

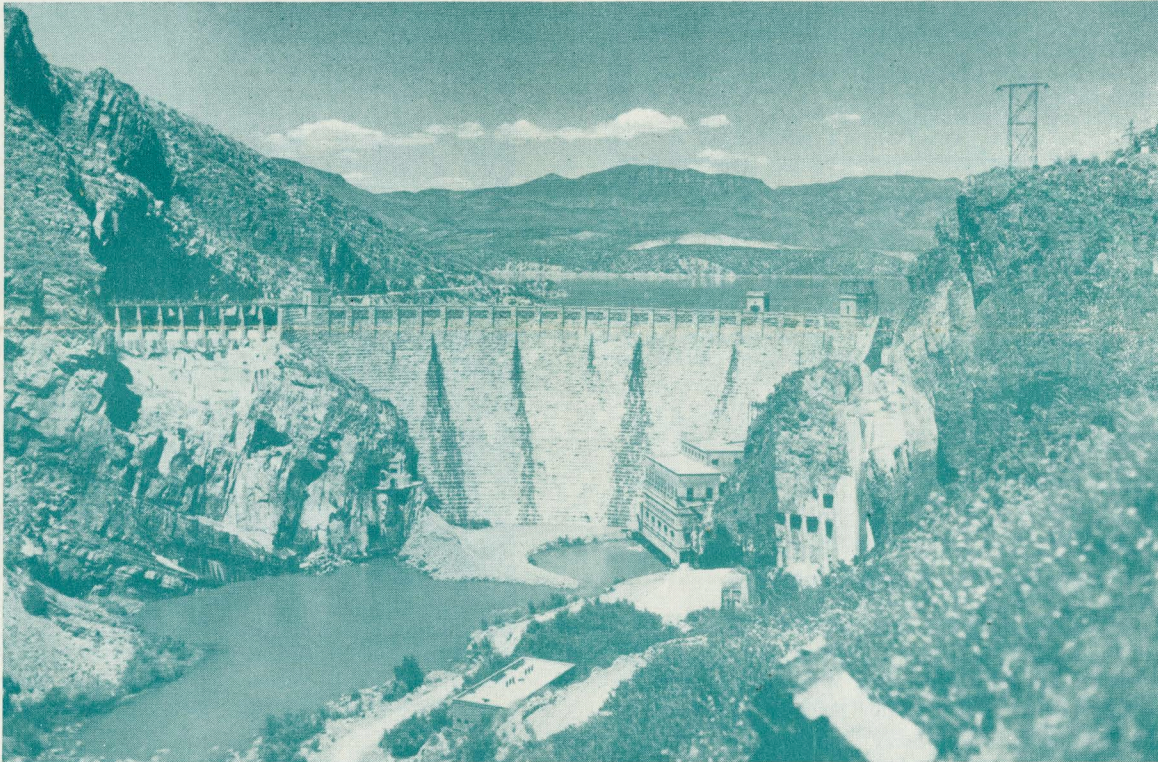


PACIFIC GENERAL MEETING

August 19-22, 1952

Phoenix, Arizona

Headquarters:
Hotel Westward Ho



Roosevelt Dam—Gravity arch type built of cyclopean masonry faced with native sandstone located at conflux of Tonto and Salt Rivers, Salt River Power District dedicated in 1911.

The Pacific General Meeting will be held in Phoenix, Arizona, August 19 to 22 inclusive. Phoenix is a hospitable city and the friendliness, which is everywhere so evident in the Southwest, is truly traditional in the Valley of the Sun. The Hotel Westward Ho has been chosen as the headquarters hotel and all technical sessions and social functions will be held in this completely air-conditioned hotel. Bus and car transportation for all inspection trips will be arranged for at the hotel.

The opening session Tuesday, August 19th at 10:00 a.m. will be presided over by J. E. Redmond who is Chairman of the General Committee. The Pacific Coast Officers and Section Officers will be introduced at this time. The address of welcome will be given by N. M. Lovell, District Vice-President.

INSPECTION TRIPS

Arizona Copper Mines: 8:00 a.m. Wednesday, August 20. Last year Arizona was the nation's leading copper-producing state, the output valued at \$205 million. This trip will take you through the Globe-Miami District, visiting properties of Inspiration Copper Co., Miami Copper Co. and International Smelter Co. You'll watch open pit mining operations and see several types of ore recovery.

A box-lunch picnic will be held in rugged, beautiful Pinal Mountains. On the return trip to Phoenix in the afternoon, the party will visit Southwestern Arboretum, a unique wonderland of plant life where 10,000 varieties of plants from every continent are growing.

Reynolds Metals Co.: 9:00 a.m. Wednesday, August 20. For those who are interested in manufacturing, a trip has been arranged to visit Reynolds Metals plant, five miles west of Phoenix. The world's largest aluminum extrusion plant, it contains nearly 1½ million square feet of space and is located on 225 acres of land. This trip will last about two hours.

Kyrene Steam Plant: 8:00 a.m. Thursday, August 21. This 30,000 kilowatt steam generating plant was dedicated and put in operation last June by the Salt River Power District. The state's first completely outdoor power plant, Kyrene is a striking example of the latest design advancements in power plant engineering.

U. S. Bureau of Reclamation Switchyard: 8:00 a.m. Friday, August 22. The power that comes into Arizona from Parker Dam on the Colorado River is handled by the Bureau at this switchyard adjoining the Arizona Public Service Co.'s power plant west of Phoenix. This will be a short trip of about two or three hours.

In addition to the scheduled inspection trips described above, guided tours will be conducted to other industrial and power installations in the Phoenix area. Also, many other scenic trips can be arranged to suit the convenience of delegates and their families. These trips can be made by private auto, regular sightseeing tours, or by chartered bus or plane.

Continued on page 4

AIEE PACIFIC GENERAL MEETING — PROGRAM — Phoenix, Arizona, August 19-22, 1952

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 in the Bimonthly Publications and in the Transactions. *Conference Papers* denoted by CP.** are intended for presentation only, and are not available.

Tuesday, August 19

10:00 a.m.—General Session

Fiesta Room

J. E. Redmond, Presiding

Introduction of Pacific Coast Institute Officers and presentation of Pacific Coast Section Officers. J. E. Redmond, General Chairman.

Address of Welcome: N. M. Lovell, Vice-President, 8th District.

Industrial Growth in Arizona. H. B. Sargent, President, Arizona Public Service Co.

Address: President D. A. Quarles.

2:00 p.m.—Transmission & Distribution

Colonial Room

C. G. Mansfield, Presiding

52-242. Field Tests on 135 KV 3.5 Million KVA Low-Oil-Content Circuit Breakers. Paul Wildi, W. H. Clagett and Lloyd Morgan of Pacific Oerlikon Company.

52-243. Radio Influence from Power Transmission Lines—Effects of Wind, Dust and Smoke. G. S. Smith and A. B. Jacobsen of University of Washington.

CP.** Application of Transmission Line Mutual Impedance Equivalent Circuits. Martin J. Lantz of Bonneville Power Administration.

52-252. "Structure Limitation Charts for Transmission Lines" by T. M. Austin, Lakewood, Colorado.

2:00 p.m.—Electronics

Saratoga Room

Otto Mangum, Presiding

52-244 Cathode Drift Compensation in D-C Amplifiers. ACO.* J. W. Rittenhouse, School of Mines & Metallurgy, University of Missouri.

CP.** The Responses of Certain Basic Circuits to a Trapezoidal Pulse. T. J. Higgins, University of Wisconsin, P. Kaufman, K. G. Black, Graduate Students.

2:00 p.m.—The Chemical Industry in the West

Fiesta Room

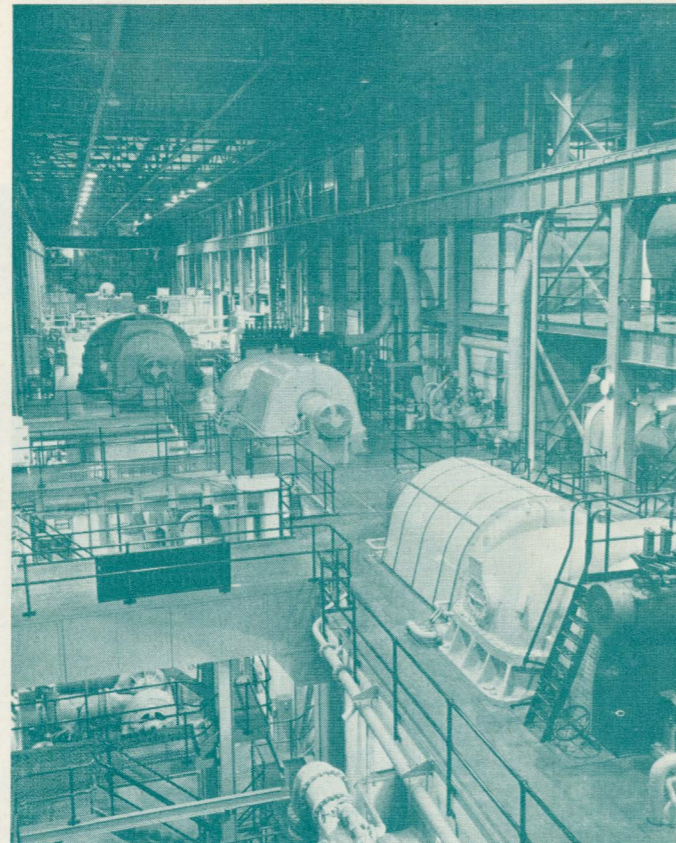
L. W. Roush, Presiding

CP.** The Development of the Western Chemical Industry. G. L. Parkhurst, Oronite Chemical Co.

CP.** Electrical Installations, Feeder Systems, Power Supply, and Processing Equipment in the Pulp and Paper Industry. E. E. Dale, Crown Zellerbach.

CP.** Electrolytic Production of Battery-Active Manganese Dioxide. J. C. Schumacher, Western Electrochemical Co.

CP.** Electrical Problems in the Design of a Diatomaceous Earth Processing Plant. L. H. Misner, Kaiser Engineers.



The Arizona Public Service Co., 155,000 KW. Steam electric station 5 miles west of Phoenix designed for natural gas and oil fuel.

CP.** Electrical Problems in Petrochemical Process Control. D. J. Pompeo, Shell Development Co.

CP.** Electrical Controls in the Manufacture of Fiberglass. R. J. Paoletti, Owens-Corning Fiberglass.

Wednesday, August 20

9:30 a.m.—Safety

Colonial Room

Noel B. Hinson, Presiding

CP.** Who Is Responsible for Safety. William Ismay, Arizona Public Service Company.

CP.** Design Engineers' Responsibility for Safety. E. C. Hunt, Pacific Gas & Electric Co.

CP.** Electric Work Injuries in California Industries. E. E. Carlton, Safety Engineer, State of California.

CP.** Electrical Safety in Great Britain. Floyd L. Goss, Water and Power Dept., City of Los Angeles.

9:30 a.m.—Western Mining Applications

Saratoga Room

A. B. Chafetz, Presiding

CP.** Open Pit Ore Haulage. M. C. Potter, Westinghouse Electric Corporation.

CP.** Portable Underground Dry Type Power Centers. Henry Gates, Westinghouse Electric Corporation.

CP.** Electrical Characteristics of Electrostatic Precipitators Applied to the Mining and Smelting Industries. R. M. Anderson, Westinghouse Electric Corp. E. J. Stocker, of A. S. & R.

2:00 p.m.—Western Mining Applications

Saratoga Room

Carl A. Poppino, Presiding

CP.** The Idaho Phosphorus Industry, Its Effect on Snake River Hydro Developments. J. G. Miller, Food Machinery & Chemical Corp.

CP.** Electric Braking System for Mining Locomotives. Felix Berra, Phelps Dodge Corp.; R. D. Call, Westinghouse Electric Corp.; B. E. Rector, Westinghouse Electric Corp.; and A. B. Chafetz, International Minerals & Chemical Corp.

CP.** A-C Distribution in Open Pit Copper Mines. Felix Berra, Phelps Dodge Corp.; D. B. Carson, C. A. Poppino, General Electric Co.

2:00 p.m.—Transformers

Fiesta Room

Kenneth V. Fletcher, Presiding

CP.** Local Conditions Affecting Loading Standard 55°C Transformers. F. L. Roe and Louisa F. Simons, Salt River Power District, and K. V. Fletcher, General Electric Co.

CP.** The Effects of Solar Radiation on Transformer Cooling in the Salt River Project. S. A. Moore and W. J. Grasmoen.

CP.** Loading of Transformers by Copper Temperature. W. L. Carey of Portland General Electric Co.

2:00 p.m.—Student Technical Session

Room 208

Prof. James C. Clark, Presiding

Thursday, August 21

9:30 a.m.—Metering and Relaying

Saratoga Room

M. A. Bostwick, Presiding

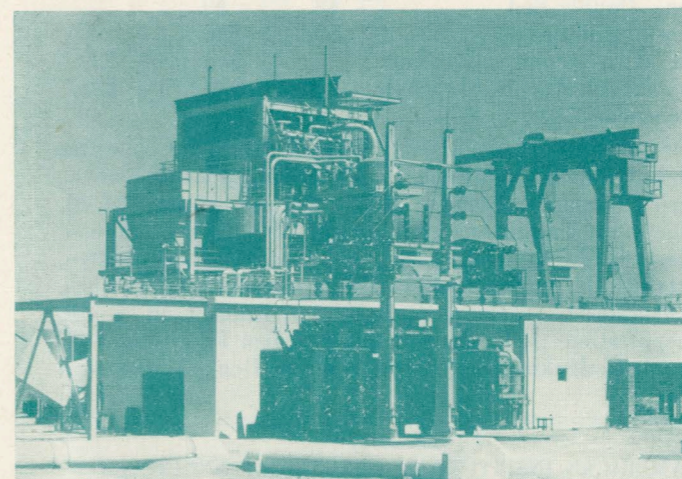
CP.** A New Time, Interval and Sequence Recorder. H. A. Holmes, Prescott, Arizona.

52-245 A Wide Range Frequency Recorder and Indicator for ACO.* Electric System Use. F. S. Benson, Pacific Gas & Electric Co. and R. M. Stuart, General Electric Co.

9:30 a.m.—Feedback Control Systems

Colonial Room

Robert H. Hartley, Presiding



Kyrene Steam Plant, 30,000 KW. outdoor design—Salt River Power District, completed May, 1952.

52-246. Analog Methods for Optimum Servomechanism Design. F. C. Fickeisen and T. M. Stout of University of Washington.

52-247. Analog Computers for Feedback Control System. Robert A. Bruns, University of California.

52-254. A Block Diagram Approach to Network Analysis. T. M. Stout, University of Washington.

9:30 a.m.—Industrial Power Systems

Fiesta Room

E. S. Dibble, Presiding

CP.** Secondary Networks Provide Service Continuity in Process Plant. Walter Hahn, of Bechtel Corp. and P. Belsky of Westinghouse Electric Corp.

CP.** Power Supply for Nuclear Research Laboratory. Carl Graver of University of California.

2:00 p.m.—Microwave Applications

Saratoga Room

T. A. Phillips, Presiding

CP.** Carrier Current Tests on Salt River Power District's 110-KV Loop System. S. M. Chalmers and F. W. Reece.

52-248. Microwaves in the Electric Power Field. W. A. Derr, H. W. Lensner, and D. F. Burnside of Westinghouse Electric Corp.

CP.** Carrier Current Equipment Operation and Maintenance on a Large System. Otto Mangum, Bureau of Reclamation.

2:00 p.m.—System Engineering

Colonial Room

N. Pike, Presiding

52-249 The Davis Dam Power Development. S. M. Denton and H. O. Britt of U. S. Bureau of Reclamation.

52-250. The Parker-Davis Power System. William M. Doak ACO.* of U. S. Bureau of Reclamation.

CP.** Influence of Power System Design on Protection Relaying. J. L. Blackburn of Westinghouse Electric Corp.

2:00 p.m.—The Shortage of Engineers

Fiesta Room

S. M. Chalmers, Presiding

CP.** "The Situation on the Shortage of Engineers in the Western States". R. J. Hannelly, Phoenix College.

CP.** "Recruiting Future Engineers in Arizona". W. B. Bustard; Headman, Ferguson and Carollo.

Friday, August 22

9:30 a.m.—Power Generation

Saratoga Room

Walter T. Lucking, Presiding

CP.** Cross Cut—40 Years of Power Plant Progress. W. J. Grasmoen and H. F. Hudson, Salt River Power District.

CP.** Kyrene—Salt River Project's Outdoor Steam Plant Designed for the Southwest Climatic and Operating Conditions. T. M. Morong, E. J. Lauerman, Salt River Power District, and I. R. Caraco, Bechtel Corp.

CP.** Intercooling of Windings of Turbine-Generator Units. Lee Kilgore, Westinghouse Electric Corp.

CP.** Applications of Gas Turbines for Central Power Stations. Mr. Stephens, Westinghouse Electric Corp.



The Hotel Westward Ho, Phoenix, Arizona.

9:30 a.m.—Lighting (IES)

Fiesta Room
J. D. Whitnell, Presiding

CP.** Lighting Yesterday and Tomorrow, B. H. Hartley, Falcon Engineering.

CP.** Engineering Aspects of Illumination, B. S. Benson, Jr., Benjamin Electric Co.

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.

INSPECTION TRIPS — Continued from page 1

Phoenix and the Valley of the Sun is often called the "Sightseeing Center of the Southwest," because there are more (17) National Parks and Monuments in Arizona than in any other state. Within a few hours' drive from meeting headquarters are huge, colorful Indian Reservations; the intriguing charm of old Mexico; cool, pine-clad mountains of northern Arizona.

Every visitor should, if at all possible, include in his plans a trip to Mother Nature's most spectacular work of art, the Grand Canyon of Arizona. Another scenic trip familiar to motorists the world over is U. S. Alternate Route 89.

This goes through Prescott over Mingus Mountain; visit Jerome, perched amazingly on the site of a mountain; travel down into the verdant Verde Valley; perhaps you'll see a movie being filmed at picturesque Sedona; marvel at the breathtaking beauty of Oak Creek Canyon, said by many to rival the splendor of the Grand Canyon.

There is much to see and do during your stay in Arizona. For further information or suggestions, or for help in planning your trip, just ask any member of the Transportation Committee. They'll be glad to help you.

ENTERTAINMENT

Social events and entertainment have been arranged for every evening except Friday.

Tuesday afternoon August 19th from 3:30 to 6:00 p.m. the Saddle and Sirloin Club in the Hotel Westward Ho

has been reserved for a roundup of members and families and a get-acquainted social. Tuesday evening in the Fiesta Room on the second floor of the Hotel Westward Ho a fellowship program has been arranged at which color films of scenic Arizona and its industries will be shown.

On Wednesday evening August 20th at 6:30 p.m. the hospitality hour for members and families has been scheduled in the Saddle and Sirloin Club of the Hotel Westward Ho. This will be immediately followed at 7:30 p.m. in the Fiesta Room by a genuine Arizona chuck wagon dinner with western entertainment for the members and their families.

Thursday evening August 21st at 7:30 p.m. the banquet, entertainment and dancing for members and families will be held in the Fiesta Room on the mezzanine floor of the Hotel Westward Ho.

LADIES EVENTS: Ladies headquarters will be in the Saddle and Sirloin Club on the third floor of the Hotel Westward Ho. Hostesses will be on hand at all times to extend a welcome, help you get acquainted and answer any questions you may have. Coffee will be served each morning from 10:00 until 11:00 a.m.

On Tuesday August 19th the ladies are invited to join with their men folk in the 3:30 p.m. roundup and attend the 8:00 p.m. fellowship program.

Wednesday, August 20th at 12:00 noon a luncheon, fashion show and Indian tribal dancing have been arranged in the Saddle and Sirloin Club. In the evening the ladies will again join the men for the hospitality hour at 6:30 p.m. and the chuck wagon dinner at 7:30 p.m.

Thursday, August 21st the ladies committee has scheduled a day of relaxation at the Town and Country Lodge. The ladies may enjoy swimming, playing cards or just relaxing. Luncheon and entertainment will also be provided. In the evening the Banquet, entertainment and dancing will prove attractive to both the ladies and the members.

HOTEL ACCOMMODATIONS: Rooms have been set aside at the Hotel Westward Ho which is completely air-conditioned. Sleeping rooms at the headquarters hotel are limited, but sufficient space has been promised for AIEE requirements. Early reservations will be advantageous and should be made directly to the hotel either by using the hotel reservation card furnished with this mailed announcement or by addressing Mr. Aiken Mathews, Manager, Westward Ho Hotel, Phoenix, Arizona. All requests should specify type of accommodations, number in party, date and time of arrival and date of departure.

Typical room rates are as follows: all with baths.

Room—Single Bed	<input type="checkbox"/>	\$6.	<input type="checkbox"/>	\$7.
Room—Double Bed	<input type="checkbox"/>	\$8.	<input type="checkbox"/>	\$9.
Room—Twin Bed	<input type="checkbox"/>	\$9.	<input type="checkbox"/>	\$10.
Suite—Two Rooms (2 people)	<input type="checkbox"/>	\$15.	<input type="checkbox"/>	\$20.*
Suite—Three Rooms (4 people)	<input type="checkbox"/>	\$30.*	<input type="checkbox"/>	\$35.*

*Kitchenette Apts.

The members of the Pacific General Meeting Committee are J. E. Redmond, chairman; T. M. Morong, Vice-Chairman; Americo Lazzari, Secretary; Walter Willson, Hotels; M. M. Bridgewater, Treasurer and Finance; Mrs. J. E. Redmond, Ladies; J. T. Kimball, Entertainment; M. R. Llewellyn, Sports; G. H. Groh, Technical Programs; E. A. Thomas, Registration; C. A. Poppino, Inspection Trips; C. R. Smith, Transportation; J. C. Clark, Students; Ben Ferguson, Publicity; I. G. Jenkins, Fay Percy, William Doak, Members at Large.

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