

GROWTH OF LOAD.

The total connected load at end of the year under review was 1,476,487 Kw., compared with 1,342,577 for 1936, an increase of 133,910 Kw., or 10 per cent.

Statistics pertaining to the increasing use of electric ranges, electric water-heaters, and milking-machines have been collected and scheduled for some years past, and from the following table will be seen the annual growth which has taken place in each class :—

Year.	Route- miles of Line in Service.	Consumers.	Annual Increase.	Electric Ranges.	Annual Increase.	Electric Water- heaters.	Annual Increase.	Electrified Milking- machines.	Annual Increase.
		Number.	Per Cent.	Number.	Per Cent.	Number.	Per Cent.	Number.	Per Cent.
1925 ..	6,011	148,699	..	1,526	..	..	..	3,581	..
1926 ..	12,454	192,392	29·3	4,671	205·0	6,654	..	4,856	35·8
1927 ..	14,975	228,345	18·7	9,511	104·0	14,160	113·0	6,738	38·8
1928 ..	17,063	243,795	6·8	15,766	66·0	21,513	52·0	8,514	26·3
1929 ..	17,759	266,306	9·2	20,254	28·5	29,257	36·0	10,161	19·4
1930 ..	19,128	284,235	6·7	25,997	28·3	37,564	28·5	11,922	17·3
1931 ..	19,636	300,809	5·9	29,480	13·2	42,803	13·9	13,656	14·5
1932 ..	20,251	309,360	2·8	31,973	8·5	45,796	7·1	14,163	3·7
1933 ..	20,585	322,997	4·4	33,998	6·4	48,070	5·0	15,913	12·4
1934 ..	20,996	334,593	3·6	36,081	6·2	50,272	4·6	16,992	6·8
1935 ..	21,707	342,334	2·3	39,730	10·1	53,635	6·7	17,200	1·2
1936 ..	22,424	355,973	4·0	44,837	12·9	58,864	9·8	18,458	7·4
1937 ..	23,322	371,027	4·2	53,402	19·1	67,049	13·9	20,275	9·8

The total increase in route-miles of line for the above twelve-year period is 289 per cent.

See Table XIV for details of ranges, waterheaters, and milking-machines for year ended 31st March, 1937.

ELECTRICAL SUPPLY AND ELECTRICAL WIRING REGULATIONS.

During the past year numbers of 6 volt, 12 volt, and 18 volt portable electric-lighting plants have been installed in territories not readily accessible to public electric-supply systems. Under the Electrical Wiremen's Registration Act the services of a registered wireman are not necessary to install the wiring where the voltage does not exceed 20 volts, but this does not include exemption from the requirements of the Electrical Wiring Regulations issued under the Public Works Act. Some modification of the standard Electrical Wiring Regulations is deemed necessary in such cases, and the Regulations Advisory Committee has under way the preparation of regulations defining the requirements to be observed by persons installing such sets with a rating not exceeding 500 watts.

INSPECTION OF ELECTRIC LINES, ALSO PRIVATE GENERATING-PLANTS.

The annual departmental inspection of the electric lines in operation was carried out in the case of supply authorities last year, and any defects or breaches of the regulations which came under notice were duly notified to the supply authorities concerned. In one instance an electric-supply authority was called on to reconstruct an E.H.T. line which had been erected contrary to regulation standards. These inspection activities of the Department undoubtedly tend towards the maintaining of a high standard, and the general willingness on the part of the supply authorities to co-operate in a general observance of the regulations governing such matters is of great assistance to this Department.

The following supply authorities have notified extensions to electric lines in their respective districts during the year :—

Power Boards—	Power Boards— <i>continued.</i>	Boroughs—
Ashburton.	Southland.	Hamilton.
Auckland.	Springs-Ellesmere.	Lyttelton.
Banks Peninsula.	Taranaki.	Napier.
Cambridge.	Tararua.	New Plymouth.
Central Hawke's Bay.	Tauranga.	Ohakune.
Central Waikato.	Te Awamutu.	Patea.
Dannevirke.	Thames Valley.	Picton.
Franklin.	Waitomo.	Taumarunui.
Golden Bay.	Waimea.	Thames.
Hawke's Bay.	Wairarapa.	Westport.
Hutt Valley.	Wairere.	County Councils—
Horowhenua.	Waitaki.	Heathcote.
Malvern.	Waitemata.	Waimairi.
Marlborough.	Wanganui-Rangitikei.	Companies—
Manawatu-Oroua.	Cities—	Alderton Utility Co.
North Canterbury.	Dunedin.	Kanieri Electric, Ltd.
Otago.	Invercargill.	Skippers Ltd.
Otago Central.	Nelson.	Westland Power, Ltd.
Poverty Bay.	Palmerston North.	Hume (Cobb River) E.P. Co.
South Canterbury.	Wellington.	Westport Coal Co.
South Taranaki.		

It is not generally known that under the Electrical Wiremen's Registration Amendment Act, 1928, it is mandatory to give notice of the installation of private electric plants, and provision is made for the inspection of these plants before same are placed in service. During the year inspections have been made as opportunity offered.