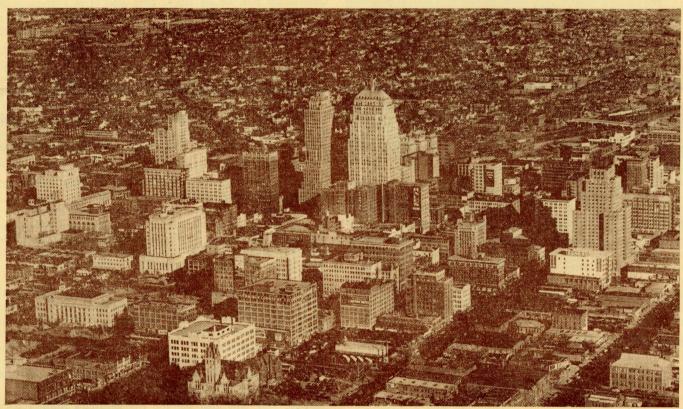
# Fall General Meeting

OCTOBER 23-27, 1950 Oklahoma City, Oklahoma



Headquarters Skirvin Hotel



Oklahoma City, Oklahoma

### MEETING FEATURES

Arrangements for the 1950 Fall General Meeting to be held in Oklahoma City, Oklahoma, October 23-27, have been completed. Headquarters for the meeting will be in the Skirvin Hotel. The technical program is broad in scope and embraces a number of sessions on basic sciences, communication and power generation.

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.

GENERAL SESSION: The General Session scheduled for Tuesday Morning at 10:00 a.m., October 24, will be opened by Roy J. Turner, Governor of Oklahoma. Governor Turner will extend an Oklahoma welcome to the Fall General Meeting. Dr. H. G. Bennett, President of Oklahoma A. & M. College, will address the Session on the subject of "The Obligation of World Leadership." "Are you an Engineer" will be the topic presented by Mr. T. G. LeClair, President of AIEE. Mr. H. R. Fritz, Vice-President 7th District AIEE, is also on the General Session agenda. The ladies are invited to attend.

STAG SMOKER: Tuesday Evening, October 24 at 6:30 p.m., the Stag Smoker will be held in the Convention Hall of the Skirvin Hotel.

This traditional event is being planned so that old friendships may be renewed and new friends may be acquired. A fine buffet dinner supplemented by good entertainmnt is being planned so that an enjoyable evening may be had by all.

DINNER-DANCE: Wednesday Evening, October 25 at 7:00 p.m., a Dinner-Dance will be held in the Persian Room of the Skirvin Tower Hotel. This event will be the highlight of the week's Entertainment.

The floor show entertainment will include a variety of numbers, one of which is a program of songs presented by the Oklahoma City University Chorus. This Chorus is in much demand in this area because of its outstanding program of songs from Broadway show hits like "Oklahoma." Another number of special interest will be dances presented by a square dance group in their colorful costumes.

Dancing will be from 8:30 p.m. until 12:00 p.m.

Dress is optional.

Mustang Generating Station, Oklahoma Gas and Electric Company

JOINT LUNCHEON WITH THE OKLAHOMA CITY CHAMBER OF COMMERCE: An interesting event is planned for Friday Noon, October 27. The AIEE Fall General Meeting is joining the Oklahoma City Chamber of Commerce for a joint luncheon at the Chamber's Friday Forum in the Skirvin Tower Hotel Persian Room. This event will feature an address by Mr. T. G. LeClair, President AIEE, who will speak on the topic of "What Engineers Do For Your Business."

LADIES PROGRAM: The Ladies Headquarters, Parlor 1012, in the Skirvin Hotel has been reserved for the ladies. At all times there will be hostesses present to extend a welcome. Here the ladies may have a game of cards, a place to get acquainted and seek information.

At 2:30 p.m., Monday, the ladies will board chartered busses for a trip to the Oklahoma Historical Building on the State Capitol grounds where an interesting program enriched by Oklahoma's colorful Indian History will be presented.

At 11:30 a.m., Tuesday, the chartered busses will again pick up the ladies for a tour of the Oklahoma City sights, stopping at the Oklahoma City Country Club for brunch, then continuing the tour of the remaining scheduled sights.

At 7:00 p.m., Tuesday, dinner, bridge, and canasta is planned and will be held at the Beacon Club atop the First National Building overlooking Oklahoma City.

At 10:30 a.m., Wednesday, an art center tour and coffee will be held at Civic Center. An outstanding art axhibit is expected to be at the Center during this tour.

Thursday Noon a buffet luncheon and style show is scheduled for the ladies in the Crystal Room of the Skirvin

Thursday Evening at 8:00 p.m., the men will be guests of the ladies for bridge and canasta in the Venetian Room of the Skirvin Hotel.

On Friday no formal arrangements have been planned.

The Ladies Headquarters, Parlor 1012, in the Skirvin Hotel will be open and attended by hostesses for the convenience of the ladies.

SPORTS: Arrangements have been made for the pleasure of the registered members and their guests to play golf. Transportation will be provided for when desired and must be arranged for at the Sports Registration Desk in advance. Tickets must be obtained at the Sports Registration Desk in advance by those who wish to play.

INSPECTION TRIPS: The following inspection trips have been scheduled during the 1950 Fall General Meeting. Admission will be by ticket only and it is extremely important that members and their guests obtain these tickets at the Inspection Trip Desk as soon as possible upon their arrival.

Trip 1. A tour of the Oklahoma City oil field and contiguous territory to show a rotary drilling rig in operation, natural gasoline plants, electric-powered oil pumping stations, several types of electrically pumped oil wells, and a general view of oil wells located on the State Capitol Building's grounds. The tour, which will cover 20 miles, will take about two hours. Wednesday and Thursday, October 25 & 26, 2:00 p.m.

Trip 2. A tour of the mechanical production plant of the Oklahoma Publishing Company (the Printers of the Daily Oklahoman and Times) showing electrically operated and controlled presses, stereotype machinery, and wire photo service. This is one of the most modern newspaper publishing plants in the nation. Tour will take about 1½ hours. Monday and Thursday, October 23 & 26, 4:30 p.m.

Trip 3. An inspection trip will be arranged covering the Belle Isle Generating Station of the Oklahoma Gas & Electric Company. The feature interest at this station is the first commercial installation of a gas turbine unit applied to electric generation. This unit has been in service since July, 1949, and has been phenomenally successful both as to dependablity and performance. It has attracted international attention and will be seen in actual operation.

This tour will also include the Mustang Station which consists of two 50,000-kw steam turbogenerating units operating at 850 pounds per square inch at 900 degrees Fahrenheit. One of these units has been in operation since May, 1950, and the second unit will be placed in operation about January, 1951. This tour will consume approximately three hours and involve bus travel of about 25 miles. Tuesday. Wednesday and Friday, October 24, 25 & 27, 2:00 p.m.

Trip 4. This tour is to Tinker Air Force Base, the largest Air Force Depot of the United States Department of Defense. Objects of interest will include the only jet engine overhaul assembly line in any of the Air Force depots; a closehand view of the overhaul of the R-3350 airplane engine used in B-29's; and a close-up inspection of the Air Force's larger bombers. Also, a tour of the Commanding General's control room will be made and a lecture in the auditorium will be provided by the Commanding Officer, Major General F. S. Borum, on "What Goes on in an Air Depot." This activity employs more than 15,000 people and the electric load approximates 10,000 kw. The tour, by bus, will take approximately three hours and is scheduled to cover about 25 miles. Monday and Friday, October 23 & 27, 2:00 p.m.

### 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 23

### 9:30 a.m.—Conductor Vibration

- 50-237. Vibration and Fatigue Life of Steel Strand. J. C. Little, D. G. MacMillan, J. V. Majercak, American Steel and Wire Co.
- 50-278. Use of Techniques from Electrical Analogues in the Study of Transmission Line Vibration. Jordan Lummis, Arthur Klopfenstein, Southern California Edison Co.
- CP.\*\* BPA Experience with Conductor Vibration. M. B. Elton, A. A. Osipovich, M. G. Poland, Bonneville Power Administration.
- CP.\*\* Vibration-Symposium. E. L. Kanouse, Dept. of Water and Power, The City of Los Angeles.
- CP. \*\* Failures of Overhead Ground Wires Caused by Aeolian Vibration. P. G. Wallace, Texas Power and Light Co.
- CP.\*\* Experience and Remedial Measures for Failures of Overhead Ground Wires Caused by Aeolian Vibration, R. F. Danner, Oklahoma Gas and Electric Co.
- CP.\*\* Vibrations-Review of Experiences-1950. L. M. Robertson, Public Service Co. of Colorado.
- Dampers-Torsional-Experience in Canada during 10 Years. J. H. Waghorne, A. D. Hoff; T. J. Burgess, Hydro-Electric Power Comm. of Ontario.
- CP.\*\* Aeolian Vibration Combines with Galloping to Speed up Failures in Conductors. A. E. Davison, Hydro Electric Power Comm. of Ontario.
- CP.\*\* Report of Progress in Conductor Vibration Investigations. Joel Tompkins, Aluminum Co. of America.

### 9:30 a.m.—Conference on Energy Sources

- CP.\*\* Ultrasonic Waves in Air. R. W. Armstrong, Evans Signal Laboratory.
- CP.\*\* Aerodynamics of the Power Wind Tunnel. P. H. Thomas, Montclair, N. J.
- CP.\*\* Limitations of Prime Movers. W. P. Green, Illinois Institute of Technology.



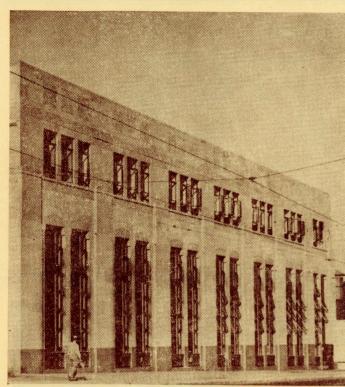
Downtown Office, Southwestern Bell Telephone Company

### 9:30 a.m.-Moderate Haul Telephone and Television Systems

- 50-235. A Negative Impedance Repeater. J. L. Merrill, Jr., Bell Telephone Labs., Inc.
- 50-240. A Simplified 48 Channel Carrier Telephone System. L. G. Erickson, Lenkurt Electric Co.
- 50-241. An Improved Transmitted Carrier System for Telephone Lines of Short or Medium Length. G. H. Brodie, Kellogg Switchboard and Supply Co.
- 50-242. A Medium-Haul Carrier Telephone System. H. H. Smith, Federal Telephone and Radio Corp.
- 50-234. Local Wire Video Television Networks. C. N. Nebel, Bell Telephone Laboratories, Inc.

### 2:00 p.m.-69 Kv Transmission Line Design Practices

- 50-243. Light Steel Tower Line Designs. A. A. Osipovich, Bonneville Power Administration.
- CP.\*\* Line Structures for 66.000 Volt, an Established Sub-transmission Voltage in New England. C. A. Booker, New England Power Service Co.
- CP.\*\* 69 Kv Review of Experience Types Used—Accumulated Experience and Preferred Types with Reasons. J. E. O'Brien, Rural Electrification Adm.



Oklahoma Publishing Company

- CP.\*\* Sagging Conductors in Inclined Spans. H. H. Rodee, Aluminum Co. of America.
- CP.\*\* Current Loadings for A.C.S.R. Conductors—1950. A. S. Runciman, Shawinigan Water and Power Co.
- CP.\*\* Bolometers—Two Years Experience in Field Locating Hot Joints. J. Leslie, Hydro-Electric Power Comm. of Ontario.

### 2:00 p.m.—Basic Science

- 50-246. Transpositions and the Calculation of Inductance from Geometric Mean Distances. W. B. Boast, Iowa State College.
- CP.\*\* A Set of General Electrical Formulas. V. P. Hessler, University of Illinois; D. D. Robb, Iowa State College.
- 50-245. Transients in Coupled L-C Circuits Analyzed in Terms of a Rolling-Ball Analog. P. C. Magnusson, Oregon State College.
- 50-244. Steady-State Waves on Transmission Lines. D. L. Waidelich, University of Missouri.

### 2:00 p.m.—Communication Switching Systems

- 50-247- The Leich Electric Dial Switchboard. H. G. Evers, ACO.\* Leich Electric Co.
- 50-227. Simplified Subscriber Toll Dialing for Low Rate, Low Density Toll Circuits Between CDO'S. Eric Brooke, J. M. Blackhall, W. H. Blashfield, The North Electric Manufacturing Co.

- 50-248. Dial Central Office Buildings for Small Communities. F. D. Reese, E. C. Roys, Pennsylvania Telephone Corp.
- 50-249. General Aspects of Community Dial Office Equipment. A. Burkett, Bell Telephone Laboratories, Inc.

# Tuesday, October 24

### 10:00 a.m.—General Session

"Welcome to Oklahoma." Honorable Roy J. Turner, Governor of Oklahoma. Response. H. R. Fritz, Vice President, 7th District, AIEE. Announcements. W. B. Stephenson, General Chairman, 1950 Fall General Meeting. "The Obligation of World Leadership." Dr. H. G.

"The Obligation of World Leadership." Dr. H. G. Bennett, President, Oklahoma A & M College.

"Are You an Engineer?" T. G. LeClair, President, AIFF

### 2:00 p.m.—Transmission and Distribution

- 50-250. Some Aspects of Lightning Surges on Power Systems and Their Suppression. S. Kaneff, The University of Adelaide.
- 50-224. Practical Experiences with Resonant Grounding in a Large 34.5 Kv System. H. H. Brown, Wisconsin Michigan Power Co.; E. T. B. Gross, Illinois Institute of Technology.
- CP.\*\* Determination of Resistance to Ground of Grounding Grids. A. J. McCrocklin, Jr., C. W. Wendlandt, The University of Texas.
- 50-251. 9 Year Operating Record of Rural Line Sectionalizing by Repeater Fuses. R. M. Schahfer, Northern Indiana Public Service Co.
- 50-236. Effect of Three-Phase Motor Loads on Voltage Changes Produced by Single-Phase Loads. M. A. Faucett, M. Fisher, Jr., M. S. Helm, University of Illinois.
- CP.\*\* Supervisory Control for 13.8 Kv Tie Feeders. R. A. Williams, Arkansas Power and Light Co.; V. B. Wilfley, Westinghouse Electric Corp.

### 2:00 p.m.—Rotating Machinery

- 50-252. Synchronous Machine Damping Torque at Low Speeds. Charles Concordia, General Electric Co.
- 50-253. Symmetrical Short Circuits on Saturated Alternators. S. L. Mikhail, Cambridge, Mass.
- 50-254. An Experimental and Analytical Study of Turbine Generator Rotor Ventilation. C. J. Fechheimer, Milwaukee, Wisconsin.
- 50-232. A Method of Total Design as Applied to Polyphase Induction Motors. C. H. Crouse, Robbins and Myers, Inc.

50-255. The Goerges Phenomenon—Induction Motors with Unbalanced Rotor Impedances. H. L. Garbarino, General Electric Co.; Eric T. B. Gross, Illinois Institute of Technology.

### 2:00 p.m.—Mining and Metal Industries

- CP.\*\* Electrical Applications in Mining—Southeast Missouri Division—Saint Joseph Lead Company. Bert L. Beal, Jr., St. Joseph Lead Co.
- CP.\*\* Automatic Hoisting. H. A. London; R. D. Call, Westinghouse Electric Corp.; A. B. Chafetz, International Minerals and Chemical Corp.
- CP.\*\* Use of Electricity in Bauxite Mining. E. A. Brenn, Alcoa Mining Co.
- 50-230. Electrical Equipment for Heavy Media Separation Process. J. J. Bean, American Cyanamid Co.; K. A. Blind, Dings Magnetic Separator Co. Presentation by title only.

# Wednesday, October 25

### 9:30 a.m.—Insulated Conductors

- 50-256. Critical Inside Dimensions for Power Cable Manholes. E. S. Halfmann, Philadelphia Electric Co.
- 50-257. Underground Conduit for Electric Power Systems— Fundamentals and Basic Design Considerations. E. G. Watkins, Consolidated Edison Company of New York, Inc.
- 50-258. Terminal Risers for Solid-Type Impregnated Paper Cables. W. A. Del Mar, Phelps Dodge Copper Products Corp.

### 9:30 a.m.—Conference on Effect of Low Voltage and Low Frequency on Power Plant Auxiliaries

- CP.\*\* Interruption of Service of the San Antonio Electrical System. H. C. Hughes, City Public Service Board, San Antonio, Texas.
- CP.\*\* The Effect of Voltage and Frequency Reduction on Steam Plant Operation. T. W. Schroder, Iowa Power and Light Co.
- CP.\*\* Design and Operation of Generating Station Auxiliaries for Power System Reliability. W. R. Brownlee, J. A. Elzi, Commonwealth Associates, Inc.
- CP.\*\* Supply Systems for Havana and Woodriver Station Auxiliaries. E. R. Walton, Illinois Power Co.; S. L. Chapin, Sargent and Lundy.
- CP.\*\* The effect of Frequency Reduction on Plant Capacity and on System Operations. H. A. Bauman, G. R. Hahn, C. N. Metcalf, Consolidated Edison Co. of New York, Inc.
- 50-280. Determination of Reserve Capacity by the Probability Theory. G. Calabrese, New York University. Presentation by title only.

### 9:30 a.m.—Large-Scale Computing Devices and Their Application to the Chemical and Petroleum Industry

- CP.\*\* Automatic Computing Machines and Devices. C. C. Hurd, International Business Machines Corp.
- CP.\*\* The Use of IBM Punched Card Devices for Distillation Calculations. Arthur Rose, T. J. Williams, Pennsylvania State College.
- 50-259- Application of Automatic Digital Computing Meth-ACO.\* ods to the Prediction of Phase Behavior. T. J. Connolly, S. P. Frankel, B. H. Sage, California Institute of Technology.
- CP.\*\* Applications of the Multicomponent Fractionation Electrical Analogue Computer. G. M. Brown, J. H. Ashley, J. J. Moder, G. W. Goelz, Northwestern University.
- CP.\*\* Solution of Fluid Flow Problems on the Anacom. J. T. Carleton, Westinghouse Electric Corp.

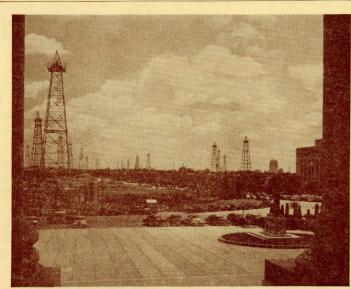
### 2:00 p.m.—Symposium on Totally Enclosed Motors

- 50-229- Trends in Auxiliary Motor Applications in Steam ACO.\* Electric Stations. H. L. Lowe, Ebasco Services, Inc.
- CP.\*\* The Totally Enclosed Fan Cooled Enclosure as Applied to Squirrel Cage Induction Motors. D. H. Ware, General Electric Co.
- 50-260- Copper Fin Totally-Enclosed Motors. L. A. Kilgore, ACO.\* J. F. Heidbreder, Westinghouse Electric Corp.
- 50-228- Large Tube Type, Totally Enclosed Fan-Cooled ACO.\* Motors. R. C. Moore, Allis-Chalmers Mfg. Co.
- CP.\*\* Large Motors for Power House Auxiliaries. Quentin Graham, Elliott Co.
- 50-226- Totally-Enclosed Auxiliary Drive Motors for Gen-ACO.\* erating Stations. J. G. Noest, Consolidated Edison Co. of New York, Inc.



Oklahoma City Municipal Airport

### AIEE FALL GENERAL MEETING



View of Oklahoma City from the State Capitol Building

### 2:00 p.m.—Industrial Power Systems

- 50-261. Automatic Control of Metal Clad Switchgear Serving Oil Refinery Motors During Power System Disturbances, R. T. Horsfall, Dingle Clark Co.: K. N. Thompson, R. W. Mills, Standard Oil Company of Ohio; P. O. Bobo, Westinghouse Electric Corp.
- CP.\*\* Electric Oil Pumping. W. C. Dreyer, F. K. Smith, Westinghouse Electric Corp.
- CP.\*\* Industrial Power Networks. H. D. Hughes, Stanolind Oil and Gas Co.; W. H. Rollman, Westinghouse Electric Corp.
- CP.\*\* Speaking of Electrical Distribution System Expansion. H. C. Swannell, J. E. Sirrine Co.

### 2:00 p.m.—Computing Devices

- 50-262- Design Objectives of the NRL Electronic Digital ACO.\* Computer. D. H. Gridley, B. L. Sarahan, Naval Research Laboratory.
- CP.\*\* Problem Preparation for a Digital Computer. D. H. Gridley, B. L. Sarahan, J. S. Seward, Naval Research Laboratory.
- 50-215. Special Devices Aid Differential Analyzer Solution of Complex Problems. A. C. Cook, L. K. Kirchmayer, General Electric Co.; C. N. Weygandt, University of Pennsylvania.
- 50-263. An Electric Analogue Computer, Using the Photo Cell as a Non-Linear Element. E. C. Koenig, Allis-Chalmers Manufacturing Co.

# Thursday, October 26

### 9:30 a.m.—Symposium on Supervisory Instruments

50-264- The Supervisory Instrument—Its Contribution to ACO.\* Centralized Control. T. T. Frankenberg, American Gas and Electric Service Corp.

- 50-221- Instruments for Detection of Toxic and Explosive ACO.\* Gases. N. W. Hartz, Mine Safety Appliances Co.
- 50-265- Improving Surface Condenser Performance Through ACO.\* the Use of Supervisory Instruments. J. G. Dobson, The Foxboro Co.
- 50-218- High Speed Supervision of Process Variables. W. ACO.\* E. Belcher, Jr., Minneapolis Honeywell Regulator
- 50-223. Centralized Control Board for Steam-Electric Generating Plants. H. L. Lowe, Ebasco Services, Inc.; R. L. Hodgkins, General Electric Co.

### 9:30 a.m.—Electronic System Engineering

- CP.\*\* Some Engineering Aspects of the Mechanism of Body Control. Robert Mayne, Goodyear Aircraft
- 50-266. Information Theory Applied to System Design. W. G. Tuller, Melpar, Inc.
- CP.\*\* Airborne Anti-Submarine Systems. T. B. Schillo, Glenn L. Martin Co.
- CP.\*\* A Special Purpose Analog Computing System for the Radar Triangulation Problem. R. E. Langworthy, R. M. Byrne, Goodyear Aircraft Corp.
- 50-267. The Further Development of Fluid Mappers. A. D. Moore, University of Michigan.

### 9:30 a.m.—Conference on Cathodic Protection

- CP.\*\* Various Cathodic Protection Applications Using Graphite Anodes. J. P. Oliver, Union Carbide and Carbon Corp.
- CP.\*\* Sources of Power for Cathodic Protection. F. F. Knapp, Montana-Dakota Utilities Co.
- 50-279- Cost Study of Generation of 80,000 Kw of D-C ACO.\* Power from Natural Gas. J. P. Smith, F. L. Kaestle. General Electric Co.

### 2:00 p.m.—Power Generation

- 50-222. Induced Currents in High Capacity Bus Enclosures. S. C. Killian, Delta-Star Electric Co.
- 50-268. Continuous Scavenging System for Hydrogen-Cooled Generators. D. S. Snell, L. P. Grobel, General Electric Co.
- 50-269. Control of Gas Turbines for Power Generation. D. C. Hoffmann, A. G. Mellor, N. E. Starkey, General Electric Co.
- 50-270. Thrust Bearing Problems and Their Solution on Turbine-Generator Units and Auxiliaries of the Consolidated Edison System. J. M. Driscoll, Consolidated Edison Co. of N. Y., Inc.; H. C. Otten, The Yonkers Electric Light and Power Co.

# TECHNICAL PROGRAM

### 2:00 p.m.—Switchgear

- 50-271. An Air Delayed Selective Overcurrent Tripping Device for Low Voltage Air Circuit Breakers. B. G. Tremblay, M. E. Horn, Westinghouse Electric Corp.
- 50-272. New Low Voltage Air Circuit Breaker with 50,000 Amperes Interrupting Capacity at 600 Volts A-C. M. E. Horn, J. J. Mikos, Westinghouse Electric
- 50-239. Ice Testing of Outdoor Disconnecting Switches to Simulate Field Conditions. J. B. Owens, Westinghouse Electric Corp.

# Friday, October 27

### 9:30 a.m.—Relays

- 50-233. A Study of Directional Element Connections for Phase Relays. W. K. Sonnemann, Westinghouse Electric Corp.
- 50-238. An Improved Reclosing Relay. L. E. Goff, General Electric Co.
- CP.\*\* The Conference for Protective Relay Engineers, Texas A&M College. L. M. Haupt, Agricultural and Mechanical College of Texas.
- CP.\*\* Operating Experience with Ground Distance Relays. M. P. Osburn, P. L. Dandeno, Hydro Electric Power Comm. of Ontario.

### 9:30 a.m.—Feedback Control Systems

- 50-231. Stability of Voltage Regulators. F. E. Bothwell, The University of Chicago.
- 50-274. Stability of Servomechanisms with Linearly Varying Elements. M. J. Kirby, Sperry Gyroscope Co.
- CP.\*\* System Frequency Response Derived from Transient Response. A. R. Teasdale, Jr., F. E. Brooks, Jr., J. P. German, The University of Texas.
- CP.\*\* Transient Analysis of Servo-mechanism. Andrew Vazsonyi, U. S. Naval Ordnance Test Station.
- 50-219. Integral Controller for Use in Carrier Type Servomechanisms. R. L. Cosgriff, Curtiss-Wright Corp.

### 9:30 a.m.—Oil Industry Applications

- CP.\*\* Application of Electric Motors in the Oil Pumping Industry. T. C. Lloyd, Robbins and Myers, Inc.
- CP.\*\* Design and Application of AC Motors for Crude Oil Production. G. A. Smith, Shell Oil Co.
- How the Petroleum Industry Uses Electric Power. W. H. Stueve, Oklahoma Gas and Electric Co.
- C.P.\*\* Electrical Engineering in Exploration for Petroleum. K. E. Burg, Geophysical Service, Inc.



Downtown Oklahoma City

### 2:00 p.m.—Transformers

- 50-220. Single-Phase Power Transformer Formed Cores. T. D. Gordy, G. G. Somerville, General Electric Co.
- 50-225. Transformer Noise and Its Confinement. Corbett McLean, Pacific Power and Light Co.
- 50-216. Economical Design of a Threephase Transformer. Ladislav Cigánek, Bratislava, Czechoslovakia.
- 50-275. Variations of Tank Pressure with Transformer Loading in Sealed Transformers. E. W. Tipton, Westinghouse Electric Corp.
- 50-217. Control Circuit Transformers. J. M. Frank, A. J. Hauck, Hevi Duty Electric Co. Presentation by title only.
- 50-273. Contributing Factors in Determining the Ratings of Power Transformers for Use on the Systems of the Hydro-Electric Power Commission of Ontario. D. B. Fleming, J. S. Lotimer, The Hydro-Electric Power Commission of Ontario. Presentation by title only.

### 2:00 p.m.—Oil Industry Applications

- CP.\*\* Application of AC Motors to Oil Well Pumping. Max Halderson, Phillips, Bartlesville.
- Selection of the Electric Motors for Oil Well Beam Pumping. J. N. Poore, General Electric Co.
- CP.\*\* Development and Operation of Reda Submergible Pumps. Joe Carle, Reda Pump Co.

# FALL GENERAL MEETING, OKLAHOMA CITY, OKLAHOMA

CP.\*\* Electric Oil Pumping. W. C. Dreyer, F. K. Smith, Westinghouse Electric Corp.

CP.\*\* Application of Capacitors in Oil Field Production.
W. B. Helms, Southwestern Public Service Co.;
W. R. Horrigan, C. B. Anderson Co.

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.

Trip 5. A tour through the downtown Okahoma City Building of the Southwestern Bell Telephone Company will afford an opportunity for members to see in operation a large communication center. The inspection party will see the following: the terminal of the buried intercity long-distance cables from the east to south; facility for local exchange telephone service; equipment and switchboard for originating, terminating, and "through" long-distance telephone traffic; information and intercepting switchboards; facilities for providing and monitoring radio program network service; facilities for telegraph and leased wire service; a switching center for teletypewriter exchange service; facilities and switchboard positions for mobile radio-telephone service; a modern test center. Tuesday, October 24, 2:00 p.m. and Wednesday, October 25, 4:30 p.m.

**Trip 6.** A tour, on Monday Evening, through the studio of WKY-TV Television Station will be of interest to the ladies as well as the members. WKY-TV was the pioneer television station in the state. The entire station will be inspected including studios, control rooms, transmitter rooms and movie projection rooms. Cameras and other equipment will be operated in full view of the audience. A balcony is available for the visitors to view live broadcasts and see and hear a program in actual process of being televised.

Fluid Mapper Program, Thursday, October 26, 8:00 p.m.

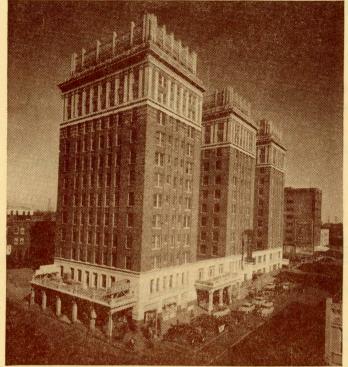
Developed by Professor A. D. Moore largely during the past two years, the devices he has called fluid mappers cause streamline fluid flow to give visual simulations of electrostatic, electromagnetic, heat conduction, and other analogous fields. During the program, an artificial stone slab is cast, and operated in a fluid mapper. Many color slides of the beautiful flow patterns will be shown.

HOTEL RESERVATIONS: All requests for room reservations should be sent directly to R. L. Jones, Chairman, Hotel Committee, 1101 Telephone Building, Oklahoma City, Oklahoma. Members are urged to send in their room requests early by completing the "Hotel Accommodation" card contained with the mailed announcement. All room reservations available at the Skirvin are now exhausted and future reservations will be filled at the Biltmore, Wells Roberts, Huckins, Black, Sieber, or Park-O-Tel. The latter two are auto type courts with car parking facilities. Room rates per day will be approximately as follows:

Single Room			
Double Room, Double Bed	6.00	to	8.50
Double Room, Twin Beds	6.50	to	8.50
Suites			
All Rooms are with Bath.			

Reservations are made for the night of October 22 and should be vacated by Friday Evening, October 27, unless other arrangements are made.

REGISTRATION: Advance registration cards contained



The Skirvin Hotel

with the mailed announcement should be mailed as promptly as possible to Mr. J. A. Taylor, Chairman, Registration Committee, 1950 Fall General Meeting, AIEE, General Electric Company, 1106 Perrine Building, Oklahoma City 2, Oklahoma.

In accordance with the policies as set up by the Board of Directors, a registration fee of \$3.00 will be required of 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. Do not enclose remittance with advance registration. Fees will be collected when registering.

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

#### **MEETING COMMITTEES**

Members of the Fall General Meeting Committee making arrangements are: W. B. Stephenson, Chairman; R. F. Danner, Vice-Chairman; Frank Meyer, Vice-Chairman; Ralph Randall, Vice-Chairman; M. C. Reed, Secretary.

The chairman of the various subcommittees are Sim Wright, Publicity; Bryce Brady, Program; Mrs. R. F. Danner, Ladies; Otis Howard, Inspection Trips; R. L. Jones, Hotel; J. S. Joseph, Sports; George Larason, Entertainment; J. A. Taylor, Registration; J. S. Wantland, Finance.

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