE Chairman
212-614-3357; Fax 212-529-5237
E-Mail p.j.greco @ ieee.org

PES / IAS

27th Annual Service Awards Luncheon

November 10, 1998

One hundred and fourteen (114) awards have been given out over the past 27 years to members of the PES / IAS New York Chapter.

The function of this Luncheon is to honor those PES / IAS members who have devoted considerable and extensive time to the service of this chapter. The Award itself Reads "Certificate of Appreciation, in recognition of their years of service to the Chapter". The Award is not just for serving on a single committee, but for serving on any PES / IAS committee in any fashion. The service does not have to be continuous nor does it have to be on the same committee. It is for the total years served.

Service awards are given for a commutative total of 10, 20 or 30 years of service within the PES / IAS chapter and on the anniversary of that period.

The awards this year were given to:

Lewis E. Ettliger, Executive Committee Member, for 10 years of service.

Dennis Lynch, Vice-Chair Publicity, for 20 years of service.

Harold Ruchelman, Publicity Coordinator, for 30 years of service.

The speaker at this years Awards luncheon was Keene M. Matsuda, P. E., member of the PES Governing Board since 1992, Regional Representative for USA and Canada, Vice-Chairman of Facilities for the 1999 Winter Power Meeting, Chairman of the Program Committee for the 2000 PES Chapter Congress in Seattle and Editor of the Membership/Chapters Newsletter. He spoke on "*The New 1998 PES Organization And What It Means To Chapters*".



**POWER ENGINEERING SOCIETY AND
INDUSTRY APPLICATION SOCIETY
NEW YORK & LONG ISLAND CHAPTER**



**Fuel Cell Technology: Overview of Technology and
Commercialization Status**

The January meeting will be a joint meeting with the Edison Engineering Society and will feature George Wolff, Principal Engineer from Con Edison's R&D Department. The presentation will cover distributed generation with particular emphasis on fuel cell technology.

The presentation will describe the background and development of the four main fuel cell types. It will discuss their common elements and differences as well as applications, environmental benefits, efficiencies, and costs. A cross section of leading manufacturers and developers will be identified in the discussion. Commercialization timeframes, based on current manufacturers projections, will also be presented. In addition, related developments impacting the application of fuel cell technology will be described.

George Wolff joined Con Edison in 1978 working at the Astoria Power Generating Station. He has also worked in the areas of Mechanical Engineering, Environmental Affairs, and Customer Service. He graduated from Columbia University in 1985 with a BS in Chemical Engineering and is currently pursuing a Master's in Business Administration. George has represented the Con Edison on the Westinghouse Solid Oxide Commercialization Association. He currently serves as the Con Edison representative on the Electric Power Research Institute's Distributed Generation Hardware for Retail Markets Target Committee.

Wednesday January 13, 1999

Refreshments: 5.00 PM

Program: Starting at 5.30 PM

**Location: Con Edison 19th Exec. Dining Area
4 Irving Place
Manhattan, NY 10003**

Nearest Subway: Union Square

**Further Information:
Alan Osborne @ 212 460 6690
Michael Miller @ 212 460 4911**

THE INSTITUTE OF ELECTRICAL AND ELECTRONICS ENGINEERS, INC.



PES New York – Long Island Chapter
Outstanding Engineer Award



**Roger K. Sullivan, P. E., Senior Member to receive the
PES Outstanding Engineer Award.**

The purpose of the PES Outstanding Engineer Award Program is to publicly recognize professional and technical excellence, major accomplishments and contributions made by PES members.

Roger K. Sullivan received a BS in Electrical Engineering from Cooper Union in 1964, an MBA in Engineering Management from City University in 1971 and the General Electric Power Systems Engineering Certificate in 1974. He is a registered professional engineer in New York since 1972. He won the Outstanding IAS Chapter Award as Chairman in 1979, the PES Working Group Recognition Award in 1980, the IEEE Centennial Medal in 1984, the IEEE Region 1 Award for Enhancement of Engineering in 1985, the IEEE PES Chapter Council Award in 1991, the IEEE Region 1 Award for Leadership in the Engineering Design of Electrical Power Systems in 1992, the New York Section Distinguished Service Award in 1996 and the PES Meritorious Service Award in 1998.

He began his career in 1964 in the Cadet Engineering Program at Con Edison working in the System Planning Department, the Purchasing Department, and the Electrical Engineering Department. Since this time he has worked in Electrical Substations, System Operations, and Electrical Plant Engineering, currently he is employed in Nuclear Power Engineering. He is a Principal Engineer in the Electrical Projects and Programs Section responsible for cable separation and various electrical power studies and programs.

Roger has been an IEEE member (SM'72) since 1960 (student member) and is actively involved in numerous activities and as a volunteer on many committees. He is presently a member of the Energy Development and Power Generation Committee. He has held the position of Chair on The New York Section, Metropolitan Activity Council, PES Chapter Council, Tellers' Committee, and was an Electro Director.

The Award will be inscribed with the following citation: "For his outstanding and sustained contribution to the IEEE, the Power Engineering Society, and his considerable service to the Engineering Profession".

Calendar of Upcoming Events

January 13, 1999 (Wednesday) 5:30 PM Refreshments at 5:00 PM

Power Engineering Society and Industry Applications Society, New York and Long Island Chapter
"Fuel Cell Technology: Overview of Technology and Commercialization Status"

Con Edison 19th Floor Executive Dining Area, 4 Irving Place, Manhattan, New York

For more information call Alan Osborn at (212) 460-6690 or Michael Miller at (212) 460-4911

January 31 - February 4, 1999

New York/Long Island PES Chapter host "The IEEE PES 1999 Winter Meeting"

The New York Hilton Hotel, 6th Avenue at 54th Street, Manhattan, New York

For more information call Frank Schink at (908) 276-8847 or visit the Web Site at

<http://www.ieee.org/power>

February 4, 1999 (Thursday) 8:15 AM Reception and Demonstration at 4:00 PM

New York Section, the New York/Long Island PES Chapter and the U.S. Department of Energy,
in cooperation with Con Edison, and Public Service Electric and Gas

"A Fuel Cell Technology Forum"

New York Hilton Hotel and Towers at Rockefeller Center,

1335 Avenue of the Americas (between 53rd and 54th Streets).

For information call Ralph Tapino at (718) 904-4526

February 19, 1999 (Friday) 6:30 PM

New York Section - 1999 Fellow Awards Dinner Dance,

New York Hilton Hotel and Towers at Rockefeller Center,

1335 Avenue of the Americas (between 53rd and 54th Streets).

For information call Ralph Tapino at (718) 904-4526

Deadlines for information to be placed into future issues of The Monitor

February IssueDecember 24, 1998

March IssueJanuary 21, 1999

April IssueFebruary 18, 1999

May IssueMarch 25, 1999

The Monitor can now be viewed on the New York Section Website using Adobe's Acrobat Reader.

Visit the site at http://www.ewh.ieee.org/r1/new_york/. You can download the Acrobat Reader by following the link from the website or by going to Adobe's website at <http://www.adobe.com>.

August 1998 - PES Chapter Initiates New Award

For Contribution To The PES Chapter In Any Of The Follow Areas

- ◆ Outstanding and meritorious contributions not recognized in any other fashion.
- ◆ Professional and distinguished leadership within the industry.
- ◆ Support of the advancement of the Power Engineering Profession.
- ◆ Significant volunteer works in the local community in support of any charitable organization.
- ◆ Enhancement of education or any educational facility.

Roland M. Dixon, Jr. was selected for the 1998 Award

Bet Electrical Testing Co presently employs Mr. Dixon. He supplies technical support to industrial, utility, and electrical contractors in the area of high voltage testing equipment. He has held this position since 1992. Previously he worked for Allen-Bradley (1987-1992). Here he coordinated efforts to review industry standards for the National Fire Protection Association. He has done extensive work in controls for combustion systems. From 1976-1987 he worked for Electronics Corp. and H. K. Porter Co. developing canning components, high voltage switching equipment, substations, transformers, and bus products.

- ◆ Aside from a challenging career he is presently chapter representative for the Power Engineering Society. He has been active with the group since 1982.
- ◆ He developed and maintained specialized system for industrial safety products.
- ◆ He automated bakery oven control systems for safety and improved design.
- ◆ He detailed, designed, and recommended safety control equipment for the pulp and paper manufacturing industry.
- ◆ He improved the design of a Burner Management System for conventional and recovery boilers
- ◆ He installed control system for utility, food and refinery industries,
- ◆ He holds a BA in History/Economics from Rutgers, a BSEE from Drexel, and an MBA from New York University
- ◆ He was Chairman of the PES New York Chapter from 1991-2 and Chairman of Technical Discussion Group form 1992-3
- ◆ He worked in the Winter Power Meeting and under his leadership, the framework for the intensely competitive PES Outstanding Chapter Award as well as this award was established.

A Fuel Cell Technology Forum

- 7:30 AM Registration and coffee
- 8:15 AM Welcomes by
IEEE Officer; NYPA; Con Edison; Public Service Electric and Gas; NYPS&C and Mayor's
or Governor's Office
- 8:30 AM Keynote Address
Speaker TBD, Announcement of new initiative or discussion of future
electrotechnology (especially fuel cells) contribution to the world's power needs.
- 9:00 AM Forum Overview
Ron Wolk, Wolk Integrated Technical Services
- 9:15 AM Technology Overviews
*Fuel Cell Technology Overview, Speaker TBD
- 10:15 AM Break
- 10:30 AM Panel of Users and Prospective Users
*Fuel Cell Markets, Commercial, Industrial, Residential, Transportation, and Bulk
Power: Con Edison, NYPA or Financial Analyst, Speaker TBD
*DOD Fuel Cell Program, U.S. Army Construction Engineering Research Laboratories
*NYPA Fuel Cell Program, Shalom Zelinger, NYPA
*Brooklyn Union Gas Fuel Cell Program, Speaker TBD
- 11:30 AM Introduction of Fuel Cells with Gas Turbines
*Speaker TBD
- 11:45 AM Luncheon
Topic: Fuel Cells in the Transportation Industry
- 1:00 PM Fuel Cell Power Plant Products for Distributed Power Applications
Stationary Power Product Descriptions:
*ONSI PC25C Phosphoric Acid Fuel Cells
*ERC Molten Carbonate Fuel Cells
*MC Power Molten Carbonate Fuel Cells
*Ballard Proton Exchange Membrane Fuel Cells
Fuel Cell/Gas Turbine Power Plants
*Westinghouse SureCell Solid Oxide Fuel Cell/Gas Turbine Hybrid
*Ztek Solid Oxide Fuel Cells
Residential Power
*Analytic Power PEM Fuel Cells
*Plug Power PEM Fuel Cells
- 2:30 PM Break
- 2:45 PM Siting and Licensing Procedures and Interconnection Issues
*Update on siting/Licensing
- 3:00 PM Moderated Forum on Fuel Cell Product Application Issues
Questions from the audience to the vendor panelists on issues of interest which could
include:
Initial and life cycle costs
Permitting and Licensing
Emissions
Reliability
Availability
Maintainability
Startup time
Duty cycle
Operating and maintenance requirements
Distributed Generation benefits
- 4:00 PM Reception and Demonstration



IEEE Power Engineering Society 1999 Winter Meeting



January 31 through February 4, 1999

New York Hilton Hotel and Towers
At Rockefeller Center
1335 Avenue of the Americas
(Between 53rd and 54th Streets)
New York, NY

The IEEE Power Engineering Society and the New York Chapter of the PES Society invite you to attend the 1999 IEEE PES Winter Power Meeting. This transnational conference will address the latest technology and developments related to power engineering and its industry.

You are encouraged to participate in your choice of approximately 400 events planned, including the technical sessions, panel discussions, poster paper sessions, tutorials, technical and society committee meetings, student-faculty-industry program, general membership meeting, awards ceremonies, technical tours, and an interesting and entertaining social program. Also take advantage of the many opportunities available in the New York area.

The meeting will begin on Sunday, January 31, with registration and an opportunity to meet old and new friends at a reception. The 4-day technical program, which has been developed by the PES Technical Committees, will begin on Monday morning February 1, with the opening at the General Membership Meeting followed by a Plenary Session. It will continue with technical, committee, tutorial and administrative sessions, tours, social events and a student program through February 4.

Prepaid Advanced Registration must be received no later than January 15, 1999. Registration requests received after this date will be processed at the conference at the higher on-site fees. Advance registration fees are: \$245 for IEEE/ASME members, \$375 for non-members and \$30 for companions. On site registration fees are \$295 for IEEE Members, \$425 for non-members and \$35 for companions. Non-members who join the IEEE and the Power Engineering Society at the time of conference registration will be permitted to register at the member rate.

Registration Forms may be found on the PES Society's Website at:

<http://www.ieee.org/power/subpages/meetings-folder/winter/99wmpreview.htm>

From Under the Rock

For Everything There is a Season

It happens every year, the holidays. I always loved this time of year because it is a time to celebrate. Too often we forget the need we have for celebration. I try to rise early in the morning to meet the new day with enthusiasm. The birds love the morning also. As the sun is rising you can hear them chirping. It seems they are really glad that a new day has begun and as the day unfolds the chirping stops.

The periodicity of life is reflected in our seasons. Notice we never skip a season and they are always in the same order. Because of this consistency we are able to manage. Every fall I put away my summer clothes and get ready for the cooler weather. Human life has seasons too. We have to prepare ourselves for the days when our hair looks like snow or when it falls from our heads like leaves from a tree.

Preparation for the seasons of life is important. We will not be young forever. Hopefully as you grow older you will grow wiser. It is amazing how foolish we can be when we are young. What seems so important when you are thirty has no meaning when you are fifty. Of course the same holds true from fifty to seventy. To learn about life you must have time for reflection. And yet we seem to have little time for thinking about what is truly important.

The reason we seem to run out of time is that we set a pace that is beyond our control. The concept of time is different for different people. There are about seven cultures that live beyond a hundred. They are people that live in high mountain regions where the water they drink and the water used for irrigation is high in mineral content. There is a story of one of these people who was examined at 80 years old and he was in fantastic shape. He was asked how old his father was when he died. The man responded, "Who said he was dead?" He then was asked how old his grandfather was when he died. He responded, "Who said he was dead?" Of course the interviewer was amazed. The 80 year old went on to say that his grandfather turned 126 and was getting married for the first time. The interviewer said, "That is amazing but who would want to marry at 126?" The man answered, "Who said he wanted to get married?"

With the holidays approaching many people just focus on the work that is to be done and not on the meaning and need for celebrating. In fact most people don't even know why we decorate a Christmas tree. Most of the actions we take are nothing but a programming exercise instilled in

us by our parents and society in general. One year I refused to put up one Christmas decoration and on Christmas day we ate pizza. I remember it as one of my most relaxing holidays. I didn't buy any gifts and of course there was no extra work. I just enjoyed the celebration. In fact all I needed to enhance the spirit was a bottle of scotch whiskey. This Christmas was so different that my family will never do it again. They told me that they were unhappy without the tree. I told them they were unhappy because they are not Scotch drinkers.

What makes anything fun is that what we did when we were children. It seems that children have all the fun. They have fun because they have limited understanding. I remember having the most fun when the world was at war. A world war to me was truly enjoyable. Everybody seemed to be happy. There was no unemployment and everybody seemed to be on the same page. Wars are so uniting that when we have a worthy cause we call it a war like "War On Drugs" There is nothing like a war to bring people together. Another beautiful war is war on poverty. What I want to see is a war on sexual harassment. Men today are bombarded with women who have a penchant for wearing sexually stimulating apparel. A woman wearing such clothing should be brought up on sexual harassment charges and fired from the workplace. Tight sweaters and min-skirts should definitely be banished from the workplace. And if the women are permitted to wear such apparel as a matter of free expression, then men should be free to express themselves when they see a woman expressing herself.

Of course women will never be brought up on charges for dressing to sexy because who is going to complain. I would never complain about a woman whose skirt is too short because I would have to stop drooling first. And after all there is no law against drooling as long as you do it quietly. I am what you might call a "quiet drooler" Quiet droolers are like closet perverts; we all know they are out there but they are in the closet. Of course this sexual stuff is really such nonsense.

If anything the holidays are a time for mirth. We have to be able to laugh at ourselves. Yes we even have to be able to laugh at war and sexual harassment. And if we can't then we should have a term "psychic harassment", where people legislate how you should think and what you find funny. Unfortunately most people don't know what to think. But don't worry you will be told by a blitz of advertisements. I just have one thought for you. "Happy Holidays"

THE NEW YORK SECTION'S 1999 IEEE FELLOW AWARDS DINNER

The 1999 IEEE Fellow Award Dinner Dance Honoring
The New York Section's Fellows and Region I Awardees
will be held on Friday evening, February 19, 1999.

This year, our dinner dance will again 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 sound of a **Sound Ideas** Orchestra.

A special overnight Hotel room rate of \$175 is available, with special reservation.

Reservations for the affair may be made by completing the coupon below and forwarding it to Ralph Tapino at the address indicated before February 1, 1999.

A special rate of \$80 for each ticket is available to IEEE members.

**Organizations wishing to be Industry Sponsors or non-IEEE members
may obtain additional information and cost by contacting:
Ralph Tapino (718) 904-4526**

MEMBER RATE RESERVATION FORM

Send to: Ralph Tapino
Con Edison Co. of New York, Inc.
Building 21, Room 112
Union, New Jersey 07083

Please indicate meal selections:
Meat _____
Fish _____

Name: _____

Company: _____

Address: _____

City: _____ State: _____

Zip Code: _____ Telephone: _____

IEEE Member # _____ No. Of Tickets @ \$80.00 _____

Amount Enclosed \$ _____

MAKE CHECK PAYABLE TO: IEEE, NY Section

