

SOUTHERN DISTRICT MEETING

BIRMINGHAM, ALABAMA

NOVEMBER 3-5, 1948



**Headquarters
Tutwiler Hotel**



BIRMINGHAM "THE MAGIC CITY"

FEATURING THE INDUSTRIAL RENAISSANCE OF THE SOUTH

Three technical sessions have been scheduled, well filled with papers related to the general theme. Electronics, power, electrical applications and other subjects of technical interest and relating to the general theme should prove highly instructive.

Southern District Meeting — Program — Birmingham, Ala., November 3-5, 1948

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 remittance to the AIEE Order Department, 33 West 39th Street, New York 18, N. Y. District papers denoted by DP* 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. Most of the papers ultimately will be published as AIEE PROCEEDINGS and in the TRANSACTIONS.

Wednesday, November 3

8:30 a.m.—Registration

10:00 a.m.—Opening Session

H. J. Scholz, Presiding

Address of Welcome: The Hon. Cooper Green, President of City Commission

Remarks: Conference General Chairman F. C. Weiss

Remarks: Vice-President J. H. Berry

Address: "Our Institute" by President Everett S. Lee

2:00 p.m.—Technical Session

L. M. Smith, Presiding

DP.* Southern Bell Applies Electronics. J. D. Askew, Southern Bell Telephone and Telegraph Co.

48-262 Carrier Channels for Telemetry. T. DeWitt Talmage, Tennessee Valley Authority.

DP.* A Load Control Installation in the South. T. H. Mawson, Commonwealth & Southern Corporation.

DP.* Installation, Operating and Maintenance of Two-Way Radio. Blair Jenkins, Jr., Carolina Power & Light Co.

DP.* A Linear Analysis of a Tuned Plate Oscillator. Craig Harris, University of Tennessee.

DP.* The Operational Amplifier. Nicholas J. Gagliano, Tulane University.

5:30 p.m.—Social Hour

7:00 p.m.—Banquet (ladies invited)

C. S. Thorn, Presiding

Address by Mr. Thomas W. Martin, President, Alabama Power Company, "Industrial Research in the South."

Thursday, November 4

9:00 a.m.—Technical Session

E. W. Robinson, Presiding

DP.* Sectional Paper Machine Drives. V. B. Baker and E. H. Vedder, Westinghouse Electric Corporation.

DP.* Unit Substations for Modern Power Distribution. D. E. Straley, General Electric Company.

DP.* Heavy Electrical Equipment as Applied to the Tennessee Coal, Iron & Railroad Company. W. W. Garrett, Jr., Tennessee Coal, Iron & Railroad Co.

DP.* Recent Developments in Power Transformers. Gordon W. Clothier, Allis-Chalmers Mfg. Co.

DP.* The Oilostatic Cable System. Rhea P. Lapsely, The Okonite-Callender Cable Company.

DP.* Electric Mass Transportation. John Gerson, Georgia Power Company.

DP.* Electrostatic Air Cleaning in the Textile Industry. R. P. Posey and C. H. McWhirter, Westinghouse Electric Corporation.

12:00 m.—Inspection Trips

Radio Center.

Southern Research Institute.

Underground Coal Gasification Experiment of the U. S. Bureau of Mines and the Alabama Power Company.

110 kv Oilostatic Cable Installation of Birmingham Electric Company.

7:00 p.m.—Banquet

J. H. Berry, Presiding

Address by Dr. John M. Gallalee, President, University of Alabama, "The Southern College and Southern Industry."

Friday, November 5

9:00 a.m.—Technical Session

Wm. J. Miller, Presiding

DP.* Electrical Engineering for Atomic Energy. D. W. Cardwell, Oak Ridge National Laboratories.

48-318 Causes and Effects of Stray Electrical Currents in Coal Mines. L. H. Harrison, U. S. Bureau of Mines.

DP.* Electricity is an Integral Part of Agriculture, W. J. Ridout, Jr., Edison Electric Institute.

DP.* Potential Gradients Within and Around Substation Ground Fields. C. C. Jones and C. R. Jager, Alabama Power Company.

DP.* Electricity Serves the Construction Industry. D. B. Clayton, Knight Electric Company.

DP.* The Specialty End of the Electrical Manufacturing Industry. Gordon Berry, Electric Products Co.

1:30 p.m.—Inspection Trips

Radio Center.

Southern Research Institute.

Tennessee Coal, Iron & Railroad Company hot strip and tin plate mills.

110 kv Oilostatic Cable Installation of Birmingham Electric Company.

DP.*: District papers, no advance copies are available; not intended for publication in Transactions.

Inspection Trips—Thursday and Friday afternoons will be devoted to inspection trips to local industries and other places of interest. Arrangements have been made for inspection of the tin plate mill and the hot strip mill of the Tennessee Coal, Iron and Railroad Company on Friday afternoon. This trip requires approximately three hours and those interested should assemble not later than 1:30 p.m. On Thursday arrangements have been made for a party to see the experiment in underground gasification of coal being conducted by the United States Bureau of Mines and the Alabama Power Company at Gorgas, Alabama. This trip requires approximately six hours and those interested should assemble not later than 12:00 noon.

On Thursday and Friday afternoons parties will be organized to visit the laboratories of the Southern Research Institute, the 110 kv Oilostatic Cable installation of the Birmingham Electric Company, and Radio Center atop Red Mountain where AM, FM and television broadcasting equipment is in service or being installed. A charge of \$1.00 will be made for each inspection trip.

Hotel Reservations—Those who will attend the meeting should make reservations by filling in and mailing the enclosed advance Registration and Hotel Reservation Card as early as possible. Arrangements have been made with the principal hotels in Birmingham for a sufficient number of rooms at regular commercial rates for the estimated attendance, but due to the unusual demand for accommodations



Laboratory Scene — Southern Research Institute

for week ends during the football season, it will be necessary to release any unused accommodations three days prior to the meeting. Unless specifically arranged otherwise, rooms must be vacated by 6:00 p.m. on Friday, November 5th. Special low-cost accommodations will be available for a limited number of students. Meeting headquarters will be in the Tutwiler Hotel. All other hotels are within walking distance.

Advance Registration—In order to save time and to assist the various committees in arranging for the accommodation and entertainment of those who attend, space has been provided on the attached Registration and Reservation Card for pertinent information. These cards should be filled out and mailed to the committee chairman (J. W. Graff, 600 North 18th Street, Birmingham 3, Alabama). Registration fee will be \$2.00 for members and \$3.00 for non-members. Everyone attending or participating will be requested to register, but no charge will be made for students and families of Institute members.

COMMITTEE CHAIRMEN

General Chairman, F. C. Weiss

Co-Chairman, E. W. Robinson

Finance, C. S. Thorn

Hotel and Reservation, J. W. Graff

Technical Papers and Program, L. M. Smith

Entertainment and Sports, W. H. Hassinger, Jr.

Attendance and Publicity, E. R. Coulbourn

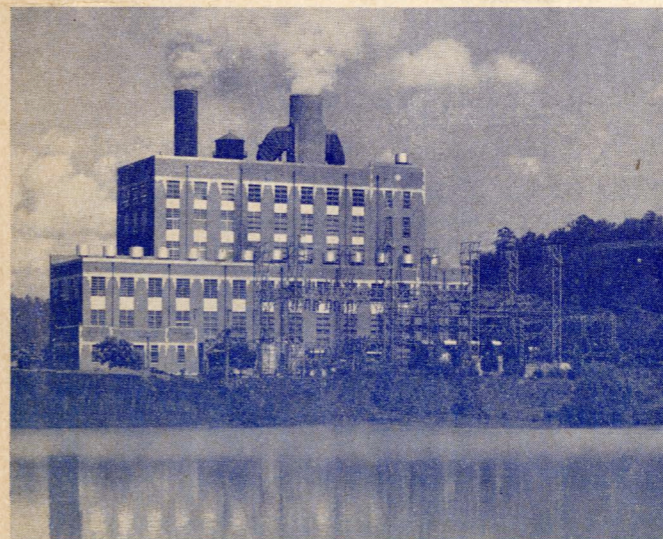
Transportation and Inspection, A. G. Morton

Student Activities, Prof. W. J. Miller

Ladies Program, Mrs. T. H. Mawson

Ladies Entertainment—A full program of entertainment will be provided for visiting ladies. On Wednesday there will be a sight-seeing trip of the city with a luncheon at the Birmingham Country Club, and a social hour and banquet Wednesday evening at the Tutwiler Hotel.

On Thursday there will be a luncheon at the Mountain Brook Club followed by bridge or golf for those ladies desiring to play, and a banquet at the Molton Hotel for ladies only at 7:00 p.m.



Alabama Power Co. — Gorgas Steam Plant No. 2



Photo Courtesy Birmingham Chamber of Commerce

"Vulcan," largest iron man in the world and second largest statue in America. It is 53 feet tall and is mounted on a 120-foot pedestal atop Red Mountain overlooking the City of Birmingham. It was cast in a Birmingham foundry of pig iron, made from iron ore from the Birmingham district and sent to the World's Exposition in St. Louis in 1904. It typifies natural resources of the district, the only place in the world where coal, iron and limestone, the three essentials for making steel, are found together in one mountain.

On Friday morning arrangements have been made for inspecting the plant of the Bradford-Norton Millinery Company. Ladies are also invited to attend any of the inspection trips arranged for the men. A charge of \$1.00 will be made for each luncheon and the Thursday evening banquet. This will cover any inspection trip or activity associated with the luncheon.

It would be very helpful to the committee arranging for the ladies entertainment if advance Reservation Cards would indicate the number of ladies planning to attend.

Sports—For those who so desire, arrangements can be made for golf at several excellent courses, skeet or trap shooting at a sky-line course, tennis, or riding.

Entertainment—On Wednesday evening at 5:30 p.m. there will be a social hour followed at 7:00 p.m. by a banquet at the Tutwiler Hotel. The ladies are invited.

On Thursday evening at 7:00 p.m. there will be a banquet at the Tutwiler Hotel for men only (a separate meeting is scheduled at this same time for lady visitors). There will be a charge of \$5.00 per plate for each of these banquets.

It would be of considerable help to the committees planning these entertainments if those planning to attend these two banquets would so indicate on their advance Reservation Card.

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