

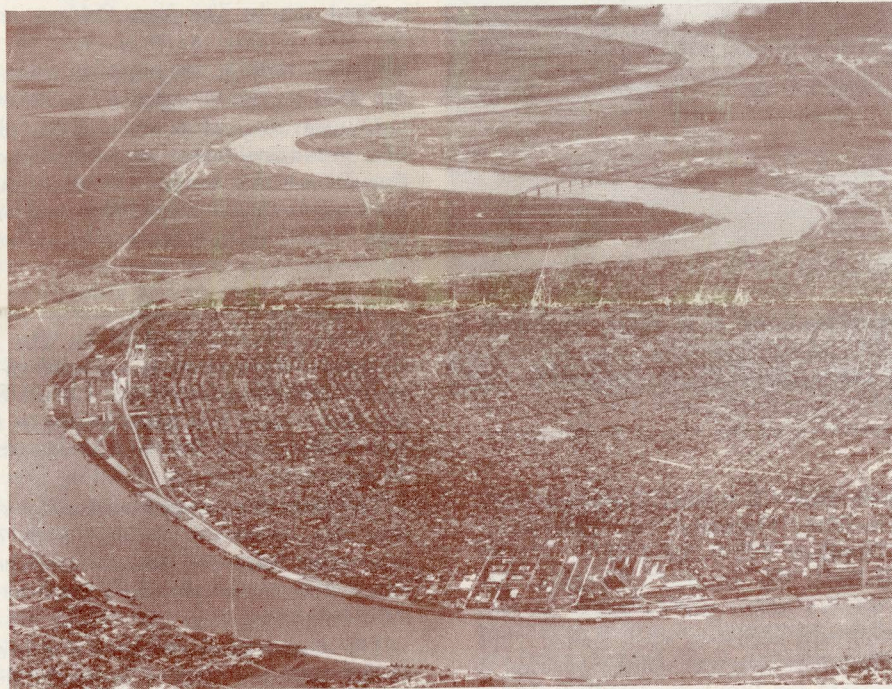


Fall General Meeting

OCTOBER 13-17, 1952

New Orleans, La.

Headquarters
Jung Hotel



New Orleans Skyline and Mississippi River

A full week of stimulating technical sessions, interest-packed inspection trips, and relaxing entertainment awaits the AIEE membership at the Fall General Meeting in New Orleans, October 13-17, 1952. Both the technical program and the inspection trips were planned with the wide interests of the membership in mind. Headquarters for the meeting will be the Jung Hotel.

Insulated Conductors, Power Generation, Education, Carrier Current, Magnetic Amplifiers, System Engineering, Rotating Machinery, Relays, Management, Safety, Feedback Control, The Chemical & Petroleum Industries in the South, Transmission and Distribution, Radio Communications, Communication Switching, Cathodic Protection, Wire Communication and General Industry Applications are the subjects scheduled for discussion at the technical sessions.

Inspection trips morning and afternoon will afford a cross-sectional view of New Orleans' varied industry with a large number of scheduled trips from which to choose. Many of these trips will feature the latest developments in plant design, machine tools and power generation. One of the most unusual trips will be the inspection of the Sewerage and Water Board facilities for the City of New Orleans.

The Honorable Robert F. Kennon, Governor of the State of Louisiana will deliver the keynote address at the general session on Monday, October 13 at 10:00 A.M.

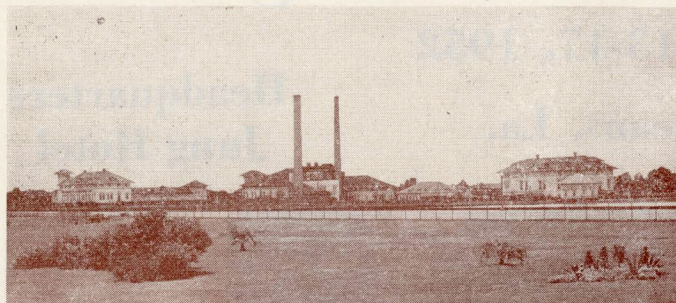
INSPECTION TRIPS: The Trips Committee for the Fall General Meeting has completed final arrangements for a number of inspections of New Orleans and surrounding industry. Advance reservations for these inspection trips

should be made by means of the advance registration card. However, remaining available tickets will be obtainable at the meeting at the Inspection Trips Desk. A nominal charge of one dollar will be made to cover the cost of transportation to and from inspection sites. The only exception is the trip to the Godchaux Sugar Plant which includes luncheon and for which the charge will be two dollars.

Sewerage and Water Board Plant (Tuesday, October 14, 9:30 A.M. and 1:30 P.M.): The Sewerage and Water Board of New Orleans operates a complete miniature utility system generating the greater part of its own power, owning and operating its own underground and overhead distribution system supplying its various pumping stations, etc. Its duties are threefold (1) to purify and distribute drinking water to the city, (2) Brings out all sewerage from the city and (3) to pump out all rain-water that falls in the city.

The trip to be conducted for the members of the AIEE will take the members first to Drainage Station No. 6, one of the largest drainage pumping stations in the world. Here may be seen the 14 foot Wood Screw Pumps developed by Mr. A. B. Wood, the present General Superintendent of the Sewerage and Water Board, alongside of the old vertical pumps that were the original equipment of this station. This station has a capacity of 6410 cu. ft. per second or approximately 32,000,000 gallons per minute.

The second station to be visited is Station "D." Here sewerage and drainage water may both be pumped at the same time but kept entirely separated. Here also are two large



Sewerage and Water Board Station, New Orleans, La.

frequency changers allowing public utility power delivered at 60 cycles per second to be converted to 24 cycles per second power for the Sewerage and Water Board. Several two unit synchronous motors allow cascading of frequencies to be used to obtain lower or higher speeds for various pumping conditions.

This trip is scheduled to be conducted ahead of a technical paper to be read by Mr. Louis T. Frantz, who for many years was associated with the system, and will give those members who avail themselves of the trip a better understanding of the paper.

The Kaiser Aluminum and Chemical Corporation's Chalmette Plant (Tuesday, October 14, Thursday, October 16, Friday, October 17, 9:30 A.M.): NOTE: Because of safety regulations, the number of persons per trip will be limited to 40. No ladies will be taken on this trip. Advance registration will facilitate visit. Leave your watches at home. The Chalmette site was chosen because it met the several requirements for this type of plant almost ideally. Nearby natural gas fields supply an abundant, cheap fuel, large quantities of which are required in the reduction process. The plant is on the banks of the Mississippi River allowing direct delivery of raw materials with a minimum of handling.

The plant will eventually consist of about 75 buildings on a plant site of 280 acres. The total power generating capacity on the plant site will be 478,200 kilowatts. One of the impressive sights at this plant is the power-house containing two rows of vertical gas burning diesel engines, each row containing 40 engines. These engines are directly connected to vertical D. C. generators set under the engines. An advanced type of voltage control is applied to the generators, all of which operate in parallel to supply the aluminum "pots" with an amazingly large current.

The delegates will be able to see the reduction process carried on and the actual pouring of the "pigs" of aluminum that are the end product of this plant.

Higgins Industries, Inc. (Tuesday, October 14, 1:30 P. M.): Higgins Industries are known all over the world for the vast number of landing craft and P. T. boats built during World War II. They are now engaged in building boats, some of which contain unique and new types of electrical equipment. Among these are a 65 foot tug and a 100 foot tug for the U. S. Navy and a 166 foot all-wooden non-magnetic mine sweeper. All of the major structural parts of this boat are built up of fabricated wood. In addition to the above craft there is a mass production schedule being carried out in the construction of 27 foot aluminum boats for the U. S. Army Engineers.

Celotex Corporation Plant (Tuesday, October 14, 1:30 P.M.): The New Orleans plant of the Celotex Corporation is the largest "board mill" in the world. Here the "bagass," that is the ground up and heretofore useless sugar cane stalks that are the residue of the sugar cane grinding mills, is used along with some other materials to make a variety of wall panels, refrigerator lining and acoustical control panels. The New Orleans area is the ideal location for such a plant as it is close to the cane mills and has abundant natural gas supplies since large quantities of heat are used in the manufacturing process.

Celotex, the end product of this plant, has very good heat and sound insulating properties and has found many uses throughout the world. The plant is situated on the West bank of the Mississippi River and on this trip the delegates will have a chance to see the industry that has grown up in this area.

Michaud Plant—Chrysler Corporation (Thursday, October 16, 9:00 A.M.): The Michaud Plant of the Chrysler Corporation is engaged in manufacturing engines to be used in tanks for the United States Army. The building that houses this plant is one of the largest single buildings in the world, the roof having an area of approximately 43 acres.

The plant is equipped with many varieties of high production rate, precision machine tools of the latest type. One interesting feature of this plant will be the aluminum foundry which may be completed by the time the delegates will make their inspection trip.

The engine produced here is a twelve cylinder V type air cooled gasoline with a specially designed cooling system for this application. After the engine is completed, it is set up in one of many very complete test stands and given a thorough test run. If it passes this test successfully, it is partially torn down, carefully inspected, reassembled and given a final test.

One of the many difficult problems that has arisen is the extensive dehumidification system necessitated by the damp climate in this area. The very high connected electrical loading of this plant has brought out some difficult problems and it is hoped that the delegates will be able to see the solutions of these problems when they come.

Rheem Manufacturing Company (Wednesday, October 15 and Thursday, October 16, 1:30 P.M.): The Rheem Manufacturing Company New Orleans plant is a pilot plant for the far flung manufacturing facilities of this company. This plant contains the largest lithographic press of its type in the world. Flat steel sheets of sizes up to those required for a standard 55 gallon oil drum are lithographed in several colors and then rolled into shape and welded. The equipment used was developed especially for this work and the welding devices are all electronically controlled for precise heating and timing.

The Nine Mile Point Generating Station (Wednesday, October 15, 1:30 P.M.): The Nine Mile Point Generating Station of the Louisiana Power & Light Company is typical of the modern generating station that is being built throughout this area to meet the rapid load increases due largely to the growth of industry in the Deep South. The climate in this section is particularly suitable for the so-called "outdoor" station of which this is a good example

and of course this allows considerable savings in construction and maintenance costs.

The first unit in this plant has been in operation for about a year. It is a 60,000 Kva unit embodying all of the latest features for reliable and economical operation. The second unit, of 100,000 Kva capacity, will be about 50% complete when the delegates see it, thus they will be able to appreciate some of the construction problems peculiar to this part of the country.

One of the more interesting features of this station is the "Functional" type control. A single control board has mounted on it a diagram of all of the steam generating and utilizing equipment along with the electrical generating and auxiliary equipment. All of the indicating instruments are mounted in their proper relative locations and the recording instruments are mounted on the rear of this panel. This control board allows one or two men to observe the functioning of all the plant equipment and to keep it operating at maximum efficiency.

Godchaux Sugars (Wednesday, October 15 and Friday, October 17, 9:00 A.M.): This trip will allow many of our delegates to see a sugar mill, that is a plant where the sugar cane is ground, for the first time. If the weather is favorable this fall, they will probably see the actual harvesting of the sugar cane, then the grinding, refining, and finally the packaging of the finished sugar.

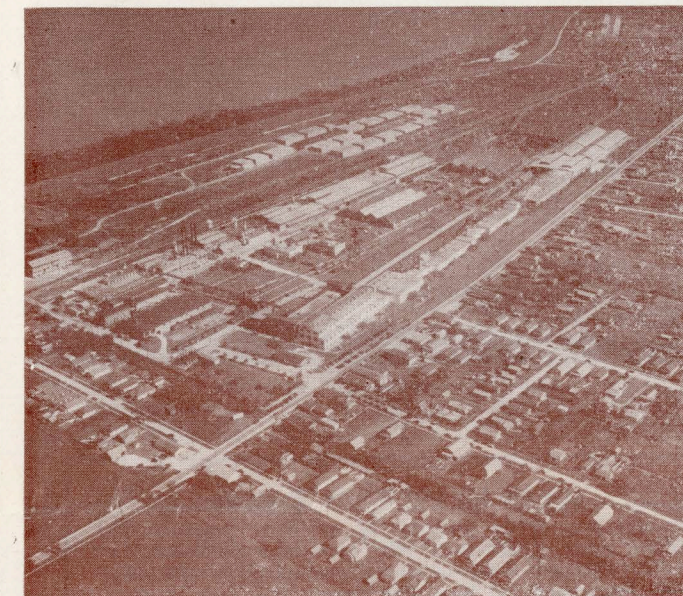
The Godchaux Sugar Plant is about 50 miles from New Orleans in the middle of a large sugar plantation. The sugar cane from the immediate plantation is supplemented by cane from nearby plantations and during that part of the year when there is no harvesting in Louisiana, raw sugar is imported from Cuba so that the refinery runs the year around.

This plant has been modernized, so there is now installed equipment ranging from the quite old up to the very latest. One of the triumphs of ingenuity is the development of methods whereby refined sugar may be stored in bulk so that the packaging plant can be operated at a steady rate, obviating the troubles attendant on seasonal operation.

Falstaff Brewing Corp. Plant No. 4 (Wednesday, October 15, 2:00 P.M.): The Falstaff Brewing Corp. Plant No. 4 in New Orleans has recently completed a modernization and expansion program that makes it one of the largest and finest of its kind in the South capable of producing over 1,000,000 barrels a year. The various operations have been modernized to the highest degree allowing a steady flow of production. Even the incoming empty bottles are unpacked by mechanical hands and placed on conveyors which carry them through the washing process.

We think that the delegates will find this trip very interesting as it furnishes a good example of how the application of electrical equipment has made possible many improvements and savings in industrial plants.

American Radiator and Standard Sanitary Plant (Wednesday, October 15, 9:30 A.M.): The American Radiator and Standard Sanitary Plant in New Orleans is a good example of how plants that were built during World War II for defense purposes may be adapted to peace time uses. The plant was originally built to construct large seaplanes and was therefore situated on the banks of Lake Pontchartrain so the completed seaplanes could be launched



Celotex Corporation Plant

directly from the plant. In addition, good railroad facilities are available. This plant has been adapted to the manufacture of a variety of vitreous china sanitary plumbing fixtures complete from raw materials to finished product. The fixtures are not only made in white but in several colors. Electricity plays an important part in the manufacturing processes and we think that the delegates will enjoy a visit to this plant.

ENTERTAINMENT AT NEW ORLEANS: When you think of the South you think of hospitality and entertainment. When you attend the convention in New Orleans you will have a demonstration of applied hospitality, entertainment par excellence and lots of it. Full programs will be provided for both ladies and members.

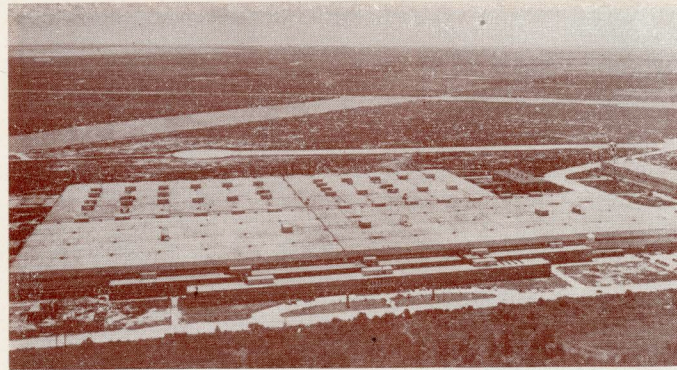
After you arrive and have your hotel accommodations, let the registration desk at the Jung Hotel know you are here, as there is a Cocktail Party arranged at the famous International House, for Sunday evening. A marvelous opportunity to renew old acquaintances and make new ones. If you wish, you can look Bourbon Street over, as the night goes on. If you were too tired or really found "some place," you can revisit it on Monday night (after the sessions), as that time is left open for sightseeing and some more getting acquainted and visiting.

Tuesday night there will be a smoker, that's right, a New Orleans smoker, food, drinks and entertainment. Stag! (The ladies will have been taken to a function in the suburbs.)

On Wednesday there will be a Dinner Dance, dress optional, at the beautiful Tulane Room of the Jung. Truly a gala affair with a wonderful band.

Thursday has been set up for a Gulf Coast Shrimp Boil at the Buena Vista Hotel, Biloxi, Mississippi. The trip will be made by busses, passing through the fabulous cypress swamp country of coastal Louisiana, the magnificent marsh and pine country of Mississippi and along the residential Gulf Coast. At the Buena Vista swimming may be enjoyed, and a wonderful shrimp boil, with all the trimmings.

Continued on page 8



Michoud Plant, Chrysler Corporation

ADVANCED COPIES OF PAPERS

Members may obtain preprints of numbered papers at the uniform price of 30c each (60c each to nonmembers), by sending enclosed order form and remittance to the AIEE Order Department, 33 West 39th Street, New York 18, N. Y. 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. Conference Papers denoted by CP.** are intended for presentation only, and are not available.

Monday, October 13

10:00 a.m.—General Session

“Address of Welcome” Governor Robert F. Kennon.

“Oil Progress in Louisiana” Henry J. Voorhies, Vice President and General Manager Standard Oil Co. Louisiana Div.

“Address” President D. A. Quarles.

2:00 p.m.—Insulated Conductors

52-281. Grounding and Corrosion Protection on Underground Electric Power Cable Sheaths and Oil or Gas Filled Pipe Lines. R. J. Kuhn, Consulting Engineer.

52-282. The Use of Trays and Troughs for Supporting Control and Power Cables in Electrical Installations. F. S. Benson, Pacific Gas & Electric Co.

CP.** Grounding Coaxial and Shielded Cable. Michael Manzi, J. H. Marsman, Sperry Gyroscope Co. and Morris Brenner, Burndy Engineering Co.

CP.** Some Operating Features of the Electrical System of the Sewerage and Water Board of New Orleans, La. L. T. Frantz, New Orleans, La.

2:00 p.m.—Power Generation

52-283. Surge Phenomena in Large Unit-Connected Steam Turbine Generators. P. A. Abetti, I. B. Johnson and A. J. Schultz, General Electric Co.

52-284. Field Investigation on the Surge Performance of a Large Unit-Connected Steam Turbine Generator. H. R. Armstrong, Detroit Edison Co., S. B. Howard and I. B. Johnson, General Electric Co.

52-285. Experience With Television for Direct Viewing of Furnaces. L. M. Exley, Long Island Lighting Co.

52-287. Television in Industry. G. H. Wilson, Diamond ACO.* Power Specialty Corp.

CP.** Television for Monitoring Stack Emission. E. R. Thomas, Consolidated Edison Co., and W. L. Norvel.

Tuesday, October 14

9:30 a.m.—Insulated Conductors

CP.** A Historical Review of Aluminum Applications in Industrial Cables. H. W. Biskeborn, Kaiser Aluminum & Chemical Corp.

CP.** Insulated Aluminum Conductors. E. G. Sturdevant, United States Rubber Co.

CP.** Significant Characteristics of Insulated Aluminum Cables. E. E. McIlveen, The Okonite Co.

CP.** Current Carrying Capacities of a Few Sizes of Aluminum Conductors. C. W. Zimmerer, Underwriters Labs., Inc.

CP.** Fundamental Problems Encountered in Aluminum Connections. C. P. Xenis, Consolidated Edison Co., Inc.

9:30 a.m.—Power Generation

52-286. Auxiliary Power System for Steam Electric Generating Stations. A. G. Mellor, R. A. Schmidt, Jr., General Electric Co.

52-274. Considerations in the Design of the Station Auxiliary System at the Encina Generating Station. T. H. Jacobsen, Pioneer Service & Engineering Co., and J. F. Sinnott, San Diego Gas & Electric Co.

52-279. Power Supply for Power House Auxiliaries. R. W. ACO.* Ferguson, Westinghouse Electric Corp.

CP.** Power Supply System for Station Auxiliaries. M. G. Lewis and S. H. Wright, Bechtel Corp.

9:30 a.m.—Carrier Current

52-275. Application of Line Traps to Power Line Carrier Systems. J. D. Moynihan, Westinghouse Electric Corp.

52-288. The Relation Between Bandwidth and Speed of Response in Power System Control Channels. J. S. Smith, General Electric Co.

52-280. R-F Hybrids Used for Paralleling Terminal Equipment for Closely Spaced Carrier-Current Channels. R. W. Beckwith, General Electric Co.

CP.** A New Line of Frequency Modulated Carrier Communication Equipment. F. B. Gunter, Westinghouse Electric Corp.

2:00 p.m.—Insulated Conductors

CP.** Insulated Aluminum Cables in Industrial and Utility Applications. E. E. McIlveen, The Okonite Co.

CP.** Forty Years Experience with Aluminum Bus at Niagara Falls, New York. William Boyd, Aluminum Company of America.

CP.** Test of Fittings on Insulated Aluminum Cable. J. Tompkins and E. Lanetot, Aluminum Company of America.

CP.** The Use of Aluminum Conductors in Industrial Electric Power Systems. A. L. Nelson, Consulting Engineer.

2:00 p.m.—Power Generation

52-291. Reactance Relays Discriminate Between Load Transfer Currents and Fault Currents on 2300 V. Station Service Generator Bus. G. B. Dodds and W. E. Marter, Duquesne Light Co.

52-289. Operating Experiences with Power Plant Auxiliary Systems. H. F. Tevlin and L. H. Romzick, Detroit Edison Co.

52-290. Application Features of Major Auxiliary Drive Motors in Electric Generating Stations. J. H. Ashby, A. E. Beardmore, R. C. Goodwin, and H. G. Schiff, General Electric Co.

CP.** Station Auxiliary Power Practices on Extended Hydro-Steam System. H. C. Austin, Southern California Edison Co.

2:00 p.m.—Management

CP.** Incentives to Accomplish Greater Productivity. R. J. Stockham, Stockham Valves and Fittings.

CP.** Stepping Stones to Good Industrial Relations. J. S. Gracy, Florida Power Corporation.

Wednesday, October, 15

9:30 a.m.—Safety

52-292. Improved Pole-Top Resuscitation. A. S. Gordon, Charles Frye and M. S. Sadove, University of Illinois.

CP.** Safety Regulations and How They Affect the Electrical Industry. L. D. Price, National Electrical Manufacturers Association.

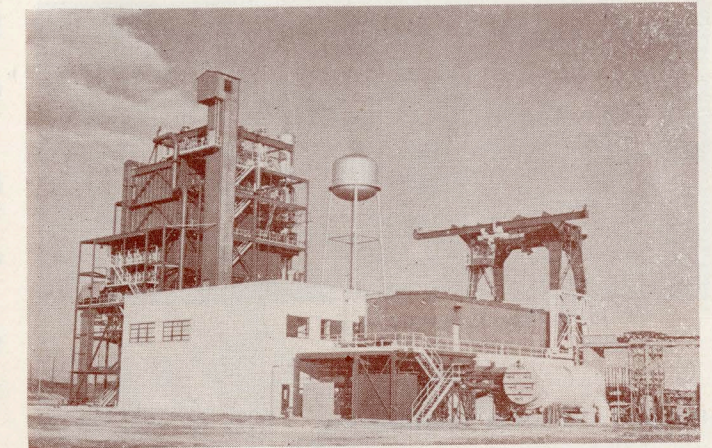
CP.** The Role of the Supervisor in Safety Work. W. H. Senyard, Louisiana Power and Light Co.

9:30 a.m.—Feedback Control Systems

52-277. Stabilization of a Servomechanism Subject to Large Amplitude Oscillation. E. S. Sherrard, General Electric Co.

52-272. Lead Networks Utilizing Saturable Core Memory. D. G. Scorgie, Naval Research Lab.

52-297. Synthesis of Feedback Control System by Phase-angle Loci. Yaohan Chu, Cambridge, Mass.



Nine Mile Point Station, Louisiana Power & Light Co.

52-298. Vacuum Tube Techniques Applied to a Hydraulic Amplifier. J. A. Baring, Askania Regulator Co.

52-211. Signal Component Control. D. J. Gimpel and J. F. Calvert, Northwestern University. Presentation by title only for discussion.

52-200. Feedback Control Systems with Dead-Time Lag or Distributed Lag by Root-locus Method. Yaohan Chu, Cambridge, Mass. Presentation by title only for discussion.

52-309. Ferroelectric Materials as Storage Elements for Digital Computers and Switching Systems. J. R. Anderson, Bell Telephone Labs., Inc. Presentation by title only for discussion.

52-310. Design Improvements and Operating Experience with 10-KC Network Analyzers. J. D. Ryder, University of Illinois and W. B. Boast, Iowa State College. Presentation by title only for discussion.

9:30 a.m.—Education

CP.** Conference on the Manpower Shortage in Power Education. J. D. Ryder, University of Illinois.

CP.** Opportunities for Engineers in the Electric Utility Industry. R. F. Danner, Oklahoma Gas & Electric Co.

CP.** The Utilities and Power Education. G. S. Dinwoodie, New Orleans Public Service, Inc.

CP.** The Equipment Manufacturer and Power Education. H. N. Muller, Westinghouse Electric Corp.

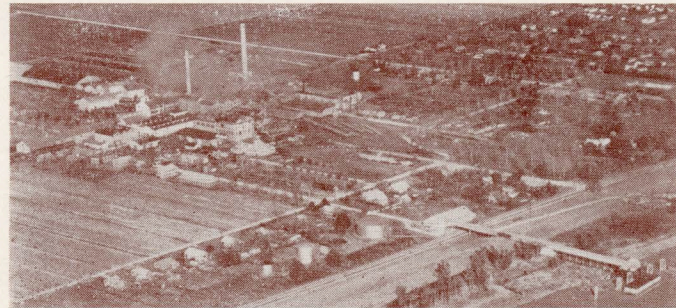
2:00 p.m.—Magnetic Amplifiers

52-271. Magnetic Amplifiers of the Self-Balance Potentiometer Type. W. A. Geyger, Naval Ordnance Lab.

52-293. Single-Core Magnetic Amplifier as a Computer Element. R. A. Ramey, Naval Research Lab.

CP.** Ferro-Resonant Circuits for Digital Computers. C. F. Spitzer, General Electric Co.

CP.** Dynamic Hysteresis Loops of Several Core Materials Employed in Magnetic Amplifiers. H. W. Lord, General Electric Co.



Godchaux Sugars

- CP.** Washing High Voltage Equipment at the Ethyl Corporation. W. G. Whitley, Ethyl Corp.
- CP.** Service Engineering Organization and Problems Peculiar to the Chemical Industry. W. C. Dreyer, Westinghouse Electric Corp.
- CP.** Lighting of a Southern Chemical Plant. J. H. Snow, The Dow Chemical Co.
- CP.** Alcoa Point Comfort Power Installation. Howard Keefer, Aluminum Co. of America.

9:30 a.m.—Switchgear

- 52-268. Selecting Station Type Switchgear Equipment for Large Generating Stations. K. T. Ashdown, General Electric Co.
- 52-295. Application of Aluminum Channel Conductors for Station Bus. E. J. Casey and N. Swerdlow, General Electric Co.
- 52-269. A New Heavy Duty Three Phase Oil Circuit Reclosure. A. Van Ryan, Klye Products Plant.
- 52-296. The Effect of Repeated Faults on Fuse Characteristics. R. E. Riebs, Line Material Co.

2:00 p.m.—Transmission and Distribution

- CP.** Trends in High Voltage Transmission. S. B. Griscom and A. A. Johnson, Westinghouse Electric Corp.
- 52-278. Insulation Coordination. C. F. Wagner, R. L. Witzke, E. Beck and W. L. Teague, Westinghouse Electric Corp.
- 52-299. Power Losses in Interconnected Transmission Networks. H. W. Hale, Purdue University.
- 52-273. Generalized Hunting Equations of Power Systems. W. G. Heffron, Jr., G. M. Rosenberry, and F. S. Rothe, General Electric Co.
- 52-270. Operation of Synchronous Condensers on the Southern California Edison System. C. R. Canady and J. H. Drake, Southern California Edison Co. Presentation by title only for discussion.

2:00 p.m.—The Petroleum Industry in the South

- CP.** Operating Experience on the World's Largest Products Line. R. S. Cannon and F. Armstrong, Plantation Pipe Line Co.
- CP.** Pipeline Stations by Supervisory Control. Clyde Hepler, Pan American Pipe Line Co.
- CP.** The Electrical System Reliability Required in Petroleum Refining Operations. E. R. Felton, Esso Standard Oil Co.
- CP.** Byproduct Power for Topping Turbine. J. B. Glasby, Atlantic Refining Co.

2:00 p.m.—Radio Communications

- CP.** Radio Aids to Navigation. L. E. Brunner, U. S. Coast Guard.

2:00 p.m.—System Engineering

- CP.** Load Forecasting—A Method Based on Economic Factors. F. W. Brooks, Cleveland Electric Illuminating Co.
- CP.** Forecasting the Demand for Electricity. R. G. Hooke, Public Service Electric & Gas Co.
- CP.** Load Forecasting and Utilization of Forecasts. Carl Kist, Department of Water and Power, Los Angeles, Cal.
- CP.** A Suggested Approach to Load Forecasting. C. L. McNeese, Houston Lighting and Power Co.

2:00 p.m.—Rotating Machinery

- CP.** Advantages of Operating Turbogenerators at Increased Hydrogen Pressures. J. W. Batchelor, Westinghouse Electric Corp.
- CP.** Operating Experience with Supercharged Rotor Cooling. L. T. Rosenberg, Allis-Chalmers Mfg. Co.
- CP.** Thermalastic Insulation for High-voltage Waterwheel Generators. W. Schneider, Westinghouse Electric Corp.
- CP.** Starting Torque of a Single-phase, Single-Winding Motor. M. S. Pendergast, Southwestern Louisiana Institute.

Thursday, October, 16

9:30 a.m.—Relays

- 52-294. Ground Relay Polarization. J. L. Blackburn, Westinghouse Electric Corp.
- CP.** More About Setting Industrial Relays. F. P. Brightman, General Electric Co.
- CP.** Protection of Generators Against Unbalanced Current. J. E. Barkle and W. E. Glassburn, Westinghouse Electric Corp.
- CP.** Improved Sensitivity of Relay for Primary Networks. C. A. Mathews, General Electric Co.

9:30 a.m.—The Chemical Industry in the South

- CP.** Aspects of Delivering Constant Current to an Electrolytic Cell Line. E. H. Cox, Ethyl Corp.

- CP.** Radio Activities of the Air Navigation Development Board. W. M. Young.
- 52-300. Radio Interference Control. C. F. Maylott, Bendix Aviation Corp.
- CP.** PTM Microwave Applications in the Pipe Line and Utilities Field. R. G. Maddox, Federal Telephone and Radio Corp.

Friday, October 17

9:30 a.m.—Transmission and Distribution

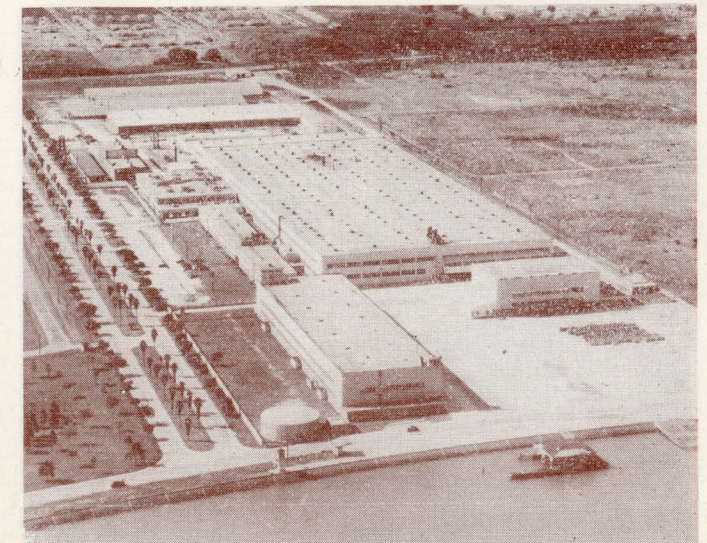
- 52-301. Developments and Experience with Series Capacitors in Sweden. G. Jancke and K. F. Akerstrom, Swedish State Power Board. For presentation by title only for discussion.
- 52-302. A Simplified Sag Tension Method for ACSR. C. A. Jordan, General Cable Corp.
- 52-303. Determination of Resistance to Ground of Grounding Grids. A. J. McCrocklin, University of Texas, and C. W. Wendlandt, Consolidated Vultee Aircraft Corp.
- CP.** Resistance of Exposed Clamp Type Connectors for ACSR Conductor over a Five Year Period. W. F. Bonwitt, Burndy Engineering Co., Inc.
- CP.** Unbalance of Untransposed Overhead Lines. E. T. B. Gross, Ray Berman and C. T. Wint, Illinois Institute of Technology.

9:30 a.m.—Communication Switching Systems

- CP.** Development of the Wire Contact Relay. R. E. Markle, International Business Machines Corp.
- 52-304. A New General Purpose Relay for Telephone Switching Systems. A. C. Keller, Bell Telephone Labs.
- 52-276. Selective Control Switching System for Radio Telegraph Transmission. J. M. Robinson, North Electric Mfg. Co.
- CP.** Telephone System Applications of Recorded Machine Announcements. W. Bennett, Bell Telephone Labs., Inc.

9:30 a.m.—Cathodic Protection

- 52-305. Measurement of Cathodic Protection Currents from Sacrificial Anodes. H. N. Hayward and R. M. Wainwright, University of Illinois.
- 52-306. The Use of Graphite Anodes for Cathodic Protection of the Bottoms of Inactivated Ships. J. P. Oliver, National Carbon Co.
- CP.** Cathodic Protection of Refinery Equipment. Derk Holsteyn, Shell Oil Co.
- CP.** Cathodic Protection of Electrical Substations and Power Plants.



New Orleans Plant, American Radiator & Standard Sanitary Corp.

2:00 p.m.—Wire Communications System

- 52-307. Type 0 Carrier Telephone. J. A. Coy and E. K. Van Tassel, Bell Telephone Labs., Inc.
- CP.** Transposition Designs for Type 0 Carrier Systems. E. Rentrop and L. Hochgraf, Bell Telephone Labs., Inc.
- CP.** Applications of the Type 0 Carrier System. J. Dechovitz, Southern Bell Telephone and Telegraph Co.
- CP.** The 45A Carrier System. R. S. Caruthers, Lenkurt Co., Inc.

2:00 p.m.—General Industry Applications

- CP.** Regulating Systems for Industrial Applications. V. B. Baker, W. R. Harris, Westinghouse Electric Corp.
- 52-308. Voltage Rating vs. Horsepower of Synchronous and Induction Motors. C. E. Miller, General Electric Co.
- CP.** A Modern Textile Distribution System. N. Stadtfeld and J. R. Potter, Westinghouse Electric Corp.
- 52-339. Load Characteristics of Five All-Electric Residences Using the Heat Pump for Year-Round Air Conditioning. Philip Sporn and E. R. Ambrose, American Gas & Electric Service Corp. Presentation by title only for discussion.
- 52-340. Residential Heat Pump Experiments in Philadelphia—Suggested Possibilities for Practical Applications. Constantine Bary, Philadelphia Electric Co. Presentation by title only for discussion.
- 52-341. Residential Heat Pump Experiments in Philadelphia—Earth as a Heat Source. A. H. Kidder, J. H. Neher, Philadelphia Electric Co. Presentation by title only for discussion.
- 52-342. Residential Heat Pump Experiments in Philadelphia—Installation and Operating Experience. J. H.

AIEE FALL GENERAL MEETING



Port of New Orleans

Harlow, G. E. Klapper, Philadelphia Electric Co.
Presentation by title only for discussion.

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.

Continued from page 3

If your thoughts turn to golf, guest cards may be had for four famous courses, New Orleans Country Club, Metairie Country Club, Colonial Country Club and Audubon Country Club.

LADIES ENTERTAINMENT: The ladies will enjoy the Sunday Cocktail Party at International House, and meet our friends and get acquainted with the other ladies. Every morning will start with a bracer in the Coffee Room, the mezzanine of the Jung.

Tuesday luncheon at the New Orleans Country Club. Truly a delightful place, with sightseeing tours of the French Quarter during the afternoon, followed by a magnificent buffet supper at Metairie Country Club (what food), with Canasta, Bridge and Bingo following.

Wednesday starts with coffee at the Jung, followed by luncheon at the Patio Royal. Walking tours of the surrounding French Quarter, visiting courtyards, hearing the stories of the Old Town. Of course, Wednesday night is the Dinner Dance with the ladies joining their husbands for a gala time.

Thursday will again start with Coffee at the Jung, with the Biloxi trip following, passing through magnificent country, past beautiful homes and always the Gulf with its miles of beaches.

Friday will start with Coffee at the Jung for the last time, with luncheon served at the Yacht Club on the shore of Lake Pontchartrain followed by a sightseeing tour through the new sections of the city and the suburbs.

For a limited group of the visiting ladies, interested in harbor activities, a trip on the "Good Neighbor" may be enjoyed on Wednesday, instead of the walking tour. If you wish to take the harbor cruise, register early, as the capacity of the vessel is limited. Southern hospitality in action. Full programs for the men and their ladies; a wonderful time in New Orleans.

HOTEL INFORMATION: Rooms will be available at the headquarters hotel, the Jung Hotel at the following rates. However, all requests for room reservations must be addressed to Mr. H. A. Schaeffer, Jr., 2518 Pressburg Street, New Orleans 22, Louisiana as the member hotels of the New Orleans Hotel Association do not accept direct requests in connection with the scheduling of conventions.

Single Room (One Person)—\$6.00, \$7.00, \$8.00.

Double Room, Twin Beds (Two people)—\$9.00, \$10.00, \$11.00, \$12.00.

Double Room, Double Bed (Two people)—\$8.00, \$9.00, \$10.00, \$11.00.

Suites—\$20.00, \$25.00, \$30.00, \$35.00 and \$50.00.

REGISTRATION

Please register in advance by returning the accompanying advance registration card, properly filled out. Arrangements have been made to expedite the registration of those who promptly send in their cards. The registration fee, payable at the meeting, is \$3.00 for members and \$5.00 for non-members. No fee is required of enrolled students and immediate families of members. Reservations for luncheons, social functions, and inspection trips should be made at the ticket sale desk.

GENERAL INFORMATION

Information on all features may be obtained at the registration desk. The bulletin board near the desk will contain notices concerning time and point of departure of all inspection trips and other information of general interest. Please consult it frequently.

The members of the **1952 Fall General Meeting Committee** are James M. Todd, Chairman; Charles P. Knost, B. P. Babin, B. E. Segal, Vice-Chairmen; E. I. Blanchard, Secretary-Treasurer; E. S. Lammers, Jr., Vice-President District #4; H. E. Pritchard, Jr., J. Robert Rombach, Jr., Members-at-Large; F. E. Johnson, Technical Programs; H. C. Swan, Inspection Trips; James C. Ryan, Publicity; B. H. Bell, Entertainment; H. A. Schaeffer, Jr., Hotels and Registration; W. D. Stroud, Finance; W. J. Drawe, Transportation; M. J. Cade, Printing; W. S. Leake, Sports; L. T. Frantz, Reception; D. H. Vliet, Students; Mrs. J. R. Rombach, Jr. and Mrs. Albert Fransen, Ladies.

Issued by

AMERICAN INSTITUTE OF ELECTRICAL ENGINEERS

33 West 39th Street, New York 18, N. Y.

PRINTED IN U.S.A.