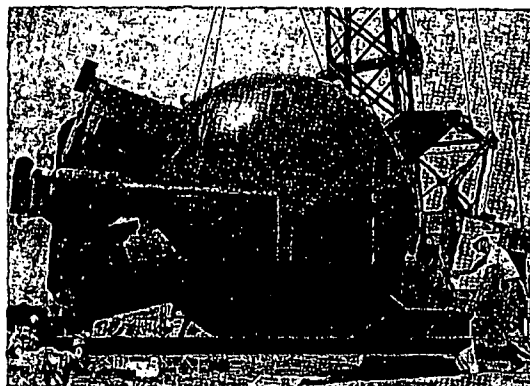


READER SERVICE SECTION

POWER NEWS
TECHNICAL BRIEFS
PLANT EQUIPMENT NEWS
NEW FREE BULLETINS



FIRST OF THREE pole units of a General Electric circuit breaker goes to Ohio Power Co's Muskingum River Plant. Unit pictured above is more than 11 feet in diameter and can hold 3350 gallons of insulating oil. The complete circuit breaker, weighing 80 tons, will be a major part of the nation's first 330-kv power transmission network.



LARGEST DISCONNECT SWITCH built by Westinghouse Electric Corp. set for test in high-voltage lab. It will handle 330-kv, surge of 1.3 million.

Lack of Funds Ends Gorgas Tests

► UNDERGROUND COAL GASIFICATION experiments have ended at Alabama Power Co's Gorgas mine. Termination of the project resulted from Congressional refusal to allot additional funds for support of the experiment.

Water pumped into the outlet holes extinguished the underground fires on June 20. However, scientific and technical knowledge gained from the four experiments at Gorgas has not been lost and the entire project can be resumed at any time in the future. Similar tests are continuing in Belgium, England and elsewhere.

The Alabama experiment, started in January 1947, was the first development

of the underground firing and continuous burning process. Later experiments led to electro-linking, a method of firing the coal by passing an electric current directly through the seam. This process produced high Btu content, synthetic gas in continuous volume and of a purity adequate to operate a gas engine.

Remarkable success of these experiments led to a world underground gasification congress at Gorgas and Birmingham—a meeting that drew noted scientists from many parts of the world. No decision has been made as to possible continuation of the Gorgas project, but the subject is so important that it probably will not be abandoned entirely.

Gas Turbines Boost Venezuelan Oil Output

► GAS TURBINES will soon be pumping gas from oil wells back into field reservoirs to conserve energy and increase ultimate production. General Electric Co has shipped the first two of ten turbines to the Creole Petroleum Corp for the Tia Juana field in Lake Maracaibo.

Fields in Maracaibo, one of the major oil-producing areas of the world, are dotted with flow stations receiving a mixture of gas and oil from wells in the lake. The ten turbines, mounted on 340 x 130-ft platforms seven miles out on the lake, will receive gas piped at (Continued on page 238)

For coming events see page 240

Scotland Plans Peat Fueled Power Project

► AN EXPERIMENTAL PEAT-BURNING power station, to be built at once at Altnabreac, Scotland, forms the first step in an extensive development scheme for the Scottish Highlands.

The pilot plant will consist of a 2000-kw, closed-cycle gas-turbine developed by John Brown & Co, Ltd of Clydebank and a 750-kw, open-cycle turbine manufactured by Ruston & Hornsby of Lincoln. The units will be installed as soon as initial running tests are ended.

The whole pilot scheme will take three to four years for completion and will cost about \$1.4-million. A Development Fund, North of Scotland Hydroelectric Board and the British Electric Authority will meet initial capital and development costs. The Hydroelectric Board will handle running costs.

There are about 600-million tons of peat solids, suitable for use as fuel, available in Scotland. If the present project is successful, the Hydroelectric Board plans further developments over the entire area. A gas turbine burning dried peat has run, with very promising results, for 1000 hours at a Clydebank experimental station. The Altnabreac project is a direct result of this success.

Look for These 7 Signs of GOOD PUMP DESIGN

CAST SHAFT SLEEVES, commercial tubing, save the shaft from wear. Sleeves extend through the stuffing box and seal on the impeller hub.

HEAVY HORIZONTAL SPLIT CAST-IRON CASING construction with suction and discharge nozzles located in lower half for easy inspection without disturbing piping.

COUPLINGS have Mastic-Grip quick change bushings for pump and drive shaft. Pin and rubber bushing type usually used. Removal for maintenance is easy.

BALL BEARINGS may be furnished for either oil or grease lubrication. Sleeve bearings also available in larger sizes.

GENEROUS STUFFING BOX LENGTH contains sufficient packing to keep stuffing box maintenance low. Provision is made for sealing water connections or for grease seal if these are required.

DOUBLE SUCTION ENCLOSED IMPELLER is precision turned and carefully balanced to assure vibrationless operation and close wearing ring clearance. Water passages are hand finished to a smooth surface.

STANDARD AND SPECIAL MATERIALS are available for many types of service where government regulations permit. Iron, bronze, stainless steel and combinations of these materials handle both oxidizing and acid solutions. Standard sizes carried in stock range from 10 to 7000 gpm with heads as high as 475 feet.

THESE DESIGN AND CONSTRUCTION features of Allis-Chalmers double suction pumps assure long pump life and low maintenance costs. Every A-C double suction pump is carefully tested on the most modern pump testing equipment in the industry.

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