

SOUTH WEST DISTRICT MEETING

DALLAS, TEXAS

APRIL 19-21, 1949



**Headquarters
Baker Hotel**



Dallas Skyline

THEME

**What Electrical Engineers
Are Doing to Meet the Needs
of
The Growing Southwest**

DALLAS, with the aid of its sister city, Fort Worth, will be host to the South West District Meeting April 19-21, 1949. Dallas—the city with the charm of yesterday and the spirit of tomorrow—is one of the youngest and most cosmopolitan of America's big cities. Big "D", as Dallas is known affectionately by its Southwestern neighbors, is a man-made city, the product of aggressive citizenship and engineering ingenuity.

Today, Dallas, with more than 500,000 population, centers a Southwest region with 17½ million consumers, with a net effective buying income of 15½ billion dollars. AIEE visitors to the South West District Meeting will have the opportunity of seeing one of the fastest growing cities in the nation.

South West District Meeting — Program — Dallas, Texas, April 19-21, 1949

MEETING FEATURES

Program—The program has been designed along broad lines so as to be of interest to everyone in the great Southwest. The meeting will open with a luncheon on Tuesday at which the story of the economic growth of the Southwest will be told. On Thursday morning, a general session will be devoted to the electrical engineers' contribution to this growth. It is expected that both of these features will be of broad interest, not only to members of the Institute, but to the general public as well.

Insofar as possible, technical papers have been prepared by and will be presented by members of the Institute residing in the South West District. The number of papers per technical session has been limited so that each author may present his paper in full and allow some time for discussion.

Entertainment—An entertainment program has been arranged for both men and women.

Tuesday evening at 6 p.m. there will be a stag Smoker and Buffet Dinner in the lovely Peacock Terrace atop the Baker Hotel. Tickets will be \$4 each.

Wednesday evening at 7 p.m. there will be an informal banquet in the beautiful Crystal Ballroom of the Baker Hotel, followed by dancing. Tickets will be \$5 each. Tickets for the Smoker and Banquet should be secured at the time of registration.

Metropolitan Grand Opera will be in Dallas on April 22, 23, and 24, with performances of Othello, Mignon, the Marriage of Figaro, and Aida scheduled. Those desiring to stay for the Opera should immediately write direct to the Dallas Grand Opera Association so that they may be placed on the mailing list to receive literature, which includes order blanks for tickets to the above performances.

Ladies' Entertainment—Tuesday will be "Get Acquainted" Day and a Hostess Parlor will be available in the Baker Hotel. Ladies are cordially invited to use the facilities of the parlor and hostesses will be available to help arrange sight-seeing, shopping or other activities.

Tuesday evening the ladies will be entertained in the Century Room of the Adolphus Hotel. Dinner will be served and followed by an unusual and attractive Ice Show (this event will take place at the same time as the Stag Smoker). Price for dinner and show is \$2.50.

Wednesday there will be a Luncheon and Style Show in the Mural Room of the Baker Hotel. This Style Show will be presented by the world-famous Neiman-Marcus Store. Tickets are \$1.50. Tickets for these events should be secured at the time of registration.

Thursday morning at 10 a.m. there will be a conducted tour of some of Dallas' exclusive residential areas and beautiful flower gardens. At this time of year flowers are at their best in this section, and visitors will have an opportunity to see them in full bloom.

Sports—For those who so desire, arrangements can be made for golf or tennis at any one of the many beautiful Country Clubs in the vicinity of Dallas. Professional Texas League baseball games can be seen in either Dallas or Fort Worth.

Meeting of Board of Directors—A meeting of the Board of Directors of the Institute will be held Wednesday, April 20. There will be a luncheon on that day honoring the Board to which all members in attendance are most cordially invited.

Inspection Trips—Trips have been planned for Tuesday, Wednesday, and Thursday afternoons to industries and points of interest in Dallas and Fort Worth. One afternoon trip will include a visit to the Haskell Toll Office of the Bell System. An afternoon tour to Fort Worth will be made to inspect the New Handley Power Station of Texas Electric Service Company, and on the same trip a visit will be made to the new WBAP-TV Television Transmitter and Studio. A third trip is scheduled to include the new Dallas Morning News building and press room just completed, the most modern and largest plant of its type in the South. Other plants scheduled include a plastics manufacturing plant and geophysical and oil research laboratories.

A small charge will be made to cover cost of transportation on each trip. Costs, dates, and other details will be available upon arrival at registration desk.

Hotel Reservations—Those who will attend the meeting should make reservations direct with hotels, pointing out that they will be attending the AIEE Meeting. A copy of each letter requesting reservations should be sent to Mr. George A. Smith, 610 N. Akard Street, Dallas 1, Texas.

The Baker Hotel has been designated as Headquarters for the Meeting; rooms have been set aside for the members.

Rates are as follows:

Single Rooms	\$3.50 to \$7.00
Double Rooms, with Double Bed	6.00 to 9.00
Double Rooms with Twin Beds	6.50 to 12.00

The Adolphus Hotel also has set aside rooms for the members with the following rates:

Single Rooms	\$3.50 to \$7.00
Double Rooms with Double Beds	5.50 to 9.00
Double Rooms with Twin Beds	7.00 to 10.00
Parlor Suites, consisting of Two Rooms	12.00 to 20.00

Special arrangements have been made with the Baker and Adolphus Hotels for the housing of students, four and five to a room, at a rate of \$2 per day.

Rooms are arranged for the night of April 18 and must be vacated by Thursday evening, April 21, unless special arrangements are made for a longer stay.

If for any reason rooms cannot be obtained at one of these, other downtown hotels in Dallas which might be contacted are White-Plaza, Jefferson, and Mayfair. Suburban hotels are Melrose Court, Stoneleigh Court, Loma Alto, and Cliff Towers. Among high-grade tourist courts are Ranch 77, El Sombrero, El Rancho-Tel, and Belmont Motor Hotel.

DISTRICT MEETING COMMITTEE

ELGIN B. ROBERTSON—*Chairman*
 P. G. WALLACE—*Vice Chairman*
 C. WALKER MIER—*Vice Chairman*
 GEO. N. PINGREE—*Vice President for South West District*
 GIBBS A. DYER—*Secretary for South West District*

DISTRICT MEETING SUBCOMMITTEES

O. S. HOCKADAY—*Chairman, Meetings and Papers*
 GEO. A. SMITH, JR.—*Chairman, Hotel and Reservations*
 C. M. MACKEY—*Chairman, Transportation and Inspection Trips*
 A. L. JONES, JR.—*Chairman, Entertainment*
 MRS. E. N. JOLLIFF—*Chairman, Ladies' Entertainment*
 HARRY R. PEARSON—*Chairman, Publicity*
 R. L. BIESELE, JR.—*Chairman, Student Activities*
 C. C. MUSGROVE—*Chairman, Finance*

ADVANCE COPIES OF PAPERS

Members may obtain preprints of technical papers at the uniform price of **30¢ each (60¢ each to nonmembers)** 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. Coupon books in \$9.00 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, April 18

7:30 p.m.—**Registration**
 LOUNGE OFF CRYSTAL BALLROOM

Tuesday, April 19

8:00 a.m.—**Registration**
 LOUNGE OFF CRYSTAL BALLROOM

9:30 a.m.—**General Session**
 CRYSTAL BALLROOM
 George N. Pingree, Presiding

Introductory—Elgin B. Robertson, General Chairman.
 "Our Institute"—Everett S. Lee, President.
 "The Significance of Electrical Activity in Crystal Structure", Dr. Jack T. Wilson, Physicist, Allis-Chalmers Manufacturing Company, Milwaukee, Wisconsin.

12:15 p.m.—**Luncheon**
 PEACOCK TERRACE, BAKER HOTEL
 J. B. Thomas, Presiding

"Economic Development of the Southwest", John F. Falvey, Consultant in Public Utility Relations—Financial and Public, New York City.



Texas Hall of State — Dallas

2:00 p.m.—**Student Session**
 TEXAS ROOM
 F. W. Tatum, Presiding

2:00 p.m.—**Inspection Trips**

2:00 p.m.—**Transmission and Distribution**
 ROOM 1
 M. H. Lovelady, Presiding

DP.* "Aerial Cable on Secondary Network", T. D. Thomas, Texas Power and Light Company.

DP.* "The Design and Construction of Transmission Structures", Ralph G. Yerck, Hughes Brothers, Inc.

DP.* "Installation of a 138 Kv Oil Pipe Cable", Colored Movie shown by R. J. Foley, City Public Service Board, San Antonio, Texas.

49-10 "Distribution Transformer and Secondary Conductor Economics", Bryce Brady, Oklahoma Gas and Electric Company.

6:00 p.m.—**Smoker and Buffet Supper**
 PEACOCK TERRACE, BAKER HOTEL

Wednesday, April 20

9:00 a.m.—**Communication**
 TEXAS ROOM
 Lee M. Hartwell, Presiding

DP.* "A New Three-Channel Stackable Carrier Telephone System", D. G. Clifford, for the Lenkurt Electric Company.

DP.* "Co-Axial Cable Engineering and Construction", W. E. Haywood, American Telephone and Telegraph Company.

DP.* "A New Alarm and Control System for Unattended Co-Axial Repeater Stations", M. P. Brown, American Telephone and Telegraph Company.

9:00 a.m.—**Usage of Electric Power by Heavy Industry**
 ROOM 1
 D. H. Levy, Presiding

49-121 "Performance of Diesel-Electric Rig for Deep Well Drilling", E. C. Clark, General Electric Company, Schenectady, and B. L. Moore, Humble Oil and Refining Company.

DP.* "Out of the Texas Woods for News", I. T. Hockaday, General Electric Company.



Hockaday Junior College for Girls, Dallas, Texas. To be included in one of the tours of Dallas which has been arranged for the ladies.

DP.* "The Need of Lightning Protection for Rotating Electrical Prime Movers in Pipe Line Stations", Ralph Paden, Atlantic Pipe Line Company.

49-124 "Electrolytic Zinc Plant of the American Smelting and Refining Company at Corpus Christi, Texas", J. S. Bowman, American Smelting and Refining Company.

9:00 a.m.—Student Session

CARUTH BUILDING AUDITORIUM, SOUTHERN METHODIST UNIVERSITY
Paul C. Petty, Presiding

9:30 a.m.—Meeting of Board of Directors

12:15 p.m.—Luncheon Honoring Board of Directors
ROOF GARDEN, ADOLPHUS HOTEL

2:00 p.m.—Meeting of Board of Directors (Continued)

2:00 p.m.—Relays and Protective Devices

ROOM 5
Gordon W. Gerell, Presiding

49-125 "Automatic Reclosing of Transmission Lines Without Ultrahigh-Speed", R. A. Lerner, Texas Electric Service Company.

DP.* "Distribution Line Protection-Fuses and Relay Coordination", J. P. Barron, Dallas Power and Light Company.

DP.* "Report of the Protective Relay Engineers' Conference", L. M. Haupt, Professor, Texas A. & M. College.

49-122 "Relaying of Ring Bus Substations on the Oklahoma Gas and Electric Company System", G. E. Brooks, Oklahoma Gas and Electric Company.

DP.* "Distance Carrier Current Relaying", A. J. Nicholson, Kansas City Power and Light Company.

2:00 p.m.—Power Generation

TEXAS ROOM
Otis Howard, Presiding

49-126 "Pumped Storage Installation", G. E. Schmitt, ACO** Lower Colorado River Authority.

DP.* "The Combustion Gas Turbine & Its Application as A Prime Mover for the Generation of Electric Power, and Other Uses", B. G. Hatch, General Electric Company.

DP.* "Latest Experiences with the Cyclone Furnace", F. G. Ely, The Babcock & Wilcox Company.

DP.* "The Design and Construction of the Tacubaya Diesel Plant, Mexico City", J. K. Jennings, Mexican Light and Power Company, Ltd.

2:00 p.m.—Inspection Trips

7:00 p.m.—Banquet and Dance

CRYSTAL BALLROOM, BAKER HOTEL
Al Jones, Toastmaster

Thursday, April 21

9:00 a.m.—General Session

CRYSTAL BALLROOM
John W. Carpenter, Presiding

DP.* Symposium—"The Electrical Engineers' Contribution to the Growth of the Southwest"

1. For the Electric Utilities, George L. McGregor, Dallas Power and Light Company.
2. For the Communication Companies, H. R. Fritz, Southwestern Bell Telephone Company.

3. For Heavy Industry, G. R. Walton, United Gas Pipe Line Company.

4. For the Manufacturers, W. J. Donald, National Electrical Manufacturers Ass'n.

5. For Educational Institutions, Dr. Umphrey Lee, President, Southern Methodist University.

2:00 p.m.—Transmission and Distribution

ROOM 1
Norman Rode, Presiding

DP.* "Experience with Insulating Oils from the Utilities View Point", D. D. Clark, Kansas City Power and Light Company.

DP.* "Phase Reversal and Overvoltages Resulting from Open Conductors in Circuits with and without Capacitors", Edith Clarke and A. R. Teasdale, Jr., University of Texas.

49-127 "The Negative-Sequence Reactances of an Ideal Synchronous Machine", William C. Duesterhoeft, University of Texas.

49-123 "The Vector Power Factor of Unbalanced Sinusoidal Three-Phase Circuits", Prof. J. F. Lamb, University of Missouri, and D. B. Brandt, General Electric Company.

2:00 p.m.—Nucleonics

TEXAS ROOM
Dr. Jack T. Wilson, Presiding

DP.* "Radioactive Isotopes in Clinical and Experimental Medicine", Dr. Joseph G. Hamilton, University of California.

DP.* "The Use of Radiophosphorous as a Tracer in the Investigation of Lipid Metabolism and Phospholipid Production in Animals", Dr. Wright H. Langham, University of California at Los Alamos, New Mexico.

DP.* "Preliminary Investigations with the Three Hundred Million Electron Volt Synchrotron", Prof. Ivan Getting, Massachusetts Institute of Technology.

2:00 p.m.—Inspection Trips

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

ACO** : Advance copies only available; not intended for publication in TRANSACTIONS.

Advance Registration—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 and Reservation card for pertinent information. These cards should be filled out and mailed as promptly as possible to the committee chairman (C. C. Musgrove, 508 Southland Annex, Dallas 1, Texas). Registration fee will be \$2 for members and \$3 for non-members. Everyone attending or participating will be requested to register, but no charge will be made for students or for families of Institute members.

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.

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