

SUPERCHARGED COOLED TURBINE-GENERATOR Performance Report for: CALENDAR YEAR 1952

Hours in Service	8557
Total Hours	8784
Service Factor	97.41%
Chargeable Outages	NONE
Turbine Availability	100.0%
Generator Availability	100.0%
Total Generation	408,849,000 kw-hrs

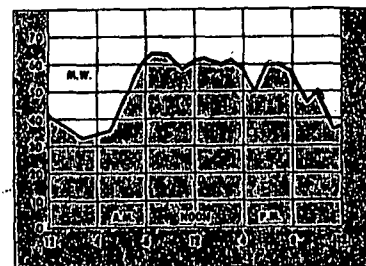
Availability for Duty: 100.0%!

Supercharged Hydrogen Cooling — the greatest advance ever made in turbine generator design — has proved itself brilliantly in its first full commercial operation!

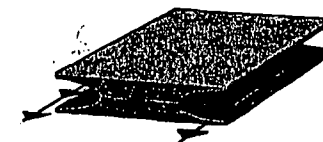
This is the calendar year 1952 Performance of the Allis-Chalmers 60,000 kw steam generator unit at the Edgewater station, Wyan, Wisconsin Power and Light Company. Both turbine and generator Availability 100.0%, with on-the-line Service Factor for the entire year being 97.41%.

By driving hydrogen at high velocity through the conductors — supercharging was first developed and applied by Allis-Chalmers. Supercharging has already permitted the generator rating of more than 70% ordinary hydrogen cooling, with even greater gains forthcoming.

You get the real design advances first from Allis-Chalmers, builder of the world's widest range of power plant equipment. When planning a steam-electric power plant, your task will be simpler and results better if you deal with Allis-Chalmers. For complete literature on all products, call your nearest A-C office or write to Allis-Chalmers, Milwaukee 1, Wisconsin. A-2781



Typical daily load cycle of the Sheboygan supercharged unit. It experiences wide load fluctuations because it operates in parallel with base load hydro power. Supercharged units are suited for even this strenuous duty because of high part load efficiency and shorter, more thermally stable construction.



Cross sectional view, showing two turns of typical supercharged conductor construction. The cooling gas is in intimate contact with the copper, removing the heat right where it originates. The heat does not have to migrate through insulation and surrounding metal to reach vent ducts in the rotor teeth or body.

ALLIS-CHALMERS

FIRST with Supercharged Hydrogen Cooling!

