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Unusual Turbines Under Construction

Two turbines of considerable engineering interest are under construction at Westinghouse Electric Corp. Both machines will use steam at high pressure and temperature but will employ steam reheating to an extent greater than usual.

One, a 65,000-kw triple-cylinder design for Boston Edison Co will use steam at 1450 psig and 1000 F. Steam exhausts at 365 psig from the high-pressure turbine. It returns to a reheat boiler where its temperature is raised back up to 1000 F. From here it enters the intermediate-pressure element of the turbine. The low-pressure turbine has an inlet pressure of about 40 psig and is of double-flow construction.

The second turbine designed for reheat is a 30,000-kw one slated for Dow Chemical Co. It has a complicated automatic control system to perform. Design pressure is 1250 psig, 825 F at the throttle. Steam is extracted at 425 and 165 psig. It exhausts at 25 psig. A hydraulic governor system controls the machine.

Work Starts on Hungry Horse Dam

Chief engineers office of the Bureau of Reclamation, Denver, called for bids to excavating for a 36-ft diversion tunnel 1100 ft long at Hungry Horse Dam, Montana.

The tunnel will divert waters of the south fork of Flathead River during the construction of the dam itself next spring. 45,000 cu yd are to be removed to form the horseshoe-shaped tunnel.

Hungry Horse Dam is expected to create a 3,500,000 acre-ft reservoir for irrigation in that area. In addition the reservoir will increase the firm power capacities of power plants on the Columbia River. The dam will be an arch-gravity structure 520 ft high and 2130 ft long.

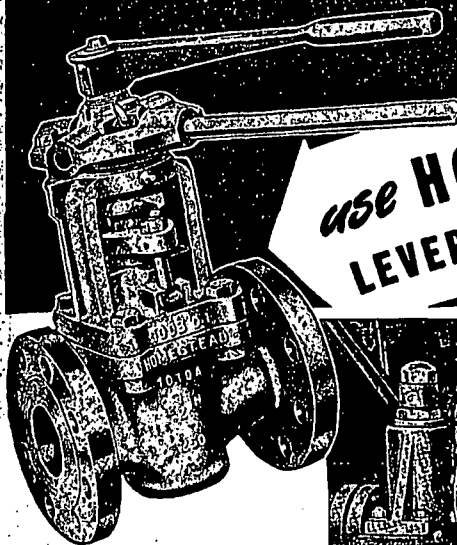
I.T.E. Circuit Breaker Co acquired Railway & Industrial Engrs Co as a subsidiary Nov. 1. Amalgamation of the two companies, effected through a transfer of stock, unites two major manufacturers of electrical switchgear whose apparatus lines are supplementary. I.T.E.'s business has been built largely around indoor air-circuit breakers up to 5000 v, as well as metal-enclosed switchgear for power-station auxiliary service and industrial distribution systems. R&IE business has been chiefly high-voltage, outdoor switching apparatus in the voltage range between 5000 and 287,000 v.

The present intention is to have I.T.E. plant at Philadelphia and R&IE plant at Greensburg, Pa., continue to make their present products. R&IE will operate under its established name with its present management personnel virtually unchanged. W M Scott Jr will be president of both companies. B W Kerr, formerly president, and K S Nevin, vice-president, treasurer and general manager of R&IE, became directors of I.T.E.

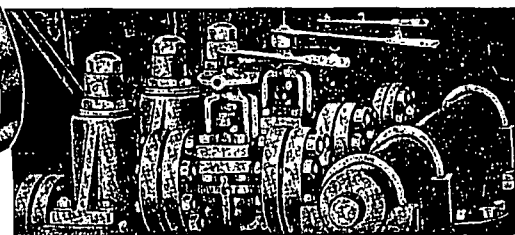
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