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## Committees

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### GENERAL

W. S. Rodman, *Honorary Chairman*  
James P. Barnes, *Chairman*  
E. D. Wood, *Vice Chairman*  
A. S. Hoefflin, *Secretary*

Philip P. Ash	F. H. Miller
James Clark, Jr.	L. S. Streng
G. W. Hubley	Stanley Warth
D. C. Jackson, Jr.	H. W. Wischmeyer

### TECHNICAL PROGRAM

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D. C. Jackson, Jr.	H. W. Wischmeyer
A. W. Lee, Jr.	E. D. Wood

### HOTELS AND REGISTRATION

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Chas. E. Barrett	G. M. Miller
Chas. Ewing	Carl P. Nachod

### TRANSPORTATION AND INSPECTION

H. W. Wischmeyer, *Chairman*

B. M. Birgman	F. W. Russell
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### ENTERTAINMENT

Stanley Warth, *Chairman*

L. H. Bauer	J. L. Gray
S. T. Fife	R. E. Tafel

### STUDENT ACTIVITIES

D. C. Jackson, Jr., *Chairman*

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T. F. Bull	F. R. Maxwell
R. W. Dickey	L. L. Patterson
S. T. Fife	S. R. Rhodes
T. W. Fitzgerald	W. S. Rodman
R. S. Fouraker	W. J. Seeley
W. E. Freeman	J. G. Tarboux
W. W. Hill	M. B. Voorhies
J. E. Lear	J. M. Weil

### ATTENDANCE AND PUBLICITY

E. D. Wood, *Chairman*  
T. W. Voils, *Vice Chairman*

L. O. Adams	E. E. George
T. F. Ball	L. L. Newman
J. H. Berry	J. R. Smith
M. Eldredge	Joseph Weil
E. S. Fitz	W. C. White
W. E. Freeman	H. L. Wills

### FINANCE


James Clark, Jr., *Chairman*

B. M. Brigman	W. H. Mansfield
A. W. Lee, Jr.	F. H. Miller
R. E. Tafel	

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## AMERICAN INSTITUTE of ELECTRICAL ENGINEERS

1884  1930

# Southern District Meeting

Louisville, Ky.

November 19-22

1930

BROWN HOTEL



Power Plant and Dam of the Ohio Falls  
Hydroelectric Development  
at Louisville, Ky.

# Southern District Meeting

Louisville, Ky. ~ November 19-22, 1930



VARIETY of engineering developments, pleasant entertainment, instructive and enjoyable trips to points of engineering and historical interest are offered in this program of a four-day meeting of the Southern District to be held at Louisville, Ky., November 19-22. Headquarters will be at the Brown Hotel.

## Engineering Papers

Many important subjects, such as lightning, relay practice, power generation, railway electrification, electrolysis, noise in transformers, welding and lighting airway beacons direct from transmission lines, are described in the papers and will be discussed subsequent to their presentation. A complete list of papers, names of authors and companies with which they are affiliated is given in a following part of this program.

## Student Activities

A student technical session will be held on Thursday morning, November 20, at 10:00 a.m., in which papers will be presented by the students. A conference on student activities will be held on Thursday afternoon.

## Registration and Hotel Reservations

Members should register in advance by filling out and mailing the enclosed A.I.E.E. Advance Registration Card.

Reservations for rooms should be made with the Brown Hotel direct by filling out and mailing the enclosed hotel card. The Brown Hotel rates are given on this card.

Upon arrival at the meeting members should register promptly at the Registration Desk.

## Entertainment

There will be an informal Smoker on Wednesday evening at which Mr. E. L. Manning of the General Electric Research Laboratories will present interesting developments in the electrical sciences.

On Thursday evening there will be a formal Dinner-Dance in the ballroom of the Brown Hotel. Following the dinner there will be various entertainment features, which will be announced later, and dancing.

Golf will be arranged for any time to suit the convenience of the player.

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## LADIES' ENTERTAINMENT PROGRAM

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### Wednesday

- 10:00 a.m.—Welcome and announcements of activities
- 3:00 p.m.—Sightseeing tour of residential section of city and parks
- 8:00 p.m.—Ladies are invited to attend the informal Smoker and lecture

### Thursday

- 12:00 m.—Bridge Luncheon at the Louisville Country Club
- 7:00 p.m.—Dinner Dance

### Friday

- 10:30 a.m.—Shopping Tour of the business section of Louisville
- 2:00 p.m.—Matinee



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# PROGRAM

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## Wednesday

9:00 a.m.—Registration

10:00 a.m.—Meeting called to order by General Chairman, J. P. Barnes

Welcome by the Mayor of Louisville  
Professor Rodman, *Presiding*

Remarks: Mr. W. S. Lee, *President, A.I.E.E.*  
Mr. F. L. Hutchinson, *National Secretary, A.I.E.E.*  
Professor Rodman, *Vice-President of the Southern District, A.I.E.E.*

10:30 a.m.—Selected Subjects

Electricity in the Cement Industry  
R. H. ROGERS,  
General Electric Co.

Automatic Arc Welding in the Electrical Industry  
G. H. KOCH  
Westinghouse Electric & Mfg. Co.

A Cooperative Electrolysis Survey in Louisville, Ky.  
W. C. WHITE  
Southern Bell Telephone & Telegraph Co.

2:00 p.m.—Transportation

Electric Railways  
MR. CHARLES GORDON,  
Managing Director, American Electric Railway Association

Lackawanna Electrification  
E. L. MORELAND  
Jackson & Moreland, Engineers

Progress in the Design of Single-Phase Series Railway Motors  
H. G. JUNGK  
Westinghouse Elec. & Mfg. Co.

8:00 p.m.—Informal Smoker

Lecture and Demonstration  
MR. E. L. MANNING  
General Electric Research Laboratories

## Thursday

10:00 a.m.—Student Technical Session

PROFESSOR D. C. JACKSON, JR., *Presiding*

2:00 p.m.—Transmission and Distribution

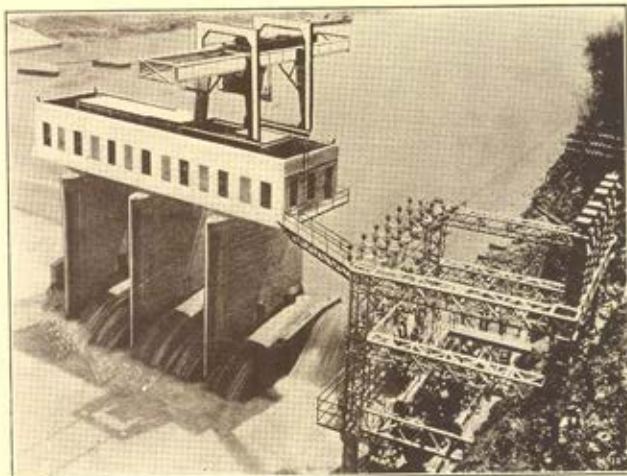
Lightning Investigation at Alocu, Tenn.  
J. E. HOUSLEY  
Knoxville Power Company

Operating Experience with Reactance Type Distance Relays  
E. E. GEORGE  
The Tennessee Electric Power Co.

Trailer Mounted Substations for Emergency Use  
F. L. MOSER & H. B. WOLF  
Duke Power Co.

Lighting Airway Beacons Direct from High Voltage Transmission Lines  
F. W. CARTLAND  
Westinghouse Elec. & Mfg. Co.

7:00 p.m.—Formal dinner-dance and entertainment in the ball room of the Brown Hotel



Lock 7 Hydroelectric Development on the Kentucky River in Central Kentucky

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## PROGRAM (continued)

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### Friday

#### 10:00 a.m.—Protective Devices

##### Grounded Neutral Y-Connected Potential Transformers on Ungrounded Systems

C. T. WELLER  
General Electric Co.

##### Physical Nature of Neutral Instability

A. BOYAJIAN & O. P. McCARTY  
General Electric Co.

##### Theory of Abnormal Line to Neutral Transformer Voltages

C. W. LA PIERRE  
General Electric Co.

##### Protection of Three-Winding Power Transformers

R. E. CORDRAY  
General Electric Co.

##### Power Transformer Noise—Its Characteristics and Reduction

R. B. GEORGE  
Westinghouse Electric & Mfg. Co.

#### 2:00 p.m.—Power Generation

##### Governor Performance During System Disturbances

R. C. BUELL, R. J. CAUGHEY,  
E. M. HUNTER  
General Electric Co., and  
V. M. MARQUIS  
American Gas & Electric Co.

##### The Ohio Falls Hydro-Electric Station at Louisville, Ky.

R. M. STANLEY  
Byllesby Engineering & Management Corp.  
and E. D. WOOD  
Louisville Gas & Electric Co.

##### Modern Steam Stations of the Duke Power Company

M. E. LAKE  
Duke Power Co.

##### The Application of Hydrogen Cooling to Turbine Generators

M. D. ROSS  
Westinghouse Electric & Mfg. Co.

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## INSPECTION TRIPS

The local committee in charge of the inspection trips has provided numerous interesting and instructive trips to points of engineering interest as well as points of historical interest.

Following is a list of the available inspection trips that may be taken daily. The starting hours will be announced at the meeting.

Ohio Falls Hydro-Electric Station  
Waterside Steam-Electric Station  
Automatic Substation  
Low-voltage distribution network  
Electric signaling and switching display  
Application of electric signals to steam and electric railroads  
Industrial application of electric power to manufacturing processes  
A modern high power broadcasting station



Saturday has been reserved for trips by bus to points of scenic and historic interest in Kentucky, among which the following are included:

#### Mammoth Cave

An all day trip to one of the wonders of the world.

#### Dix River and Lock 7 Hydroelectric Developments

A trip of unusual interest through some of the most beautiful scenery in this part of the country. These two plants include many features that are unique in hydroelectric plant design.

#### Historic Tour

A visit to the original Old Kentucky Home at Bardstown, where Stephen Collins Foster was inspired to write many of his immortal songs, and to the memorial erected at the Lincoln birthplace near Hodgenville.

