When one of these became vacant it was converted into a showroom, and for the first time the company was able to display under its own control, the range of products which it was manufacturing.

In 1950, the first of a considerable number of 48V 750W wind generating units was sold to the POST-MASTER GENERAL'S DEPT. (Now TELECOM AUST.) to power country repeater stations, where no mains supply was available. Also in this year, the frontage to Rundle Street of the building housing the winding and packing departments was rented and the sales division was moved into this area, clearing the way for the demolition of the old cottages.

In 1951, the 1000W and 1500W (MODELS "L" & "M")'wind generators went into production. These featured the 3 bladed variable pitch propellers, rigid tail assembly and voltage control regulators and full band FERRODO type brake. These continued in production until 1973 (MODEL "L") and 1970 (MODEL "M")

In 1951, work commenced on the building of the new premises to house the company and in 1952, all operations were transferred to this building, which consisted of a basement, ground and first floor areas, it was shortly after this that the old original workshop premises building was demolished, the street widened and renamed FROME ST.)

With more space, efficient layout and additional machining facilities, staff numbers and production increased. Also a comprehensive range of appliances were stocked to meet customer requirements. There was a considerable continuing demand for engine powered d.c. generator sets and in 1953 a complete new range of DUNLITE units went into production ranging from 1000-1750 watts output.

These were a new concept in design, with the armature sliding on and locked to the engine crankshaft and the body/field assembly bolted directly to the engine spigot, dispensing with belts and pulleys.

A ranges of engines were used including kerosene, petrol, and diesel fuelled, either air or water cooled and this allowed the customer a greater degree of choice in sizes and prices. A variety of control system was available including an automatic version, which resulted in engine starting as battery condition or load dictated and shutdown when demand ceased.

These d.c. units, in their various forms, continued to be manufactured until 1972.

In mid 1954, with a growing trend toward the replacement of d.c. generators and sets of batteries with alternator sets to furnish power for all manner of household appliances, refrigeration, air conditioning and workshop equipment in the rural area, the DUNLITE designed alternator was placed on the market.

Initially it was available only as 240V single phase 1.5 & 3kVA either as two bearing alternator or directly mounted to the engine in a similar manner to the d.c. generators.

In 1955, the first of a series of contracts, continuing up to the present day, was placed by the PMG DEPT. for engine powered generator sets.

These were supplied as 24 or 4§V 500W d.c. units for battery charging in remote country areas. Further business expansion necessitated the addition of another floor to the building in 1956 and the goods lift installed originally (ex. St. Ann's College) was used to capacity moving completed sets from the top floor to the despatch section.

During the next 8 or 9 years, the DUNLITE range of alternator sets, powered by a variety of diesel engines, available in single and three phase and with outputs up to 40kVA were produced and sold throughout Australia.

With the range available DUNLITE was able to meet the requirement for many commercial applications including hospital's, defence forces and government bodies.

The previous method of mounting the armature on the engine crankshaft was, during this period, superseded by a new type coupling in which a series of spring steel discs was interposed between a coupling plate on the alternator rotor and the flywheel of the engine. This overcame any slight irregularities in alignment, obviated the need for shxmming and provided a positive drive. The field frame was bolted to the engine flywheel housing via an adaptor plate, which was made in a variety of sizes to suit the range of engines.

Distributorships were established in all the mainland states, except Northern Territory and although not directly under the control of the company, were active in promoting sales and maintaining service facilities the latter having always been a feature of Dunlite's reputation.

Several teams of installation servicemen, covered all areas of South Australia backed up by a service spares department which handled not only Dunlite equipment but also had established itself as a repair and rewind business in the industrial field.

In 1960, to meet demand by a number of companies for a locally manufactured range of specialized d.c. motors to be used in evaporative air coolers, the company produced a range of these in various voltages and speeds and continued to do so for about 10 years, when increasing competition from imported motors and the trend away from d.c. power made production no longer viable.

By 1965, capacity of the Frome Street premises had reached saturation and the first stage of an additional factory was built at 28 Fullarton Road Kent Town. With this move, repairs and servicing were confined to DUNLITE products, and the industrial contracting and rewinding side of the business was made redundant.

During this year the first large order for lightweight portable generating sets designed specifically for the DEPT. OF ARMY was awarded and this has been followed by continuing orders.

Having reached what was considered to be the maximum size of static excited slip ring alternator $(40 \, \text{kVA})$ and following investigations overseas the first all-Australian designed brushless alternator went into production in this year and is still (1978) the only such type alternator wholly manufactured in Australia.

This radically different type dispersed with the restrictions in output imposed by the previous design, had less moving parts and using solid state voltage regulation gave a much closer control of output voltage than had previously been possible.

Production was initially concentrated on the range of 20-60 kVA three phase 415/240 V 50Hz. for which there was the maximum demand (known as TYPE "B".)

The PMG DEPT. was one of the earlier purchasers of the new type alternator which with its close tolerance regulation, ample overload capacity, and minimum maintenance had considerable appeal to the Dept.

The flexible steel disc coupling method was and still is, used with the brushless range of alternators.

During 1966, the range was expanded to cover capacities from 6 to 20kVA both single and three phase and this was identified as TYPE "A".

As business continued to increase, the Fullerton Road factory area was added to and additional premises were built at 110 RUNDLE ST. KENT TOWN to house a design and development centre.

By 1967, the brushless alternator was available in three ranges, the TYPE "C" being rated at a maximum of 150kVA three phase. Also in this year the DUNLITE brushless 2KW. wind generator went into production.

After prolonged negotiations, in 1967, L.B. DUNN sold the Company to Australian Pye Industries, and was retained as Managing Director until the end of 1970, when he relinquished the position.

However, he continued his association with the Company in a consultive capacity until mid year of 1974.

In early 1972, the range of alternators was further increased, the TYPE "D being available in the range above 150kVA and up to 325kVA and to date this is>the maximum size manufactured although diesel/alternator sets have been built by the company in excess of this size, using imported alternators.

Concurrent with the growth of alternator capacities and types was the production of control systems, ranging from simple pushbutton and key operated set mounted controls to automatic load sensing and sophisticated monitoring to meet the rigid specification of TELECOM AUST, the defence forces, government departments and consulting engineers.

Side effects of this were the manufacture of battery chargers and a range of solid state devices.

Problems of co-ordinating production and interfactory transport of materials between the premises in FROME ST. and those at FULLARTON ROAD brought about a decision to look for premises large enough to house all manufacturing and administrative sections preferably in an area where all services were available, including transport, was readily accessible and allowed for future expansion.

In 1973, the factory formerly occupied by McKAY CONVAIR was purchased and during November/December of that year, machines and material were removed from both of the former factories, which had been occupied on a rental basis and re-installed at ORSMOND ST. HINDMARSH.

At the commencement of business in 1974, all personnel were relocated in the new premises, and a continuing programme of expansion of new machinery and equipment was initiated.

Improved handling facilities, test equipment, and a separate alternator Set test bay provided increased efficiency of operation.

Associated with DUNLITE was the F.W. DAVEY company of Melbourne, who were also part of the PYE organization and the combination was known as DAVEY-DUNLITE. F.W.DAVEY specialized in the manufacture of pumping and water pressure systems and are well known throughout Australia for their products. At one time they also manufactured a' range of a.c. and d.c. motors plus assembly of alternator sets. The d.c. motor manufacture was eventually taken over by DUNLITE and a comprehensive range of voltage and H.P.'s continue to be manufactured.

A recent contract was for the supply of motors for air conditioners installed on State city bus services in Perth and Adelaide.

In late 1977, PYE OF CAMBRIDGE was taken over by the PHILIPS organization. DUNLITE & DAVEY again becoming two separate entities.

With the world concern with reduction of energy sources (oil and coal reserves) and upsurge of interest in windpower, further research and testing of the 2KW windplant resulted in a unit with a capacity of 5KW at 110V. Although TELECOM AUST. purchased large numbers of the 2KW 24V wind generator for use on the EAST-WEST micro link most of the sales have been in American where the DUNLITE unit is recognized as one of the best available in its size range.

It is due to enquiries from America for larger capacity generators that the $5 \, \text{KW}$ was developed and interest has since been shown by other countries, in particular China.

Toward the end of 1977, development of a complete new light weight portable power pack, aimed specifically at the construction and leisure markets was completed and these were made in 3 & 5kVA sizes, and coupled to a range of aircooled, 3000 rpm petrol engines. Also available was a diesel powered version and both size alternators were available as two bearing configurations.

With a well planned publicity campaign, these were introduced to the Australian market early in 1978 and have already established an enviable reputation.

The design is of the rotating field principle and with solid state regulation maintaining close voltage control and exceptionally good motor starting characteristics allied to competitive pricing, DUNLITE is gaining an ever increasing share of the market for this type of unit.

DUNLITE have been in the business of meeting Australian power requirement.' rural and industrial for over 40 years and their expertize in this field is second to none. This, allied with soundly engineered and reliable equipment, backed by service facilities in all mainland states and with a range designed to meet the majority of requirements, places the company in the forefront of generating set and allied equipment suppliers.

Not only is a comprehensive range of standard sets available, but special units can, and are, built to order, complying with the most rigid of specifications, including Lloyds Register of Shipping, Telecom Aust.,

Dept, of Army, etc.

Installations in South Australia include a number of the hospitals, TAB headquarters (a fully automatic paralleling system comprising three "185kVA sets) Tourist Bureau,S.A. Country Fire Services, RAA Headquarters Yatala Prison, Govt. Printing Works and many other industrial and commercial sites, in addition to the widespread rural use.

A design and development section, staffed with qualified engineers and technicians ensures that DUNLITE is up-to-date with all the latest trends in power generation and quality control-inspection maintains the DUNLITE reputation of top quality products.

The company's administrative, manufacturing and storage areas cover an area of approximately 105,000 sq. feet and currently the labour force numbers approx. 250 persons.

The DUNLITE logo stresses our proud claim as

" THE POWER-BEHIND A NATION "