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CHICAGO SECTION • IEEE • INSTITUTE OF ELECTRICAL & ELECTRONICS ENGINEERS

JUNE 1976

CALENDAR OF EVENTS

*For Reservations Call the IEEE Office at 236-4609
(Unless Otherwise Indicated)*

- June 1 IEEE Executive Committee Meeting; Brown & Root Offices, 2001 Spring Rd., Oak Brook, Ill., 7:30 PM — ALL WELCOME.
- 7-8 Chicago Spring Conference on Consumer Electronics, Marriott Motor Hotel, 8535 W. Higgins Rd., Chicago, Ill.
- 9 "Programmable Controllers," IAS-IECI, Nielsen's, 7330 W. North Ave., Elmwood Park, Ill., Social Hour 5:30 PM; Dinner 6:15 PM; Meeting 7:15 PM. For reservations, call Bob Loewe at 644-0828.
- 12 Tour of Commonwealth Edison Company's Collins Station Site, PES, Tour 9:30 AM; Luncheon 12:30 PM at Drakes Farm.
- 17 "Extremely Low Frequency Phenomena from Nicola Tesla (1899) to the Present," MTT/APS, Holiday Inn-Chicago Downtown, One South Halsted Street, Social Hour 6:00 PM; Dinner 8:00 PM; Program 9:00 PM.

TENTATIVE 1976-77 PROGRAM SCHEDULE OF THE POWER ENGINEERING SOCIETY, CHICAGO CHAPTER

DATE	SUBJECT	SPEAKER	LOCATION
1976			
Sept. 8	Electric Energy Transmission — Past, Present and Future (Joint Fox V. Sub.)	Charles E. Wagner Westinghouse Electric Corp.	(Not determined) Evening
Oct. 12	General IEEE Topic of Interest	Joseph Dillard President of IEEE Westinghouse Electric Corp.	Midland Hotel Chicago, Ill. Luncheon
Nov. 10	Area Load Control	Robert Green Sargent & Lundy	Midland Hotel Chicago, Ill. Luncheon
Dec. 1	(Not determined)	Frank A. Jenkins (tentative) President of IEEE, PES Duke Power Company	Midland Hotel Chicago, Ill. Luncheon
1977			
Jan. 19	General Energy Related Topic (Joint Joliet Sec., ISPE and Fox V. Sub., ASME)	Fredric C. Olds Power Engineering	White Fence Farm Lemont, Ill. Evening
Feb. 23	High Energy Density Load Levelling Batteries	Paul Nelson Argonne National Laboratory	Midland Hotel Chicago, Ill. Luncheon
Mar. 23	Generator Water Cooled Stators and Rotors	(Not determined) Allis-Chalmers Mfg. Company	Midland Hotel Chicago, Ill. Luncheon
Apr. 14	Status Report on Square Butte HVDC Transmission Line (Joint WSE, West Suburban)	(Not determined) General Electric Company	(Not determined) Evening
May 5	Organization, Present Projects, and Present & Future Goals of Electric Power Research Inst.	Ludwig Lischer Commonwealth Edison Company	Edison 650 Large Chicago, Ill. Luncheon
May 21	Tour of LaSalle County Nuclear Generating Station Commonwealth Edison Company		LaSalle County Sta. LaSalle, Ill. Morning Luncheon follows

CHICAGO SPRING CONFERENCE

The Chicago Spring Conference on Broadcast and TV Receivers will be held June 7-8, 1976 at the Marriott Motor Hotel, 8535 West Higgins Road, Chicago, Illinois. A morning session, starting at 9:30 AM and an afternoon session, starting at 2:00 PM are planned each day.

The Monday morning session on TV Tuning and Remote Control will be chaired by Robert Williams, Magnavox Company. Monday afternoon's session on TV Color Uniformity will have K. Blair Benson, Goldmark Communications Corporation as the chairman. Guest speaker at Monday's luncheon will be Rudd Bom, president, Philips Electronics Industries, Ltd. of Toronto, Canada.

An industry cocktail party, 6:00 PM, will follow the afternoon session.

Tuesday morning's session on New Developments will have Fred Smith, RCA Solid State Division as chairman. Luncheon guest speaker will be David Packard, chairman of the board, Hewlett Packard of Palo Alto, California. The afternoon session, Video Disc Update, will be chaired by Art Korpel, Zenith Radio Corporation.

For further information, call the IEEE Office, 236-4609.

PES 1976-77 ROSTER OF OFFICERS

The Power Engineering Society, Chicago Chapter, roster of officers and committee chairmen for 1976-77 is as follows: *Chairman* — Ed Horn, Westinghouse Electric Corp.; *Vice Chairman* — Tom Traub, Commonwealth Edison Co.; *Secretary/Treasurer* — Dave Schroeder, Sargent & Lundy Engineers; *Past Chairman* — Chuck Hatstat, Sargent & Lundy Engineers; *Program Committee Chairman* —

IAS/IECI 1976-77 PROGRAM

The 1976-77 program schedule for IAS/IECI is as follows: *September 8* — Emergency Generation — Discussion of NEC requirements and considerations on emergency electrical systems; the selection, purchase and installation; *October 13* — Industrial Power Systems — Consideration in the selection of distribution systems for industrial plants. This meeting will be in conjunction with the IAS National Conference; *November 10* — Surge Protection for Electronic and Power Equipment; *December 8* — Electrical Considerations in the New Chicago High Rise Building Code; *1977, January 12* — Coordination of Industrial Power Systems; *February 9* — Discussion of Current Practices and Requirements in the Installation and Testing of Cable; *March 9* — Microprocessors — For industrial and power plant applications; *April 13* — Electric Utility and User Interface. *May 11* — Instrumentation — Annunciator and Data Recording Systems; *June 8* — The Engineer and The Law.

Meetings are held every second Wednesday of the month at Nielsen's Restaurant, 7330 West North Avenue in Elmwood Park, Illinois. Social hour is 5:30 PM, dinner 6:15 PM and the meetings are held at 7:15 PM.

— Don Taylor, Sargent & Lundy Engineers; *Member Services Committee Chairman* — Dave Rucklos, Sargent & Lundy Engineers; *PES Volunteers' Committee Chairman* — Mark Bailey, Commonwealth Edison Co.; *Arrangements Committee Chairman* — Carl Schwarz, Sargent & Lundy Engineers; and *Publicity Committee Chairman* — Jim Keller, Harza Engineering Co.

PROGRAMMABLE CONTROLLERS

At the June 9 meeting of the Industry Application Society and Industrial Electronics and Control Instrumentation Group, Brian L. Neuman will discuss the rapidly growing field of solid state logic control systems that can be controlled i.e. the multitude of controlled variations in automobile production lines. He will cover the principles of operation and various applications, the benefits of programmable controllers over other systems currently used, the current state-of-the-art and how this has affected different applications, and future trends in technology. Mr. Neuman will conclude with a question and answer period.

Brian Neuman graduated in electrical engineering at the University of Wisconsin and is currently System Application Engineer for Allen-Bradley in Chicago. This position has furnished a wide background for a variety of applications from the simplest sequential machines to the large, complicated process systems.

Refer to this month's meeting calendar for details of location and time. Tickets for the dinner and two drinks will be available at the door. The cost is \$7.00 for members and \$8.00 for non-members. Call early for your reservation: Bob Loewe — 644-0828.

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Meeting Reservations

Remember that the IEEE office, (312) 236-4609 will take your meeting reservations. Call anytime between 8:00 AM and 5:00 PM, Monday through Friday.

The meeting coordinator for any group should call and leave his number with the office, so they can refer questions on matters other than reservations.

Change of Address

If you have moved — or are about to move — please notify the IEEE office in NEW YORK. Our SCANFAX mailing labels come from there, and we cannot update your mailing address locally in Chicago.

A change of address form is included in each issue of SPECTRUM. Your local post office will also supply you with cards; mail to Emily Sirjane, Membership Services, IEEE, 345 E. 47th Street, New York, NY 10017. Include your SPECTRUM mailing label if possible. We cannot forward this information for you, so please do not send it to the local office.

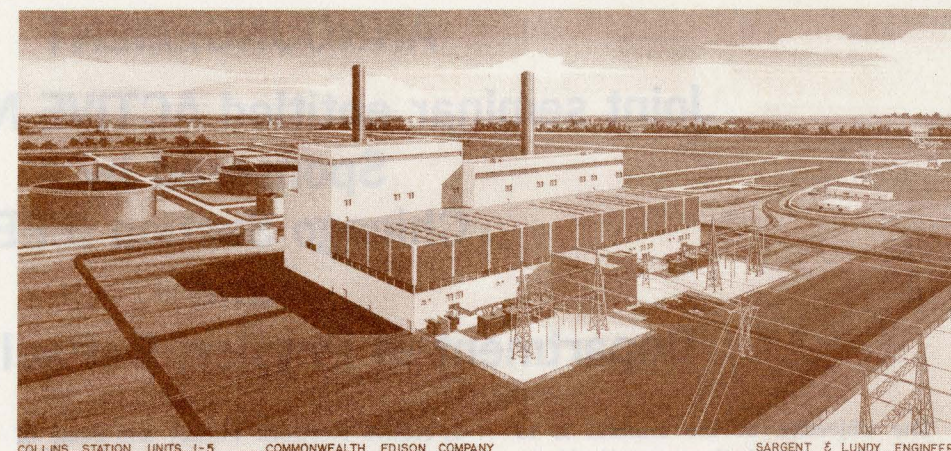
TOUR OF EDISON COLLINS STATION

REPEATED BY POPULAR DEMAND

The Power Society has arranged for a tour of the Commonwealth Edison Collins Station near Morris, Illinois on Saturday, June 12, 1976. This is a five-unit fossil fuel generating station under construction. Each unit will be able to generate 500 megawatts. The station is designed for cycling service with a minimum staff and contains many design innovations. On the tour, the five generating units will be seen at different stages of construction.

The station operating staff will conduct the tour. Some of the most interesting features are: the cooling lake; oil handling and storage facilities; individual turbine units; main control room; and the 765 kv and 345 kv switchyards. Wives of members are invited for the tour.

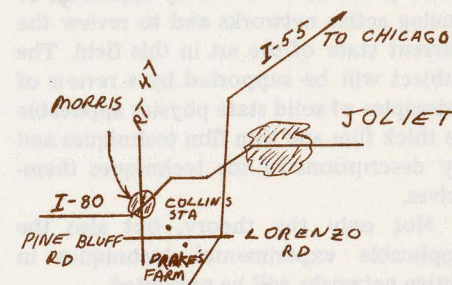
The scheduled arrival time is



COLLINS STATION UNITS 1-5 COMMONWEALTH EDISON COMPANY

SARGENT & LUNDY ENGINEERS

9:00-9:15 AM with the tour from 9:30 AM to 12:00 PM. Lunch is planned for 12:30 PM at Drakes Farm on Lorenzo Road near the station. The cost is \$6.00 (cash bar available). A bus will be available from downtown Chicago if enough phoned reservations indicate the need. Please call the IEEE office at 236-4609 by Monday, June 7. (80 Maximum).



LEGAL RIGHTS OF ENGINEERS

The United States Activities Board (USAB) of the IEEE has funded a grant request from the La Verne College Law Center in La Verne, Calif., to study the legal rights of engineers. The Study Group, called SCORE for Special Committee on Rights of Engineers, is headed by Selwyn Berg. Mr. Berg is a graduate engineer who has returned to La Verne College to complete his law studies. As a part of the research toward his Doctor of Laws Degree he has undertaken this Project because of his concern for the legal rights of members of the engineering profession.

Specifically, SCORE will investigate complaints submitted by engineers who feel their legal rights have been violated. SCORE will also investigate legal cases that appear in the Court Reports, although most cases do not get into such case histories, regardless of merit, because the engineer frequently accepts actions

against him without seeking legal recourse.

The SCORE Team plans to document the problems referred to them and the disposition of each case. Using this material as input, SCORE will select those cases which would be of greatest interest to a majority of the membership, and prepare a Handbook for use by those members who may need such reference material for initiating court actions. An article based on the contents of this Handbook will be submitted to the American Bar Association for publication.

IEEE members who would like the assistance of SCORE should prepare a communication to the Law Center and include the following:

- Description of any actions against an engineer which resulted in economic hardship or loss of professional status because of lack of timely legal knowledge.

Communications should be sent to:

Mr. Selwyn Berg
SCORE

La Verne College Law Center
La Verne, Calif. 91750

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ANNOUNCEMENT

Joint seminar entitled ACTIVE NETWORKS

Sponsored by
Chicago Section IEEE
and

Department of Physics, DePaul University

The objective of the seminar is to develop the network theory applicable to analog active networks and to review the current state of the art in this field. The subject will be supported by a review of principles of solid state physics applicable to thick film and thin film techniques and by descriptions of the techniques themselves.

Not only the theory, but also the applicable experimental techniques in active networks will be presented.

The seminar will end by a session on sampling techniques applicable to analog signals in anticipation of similar future seminars describing digital networks and their applications. It's planned to supply a good, modern state-of-the-art review. At the same time, the seminar is not intended to be limited to a small number of persons active in research in the field of active networks. The material will be made accessible at a reasonable effort to persons with B.Sc. background (or equivalent) in physics or engineering, allowing for a certain lack of recent skill in application of mathematical techniques. Such mathematical techniques and physical concepts will be emphasized and exercised at the seminar, but crowding of the material will be avoided.

Ten three-hour sessions are planned, meeting once a week on Tuesday evenings. Each session will be roughly divided into lecture and exercise/discussion period separated by a break.

A four-quarter hour graduate credit for the entire course at DePaul University Graduate School may be arranged, if desired. In this case candidates will have to undergo necessary tests.

The sessions will be held from September 21 to November 23, 1976 on Tuesdays, 5:30 p.m. to 8:30 p.m. Location is the north side campus of DePaul University. The initial assembly point will be Room 8, Department of Physics, 1215 West Fullerton Avenue, Chicago, Illinois.

Schedule of Subjects and Speakers

(Program arranged with the aid of Communications Society, Chicago Chapter IEEE)

1. Active Network Theory and State of the Art
September 21, 28, October 5, 12, 19, 1976 — Dr. J. J. Hupert, DePaul University
2. Solid State Physics Background to Active Networks Technology
October 26, 1976 — Dr. D. O. van Ostenburg, DePaul University
3. Thick Film Technology*
November 2, 1976
4. Thin Film Technology*
November 9, 1976
5. Experimentation with Analog Active

Devices

November 16, 1976 — Mr. John Kimec, Automatic Electric Laboratories, Northlake, Ill.

6. Sampling Techniques in Active Networks

November 23, 1976 — Mr. D. J. Stelte, Automatic Electric Laboratories, Northlake, Ill.

*Arrangements with speakers from industry are currently in progress. For information call Dr. Julius J. Hupert at (312) 321-8176 or at home (312) 469-2848.

Registration Form

SEMINAR IN ACTIVE NETWORKS

Sponsored by

Chicago Section IEEE & Department of Physics, DePaul University

Please mail to: Dr. J. J. Hupert — Chairman, Graduate Committee
Department of Physics — DePaul University
1215 W. Fullerton Avenue — Chicago, Illinois 60614

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Affiliation _____

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Business Phone _____

Education _____

☐ Check for \$240.00 participation fee enclosed.

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Additional comments _____

Signature _____

Date _____

Registration deadline: September 15, 1976

Make check payable to: IEEE Active Networks Seminar