# Fall General Meeting

OCTOBER 17-21, 1949

Cincinnati, Ohio



Headquarters
Netherland Plaza Hotel



Cincinnati, Ohio

Marsh Photographers, Inc.

#### **MEETING FEATURES**

Arrangements for the 1949 Fall General Meeting to be held in Cincinnati, Ohio, October 17-21, have been completed. Headquarters for the meeting will be in the Netherland Plaza Hotel. The technical program is broad in scope and embraces a number of sessions in each of the five technical groups of Institute activity, namely: Communications, Industry, Science and Electronics, General Applications and Power.

A delightful series of events, consisting of a stag smoker, dinner-dance, inspection trips, and a special women's program, have been arranged by the Fall General Meeting Committee.

**STAG SMOKER:** Tuesday evening, October 18 at 7:00 p.m., the stag smoker will be held in the Pavilion Caprice of the Netherland Plaza Hotel. The cost will be \$6.00 per person.

This is the evening "when good fellows get together" to renew old friendships and make new ones. There will be a hearty dinner, planned for men's appetites. A variety of music and entertainment will give you an hour of laughs and relaxation. After the show, stay and "shoot the breeze" with your good friends as long as you wish.

**DINNER DANCE:** Wednesday evening, October 19 at 7:00 p.m., a dinner-dance will be held in the Pavilion Caprice of the Netherland Plaza Hotel. The cost will be \$4.00 per person. Dress is optional.

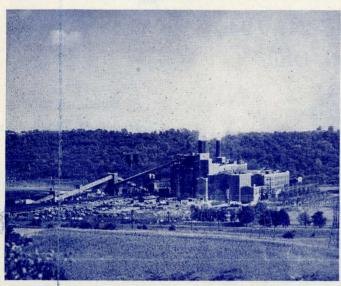
A gay evening of dining and dancing, planned to include the lady of your choice. You will enjoy this gala evening in the colorful Pavilion Caprice.

Dancing will be from 8:30 p.m. to 12:30 a.m.

LADIES' PROGRAM: A program for the ladies visiting the convention will begin Monday afternoon with a "Get Acquainted Tea" in the Julep Room at the Netherland Plaza Hotel.

At 9:00 a.m. Tuesday, the ladies will board chartered busses for a trip to Procter and Gamble Company, the world's largest manufacturer of soaps, also manufacturers of Drene, Crisco, and numerous other cosmetics.

At 2:00 p.m. Tuesday, busses will again pick up visitors for a trip to the Taft Art Museum for tea. This Museum, the home of Mr. and Mrs. Charles Taft, is considered the finest example of early Federal Architecture in the United States. The fine collection of paintings, furnishings, and Chinese porcelains were the gift of the Tafts also. Tea will



Miami Fort Generating Station, Cincinnati G. & E. Co.

be preceded by a short talk on the Museum and its treasures, which will make this one of the highlights of the convention.

Tuesday evening, while the men attend the traditional smoker, some outstanding entertainment will be provided for the ladies.

Wednesday morning, busses will again pick up the visiting ladies for a scenic tour of the city ending with luncheon at the Hyde Park Country Club.

Thursday morning, the ladies will be guests at a luncheon at the attractive Dean Schneider Memorial, headquarters of the Engineering Society of Cincinnati. This luncheon will be sponsored by the Women's Committee of the Engineering Society.

No formal entertainment has been planned for Friday, but individual arrangements will be made for those remaining in the city for sightseeing, shopping, etc.

The entire program, including all ladies entertainment functions and transportation, will be offered to the ladies for a total charge of \$3.00.

INSPECTION TRIPS: The following inspection trips have been scheduled during the 1949 Fall General Meeting. Admission will be by ticket only and it is very important that members and their guests register at the Inspection Trip Desk whether you have private transportation or not. The registration is necessary in the cases of men having their own transportation since the number of men permitted to make the inspection trips is definitely limited in most cases.

1. The Baldwin Company. A tour through the Baldwin Company manufacturing plant affords the visitor an unusual opportunity to observe a remarkable association of modern engineering and scientific proficiences allied with age old traditions of artistic skill and craftsmanship—a unique combination not often found in American Industry. Here one may see many unhurried processes whose effectiveness has been proven by centuries of development and perfection in the art of creating fine pianos and one may see also the laboratories where engineers and technologists study the science of musical instruments and the development of new forms such as the Baldwin Electronic Organ.

To show that the science and art of making pianos is

not a static thing, the acoustic studio and Piano Research Laboratory will be visited, with a short non-technical discussion and demonstration of the interesting work of this activity.

The tour is brought to an interesting conclusion with a "Pops" Concert and demonstration in the popular scientific manner.

This trip is scheduled for Monday and Tuesday, October 17 and 18 at 1:30 p.m.

2. The Procter and Gamble Company. The Ivorydale Factory of the Procter and Gamble Company is the heart of the largest soap manufacturing center of the world. Ivorydale is composed of 123 buildings spread over 173 acres, and employs over 2,000 people. Many hundreds more are employed in the company's St. Bernard and Drug Products Factories nearby. Visitors to the plant will see soap made in the giant three-story kettles and processed into bars, flakes and granules. Of particular interest are the high-speed packaging machines which form cartons, fill, seal, and pack them. Visitors will also see the control laboratory where over 30,000 tests are run each month, and the company's vegetable shortening facilities where Crisco and bulk shortenings are made.

This trip is scheduled for Monday and Tuesday, October 17 and 18 at 1:30 p.m.

# 3. Fisher Body Plant—General Motors Corporation—Hamilton, Ohio.

This plant is engaged in the fabrication of metal parts for General Motors automobile bodies. The acceleration, speed, and torques developed by the motor operating the large presses and stamping machines, as well as the safety features incorporated in all of the equipment, should be of special interest.

This trip is scheduled for Wednesday and Thursday, October 19 and 20 at 1:15 p.m.

# 4. Miami Fort Generating Station—The Cincinnati Gas and Electric Company.

This station, located on the Ohio River twenty miles west of Cincinnati, was placed in operation in 1925. With the completion of the present addition, scheduled for operation by November 1, 1949, the station will have a rating of 336,000 KW.

The present construction program covers the installation of a 13,800 volt, 80,000 kw, .8 pf., 1250 psi, 950° F, hydrogen cooled turbo-generator directly connected through 5000 ampere, isolated phase bus duct to a 100,000 KVA class FOW, 13.2-132 KV transformer bank. Previous installations had 13.2 KV horizontal phase separated switching with fault bus protection in both concrete cell and metal enclosed types.

Power is transmitted from this station over 33 KV, 66 KV, and 132 KV lines. The 132 KV switching structures are fault bus protected.

All coal is received in barges operating on the Ohio River and is conveyed from the unloading tower to the station by endless belt conveyors. Coal is handled to and from storage by means of wagon scrapers. Pulverizing is accomplished by means of a centralized bin system and also by unit pulverizers.

This trip is scheduled for Wednesday, October 19 at 1:15 p.m., and Thursday, October 20 at 9:00 a.m.

Continued on page 8

#### ADVANCE COPIES OF PAPERS

Members may obtain preprints of technical papers at the uniform price of 30¢ each (60¢ each to non-members) by sending enclosed order form and remittance to the AIEE Order Department, 33 West 39th Street, New York 18, N. Y. Conference papers denoted by CP\*\* are intended for presentation only, and are not available. Mail orders (particularly from out-of-town members) are advisable, inasmuch as an adequate supply of each paper at the meeting cannot be assured. Coupon books in \$9 denominations are available for those who wish to avoid remittance by check or otherwise. Most of the papers ultimately will be published as AIEE PROCEEDINGS and in the TRANSACTIONS.

## Monday, October 17

#### 9:30 a.m.—Rotating Machinery

- 49-225. The Design of Direct Current Motors for Use in Automatic Control Systems. Paul Lebenbaum, Jr., General Electric Company. Presentation by title only.
- 49-226. Limitations in Design of D-C Adjustable Speed Motors. L. G. Opel, Westinghouse Electric Corporation. Presentation by title only.
- 49-227. Use of Cumulative and Differential Series Fields in the Parallel Operation of Motors. A. W. Kimball, Westinghouse Electric Corporation. Presentation by title only.
- 49-31. Measuring Commutation with an Indicating Instrument. R. T. Lundy, General Electric Company. Presentation by title only.
- 49-229. Transient Characteristics of D.C. Motors and Generators. A. T. McClinton, E. L. Brancato, and Robert Panoff, Naval Research Laboratory.
- 49-230. The Eccentric Pole Face—A Means to Better D.C. Machine Performance. M. A. Baker, General Electric Company.
- 49-231. An Analysis of Rotating Amplifiers. Bernard Litman, Arma Corporation.
- 49-232. Temperature Rise Values for D-C Machines—II. Subcommittee on D-C Machines.

#### 9:30 a.m.—Probability Methods

- 49-278. A Convenient Method for Determining Generator Reserve. H. P. Seeyle, The Detroit Edison Company.
- 49-279. Allocation of Capacity Savings Resulting from Inter-ACO.\* connecting Two or More Generating Systems.
- C. W. Watchorn, Pennsylvania Water and Power Company.
- CP.\*\* Determination of Reserve Capacity by the Probability Theory—Simplified Methods. G. Calabrese, New York University.
- CP.\*\* Relation of Thermo Flap Design to Reserve Capacity Requirements. M. J. Steinberg, Consolidated Edison Company of New York, Inc.

#### 9:30 a.m.—Industrial Power Systems

- 49-233. Electrical Distribution System for a Mexican Cement
- ACO.\* Plant. Leo Dolkart, Latin American Export Service.
- CP.\*\* Power Distribution in Textile Mills. John Wesley Davis, George Wrigley, J. E. Sirrine Company.



Photo by Paul Briol

CP.\*\* Electrical Maintenance Problems in Continuous Process Plants. T. O. Sweatt, Wearn, Vreeland, Carlson and Sweatt, Inc.

The Baldwin Piano Company

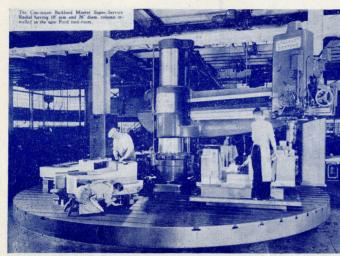
CP.\*\* Interior Wiring Design for Commercial Buildings.
Subcommittee on Interior Wiring Design for Commercial Buildings.

#### 2:00 p.m.—Rotating Machinery

- 49-234. Progress Report on AIEE Test Code for Electric Brushes. Joint Subcommittee on Electric Brushes.
- 49-235. Differential Leakage of the Different Patterns of a Fractional Slot Winding. M. M. Liwschitz, Polytechnic Institute of Brooklyn.
- 49-236. Flywheel—Induction Motor Drives. Joseph Ben Uri, Tel-Aviv, Palestine.
- 49-237. Motor Tests Evaluate Thermal Endurance of Class H Insulation and Silicone Varnish. George Grant III, T. A. Kauppi, Dow Corning Corporation; G. L. Moses, G. P. Gibson, Westinghouse Electric Corporation.

#### 2:00 p.m.—Speed Governing

- 49-288. Governors and the AIEE ASME Governor Performance Specification. A. F. Schwendner, Westinghouse Electric Corporation; Wayne Astley, Philadelphia Electric Company.
- 49-289. A New Automatic Load Control for Turbine Generators. H. B. Ruud, Iowa-Illinois Gas and Electric Company; S. B. Farnham, General Electric Company.
- 49-290. Determining Incremental Regulation and Dead Band of Governors on Steam Turbine Generators Under System Load Conditions. E. L. Tornquist, I. L. Wade, Public Service Company of Northern Illinois.
- 49-291. The Performance of a Topped Steam Power Plant on Sudden Load Reduction. John G. Noest, Consolidated Edison Company of New York, Inc.



Built by Cincinnati Bickford Tool Company

#### 2:00 p.m.—Instruments and Measurements

- 49-275. A Circuit to Correct Ammeter and Wattmeter Read-ACO.\* ing for Current Drawn by Voltmeter and Wattmeter Potential Coils. L. L. Shumaker, G. A. Neyhouse, Delco Products, Division of General Motors Corporation.
- 49-276. The Irradiation of Spark Gaps for Voltage Measure-ACO.\* ment. D. R. Hardy, J. D. Craggs, The University of Liverpool.
- 49-277. A Double-Input Oscilloscope for the Study of ACO.\* Laboratory A-C Circuits. Paul M. Kintner, University of Illinois.
- 49-292. Ammeter as Direct Reading Power Factor Meter. ACO.\* Joseph Ben Uri, Tel-Aviv, Palestine.

#### 2:00 p.m.—Conference on Undervoltage Protection of Motorized Devices

- CP.\*\* The Effect of Undervoltage Protection on the Power System. W. R. Weise, Cincinnati Gas and Electric Company.
- CP.\*\* Undervoltage Protection of Equipment. R. A. Hess, Armco Steel Corporation.
- CP.\*\* Undervoltage Protection of Motorized Devices.
  J. C. Lynch, Hammermill Paper Company.
- CP.\*\* Undervoltage Protection of Motor Drives. J. E. Arberry, Pittsburgh Plate Glass Company.
- CP.\*\* Aspects of Time-Delay Undervoltage Protection as it Affects Industrial Control. E. H. Alexander, General Electric Company.

### Tuesday, October 18

#### 10:00 a.m.—General Session

President J. F. Fairman, Presiding "Welcome." Dr. Raymond Walters, President, University of Cincinnati.

"Professional Unity at the Grass Roots". J. F. Fairman, President

"Address."

"Presentation." Prize Paper Awards.

#### 2:00 p.m.—Rotating Machinery

- 49-238. General Theory of Multiple Cage Induction Motors. S. S. L. Chang, Robbins and Myers, Inc.
- 49-239. Reactive Speed-Torque Control of Squirrel-Cage ACO.\* Induction Motors. R. V. Tiede, The Johns Hopkins University.
- 49-240. Saturation Effect on Leakage Reactance. S. S. L. Chang, T. C. Lloyd, Robbins and Myers, Inc.
- 49-241. The Torques of the Synchronous Tie—A Steady-State Analysis. L. A. Finzi, H. M. McConnell, Carnegie Institute of Technology.

#### 2:00 p.m.—System Economics

- 49-242. Coordination of Fuel Cost and Transmission Loss by Use of Network Analyzer to Determine Plant Loading Schedules. E. E. George, H. W. Page, and J. B. Ward, Ebasco Services, Inc.
- CP.\*\* Phase Shifting 22 Kv Regulators Save System Investment. V. E. Hill, Duquesne Light Company.
- 49-287. New Suspension Clamp for Transmission Line ACO.\* Conductors. Sverre Sandberg, Svenska Aluminium-kompaniet.

#### 2:00 p.m.—Industrial Control

- 49-243. Press Control with an Eddy-Current Drive. B. H. ACO.\* Carlisle, Jr., The Clark Controller Company.
- CP.\*\* Spotting Control of Synchronous Motors. S. C. Ewing, E. A. E. Rich, General Electric Company.
- CP.\*\* A Proposed Classification of Regulating Systems. S. L. Burgwin, Westinghouse Electric Corporation.
- CP.\*\* Fundamentals of Analysis of Regulating Control Systems for Industrial Applications. W. Alvarez, E. S. Dygve, General Electric Company.
- 49-244. Prediction of Ultimate Temperature Rise from Early Heat Run Data. J. E. Ryan, General Electric Company. Presentation by title only.

# 2:00 p.m.—Problem and Thesis Subjects from Industry

- CP.\*\* Electrical Application Problems for Engineering Education. F. R. Benedict, W. R. Harris, R. L. Witzke, Westinghouse Electric Corporation.
- CP.\*\* Electrical Design Problems for Engineering Education. T. M. Linville, K. B. McEachron, Jr., General Electric Company.
- CP.\*\* Industrial Electronic Problems for Engineering Education. Walther Richter, Allis-Chalmers Manufacturing Company.

# Wednesday, October 19

#### 9:30 a.m.—Protective Devices

- 49-280. Application Guide on Methods of Neutral Ground-ACO.\* ing of Transmission Systems. Working Group of Subcommittee on Fault Limiting Devices.
- 49-281. Application Guide for the Grounding of Syn-ACO.\* chronous Generator Systems. Working Group of Subcommittee on Fault Limiting Devices.

- 49-282. Operation of A Ground Fault Neutralizer on a Regulated Distribution System. H. R. Tomlinson, F. B. Hunt, New England Power Service Company.
- 49-283. Guide for Application of Ground-Fault Neutralizers.
  ACO.\* Working Group of Subcommittee on Fault Limiting
  Devices.

#### 9:30 a.m.—Conference on Applications of Conformal Mapping in Electric Circuit Analysis

- CP.\*\* Basic Theory of the Generalized Schwarz-Christoffel Transformations and Their Use in Electric Circuit Analysis. Thomas J. Higgins, The University of Wisconsin.
- CP.\*\* The Potential Analogue in Network Synthesis and Analysis. W. H. Huggins, Air Material Command.

#### 9:30 a.m.—Conference on Railroad Communication

- CP.\*\* Train Communication in Railroad Operations. F. H. Menagh.
- CP.\*\* Wire Communication System of the Santa Fe Railroad. L. R. Thomas.
- 49-245. Centralized Traffic Control for Railroads. W. D. Hailes, General Railway Signal Company.
- CP.\*\* Line Circuits for Centralized Traffic Control. G. W. Baughman.

#### 9:30 a.m.—Rotating Machinery

- 49-294. Transients in 2-Phase Synchronous Machines. N. E. Wilson, University of Massachusetts.
- 49-296. Design of Auxiliary Circuits of Single-Phase Induction Motors. M. S. Thacker, H. V. Gopalakrishna, Indian Institute of Science.

49-295. The Dynamoelectric Amplifier—Class A Operation. R. M. Saunders, University of California.

#### 2:00 p.m.—Protective Devices

- 49-284. Report on Survey of Unbalanced Charging Currents on Transmission Lines as Affecting Ground-Fault Neutralizers. Working Group of Subcommittee on Fault Limiting Devices.
- 49-286. Performance Characteristics of Lightning Protective Devices. Subcommittee on Lightning Protective Devices.

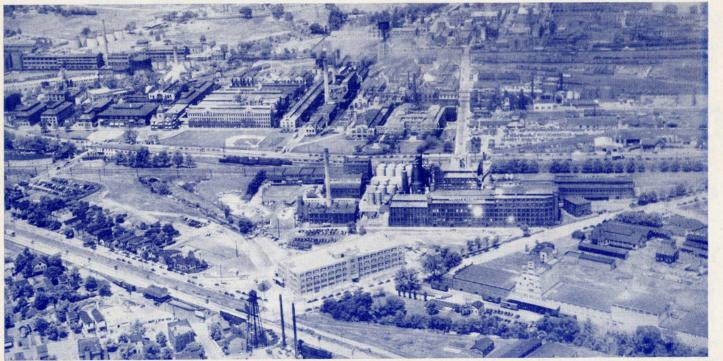
#### 2:00 p.m.—Conference on Voltage Induction

#### 2:00 p.m.—Symposium on Technical Design of Coaxial Television and Telephone Systems

- 49-246. Attenuation and Delay Equalizers for Coaxial Lines. W. R. Lundry, Bell Telephone Laboratories, Inc.
- 49-247. Stability of Tandem Regulators in the L-1 Carrier System. J. P. Kinzer, Bell Telephone Laboratories, Inc.
- 49-248. Equalization of Coaxial Lines. K. E. Gould, Bell Telephone Laboratories, Inc.
- 49-249. Television Terminals for Coaxial Systems. L. W. Morrison, Jr., Bell Telephone Laboratories, Inc.

#### 2:00 p.m.—Aluminum

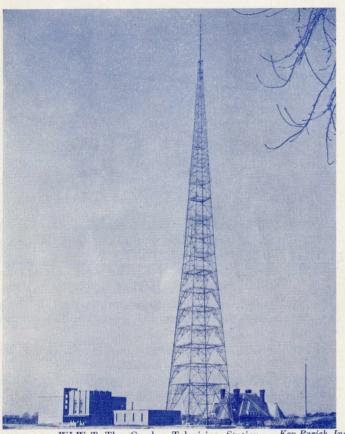
49-250. Aluminum and the Electrical Industry. Donald M. ACO.\* White, The Aluminum Association.



Ivorydale Plant, Procter and Gamble Company

Marsh Photographers, Inc

### AIEE FALL GENERAL MEETING



WLW-T The Crosley Television Station

- CP.\*\* Aluminum Rolled Products in Relation to the Electrical Industry. D. W. Smith, The Permanente Metals Corporation.
- Aluminum Extruded and Drawn Products in Relation to the Electrical Industry. H. V. Menking, Reynolds Metals Company.

# Thursday, October 20

#### 9:30 a.m.—Transmission and Distribution

- 49-251. Report of a Survey on the Performance of Shunt Capacitors. Joint Working Groups of the Capacitor Subcommittee of AIEE and EEI Transmission and Distribution Committees.
- 49-252. Report on the Operation and Maintenance of Shunt Capacitors. Working Group of Capacitor Subcommittee of Transmission and Distribution Committee.
- 49-253. The Calculated Risk of Operating Capacitors Without Individual Fuses. Hamilton Brooks, Westinghouse Electric Corporation.
- 49-254. Connection Arrangements and Protective Practices for Shunt Capacitor Banks. N. R. Clark, S. B. Farnham, General Electric Company.

#### 9:30 a.m.—Mining and Metal Industry

49-255. Selection of Optimum Rating of Mercury Arc Rectifiers for Coal Mining Service. L. W. Scott, J. A. Dunn, General Electric Company.

- CP.\*\* Redesign of 5 HP Open Motors for Explosion Proof, Pumping and Conveyor Service. W. R. Wood, The Berwind-White Coal Mining Company.
- CP.\*\* Analysis of Power Costs of Bituminous Coal Mines. H. P. Musser, West Virginia Engineering Company.
- Electric Machinery Inspection Technique and Problems, W. W. Mattson, Armco Steel Corporation.

#### 9:30 a.m.—Radio

- 49-256. Design of Mobile Radio Communications Equipment for Land-Mobile Services Operating on Frequencies Between 152-174 MC. R. A. Beers, W. A. Harris, and A. D. Zappacosta, Radio Corporation of America.
- The Transition Air Navigation System and Its Evolution. Col. S. A. Mundell.
- Technical Features of Airborne and Ground Distance Measuring Equipment. C. J. Hirsch, R. B. Brunn, H. L. Blaisdell.

#### 9:30 a.m.—Conference on Machine Tools

- CP.\*\* The Application of the Rototrol to Machine Tools. M. H. Fisher, Westinghouse Electric Corporation.
- CP.\*\* Electrification of a Large Planer Type Milling Machine. J. W. Harper, General Electric Company.
- CP.\*\* Electronic Control as Applied to Grinders. J. M. Morgan, Cincinnati Milling Machine Company.

#### 2:00 p.m.-Mining and Metal Industry

- CP.\*\* Shuttle Cars and Electrical Problems Encountered in Their Use. J. W. Woolf, Joy Manufacturing
- CP.\*\* Electrical Control of Belt Conveyors. W. R. Roberts, The Jeffrey Manufacturing Company.
- CP.\*\* Cable Reel for Use on Mine Locomotives. J. R. Doig, General Electric Company.
- CP.\*\* Trolley Phone Mine Communication. W. P. Place, Farmers Engineering and Manufacturing Company.

#### 2:00 p.m.—Television

- 49-257. A 500 Watt Visual 250 Watt Aural Television Trans-ACO.\* mitter. L. Voorhees, Allen B. Du Mont Laboratories, Inc.
- 49-258. Low Voltage and High Voltage Power Supplies for ACO.\* Home Television Receivers. Victor Wouk, Beta Electric Corporation.
- 49-259. Effect of Man-Made Noise on Television Receivers. ACO.\* G. D. Hulst. Allen B. Du Mont Laboratories, Inc.
- CP.\*\* Microwave Television Relay for Navy Training Program. H. Cook.

# Friday, October 21

#### 9:30 a.m.—Relays

- 49-260. A New Loss-of-Excitation Relay for Synchronous Generators. C. R. Mason, General Electric Company.
- 49-261. A One Slip Cycle Out-of-Step Relay Equipment. W. C. Morris, General Electric Company.
- 49-262. Novel Test Circuits for Protective Relays. W. K. Sonnemann, Westinghouse Electric Corporation.

### TECHNICAL PROGRAM

49-263. Insulation Level of Relay and Control Circuits. Project Committee on Insulation Level of Relay and Control Circuits.

#### 9:30 a.m.—Insulated Conductors and Accessories

- 49-264. A New Technique in the Manufacture of Soldered Porcelain Potheads. A. E. Papp, J. H. Nicholas, G. & W. Electric Specialty Company. Presentation by title only.
- 49-265. Design Fundamentals of Potheads 69000 Volts and Below. J. H. Nicholas, G. & W. Electric Specialty Company.
- 49-266. Cable Accessory Design Utilizing New Laboratory Techniques. P. N. Bosworth, H. K. Farr, General Electric Company.
- 49-267. A Theoretical and Practical Approach to the Design of High-Voltage Cable Joints. H. D. Short, Canada Wire and Cable Company.
- 49-268. Transient Temperature Phenomena of Three-Conductor Cables. F. O. Wollaston, B. C. Electric Railway Company.

#### 9:30 a.m.—Electronic Power Converters

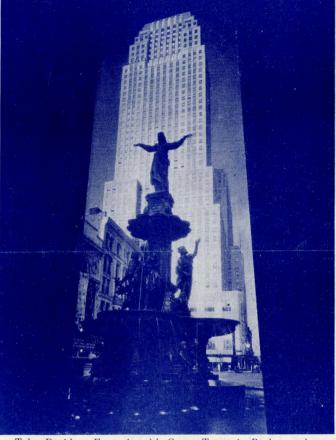
- 49-269. Protection of Electronic Power Converters-Part ACO.\* II. Subcommittee on Electronic Converter Circuits.
- 49-270. Diagnosis of Rectifier Ailments. I. K. Dortort. Allis-Chalmers Manufacturing Company.
- Preliminary Report on Survey of Operation of Mercury Arc Rectifiers. Subcommittee on Electronic Converter Application.
- 49-271. Rectifier Transformer Characteristics. Subcommittee on Rectifier Transformers. Presentation by title only.

#### 9:30 a.m.—Conference on Machine Tools

- Automatic Programming of Machine Cycles, R. N. Eck. Cutler Hammer, Inc.
- Motor Ripple Voltage and Its Application to Plugging Relays. S. Noodleman, Standard Dayton Corporation.
- CP.\*\* What the Automotive Industry Expects of Electrical Equipment on Machine Tools. W. B. Nichol. Chevrolet Division of General Motors Corporation.
- CP.\*\* A New Control for Direct Drive Presses. W. E. Large, Westinghouse Electric Corporation.

#### 2:00 p.m.—Substations

- 49-272. Space Code Selector Supervisory System. E. F. Forrest, P. W. Schirmer, General Electric Company.
- 49-285. Basic Single-Line Diagrams for Substations. H. P.
- ACO.\* Cadario, H. P. Smith, The Hydro-Electric Power Commission of Ontario.
- 49-273. Functional Development of 66 Kv Switching and ACO.\* Transformer Stations. N. N. Smeloff, Pennsylvania Power and Light Company.
- 49-274. Safety in Substation Design. J. O. Leslie, D. L. ACO.\* Greene, Gilbert Associates, Inc.
- 49-293. A-C Tripping and Reclosing of Line Sectionalizing Circuit Breakers. C. E. Winegartner, H. E. Bonheimer, The Cleveland Electric Illuminating Com-
- 49-228. Proposed American Standard Guide for Loading ACO.\* Oil-Immersed Step-Voltage and Induction-Voltage



Tyler Davidson Fountain with Carew Tower in Background

Regulators. Working Group on Operating Guide for Regulators. Presentation by title only.

#### 2:00 p.m.—Conference on Machine Tools

- CP.\*\* Opportunities for Electrification of Machine Tools in Railroad Shops. V. P. Schmidt, The Pennsylvania Railroad.
- CP.\*\* Magnetic Clutch and Brake Application on Production Lathes and Milling Machines. B. T. Anderson, Sundstrand Machine Tool Company.
- General Principals of Applying Clutches and Brakes to Machine Tools. Glenn Spohn, Gregg and Spohn, representing Warner Electric Brake Manufacturing Company.
- CP.\*\* Conference paper; no advance copies are available; not intended for publication in Transactions.
- ACO.\* Advance copies only available; not intended for publication in Transactions.

#### **MEETING COMMITTEES**

Members of the Fall General Meeting Committee making arrangements are: E. S. Fields, Chairman; R. J. Rockwell, Vice-Chairman; J. P. Quitter, Secretary; W. H. McNutt, Treasurer: J. C. Strasbourger, R. E. Stoppel, F. E. Wiatt.

The chairmen of the various subcommittees are: A. C. Burroway, E. F. Nuezel, Technical Program; W. T. Pavely, Inspection Trips: S. B. Storer, Entertainment: J. A. Noertker, Transportation; D. T. Michael, Registration; F. W. Willey, Finance; R. E. Colado, Publicity; Mrs. J. A. Noertker, Ladies; H. E. Barnett, Hotel and Equipment.

### FALL GENERAL MEETING, CINCINNATI, OHIO

#### 5. Engineering Society of Cincinnati.

The inspection trip and forum will put on display the fine facilities provided by Cincinnati's Herman Schneider Foundation for use by the engineering, scientific, and technical organizations in the vicinity and will indicate how the Foundation, The Engineering Society of Cincinnati, and the societies participating in Cincinnati's Council of Technical and Scientific Societies, complement and supplement each other in a unique program of cooperation.

This trip is scheduled for Wednesday, October 19 at 11:30 a.m. Luncheon at the Foundation will be served at 12:30 p.m.

**6.** Oakley Colony which includes The Cincinnati Milling and Grinding Machine Company, the Cincinnati Planer Company and The Cincinnati Bickford Tool Company.

We will see the latest applications of electrical control to milling machines, grinding machines, planes, and drilling machines. At the same time, we will be shown the modern plants in which these machines are made, and the machines themselves in various stages of construction. The Oakley Colony is probably one of the largest and most modern centers of machine tool production.

This trip is scheduled for Thursday, October 20 at 1:30 p.m.

7. Crosley Broadcasting Corporation, Television Station WLW-T, and Frequency Modulation Station WLW-A.

An inspection trip will be made to the television station and studios of stations WLW-T and WLW-A. Station WLW-T has a visual power of 34 kilowatts and an aural power of 17 kilowatts. Station WLW-A has a frequency modulated output of 20 kilowatts. The entire station will be inspected including studios, control rooms, transmitter rooms, movie projection rooms and a movie film development room. A special triplex filter for the antenna, which is used for both WLW-T and WLW-A (FM) signals, will be explained. The studio building is one of the highest concrete block buildings in the country. An excellent panoramic view of the City of Cincinnati can be seen from the entrance porch to the station.

(Note: The scheduling of this trip will depend on the Studio Schedule.)

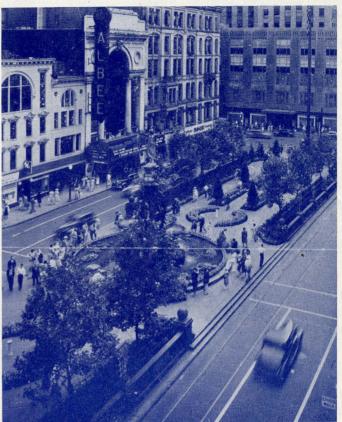
The committee will be pleased to assist in making arrangements to other places if any registrants so desire. Watch the bulletin boards for these and other trips.

#### HOTEL RESERVATIONS

In the Netherland Plaza Hotel all rooms are outside rooms with tub, shower, and four station radio. Room rates per day are as follows:

Single room	\$ 4.00—\$10.00
Double bedroom for two	8.00— 12.00
Twin bedroom for two	9.00— 13.00
Suite: parlor and bedroom	18.00— 35.00

All requests for room reservations should be sent directly to the Netherland Plaza Hotel, Fifth and Race Streets, Cincinnati 2, Ohio. Members are urged to send in their requests early. The Netherland Plaza Hotel will place overflow reservations in adjacent hotels, including the Terrace Plaza, Hotel Gibson, and Hotel Sinton at comparable rates.



Marsh Photographers, Inc.

Downtown Cincinnati

REGISTRATION FEES REQUIRED: Members and nonmembers should register in advance by filling in the advance registration card sent to you with this mailed announcement. In accordance with the policy as set up by the Board of Directors, a registration fee of \$3.00 will be required for members and a fee of \$5.00 for nonmembers. This is to help make the meeting self-supporting and obviate the need for raising the annual dues. Student members and the immediate families of members will not be required to pay any fee. In order to save time and to assist the various committees arranging for the accommodation and entertainment of those who attend, space has been provided on the attached Registration card for pertinent information. These cards should be mailed as promptly as possible to Mr. D. T. Michael, Chairman Registration Committee, Fall General Meeting AIEE, Cincinnati Gas & Electric Co., 323 Plum Street, Cincinnati 2. Ohio.

GENERAL INFORMATION — Information on all features may be obtained at the registration desk. A table for mail and memoranda will be maintained as well as a special bulletin board for the posting of personal messages and notices. Schedule of inspection trips and entertainment features will also be displayed.

Issued by

AMERICAN INSTITUTE OF ELECTRICAL ENGINEERS 33 West 39th Street, New York 18, N. Y.

PRINTED IN U.S.A.