

National
POWER
Conference



SEPTEMBER 23-26, 1962



Port of Baltimore, Maryland

Sponsored by the **Power Divisions** of the
American Institute of Electrical Engineers
and the **American Society of Mechanical Engineers**
with the cooperation of the
Maryland Section, AIEE, and Baltimore Section, ASME



Technical Program



Monday, September 24

9:00 A.M. — SESSION I — PEAKING

Chairman:

MR. C. W. ELSTON
General Manager, Large Steam Turbine-
Generator Department
General Electric Company

Vice-Chairman:

MR. G. W. KEEN
Superintendent, Power Production Stations
Baltimore Gas & Electric Company

1. Mechanical Design Aspects of Conowingo's Second Stage Development

Authors:

MR. WEBSTER McCORMACK
Allis Chalmers Company
MR. STANLEY MOYER
Philadelphia Electric Company

2. System Planning and Electrical Design Aspects of the Conowingo Expansion

Authors:

MR. G. BALDERSTON
Philadelphia Electric Co.
MR. E. KASUM
Philadelphia Electric Co.

3. Why Aircraft Gas Turbines in Electrical Generation?

Author:

MR. T. R. WHEATON
Pratt and Whitney Aircraft

2:00 P.M. — SESSION II — NUCLEAR POWER

Chairman:

MR. R. F. GILKESON
Vice President
Philadelphia Electric Company

Vice Chairman:

MR. M. C. BEEKMAN
Director, Nuclear Power Development Department
Detroit Edison Company

1. Training of Operating Personnel for Shippingport Atomic Power Station

Author:

MR. C. N. DUNN
Duquesne Light Company

2. Non-Nuclear Testing at the Enrico Fermi Atomic Power Plant

Author:

MR. R. W. HARTWELL
Power Reactor Development Company

3. The Hallam Nuclear Power Facility Start-Up Program

Author:

MR. J. E. OWENS
AI Plant Superintendent
Hallam Nuclear Power Plant

4. Boiling Water Reactor Control System

Author:

DR. E. R. OWEN
General Electric Company

8:00 P.M. — SESSION III — EFFECTS OF TEMPERATURES ON THE PROPERTIES OF METALS

Chairman:

MR. R. A. BAKER
Chief Engineer
Public Service Electric and Gas Co.

Vice Chairman:

PROFESSOR G. L. WEST, JR.
Department of Naval Architecture and
Marine Engineering
University of Michigan

1. Metallurgical Principles Governing the Creep-Rupture Properties of Austenitic Steel Superheater Tubing

Authors:

MR. J. E. WHITE
University of Michigan
MR. J. W. FREEMAN
University of Michigan

2. A Study Designed to Explain the Creep-Rupture Strength of Type 321 ("18Cr — 8Ni + Ti") Superheater Tubing

Authors:

MR. J. E. WHITE
University of Michigan
MR. J. W. FREEMAN
University of Michigan

3. The SP-5 and SP-6 Projects

Author:

MR. H. M. SOLDAN
Public Service Electric and Gas Co.

4. Metallurgical Factors Influencing the Hot-Ductility of Austenitic Steel Steam Piping at Welding Temperatures

Authors:

MR. T. M. CULLEN
University of Michigan
MR. J. W. FREEMAN
University of Michigan

Tuesday, September 25

9:00 A.M. — SESSION IV — FUEL SLURRIES

Chairman:

MR. J. G. MILLER
Assistant Chief Engineer
Metropolitan Edison Company

Vice Chairman:

PROFESSOR GEORGE AUTH
Mechanical Engineering Department
Villanova University

1. Economics and Design Requirement of Pipe Line Transport for Coal Slurry

Authors:

MR. W. T. THAGARD
Texas Eastern Transmission Co.
MR. E. R. REICHL
Consolidation Coal Co.

2. Utilization of Pipe Line Coal in Pulverized Fuel-Fired Boiler Furnaces

Authors:

MR. J. JONAKIN
Combustion Engineering Company
MR. V. Z. CARACRISTI
Combustion Engineering Company

3. The Operating Experience at South Amboy with Cyclone Furnace Firing

Authors:

MR. G. KALCEC and MR. P. P. OLIVADOTI
Jersey Central Power and Light Co.
MR. A. F. DUZY
Babcock & Wilcox Co.

2:00 P.M. — SESSION V — STEAM POWER STATIONS

Chairman:

MR. W. C. BEATTIE
Vice President
Consolidated Edison Company

Vice Chairman:

MR. G. H. McDANIEL
Head, System Operating Division
American Electric Power Service Corp.

1. First Year's Operating Experience with Charles P. Crane No. 1

Authors:

MR. W. MacWILLIAMS
Baltimore Gas & Electric Co.
MR. W. L. RIEDEL
Baltimore Gas & Electric Co.

2. Controls and Protection for Charles P. Crane No. 1

Authors:

MR. C. D. ALVEY
Baltimore Gas & Electric Co.
MR. R. McC. BYERS
Baltimore Gas & Electric Co.

3. Boiler Water Quality Control in High Pressure Steam Power Plants

Author:

MR. J. E. LUX
Babcock and Wilcox Company

4. Keeping Power Station Noise Within Acceptable Limits

Author:

MR. R. X. FRENCH
Sargent and Lundy

Wednesday, September 26

9:00 A.M. — SESSION VI — MECHANIZATION IN THE POWER INDUSTRY

Chairman:

MR. L. B. LeVESCONTE
Sargent and Lundy

Vice-Chairman:

MR. D. M. SAUTER
Minneapolis-Honeywell Regulator Company

1. Digital Computer Controls Automatic Dispatch of Generation for Philadelphia Electric Co.

Authors:

MR. A. C. HARTRANFT
Philadelphia Electric Co.

MR. J. R. STAUFFER
Philadelphia Electric Co.

MR. J. HOAG
Minneapolis-Honeywell Regulator Company

2. Automatic Coal Handling on the Public Service System

Authors:

MR. H. E. CARPENTER
Public Service Electric & Gas Co.

MR. F. H. SCHIFFER
Public Service Electric & Gas Co.

3. The Boiler Cleaning Control Subloops

Authors:

MR. W. F. CANTIERI
Diamond Power Specialty Co.

MR. J. W. LOCKE
Diamond Power Specialty Co.

4. Design and Operation of Automatic Burners Control System for West Texas Utilities Company, Oak Creek Power Station

Authors:

MR. L. E. ACKMANN
Sargent and Lundy

MR. R. E. PATTON
West Texas Utilities Company

MR. M. MACZUZAK
Bailey Meter Company

MR. F. A. JASANY
Bailey Meter Company

Availability of AIEE Papers

Copies of AIEE papers can be obtained after the Conference by writing directly to the American Institute of Electrical Engineers, 345 East 47th Street, New York 17, New York. Prices are 50 cents to members and \$1 to nonmembers. Do not order without numbers which will be listed in the final program distributed at the Conference.

Availability of ASME Papers

No ASME papers were available when this program went to press. Therefore do not order any papers listed in this program. The final listing of available technical papers will be found in the issue of MECHANICAL ENGINEERING containing an account of the Conference. Prices are 50 cents to members of ASME, \$1 to nonmembers, plus postage and handling charges. Payment may also be made by free coupons which may be purchased from the Society in lots of ten at \$4 to members; \$8 to nonmembers. YOU CAN SAVE THE POSTAGE AND HANDLING CHARGES BY INCLUDING YOUR CHECK OR MONEY ORDER MADE PAYABLE TO ASME WITH YOUR ORDER AND SENDING BOTH TO: ASME ORDER DEPARTMENT, 345 EAST 47th STREET, NEW YORK 17, NEW YORK.

Hotel Reservation Form

**AIEE-ASME National Power Conference
September 23-26, 1962**

To assure preferred treatment and confirmation this form or facsimile must be received no later than September 8, 1962 by Mr. David S. Wilson, Lord Baltimore Hotel, Baltimore 3, Maryland. If a room at the rate requested is unavailable, one at the nearest available rate will be reserved.

Name _____

Company _____

Address _____

City _____ Zone _____ State _____

Arrival Date _____ Hour _____ Departure Date _____

Please reserve accommodations as checked below:

(Per Day)

Single/Bath	\$ 8.00-\$14.00	<input type="checkbox"/>
Double (Double Bed)	\$ 9.50-\$18.00	<input type="checkbox"/>
Double (Twin Bed) Shower Tub	\$11.00-\$18.00	<input type="checkbox"/>
Suites (Parlor, Twin Bedrooms & Bath)	\$23.00-\$37.00	<input type="checkbox"/>

(Tear Here)

**AIEE-ASME NATIONAL POWER CONFERENCE
Advance Registration Form
September 23-26, 1962, Baltimore, Maryland**

REGISTRATION FEES:	No.	Cost	Total
<input type="checkbox"/> Member AIEE	_____	\$ 7.00	_____
<input type="checkbox"/> Member ASME	_____	\$ 7.00	_____
<input type="checkbox"/> Non-Member	_____	\$10.00	_____
<input type="checkbox"/> Wives of Registrants	_____	No Fee	_____
<input type="checkbox"/> Students	_____	No Fee	_____

SOCIAL EVENTS

<input type="checkbox"/> Sunday, September 23	_____	No Fee	_____
<input type="checkbox"/> Get Acquainted Party 4:00 to 6:00 P.M.	_____	No Fee	_____
Monday, September 24	_____	\$ 4.00	_____
<input type="checkbox"/> Welcoming Luncheon	_____	\$ 4.00	_____
Tuesday, September 25	_____	\$ 8.00	_____
<input type="checkbox"/> Luncheon	_____	\$ 4.00	_____
<input type="checkbox"/> Banquet	_____	\$ 8.00	_____

Please indicate your probable attendance at the following events:

- Charles P. Crane Station, Baltimore Gas and Electric Co.
- Sparrows Point Plant, Bethlehem Steel Co.

(Please Print)
Name _____
Address _____
City & State _____
Company _____
Title _____

Tickets for Ladies' Activities on Sale at Ladies Headquarters.

Please Make Check for Registration and Social Events Payable to:
National Power Conference

To avoid delay at registration desk, please mail this form with your check to:

Charles Wallace
Westinghouse Electric Corp.
501 St. Paul Place
Baltimore 2, Maryland

GENERAL INFORMATION

REGISTRATION

The Registration Desk will be located on the Mezzanine and will be open during the following hours:

Sunday, September 23	4:00 p.m. to 8:00 p.m.
Monday, September 24	8:00 a.m. to 5:00 p.m.
Tuesday, September 25	8:00 a.m. to 5:00 p.m.
Wednesday, September 26	8:00 a.m. to 12 Noon

REGISTRATION FEES

AIEE and ASME Members	\$ 7.00
Non-Members	\$10.00
Student	NONE
Wives of Registrants	NONE

AUTHORS BREAKFAST

By invitation, the authors, session chairmen and vice chairmen of each day's technical sessions will meet at breakfast to become better acquainted and receive last minute instructions. The breakfast will be served in the Maryland Room at 8:00 A.M.

LADIES PROGRAM

Monday, September 24, 1962

- 9:00 A.M. — Coffee Hour
- 9:45 A.M. — B & A Bus Tour, Annapolis, Md., Naval Academy — Dutch Treat Lunch at Carvel Hall — Historical Houses — The Capitol — Reception at the Governor's Mansion — Fee — \$3.00 Per Person
- 8-10 P.M. — Social Time — Cards if Desired

Tuesday, September 25, 1962

- 9:00 A.M. — Bus Tour of Procter & Gamble Plant — Coffee and Favors at Plant
- 10:45 A.M. — Bus to Engineers' Club and Walter's Art Gallery
- 1:00 P.M. — Dutch Treat Lunch at Hutzler's Department Store — \$1.50 Per Person

Wednesday, September 26, 1962

- 9:00 A.M. — Coffee Hour
- 9:45 A.M. — Bus Tour — Some Historical Points in Baltimore — Fee — \$1.25 Per Person
- 12:00 Noon — Lunch at Haussner's Restaurant (Dutch Treat)
- 1:00 P.M. — Optional Tours with Husbands
 - a. Crane Station
 - b. Sparrows Point Plant

A separate headquarters area on the mezzanine, which will be opened each morning from 9 o'clock until noon, has been arranged for the ladies.

CONFERENCE HIGHLIGHTS

In planning to attend this conference you are urged to purchase your tickets in advance by using the Advance Registration Form. The price per ticket is listed below and includes gratuities.

GET ACQUAINTED PARTY

Carnival Room

Sunday, September 23
4:00 to 6:00 P.M. No Fee

WELCOMING LUNCHEON

Caswell Room

Monday, September 24
12:15 P.M. \$4.00 per person

Speaker: Mr. T. E. Marburger, Vice President, Engineering and Construction, Baltimore Gas and Electric Co., and Vice President, District #2, AIEE

LUNCHEON

Main Ballroom

Tuesday, September 25
12:15 P.M. \$4.00 per person

Prime Movers Committee Award, presented by Mr. Clifford H. Shumaker, President, ASME, to F. J. Pocock, Senior Chemist, and J. F. Stewart, Chemist, Research Center, Babcock and Wilcox Co.

Speakers: Dr. B. R. Teare, Jr., President, AIEE
Mr. C. H. Shumaker, President, ASME

RECEPTION AND BANQUET

Main Ballroom

Tuesday, September 25
6:30 P.M. \$8.00 per person

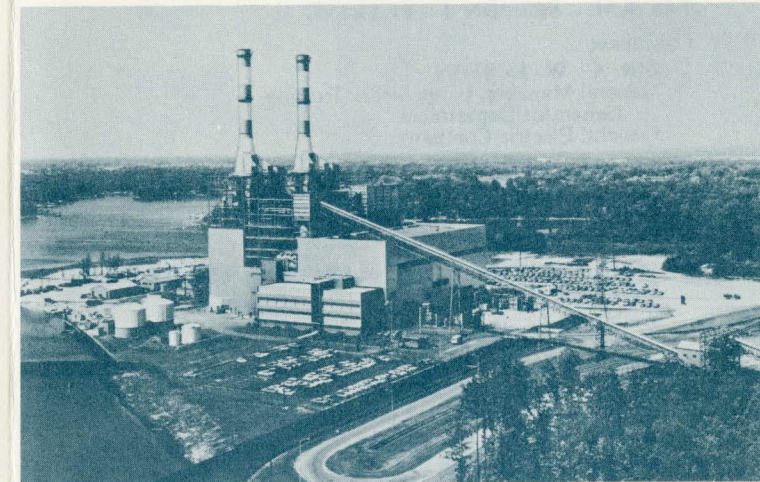
Presentation of ASME George Westinghouse Gold Medal by Mr. Clifford H. Shumaker to Edwin Holmes Krieg, Vice President and Director, Stone and Webster Engineering Corp.

Speaker: Mr. R. E. Ginna, Chairman of the Board, Rochester Gas and Electric Corp.

INSPECTION TRIPS

Wednesday, September 26

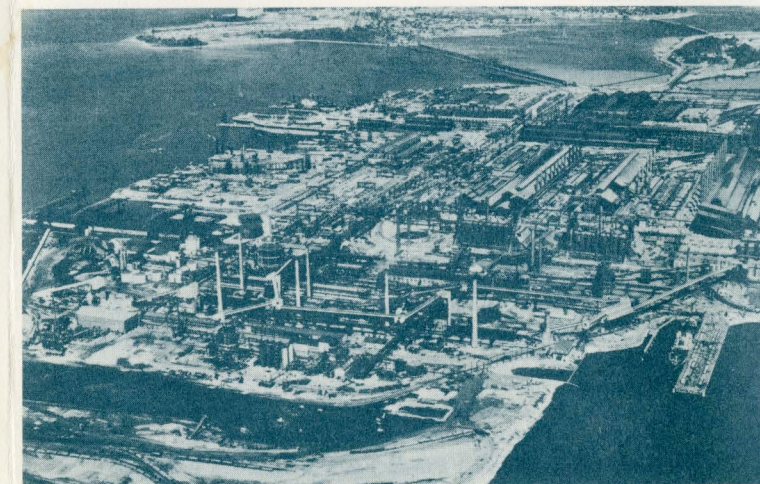
1:00 P.M. — Tour to the Charles P. Crane Station of the Baltimore Gas and Electric Company. There is no charge for this tour.



Charles P. Crane Station — contains the largest and most efficient unit in the Baltimore Gas and Electric Company system. Boiler is country's first cyclone-fired, subcritical pressure, once-through installation.

Wednesday, September 26

1:00 P.M. — Tour to the Sparrows Point Plant of the Bethlehem Steel Company. There is no charge for this tour.



Sparrows Point Plant — the largest integrated steel plant in the world. Facilities of this Bethlehem Steel Company plant for converting iron ore to steel sheet, plate, wire and pipe extend over a 4,000 acre tidewater site.

The Power Divisions AIEE-ASME

***Cordially Invite You
to Attend the***

1962

NATIONAL POWER CONFERENCE

September 23-26, 1962

***Lord Baltimore Hotel
Baltimore, Maryland***

PLAN NOW TO ATTEND!

**THE AMERICAN INSTITUTE
OF ELECTRICAL ENGINEERS**

**345 East 47th Street
New York 17, N. Y.**