

SOUTHERN DISTRICT MEETING

MIAMI BEACH, FLORIDA

APRIL 11-13, 1951



Headquarters
The MacFadden-Deauville Hotel



International Airport, Miami, Florida

MEETING FEATURES

The Southern District Meeting will be held in world famous Miami Beach, April 11-13, 1951, at the MacFadden-Deauville Hotel. A well rounded technical program will be presented in a setting which offers the finest facilities for entertainment and recreation.

The opening session of the meeting will be held on Wednesday at 10:00 a.m., which will feature an official welcome to Miami Beach by Mayor Harold Turk and an address by Mr. Titus G. LeClair, President of the Institute.

Inspection Trips and Sightseeing Tours—The following program of trips has been arranged for those attending the Southern District Meeting. A schedule and brief description including the cost of these trips are given below. Since it is necessary to provide for accommodations in advance, members should indicate on the advance registration card those events which they plan to attend. Tickets for the trips will be available at the time of registration and should be purchased then.

1. The Cutler Steam Electric Station of the Florida Power & Light Company—Thursday Afternoon 1:30—4:30, April 12, 1951.

This plant is situated on Biscayne Bay about nine miles south of Miami, in a beautiful residential suburban area.

In order to conform to the ultimate development of the area, the surrounding grounds have been landscaped to beautify the site and, to some extent, conceal the plant.

The plant has a total capability of 80,000 KW and is unique in that it is outdoor-type construction. The largest unit is 50,000 KW capability with steam conditions of 1250 p.s.i. at 900° F.

The visitors will be conducted through the entire plant, with the various functions explained by members of the plant personnel. The return trip to the hotel will be made via the University of Miami Campus and Coral Gables. Cost \$1.00.

2. Eastern Airlines—Friday Afternoon 1:30—4:30, April 13, 1951.

On this tour members will see the International Airport, but particularly, will watch tests performed in such shops as Engine Overhaul, Engine Accessories, Cabin Supercharger Section, machine shops, radio equipment, instrument overhaul and engineering shops. Upon leaving the maintenance and overhaul base where airliners are conditioned under a rigidly adhered to system of checks, the tour will take to the sky in a four-engine air transport for a 30-minute flight over scenic Greater Miami as guests of Eastern Airlines. Cost \$1.00

Continued on page 3

Southern District Meeting — Program — Miami Beach, Fla., April 11-13, 1951

ADVANCE 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. District Papers denoted by DP.** are intended for presentation only and are not available.

Wednesday, April 11

10:00 a.m.—Opening Session

Official Welcome. Mayor Harold Turk, Miami Beach, Florida.

Address. Titus G. LeClair, President, American Institute of Electrical Engineers.

Thursday, April 12

8:30 am.—General Group

51-144. 940-960 Megacycle Communications Equipment for Industrial Applications. F. B. Gunter, Westinghouse Electric Corp. Presentation by title only.

51-145. Application of Microwave Channels. R. C. Cheek, Westinghouse Electric Corp.

DP.** Florida: Communication Gateway to the Caribbean. I. S. Coggeshall, The Western Union Telegraph Co.

DP.** Telegram Handling by Facsimile. H. H. Haglund, The Western Union Telegraph Co.

DP.** The Use of Radar for Hurricane Location. M. H. Latour, University of Florida.

DP.** Recent Developments in Loran. A. W. Sullivan, J. M. Barney, University of Florida.

DP.** A Low Frequency Polar Vector Indicator. F. O. Nottingham, Jr., Georgia Institute of Technology.

DP.** The Engineering Design and Construction of Atomic Power Plants. D. W. Cardwell, Oak Ridge National Laboratory.

DP.** Silicone Rubber—A Resilient Dielectric. J. F. Dexter, Dow Corning Corp.

8:30 a.m.—Power Group

DP.** Modern High Voltage High Capacity Circuit Breakers. W. M. Leeds, Westinghouse Electric Corp.

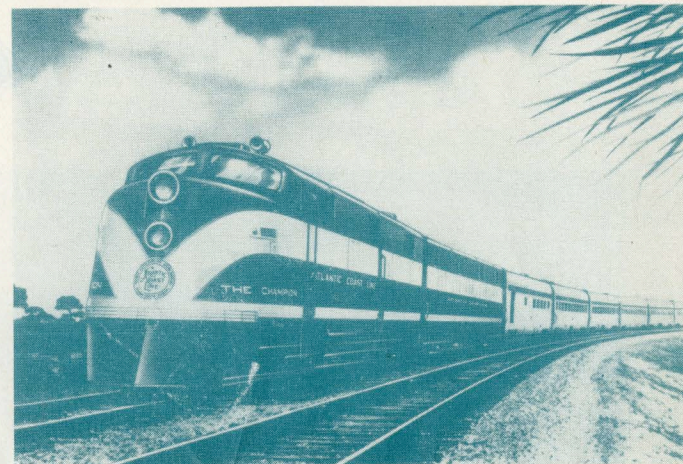
DP.** Power System Relaying. G. L. Dibble, South Carolina Electric and Gas Co.

DP.** Fundamentals of A.C. Circuit Interruption. Erwin Salzer, Allis-Chalmers Manufacturing Co.

51-146. Vibracode System of Supervisory Control on a Carrier Communication Channel. T. J. Allen, Joel Daniel, Georgia Power Co.

DP.** Considerations in Selecting a Carrier Relaying System. R. C. Cheek, J. L. Blackburn, Westinghouse Electric Corp.

51-147. The Measurement of the Impedance of Large Substation Grounds. L. E. Smith, Tennessee Valley Authority.



Diesel Powered Florida Special

51-148. An Analysis of Grounding Banks to Balance Distribution Feeder Voltages. L. W. Long, North Carolina State College.

DP.** A Self-Excited Thyatron Inverter. R. W. Sampson, University of Florida.

51-149. A Compensated Thermal Anemometer and Flowmeter. C. E. Hastings, C. R. Weislo, Hastings Instrument Co., Inc.

Friday, April 13

8:30 a.m.—General Group

51-150. Electric Home Heating. E. E. Parks, Nashville Electric Service.

DP.** Electric Steam and Hot Water Accumulators. A. C. Gibson, Nashville Electric Service.

DP.** High Temperature Induction Heating of Non-Magnetic Metals. D. C. White, H. A. Owen, University of Florida.

DP.** Determination of Instantaneous Currents and Voltages by Means of Alpha, Beta and Zero Components. W. C. Dueterhoeft, Max Schultz, Edith Clarke, University of Texas.

DP.** Analysis of Performance of a Modern Sectional Electric Paper Machine Drive. R. R. Baker, Westinghouse Electric Corp.

DP.** The Amplidyne: Antecedents and Theory. Clarence B. Grund, Jr., The Alabama Polytechnic Institute.

DP.** Street and Highway Lighting. R. J. Swackhamer, General Electric Co.

DP.** The Bare Facts of Light. H. L. Logan, Holophane Co., Inc.

8:30 a.m.—Power Group

DP.** Modern Electrical Cable Insulating Materials. E. W. Davis, Simplex Wire and Cable Co.

DP.** Present Applications of Silicone Electrical Insulation. G. E. McIntyre, Dow Corning Corp.

DP.** An Installation of 15 KV Polyethylene Cable. L. W. Roush, Union Carbide and Carbon Corp.

DP.** Field Lashing of Aerial Cables. F. E. Treat, Florida Power and Light Co.

DP.** Cathodic Protection for the Florida Area. T. G. Hieronymus, Radiation Laboratories, Inc.

DP.** Corrosion and Cathodic Protection in the Miami Area. C. M. Broom, Florida Power and Light Co.

DP.** Safety Grounding Neutrals for Low Voltage A.C. Power Systems Using Dry-Disc Rectifiers. L. H. Harrison, Bureau of Mines.

DP.** Thermal Limitations—A Poor Criterion for Loading Distribution Circuits. F. G. Hamner, G. B. Campbell, Southern Services, Inc.

MEETING FEATURES — continued from page 1

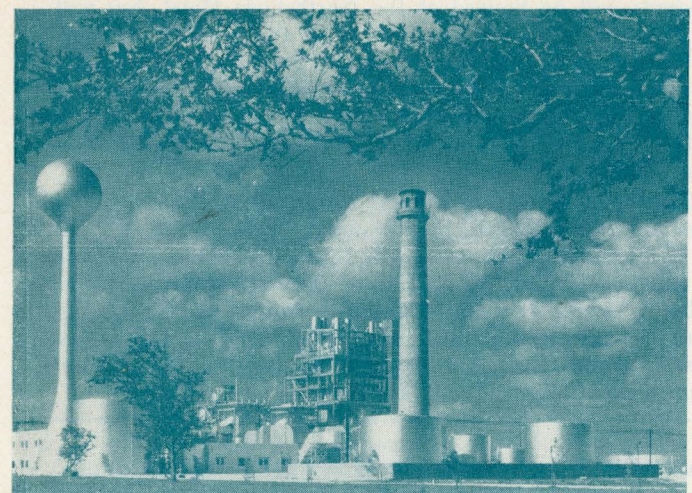
3. The U. S. Weather Bureau and Television Station WTVJ, Wednesday Afternoon 2:30—5:00, April 11, 1951

The Weather Bureau atop the Vocational High School Building utilizes the latest instruments and radar for tracking hurricanes. These will be explained, together with a demonstration of the most recent developments in automatic electronic weather report instruments. The tour will proceed to Television Station WTVJ located on the roof of the beautiful Everglades Hotel in Miami. Here the members will see and learn about a complete modern transmitter. Here also can be seen an unexcelled panorama view of Greater Miami's stately structures gleaming white and clean in the sun.

The tour will then move to the station studios in the Wometco Building where the latest instruments and equipment are used to produce video shows unassisted by any network hook-up. A few of the more fortunate visitors will have an opportunity to be interviewed and televised. Cost \$1.00.

4. A sightseeing tour on Biscayne Bay—Thursday Afternoon 1:30—4:30, April 12, 1951.

This tour is a must when one visits Greater Miami. The many man-made islands scattered in the bay form waterways lined with beautiful homes, overhung with palms and made gorgeous by colorful flowers and plants in profusion. While cruising on South Bay, the members will see Virginia and Biscayne Keys, the only remaining virgin land in the area. These keys are at the head of the famous line of Florida Keys extending south to Key West. The \$16,000,000 Deering Estate, the Rickenbacker Causeway, the beautiful Mercy Hospital, the historical Cape Florida Lighthouse and the



Cutler Steam Electric Station, Florida Power and Light Company

skyline of Miami will be seen. Words cannot express the colorful beauty of this tour. Cost \$2.00.

5. The Greater Miami Tour—Friday Afternoon 1:30—5:00, April 13, 1951.

This tour by modern, air-conditioned, glass-top buses will afford our members 3½ hours and 50 miles of travel through Miami, Miami Beach, Hialeah, Miami Springs, Coral Gables, Coconut Grove and other sections of scenic Dade County. Bring your cameras, for on this trip you will be afforded an opportunity to make pictures where movies are made and capture a lasting record of your trip to semi-tropical Florida. At such places as the Venetian Swimming Pool, Wheeler Estate, and Hialeah Race Track, the tour will be guide-conducted and given a comprehensive picture of these specially selected points of interest. Other points of interest to be seen on this tour are too numerous to list, but of more than 64 places, the \$16,000,000 Deering Estate, the Sausage Tree, English Village, Chinese Village, French Village, the Pink Flamingos, Eastern Airline Terminal, Alligator Farm and the University of Miami are a few most worthy of your attention. Cost \$2.50.

Luncheon—A luncheon will be held at 12:30 p.m., Wednesday, April 11, 1951, in the MacFadden-Deauville Hotel. Professor F. H. Pumphrey, Chairman of the Florida Section, will be presiding. Advance registration should be indicated. The price of tickets will be \$2.50 per person. Tickets should be purchased at the time of registration.

Buffet and Water Show—Wednesday evening, April 11, 1951, at 7:00 a buffet supper will be held at the famous swimming pool area of the MacFadden-Deauville. Following the buffet supper, from 8:30 to 9:30 p.m., the renowned Water Show will be presented for the members. Dancing in the Palm Room will start at 9:30 p.m. Tickets will be priced at \$4.50 per person and available at time of registration. Advance registration should be indicated.

The **Banquet** will be held at the MacFadden-Deauville, Thursday evening at 7:30, April 12, 1951. The finest in food and entertainment will be presented to make a memorable evening. The price of tickets will be \$6.00 per person for members and guests and \$3.00 per person for Student members. Advance registration is requested. Tickets should be purchased at time of registration.

Ladies' Entertainment—Wednesday at 12:30, April 11, 1951, a luncheon will be held in conjunction with a fashion show presented in the best traditions of Miami Beach. Advance summer styles will be featured. Price for tickets will be \$2.00 per person; advance registration is necessary. Tickets should be purchased at the time of registration.

A shopping tour is planned for Thursday morning on famous Lincoln Road. Friday morning canasta and bridge will be the order of entertainment. Side trips to points of interest can be arranged.

In order to provide accommodations for the trips Thursday and Friday morning, it will be necessary to make reservations following the Wednesday Fashion Show.

Ladies are invited on all the afternoon inspection and sightseeing tours listed.

Recreational Program—Golfers will find both the Bayshore and Normandy Shores Golf Courses open to those attending the meeting with no green fee charges. Arrangements for the many available and beautiful sightseeing trips by bus or boat as well as bay-bottom and Gulf Stream fish-

ing trips can be made when registering at the meeting headquarters. Likewise, post-meeting tours to either beautiful Nassau in the Bahamas, or Havana, Cuba by boat or air are available at headquarters.

Hotel Accommodations—The MacFadden-Deauville Hotel has been designated as headquarters for the meeting and will handle all reservations. It will not be possible to house all of those attending in the headquarters hotel and blocks of rooms have been set aside by neighboring hotels (within two blocks of the MacFadden-Deauville). Address all requests to MacFadden-Deauville Hotel, Collins Avenue at 67th Street, Miami Beach, Florida. Confirmation will be made directly by the hotel and if space is confirmed in a cooperating hotel, the name and address of the hotel will be given so that those attending may check in to the proper hotel without stopping at the headquarters hotel first. Copies of reservation requests should be sent to Mr. Ollie T. Ayers, Chairman, Hotel and Reservation Committee, Box 3100, Miami, Florida. Parking facilities for those motoring to the meeting are available in the vicinity of the headquarters hotel on commercial parking lots only, at fees ranging from \$1.00 to \$1.50 per day.

For those who may wish to stay in motel accommodations, the following motels with their rates are given:

| <i>Motel</i> | <i>Rates</i> |
|---|---|
| Golden Arrow Motel 15600 Collins Ave. | \$6.00 per day/room for 2 |
| Montgomery Motel 15720 Collins Ave. | \$6.00 per day/room for 2 |
| Prince Royal, 15810 Collins Ave. | \$4.00 per day/room for 2 |
| Kimberly Hotel 158th St. and Collins Ave. | \$10.00 per day/room for 2 |
| Ocean Palm Motel Collins Ave. at 157th St. | \$6.00 per day/room for 2 \$8.00 per day/room for 2 |
| Gregory Motel 16050 Collins Ave. | Two per room, \$2.50 per person \$6.00/day for 2 in apt. |
| Windward Motel 16051 Collins Ave. | \$6.00-\$10.00 per day per room \$2.00/day extra over 2 |
| Sea Breeze Motel 16151 Collins Ave. | \$6.00-\$12.00/day per person |
| Sandy Shores Motel 16251 Collins Ave. | \$5.00-\$9.00/day room for 2 |

The headquarters hotel and cooperating hotels have set the following schedule of rates:

| | |
|------------------|----------------|
| Single | \$5.00 per day |
| Double | 7.00 per day |
| Triple | 9.00 per day |

European Plan, run of the house rooms.

The date of the meeting falls within the normal winter season, and it is urgently requested that reservations be in as far in advance as possible in order to assure adequate space and utmost efficiency. The meeting rates will apply only for a six-day period. Prevailing rates will be charged for those days in excess of six. Rates for additional stay will be quoted by the hotel with confirmation. Although not mandatory, it is suggested that a deposit of at least one day's rent accompany reservation request. Such deposits will be refunded if reservation is cancelled 24 hours in advance of planned arrival. All reservations should be in by April 1, 1951.

Registration Fees—Members and nonmembers should register in advance by filling in the advance registration card sent with this announcement. A registration fee of \$2.00 for members and \$3.00 for nonmembers will be required. Enrolled Students and families of members, no fee.



The MacFadden-Deauville Hotel

Tickets for luncheon, April 11, Buffet Supper and Water Show, April 11, Banquet, April 12 and various planned trips will be available for purchase upon registration, but planned attendance should be noted on return card so that adequate facilities will be available.

Registration booth for the meeting will open at 6:00 p.m. Tuesday, April 10, 1951, at the headquarters hotel, and remain open until 10:00 p.m., and again on Wednesday from 8:00 a.m. to 12:00 noon. Arrangements will be made to handle later registration at times to be announced.

The Student Branch Meeting will be held in Miami Beach concurrently with the District Meeting, and Student Technical Sessions will be held at the MacFadden-Deauville Hotel during Wednesday, April 11, and Thursday, April 12. The Students will be housed at the Northshore Hotel, but will be welcome to join in any or all of the District Sessions and Trips. A special feature of the Banquet on Thursday, April 12, will be the presentation of awards for Student Papers given at this meeting of the Student Branches.

The members of the 1951 Southern District Meeting Committee are:

Chairman, Harvey F. Pierce; *Programs*, J. W. Lacy, Jr.; *Technical Programs*, C. H. Summers; *Technical Papers*, Dr. H. H. Sheldon; *Finances*, E. F. Johnson; *Treasurer*, Clyde V. Booth; *Publicity*, C. K. Lingo; *Hotels and Reservations*, Ollie T. Ayers, Jr.; *Sports and Entertainment*, W. C. Coghurn; *Ladies Entertainment*, Mrs. Ollie T. Ayers, Jr.; *Transportation and Inspection Trips*, J. W. Beville, Jr.; *Student Branch Coordinator*, Frank Lucas.

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