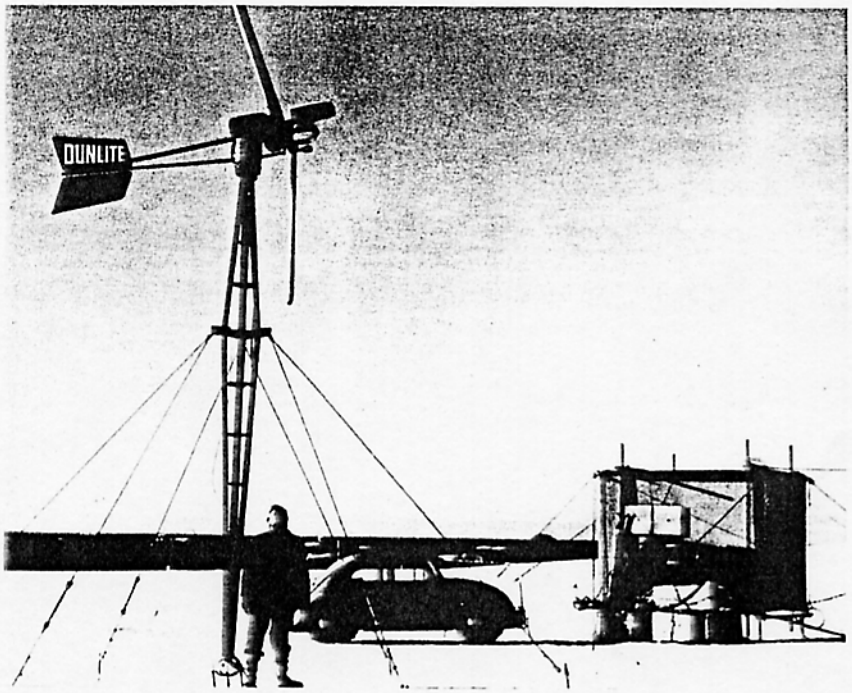
Dunlite wind driven battery charging plants-they look after themselves.



Antarctic Installation — a Dunlite wind-driven generator installed at Mawson provides power to charge batteries for the Glaciology instrumentation hut.

A Dunlite wind-driven power plant is being used to power the world's longest Microwave Communicatior link between Port Pirie in S.A. and Northam in W.A.

Whenever there is a lack of mains power and a need for simple and economical power generation, there's a Dunlite wind-driven generator to do the job.

Installation of Dunlite Wind-Driven Plants is Simple

Installation of Dunlite wind-driven plants is simple and can be carried out by anyone capable of installing a windmill. The plant is assembled in sections after the tower has been erected — full instructions are included with the plant. The heaviest part is the generator, which weighs from 140 lbs. to 280 lbs. depending on model. Leads are taken from the terminals on the tower to the battery room.

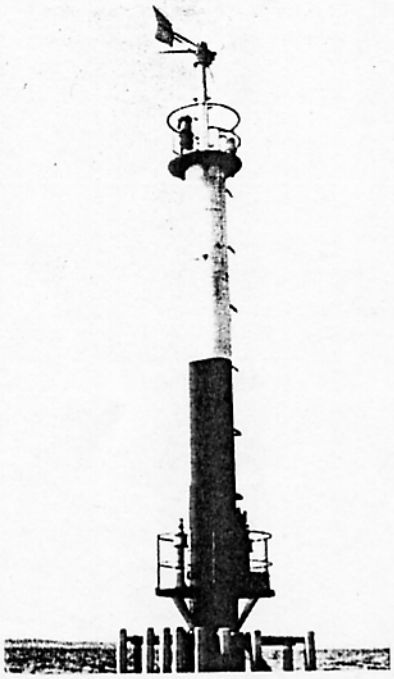
Dunlite Charge Even in Winds as Low as 7 m.p.h.!

Dunlite plants commence charging batteries in winds as low as 7 m.p.h. and reach maximum output in a 25 m.p.h. breeze. Even in light breezes batteries are charged at a slow safe rate.

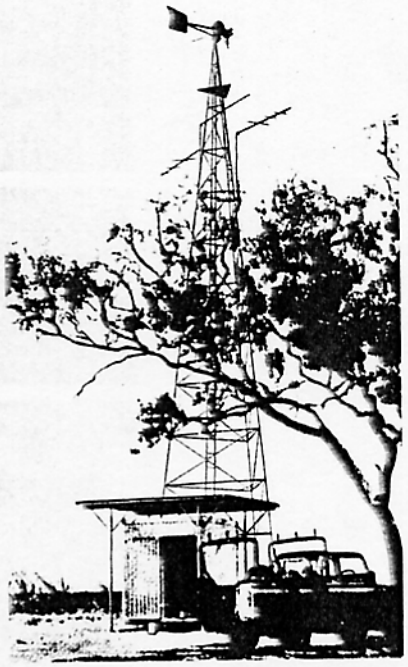
Dunlite Wind-Driven Plants Can be Used as a Sole Source of Power

Many thousands of people use a wind plant to supply all their electrical requirements. Normally, where a wind plant is installed as the sole source of power, batteries of sufficient capacity to carry the load for a week without wind, should be installed.

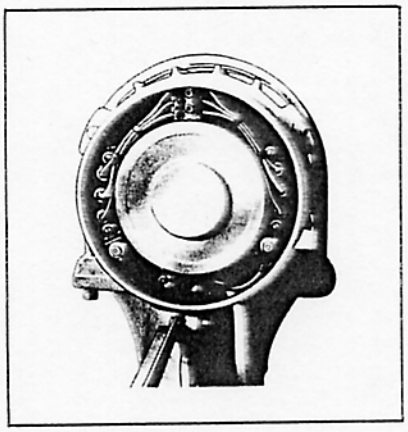
Or alternatively for installations involving heavy power demands a wind-driven plant may be installed in conjunction with a stand-by diesel engined plant. Both the wind-driven and diesel plants are permanently connected to a common set of batteries, each through a separate reverse current relay. Either plant can be run at any time without the need for any switching or manual adjustments. This is really an ideal arrangement as it provides all the advantages of free electricity generated by the wind plant with the safeguard of an engine driven generator for emergencies.



Model "L" Dunlite wind-driven generators have been installed on two "leading light" towers which aid ships in navigating channels to the oil refineries at Kwinana, W.A.



Powered by Dunlite brushless wind generators, the P.M.G. radio telephone link between Wanaaring and Thoulcanna is the first wind-powered telephone system in N.S.W.



End view of a brushless generator with cover removed, showing diodes and output terminals.

Dunlite Wind-Driven Plant and Stand-by Diesel Set Installations Provide the Following Benefits—

1. It produces electricity free — no fuel or oil costs.
2. Maintenance cost on a wind plant is extremely low — only three revolving parts, all mounted on sealed ball races.
3. Even if the load is heavy and the wind plant only supplies half the power, it means that the life of the engine plant is doubled.
4. It saves time and work in fuelling and maintaining an engine plant.
5. Longer battery life, an important factor in any installation, is obtained with a wind-driven plant because the batteries are charged slowly and frequently. Because of this batteries are maintained in a higher state of charge than with an engine plant.
6. On Model "L" and Brushless plants the automatic charging rate control keeps batteries from being over charged and yet always maintains batteries in a fully charged condition without the need for testing or switching plant on and off.

How to Choose the Location

Choice of location is of primary concern when installing a wind-driven plant. Power to operate the generator must come from the wind and the propeller should be installed above any surrounding objects to ensure an uninterrupted air flow to the plant. Surrounding objects within 100 yards radius have a very disturbing effect on the air and cause whirling eddy currents that affect plant performance.

It must be remembered that trees behind a plant interfere as well as trees in front. Dunlite wind-driven plants have a large reserve to overcome line voltage drop and it is better to install the plant 100-300 yards away from the point where power is required if a good wind can be obtained in that position. In hilly districts, hills can cause swirling winds or blind spots and it is better to mount the plant on a hill top so that it gets clear wind from all directions.

How Long is the Life of a Dunlite Wind-Driven Plant?

The design of Dunlite plants does away with maintenance worries. All rotating parts are mounted on sealed grease-packed ball races and no lubrication is usually necessary for 5-7 years. Dunlite keeps a complete plant history service so that by quoting the serial number of your plant any part can be supplied immediately (we have records of many plants which have run 10-15 years without any service whatever).

The Features of Dunlite Wind-Driven Power Plants

1. Current is transferred from the generator through slip rings enclosed in the turntable section, to a weather shrouded terminal strip.
2. Standard plants are designed to withstand wind speeds of 80 m.p.h. and will commence to charge in a 6-8 m.p.h. wind and deliver maximum output in a 25 m.p.h. wind. Specially designed units can be supplied where wind conditions exceed 80 m.p.h.