

FEDERATION OF RHODESIA AND NYASALAND  
FEDERAL POWER BOARD

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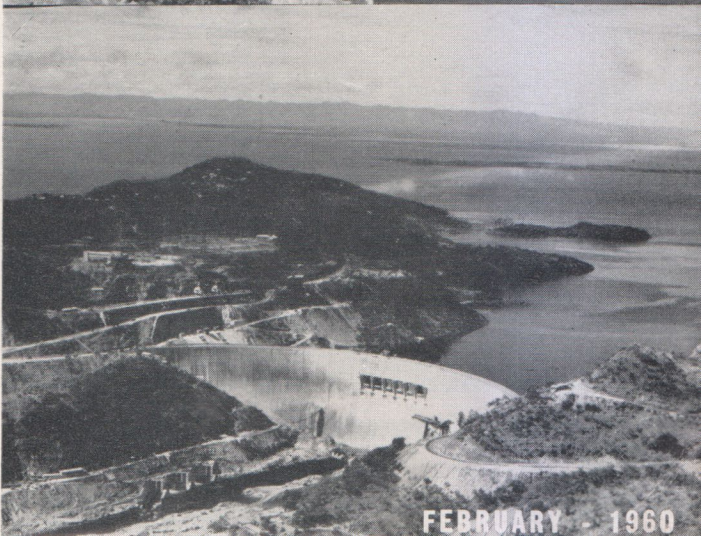
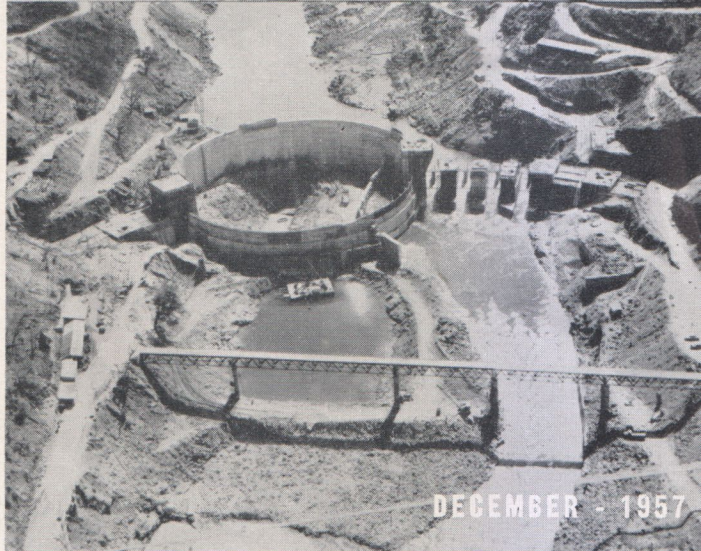
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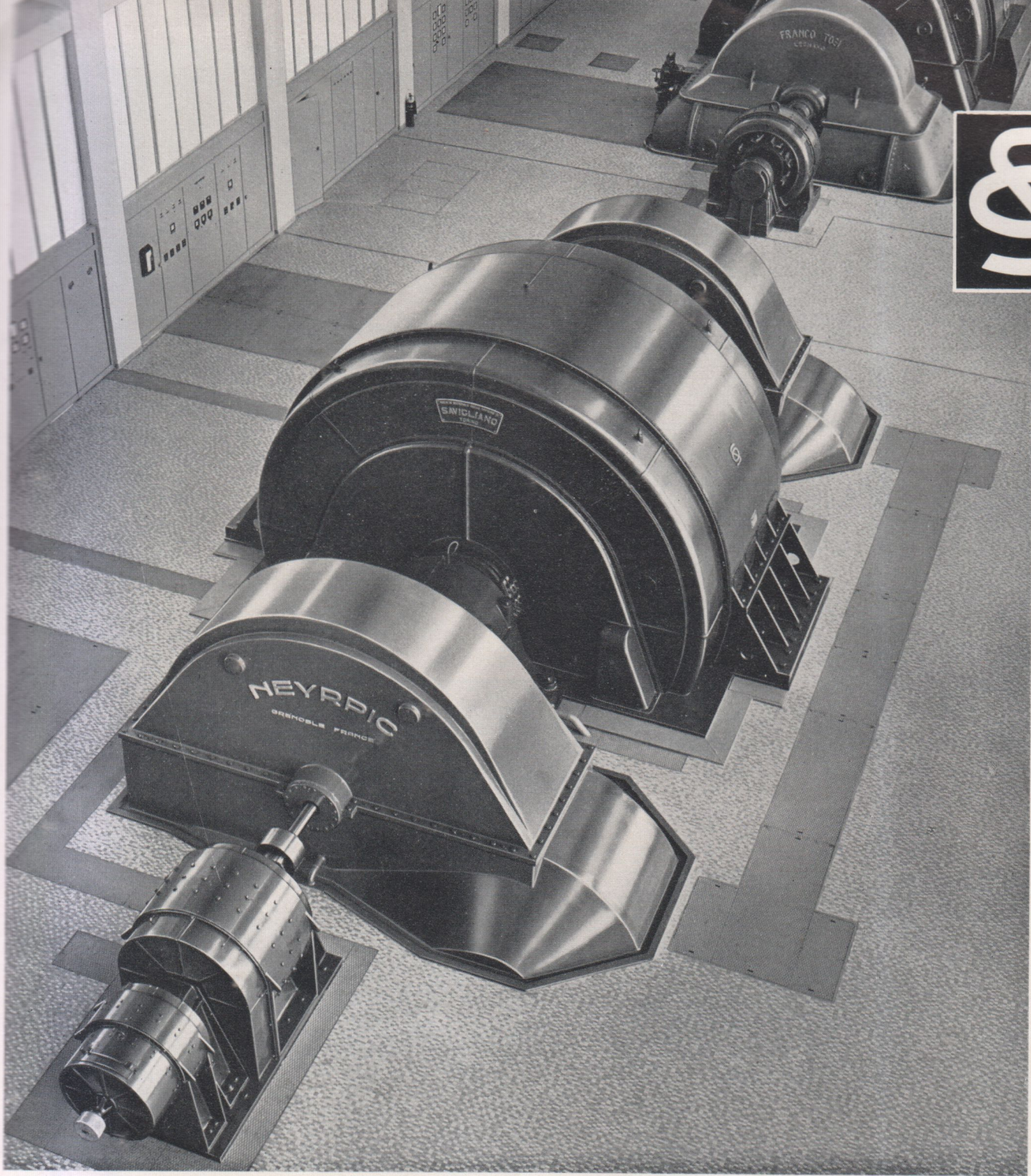
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One 75 MVA three-phase synchronous generator, horizontal shaft, 428 r.p.m., 11,000 V  $\pm$  5%, 50 c.p.s.  $\pm$  5% coupled to two Pelton turbines of the overhanging type. This generator has been supplied to C.E.B. (Consorzio Elettrico del Buthier), Turin, Italy, for their Valpelline power station. This machine is the largest generator in the largest power station in the Aosta Valley.

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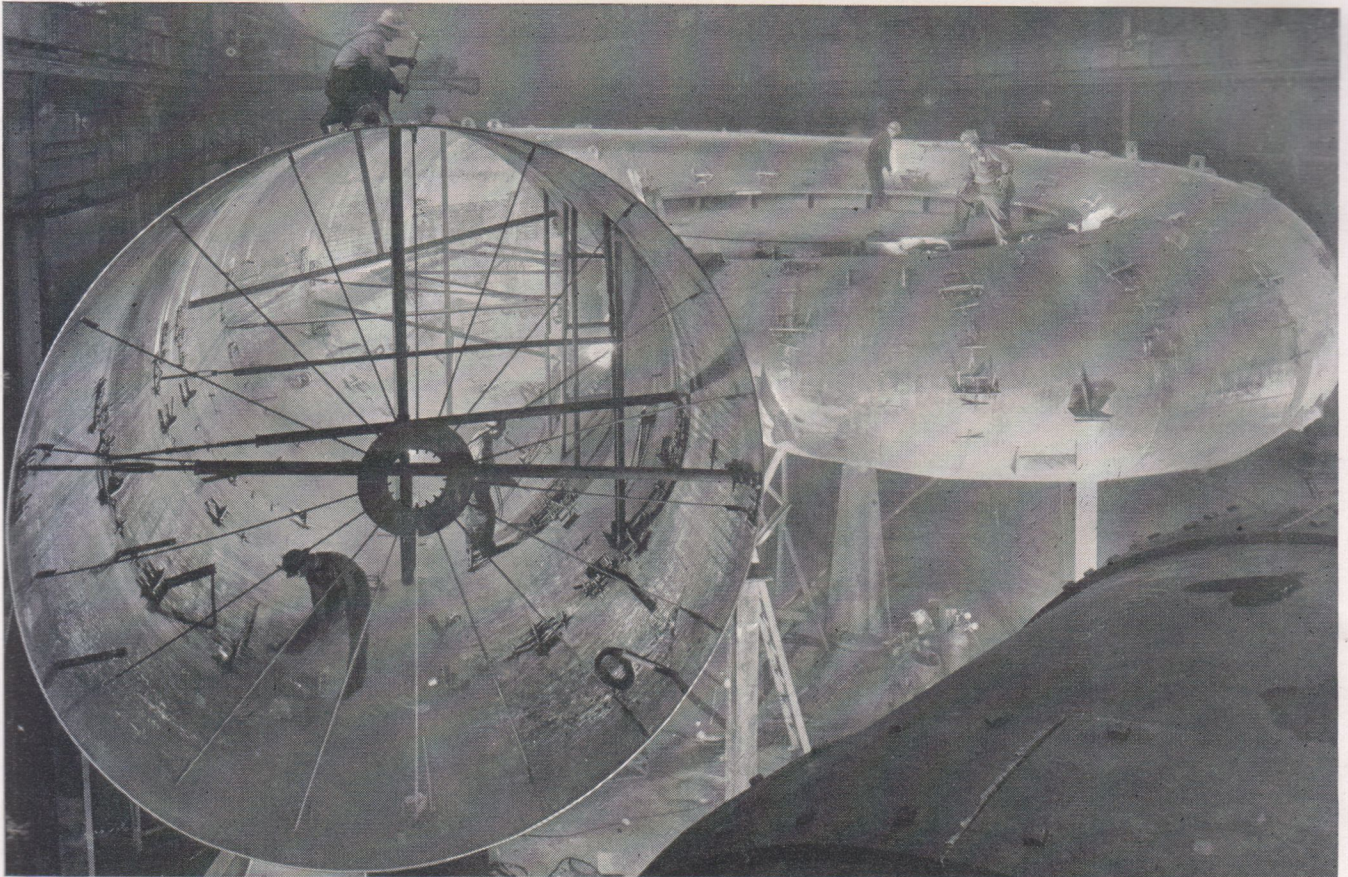
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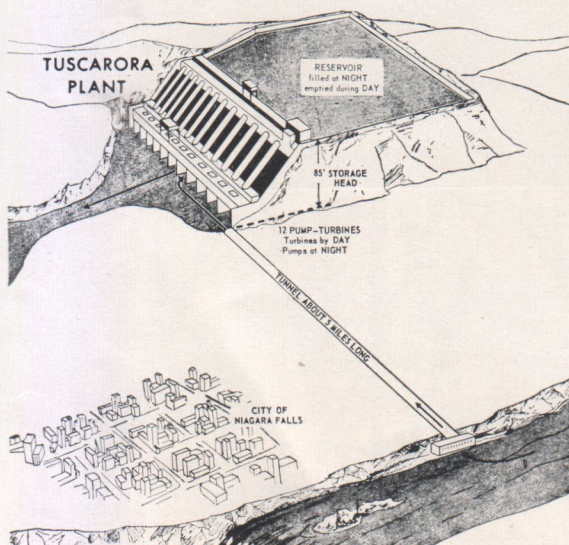
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THE BIGGEST MADE IN THE U.S.A., this reversible pump-turbine scroll case has inlet diameter of 18 ft, measures 56 ft across. It's designed for one of Tuscarora's 12 Allis-Chalmers pump-turbines.

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**Power plant by day, pumping station at night** — the New York State Power Authority's Tuscarora plant will capitalize on the hydroelectric power potential of the Niagara River without adversely affecting the scenic beauty of the Falls.

The largest project of its kind, Tuscarora will have 12 reversible pump-turbines... all designed and fabricated by Allis-Chalmers. As a turbine, each of these units is rated at 28,000 hp under 75-ft head. In reverse, as a pump, each is rated at 3400 cfs against 85-ft head. All will be direct-connected to Allis-Chalmers generator-motors — rating 25,000 kva at .8 P.F. as generators... 37,500 hp at 100% P.F. in reverse as motors.

The selection of Allis-Chalmers to design and build the above components came naturally. A-C is the only builder of complete reversible pump-turbine installations — with a record that includes the world's largest pumped-storage projects.

Look to Allis-Chalmers for leadership in the design, engineering and manufacture of hydraulic turbines and necessary accessories such as valves, pumps, trash rakes, water control gates and hoists. For information, contact your nearby A-C office... or write **Allis-Chalmers, Hydraulic Division, York, Pa.**