



The IEEE

# News

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Editor . . . . . Sidney Bell  
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445 Hoes Lane  
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It is not necessary to inform the North Jersey Section when you change your mailing address. The NEWSLETTER and other section mailings use a list provided by IEEE's national headquarters in New York. This means the Section has no need to maintain a mailing list or addressing plates. Section membership records are changed when Headquarters notifies us.

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## Three Mile Island Plant Rehabilitation

The annual joint meeting of the North Jersey Section IEEE Power Engineering Society and the North Jersey Morris-Sussex Subsection ASME will feature a program on the technical aspects concerning the rehabilitation of the Three Mile Island-2 Nuclear Plant.

Mr. Thomas M. Crimmins, Manager-Generation Engineering, Jersey Central Power and Light Company, will discuss the utility's participation in the rehabilitation program at the nuclear plant while Mr. Harry Kister, Chief of Nuclear Support Section Reactor Operations will represent the Nuclear Regulatory Commission at the meeting.

Time: 7:30 PM, October 24, 1979.  
Place: Jersey Central Power & Light Company, Madison Avenue (Rt. 24) and Punchbowl Road, Morristown, N. J. 07960.

Attendance at the meeting is free and open to all interested parties. Refreshments will be served.

Further information on the meeting may be obtained from the following individuals:

PES Chairman . . . . Gerard V. Barton  
353-7000 Ext. 545  
PES Vice Chairman . . . John A. Baka  
455-8534  
ASME Contact . . . Joseph A. Schelke  
386-4916

The November 28, 1979 Meeting Program will include a tour of McGraw Edison Battery Manufacturing Plant in Bloomfield, N. J.

## Stephen Unger On Ethics And The Engineer

The October PAC meeting will address the IEEE Code of Ethics. Stephen Unger, Chairman of the Ethics Committee of the "Committee on Social Implications of Technology" (CSIT) will be the guest speaker. The meeting will include an introduction to the Code of Ethics, its history and its potential. Issues such as free overtime, student recruiting, conflict of interest, employer-employee relationships, members responsibility to each other and society will be discussed.

Stephen Unger has been involved with the IEEE Code of Ethics and its development since 1975. He has studied cases in depth including the Bart and Edgerton cases. Dr. Unger, formerly with Bell Laboratories, is a Professor of Computer Sciences at Columbia University. He earned his B.E.E. degree from Brooklyn Polytech and his Masters and P.H.D. from M.I.T.

He has expressed his interest in the range of problems faced by members in their daily work environment. His talk will be followed by open discussion.

PAC meetings are open to all Engineers. Members and guests are invited. Refreshments will be served. Your attendance is requested. Bring along a fellow engineer. Copies of the IEEE Code of Ethics will be available.

Time: 7:30 PM, Wednesday, October 24, 1979.

Place: ITT Conference Center, 500 Washington Ave., Nutley, N. J.

Pre-Meeting Dinner: 5:30 PM

Call: Richard Tax (201) 391-9075 for further information and dinner reservations.

## Reliability Engineering In Power Generation

The October meeting of the North Jersey Section IEEE Reliability Group will have an illustrated presentation on "Reliability Engineering in the Electrical Power Generating Industry" by Ed Parascos, Manager of Reliability Engineering at Con Edison of New York. The talk will deal with the generation, transmission, and distribution aspects of electrical power.

Mr. Parascos has been Reliability Engineering Manager at Con Ed for 7 years and currently is Project Manager for the 4.8 MW Fuel Cell development program. His prior experience has been with CBS Labs, Perkin-Elmer, American Power Jet, and Singer-Kearfott. He is a licensed Professional Engineer (California), a certified Reliability Engineer, and is a member of the ASQC, ASME, IES and ASA societies.

Time: 7:30 PM, October 17, 1979.

Place: Singer-Kearfott Plant 3 Auditorium, 1225 McBride Ave., Little Falls.

The talk is open to all interested parties and further information may be obtained from the following individuals:

Rel Grp Chairman . . Sergei W. Bogaenko  
256-4000 Ext. 2528  
Member-at-Large . . . Michael Y. Swaluk  
284-3565

## Long Lines

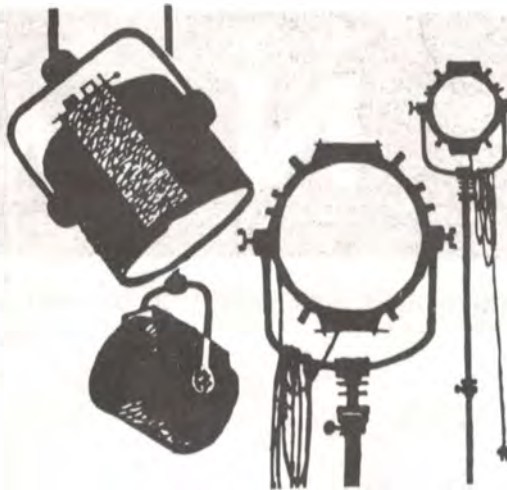
The November meeting of the North Jersey Section IEEE Reliability Group will feature a guided tour and detailed description of the ATT Long Distance Center at Bedminster. The tour will highlight the Bell System facility's extensive use of computers, communications networks and sophisticated switching equipment for automated routing of long distance telephone calls. The tour is open to all interested parties. Children accompanying a parent should be at least 12 years of age.

Time: 7:00 PM, November 14, 1979.

Place: ATT Long Distance Center, Route 202 one-half mile north of the Bedminster exit from Route 287.

Further information on the meeting may be obtained from the following individuals:

Rel Grp Chairman Sergei W. Bogaenko,  
256-4000 Ext. 2528  
Rel Grp Vice Chairman - Arthur Santopietro  
542-2000 Ext. 443



## SPOTLIGHT ON NORTH JERSEY

1979 - 80

### OPERATING BUDGET NORTH JERSEY SECTION IEEE

#### Revenues

Description	Dollars
IEEE Membership Rebate	9,000
Electro Proceeds	3,000
Course Tuition Fees	8,000
Annual Awards Banquet	3,000
Other	2,700
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	\$25,700

#### Disbursements

Technical Chapters/Societies	2,300
Newsletter	14,000
Education Program Expenses	4,000
Annual Awards Banquet Expenses	4,000
Section/Committee Activities	1,400
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	\$25,700

The above budget for the 1979-80 term was approved at a recent Section Executive Committee Meeting. Let's examine in some more detail the various items included in this Budget Summary - the actual budget includes about forty line items.

Our principal source of revenue to fund Section activities is the semiannual IEEE membership rebate. The amount of the rebate is a function of the number of members in the Section, the number of active technical chapters/societies and the number of meetings conducted during the year. Penalties are assessed against the rebate for lapses in membership, either intentionally or for late payment of membership dues.

We also share in the proceeds of the Electro Conference. To earn our share we are expected to provide volunteers to staff the various committees responsible for organizing and running this conference.

Education courses are also a major source of revenue, as well as, expense to the Section. Generally, we realize a net profit from this activity. The extent of such a profit - or whether we break even - hinges on enrollment. Any profit for the education program is used to supplement IEEE funding which alone is not sufficient to maintain the present level of Section services.

The Annual Awards Banquet is subsidized by the Section. Newly elected Fellows and major IEEE award recipients are guests of the Section. Tickets to the affair, which is our major social function, usually are offered to the membership at a slight discount below actual cost.



Other sources of income include savings account interest, Newsletter advertising, and IEEE grants for special projects.

The amount budgeted for the technical chapters and societies primarily reflects direct meeting expenses. We are fortunate that most of our meetings are conducted at corporate facilities and incur no room rental charges.

The Monthly Newsletter is our major expense item. It is the vehicle by which we communicate to our 5000 members 10 months of the year about meetings, education courses, Section activities, and other items of general interest. The expenditure reflects production costs, postage and the purchase of mailing labels from IEEE.

The remaining expense category Section/Committee activities covers the cost incurred by our 10 outstanding committees (Awards, Student Affairs, Membership, PAC - to name just a few) and expenses occurred by the Section such as stationery, billings for requested IEEE services, and other general items associated with the operation of the Section.

In closing, I will just mention that each year we are required to submit a detailed financial report to IEEE Headquarters. In addition, an annual internal financial audit is conducted at the conclusion of our fiscal year which ends on June 30th. — Ken Oexle

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## PAC NEWS

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(The following is reprinted with permission of "Design News.")

### MORE ON CONTROLLING ENGINEERS' SALARIES

In our March 5th issue I commented on an Average Salary Rate Control plan which systematically disposes of higher paid (older) engineers and replaces them with lower paid (younger) engineers. I invited our readers to comment on this and/or other systems that companies use to hold down engineering department salaries.

I got dozens of letters and even more phone calls from engineers verifying that such plans exist, and many of my correspondents were victims of "the plan." The problem, as I had stated in my previous editorial, is that it's hard to prove that the plan was used as the reason for layoff because it's usually used in conjunction with other strategies.

Several readers wrote about a system where engineers are laid off and then taken back as "temporaries." The temporary engineers are then employed in a sub-status category where benefits and wage increases are either restricted or nonexistent.

Many engineers reported that they were squeezed out of a job when the company ran them through a series of maneuvers to make the job less attractive. These included a drop in grade, thus reducing the salary level, transfer to another department with an unsympathetic boss, or other harassment that resulted in the engineer's quitting the job. Another ploy is to transfer work from a plant in one city to another and then back again after a few years. Usually a shuttle of this type will get rid of many older engineers who can be replaced with new, younger engineers.

After having been shuffled through several jobs, one engineer sent me a list of danger signals for spotting a company that makes engineering turnover a habit.

- (1) Are most engineers young or newly hired while the only older engineers are the supervisors?
- (2) Does the company continuously advertise for engineers?
- (3) Does the company stress product experience in the interview rather than technical qualifications?
- (4) Does top management continuously change with a succession of "cost cutters" each vowing to make the company more efficient?

Engineers who have lost jobs or been forced into low-salary, dead-end positions are understandably bitter about their treatment from the company. Most say they should have spotted the trouble before they got hurt. The lesson to all engineers is to be more thorough in getting information about their prospective employer.

I am still collecting information on methods used to control or restrict engineering salaries. If you have such information, write to me—anonously if you wish. Lars Soderholm, Editorial Director, DESIGN NEWS, 221 Columbus Ave., Boston, Mass. 02116.

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Keep your eyes open for our future meeting with Mr. Soderholm as our guest speaker. Meanwhile send information on salary control and working conditions to PAC and "Design News."

## Visual Control Systems

The Metropolitan New York Chapter of the Engineering in Medicine and Biology Society will conduct a meeting on "Measurement And Analysis Of Visual Control Systems" on November 7, 1979.

The speaker will be John Semmlow, Ph.D., of Rutgers University.

Time: 7:30 PM, Wednesday, November 7, 1979.

Place: Rockefeller University, Bronx Lab., Room 216, 66th St. and York Ave., NYC.

## WANTED: Information

EMPLOYMENT ADS FROM MAGAZINES AND PAPERS PRIOR TO 1970. —The ad or a copy will be helpful. Please send the full page.

PER DIEM RATES — These rates still vary from \$8 per day and up with some companies having more than one rate. Any information and data on this subject would be helpful.

Send any material on above to: PAC, c/o Richard Tax, 51 Hawthorne Ave., Park Ridge, N. J. 07656.

## WANTED: Your Views

USAB's OpCom has issued a call for comments on the adequacy and appropriateness of current U.S. Department of Labor (DOL) procedures for the entry and classification of foreign engineers.

Classification H-2 implies DOL certification of need based on proven domestic shortage of the employees to be recruited abroad. Attempts have recently been made to change the status of engineers recruited abroad to Classification H-1 of the U.S. Immigration and Naturalization Service, which permits open entry of skilled aliens.

USAB OpCom favors the present procedures (Classification H-2) of DOL and is proposing that USAB adopt a position supporting their continuation.

What are your views? Write to: IEEE/USAB, 2029 K Street, N.W., Washington, D.C. 20006, Attention: USAB OpCom.

## 1979 ANNUAL AWARDS BANQUET







## “MOS CIRCUIT DESIGN”

**INSTRUCTOR:** Mr. Roger Stewart, RCA Solid State Division  
**PLACE:** Somerset County Vocational High School, Somerville  
**TIME:** Thursday at 7 PM, Starting November 1, 1979

### OUTLINE OF COURSE

November 1 — Basic Logic Design - Amplifiers, speed/power products, balanced and unbalanced rise and fall time logic design, loading effects, passive and active loads.

November 8 — Advanced MOS Logic - Dynamic logic, bootstrap circuits, clocked logic, oscillators, bias generators, differential amplifiers.

November 15 — Power Dissipation - Optimum design using passive loads, semi-active loads, power gating, steady state and transient thermal calculations, overload protection circuits.

November 29 — Noise - DC vs transient effects, noise source, types, noise immunity and common mode rejection, power supply decoupling, signal line routing, instabilities, feedback and oscillations.

December 6 — Interface Circuits - PMOS, NMOS, CMOS, TTL, ECL, IIL circuits, review and summary.

Detail information may be obtained from the coordinator, Mr. John Van Savage, (201) 328-4667/4843. One CEU will be awarded upon satisfactory completion.

Attendees will have the opportunity to participate in solving specific problems such as, binary to digital decode and display, 5 to 12 volt bias generator, overload protected power supply, and printed circuit board shift register layout.

**Tuition:** IEEE members \$30, non-members \$60; IEEE Student members free on a space available basis - contact Mr. Van Savage (see phone above), student non-members on space available basis \$6 per lecture. Payment of tuition reserves a place in the lecture hall, but if there are still seats available tuition may be paid the night of the first lecture. Those desiring to drop out of the lecture series will receive a full refund if the coordinator is informed before the beginning of the second lecture.

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### REGISTRATION FORM

**Mail to:** Leonard Gardner, 7 Acorn Place, North Caldwell, N. J. or phone (201) 328-3450/6416  
Make checks payable to “North Jersey IEEE”

Please enroll me in “MOS CIRCUIT DESIGN”

Name: \_\_\_\_\_

Company: \_\_\_\_\_

Address: \_\_\_\_\_

City, State, ZIP: \_\_\_\_\_

Phone: \_\_\_\_\_

IEEE Member No. \_\_\_\_\_

Fee: \$30 IEEE Members      \$60 Non-IEEE Members

IEEE Grade \_\_\_\_\_