1932.

VICTORIA.

STATE ELECTRICITY COMMISSION OF VICTORIA.

THIRTEENTH ANNUAL REPORT

COVERING THE

FINANCIAL YEAR ENDED 30TH JUNE, 1932;

TOGETHER WITH

APPENDICES.

PRESENTED TO PARLIAMENT PURSUANT TO SECTION 35 (*b*) OF STATE ELECTRICITY COMMISSION ACT No. 377

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TABLE OF CONTENTS.

APPENDICES.

THIRTEENTH ANNUAL REPORT.

18th October, 1932.

The Hon. Ian Macfarlan, M.L.A.,
Minister in Charge of Electrical Undertakings,
Melbourne.

SIR,

As directed by Section 35 (*b*) of the *State Electricity Commission Act* 1928 (No. 3776), we have the honour to present our Thirteenth Annual Report, covering the financial year ended the 30th June, 1932, with Profit and Loss Accounts and Balance-sheet.

PART I.—ADMINISTRATION.

MAJOR EXTENSION—MAIN SUPPLY SYSTEM.

The two sections of the major extension of the supply system which were brought into operation during the previous financial year, viz., the new Terminal Station at Richmond and the new 132,000-volt transmission line from Yallourn to Richmond, have since functioned most satisfactorily. Besides meeting the requirements of the extended power station at Yallourn, they have greatly facilitated maintenance of the main supply and distribution systems, which now set a high standard of safety, reliability and flexibility.

The effects of the depression in modifying the programme of works associated with the actual extension of the Yallourn Power Station were indicated in the Twelfth Annual Report. They were, briefly, the drop in the industrial and commercial demand for power, and the lack of loan funds for extensions of supply to country centres, so that the Commission, by working its existing plant to the limits of safety, and deferring expenditure as much as possible, was enabled to postpone for one year the installation of the first of the three 25,000 kw. sets provided for in the major extension scheme approved by Parliament in 1928. This set, therefore, did not come into operation until April, 1932. It will assist in meeting the sustained maximum demand on the system, which, despite the falling off in the commercial and industrial consumption of energy, had exceeded the normal capacity of the existing plant. At the same time, it will cater for any further immediate increase, and provide a margin of reserve essential to the carrying out of ordinary routine maintenance. The new plant, which includes four boilers in the extended boiler-room, is also being fully availed of to facilitate the reconditioning of the original boiler installation, and by making the best possible use of the old and new plant, all loading conditions at the station are being fully and satisfactorily met.

No decision has been made regarding the time when it will be definitely necessary to install the second 25,000 kw. set in the extended station. The date will depend upon developments, and, having regard to the general conditions existing, and to the fact that this machine was purchased as part of the original plan to have it in operation by the winter of 1932, the decision as to the date of its actual erection will be deferred until the latest possible moment. In the meantime, of course, the question of ordering and installing the third set is also in abeyance, as part of the general decision not to incur any expenditure not warranted by loading conditions. This decision necessarily embraces the provision of the boiler plant for the extended station. Ten boilers will be required to complete the equipment, and their erection will be proceeded with in stages. The first stage was completed with the erection of the four that are now in operation.

The capital expenditure on the various sections of the new extensions at 30th June, 1932, was as follows:—

	£
Power Station extensions	1,215,169
132,000-volt Transmission Line	205,211
Richmond Terminal Station	214,190
	1,634,570

COST OF ELECTRICITY.

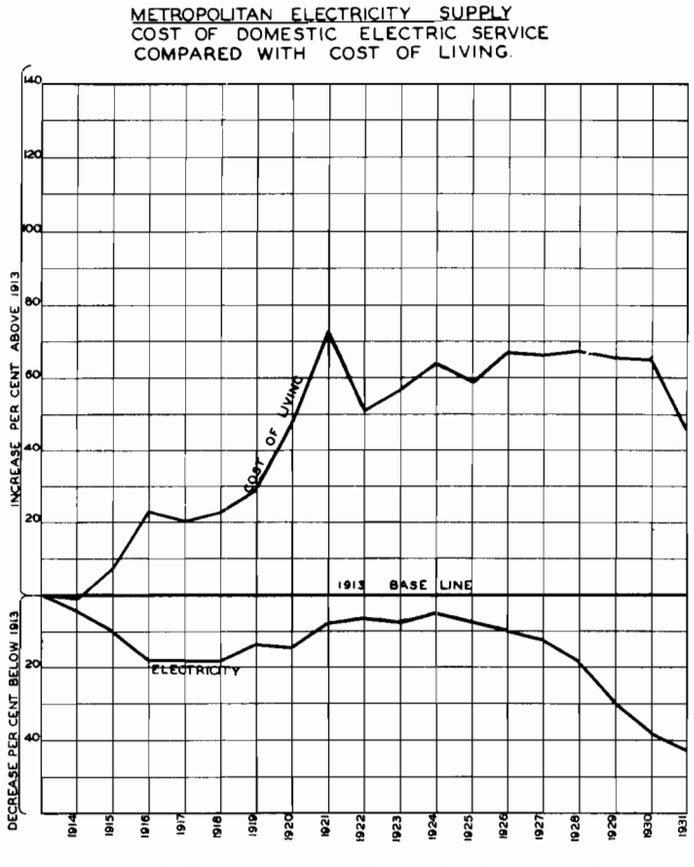
During the year, agitations for reductions in electricity charges, particularly in the metropolitan area served by the Commission, were persistent. The claims put forward were so obviously based on a misconception of the real position in relation to electricity supply that the Commission was impelled to make the following public pronouncement:—

> " The Commission definitely challenges any suggestion that it has failed materially to lower the cost to its consumers.
>
> The popular grounds for the price reduction agitation are—(1) That the cost of living, rent, the necessities of life, &c., have been reduced in recent months, therefore electricity should follow suit, and (2) that the Commission has failed to pass on to its consumers the reductions in wages and salaries and in the rate of interest.
>
> While it is perhaps not unnatural to compare the cost of electric service with the cost of living and its component parts, nevertheless it is illogical to expect reduction in electricity costs merely because living costs have during the past twelve months, at least, shown a downward tendency. The reason lies in the information set out in the graph reproduced herein. The cost of living figures are based upon the latest available published reports of the Commonwealth Statistician, and relate to the metropolis of Melbourne. The electricity curve relates to the average price per kwh. for domestic electric service in metropolitan electricity supply.
>
> While the cost of living has rapidly risen since 1913, the cost of domestic electricity has never risen above its 1913 figure; in fact, it has always been below, and has taken an accelerated downward trend from the time Yallourn began to function in 1924. In short, when in 1930 the cost of living was nearly 70 per cent. above pre-war level, the cost of domestic electricity was nearly 40 per cent. below this level; an enormous difference in favour of electricity. The final cost of living figures for 1931 (just available) show a downward tendency, but the cost of electricity has fallen still further below the 1913 level, thus maintaining for all practical purposes the great difference in favour of electricity. The Commissioners ask what other public or private service can show during the difficult war and post-war periods, and the critical times of the past two years particularly, similar favorable comparative results.
>
> The plain fact is that if the present cost of living variations be accepted as the ground for reduction in electricity tariffs, there must be at least a return to the 1913 price levels of the cost of living components before these can even be compared with electricity. But electricity still would have the advantage, for, as shown, the average price per kwh. is to-day 40 per cent. below the 1913 level. Thus, for some years past the cost of domestic electricity in Melbourne has been substantially lower than at any other period of the history of electricity supply in Victoria. This is likewise true of the cost of electricity to all sections of the community, whether their interests be domestic, industrial or commerical. This downward tendency in favour of the consumer will continue in consonance with the development of the demand, which is being specially furthered by the Commission with this object in view.
>
> Whilst the graph portrays in the clearest possible terms the benefits that have accrued to the domestic user of electricity, and also shows that the greatest reductions in the average price per kwh. have taken place during a period of financial, economic and business stress, expression of these benefits in terms of £ s. d. would still further emphasize their value to consumers. Four years ago the domestic two-part tariff was introduced generally throughout the metropolis, together with other standard tariffs which involved reductions to power consumers; in that period benefits amounting to £750,000 have accrued to the Commission's consumers.
>
> The following figures relating to the metropolitan area served by the Commission may help to a better understanding of the financial problens involved in reduction of rates:—
>
> 1. A reduction of 1d. per unit in the average cost of domestic service means £194,000 per annum.
>
> 2. A reduction of ½d. per unit in the average cost of service to domestic, industrial and commercial consumers as a whole means £306,000 per annum.
>
> These reductions, if they could be granted, would be, of course, in addition to the reductions at the rate of over £230,000 per annum which already accrue from the 1927 metropolitan standard tariffs. Application of such reductions throughout the State would add substantially to the above figures. At no time during the seven years and a half in which the Commission has been operating has it experienced a lack of

development, such as that faced in the past two years, and which on present signs must continue to be faced by the Commission in common with the rest of the community. Nevertheless, as already indicated, very material reductions in the average cost per unit have been made by the Commission, the outstanding reduction being that of 2d. per unit, or 40 per cent., in the cost to its metropolitan domestic consumers in the period of seven years commencing in 1924, when Yallourn came into operation. In its country centres the overall reduction per unit to its domestic consumers over a period of five years is $2\frac{3}{4}$d., or 38 per cent.

The Commission is convinced that electricity supply consumers, as a body, do not fully recognize that the forms of tariff in use assure them of reduction in unit cost as their consumption increases.

Regarding the belief that consumers have not been given the benefit of reductions in wages, salaries and interest, it is true that the Commission has benefited in this year to the extent of about £100,000 per annum from such reductions. On the other hand this gain is completely eliminated by an amount of £144,000* which must be charged against the operations of 1931-32 on account of exchange; this figure takes account of the recent reduction in exchange Australia-London, which saving was negatived by the departure of Great Britain from the gold standard and the necessity to pay increased exchange on certain American loans taken over under the terms of acquisition relating to the Melbourne Electric Supply Company. To this debit must also be added the substantial loss in the Commission's revenue caused by the drop in industrial consumption, a situation which still continues. The fact that the industrial and commercial load represents nearly 70 per cent. of the total consumption in territories served by the Commission gives a very real significance to this loss of revenue. It will be appreciated, therefore, that electricity consumers have not only secured all the benefits that it was possible to give them, but also that they have not been called upon to make good the losses in revenue through falling load and increased expenditure due to exchange. The financial structure of the Commission can stand the automatic reductions, even under present-day conditions, provided the undertaking is not saddled with any further financial burdens. Obviously, having regard to the hundreds of thousands of pounds per annum shown by the above figures to be involved in these repeated requests for reduction, it is to seek complete wreckage of the enterprise to press for wholesale tariff reductions over and above those now automatically accruing to consumers as a whole."

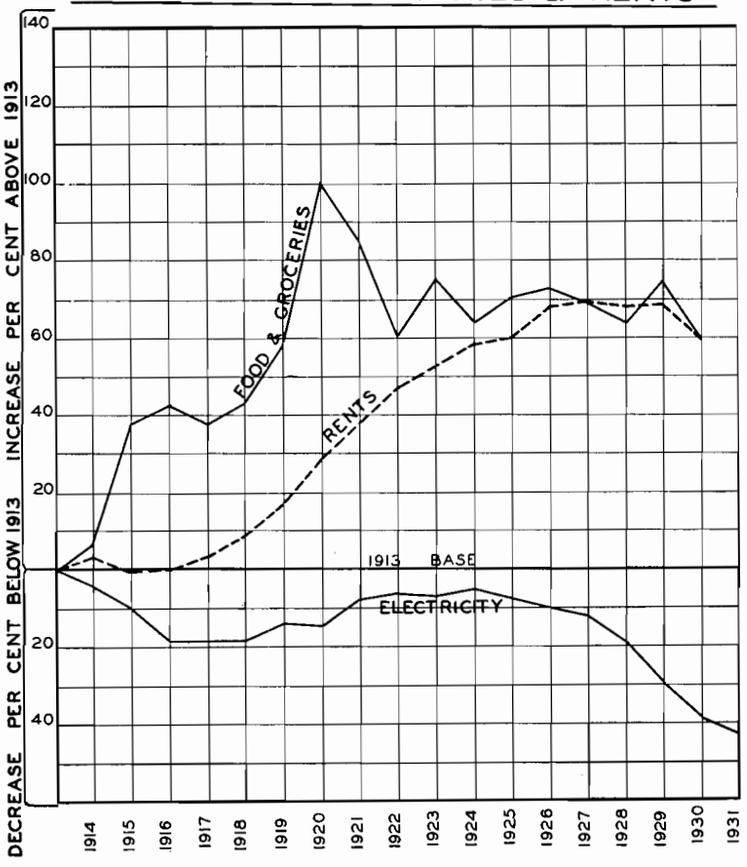


* The amount actually involved in exchange during the year was £150,692.

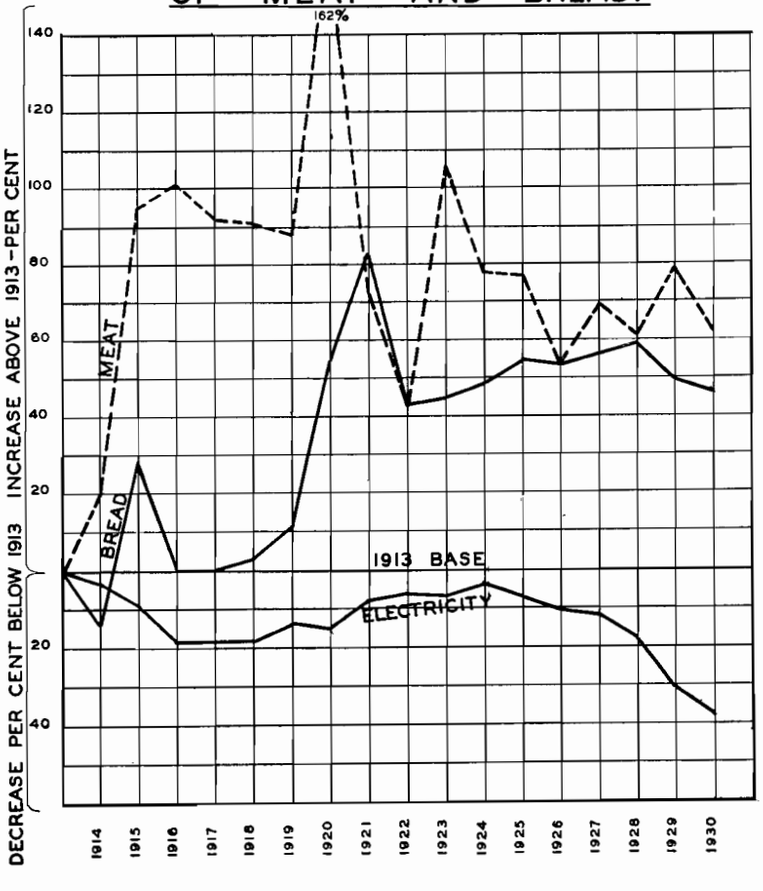
In amplification of the above statement, graphs are produced hereunder which contrast the downward trend of electricity charges with the rise in the cost of commodities and other

services. In each case the curve is carried to the point of time at which the latest official statistics relating to these commodities and other services are available.

METROPOLITAN ELECTRICITY SUPPLY.
COST OF DOMESTIC ELECTRIC SERVICE COMPARED WITH COSTS OF FOOD & GROCERIES & RENTS



METROPOLITAN ELECTRICITY SUPPLY
COST OF DOMESTIC ELECTRIC SERVICE COMPARED WITH COST OF MEAT AND BREAD.



The graphs show that, while the average cost of domestic electrical service in the metropolitan area has fallen so appreciably, the principal components of the cost of living index figure for the metropolitan area have risen steeply and more or less consistently above pre-war figures, the excess in each case, according to the latest available statistics, being as follows:—Meat (wholesale), over 60 per cent.; bread (retail), over 40 per cent.; food and groceries, 60 per cent.; rents, 60 per cent.

In Appendix No. 6 will be found a list of undertakings acquired by the Commission, showing the development which has taken place since acquisition. In every case the large increases in sales of energy are associated with marked reductions in the average revenue received per unit.

BALLARAT AND BENDIGO ELECTRIC SUPPLY AND TRAMWAY UNDERTAKINGS.

Street Lighting.—The new schedule of public lighting rates in Bendigo, as mentioned in the twelfth Annual Report, and which provided for reduced charges and all-night lighting, came into operation during the year. The savings to the municipality, compared with the old rates, are at the rate of £500 per annum, which the Council decided to spend in more and better lighting.

The negotiations with the Ballarat City Council regarding street lighting, as also indicated in the Twelfth Annual Report, were finalized during the year. The public lighting in this centre is divided between gas and electricity, and, as the result of the agreement arrived at, 318 of the existing gas lamps are to be converted to electricity, thus increasing the number of electric street lamps in Ballarat from 263 to 581. The extra volume of electric street lighting has enabled the Commission to introduce reduced charges for this service in Ballarat, so that, as the outcome of the conversion, the local City Council will effect an annual saving of £1,537 19s. 3d. in its overall public lighting expenditure.

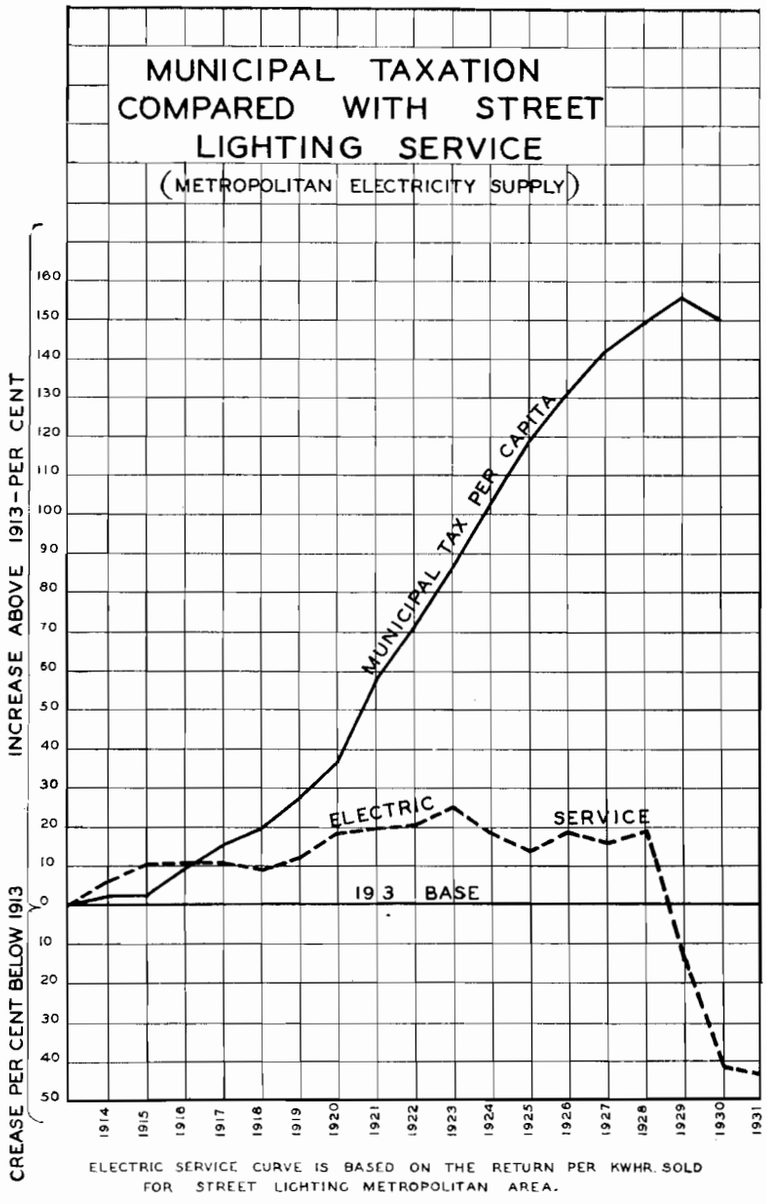
Domestic Two-part Tariff.—The promise made by the Commission in 1927 to the Councils concerned, that the two-part domestic tariff would be introduced into Ballarat and Bendigo on the 1st July, 1931, was based on the assumption that transmitted supply would be available in those two cities on that date. The restriction of loan funds falsified this expectation, with the result that the advantages associated with such supply were delayed. However, the Commission, despite the changed conditions and circumstances, fulfilled its promise. Exercising the powers conferred upon it under the agreement with the Electric Supply Company of Victoria Ltd. for the acquisition of the undertakings, the Commission introduced the tariff into both cities on the date in question, thus placing the long-hour, diversified use of electricity for household purposes on an economical basis to consumers in each centre.

Tramways.—The cost of rehabilitating the tramway systems in Ballarat and Bendigo is being investigated, with a view of finding the most satisfactory and economical solution of the problem of providing efficient street transport without unduly burdening the consumers of electricity.

METROPOLITAN STREET LIGHTING CHARGES.

In 1928 the Commission offered to the various metropolitan municipalities concerned very appreciable reductions in public lighting charges, conditionally upon the resultant savings being employed in the provision of a standard of service in keeping with modern requirements. Associated with the reduced charges for lamps of varying wattages was the extension of burning hours from midnight to sunrise in all cases. The Councils readily availed themselves of the offer, and in full agreement with them the Commission incurred the necessary capital expenditure in the provision of additional street lamps, as well as the substitution of higher powered lights in situations where it was desirable to have better illumination. As the result of the arrangement, the Commission was called upon to increase the number of lights installed by 38 per cent., the power of lights installed by 85 per cent., and the amount of electricity supplied for public lighting purposes by 125 per cent. In the aggregate, the value of this extra lighting service to the twenty municipalities affected amounts to £40,000 per annum. Moreover, the improved standard of lighting has been greatly appreciated by the public, which would be very averse from a return to the old conditions obtaining in most cases, of streets being in complete darkness after midnight. Excepting for the conversion by two municipalities of their street lighting systems from gas to electricity, little, if any, benefits accrued to the Commission from the new arrangement.

The following graph shows the drop in the revenue per kilowatt hour received for electricity supplied by the Commission for public lighting in the metropolitan area, following the arrangement in 1928 with the bodies concerned, and it also discloses the trend of public lighting charges in the metropolitan area since 1913, compared with the upward curve of general municipal charges during the same period :—



During the year, the Councils, faced with the difficulty of balancing their budgets in a period of falling revenues, asked for a reduction in street lighting charges by 20 per cent., in view of reductions in interest, salaries, and wages. In the event of the Commission not being able to make a straight-out concession, it was suggested that the Commission should increase its standard rates for bulk supply to the metropolitan municipal distributing authorities (and which attend to their own street lighting), so as to provide an amount to be passed back to the other metropolitan municipalities in the form of reduced street lighting charges. The latter alternative was put forward as reasonable, because, as a whole, the municipalities supplied in bulk were making substantial profits out of electricity supply, at the same time as they were supplying themselves with street lighting at a low figure. There was also a suggestion that the position might be met by reducing the standard of service of street lighting either by lessening the number or power of lamps or the burning hours.

The Commission has been unable to agree to the requests which have been made, seeing (*a*) that the annual charges on the capital investment necessary to provide the present standard have to be met, irrespective of whether or not the standard is reduced, and that any modification of switching on and off time would simply involve further capital expenditure ; (*b*) that any benefits accruing to the Commission from reduction in interest, salaries and wages are being more than offset by adverse exchange rates and the shrinkage in and/or lack of normal development in the commercial and industrial demand for power; and (*c*) that any arbitrary increase of bulk

supply charges to municipal undertakers which attend to their own street lighting, so that relief might be given to those municipalities whose public lighting requirements are supplied by the Commission, are impracticable, not only because the present standard bulk supply rates are framed on the latest estimates of cost, but because contractual arrangements with the bodies concerned absolutely preclude any such action.

METROPOLITAN ELECTRICITY SUPPLY—NEW FLINDERS-STREET OFFICES.

The new building erected by the Commission at 238–242 Flinders-street was completed and occupied on the 7th June, 1932. It accommodates that section of the Commission's operations known as Metropolitan Electricity Supply, which, prior to its acquisition by the Commission, on the 1st September, 1930, functioned for 30 years at 19 Queen-street as the Melbourne Electric Supply Company Ltd., whose assets, at the time of transfer, amounted to £5,000,000.

As the erection of the building is an important event in the history of electricity supply in the metropolitan area, the following facts are recorded :—

Need of the New Building.—One of the largest single undertakings in the world, with 146,498 consumers connected to supply, a yearly revenue of £1,584,847, and a staff of 505, sections of which had to find offices here and there throughout the city and suburbs, the operations of Metropolitan Electricity Supply outgrew the old cramped quarters at Queen-street long before absorption by the Commission took place, and, as the logical and inevitable outcome of the growth of electricity supply in the metropolitan area, the erection of a new building would have been undertaken by the Company itself had not its business been transferred to the Commission.

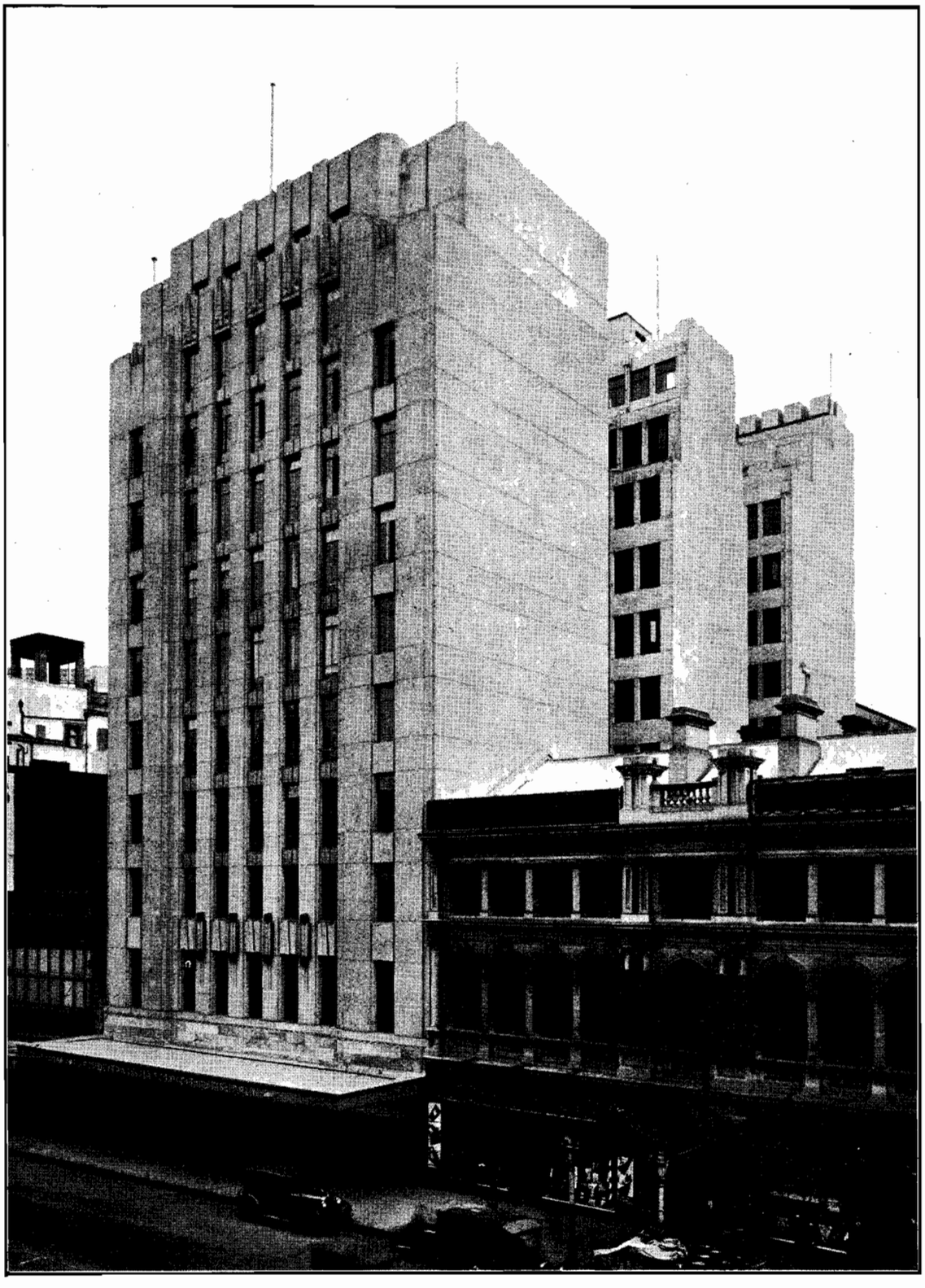
It being necessary to provide suitable new premises, the selection of a central permanent site was as important to consumers as to the supply authority itself. This led to the acquisition of the premises known as Sargood's, in Flinders-street.

Scope and Functions of Metropolitan Electricity Supply.—The Flinders-street office directs the whole of the commercial and engineering operations associated with the distribution of electricity throughout the suburbs supplied by the Commission, and which include the municipal districts of Braybrook (Sunshine), Brighton, Camberwell, Caulfield, Collingwood, Essendon, Fitzroy, Hawthorn, Kew, Malvern, Melbourne (Flemington), Moorabbin, Mordialloc, Oakleigh, Prahran, Richmond, St. Kilda, Sandringham, and South Melbourne, the whole comprising an area of 400 square miles. In addition, Metropolitan Electricity Supply administers the Western Metropolitan District, which takes in Werribee, Point Cook, Altona, and Laverton.

For the supply of its purely metropolitan area, electricity is received from the Yallourn system at nine main sub-stations, whence it is transmitted to 480 ultimate sub-stations, which have an aggregate capacity of 117,000 kva., and contain 751 transformers. In the distribution network, there are 8,000 miles of copper mains, of a total weight of 3,500 tons ; 58,800 poles in 1,400 miles of streets ; and 370 miles of underground cables. The essentials of safety and continuity of supply in this vast and complex system and the minute dovetailing of the multiplicity of minor and major operations that go to make up an extensive and comprehensive system of electricity supply, necessitate the services of a large engineering, technical, and maintanance staff, with every facility for instant inter-communication and action. All sections of this staff are now enabled to be concentrated in the one building, thus ensuring more convenient, economical, and efficient organization. A most important section of this staff are the operations engineers, who are on constant duty. Equipped with a comprehensive service of telephonic and wireless communication, the whole charted system of supply before them, and in instant touch with the operation and maintenance sections and patrols, they can not only immediately locate any interruption of supply, but can at once initiate the necessary remedial action. Other aspects of the technical operations of Metropolitan Electricity Supply are the constant laboratory work necessitated by the testing of all items of plant and material, the maintenance of meters (24,000 of the 197,623 installed being tested annually), the extensive workshops and the control and maintenance of transport.

The extent of the ordinary business of the Metropolitan Electricity Supply may be gauged from the following annual aggregate figures :—

Personal interviews at the office, apart from the actual payment of accounts, number 192,000 ; telephone calls 200,000 ; letters received, 165,000 ; letters despatched, 120,000 ; 1,200,000 meter readings are made ; 850,000 regular accounts are issued, in addition to 42,000 interim accounts due to changes of residence, which, in turn, necessitate 220,000 personal calls by officers, to which is added 660,000 visits made by collectors in the ordinary course of their duties. The number of receipts issued from the office is 506,000. For many years this very large volume of business was transacted at 19 Queen-street under the most unfavorable and congested conditions.



New Premises of Metropolitan Electricity Supply, 238–242 Flinders-street.

Design and Equipment of New Building.—The governing considerations in the design and equipment of the Flinders-street premises are utility and economy, and, besides affording the most modern facilities for dealing with the public and the large volume of business to be transacted annually, their central location, opposite the Flinders-street Railway Station, meets the convenience of the many thousands of metropolitan consumers who have direct personal dealings with the office.

Ninety-nine per cent. of the total investment in the new premises has been expended in Australia, and all but 1 per cent. of this is represented either directly or indirectly by wages in Victoria.

Merchandising Section.—Portion of the building (roughly, 9 per cent. of the total floor area) is devoted to the display, demonstration, and sale of electric appliances.

DEMAND FOR ELECTRICAL ENERGY WITHIN RANGE OF THE STATE SCHEME AS AT PRESENT DEVELOPED.

Graph No. 1 illustrates the loading in the metropolitan area during each hour on a typical winter day in 1932. The sharp morning rise and early evening decline, apart from railway traction, show the predominating effect of the industrial load, while the two steep railway peaks are due to the morning and evening heavy loading periods. From midnight to 6 a.m. a period of very light loading occurs, and it is hoped that the introduction of attractive off-peak power rates for industrial and commercial consumers and similarly attractive night water heating rates for all classes of consumers will have an appreciable effect in filling up this " valley " in the daily load curve.

Graph No. 2 shows the energy sent out of power stations or terminal stations by all generating authorities in the metropolitan area. Apart from energy for railway traction purposes, it will be seen that the metropolis is practically wholly dependent on the output from the Commission's system.

Graph No. 3 shows the amount of energy delivered in bulk to the various distributing authorities in the metropolitan area. The increase over the previous year indicated is mainly confined to deliveries to areas in which the Commission itself operates.

Graph No. 4 shows the maximum demand recorded yearly at each of the Commission's generating stations since the Commission's system began to function. Yallourn, as the base load station, carries the greater portion of the load, assisted by the hydro group, the Commission's metropolitan power houses (Newport " B " and Richmond) acting as peak load stations. The maximum instantaneous demand on the Commission's system during 1931–32 was 111,100 kw. This was the highest yet recorded, and was 7,400 kw. in excess of the previous year's figure.

Appendices Nos. 2 and 3 give details of the Commission's transmission and distribution systems.

Appendix No. 4 gives details of the amount of energy distributed by all undertakers in the metropolitan area.

Area supplied with Energy.—In addition to the City of Melbourne, the following undertakings in the metropolitan area are supplied by the Commission in bulk :—The City Councils of Box Hill, Brunswick, Coburg, Footscray, Northcote, Port Melbourne, Preston and Williamstown, and the Shire of Heidelberg.

The local distribution of electricity is undertaken by the Commission in the following metropolitan municipalities :—Braybrook (Sunshine), Brighton, Camberwell, Caulfield, Collingwood, Essendon, Fitzroy, Hawthorn, Kew, Malvern, Melbourne (Flemington), Moorabbin, Mordialloc, Oakleigh, Prahran, Richmond, St. Kilda, Sandringham and South Melbourne.

Extensions of Supply.—Owing to the financial stringency, no extensions of supply could be undertaken during the year, and the number of centres served by the State scheme remained at 180.

MAP OF VICTORIA,

showing extent of Commission's transmission system, which serves the whole of the metropolitan area (20 municipalities direct and the remaining 10 in bulk) and 160 country centres (direct supply), 108 of which had no supply previously. The three New South Wales centres shown on the map receive bulk supply from sub-stations on the Victorian side of the border. The ring main indicated will ultimately give direct supply to Ballarat, Bendigo, and Geelong, and bring numerous smaller centres within economic range of service. Commission will take over Ballarat and Bendigo in July, 1934.

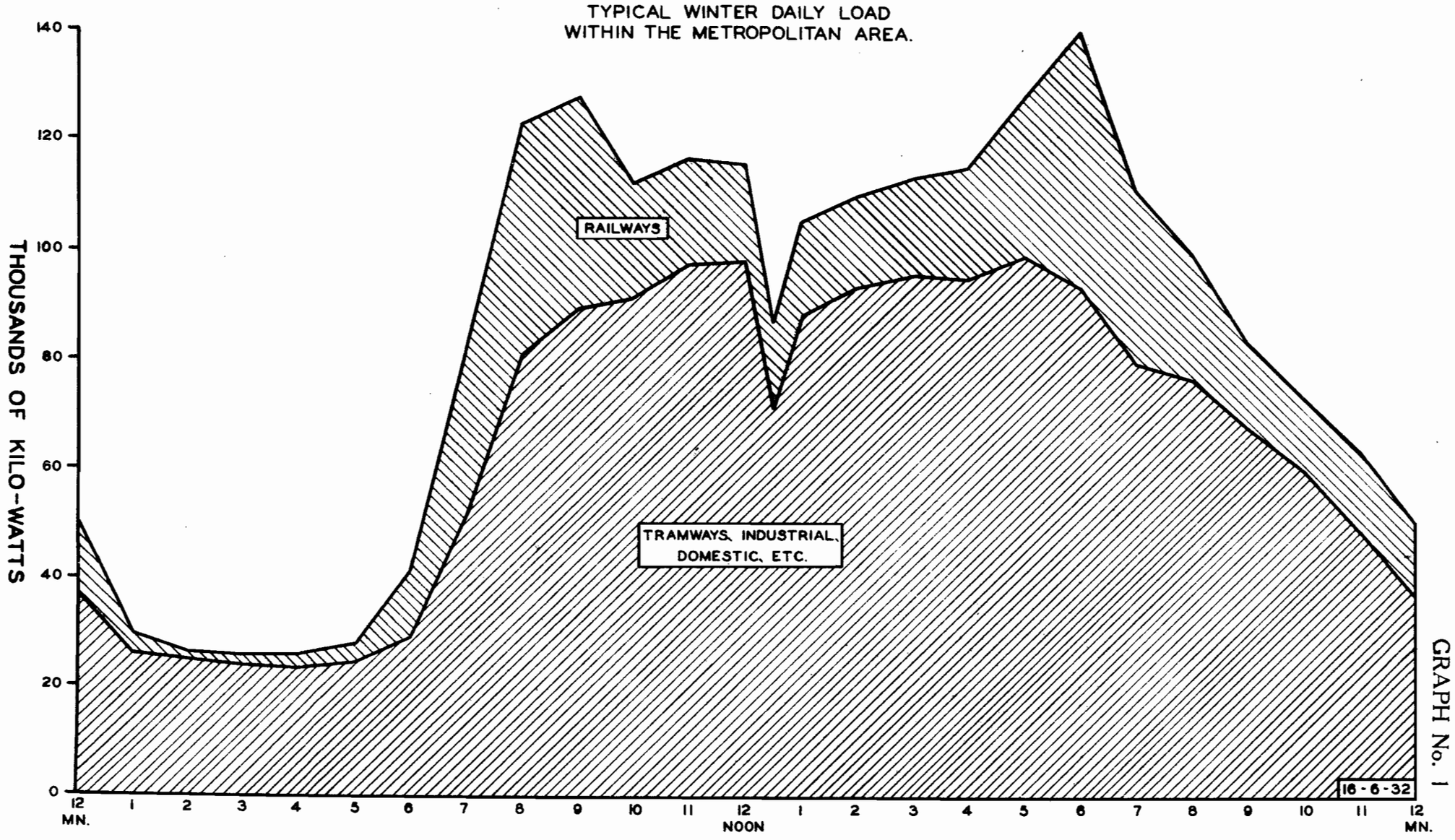
TOWN OF YALLOURN.

Town of Yallourn.—No moneys were available during the year for the erection of new houses at Yallourn, and nothing could be done in this respect, therefore, to reduce the waiting list of about 50 which still exists. The only new house erected during the period was one to replace a wooden dwelling that was destroyed by fire, and the number of houses of all classes in the town consequently remained at 527.

Largely due to a reduction in the number of employees, the population of the town proper decreased by 37 during the year, while that of the territory as a whole declined by 155. This latter figure, however, is affected by an adjustment made during the year, whereby only those actually residing within the Commission's boundaries were included in the census for the territory. The numbers in the settlements fringing the Commission's territory increased during the period. The growth of the adjacent Haunted Hills settlement, where conditions are primitive and unhygienic, is a matter of particular concern. The figures for the Yallourn territory at 30th June, 1932, were as follows :—

Town of Yallourn	2,351
Western Camp	273
South Camp	162
Old Brown Coal Mine	635
Outlying areas	41
Total	3,462

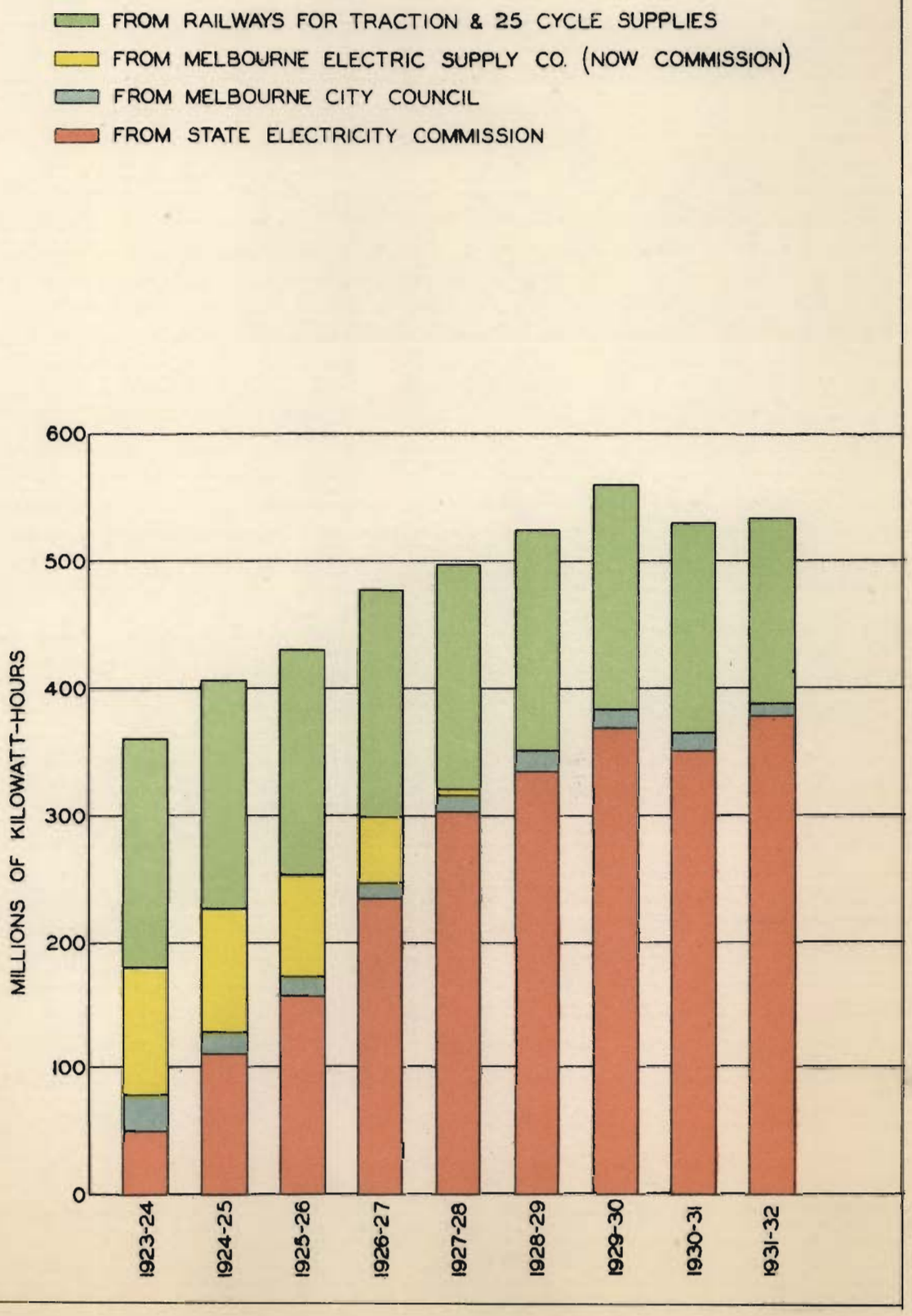
The permanent beautification features of the town, represented by the various plantations, &c., are now pronounced. Although some years have yet to elapse before they attain full maturity, they clearly disclose the plan envisaged when Yallourn was laid out, and will still further enhance the appearance of the town in the future, especially as private gardens generally continue to be well maintained, many having their own permanent and matured features. The monthly competitions conducted by the Horticultural Society have further stimulated the interest of


TYPICAL WINTER DAILY LOAD
WITHIN THE METROPOLITAN AREA.
THOUSANDS OF KILO-WATTS
140
120
100
80
60
40
20
0
RAILWAYS
TRAMWAYS, INDUSTRIAL,
DOMESTIC, ETC.
16-6-32
12 MN.
1
2
3
4
5
6
7
8
9
10
11
12 NOON
1
2
3
4
5
6
7
8
9
10
11
12 MN.

GRAPH No. 1

GRAPH No. 2

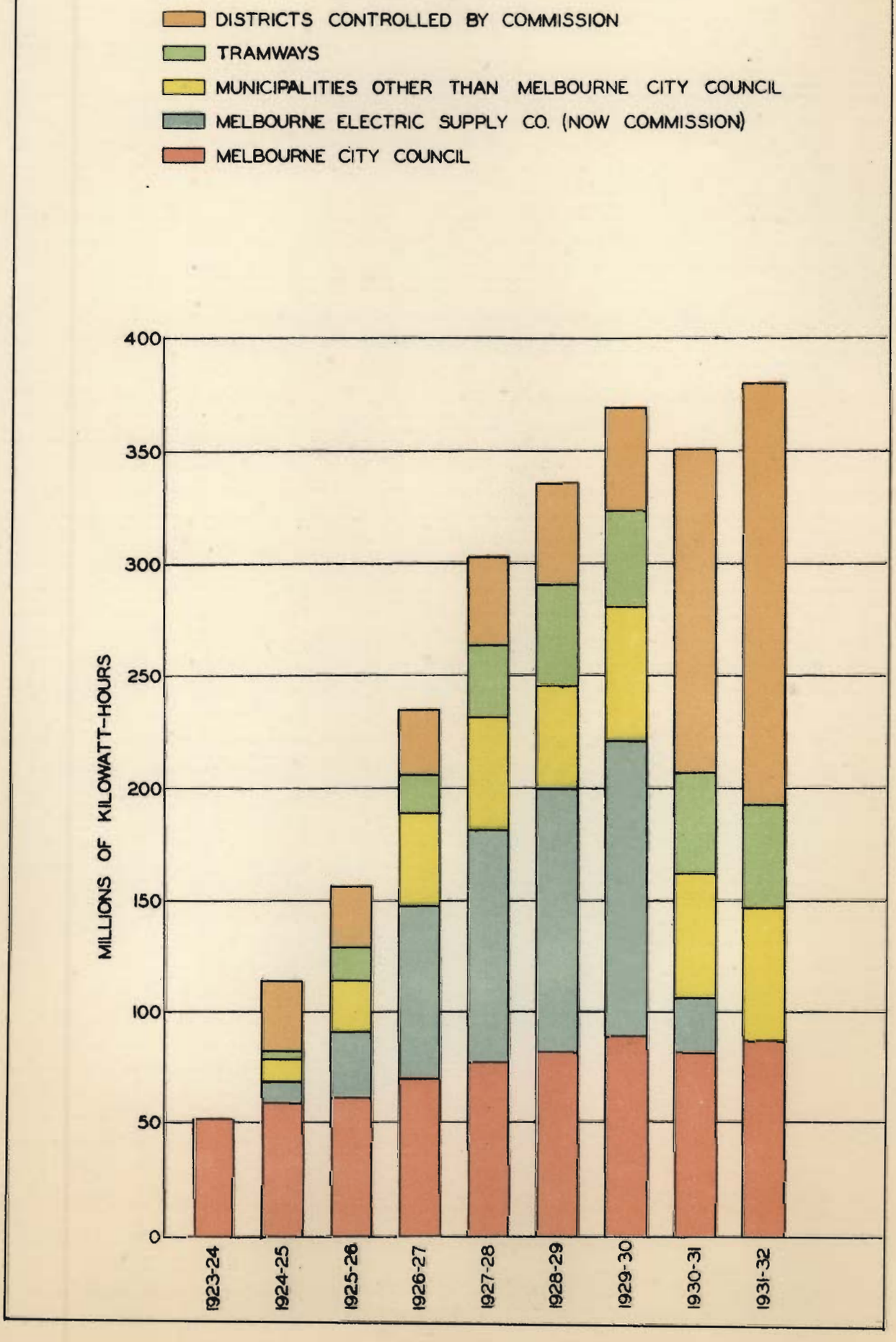
ENERGY MADE AVAILABLE FROM ALL SOURCES FOR USE IN THE METROPOLITAN AREA FOR ALL PURPOSES



GRAPH No. 3.

STATE ELECTRICITY COMMISSION OF VICTORIA.

ENERGY DELIVERED TO DISTRIBUTING AUTHORITIES AND OTHER CONSUMERS IN METROPOLITAN AREA.



STATE ELECTRICITY COMMISSION OF VICTORIA.

MAXIMUM DEMANDS AT GENERATING STATIONS.

private gardeners, and the fact that it is possible to conduct such frequent shows with unfailing success is in itself sufficient evidence of the enthusiasm of the residents in seconding the civic efforts at improvement. As the outcome of both, Yallourn gained the special prize of £200 in the ideal town competition conducted by the *Sun* newspaper during the year.

Visitors to the number of 14,563, including many groups of school children, were personally conducted over the Yallourn works by the Commission's guides in the year under review.

Hospital.—The reduction in the number of employees at Yallourn has adversely affected the finances of the Medical and Hospital Society, thus necessitating the most careful and economical management, both in regard to the Hospital and the general services (including the Health Centre), which the Society maintains by means of regular contributions from all employees in the territory. However, there was no diminution of the advantages conferred by the Hospital and its allied services during the year, and the interest in the welfare of the institution itself was also well maintained.

Educational Facilities.—Although the educational facilities at Yallourn have been improved during the last few years by the establishment of a Technical School, the raising of the status of the State School to that of a Higher Elementary School, and the establishment of a separate Infants' School, they can at best only carry pupils to the "intermediate" standard, so that parents who desire to give their children a better education have to undergo the expense of sending them to Melbourne or the nearest High School, which is 30 miles distant. The establishment of a High School at Yallourn would not only meet a distinct local need, but would also serve a large district. The Technical School has increased its curriculum by the formation of wood-working classes, which are attended by boys from the Higher Elementary School and from the Moe and Morwell State Schools.

A Vocational Guidance Committee, consisting of representatives of Yallourn, Moe, Morwell, and the Brown Coal Mine, was formed during the year for the purpose of advising parents as to the standard of education which should be aimed at for any child concerned, and as to the employment most suitable for the capacity and temperament of such child, and the prospects of obtaining such employment.

Reserves and Gardens.—Football was played for the first time on the Recreation Reserve, formerly known as the Melbourne Swamp. The prize money won in the *Sun* Ideal Town Competition was utilized in fencing two ovals.

The reclamation of the swamp area has not only provided proper and much-needed playing grounds and improved the approach to the town from Prince's Highway, but has materially increased the area of level building ground available for residential purposes.

Community and Welfare.—The various local clubs and organizations had a satisfactory year, and provided every manifestation of a virile community spirit.

Lectures under the auspices of the Workers' Educational Association and the University Extension Board, and the League of Nations Union were well attended, and the local branches of the Country Women's Association and the Housewives' Association respectively functioned satisfactorily.

The Boy Scouts and Girl Guides are both active bodies. The former have their own hall, and the latter are also looking forward to securing quarters of their own.

The bowling, golf, rifle, tennis, cricket, football, swimming, and carpet bowls clubs all contribute their share to the amenities of the town. The football club signalized its entry into the Gippsland competition by carrying off the premiership.

The status of the Yallourn Band has been increased from "D" to "B" grade, and at the Stawell "B" grade competitions it won every event on the programme.

At the Country Fire Brigades Demonstration at Geelong, the Fire Brigade won the two-men Marshall event, the "B" class four-men hose and reel event, and a special prize for discipline, besides being placed equal for first in the hose aggregate and equal for second in the grand aggregate. In the Eastern Brigades Competition at Wonthaggi it gained two second places.

INDUSTRIAL.

Disposition of the Commission's labour forces at 30th June, 1932 :—

	Operation.	Construction.
Yallourn	1,164 ..	20
Metropolitan	700 ..	244
Transmission Lines	73 ..	..
Districts	373 ..	15
Sugarloaf–Rubicon Hydro-Electric Scheme ..	11 ..	..
	2,321 ..	279

The above figures show a decrease of 162 on construction and an increase of 365 on operation compared with the same date in 1931. The primary reason for the increase in the operation figures is the additional plant at the Yallourn Power Station and the Briquetting Factory.

Arbitration.—Of the numerous applications for interpretations and/or variations of awards dealt with by the Commonwealth Court of Conciliation and Arbitration during the year, there was none of any material importance to the Commission, excepting the interpretation of the generating section of the briquetting factory as a " large power house." Applications to the Full Court by a number of unions for the restoration of the 10 per cent. reduction in wages were not granted by the Court.

ELECTRIC LIGHT AND POWER ACT 1928.

Since the passing of the *Electric Light and Power Act* 1896, 212 Orders in Council have been granted. Of these, 121 have been issued to municipal councils, and 91 to companies or persons. Seventy-nine Orders in Council have been revoked, including a number relating to undertakings which have passed to the control of the Commission.

Preliminary steps have been taken by either companies or persons to secure Orders in Council to supply electricity in Omeo, Welshpool, and Edenhope.

LICENSING OF WIREMEN.

The number of wiremen's licences issued to the 30th June, 1932, and also the number issued during the twelve months previous to that date, are given below :—

Grade.	Number issued to 30th June, 1931.	Number issued from 1st July, 1931, to 30th June, 1932.	Totals.
" A "	1,621	60	1,681
" B1 "	191	23	214
" B "	1,174	50	1,224
" C "	1,532	43	1,575
Special Licences	65	1	66
Permits	3,351	117	3,468

During the year two examinations in theory and practice were held. The Board of Examiners report a slight decrease in the number of candidates, but an increase in the percentage of passes gained, excepting in " B " grade, in which the percentage of passes was not as large as last year.

ELECTROLYSIS RESEARCH—METROPOLITAN AREA.

The Electrolysis Committee, consisting of representatives of—

The Postmaster-General's Department,
The Victorian Railways Commissioners,
The Melbourne City Council,
The Melbourne and Metropolitan Board of Works,
The Melbourne and Metropolitan Tramways Board,
The Metropolitan Gas Company,
The State Electricity Commission of Victoria,

has, through the Electrolysis Research Engineer, operating in conjunction with its Technical Sub-Committee, continued the investigation of conditions alleged to be causing electrolytic corrosion on underground metallic structures in the metropolitan area. As a result of these studies, certain practical remedies have been devised and put into operation.

The conditions are now regarded as much more satisfactory than they were a year ago, for, not only has damage been checked, but the number of cases reported has fallen to 174 for the past year as compared with 243 for the year 1930–31. Whilst this represents a decrease of about 30 per cent., the corresponding cost of repairs has decreased by 44 per cent.

Every effort is being made to push on with the installation of mitigative measures in order to reduce the damage to a negligible amount.

PART II.—FINANCIAL AND COMMERCIAL.

ANNUAL ACCOUNTS.

The General Profit and Loss Account and Balance-sheet, accompanied by summarized Profit and Loss Accounts and Balance-sheets of the Branch Undertakings of the Commission, as well as Schedules of Fixed Capital and of Debentures guaranteed by the Commission, are contained in Appendix No. 1.

CAPITAL EXPENDITURE.

The following table shows the growth of fixed capital since the Commission commenced its activities :—

	£	s.	d.
1919–20	**1,980**	**8**	**11**
1920–21	**213,238**	**2**	**11**
1921–22	**1,645,790**	**12**	**3**
1922–23	**3,993,825**	**12**	**1**
1923–24	**6,036,422**	**15**	**11**
1924–25	**7,246,767**	**11**	**1**
1925–26	**8,347,818**	**3**	**0**
1926–27	**9,586,181**	**15**	**6**
1927–28	**11,147,771**	**18**	**10**
1928–29	**12,220,583**	**19**	**1**
1929–30	**13,891,711**	**17**	**6**
1930–31	**18,501,539**	**16**	**4**
1931–32	**19,267,749**	**10**	**0**

Apart from writings off and minor adjustments, the actual capital expenditure for the year was £805,639 7s. 5d.

RESULTS OF OPERATIONS OF ALL ACTIVITIES FOR FINANCIAL YEAR ENDED 30TH JUNE, 1932.

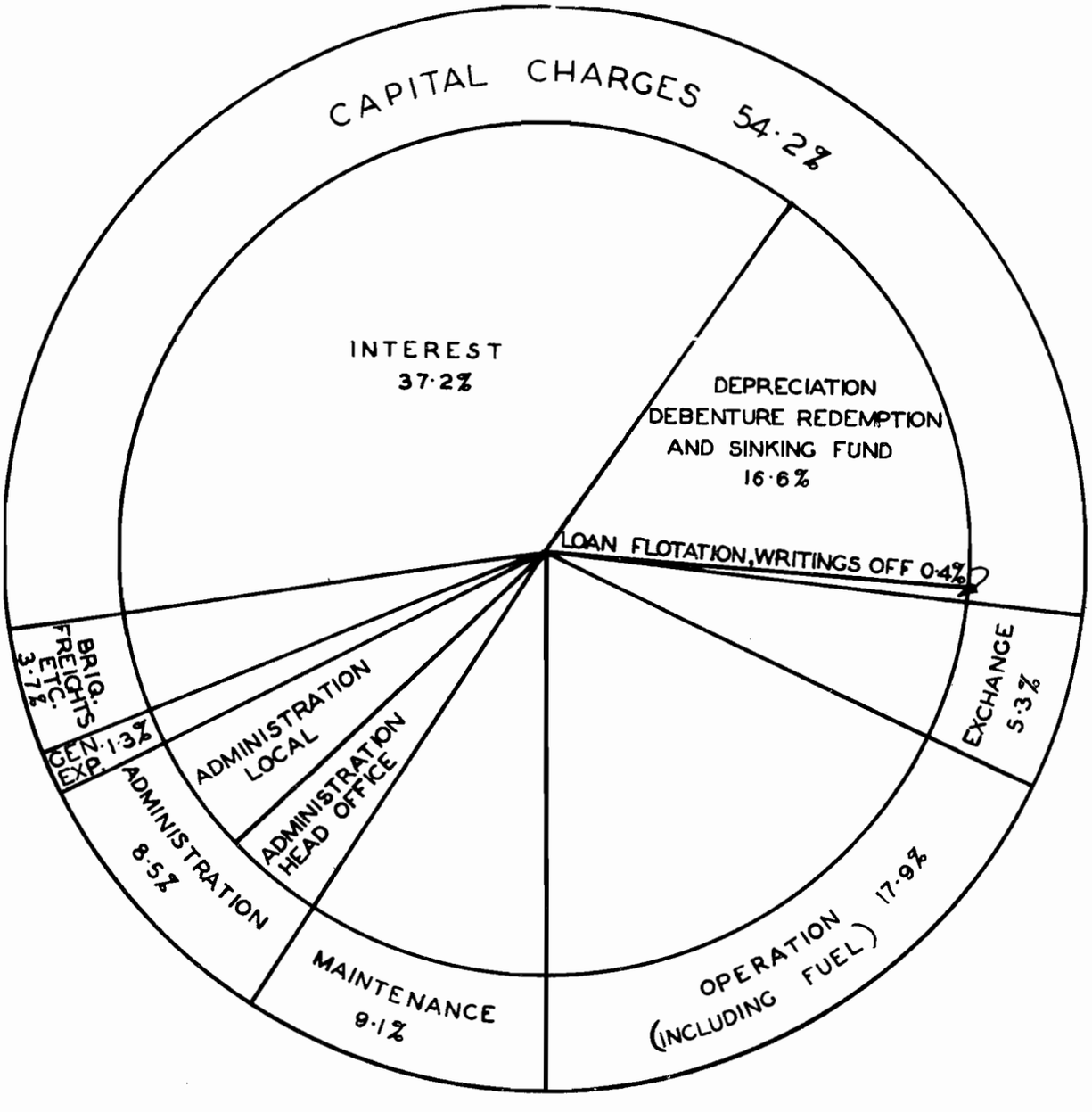
Profit on Operations of all activities before provision for exchange, statutory and other deductions		**£206,569**
Deduct—		
Exchange	**£150,692**	
Provident Fund	**20,592**	
Redemption of Debentures	**16,057**	
Writings Down	**5,000**	
Loan Flotation Expense	**6,505**	
Miscellaneous	**2,591**	
Contribution to the cost of using Wonthaggi Coal at Geelong Power House	**2,101**	
		203,538
Profit for the year		**£3,031**

The following facts should be noted :—

(*a*) Included in the year's expenditure is £150,692 for exchange. In eighteen months up to 30th June, 1932, the operation of adverse exchange had cost the Commission £209,656.

STATE ELECTRICITY COMMISSION OF VICTORIA.

DIAGRAMMATIC SUBDIVISION OF TOTAL OPERATING EXPENDITURE FOR FINANCIAL YEAR 1931-1932.



(*b*) For the first time the accounts include a full year's operation of Metropolitan Electricity Supply, Geelong Electricity Supply and Tramways and the extended briquetting factory. The annual figures are consequently not comparable with those of previous years, the effect upon both revenue and expenditure having been material in the period under review.

(*c*) Full depreciation on the whole capital investment has been charged in the year's accounts. The amount thus charged was £456,132, against £354,040 provided last year. The provision includes contribution to the Sinking Fund created by the State in accordance with the financial agreement with the Commonwealth of Australia, dated 12th December, 1927.

(*d*) The redemption of debentures forming part of the purchase price of the assets acquired from the Melbourne Electric Supply Company Ltd. has been made from revenue. the amount involved during the year being £16,056 9s. 10d., making the total £49,188 1s. 10d. since the date of acquisition, viz.. 1st September, 1930.

(*e*) Interest reduction benefits of the Financial Emergency Act were not applied during the year to loan moneys utilized for the works of the Commission ; consequently, interest continued to be charged in the year's accounts at the rates operating prior to the passing of the Act. In regard to municipal loans for which the Commission has become responsible under contracts for acquisition of country undertakings, total interest reductions under the Act amounting to about £1,000 were received.

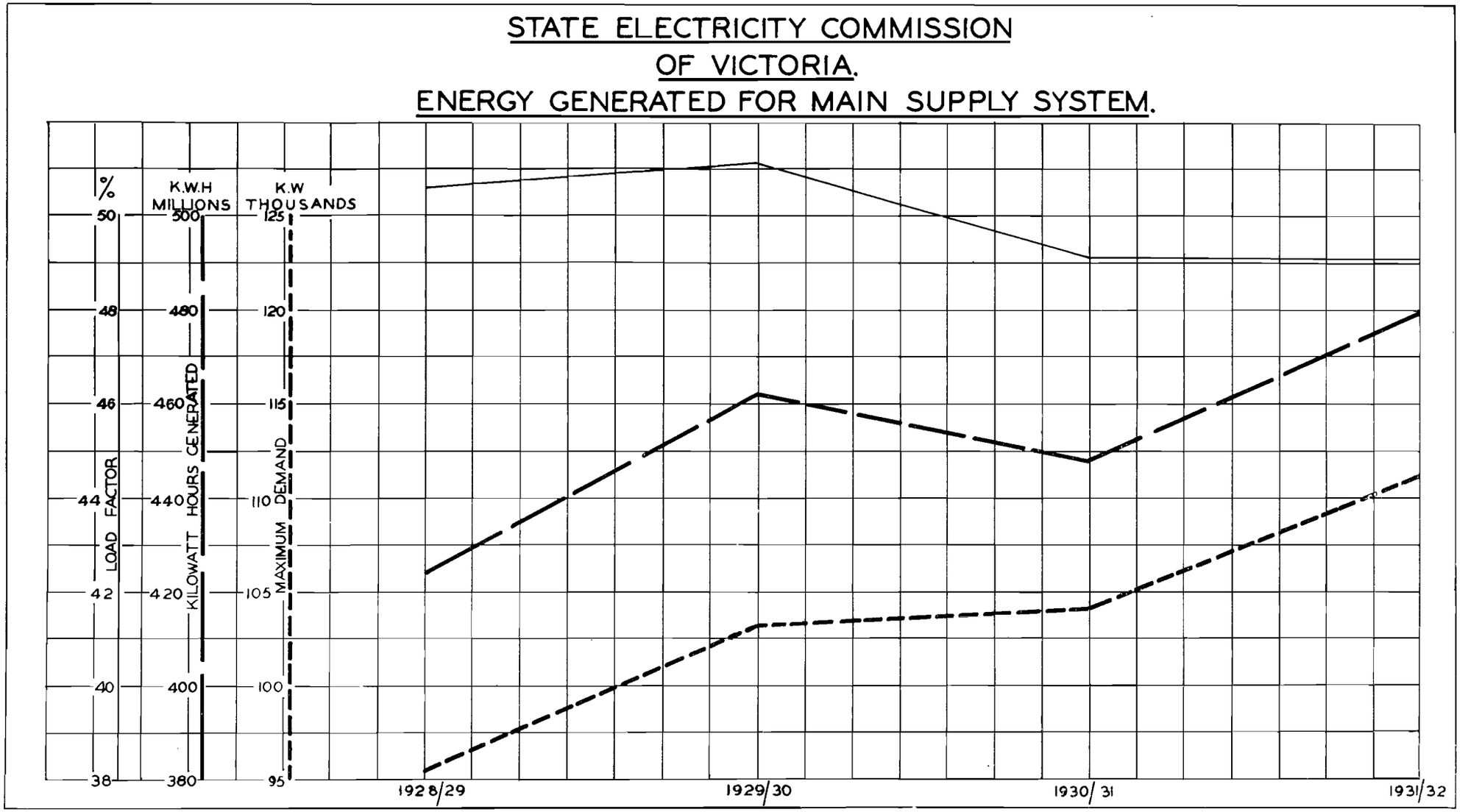
ELECTRICITY SUPPLY—CONDITIONS OF SYSTEM LOADING, 1931–32.

As more than 95 per cent. of the electricity required for all purposes in Victoria is provided by the Commission's power stations, it follows that the supply system is peculiarly sensitive to business fluctuations. This was strikingly illustrated by the unfavorable conditions of system loading in 1930–31, when as a consequence of the depressed state of trade and industry, there was a drop of over 20,000,000 kwh. in the industrial and commercial demand for electrical energy, compared with the consumption in the preceding year. This year, there was an improvement in the conditions of system loading, and as the improvement was contributed to by a recovery in the industrial and commercial demands, it affords an indication of a return towards normal conditions generally. Overall, however, the industrial demand was still 5.4 per cent. below that recorded in 1929–30, while the commercial demand just about regained the 1929–30 level. The position compared with 1929–30 would have been much less favorable but for the more settled conditions obtaining in the country areas, excluding Geelong, where the industrial demand, which is substantial in that centre, showed a lag of 12.7 per cent. below sales for 1929–30. It is, of course, the heavy metropolitan demand which governs the whole situation. Being many times greater than the combined requirements of all other districts, fluctuations therein have an immediate and most material effect upon system loading and financial returns. Under normal conditions the growing maximum demand in the metropolis would have been associated with a regular annual increment in industrial and commercial sales of energy.

The increase in energy sales to all classes of consumers for the year was 24,412,484 kwh., total sales being 403,984,624 kwh., compared with 379,572,140 kwh. in 1930–31. The contributions of the several branches to the year's results is shown in the published accounts, and the results of each branch are commented upon later in this section of the report.

Coupled with the partial recovery in the industrial and commercial spheres was the continued increment in the domestic demand, which registered a further substantial advance on the previous year's figures, thus evidencing the stability of this field and the benefits accruing from its intensive development. This development has been the principal factor in maintaining the finances of the Commission on an even keel in the midst of business fluctuations since the depression manifested itself.

Subsequent analyses in this section of the report disclose the extent and nature of the year's improvement, which was associated with an increase in both maximum demand and load factor. The latter is, however, still 3 per cent. below that in 1929-30. The first section of the Yallourn extension plant is now out of the construction stage, and on load, and interest on the investment will come into subsequent accounts, thereby off-setting reductions in general interest from 1st July, 1932, accruing from the Financial Emergency Act. It becomes doubly important, therefore, that the improvement in the industrial and commercial demand for energy shall not only be maintained, but that there shall be a return of those markets to the normal condition of a consistent yearly increment, accompanied by further intensive development of the domestic demand.



The Main Supply System comprehends the generation and the transmission to and transformation at terminal stations of electricity for the requirements of the local distributing systems of the metropolitan area and the country districts.

VARIATION IN CONSUMPTION OF CONSUMER CLASSES AND BULK SUPPLY AUTHORITIES.

The following table shows the improvement during the year in the industrial and commercial demand for energy in the Commission's districts. Taken together, the results are still appreciably below those registered in 1929–30.

INDUSTRIAL AND COMMERCIAL CLASSES—PERCENTAGE INCREASE IN TOTAL KWH. SOLD IN 1931–32, COMPARED WITH 1930–31 AND 1929–30.

	Industrial.		Commercial.	
	1931–32 compared with 1930–31.	1931–32 compared with 1929–30.	1931–32 compared with 1930–31.	1931–32 compared with 1929–30.
	%	%	%	%
Metropolitan Electricity Supply	+12·0	− 5·9	+ 0·3	− 2·3
Geelong	+ 6·0	−12·7	+ 2·5	+ 2·5
Country (exclusive of Geelong)	+ 7·1	+10·5	+ 7·0	+15·9
Overall	+11·0	− 5·4	+ 1·8	+ 1·4

DOMESTIC CLASS—PERCENTAGE INCREASE IN KWH. SOLD IN 1931–32, COMPARED WITH 1930–31 AND 1929–30.

Territory.	Percentage Increase Compared with	
	1930–31.	1929–30.
	%	%
Metropolitan Electricity Supply	+5·8	+17·3
Geelong Electricity Supply	+5·5	+11·9
Country Districts (exclusive of Geelong)	+7·0	+31·8
Overall	+6·0	+19·0

The above figures afford yet another illustration of the stability and importance of the domestic demand, as the increases followed upon the very substantial increments shown in the previous year, the overall increase since 1929–30 being 19.03 per cent. Expressed as an increase in the consumption per domestic consumer, the improvement is 6 per cent., compared with 1930–31, or 17 per cent., compared with 1929–30, the average number of kilowatt hours used per domestic consumer rising from 333 in 1929–30 to 369 in 1930–31, and to 390 in 1931–32. This appreciable and consistent increase has partly counteracted the violent fluctuations in the industrial and commercial demands during the last two years. While this is so, it is obvious, of course, that the domestic use of energy has been very seriously affected by unemployment and the slump in the building industry.

METROPOLITAN MUNICIPAL DISTRIBUTING AUTHORITIES.

The following table shows that all excepting one of the metropolitan municipal distributing authorities purchased more energy in 1931–32 than they did in 1930–31. Analysis shows that the trend towards recovery in the industrial demand is also a feature of the year's operations in the territories controlled by these authorities.

Municipality.	Percentage Variation in Kwh. Purchased in 1931–32 Compared with 1930–31 and 1929–30.	
	1931–32 compared with 1930–31.	1931–32 compared with 1929–30.
	%	%
Box Hill	+ 2·8	− 1·1
Brunswick	+14·1	+12·8
Coburg	+11·1	+ 1·6
Footscray	+16·5	− 3·8
Heidelberg	− 0·5	− 1·0
Melbourne	+ 5·0	− 3·5
Northcote	+ 7·6	− 0·4
Port Melbourne	+10·4	+10·9
Preston	+ 8·4	+ 7·9
Williamstown	+ 3·9	−11·1

With one exception, the fluctuations disclosed by the table were pronounced in those areas which are largely industrial, but, whereas in 1930–31 there was a serious falling off in the amount of energy used in such areas, the reverse was the case in 1931–32, three exceeding their purchases in 1929–30, viz., Brunswick, Coburg and Port Melbourne. Overall, however, purchases were approximately 2,000,000 kwh. less than in 1929–30, although the improvement, compared with 1930–31, was 8,919,827 kwh., an increase of 6.5 per cent.

As was the case in the preceding year, the table demonstrates the stability of the demand in those territories which are substantially residential. However, there is not the intensive development of the domestic use of electricity in any of the metropolitan municipal distributing areas which obtains in the Commission's own districts, because none of the Councils concerned has the authority to engage in the selling of electrical appliances, and the adverse cumulative effect of this disability on the development of the State scheme, which the introduction into the metropolitan municipal areas in 1928 of the Commission's standard domestic two-part tariff was intended to accelerate is undoubtedly very great.

BRIQUETTE MANUFACTURE AND DISTRIBUTION.

	1931–32.
Revenue	**£357,056**
Expenditure	**370,808**
Loss	**£13,752**
Sales	**280,524 tons**

The expenditure covers all charges, including interest and depreciation.

The loss shown is £7,284 less than that incurred in the previous financial year.

This result confirms the anticipated movement in the financial results consequent upon bringing the factory extensions into operation, with a resultant large immediate increase in output.

During the year, briquettes were produced at an average rate of approximately 1,100 tons per day, as compared with 600 tons just prior to the completion of the factory extensions.

It is obvious, of course, that this sudden increment in output could not be followed immediately by a corresponding abrupt rise in sales, the penetration of the market requiring considerable selling effort, particularly in view of the general adverse trading conditions prevailing, coupled with the intense price competition of alternative fuels. It is, therefore, the more gratifying to report an increase of sales during the period of 63,801 tons, equalling 30 per cent, as compared with the corresponding period last year.

As illustrating the intense price competition in a restricted market, the following tabulation compares the minimum prices ruling at 30th June, 1930, with those ruling at 30th June, 1932.

Fuel.	June, 1930.	June, 1932.
Newcastle coal—large ..	40s. per ton free on wharf Melbourne ..	28s. per ton free on wharf Melbourne
,, slack ..	34s. per ton free on wharf Melbourne ..	24s. per ton free on wharf Melbourne
Wonthaggi coal ..	22s. per ton f.o.r. Wonthaggi	14s. 0d. per ton f.o.r. Wonthaggi
Victorian slack coal ..	.. ..	12s. per ton f.o.r. at various mines
Fuel oil	85s. per ton	80s. per ton
Best grey box blocks ..	47s. 6d. per ton delivered to public ..	37s. to 40s. per ton delivered to public
Mallee Roots—large ..	45s. per ton delivered to public ..	35s. per ton delivered to public
,, small ..	50s. per ton delivered to public ..	42s. 6d. per ton delivered to public

Although the large additional tonnage of briquettes sold under such unfavorable conditions is so satisfactory, the adverse market prevented the full realization of the objective of balancing the briquetting accounts as an early consequence of the lower production costs attendant upon the increased output of the extended factory. In no sense, however, can the briquetting enterprise be regarded as unprofitable. Its association with the main electrical enterprise has, in each year of operation, conferred upon the latter benefits which much more than offset any losses incurred on the factory. These benefits have grown, of course, with the increasing requirements of the factory in the matter of raw coal, so that to-day they are more appreciable than ever. At the present time, the factory takes approximately half of the daily output of 10,000 tons from the Yallourn open cut, and in thus spreading the cost of coal-winning over the much greater tonnage, it is materially reducing the cost of coal to the power station, a factor which in itself makes briquetting of direct profit to the consumers of electricity.

Other benefits of briquetting to the public of Victoria are even more important, although they are apt to be overlooked in times of excessive competition on the general fuel market. Since briquettes were put on the market at the beginning of 1925, supplies from the factory have never once been interrupted, and they have been of inestimable value in keeping industry in motion on those occasions when supplies of imported black coal have been stopped. In so doing, briquettes have fulfilled the main objective in view when the scheme was initiated. The last occasion was as late as 1929–30, during the protracted strike on the New South Wales coal fields, when Yallourn power and briquettes saved industry in Victoria from being reduced to a condition of paralysis, which would have involved huge losses both to employers and employed. Furthermore, the factory has, particularly in past periods of prosperity, ensured considerable savings to fuel users, by the stabilization of prices, which, prior to the availability of briquettes at fixed standard rates, were, on the domestic market, wont to rise each succeeding year with unfailing regularity. In the first full year of briquetting it was estimated that the stabilization of prices saved domestic consumers alone £40,000. This benefit has been more or less a recurring one. As briquettes are the chief competitors of imported black coal, other than on the gas and railway markets, the savings they have ensured to industrialists are also appreciable, and it is certain that the price of sea-borne black coal would not be so low to-day were it not for the availability of briquettes. It is patent, of course, that the briquetting factory cannot simply be set going in times of emergency, and the factors enumerated demonstrate how essential it is to safeguard its full and continuous operation even when other fuels are plentiful and competition is intense.

Briquette Selling Rates.—At the beginning of the 1931–32 winter, the price for household briquettes was reduced from 25s. 6d. to 23s. per ton f.o.r. Yallourn, and adjustments were made in the retail prices charged by fuel merchants. Although briquettes had again to meet the competition of firewood at reduced rates, coupled with the fact that 70,000 tons of firewood were distributed free by the Government in relief of distress, they more than maintained their position on the household market, which subscribed substantially to the increased sales registered during the year.

In face of the more intensified competition of black coal, sales of briquettes on the industrial market were 28 per cent. more than in 1930–31, and this result was accomplished with no further reduction in charges other than those which anticipated the lower production costs of the extended factory.

Depots.—New depots were opened at Fairfield and Tooronga, making the number in the metropolitan area 22, in addition to one each at Ballarat, Geelong, and Yallourn, or a total of 25.

BRANCH UNDERTAKINGS.

Statistical data relating to main Branch Undertakings appear in this section of the report. From these details the following summary is extracted :—

(*a*) The total number of consumers served at the end of the year was 185,609.

(*b*) Sales of energy for all purposes within the Commission's branches amounted to 255,381,396 kwh.

(*c*) The revenue from the sales of energy within the Commission's branches amounted to £2,063,311, and the average price per kwh. was 1.939d., compared with 2.1d. in the previous year, or a reduction of 7.6 per cent.

NOTE.—These financial results merely determine the relationship of each branch account to the main accounts in Head Office ; hence there still remain the overall adjustments in respect of exchange and other items of expense, writings down and appropriations, which, of course, are cleared through the General Profit and Loss Account.

Metropolitan Electricity Supply.—This branch includes the seventeen suburban centres taken over from the Melbourne Electric Supply Company Ltd., together with Essendon-Flemington, Sunshine and Deer Park, the last two centres being transferred from the Western Metropolitan district during the year. The population of the supply area is 631,600, and the number of consumers 146,498. Sales of energy amounted to 211,923,626 kwh. After providing £90,331 4s. for depreciation, the revenue exceeded operating expenses by £226,367 12s. 5d. The figures for the year cover a full year's operation for the first time, and are not, therefore, comparable with last year's results, which covered only ten months for the major portion of the area.

Western Metropolitan District.—This district includes Werribee, Point Cook, Altona and Laverton. Revenue exceeded expenditure on operations by £322 15s. 2d., after providing £599 16s. for depreciation. The number of consumers is 685. Owing to the transfer of Sunshine and Deer Park to Metropolitan Electricity Supply during the year, figures are not comparable with those in previous statements.

Eastern Metropolitan District.—After providing £7,848 7s. 3d. for depreciation, revenue exceeded expenditure on operations by £6,705 1s. 11d. The number of consumers increased from 7,845 to 7,881, and sales of energy from 6,109,930 kwh. to 6,248,319 kwh.

Geelong Electricity Supply.—After providing £8,221 10s. for depreciation, revenue exceeded expenditure on operations by £21,405 10s. 6d., which, however, is offset by a loss of £17,620 15s. 5d. on the tramways section of the undertaking. The figures cover a full year's operation, and are not, therefore, comparable with the results shown for the previous year, which were for ten months only.

North-Eastern District.—After providing £5,986 3s. for depreciation, revenue exceeded expenditure on operations by £7,324 2s. 11d. The improvement was very marked, a recovery in the demand for energy for industrial and commercial purposes being one of the features of the year's operations. The number of consumers increased from 6,070 to 6,677, mainly due to the acquisition of the Numurkah and Nathalia undertakings of the Numurkah Shire Council. Sales of energy increased from 8.737,180 kwh. to 9,763,594 kwh.

Gippsland District.—Progress in this district was again satisfactory. The number of consumers increased from 6,315 to 6,383, and sales of energy from 5,192,209 kwh. to 5,569,398 kwh. The provision for depreciation was £6,192 8s. 4d., after which the excess of revenue over expenditure on operations was £1,484 10s. 9d.

Castlemaine District.—This district, which is served by the first section of the Melbourne-Ballarat-Bendigo-Geelong ring main, continues to make good progress. Consumers increased by 32 and sales of energy by 129,491 kwh. After providing £3,175 19s. 3d. for depreciation, expenditure on operations exceeded revenue by £1,738 10s. 9d.

South-Western District.—Expenditure on operations exceeded revenue by £4,405 12s. 5d., after allowing £4,712 10s. 8d. for depreciation. Special improvement work on the existing main 44,000-volt transmission line, which was undertaken during the course of duplication, and which will be of permanent value, accounted for over £4,000 of non-recurring charges in the operating expenditure. Progress in this district was quite satisfactory, and the major work of duplicating the 44,000-volt transmission line from Belmont to Warrnambool, which was completed in the previous year, is a permanent provision for future development in the district. Consumers increased from 6,011 to 6,126, and sales of energy from 4,699,900 to 4,908,728 kwh.

Geelong Tramways.—The loss for the year of £17,620 15s. 5d. was after providing £5,945 for depreciation and an improvement in the cost of operating the tramways of approximately £6,000. The savings, however, were offset by a drop in revenue, the number of car passengers carried, viz., 3,890,585, being nearly 7 per cent. less than in the previous year. The principle governing the operation of Tramways by the Commission is that any loss shall be borne by the electricity supply undertaking in the provincial centre concerned, and not become a charge upon the Commission's main electricity supply business as a whole. The number of tram cars in operation at Geelong is 27, serving a population of 34,000.

COMMISSION'S ELECTRIC SUPPLY UNDERTAKINGS FOR LOCAL DISTRIBUTION.

METROPOLITAN ELECTRICITY SUPPLY.

	1930–31*	1931–32†
Population of Supply Area	626,300	631,600
Number of Consumers	143,338	146,498
Percentage of Consumers to Population	22·88 per cent.	23·19 per cent.
Sales of Energy, in Classes—		
Bulk Supplies	237,630 kw. hrs.	272,396 kw. hrs.
Street Lighting	7,964,045 ,,	9,918,931 ,,
Domestic	37,771,450 ,,	49,360,879 ,,
Industrial	96,854,280 ,,	131,524,241 ,,
Commercial (Excluding adjustment for unread meters and service charges paid in advance at end of year)	16,937,833 ,,	20,847,179 ,,
	159,765,238 ,,	211,923,626 ,,
Revenue	£1,252,167	£1,557,575
Average Revenue per kwh. sold	1·88d.	1·764d.
Maximum Demand in kw.	66,560	68,566
Number of Motors (Excluding Bulk Supplies)	..	14,172
Total h.p. of Motors (Excluding Bulk Supplies)	108,010	131,365

* Includes ten months' figures only.
† Sunshine and Deer Park were transferred to Metropolitan Electricity Supply from Western Metropolitan District at the beginning of the year.

Commission's Electric Supply Undertakings for Local Distribution—*continued.*

WESTERN METROPOLITAN DISTRICT.

	1928–29	1929–30	1930–31	1931–32*
Population of Supply Area	10,300	10,300	10,300	4,100
Number of Consumers	1,928	1,997	1,919	685
Percentage of Consumers to Population	18·718 per cent.	19·4 per cent.	18·63 per cent.	16·7 per cent.
Sales of Energy, in Classes—				
Street Lighting	82,410 kw. hrs.	97,105 kw. hrs.	94,317 kw. hrs.	36,877 kw. hrs.
Domestic	433,157 ,,	517,811 ,,	560,000 ,,	196,652 ,,
Industrial—	3,113,383 ,,	3,431,601 ,,	2,433,345 ,,	
Large	342,283 ,,	326,983 ,,	267,062 ,,	537,172 ,,
Small	152,531 ,,	164,518 ,,	166,590 ,,	67,564 ,,
Commercial				
Excluding adjustments for unread meters and service charges paid in advance at end of year	4,123,764 ,,	4,538,018 ,,	3,521,314 ,,	838,265 ,,
Revenue	£27,749	£29,921	£26,662	£9,197
Average Revenue per kwh. sold	1·615d.	1·582d.	1·817d.	2·63d.
Maximum Demand in kw.	1,742	1,916	1,885	326
Number of Motors	342	389	391	87
Total h.p. of Motors	4,604	5,136	5,222	822

* Sunshine and Deer Park were transferred to Metropolitan Electricity Supply at the beginning of the year.

EASTERN METROPOLITAN DISTRICT.

	1927–28.	1928–29.	1929–30.	1930–31.	1931–32.
Population of Supply Area	25,753	25,943	26,200	28,300	28,300
Number of Consumers	5,800	6,545	7,189	7,845	7,881
Percentage of Consumers to Population	22·5 per cent.	25·22 per cent.	27·4 per cent.	27·72 per cent.	27·84 per cent.
Sales of Energy, in classes—					
Bulk Supplies	438,233 kw. hrs.	164,810 kw. hrs.	199,330 kw. hrs.	15,450 kw. hrs.	—
Street Lighting	119,257 ,,	173,445 ,,	187,373 ,,	215,993 ,,	206,205 kw. hrs.
Domestic	1,011,195 ,,	1,726,876 ,,	2,331,636 ,,	2,826,097 ,,	3,003,430 ,,
Industrial—					
Large		2,610,613 ,,	1,396,087 ,,	1,142,864 ,,	
Small	2,093,786 ,,	754,357 ,,	772,412 ,,	706,851 ,,	1,765,330 ,,
Commercial		789,906 ,,	1,052,194 ,,	1,202,675 ,,	1,273,354 ,,
Excluding adjustments for unread meters and service charges paid in advance at end of year	3,662,471 ,,	6,220,007 ,,	5,939,032 ,,	6,109,930 ,,	6,248,319 ,,
Revenue	£58,990	£78,563	£88,046	£90,362	£86,595
Average Revenue per kwh. sold	3·87d.	3·03d.	3·558d.	3·558d.	3·33d.
Maximum Demand in kw.	1,230	1,778 (estd)	2,082	2,014	2,181
Number of Motors (Excluding Bulk Supplies)	216	337	439	469	496
Total h.p. of Motors (Excluding Bulk Supplies)	1,835	3,544	3,979	3,545	3,448

GEELONG ELECTRICITY SUPPLY.

	1930–31*	1931–32
Population of Supply Area	45,000	45,000
Number of Consumers	9,200	8,966
Percentage of Consumers to Population	20·45 per cent.	19·9 per cent
Sales of Energy, in Classes—		
Bulk Supplies	..	..
Street Lighting	177,072 kw. hrs.	223,676 kw. hrs.
Domestic	1,411,679 ,,	1,863,145 ,,
Industrial—		
Large		
Small	8,112,887 ,,	10,805,083 ,,
Commercial	1,535,921 ,,	1,955,722 ,,
Excluding adjustments for unread meters and service charges paid in advance at end of year	11,237,559 ,,	14,847,626 ,,
Revenue	£102,366	£125,074
Average Revenue per kwh. sold	2·186d.	2·02d.
Maximum Demand in kw.	3,402	4,193
Number of Motors (Excluding Bulk Supplies)	1,672	1,725
Total h.p. of Motors (Excluding Bulk Supplies)	16,676	17,336

* Includes ten months' figures only.

COMMISSION'S ELECTRIC SUPPLY UNDERTAKINGS FOR LOCAL DISTRIBUTION—*continued.*

NORTH-EASTERN DISTRICT.

	1927–28.	1928–29.	1929–30.	1930–31.	1931–32.
Population of Supply Area	30,650	32,700	34,200	34,200	36,410
Number of Consumers	5,238	5,777	6,045	6,070	6,677
Percentage of Consumers to Population	17·09 per cent.	17·66 per cent.	17·7 per cent.	17·74 per cent.	18·34 per cent.
Sales of Energy, in classes—					
Bulk Supplies	3,414,580 kw. hrs.	4,014,310 kw. hrs.	4,396,140 kw. hrs.	4,213,321 kw. hrs.	4,775,640 kw. hrs.
Street Lighting	127,381 ,,	156,147 ,,	158,142 ,,	161,598 ,,	163,378 ,,
Domestic	598,412 ,,	874,619 ,,	1,102,004 ,,	1,216,506 ,,	1,299,693 ,,
Industrial— Large		208,898 ,,	881,210 ,,	773,527 ,,	
Small		1,125,129 ,,	1,365,785 ,,	1,147,536 ,,	2,182,802 ,,
Commercial		1,024,044 ,,	1,196,154 ,,	1,224,692 ,,	1,342,081 ,,
Excluding adjustments for unread meters and service charges paid in advance at end of year	1,686,663 ,,				
	5,827,036 ,,	7,403,147 ,,	9,099,435 ,,	8,737,180 ,,	9,763,594 ,,
Revenue	£74,086	£85,585	£99,534	£97,387	£100,895
Average Revenue per kwh. sold	3·05d.	2·774d.	2·625d.	3·021d.	2·48d.
Maximum Demand in kw.	1,750 (approx.)	2,640	2,559	2,995	2,690
Number of Motors (Excluding Bulk Supplies)	428	471	537	560	590
Total h.p. of Motors (Excluding Bulk Supplies)	1,763	2,181	3,023	3,385	3,152

GIPPSLAND DISTRICT.

	1927–28.	1928–29.	1929–30.	1930–31.	1931–32.
Population of Supply Area	25,230	26,670	26,870	30,200	30,200
Number of Consumers	4,637	5,180	5,534	6,315	6,383
Percentage of Consumers to Population	18·38 per cent.	19·4 per cent.	20·59 per cent.	20·91 per cent.	21·13 per cent.
Sales of Energy, in classes—					
Street Lighting	121,658 kw. hrs.	134,768 kw. hrs.	163,600 kw. hrs.	189,833 kw. hrs.	191,004 kw. hrs.
Domestic	822,916 ,,	1,007,627 ,,	1,257,630 ,,	1,566,443 ,,	1,650,133 ,,
Industrial— Large		122,468	288,840 ,,	414,806 ,,	
Small		1,583,993 ,,	1,749,864 ,,	2,011,040 ,,	2,671,737 ,,
Commercial		844,021	929,264 ,,	1,010,087 ,,	1,056,524 ,,
Excluding adjustments for unread meters and service charges paid in advance at end of year	2,111,136 ,,				
	3,065,710 ,,	3,692,877 ,,	4,389,198 ,,	5,192,209	5,569,398 ,,
Revenue	£52,883	£60,384	£69,489	£78,319	£78,948
Average Revenue per kwh. sold	4·14d.	3·924d.	3·8d.	3·62d	3·4d.
Maximum Demand in kw.	1,200	1,610	1,730	2,020	2,020
Number of Motors	487	555	699	686	694
Total h.p. of Motors	2,365	2,710	3,260	3,647	3,722

CASTLEMAINE DISTRICT.

	1928–29.	1929–30.	1930–31.	1931–32.
Population of Supply Area	5,470	13,550	13,550	13,550
Number of Consumers	528	2,275	2,361	2,393
Percentage of Consumers to Population	9·65 per cent.	16·8 per cent.	17·4 per cent.	17·66 per cent.
Sales of Energy, in Classes—				
Street Lighting	15,694 kw. hrs.	76,450 kw. hrs.	107,058 kw. hrs.	110,182 kw. hrs.
Domestic	42,069 ,,	256,065 ,,	483,290 ,,	547,377 ,,
Industrial— Large	136,200 ,,	127,604 ,,	45,870 ,,	
Small	.. ,,	34,384 ,,	55,578 ,,	140,525 ,,
Commercial	126,802 ,,	361,079 ,,	460,553 ,,	483,756 ,,
Excluding adjustments for unread meters and service charges paid in advance at end of year				
	320,765 ,,	855,582 ,,	1,152,349 ,,	1,281,840 ,,
Revenue	£6,601	£23,620	£29,505	£28,447
Average Revenue per kwh. sold	4·938d.	6·625d.	6·15d.	5·325d.
Maximum Demand in kw.	160	350	350	360
Number of Motors	41	166	183	172
Total h.p. of Motors	330	683	769	757

COMMISSION'S ELECTRIC SUPPLY UNDERTAKINGS FOR LOCAL DISTRIBUTION—*continued*

SOUTH-WESTERN DISTRICT.

	1927–28.	1928–29.	1929–30.	1930–31.	1931–32.
Population of Supply Area	26,970	31,200	31,200	31,200	31,200
Number of Consumers	4,677	5,485	5,741	6,011	6,126
Percentage of Consumers to Population	17·34 per cent.	17·58 per cent.	18·4 per cent.	19·26 per cent.	19·63 per cent
Sales of Energy, in classes—					
Street Lighting	136,030 kw. hrs.	144,438 kw. hrs.	156,438 kw. hrs.	163,343 kw. hrs.	153,751 kw. hrs.
Domestic	739,519 ,,	937,125 ,,	1,202,741 ,,	1,380,442 ,,	1,460,737 ,,
Industrial— Large	496,110 ,,	807,520 ,,	1,430,273 ,,	2,307,863 ,,
Industrial— Small	722,845 ,,	784,271 ,,	761,204 ,,	
Commercial	908,531 ,,	991,976 ,,	964,634 ,,	986,377 ,,
Excluding adjustments for unread meters and service charges paid in advance at end of year	2,034,165 ,,			
	2,909,714 ,,	3,209,049 ,,	3,942,946 ,,	4,699,900 ,,	4,908,728 ,,
Revenue	£55,347	£62,236	£73,166	£75,943	£76,480
Average Revenue per kwh. sold ..	4·56d.	4·654d.	4·454d.	3·878d.	3·74d.
Maximum Demand in kw.	(*a*) 1,035	(*a*) 1,212	(*a*) 1,340	(*a*) 1,570	(*a*) 1,680
	(*b*) 177	(*b*) 211	(*b*) 211	(*b*) 211	(*b*) 225
Number of Motors	479	578	597	767	726
Total h.p. of Motors	1,812	2,160	2,951	3,490	3,347

(*a*) Belmont Sub-station. (*b*) Supply to Bellarine Peninsula

ALL BRANCHES.

	1931–32.
Population of Supply Area	820,360
Number of Consumers	185,609
Percentage of Consumers to Population	22·62 per cent.
Sales of Energy, in Classes—	
Bulk Supplies	5,048,036 kw. hrs.
Street Lighting	11,004,004 ,,
Domestic	59,382,046 ,,
Industrial	151,934,753 ,,
Commercial	28,012,557 ,,
Excluding adjustment for unread meters and service charges paid in advance at end of year ..	255,381,396 ,,
Revenue	£2,063,311
Average Revenue per kwh. sold	1·939d.
Number of Motors	18,662
Total h.p. of Motors	163,949

DEVELOPMENT OF THE USE OF ELECTRICITY.

The total sales of electricity during the year were 24,412,484 kilowatt hours greater than in the preceding period This result, which was gained despite the unfavorable economic conditions prevailing and the absence of any major extensions of supply to new centres, is largely attributable to the active sales policy undertaken by the Commission. The policy being followed by the Commission in the development of residential loading is now forming the subject of an inquiry on behalf of the Government by Colonel the Hon. H. E. Cohen, M.L.C., Assistant Minister for Railways, and a comprehensive report on the matter has been furnished to the Government by the Commission. Anything more than a passing reference to this policy is, therefore, omitted from this present Report.

TARIFFS.

Since its previous Report, the Commission has made the following tariff reductions :—

1. A discount of 10 per cent. to public hospitals subsidized by the State Government as shown in the annual reports of the Charities Board.
2. A modification to the industrial two-part tariff in country districts, to benefit seasonal and intermittent industries, such as cool stores, butter factories, fruit preserving plants, &c.
3. A reduction of the service charge of the country industrial two-part tariff by 6d. per month per horse-power in the case of installations of over 500 horse-power.
4. A reduction in the industrial power tariffs in the Castlemaine district by approximately 20 per cent.
5. The introduction of a new tariff in the metropolitan area, which enables shopkeepers to have pavement lighting at much lower costs than previously.
6. A reduction in the service charge of the industrial two-part tariff in Queenscliff, Camperdown, Colac, and Warrnambool by 3d. per horse-power per month for installations of from 201 to 500 h.p.

7. A reduction in the continuous water heating tariff in Castlemaine district by about 20 per cent.
8. The introduction of a night (off-peak) water heating tariff of 0.375d. per unit in the metropolitan area, with relatively low rates in various country districts. The new tariff applies to electricity consumed through a separate meter by water heating elements switched on by means of a special time switch (provided by the Commission) between 10 p.m. and 6 a.m., or 11 p.m. and 7 a.m., depending on the area concerned, with four hours extra on Sunday morning, so as to meet the heavier demands for hot water which usually occur over the week-end and on Mondays.
9. The introduction of a night (off-peak) tariff for industrial power of .3d. per unit in the metropolitan area, with relatively low rates in country districts. The new tariff applies to electricity used between the hours of 10 p.m. and 6 a.m., or 11 p.m. and 7 a.m., depending upon the area concerned.
10. A reduction, as from 1st October, 1932, of 10 per cent. in the standard charges for street lighting in rural areas, subject to a levelling of rates in any area in which they are not uniform, and to no alteration being made in any rates which are at present on or below the new standard. A 5 per cent. reduction in Geelong, so as to bring the street lighting charges there into line with those in force in Ballarat and Bendigo, has also been made.

In the aggregate, the value of the reductions to consumers is about £15,000 per annum. To this has to be added the benefits of £80,000 which accrued to consumers during the year through the reduction in average price which, under the Commission's standard tariffs, arises from increased consumption. The total of the benefits gained by consumers during the year was, therefore, approximately £95,000.

The development of the various markets for electricity during the year under review is indicated hereunder :—

(*a*) *Industrial.*—Several large industrial concerns converted their plants to electric drive, the additional load from this source aggregating 3,763 h.p. of electric motors. While there will undoubtedly be further conversions from steam to electricity, it is expected that the bulk of new business will be mainly derivable from extensions of existing plants and the establishment of new industries, because electricity already supplies the greater part of the industrial power needs of Victoria. The limitations in this field have been further accentuated by the trade conditions of the past two years, during which time the industrial consumption decreased to a degree substantially greater than that of any other consumer class.

(*b*) *Rural.*—During the year a number of rural sub-stations were erected, bringing the total in service to over 230. Apart from its use for domestic purposes, there are now over twenty distinct applications of electricity being demonstrated profitably on Victorian farms, and efforts are being continued to extend this number on a commercial scale with benefit to farmer consumers.

The experimental work in the electrical curing of tobacco, commenced during the previous year, was continued in the Goulburn Valley tobacco-growing area. The experimental plant was transferred from Wangaratta to Merrigum, in order to increase its sphere of usefulness. The results of the tests demonstrated that electricity has a special value in improving the quality of cured tobacco, and that under certain conditions the electrical method has economic advantages over all other methods. The demand for the Commission's report on the matter has been world-wide.

Following upon a detailed investigation, which was undertaken with the object of improving the power efficiency of fruit cool storage plants, a brochure was issued that has been of considerable assistance in enabling cool store managements to obtain greater returns from their expenditure on power.

As a result of the assistance rendered to poultry farmers, commercial hatching by electrical means has been materially extended, with profit to the industry in general. Experiments are now in hand with the object of assisting the poultryman in connexion with electric brooders.

Experimental work was also undertaken in connexion with the electric heating of glass houses and seedling beds, with results which promise well for the development of this further form of rural service. In co-operation with officers of the State Agricultural Department at the Werribee Research Farm, work is also proceeding with the object of utilizing electric light to promote plant life. Very promising results in this direction have been obtained already in regard to wheat breeding.

(*c*) *Domestic.*—In potential consumption, the domestic class offers by far the best field for development, and the continued intensive cultivation of this demand during the year resulted in an appreciable increment in sales.

PART III.—DESIGN, CONSTRUCTION, AND OPERATION.

COAL SUPPLY.

Yallourn Open Cut.

Overburden Removal.—The removal of overburden at the Yallourn open cut during the year was continued by the dredge on a one-shift basis only, the reason being that the starting of the dredge on the 90-ft. level practically doubled the amount of coal which could be won with little increase in the area already exposed. The quantity of overburden removed was 586,100 cubic yards, compared with 947,700 cubic yards in the previous period, when two shifts were worked. The output of overburden during the year under review was further reduced by the fact that opportunity was taken to lay off the dredge for a month for complete overhaul. During this time the work was taken over by the 175B (Bucyrus) power shovel, and 36,200 yards removed by this machine is included in the total for the year. The shovel was employed in widening the "gullet cut" to the south-east, and its operation there served the dual purpose of advancing this work and of improving the track arrangements for transporting the overburden.

The quantity of overburden removed since operations commenced is 6,671,900 cubic yards. At the end of the year the area of the open cut had been increased from 130 acres to 152 acres at "grass level" and from 117 acres to 132 acres at the level of the surface of the coal.

Coal-Winning.—During the year 2,563,405 tons of coal were excavated, compared with 1,850,849 tons in the previous year. The total quantity of coal excavated since the commencement of operations is 10,994,497 tons.

The output of coal for the year was practically shared between the two dredges—one on the coal surface and one on the 90-ft. level, the former supplying the requirements of the briquetting factory at a track hopper, and the latter supplying the power station by means of the electric steep haulage. The dredge on the bottom level excavated to the bottom of the coal in places, but the intervention of a band of clay and sand, varying in thickness from nothing to 6 feet, prevented this being done throughout. This adverse circumstance is being overcome by excavating and overcasting the clay and sand with the dragline, after which the machine digs the underlying coal, and throws it on to the dredge face, from where it is won by the ordinary operation of the latter machine.

Just before the close of the year the Ruston power shovel completed its work of reducing the bottom level of the cut to 90 feet from the coal surface. It now forms a useful reserve of coal-winning plant, and the loader for No. 1 ropeway has been placed in a position to enable the shovel to dig from the western end of the open cut in case of emergency without interfering with the operation of either dredge.

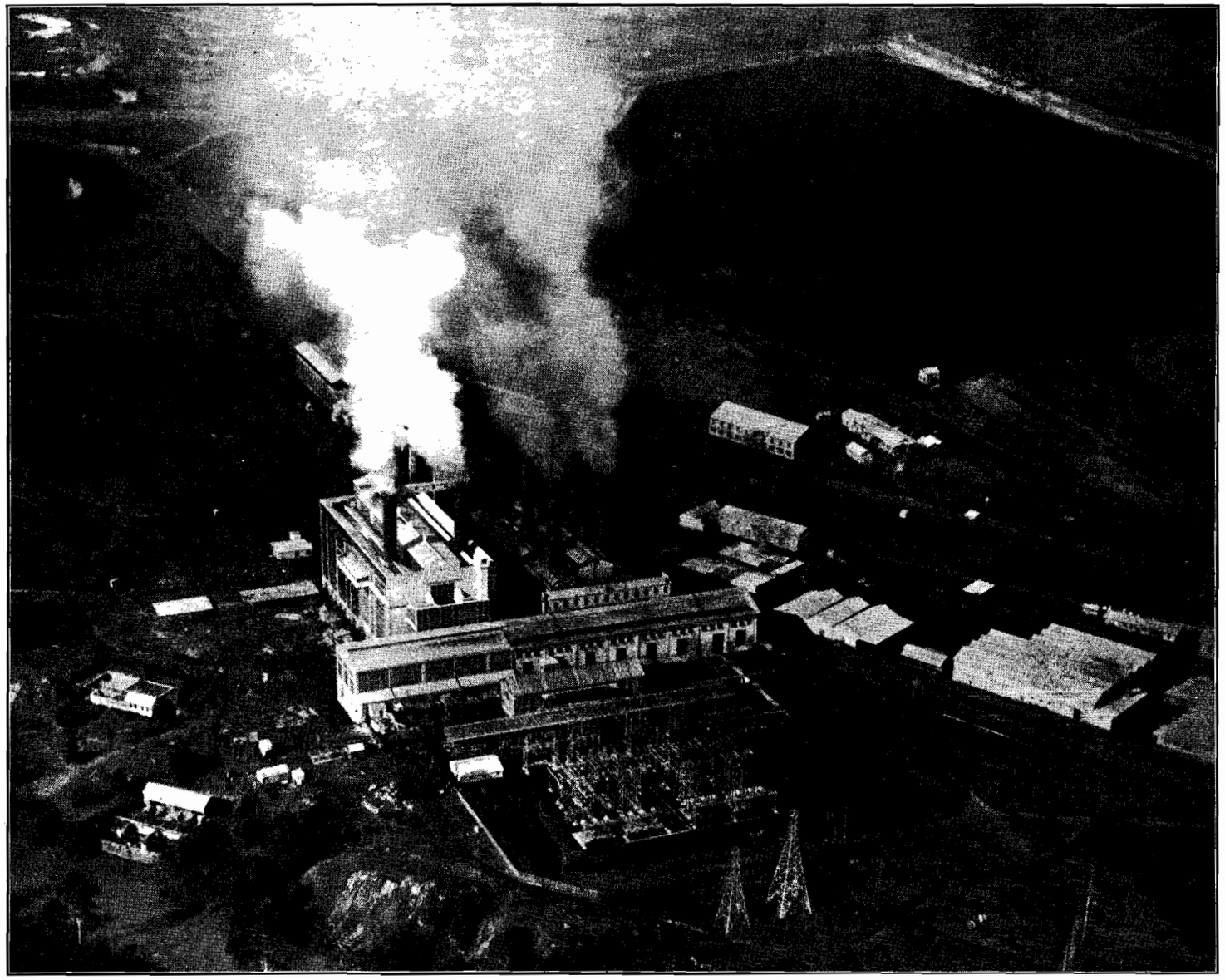
As indicated in the Twelfth Annual Report, the increased amount of track-shifting required on the various dredge tracks necessitated the installation of a second track-shifter. This machine, which was made in Australia, was tested and taken over in September, and has operated satisfactorily.

Boring.—During the year boring operations were confined to the vicinity of the open cut, no new ground being prospected to prove additional coal. Altogether, 89 bores, aggregating 12,729 feet of boring, were put down, with the object of more accurately determining the contours of the upper and lower surfaces of the coal, so as to allow excavation and pumping operations to be planned to the best advantage.

ELECTRICITY SUPPLY.

Yallourn Power Station.

Maximum load during year ended 30th June, 1932 . .	**71,500 kw.**
Generated during year ended 30th June, 1932	**282,608,400 kwh.**
Received from briquetting factory during year	**37,523,400 kwh.**
Total	**320,131,800 kwh.**



Yallourn Power Station and Open Cut, 1932.

The production of the power station was about 44 million kwh. greater than that in the previous year, an increase of approximately 18.5 per cent. With the larger amount of energy received from the briquetting factory, the overall increase in the number of kwh. dealt with at the power station was 27 per cent.

Supply from the station was maintained continuously throughout the year, excepting for one cessation of 17 minutes, due to the development of a fault on the 11 kv. bus.

Boiler Plant.—The permanent reconstruction of the boiler plant, as indicated in the Twelfth Annual Report, has proceeded satisfactorily, all available plant being used to the best advantage in facilitating the work and maintaining station output. At the end of the year boilers Nos. 1 and 2 had been completely reconstructed and were in service, while boiler No. 3 was in course of being dried out, and work on No. 4 was in active progress. This stage had been reached well in advance of the programme laid down when the work was commenced.

Two of the new boilers (Nos. 13 and 14) for the extended power station came into commission in September and October, 1931, respectively, followed early in 1932 by two (21 and 22), the latter coming on load almost coincidently with the new 25,000 kw. turbo-generator (No. 7). The new boilers, which incorporate the features (the results mainly of local research) that have enabled record combustion results to be obtained from Yallourn open-cut coal, are all giving excellent performance.

Newport "B" Power Station.

Maximum load during year ended 30th June, 1932 ..	**18,800 kw.**
Generated during year ended 30th June, 1932	**9,770,138 kwh.**

This station was in commission during the first four months of the year only, and the output was much less than the previous year's reduced total, the position being affected by the exceptionally favorable conditions at Sugarloaf-Rubicon.

Richmond Power Station.

Maximum load during year ended 30th June, 1932 ..	**15,000 kw.**
Generated during year ended 30th June, 1932	**25,745,000 kwh.**

The station, which uses briquettes exclusively, again operated most satisfactorily throughout the year, and its output was approximately the same as that in the previous period.

Sugarloaf–Rubicon Hydro Stations.

Maximum load during year ended 30th June, 1932 ..	**23,400 kw.**
Generated during year ended 30th June, 1932	**122,369,800 kwh.**

The output from this group exceeded that for the previous year by 1½ million units, and the load factor was 60 per cent. The favorable conditions in regard to the supply of water are indicated by the fact that the maximum power developed at the daily peak never once fell below 17,000 kw. Under the worst possible seasonal conditions which may be experienced, the power developed by the hydro stations may fall as low as 11,000 kw.

The turbine plant at the various stations performed satisfactorily. There was a failure of one unit of the Rubicon Power House transformer bank. This was attributed to a piece of scale from the laminations of the core short-circuiting a portion of the low-voltage winding. Bare conductors were accordingly eliminated from the structure of the new winding.

Yallourn–Melbourne 132,000-Volt Transmission Lines.

Both the Yallourn–Yarraville and the Yallourn–Richmond main transmission lines operated with marked efficiency throughout the year, failure of insulators being negligible, and no troubles being experienced with conductors or ground wires, either at joints, suspension or strain positions.

Supply was maintained continuously throughout the year, with the exception of one total interruption of brief duration, when there was the unsuual occurrence of both tower lines receiving simultaneously a severe lightning stroke.

On another occasion an aeroplane struck the Yallourn–Yarraville line near the Geelong-road, but the protective devices immediately isolated the affected circuits from the system, thereby avoiding a general interruption to metropolitan supplies.

THOMASTOWN–NORTH-EASTERN 66,000-VOLT TRANSMISSION LINES.

Lightning caused one brief interruption of supply to the Thomastown Terminal Station. Two short interruptions of supply from Sugarloaf to the North-Eastern district were due to the same cause. In a few other instances, lightning produced faults between Rubicon "A" and Thomastown, but the circuits affected were promptly isolated by the protective relays and switches.

BELMONT–WARRNAMBOOL 44,000-VOLT TRANSMISSION LINE.

This line had another satisfactory year's performance, although on one occasion a heavy gale resulted in supply to centres beyond Colac being interrupted, while on another a burnt cross-arm affected supply to Warrnambool and Port Fairy.

TERMINAL STATIONS.

Yarraville.—The efficient operation of the station was maintained without incident.

Richmond.—This station, which came into commission in May, 1931, has since given uniformly satisfactory performance.

Thomastown.—The only fault at this station was the failure of a bushing on a 22 kv. oil-circuit breaker, which caused a twelve-minute interruption of supplies from the feeder controlled thereby.

A bus sectionalizing oil-circuit breaker was installed on the 22,000-volt busbars, together with differential protection against bus faults.

CENTRAL SUPPLY DISTRIBUTION.

The provision made in the previous period to increase the capacity of the Spencer-street ("J") sub-station, so as to cope satisfactorily with the increased Melbourne City Council loading, was followed during the year under review by a re-arrangement of the 22,000-volt buses to give improved switching and operating conditions; bus protection was also installed.

At the Preston ("P") sub-station, the 6·6 kv. switchgear was re-arranged to provide for an additional feeder to augment the supply to the Preston City Council and the new Preston traction sub-station of the Melbourne and Metropolitan Tramways Board. An additional incoming feeder oil circuit breaker was installed at the Preston City Council's sub-station, and two incoming feeder equipments and metering at the Tramways Board's converting sub-station.

Spare transformers were put in at the St. Kilda ("H") and Camberwell ("K") sub-stations.

The transformer installation at the Sunshine ("S") sub-station was increased to 3,750 kva. by the addition of two 750 kva. transformers from Ringwood, to which an outdoor 3,000 kva. bank was made available in the previous period by an appropriate substitution of transformers at the Ascot Vale ("D") sub-station. The 22,000-volt feeder from the Yarraville Terminal Station to the Sunshine sub-station was equipped with an oil circuit breaker, and impedance relay protection was substituted for the overload relays. The transformers and buses were equipped with differential protection.

There was an entire freedom from faults on the 22,000-volt underground cable system. The special treatment referred to in the Twelfth Annual Report, and which consists of replenishing with oil the elevated end portions of cables, was carried out. Impregnating oil was injected into 36 such cable ends, and the process will be repeated at an early date. The draining of oil from joint sleeves at the higher levels was also watched for, and cast-iron domes to serve as oil reservoirs were fitted to nineteen joint sleeves.

Ground temperature, and ground condition, in respect of moisture content, class of soil, &c., having an important bearing on permissible safe loading currents, records were taken throughout the year at six stations in the metropolitan area.

MAIN DISTRIBUTION AND SUB-STATIONS.

South-Western.—The equipping of the Belmont main sub-station with additional transformer and voltage regulator was completed, together with three 44,000-volt oil circuit breakers (one in each transmission line circuit and one in the bus tie circuit). A balanced current system of protection was installed on the 44,000-volt outgoing lines, and an oil circuit breaker on the second 6,600-volt feeder from the Geelong Power Station.

The Colac main sub-station was equipped with 44 kv. oil circuit breakers for switching both incoming lines from Belmont, and selective line protection installed.

At the Terang main sub-station, 6,600-volt induction voltage regulators were installed in the Mortlake feeder.

The only fault recorded was in the voltage transformer at Terang main sub-station, supply to Terang and Warrnambool being affected for a brief period.

Gippsland.—To improve the voltage conditions at Sale, induction voltage regulators were installed at Maffra in the 6,600-volt Maffra–Sale feeder. The Maffra Beet Factory supply was removed from the Sale feeder, and transferred to a short 22,000-volt tee off the main East Gippsland feeder.

One overhead line fault caused an interruption on the East and South Gippsland feeders, while supply to West Gippsland was affected on another occasion owing to a cross-arm burning.

North-Eastern.—The performance of sub-station equipment and overhead lines was satisfactory. There was a failure of a 66 kv. bushing of the Mansfield transformer and of a 22 kv. bushing of the voltage regulator at Wangaratta, and steps were taken to obviate a recurrence by increasing the insulation resistance of these parts.

The feeders supplying Albury were reinforced by arranging for parallel operation of the two 22 kv. Wangaratta–Albury lines, suitable switching being provided at Albury and protection to meet the new conditions added.

Bus protection was fitted to the 66 kv. buses at the Benalla sub-station.

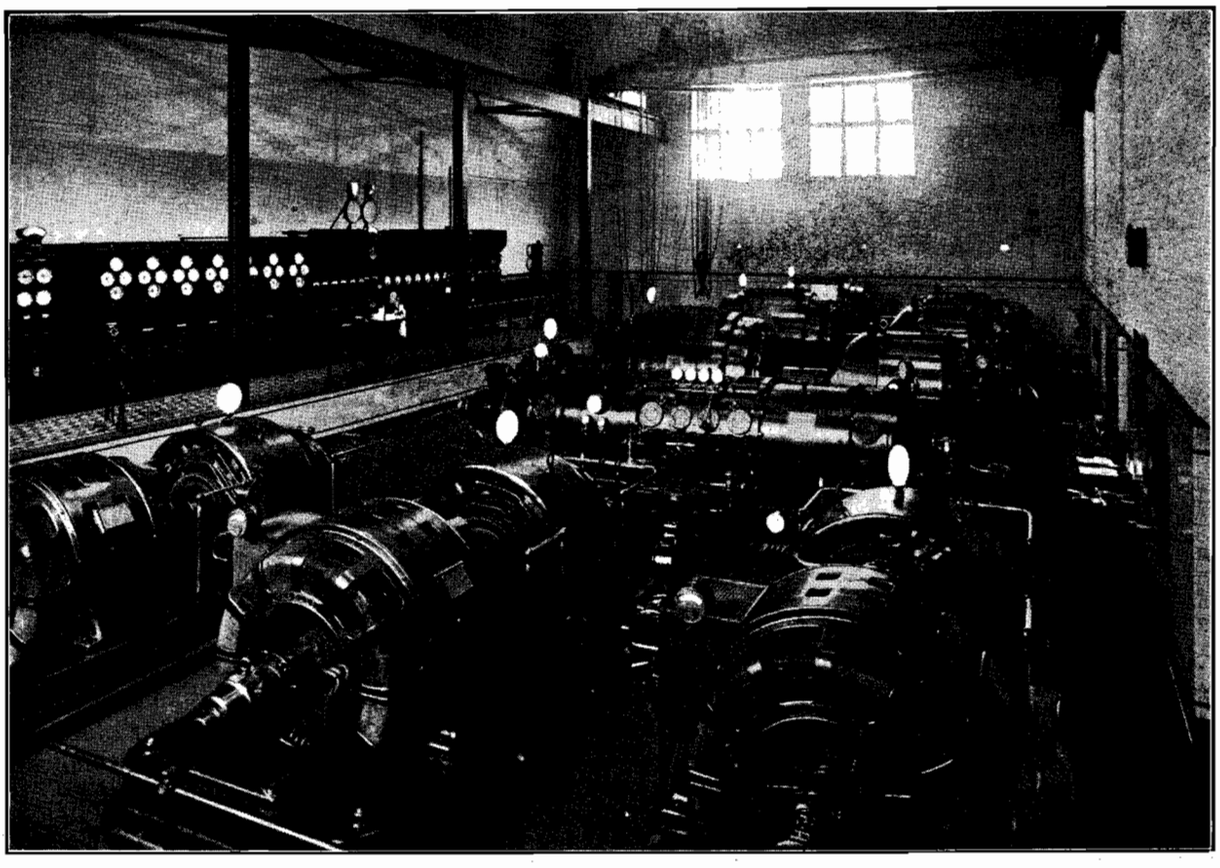
Eastern Metropolitan.—In order to cope with the load on the Dandenong main sub-station, and to more adequately take care of voltage conditions on the Mornington Peninsula, a new sub-station to replace the original one was built, and equipped with a larger capacity of transformers, appropriate switching of the Dandenong, Peninsula, and Pakenham–Cranbourne feeders and a step-type voltage regulator.

The whole of the main distribution system supplying this district operated satisfactorily, only a few minor interruptions being recorded.

Castlemaine.—The line and sub-station equipment operated without faults, excepting for minor insulator failures due to lightning.

MAIN AND BRANCH DISTRIBUTION SYSTEMS—BRANCH UNDERTAKINGS.

Statistical information relating to overhead transmission lines, underground cables, and the number and capacity of sub-stations is contained in Appendices Nos. 2 and 3.



Geelong Power Station. Installed Capacity, 10,500 kw.

OVERHEAD LINE MAINTENANCE.

During the year new and noteworthy processes were evolved by the Commission's engineers in regard to maintenance methods on overhead lines, viz. :—

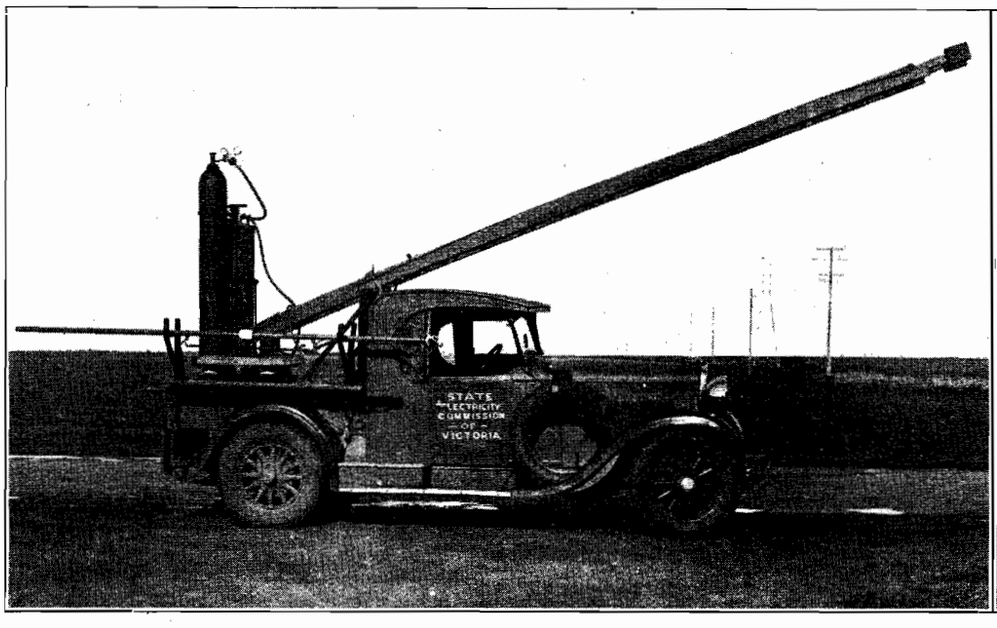
(*a*) *Pole Renewals on Live* 66 *kv. Lines.*—The renewal of a pole in an " H " structure on a live 66 kv. line was successfully accomplished in nine hours by a maintenance officer and six men. Apart from achieving the important object of avoiding an interruption of supply, a substantial saving in cost accrued over the alternative method of doing the work during a " shut down " period at night. Briefly, the method consists of a system of wire guys and timber struts to preserve the balance of the sound pole and cross-arms, the gear being designed to cope with the weight to be handled. The removal of the defective pole and its subsequent replacement by a new pole is accomplished by the use of derricks and suitable tackle.

(*b*) *Raising of Heights of Structure on Live* 66 *kv. Lines.*—In the case of an " H " structure which was not high enough to afford adequate ground clearance, a 12-ft. channel iron raiser was erected on each pole by means of appropriate tackle. The existing cross-arms were lifted and affixed to the raisers, and the whole operation was carried out while the line remained on load.

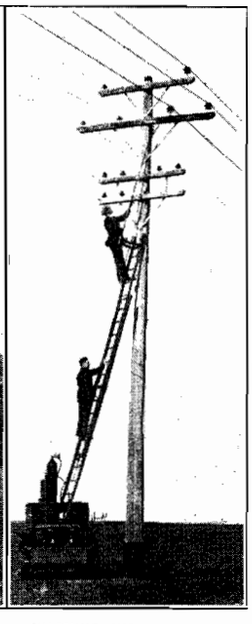
(*c*) *Heat Treatment of Poles for the Eradication of Dry Rot Fungus.*—The dry rot is removed by burning it out with an oxy-acetylene flame. When all the rotted timber is removed, the whole surface of the pole is charred, and, while hot, liberally treated with creosote. The appearance of the pole is restored to normal by filling the holes with asphalt.

(*d*) *Cleaning of Insulators on Live* 22 *kv. Lines.*—After thorough laboratory and field tests, an equipment was devised whereby " live " insulators up to 22,000-volts can be washed periodically, and thus their insulation resistance, even under " dirty " operating conditions, is maintained above a safe working value. A water jet of high pressure was found to effectively and safely clean the insulators, and liquid carbon dioxide was chosen in preference to compressed air as the agent for producing the pressure and breaking up the jet. The new method is much quicker and cheaper than the hand method.

Photographs illustrate the application of the method in the field.



PATROL TRUCK EQUIPPED FOR LIVE INSULATOR WASHING



WASHING INSULATORS ON LIVE 22 KV. LINE

(*e*) *Changing of Strain Insulators on Live* 22 *kv. and* 6.6 *kv. Lines.*—The successful development of " live " insulator washing led to the renewal of strain insulators without interrupting supply. This work is accomplished by the use of an auxiliary insulator string in conjunction with specially-designed plant and tools mounted on insulated sticks. The operator stands on an insulated ladder, and the total time occupied in changing insulators under these conditions does not exceed that usually required in going through the preliminaries necessary to enable the work to be carried out with the line dead. The fact that the work can be done without interruption of supply is an important factor in maintaining continuity of service on long radial lines.

WATER POWER INVESTIGATIONS.

During the year investigations were largely confined to the continuance of the collection and study of stream flow records, which will be of great value in considering any future extensions of the supply system that may become necessary.

The policy of installing automatic gauges was continued, and, at the end of the year, the Commission was maintaining twenty regular gauging stations, of which seventeen were equipped with automatic recording gauges.

Equipment for taking current meter measurements was also improved, particularly on the larger streams, such as the Snowy and Mitta Rivers. Cableway measuring stations are now installed at twelve sites.

A small amount of field work was carried out on the Kiewa and Mitta Rivers, and further valuable data regarding these possible schemes have been investigated and recorded.

BRIQUETTING AND RESEARCH.

The output of the Yallourn works for the year was 321,741 tons of briquettes, an increase of 96,370 tons, or 42 per cent., on the output of 225,470 tons for the preceding year. This large increase was due to the extended factory working at nearly full capacity for the whole period. The output would have been somewhat larger but for the unexpectedly large demand for small industrial briquettes (nuts). The capacity of the presses is somewhat less on this type of briquette than on the larger briquettes.

The new high pressure boiler plant was not available for continuous use during the early portion of the financial year. Excepting for a number of details still requiring adjustment, this plant, since it began to function, has operated satisfactorily, supplying the maximum demand for steam without difficulty. The two new 10,000 kw. turbines, which receive steam at 550 lb. gauge pressure, have both operated very satisfactorily and at somewhat less than the steam consumption per kwh. guaranteed by the contractors. They are operated alternately, one being always available as a spare. At the beginning of the year about 7,500 kw. was being generated, of which approximately 5,500 kw. was delivered to the main electricity supply system. The present output is 9,000 kw. to 9,500 kw., of which all but about 2,000 kw. goes to the main system.

A second loading shed and its equipment, including a considerable amount of belt conveying plant with automatic loaders, have been completed and are now in regular operation.

Plans are in preparation for a continuous filtering plant to deal with the brown coal dust sludged in the dust extraction plants. It is hoped to have this plant in operation in about six months' time, after which the discharge of fine coal dust from the factory into the Latrobe River will be discontinued.

The only research work carried out during the period was that attached to briquetting.

PART IV.—GENERAL.

APPOINTMENT OF COMMISSIONER.

On the 2nd August, 1932, the Governor in Council appointed Mr. D. J. McClelland, M.C.E. (Melb.), M.Inst.C.E. (London), as a Commissioner of the State Electricity Commission of Victoria, to fill the vacancy caused by the death of Sir John Monash on the 8th October, 1931. Mr. McClelland's appointment is for five years, commencing on the 8th August, 1932.

MEMORIAL TO THE LATE GENERAL SIR JOHN MONASH.

Following upon the death of the late Chairman of the Commission, General Sir John Monash, early steps were taken by the staff and employees of the Commission to suitably commemorate his memory. The response made was liberal and universal right throughout the Commission's service, and a sum of over £500 was subscribed. With the approval of the Commission, it was decided to devote this sum to the erection, in the Town Square at Yallourn, of a monument in granite, incorporating Mr. Paul Montford's bronze bust of Sir John Monash. The monument is to be unveiled in November, 1932.

The monument, a drawing of which is contained in this report, bears the following inscription :—

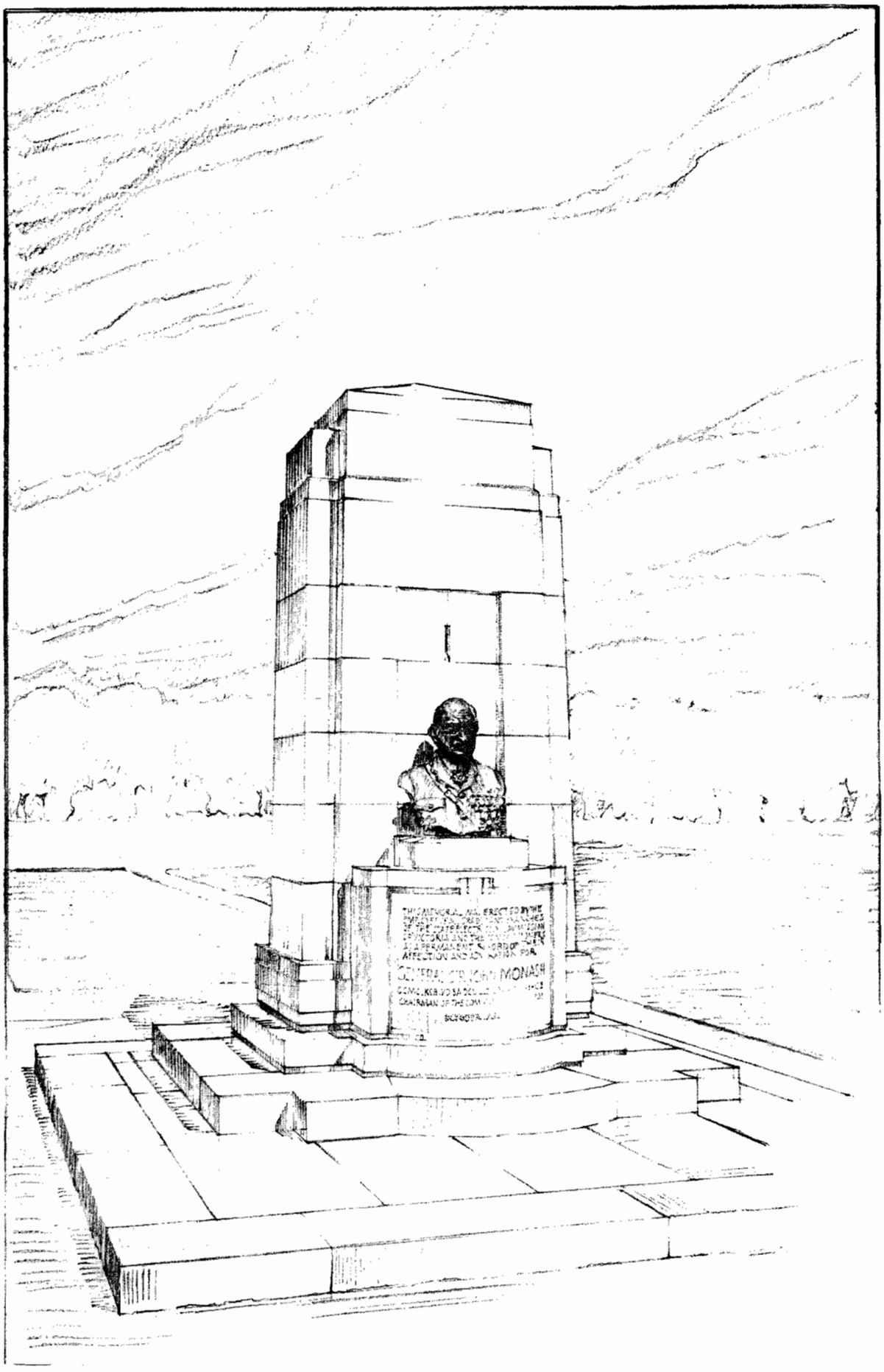
> " This Memorial was erected by the employees, of all grades and branches, of the State Electricity Commission of Victoria, and the Commissioners, as a permanent record of their affection and admiration for
>
> GENERAL SIR JOHN MONASH,
>
> G.C.M.G., K.C.B., V.D., B.A., D.C.L., LL.D., D.Eng., M.Inst.C.E.,
>
> Chairman of the Commission 1921–1931."

STAFF.

The Commission has again pleasure in acknowledging the loyal and efficient services rendered by the staff and employees. In the work of a strenuous year, the Commission has had their fullest co-operation.

(Sgd.) F. W. CLEMENTS, Chairman.
THOMAS R. LYLE, Commissioner.
ROBERT GIBSON, Commissioner.

(Sgd.) W. J. PRICE,
Secretary.



Memorial to Late General Sir John Monash, Town Square, Yallourn.

[*To face page* 36

APPENDIX No. 1.

AUDITOR-GENERAL.—VICTORIA.

Melbourne.

DEPUTY AUDITOR-GENERAL'S CERTIFICATE.

I certify that the accounts have been examined with the books and vouchers, and I am of opinion the Balance-sheet fairly exhibits a true and correct view of the undertaking at the 30th June, 1932. The values of the stores have been accepted on the certificates of the storekeepers.

W. H. COVE,
Deputy Auditor-General,
18th October, 1932.

APPENDIX No. 1.

STATE ELECTRICITY COMMISSION OF VICTORIA.

GENERAL BALANCE-SHEET AS AT 30TH JUNE, 1932.

LIABILITIES.

	£	£ s. d.	£ s. d.
CAPITAL LIABILITIES—			
Victorian Government Advances—			
Loan Act No. 3029	355,000		
,, ,, 3101	1,430,000		
,, ,, 3160	2,006,000		
,, ,, 3234	1,576,000		
,, ,, 3306	1,447,000		
,, ,, 3381	1,569,500		
,, ,, 3433	1,841,000		
,, ,, 3478	1,918,334		
,, ,, 3565	1,750,000		
,, ,, 3606	2,050,000		
,, ,, 3831	1,874,000		
,, ,, 3934	1,160,000		
,, ,, 3993	240,000		
	19,216,834		
Expenditure under above Acts		10,905,404 3 0	
Add Expenditure under Treasury Act 3598		1,250,000 0 0	
,, ,, ,, ,, ,, 3825		1,000,000 0 0	
,, ,, ,, ,, ,, 3274		2,500,000 0 0	
,, ,, ,, ,, ,, 3345		1,500,000 0 0	
,, ,, ,, ,, ,, 3934		907,337 5 3	
		18,062,741 8 3	
Deduct Redeemed or cancelled Securities		303,403 16 10	
		17,759,337 11 5	
Advances by Treasury from Public Account (Sections 5 and 6, Act 3439)		66,150 10 0	
Other Advances		7,500 0 0	
Debentures (as per Schedule)		1,902,188 16 4	
			19,735,176 17 9
CURRENT AND ACCRUED LIABILITIES—			
Sundry Creditors		44,957 4 2	
Sundry Creditors' Retention		14,377 5 0	
Consumers' Deposits		23,013 15 10	
Service Charges received in Advance		52,451 13 4	
Unclaimed Wages		281 3 9	
Consumers' Advances for Construction		10,469 14 1	
Other Deposits and Trust Moneys		6,254 18 11	
Interest Accrued		172,826 9 1	
Salaries and Wages Accrued		23,004 0 0	
Insurances, Telephone Charges, and Rents Accrued		6,633 17 10	
Miscellaneous Current and Accrued Liabilities		13,294 13 11	
			367,564 15 11
RESERVES—			
Depreciation and Sinking Fund		2,110,758 2 6	
Doubtful Debts		2,940 8 11	
Miscellaneous		21,507 5 0	
			2,135,205 16 5
			£22,237,947 10 1

ASSETS.

	£ s. d.	£ s. d.
FIXED CAPITAL—		
Coal Supply Works	935,839 15 4	
Briquette Works	1,221,051 15 11	
Power Stations—		
Steam	4,166,059 14 10	
Hydro.	819,654 15 5	
Transmission Lines	2,148,400 3 7	
Terminal Stations	916,597 6 6	
Transmission Sub-stations	591,274 16 0	
Distributing Systems	5,016,853 19 8	
Tramways	198,743 10 10	
Townships	718,083 7 3	
General	1,067,009 15 7	
Unfinished Construction	1,476,746 1 2	
	19,276,315 2 1	
Deduct Proportion of cost of extensions payable by consumers	8,565 12 1	
		19,267,749 10 0
CURRENT AND ACCRUED ASSETS—		
Cash	292,211 15 4	
Sundry Debtors	473,129 17 1	
Stores	392,001 17 5	
Advances	70,760 6 1	
Investments	13,486 12 8	
Miscellaneous Current and Accrued Assets	1,637 18 0	
		1,243,228 6 7
RESERVE FUNDS—		
Sinking Funds	13,255 16 6	
		13,255 16 6
SUSPENSE—		
Overburden Removal and Disposal	574,974 11 11	
Preliminary Investigations	1,606 3 11	
Chargeable Work	1,118 4 0	
Paid in Advance Accounts	559 7 4	
Unamortised Loan Flotation Expense	188,353 19 3	
Work in Progress	7,956 15 6	
Amount charged to Commission by Treasury in accordance with decision of Cabinet, 22nd July, 1922	52,023 6 8	
Hospital and Health Centre, Yallourn	33,883 10 2	
Miscellaneous	60,701 1 10	
Profit and Loss—Deficit	792,536 16 5	
		1,713,713 17 0
		£22,237,947 10 1

There is a contingent asset and liability in respect of securities lodged as bona fides under Contracts to the extent of £33,193 4s. 7d., and held by the Bank on the Commission's behalf.

R. LIDDELOW,
Manager.

STATE ELECTRICITY COMMISSION OF VICTORIA.

GENERAL PROFIT AND LOSS ACCOUNT FOR YEAR ENDED 30TH JUNE, 1932.

Dr. *Cr.*

To Expenditure—	£ s. d.	£ s. d.	*By Income*—	£ s. d.	£ s. d.
Electric Supply—			Electric Supply—		
Purchased Power	27,824 6 1		Bulk Supply	406,655 3 4	
Generation and Transmission	1,254,252 1 9		Street Lighting	123,329 6 6	
Distribution	951,904 3 8		Domestic	855,341 14 11	
Bulk Supply Expenses	733 9 5		Industrial	620,883 17 7	
	2,234,714 0 11		Commercial	436,779 3 11	
Deduct Cost of Power transferred to Works	15,958 18 7		Miscellaneous	10,597 1 10	
		2,218,755 2 4		2,453,586 8 1	
Briquetting—			*Add* Meters unread 30th June, 1932, and Service Charges received in advance 30th June, 1931	149,599 9 10	
Manufacturing	255,828 10 0			2,603,185 17 11	
Distribution and Selling	152,437 16 11		*Deduct* Meters unread 30th June, 1931, and Service Charges received in advance 30th June, 1932	146,488 18 11	
Add Briquettes on hand 30th June, 1931	12,692 10 2				2,456,696 19 0
	420,958 17 1		Briquetting—		
Deduct Cost of Briquettes transferred to Works	37,458 14 9		Briquette Sales	307,139 8 1	
		383,500 2 4	*Add* Briquettes on hand 30th June, 1932	62,608 10 1	
Tramways		53,070 14 5			369,747 18 2
Miscellaneous		3,308 10 1	Tramways		35,449 19 0
Coal Subsidy		2,100 13 11	Miscellaneous		717 9 1
Sinking Fund Contributions		16,056 9 10			
Provident Fund Contributions		20,592 2 10			
Loan Flotation Expense		6,505 8 0			
Exchange on Overseas Remittances		150,691 19 10			
Proportion of amount charged to Commission by Treasury in accordance with decision of Cabinet, 22nd July, 1922		5,000 0 0			
To Profit carried down		3,031 1 8			
		2,862,612 5 3			2,862,612 5 3
To Balance as at 30th June, 1931		795,567 18 1	By Profit for year		3,031 1 8
			By Balance as at 30th June, 1932, carried to General Balance-sheet		792,536 16 5
		£795,567 18 1			£795,567 18 1

STATE ELECTRICITY COMMISSION OF VICTORIA.

BRANCH UNDERTAKINGS.

PROFIT AND LOSS ACCOUNTS FOR YEAR ENDED 30TH JUNE, 1932.

—	Metropolitan Electricity Supply.	Castlemaine.	Eastern Metropolitan.	Geelong Electricity Supply.	Gippsland.	North-Eastern.	South-Western.	Western Metropolitan.
EXPENDITURE.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.
To Power	714,366 14 7	4,047 18 0	21,631 10 10	52,800 1 5	21,204 5 8	13,306 0 9	21,073 4 3	3,164 11 9
Transmission	..	7,753 7 10	6,763 19 0	..	13,292 14 11	30,268 18 5	22,328 16 11	1,296 7 7
Generation	..	11 2 1	..	..	..	6,971 2 1	..	..
Overhead and Underground Lines	66,392 2 7	1,102 16 4	5,028 15 0	7,689 1 11	3,559 0 9	3,605 18 4	6,095 7 7	803 1 9
Sub-stations	24,588 17 11	604 19 7	2,609 14 1	627 16 3	2,210 18 3	1,153 1 5	734 18 8	76 18 9
Meters	13,895 17 5	130 3 7	757 12 0	1,985 10 9	640 11 4	702 19 8	484 4 2	15 17 9
Consumers' Premises	20,260 4 0	496 2 7	2,144 5 2	1,338 15 11	1,068 0 1	330 9 4	341 16 3	63 10 7
Commercial Lamps	2,960 1 4	19 15 11	..	..	..	16 1 5	..	..
Public Lighting	26,979 11 6	451 8 6	918 7 6	1,701 4 6	772 15 8	858 18 3	598 7 4	153 12 11
Meter Reading, Billing, and Collecting	62,841 18 3	428 18 6	3,080 9 8	3,163 6 8	2,125 11 2	1,449 11 9	931 4 4	259 2 0
Administration—								
Local	59,657 11 6	4,231 7 10	8,809 13 7	8,605 10 7	11,493 12 8	13,998 1 3	9,693 19 8	836 3 7
Head Office	19,674 11 6	588 0 2	1,637 4 11	1,620 14 10	1,408 5 9	1,629 5 5	1,114 5 1	143 5 5
Superintendence—Head Office	755 18 0	355 16 11	502 15 0	..	373 17 0	334 9 11	504 7 8	144 19 0
Interest	227,471 17 3	6,514 10 6	16,862 4 7	14,689 9 9	13,107 1 8	12,635 3 8	11,869 14 5	1,348 0 4
Depreciation	90,331 4 0	3,175 19 3	7,848 7 3	8,221 10 0	6,192 8 4	5,986 3 0	4,712 10 8	599 16 2
Insurance	663 13 1	13 1 2	19 11 11	209 3 3	29 4 1	68 9 7	21 0 7	3 15 2
Workers' Compensation Insurance	783 14 6	27 18 10	73 6 4	89 0 4	72 16 3	108 10 0	54 1 1	3 17 11
Uncollectable Accounts	4,026 16 6	79 2 8	233 13 9	422 14 10	196 2 2	258 7 5	275 15 2	11 14 3
Total	1,335,650 13 11	30,032 10 3	78,921 10 7	103,164 1 0	77,747 5 9	93,681 11 8	80,833 13 10	8,924 14 11
INCOME.								
By Sales	1,562,018 6 4	28,293 19 6	85,626 12 6	124,569 11 6	79,231 16 6	101,005 14 7	76,428 1 5	9,247 10 1
Total	1,562,018 6 4	28,293 19 6	85,626 12 6	124,569 11 6	79,231 16 6	101,005 14 7	76,428 1 5	9,247 10 1
Profit transferred to Head Office	226,367 12 5	..	6,705 1 11	21,405 10 6	1,484 10 9	7,324 2 11	..	322 15 2
Loss transferred to Head Office	..	1,738 10 9	..	..	..	..	4,405 12 5	..

Note.—These financial results merely determine the relationship of each branch account to the main accounts in Head Office. Hence, there still remain the overall adjustments in respect of exchange and other items of expense, writings down and appropriations which, of course, are cleared through the General Profit and Loss Account.

BRANCH UNDERTAKINGS.

BALANCE-SHEETS AS AT 30TH JUNE, 1932.

—	Metropolitan Electricity Supply.	Castlemaine.	Eastern Metropolitan.	Geelong Electricity Supply.	Gippsland.	North-Eastern.	South-Western.	Western Metropolitan.
ASSETS.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.
Fixed Capital—								
Power Stations—Steam	..	..	..	328,112 13 1	..	..	..	..
Transmission Lines	..	81,160 1 2	59,117 4 8	..	125,037 10 7	233,024 9 0	139,095 13 5	7,931 14 10
Transmission Sub-stations	..	..	..	..	6,233 15 2	62,099 3 5	34,842 10 0	..
Distributing Systems	3,595,754 1 10	115,639 4 1	319,060 3 0	265,382 5 7	239,324 6 3	220,457 14 9	219,440 12 0	24,973 19 11
Tramways	..	..	..	198,743 10 10	..	..	..	..
General	255,494 7 3	3,805 9 11	17,381 9 1	3,094 5 3	6,570 16 11	13,906 10 0	11,035 16 8	273 10 1
Unfinished Construction	132,187 14 2	..	..	269 0 9	52 1 1	2,465 19 9	13,617 19 7	..
	3,983,436 3 3	200,604 15 2	395,558 16 9	795,601 15 6	377,218 10 0	531,953 16 11	418,032 11 8	33,179 4 10
Deduct Proportion of Cost of Extensions Payable by Consumers	2,779 11 5	39 7 6	4,274 2 5	57 15 0	1,019 2 9	156 1 0	239 12 0	..
	3,980,656 11 10	200,565 7 8	391,284 14 4	795,544 0 6	376,199 7 3	531,797 15 11	417,792 19 8	33,179 4 10
Current and Accrued Assets—								
Cash	5,934 11 4	202 0 1	210 15 7	2,176 4 10	387 3 2	335 16 2	559 17 3	..
Sundry Debtors	281,605 4 7	5,470 19 7	16,211 4 1	18,935 2 10	12,243 15 3	18,442 13 10	12,814 6 11	1,545 7 10
Stores	88,325 18 5	5,100 0 0	7,379 5 8	27,560 1 4	9,646 8 9	12,947 10 7	5,172 2 5	512 11 0
Miscellaneous Current and Accrued Assets	1,182 19 2	16 9 6	58 18 0	7 4 9	9 19 10	29 14 9	12 13 1	0 8 5
Reserve Funds—								
Sinking Fund	..	3,574 10 6	460 15 3	..	3,897 4 7	5,263 10 10	59 15 4	..
Suspense—								
Preliminary Investigations	22 12 0	..	..	..	..	..	..	17 19 4
Chargeable Work	215 11 6	..	27 5 8	439 12 10	9 18 8	..	..	..
Paid in Advance Accounts	15 3 7	2 9 10	63 5 10	10 16 7	2 12 9	..	18 13 5	..
Miscellaneous Suspense	..	..	..	..	117 0 8	..	..	..
Work in Progress	1,135 7 0	..	..	..	..	..	..	..
Total	4,359,093 19 5	214,931 17 2	415,696 4 5	844,673 3 8	402,513 10 11	568,817 2 1	436,430 8 1	35,255 11 5
LIABILITIES.								
Capital Liabilities—								
Head Office	2,243,991 10 8	184,289 16 11	329,249 10 6	793,219 19 9	343,921 3 1	457,794 12 7	368,167 11 0	27,901 10 1
Debentures	1,785,068 13 0	18,322 12 5	36,013 13 7	..	10,320 1 7	44,430 0 4	6,200 0 0	1,833 15 5
Current and Accrued Liabilities	117,952 13 11	2,964 8 11	13,025 3 10	6,786 7 2	8,680 17 5	12,261 17 10	8,927 7 10	1,108 9 7
Reserves—								
Depreciation	212,081 1 10	9,260 7 2	37,392 9 4	44,666 16 9	39,275 7 7	53,904 0 4	53,022 5 6	4,368 18 9
Doubtful Debts	..	94 11 9	15 7 2	..	316 1 3	426 11 0	113 3 9	42 17 7
Total	4,359,093 19 5	214,931 17 2	415,696 4 5	844,673 3 8	402,513 10 11	568,817 2 1	436,430 8 1	35,255 11 5

STATE ELECTRICITY COMMISSION OF VICTORIA

SCHEDULE OF FIXED CAPITAL AS AT 30TH JUNE, 1931, AND 30TH JUNE, 1932.

	Expenditure at 30th June, 1931.	Expenditure for 1931–32.	Total at 30th June, 1932.	Less Written Off During 1931–32.	Expenditure at 30th June, 1932.	Total at 30th June, 1932.
	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.
COAL SUPPLY WORKS—						
Yallourn	875,233 1 1	41,374 18 7	916,607 19 8	6,314 8 5	910,293 11 3	
Brown Coal Mine	25,560 11 6	*Cr.* 14 7 5	25,546 4 1	..	25,546 4 1	
						935,839 15 4
BRIQUETTE FACTORY—YALLOURN—	1,213,959 16 1	9,907 8 1	1,223,867 4 2	2,815 8 3	1,221,051 15 11	
						1,221,051 15 11
POWER STATIONS—STEAM—						
Yallourn	2,837,065 1 5	18,247 8 6	2,855,312 9 11	..	2,855,312 9 11	
Newport "B"	836,221 13 4	*Cr.* 458 7 7	835,763 5 9	..	835,763 5 9	
Richmond	146,501 10 9	369 15 4	146,871 6 1	..	146,871 6 1	
Geelong	316,057 15 8	12,054 17 5	328,112 13 1	..	328,112 13 1	4,166,059 14 10
POWER STATIONS—HYDRO.—						
Sugarloaf Rubicon	819,695 17 9	*Cr.* 41 2 4	819,654 15 5	..	819,654 15 5	
						819,654 15 5
TRANSMISSION LINES—						
Yallourn to Yarraville	710,562 7 3	4,230 8 5	714,792 15 8	..	714,792 15 8	
Newport to Yarraville	26,785 18 5	..	26,785 18 5	..	26,785 18 5	
Sugarloaf to Thomastown	202,499 8 6	*Cr.* 219 2 9	202,280 5 9	..	202,280 5 9	
Sugarloaf–Rubicon Area	33,451 3 0	233 4 7	33,684 7 7	..	33,684 7 7	
Central Supply System	524,401 18 10	1,088 3 8	525,490 2 6	..	525,490 2 6	
Castlemaine District	80,057 10 3	1,102 10 11	81.160 1 2	..	81,160 1 2	
Eastern Metropolitan District	58,800 6 0	316 18 8	59,117 4 8	..	59,117 4 8	
Gippsland District	124,872 7 7	165 3 0	125,037 10 7	..	125,037 10 7	
North-Eastern District	233,796 10 10	*Cr.* 772 1 10	233,024 9 0	..	233,024 9 0	
South-Western District	123,893 0 8	15,202 12 9	139,095 13 5	..	139,095 13 5	
Western Metropolitan District	7,931 14 10	..	7,931 14 10	..	7,931 14 10	
						2,148,400 3 7
TERMINAL STATIONS—						
Yarraville	534,024 3 8	364 0 3	534,388 3 11	..	534,388 3 11	
Thomastown	100,754 0 10	*Cr.* 146 10 5	100,607 10 5	..	100,607 10 5	
Richmond	..	214,189 17 5	214,189 17 5	..	214,189 17 5	
Rubicon	65,172 4 5	2,239 10 4	67,411 14 9	..	67,411 14 9	
						916,597 6 6
TRANSMISSION SUB-STATIONS—						
Central Supply System	481,150 3 0	6,949 4 5	488,099 7 5	..	488,099 7 5	
Gippsland District	4,578 19 7	1,654 15 7	6,233 15 2	..	6,233 15 2	
North-Eastern District	60,895 17 7	1,203 5 10	62,099 3 5	..	62,099 3 5	
South-Western District	33,653 3 3	1,189 6 9	34,842 10 0	..	34,842 10 0	
						591,274 16 0
DISTRIBUTING SYSTEMS—						
Metropolitan Electricity Supply	3,506,886 1 11	89,072 3 11	3,595,958 5 10	204 4 0	3,595,754 1 10	
Geelong Electricity Supply	258,235 2 10	7,147 2 9	265,382 5 7	..	265,382 5 7	
Castlemaine District	117,523 14 3	*Cr.* 835 10 2	116,688 4 1	1,049 0 0	115,639 4 1	
Eastern Metropolitan District	309,780 8 4	11,154 16 6	320,935 4 10	1,875 1 10	319,060 3 0	
Gippsland District	236,410 12 7	4,335 8 4	240,746 0 11	1,421 14 8	239,324 6 3	
North-Eastern District	218,473 8 9	3,847 6 0	222,320 14 9	1,863 0 0	220,457 14 9	
South-Western District	212,907 12 0	6,595 0 0	219,502 12 0	62 0 0	219,440 12 0	
Western Metropolitan District	24,501 15 5	566 0 8	25,067 16 1	93 16 2	24,973 19 11	
Yallourn	15,601 12 1	19 10 6	15,621 2 7	..	15,621 2 7	
Brown Coal Mine	1,209 19 1	*Cr.* 9 9 5	1,200 9 8	..	1,200 9 8	
						5,016,853 19 8
Carried forward						

SCHEDULE OF FIXED CAPITAL AS AT 30TH JUNE, 1931, AND 30TH JUNE, 1932—*continued.*

—	Expenditure at 30th June, 1931.	Expenditure for 1931–32.	Total at 30th June, 1932.	Less Written Off During 1931–32.	Expenditure to 30th June, 1932.	Total at 30th June, 1932.
	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.
Brought forward						
TRAMWAYS—						
Geelong	198,674 6 2	69 4 8	198,743 10 10	..	198,743 10 10	198,743 10 10
TOWNSHIPS—						
Yallourn	713,038 1 9	*Cr.* 4,071 11 4	708,966 10 5	..	708,966 10 5	
Brown Coal Mine	9,116 16 10	..	9,116 16 10	..	9,116 16 10	718,083 7 3
GENERAL—						
Metropolitan Electricity Supply	22,206 1 10	240,238 2 4	262,444 4 2	6,949 16 11	255,494 7 3	
Geelong Electricity Supply	3,345 8 1	439 1 2	3,784 9 3	690 4 0	3,094 5 3	
Castlemaine District	4,141 6 4	153 10 11	4,294 17 3	489 7 4	3,805 9 11	
Eastern Metropolitan District	15,337 15 8	2,895 0 5	18,232 16 1	851 7 0	17,381 9 1	
Gippsland District	7,339 5 6	93 13 8	7,432 19 2	862 2 3	6,570 16 11	
North-Eastern District	14,600 2 5	463 14 9	15,063 17 2	1,157 7 2	13,906 10 0	
South-Western District	11,626 12 5	33 1 0	11,659 13 5	623 16 9	11,035 16 8	
Western Metropolitan District	77 13 5	235 1 11	312 15 4	39 5 3	273 10 1	
Yallourn	486,096 0 2	4,339 16 10	490,435 17 0	3,921 7 2	486,514 9 10	
Metropolitan Area	268,579 15 7	8,499 11 7	277,079 7 2	8,146 6 7	268,933 0 7	1,067,009 15 7
	17,133,285 19 6	705,712 15 2	17,838,998 14 8	39,429 13 9	17,799,569 0 11	17,799,569 0 11
UNFINISHED CONSTRUCTION—						
Beginning of year—*Add*	1,375,872 6 7	..	..	..	..	..
Deduct	..	1,375,872 6 7	..	..	..	..
	18,509,158 6 1	*Cr.* 670,159 11 5	17,838,998 14 8	39,429 13 9	17,799,569 0 11	17,799,569 0 11
UNFINISHED CONSTRUCTION—						
End of year—*Add*	..	1,476,746 1 2	1,476,746 1 2	..	1,476,746 1 2	1,476,746 1 2
	18,509,158 6 1	806,586 9 9	19,315,744 15 10	39,429 13 9	19,276,315 2 1	19,276,315 2 1
Deduct Proportion of Cost of Extensions payable by Consumers ..	7,618 9 9	947 2 4	8,565 12 1	..	8,565 12 1	8,565 12 1
Total FIXED CAPITAL	18,501,539 16 4	805,639 7 5	19,307,179 3 9	39,429 13 9	19,267,749 10 0	19,267,749 10 0

SCHEDULE OF DEBENTURES GUARANTEED BY STATE ELECTRICITY COMMISSION OF VICTORIA.

District.	Undertaking.	Details.	Actual Rate.	Rate under Financial Emergency Act.	Original Issue.	Date of Acquisition.	Outstanding at Date of Acquisition.	Redeemed since Date of Acquisition.	Outstanding at 30th June, 1932.	Total Outstanding.
			%	£	£ s. d.		£ s. d.	£ s. d.	£ s. d.	£ s. d.
METROPOLIS.										
Metropolitan Electricity Supply	Melbourne Electric Supply Company Ltd.	First Mortgage Debenture Stock ..	5	5	250,000 0 0	1.9.30	197,463 0 0	5,013 14 0	192,449 6 0	
		Consolidated Debenture Stock ..	5	5	250,000 0 0	,,	188,596 0 0	18,042 7 8	170,553 12 4	
		Gold Bonds	7½	7½	513,769 0 0	,,	472,602 14 10	16,937 1 1	455,665 13 9	
		General Mortgage Debenture Stock ..	6	5	300,000 0 0	,,	275,595 0 0	9,194 19 1	266,400 0 11	
		Debenture Stock	6½	6½	300,000 0 0	,,	300,000 0 0	..	300,000 0 0	
		,, ,, ...	7	7	400,000 0 0	,,	400,000 0 0	..	400,000 0 0	
					2,013,769 0 0		1,834,256 14 10	49,188 1 10	1,785,068 13 0	1,785,068 13 0
COUNTRY.										
Castlemaine	Gisborne	Gisborne Shire .. .. Loan No. 3	6½	5.0375	900 0 0	1.10.28	781 15 5	197 8 7	584 6 10	
	Kyneton	Kyneton Shire .. .. ,, 3	5¾	5	12,000 0 0	1.10.29	10,830 0 0	545 0 0	10,285 0 0	
	,, ...	,, ,, ... ,, 5	6	5	3,800 0 0	,,	3,084 15 2	381 9 7	2,703 5 7	
	Sunbury	Bulla Shire .. .. ,, A	4¼	4¼	5,000 0 0	1.5.26	2,500 0 0	1,000 0 0	1,500 0 0	
	Woodend	Newham and Woodend Shire ,, 1	4	4	2,000 0 0	1.8.29	200 0 0	200 0 0	..	
	,, ...	,, ,, ,, ,, 2	5	5	750 0 0	,,	750 0 0	..	750 0 0	
	,, ...	,, ,, ,, ,, 4	6	5	1,500 0 0	,,	1,500 0 0	..	1,500 0 0	
	,, ...	,, ,, ,, ,, 5	6	5	1,000 0 0	,,	1,000 0 0	..	1,000 0 0	
					26,950 0 0		20,646 10 7	2,323 18 2	18,322 12 5	18,322 12 5
Eastern Metropolitan ..	Dandenong ..	Dandenong Shire.. .. Loan No. 19	6¼	5	6,600 0 0	1.10.23	5,941 7 1	3,174 6 2	2,767 0 11	
	,, ...	,, ,, ... ,, 20	6	5	4,000 0 0	,,	3,946 19 0	1,189 1 9	2,757 17 3	
	Frankston	Frankston and Hastings Shire ,, 10	6½	5.0375	5,000 0 0	21.2.28	3,690 16 11	1,472 6 4	2,218 10 7	
	,, ...	,, ,, ,, ,, 11	6	5	3,000 0 0	,,	2,277 2 3	860 18 6	1,416 3 9	
	,, ...	,, ,, ,, ,, 13	6¼	5	4,000 0 0	,,	3,366 6 2	1,043 9 5	2,322 16 9	
	,, ...	,, ,, ,, ,, 15	6½	5.0375	3,000 0 0	,,	2,290 0 0	1,350 0 0	940 0 0	
	,, ...	,, ,, ,, ,, 16	6½	5.0375	5,000 0 0	,,	4,665 15 5	659 8 9	4,006 6 8	
	Lilydale	Lilydale Shire .. .. ,, 16	6½	5.0375	3,000 0 0	1.4.25	2,869 12 7	399 4 9	2,470 7 10	
	Mornington ..	Mornington Shire.. .. ,, 7	6½	5.0375	4,445 0 0	1.8.30	3,195 0 0	425 0 0	2,770 0 0	
	,, ..	,, ,, ... ,, 9	6½	5.0375	1,200 0 0	,,	630 0 0	260 0 0	370 0 0	
	,, ..	,, ,, ... ,, 11	5¾	5	1,000 0 0	,,	895 16 8	69 9 10	826 6 10	
	Ringwood and Croydon	Lilydale Shire .. .. ,, 11	5	5	2,100 0 0	,,	1,100 0 0	800 0 0	300 0 0	
	,, ,,	,, ,, ... ,, 13	6	5	1,200 0 0	,,	1,200 0 0	..	1,200 0 0	
	,, ,,	,, ,, ... ,, 16	6½	5.0375	2,000 0 0	,,	1,913 1 7	266 3 2	1,646 18 5	
	,, ,,	,, ,, ... ,, 17	6	5	4,000 0 0	,,	3,600 0 0	1,400 0 0	2,200 0 0	
	Sorrento and Portsea	Flinders Shire .. .. ,, 3	6	5	3,600 0 0	1.10.27	2,700 0 0	900 0 0	1,800 0 0	
	,, ,,	,, ,, ... ,, 4	6½	5.0375	5,000 0 0	,,	4,185 0 0	1,025 0 0	3,160 0 0	
	,, ,,	,, ,, ... ,, 5	6	5	3,500 0 0	,,	3,356 10 7	515 6 0	2,841 4 7	
					61,645 0 0		51,823 8 3	15,809 14 8	36,013 13 7	36,013 13 7
		Carried forward								

SCHEDULE OF DEBENTURES GUARANTEED BY STATE ELECTRICITY COMMISSION OF VICTORIA—*continued.*

District.	Undertaking.	Details.	Actual Rate.	Rate under Financial Emergency Act.	Original Issue.	Date of Acquisition.	Outstanding at Date of Acquisition.	Redeemed Since Date of Acquisition.	Outstanding at 30th June, 1931.	Total Outstanding.
			%	£	£ s. d.		£ s. d.	£ s. d.	£ s. d.	£ s. d.
		COUNTRY—*continued.*								
		Brought forward								
Gippsland	Korumburra ..	Korumburra Shire .. Loan No. 4	4	4	2,500 0 0	1.12.24	2,500 0 0	..	2,500 0 0	
	,, ...	,, ,, .. ,, 5	4	4	700 0 0	,,	700 0 0	..	700 0 0	
	,, ...	,, ,, .. ,, 7	4	4	1,000 0 0	,,	1,000 0 0	..	1,000 0 0	
	,, ...	,, ,, .. ,, 8	5	5	700 0 0	,,	700 0 0	..	700 0 0	
	Maffra	Maffra Shire .. .. ,, 1	4¾	4¾	6,500 0 0	1.9.24	5,660 0 11	917 14 8	4,742 6 3	
	,, ...	,, ,, ... ,, 2	5½	5	1,000 0 0	,,	877 5 7	199 10 3	677 15 4	
	Morwell	Morwell Shire .. .. ,, 2	7	5.425	1,500 0 0	1.4.26	1,015 0 0	1,015 0 0	..	
	,, ...	,, ,, ... ,, 3	6	5	500 0 0	,,	265 0 0	265 0 0	..	
					14,400 0 0		12,717 6 6	2,397 4 11	10,320 1 7	10,320 1 7
North-Eastern ..	Alexandra	Alexandra Shire .. Loan No. 1	6	5	4,500 0 0	11.4.27	3,832 18 10	574 5 2	3,258 13 8	
	Benalla	Benalla Shire .. .. ,, A	6	5	15,000 0 0	1.5.26	15,000 0 0	..	15,000 0 0	
	,, ...	,, ,, ... ,, B	6½	5.0375	3,000 0 0	,,	3,000 0 0	..	3,000 0 0	
	Euroa	Euroa Shire .. .. ,, 3	5	5	600 0 0	20.3.28	311 4 0	180 2 0	131 2 0	
	,, ...	,, ,, ... ,, 4	7	5.425	2,000 0 0	,,	967 5 10	967 5 10	..	
	,, ...	,, ,, ... ,, 7	6½	5.0375	1,200 0 0	,,	939 4 0	379 2 0	560 2 0	
	,, ...	,, ,, ... ,, 9	6¼	5	1,500 0 0	,,	1,320 4 0	433 6 7	886 17 5	
	Mansfield	Mansfield Shire .. .. ,, 6	6	5	1,200 0 0	1.6.28	1,200 0 0	..	1,200 0 0	
	,, ...	,, ,, ... ,, 8	6	5	800 0 0	,,	800 0 0	200 0 0	600 0 0	
	Mooroopna ..	Rodney Shire .. .. ,, 1	5	5	3,000 0 0	1.10.26	2,286 7 8	498 2 3	1,788 5 5	
	Nathalia	Numurkah Shire .. .. ,, 4	4¾	4¾	4,200 0 0	1.10.31	2,600 0 0	200 0 0	2,400 0 0	
	,, ...	,, ,, ... ,, 8	6¼	5	3,500 0 0	,,	2,257 15 5	225 5 8	2,032 9 9	
	Numurkah	,, ,, ... ,, 3	4½	4½	700 0 0	,,	300 0 0	100 0 0	200 0 0	
	,, ...	,, ,, ... ,, 5	4¾	4¾	800 0 0	,,	200 0 0	..	200 0 0	
	,, ...	,, ,, ... ,, 7	7	5.425	2,500 0 0	,,	1,922 4 11	39 6 2	1,882 18 9	
	Rutherglen ..	Rutherglen Borough .. ,, 2	4½	4½	3,000 0 0	15.10.26	2,094 3 8	600 3 2	1,494 0 6	
	Wahgunyah ..	,, Shire .. ,, 4	6	5	350 0 0	1.2.26	296 1 8	58 15 7	237 6 1	
	Wangaratta ..	Wangaratta Borough .. ,, 8	6½	5.0375	6,500 0 0	12.3.27	6,078 12 8	649 1 4	5,429 11 4	
	,, ..	,, ,, .. ,, 9	6	5	1,500 0 0	,,	1,412 2 5	160 6 11	1,251 15 6	
	Yarrawonga ..	Yarrawonga Shire .. ,, 3	4	4	3,500 0 0	1.8.25	2,600 0 0	700 0 0	1,900 0 0	
	,, ..	,, ,, .. ,, 4	4½	4½	800 0 0	,,	576 3 8	186 4 3	389 19 5	
	,, ..	,, ,, .. ,, 5	5	5	500 0 0	,,	387 11 1	107 3 8	280 7 5	
	,, ..	,, ,, .. ,, 6	5	5	500 0 0	,,	406 1 8	99 10 7	306 11 1	
					61,150 0 0		50,788 1 6	6,358 1 2	44,430 0 4	44,430 0 4
South-Western ..	Camperdown ..	Hampden Shire .. .. Loan No. 1	4	4	8,000 0 0	8.1.24	2,600 0 0	1,100 0 0	1,500 0 0	
	,, ...	,, ,, ... ,, 3	4	4	1,400 0 0	,,	750 0 0	400 0 0	350 0 0	
	Koroit	Koroit Borough .. .. ,, 1	4¼	4¼	6,500 0 0	1.12.28	4,000 0 0	900 0 0	3,100 0 0	
	Terang	Hampden Shire .. .. ,, 2	4	4	3,000 0 0	4.3.24	1,600 0 0	800 0 0	800 0 0	
	,, ...	,, ,, ... ,, 4	4	4	1,500 0 0	,,	850 0 0	400 0 0	450 0 0	
					20,400 0 0		9,800 0 0	3,600 0 0	6,200 0 0	6,200 0 0
Western Metropolitan	Werribee	Werribee Shire .. .. Loan No. 1	5	5	4,000 0 0	10.4.24	2,200 0 0	1,600 0 0	600 0 0	
	,, ...	,, ,, ... ,, 3	4¾	4¾	1,000 0 0	,,	818 1 5	230 9 6	587 11 11	
	,, ...	,, ,, ... ,, 4	5½	5	1,000 0 0	,,	856 16 2	210 12 8	646 3 6	
	,, ...	,, ,, ... ,, 5	6½	5.0375	1,000 0 0	,,	760 0 0	760 0 0	..	
					7,000 0 0		4,634 17 7	2,801 2 2	1,833 15 5	1,833 15 5
	TOTAL FOR COUNTRY				191,545 0 0	..	150,410 4 5	33,290 1 1	117,120 3 4	117,120 3 4
	TOTAL FOR METROPOLIS				2,013,769 0 0	..	1,834,256 14 10	49,188 1 10	1,785,068 13 0	1,785,068 13 0
	GRAND TOTAL				2,205,314 0 0	..	1,984,666 19 3	82,478 2 11	1,902,188 16 4	1,902,188 16 4

APPENDIX No. 2.

OVERHEAD TRANSMISSION LINES.

District.	Erected during Year ended 30th June, 1932.		Total Erected to 30th June, 1932.	
	Route Miles.	Miles of Cable.	Route Miles.	Miles of Cable.
132,000 Volt Lines.				
Yallourn–Yarraville	..	..	190	900
Yallourn–Richmond	..	..		
Metropolitan.				
22,000 Volt Lines	..	..	141·0	423·0
6,600 Volt Lines	15·57	51·45	228·37	689·65
Eastern Metropolitan.				
22,000 Volt Lines	0·802	2·016	111·652	305·366
6,600 Volt Lines	2·35	5·3	79·625	218·15
Western Metropolitan.				
22,000 Volt Lines	..	..	29·0	87·0
6,600 Volt Lines	..	..	29·5	88·7
Geelong.				
6,600 Volt Lines	0·36	1·08	80·26	240·98
North-Eastern.				
66,000 Volt Lines	..	..	223·7	696·1
22,000 Volt Lines	0·16	0·48	110·34	458·12
6,600 Volt Lines	1·08	2·16	10·78	27·16
North-Western.				
66,000 Volt Lines	..	..	52·5	157·5
22,000 Volt Lines	..	..	37·2	107·7
South-Western.				
44,000 Volt Lines	..	..	116·1	484·8
22,000 Volt Lines	0·425	1·275	20·925	62·775
6,600 Volt Lines	1·198	3·594	139·678	370·554
Gippsland.				
22,000 Volt Lines	0·519	1·557	271·839	763·637
6,600 Volt Lines	—0·05 (taken down)	—0·15 (taken down)	13·65	33·45
Yallourn.				
11,000 Volt Lines	..	..	1·415	8·49

SUMMARY OF OVERHEAD LINE CONSTRUCTION.

Voltage.	Erected during Year ended 30th June, 1932.		Total Erected to 30th June, 1932.	
	Route Miles.	Miles of Cable.	Route Miles.	Miles of Cable.
132,000 Volts	..	..	190	900
66,000 Volts	..	..	276·2	853·6
44,000 Volts	..	..	116·1	484·8
22,000 Volts	1·906	5·328	721·956	2,207·598
11,000 Volts	..	..	1·415	8·49
6,600 Volts	20·508	63·434	581·863	1,668·644
Totals	22·414	68·762	1,887·534	6,123·132

UNDERGROUND CABLES.

Class of Cable.	Cable Miles Laid during Year ended 30th June, 1932.	Total Miles Laid at 30th June, 1932.
22,000 Volts	0·066	105·767
6,600 Volts	4·977	397·881
400 Volts	..	4·072
Pilot and Telephone	0·354	58·809
Supervisory	..	13·012
Miscellaneous	0·897	14·866
Totals	6·294	594·407

APPENDIX No. 3.

TABLE SHOWING NUMBER AND CAPACITY OF SUB-STATIONS AS AT 30TH JUNE, 1932.

	No.	*Kva.*
Terminal Stations	4	186,900
Central Supply Transmission Sub-stations	16	166,500
Distribution Subs. at Line Voltage	16	23,060
Transformer Distribution Sub-stations (Melbourne and Extra Metropolitan)—		
Melbourne	7	3,105
Metropolitan Electricity Supply	472	112,580
Extra Metropolitan	20	4,655
Eastern Metropolitan	148	5,668
		126,008
GEELONG ELECTRICITY SUPPLY.		
Transformer Distribution Sub-stations	52	8,170
WESTERN DISTRICT.		
Transmission Sub-stations	5	5,250
Transformer Distribution Sub-stations	79	3,885
GIPPSLAND DISTRICT.		
Transmission Sub-stations	3	900
Transformer Distribution Sub-stations	125	4,685
NORTH-EASTERN DISTRICT.		
Transmission Sub-stations	7	1,100
Transformer Distribution Sub-stations	59	4,280
CASTLEMAINE DISTRICT.		
Transformer Distribution Sub-stations	38	1,355
SUGARLOAF-RUBICON AREA.		
Transformer Distribution Sub-stations	2	450
TOWN OF YALLOURN, ETC.		
Transformer Distribution Sub-stations	28	7,225
Total Installed	1,081	539,768

APPENDIX No. 4.

ENERGY MADE AVAILABLE FROM ALL SOURCES FOR USE IN THE METROPOLITAN AREA FOR ALL PURPOSES.

—	State Electricity Commission. (Table 3.)	Melbourne City Council.	Melbourne Electric Supply Company.	Totals for General Purposes.	Railway Purposes Newport "A" Power Station.	Grand Total for all Purposes
	Kwh.	Kwh.	Kwh.	Kwh.	Kwh.	Kwh.
1925–26	157,035,322	15,600,000	80,616,400	253,251,722	177,695,192	430,946,914
1926–27	235,010,590	12,240,000	52,375,000	299,625,590	178,126,299	477,751,889
1927–28	302,839,997	14,071,976	4,380,550	321,292,523	176,135,807	497,428,330
1928–29	335,721,263	15,769,915	..	351,491,178	173,020,880	524,512,058
1929–30	369,232,691	14,396,740	..	383,629,437	175,993,998	559,623,435
1930–31	350,633,126	13,927,480	..	364,560,606	164,871,512	529,432,118
1931–32	377,334,359	7,984,370	..	385,318,729	147,585,037	532,903,766

APPENDIX No. 5—TARIFFS.

METROPOLITAN DISTRICTS SERVED BY STATE ELECTRICITY COMMISSION OF VICTORIA.

District.	Population.	System of Supply.	Number of Consumers.	Domestic Light and Power.		Other Tariffs
				Service Charge per Room per Month.	Unit Charge.	
Brighton	631,690	A.C., 1 ph., 200–400 v. ..	..	*s. d.*		See Standard Metropolitan Tariffs at foot of page
Collingwood		A.C., 3 ph., 230–400 v. ..				
Camberwell		A.C., 1 ph., 200–400 v. ..				
Caulfield		,, ,, ..				
Cheltenham		,, ,, ..				
Essendon		A.C., 3 ph., 230–400 v. ..				
Flemington		,, ,, ..				
Fitzroy		,, ,, ..				
Hawthorn		A.C., 1 ph., 200–400 v. ..				
Kew		,, ,, ..		1 0	1¼d.	
Mentone		,, ,, ..				
Malvern		,, ,, ..				
Mordialloc		,, ,, ..				
Oakleigh		,, ,, ..				
Prahran		,, ,, ..				
Richmond..		A.C., 3 ph., 230–400 v. ..				
St. Kilda		A.C., 1 ph., 200–400 v. ..				
Sandringham		,, ,, ..				
South Melbourne		A.C., 3 ph., 230–400 v. ..				
Sunshine		,, ,, ..				

METROPOLITAN DISTRICTS SERVED BY MUNICIPAL UNDERTAKINGS PURCHASING BULK SUPPLY FROM COMMISSION.

District.	Population.	Supply Authority.	System of Supply.	Number of Consumers.	Tariffs.
City of Melbourne	102,000	Melbourne City Council ..	D.C., 230–460 v. / A.C., 3 ph., 230–400 v.	25,462	The Commission's Standard Metropolitan Tariffs (see statement below) apply in all these centres. The Melbourne City Council has the Standard Two-part Domestic Tariff in operation, but its power tariffs are:—Block Rate: First 500 units in any one month, 1¾d. per unit; next 500 units in any one month, 1d.; all further consumption in any one month, 0·8d. per unit. Restricted Hour Flat Rate: Up to 500 units during any one month, 1¾d. per unit; for next 500 units in any one month, 1d. per unit; for next 9,000 units, 0·8d. per unit; all further consumption, 0·65d. per unit. Maximum Demand Rate: 2d. per unit for the quantity of electricity equivalent to 90 hours' use per month of consumers' maximum demand, and 0·3d. per unit for all units over that quantity.
Box Hill ..	13,400	Box Hill City Council ..	A.C., 3 ph., 230-400 v.	5,500	
Brunswick ..	56,200	Brunswick City Council..	,, ,, ..	13,092	
Coburg ..	40,200	Coburg City Council ..	,, ,, ..	9,279	
Footscray ..	51,800	Footscray City Council ..	,, ,, ..	10,900	
Heidelberg ..	25,500	Heidelberg Shire Council	,, ,, ..	6,044	
Northcote ..	41,500	Northcote City Council ..	,, ,, ..	10,380	
Port Melbourne	13,100	Port Melbourne City Council	,, ,, ..	2,700	
Preston ..	29,200	Preston City Council ..	,, ,, ..	7,500	
Williamstown ..	20,200	Williamstown City Council	,, ,, ..	6,200	

STANDARD METROPOLITAN TARIFFS.

CLASS I.—COMMERCIAL AND INDUSTRIAL SUPPLIES.

Lighting.—

Tariff "A"—Block Rate—

For electricity consumed between two consecutive monthly meter readings—

Up to and including 500 kilowatt hours .. .. 5¾d. per kilowatt-hour

For all further consumption in the same period .. .. 3d. ,, ,,

Meter Rental.—See below.

Pavement Lighting.—

Tariff "B."—Two-part Rate (Service plus Energy Charge)—

Service Charge—

(Payable monthly in advance and whether any or no electricity is consumed during the period in respect of which the charge is made)—

(*a*) For each 100 watts rating or part thereof of lamps connected .. .. 2s. 6d. per month.

This service charge, together with the energy charge given below, is for a metered supply of electricity under time switch control.

(*b*) For each 100 watts rating or part thereof of lamps connected—

1s. 6d. per month in the case of lamps burning until midnight.

2s. 3d. per month in the case of lamps burning after midnight.

This service charge is for renewal of lamps and cleaning of fittings.

Energy Charge—

1¼d. per kilowatt-hour, payable monthly upon rendering of account.

The foregoing tariff is available under contract, which shall be for a period of not less than twelve calendar months, the Consumer to provide and maintain wiring and fittings, and to operate the lamps every night from half an hour after sunset until 11 p.m. or later.

Lamps to be of the general service type of not less than 200 watts rating.

Minimum Installation—1,200 watts.

No meter or time switch rental.

APPENDIX No. 5—*continued.*

Power and Heating—

Tariff "C"—

Option I.—Block Rate—

For electricity consumed between two consecutive monthly meter readings—

Up to and including	500 kilowatt-hours	2d. per kilowatt-hour.
For the next	4,500 ,,	1¼d. ,, ,,
For the next	20,000 ,,	0·9d. ,, ,,
For all further consumption in the same period		0·8d. ,, ,,

Option II.—Two-rate (Prescribed Hours)—

(Available as from 1st September, 1932).

For electricity consumed between the hours of 11 p.m. and 7 a.m. .. .. 0·3d. per kilowatt-hour

For electricity consumed during other portions of the day, Block Rates as set forth under Option I. above will apply.

Any consumer applying to be charged under Option II. shall be deemed to have agreed to his being charged accordingly for a period of not less than twelve consecutive calendar months.

The Commission reserves the right to—

Alter the times between which the rate of 0·3d. per kilowatt-hour applies to any other spread of hours convenient to it for the consumer or locality concerned ;

Require any consumer who takes a large proportion or all of his power or heating consumption under Option II. to enter into a special agreement including conditions deemed appropriate by the Commission to the particular circumstances.

Meter Rental.—See below.

Commercial Cooking—

Tariff "F"—

For electricity consumed in connexion with electric cooking where an electric range, electric oven, or like device of not less than 3-kilowatt capacity is used .. .. 1¼d. per kilowatt-hour.

Meter Rental.—See below.

CLASS II.—DOMESTIC SUPPLY.

Lighting, Power, Heating, and Cooking (Private Houses and Flats)—

Tariff "G"—Two-part Rate (Service plus Energy Charge)—

Service Charge—

Payable on an annual basis, quarterly in advance.

Private Houses and Flats—

1s. per room per month (minimum charge 4s. per month), whether the room is lighted or not, whether the room is erected at the time this application is made or at some time thereafter, and whether any or no electricity is consumed during the period in respect of which the charge is made.

Each room is assessed on the basis that every 350 square feet of floor area or part thereof constitutes one room. Maximum charge in respect of any one room, 3s. per month.

The following are exempt in assessing service charge :—Passages, pantries, cupboards, bathrooms, lavatories, cellars, entrance halls and porches, cloak rooms, sculleries, private workshops and garages, washhouses, vestibules and verandahs unless such vestibules and verandahs are used as living rooms, and outside lights for drives, paths, yards, and the like.

Private Tennis Courts, Bowling Greens, and Croquet Lawns—

5s. per month per court, green or lawn, payable quarterly in advance and whether any or no electricity is consumed during the period for which the charge is made, which shall be for not less than twelve consecutive calendar months.

Energy Charge—

1¼d. per kilowatt-hour, payable quarterly upon rendering of account.

No meter rental.

CLASS III.—COMMERCIAL, INDUSTRIAL, AND DOMESTIC SUPPLIES.

Water Heating—

Tariff "H" (continuously operated)—

For each 100 watts rating or part thereof of Heating Element continuously operated throughout the year :—

A fixed charge, including electricity, of 3s. 9d. per month, payable quarterly in advance.

Any consumer applying to be charged under this Tariff shall be deemed to have agreed to his being charged for the wattage specified in his application for a period of not less than twelve consecutive calendar months.

No meter rental.

Tariff "I" (Night Rate)—

(Available as from 1st September, 1932.)

For electricity consumed through a separate meter by heating elements which are switched on only between 11 p.m. and 7 a.m. (11 a.m. on Sundays) by means of a time switch .. .. .. 0·375d. per kilowatt-hour.

The Commission reserves the right to—

Vary the times between which the restricted hour service is given ;

Require consumers to enter into agreements including conditions deemed appropriate by the Commission in special cases.

No meter or time-switch rental.

Boosting Elements—

Electricity consumed by boosting elements will be charged for according to meter registrations and at the appropriate rate for the class of supply concerned.

Meter Rental—

Tariff "A" (Block Rate); Tariff "C" (Option I. Block Rate); and Tariff "F" :—

For all 200 and 230 volt two-wire meters	6d. per month per meter.
For all 200 and 230 volt three-wire or three-phase meters and all 400-volt meters	1s. ,, ,,

Tariff "C" (Option II.—Two-rate) :—

For all two-rate meters	5s. ,, ,,

APPENDIX No. 5—*continued.*

COUNTRY CENTRES SERVED BY STATE ELECTRICITY COMMISSION OF VICTORIA.

District.	Population.	System of Supply. Single-Ph. 230/460-V. Three-Ph. 230/400-V.	No. of Consumers.	Domestic Light and Power.		Commercial Light and Power. (*c*)		(*a*) Industrial Power and Heating Two-part Tariff.			(*b*) Industrial Power and Heating Two-part Two-rate Tariff. Service Charge per H.P. per Month as under (*a*).	(*d*) Commercial and Industrial Lighting	(*e*) Intermittent Power.	(*f*) Water Heating.	
				Service Charge per Room per Month.	Charge per Unit.	Service Charge per Room per Month.	Charge per Unit.	Service Charge per H.P. per Month. H.P., 1–50.		Charge per Unit.	Charge per Unit.	Charge per Unit.	Charge per Unit.	Continuous Rate per 100 watts per Month,	Night Rate. Charge per Unit.
				s. d.	*d.*	*s. d.*	*d.*	*s. d.*		*d.*	*d.*	*s. d.*	*d.*	*s. d.*	*d.*
Alexandra ..	850	A.C., 3 ph.	211	1 6	1¾	2 0	1¾	6 0		1	0·35	1 0	6	5 6	0·5
Allansford ..	296	A.C., 1 ph.	38	1 6	1¾	2 0	1¾	7 0		1¼	0·70	1 0	6	7 0	0·75
Altona ..	1,500	,,	249	1 4	1½	1 10	1½	5 6		1	0·35	1 0	4½	7 0	0·5
Alvie	150	,,	70	1 6	1¾	2 0	1¾	7 0		1¼	0·70	1 0	6	7 0	0·75
Ardmona ..	..	A.C., 3 ph.	..	1 6	1¾	2 0	1¾	6 0		1	0·35	1 0	6	5 6	0·5
Bairnsdale ..	4,000	,,	807	1 3	1½	1 9	1½	5 0		1	0·35	0 9	4	5 6	0·5
Bayswater ..	450	A.C., 1 ph.	82	1 6	1½	2 0	1½	6 0		1	0·35	0 10	5	5 6	0·5
Barnawartha ..	240	,,	19	1 6	1¾	2 0	1¾	6 0		1	0·35	1 0	6	5 6	0·5
Barwon Heads ..	600	,,	153	1 6	1½	2 0	1½	6 6		1¼	0·70	1 0	5½	6 6	0·75
Beaconsfield ..	150	,,	11	1 6	1½	2 0	1½	6 0		1	0·35	0 10	5	5 6	0·5
Beeac	300	,,	103	1 6	1¾	2 0	1¾	7 0		1¼	0·70	1 0	6	7 0	0·75
Belgrave ..	800	A.C., 3 ph.	482	1 6	1½	2 0	1½	6 0		1	0·35	0 10	5	5 6	0·5
Bena	800	,,	35	1 6	1½	2 0	1½	6 0		1	0·35	1 0	5	5 6	0·5
Benalla ..	4,000	,,	682	1 3	1¾	1 9	1¾	5 0		1	0·35	0 9	5	5 6	0·5
Berwick ..	650	A.C., 1 ph.	283	1 6	1½	2 0	1½	6 0		1	0·35	0 10	5	5 6	0·5
Birregurra ..	400	,,	82	1 6	1¾	2 0	1¾	7 0		1¼	0·70	1 0	6	7 0	0·75
Boolarra ..	685	A.C., 3 ph.	51	1 6	1½	2 0	1½	6 0		1	0·35	1 0	5	5 6	0·5
Bostock Creek ..	50	A.C., 1 ph.	24	1 6	1¾	2 0	1¾	7 0		1¼	0·70	1 0	6	7 0	0·75
Boronia ..	700	,,	48	1 6	1½	2 0	1½	6 0		1	0·35	0 10	5	5 6	0·5
Briar Hill ..	200	,,	44	1 6	1½	2 0	1½	6 0		1	0·35	0 10	5	5 6	0·5
Bruthen ..	580	,,	87	1 6	1½	2 0	1½	6 0		1	0·35	1 0	5	5 6	0·5
Bunyip ..	600	,,	56	1 6	1½	2 0	1½	6 0		1	0·35	1 0	5	5 6	0·5
Camperdown ..	3,500	A.C., 3 ph.	621	1 3	1¾	1 9	1¾	6 0		1¼	0·70	1 0	5	7 0	0·75
Castlemaine ..	5,650	,,	725	1 3	1¾	1 9	1¾	5 0		1	0·35	1 0	5	5 6	0·5
Chiltern ..	1,500	,,	110	1 6	1¾	2 0	1¾	6 0		1	0·35	1 0	6	5 6	0·5
Clayton ..	250	A.C., 1 ph.	78	1 6	1½	2 0	1½	6 0		1	0·35	0 10	5	5 6	0·5
Cobden ..	650	A.C., 3 ph.	140	1 6	1¾	2 0	1¾	7 0		1¼	0·70	1 0	6	7 0	0·75
Cobram ..	850	D.C. ..	147	1 6	1¾	2 0	1¾	7 6		1¾	..	1 6	6	..	..
Colac	4,950	A.C., 3 ph.	1,170	1 3	1¾	1 9	1¾	6 0		1¼	0·70	0 8	5	7 0	0·75
Cororooke ..	150	,,	87	1 6	1¾	2 0	1¾	7 0		1¼	0·70	1 0	6	7 0	0·75
Cowwarr ..	200	,,	68	1 6	1½	2 0	1½	6 0		1	0·35	1 0	5	5 6	0·5
Cranbourne ..	300	A.C., 1 ph.	80	1 6	1½	2 0	1½	6 0		1	0·35	0 10	5	5 6	0·5
Crib Point ..	150	,,	62	1 6	1¾	2 0	1¾	6 0		1	0·35	1 0	6	7 0	0·5
Croydon ..	1,800	A.C., 3 ph, and 1 ph.	476	1 0	1¼	1 6	1¼	5 0		1	0·35	0 7	3	5 6	0·5
Dandenong ..	5,700	,,	1,189	1 2	1¼	1 9	1½	5 0		1	0·35	0 9	4	5 6	0·5
Darnum ..	100	A.C., 3 ph.	50	1 6	1½	2 0	1½	6 0		1	0·35	1 0	5	5 6	0·5
Deer Park ..	100	,,	13	1 4	1¾	1 10	1¾	6 6		1¼	0·35	1 0	5½	7 0	0·5
Dennington ..	310	A.C., 1 ph.	..	1 6	1¾	2 0	1¾	7 0		1¼	0·70	1 0	6	7 0	0·75
Diamond Creek ..	100	,,	66	1 6	1½	2 0	1½	6 0		1	0·35	0 10	5	5 6	0·5
Diggers Rest ..	50	,,	19	1 6	1¾	2 0	1¾	6 0		1	0·35	1 0	6	5 6	0·5
Dingley ..	100	,,	29	1 6	1½	2 0	1½	6 0		1	0·35	0 10	5	5 6	0·5
Dromana ..	350	A.C., 3 ph.	75	1 6	1¾	2 0	1¾	6 0		1	0·35	1 0	6	7 0	0·5
Drouin ..	850	,,	171	1 6	1½	2 0	1½	6 0		1	0·35	0 9	5	5 6	0·5
Drysdale ..	800	A.C., 1 ph.	70	1 6	1½	2 0	1½	6 6		1¼	0·70	1 0	5½	7 0	0·75
Echuca ..	4,032	A.C., 3 ph.	730	1 3	1¾	1 9	1¾	5 0		1	0·35	1 0	5	5 6	0·5
Eltham ..	700	A.C., 1 ph.	106	1 6	1½	2 0	1½	6 0		1	0·35	0 10	5	5 6	0·5
Evelyn (see Silvan)															
Euroa	2,300	D.C., 230 v	403	1 4	1¾	1 10	1¾	7 6		1¾	..	0 9	5	..	..
Ferntree Gully ..	1,200	A.C., 3 p.h and 1 ph.	168	1 6	1½	2 0	1½	6 0		1	0·35	0 10	5	5 6	0·5
Ferny Creek ..	50	A.C., 1 ph.	16	1 6	1½	2 0	1½	6 0		1	0·35	1 0	5	5 6	0·5
Frankston ..	3,000	A.C., 3 ph.	1,184	1 2	1¼	1 9	1½	5 0		1	0·35	0 9	4	5 6	0·5
Garfield ..	200	A.C., 1 ph.	54	1 6	1½	2 0	1½	6 0		1	0·35	1 0	5	5 6	0·5
Geelong ..	29,700	A.C., 3 ph. D.C. 3 wire	9,624	(See Schedule at foot hereof)											
Gisborne ..	770	A.C., 3 ph.	106	1 6	1¾	2 0	1¾	6 0		1	0·35	1 0	6	5 6	0·5
Glengarry ..	120	,,	19	1 6	1½	2 0	1½	6 0		1	0·35	1 0	5	5 6	0·5
Glen Waverley ..	350	A.C., 3 ph. and 1 ph.	..	1 6	1½	2 0	1½	6 0		1	0·35	0 10	5	5 6	0·5
Greensborough ..	930	A.C., 3 ph.	473	1 6	1½	2 0	1½	6 0		1	0·35	0 10	5	5 6	0·5
Hastings ..	488	A.C., 1 ph.	192	1 6	1¾	2 0	1¾	6 0		1	0·35	1 0	6	7 0	0·5
Heyfield ..	700	A.C., 3 ph.	133	1 6	1½	2 0	1½	6 0		1	0·35	1 0	5	5 6	0·5
Jumbunna ..	400	,,	35	1 6	1½	2 0	1½	6 0		1	0·35	1 0	5	5 6	0·5
Kallista ..	150	A.C., 1 ph.	29	1 6	1½	2 0	1½	6 0		1	0·35	1 0	5	5 6	0·5
Kangaroo Flat ..	835	A.C., 3 ph.	60	(Lighting 1s. per unit. Power 6d. per unit)											
Kilsyth ..	150	A.C., 1 ph.	32	1 0	1¼	1 6	1¼	5 0		1	0·35	0 7	3	5 6	0·5
Kolora and supply *en route*	..	,,	92	1 6	1¾	2 0	1¾	7 0		1¼	0·70	1 0	6	7 0	0·75
Kongwak ..	..	..	19	1 6	1½	2 0	1½	6 0		1	0·35	1 0	5	5 6	0·5
Koroit ..	2,000	A.C., 3 ph.	239	1 4	1¾	1 10	1¾	6 6		1¼	0·70	1 0	5½	7 0	0·75
Korumburra ..	3,000	,,	555	1 4	1½	1 10	1½	5 6		1	0·35	0 10	4½	5 6	0·5
Kyabram ..	1,700	,,	389	1 4	1¾	1 10	1¾	5 6		1	0·35	1 0	5½	5 6	0·5
Kyneton ..	3,195	,,	640	1 3	1¾	1 9	1¾	5 0		1	0·35	0 9	5	5 6	0·5
Lakes Entrance ..	900	A.C., 1 ph.	146	1 6	1½	2 0	1½	6 0		1	0·35	1 0	5	5 6	0·5
Lancefield ..	600	A.C., 3 ph.	251	1 6	1¾	2 0	1¾	6 0		1	0·35	1 0	6	5 6	0·5
Leongatha ..	1,700	,,	435	1 4	1½	1 10	1½	5 6		1	0·35	0 10	4½	5 6	0·5
Lilydale ..	1,800	,,	264	1 4	1½	1 10	1½	5 6		1	0·35	0 10	4	5 6	0·5
Loch	130	A.C., 1 ph.	70	1 6	1½	2 0	1½	6 0		1	0·35	1 0	5	5 6	0·5
Longwarry ..	300	A.C., 3 ph.	43	1 6	1½	2 0	1½	6 0		1	0·35	1 0	5	5 6	0·5
Lower Plenty ..	50	A.C., 1 ph.	27	1 6	1½	2 0	1½	6 0		1	0·35	0 10	5	5 6	0·5
Macedon ..	250	A.C., 3 ph.	189	1 6	1¾	2 0	1¾	6 0		1	0·35	1 0	6	5 6	0·5

APPENDIX 5—*continued.*

COUNTRY CENTRES SERVED BY STATE ELECTRICITY COMMISSION OF VICTORIA—*continued.*

District.	Population.	System of Supply. Single-Ph. 230/460-V. Three-Ph. 230/400-V.	No. of Consumers.	Domestic Light and Power.		Commercial Light and Power. (*c*)		(*a*) Industrial Power and Heating Two-part Tariff.		(*b*) Industrial Power and Heating Two-part Two rate Tariff.	(*d*) Commercial and Industrial Lighting.	(*e*) Intermittent power.	(*f*) Water Heating.	
				Service Charge per Room per Month.	Charge per Unit.	Service Charge per Room per Month.	Charge per Unit.	Service Charge per H.P. per Month. H.P., 1–50.	Charge per Unit.	—Service Charge per H.P. per Month as under (*a*). Charge per Unit.	Charge per Unit.	Charge per Unit.	Continuous Rate per 100 watts per Month.	Night Rate. Charge per Unit.
				s. d.	*d.*	*s. d.*	*d.*	*s. d.*	*d.*	*d.*	*s. d.*	*d.*	*s. d.*	*d.*
Maffra.. ..	2,000	A.C., 3 ph.	474	1 4	1½	1 10	1½	5 6	1	0·35	0 10	4½	5 6	0·5
Mansfield ..	650	A.C., 1 ph.	182	1 6	1¾	2 0	1¾	6 0	1	0·35	1 0	6	5 6	0·5
Merrigum ..	200	A.C., 3 ph.	50	1 6	1¾	2 0	1¾	6 0	1	0·35	1 0	6	5 6	0·5
Mirboo North ..	600	,,	128	1 6	1½	2 0	1½	6 0	1	0·35	1 0	5	5 6	0·5
Moe	400	,,	152	1 6	1½	2 0	1½	6 0	1	0·35	1 0	5	5 6	0·5
Monegeetta ..	50	A.C., 1 ph.	13	1 6	1¾	2 0	1¾	6 0	1	0·35	1 0	6	5 6	0·5
Montrose ..	100	,,	98	1 0	1¼	1 6	1¼	5 0	1	0·35	0 7	3	5 6	0·5
Mooroopna ..	1,500	A.C., 3 ph.	207	1 4	1¾	1 10	1¾	5 6	1	0·35	0 11	5½	5 6	0·5
Montmorency ..	400	A.C., 1 ph.	41	1 6	1½	2 0	1½	6 0	1	0·35	0 10	5	5 6	0·5
Mornington ..	3,250	A.C., 3 ph.	594	1 4	1½	1 10	1½	5 6	1	0·35	0 10	4	5 6	0·5
Mortlake ..	1,000	,,	233	1 6	1¾	2 0	1¾	7 0	1¼	0·7	1 0	6	7 0	0·75
Morwell ..	1,365	,,	280	1 4	1½	1 10	1½	5 6	1	0·35	0 9	4½	5 6	0·5
Mulgrave ..	350	,,	164	1 6	1½	2 0	1½	6 0	1	0·35	0 10	5	5 6	0·5
Nalangil ..	..	A.C., 1 ph.	61	1 6	1¾	2 0	1¾	7 0	1¼	0·7	1 0	6	7 0	0·75
Narre Warren ..	100	A.C., 3 ph.	..	1 6	1½	2 0	1½	6 0	1	0·35	0 10	5	5 6	0·5
Nathalia ..	860	D.C. 230–460 v.	200	1 6	1¾	2 0	1¾	7 6	1¾	..	1 0	6	..	..
Newry ..	300	A.C., 1 ph.	30	1 6	1½	2 0	1½	6 0	1	0·35	1 0	5	5 6	0·5
Nilma	100	A.C., 1 ph.	22	1 6	1½	2 0	1½	6 0	1	0·35	1 0	5	5 6	0·5
Noble Park ..	500	,,	123	1 6	1½	2 0	1½	6 0	1	0·35	0 10	5	5 6	0·5
Noorat ..	120	A.C., 3 ph.	62	1 6	1¾	2 0	1¾	7 0	1¼	0·7	1 0	6	7 0	0·75
Numurkah ..	1,350	D.C., 230 v.	300	1 4	1¾	1 10	1¾	7 6	1¾	..	0 9	5	..	..
Ocean Grove ..	50	A.C., 1 ph.	38	1 6	1½	2 0	1½	6 6	1¼	0·7	1 0	5½	6 6	0·75
Officer	50	,,	2	1 6	1½	2 0	1½	6 0	1	0·35	1 0	5	5 6	0·5
Olinda ..	250	,,	48	1 6	1½	2 0	1½	6 0	1	0·35	1 0	5	5 6	0·5
Pakenham ..	400	,,	39	1 6	1½	2 0	1½	6 0	1	0·35	0 10	5	5 6	0·5
Pomborneit ..	50	,,	25	1 6	1¾	2 0	1¾	7 0	1¼	0·7	1 0	6	7 0	0·75
Poowong ..	..	,,	42	1 6	1½	2 0	1½	6 0	1	0·35	1 0	5	5 6	0·5
Portarlington ..	600	,,	118	1 6	1½	2 0	1½	6 6	1¼	0·7	1 0	5½	6 6	0·75
Port Fairy ..	2,000	A.C., 3 ph.	256	1 4	1¾	1 10	1¾	6 6	1¼	0·7	1 0	5½	7 0	0·75
Portsea ..	150	,,	98	1 6	1¾	2 0	1¾	6 0	1	0·35	1 0	6	7 0	0·5
Point Lonsdale ..	700	A.C., 1 ph.	118	1 6	1½	2 0	1½	6 6	1¼	0·7	0 10	5½	6 6	0·75
Queenscliff ..	1,900	A.C., 3 ph.	409	1 4	1½	1 10	1½	6 0	1¼	0·7	0 10	5	6 6	0·75
Riddell ..	350	A.C., 1 ph.	17	1 6	1¾	2 0	1¾	6 0	1	0·35	1 0	6	5 6	0·5
Ringwood ..	3,000	A.C., 3 ph.	607	1 0	1¼	1 6	1¼	5 0	1	0·35	0 7	3	5 6	0·5
Romsey ..	600	,,	86	1 6	1¾	2 0	1¾	6 0	1	0·35	1 0	6	5 6	0·5
Rosebud ..	200	,,	79	1 6	1¾	2 0	1¾	6 0	1	0·35	1 0	6	7 0	0·5
Rosedale ..	520	A.C., 1 ph.	71	1 6	1½	2 0	1½	6 0	1	0·35	1 0	5	5 6	0·5
Ruby	50	,,	9	1 6	1½	2 0	1½	6 0	1	0·35	1 0	5	5 6	0·5
Rutherglen ..	1,160	A.C., 3 ph.	258	1 4	1¾	1 10	1¾	5 6	1	0·35	0 11	5½	5 6	0·5
Rye	50	,,	11	1 6	1¾	2 0	1¾	6 0	1	0·35	1 0	6	7 0	0·5
Sale	3,971	,,	814	1 3	1½	1 9	1½	5 0	1	0·35	0 9	4	5 6	0·5
Sassafras Area ..	500	A.C., 3 ph. and 1 ph.	269	1 6	1½	2 0	1½	6 0	1	0·35	1 0	5	5 6	0·5
Shepparton ..	6,000	A.C., 3 ph.	1,110	1 3	1¾	1 9	1¾	5 0	1	0·35	0 10	5	5 6	0·5
Sherbrooke ..	..	A.C., 1 ph.	..	1 6	1½	2 0	1½	6 0	1	0·35	1 0	5	5 6	0·5
Silvan Line and Evelyn	650	A.C., 3 ph. and 1 ph.	55	1 6	1½	2 0	1½	6 0	1	0·35	0 10	5	5 6	0·5
Springhurst ..	100	A.C., 3 ph.	17	1 6	1¾	2 0	1¾	6 0	1	0·35	1 0	6	5 6	0·5
Springvale ..	1,250	,,	259	1 6	1½	2 0	1½	6 0	1	0·35	0 10	5	5 6	0·5
Somerville ..	200	,,	62	1 6	1¾	2 0	1¾	6 0	1	0·35	1 0	6	7 0	0·5
Sorrento ..	500	,,	702	1 6	1¾	2 0	1¾	6 0	1	0·35	1 0	6	7 0	0·5
Stratford ..	800	,,	101	1 6	1½	2 0	1½	6 0	1	0·35	1 0	5	5 6	0·5
Sunbury ..	1,100	,,	190	1 4	1¾	1 10	1¾	5 6	1	0·35	1 0	5½	5 6	0·5
St. Albans ..	600	A.C., 2 ph. of 3-ph. system	59	1 4	1¾	1 10	1¾	5 6	1	0·35	1 0	5½	5 6	0·5
Swan Reach ..	..	.. ..	..	1 6	1½	2 0	1½	6 0	1	0·35	1 0	5	5 6	0·5
Tally Ho ..	110	.. ..	..	1 6	1½	2 0	1½	6 0	1	0·35	0 10	5	5 6	0·5
Tatura ..	1,300	A.C., 3 ph.	252	1 4	1¾	1 10	1¾	5 6	1	0·35	0 11	5½	5 6	0·5
Terang ..	2,255	,,	462	1 4	1¾	1 10	1¾	6 6	1¼	0·7	1 0	5½	7 0	0·75
Thornton ..	150	A.C., 1 ph.	37	1 6	1¾	2 0	1¾	6 0	1	0·35	1 0	6	5 6	0·5
Tinamba ..	50	,,	26	1 6	1½	2 0	1½	6 0	1	0·35	1 0	5	5 6	0·5
Tongala ..	250	A.C., 3 ph.	88	1 6	1¾	2 0	1¾	6 0	1	0·35	1 0	6	5 6	0·5
Toongabbie ..	150	A.C., 1 ph.	15	1 6	1½	2 0	1½	6 0	1	0·35	1 0	5	5 6	0·5
Torquay ..	..	A.C., 3 ph. and 1 ph.	..	1 6	1¾	2 0	1¾	7 0	1¼	0·7	1 0	6	7 0	0·75
Traralgon ..	2,300	A.C., 3 ph.	518	1 4	1½	1 10	1½	5 6	1	0·35	0 8	4½	5 6	0·5
Trafalgar ..	700	,,	220	1 6	1½	2 0	1½	6 0	1	0·35	1 0	5	5 6	0·5
Tremont ..	200	A.C., 1 ph.	41	1 6	1½	2 0	1½	6 0	1	0·35	1 0	5	5 6	0·5
Tyabb.. ..	..	A.C., 1 ph.	..	1 6	1½	2 0	1½	6 0	1	0·35	1 0	6	7 0	0·5
Tyers	250	,,	49	1 9	1½	2 3	1½	6 0	1	0·35	1 0	6	5 6	0·5
Tynong ..	50	,,	19	1 6	1½	2 0	1½	6 0	1	0·35	1 0	5	5 6	0·5
Upwey ..	200	A.C., 3 ph.	136	1 6	1½	2 0	1½	6 0	1	0·35	0 10	5	5 6	0·5
Wahgunyah ..	500	,,	68	1 6	1¾	2 0	1¾	6 0	1	0·35	0 9	6	5 6	0·5
Wangaratta ..	4,300	,,	839	1 3	1¾	1 9	1¾	5 0	1	0·35	0 9	5	5 6	0·5
Warrion ..	..	A.C., 1 ph.	..	1 6	1¾	2 0	1¾	7 0	1¼	0·7	1 0	6	7 0	0·75
Warrnambool ..	8,000	A.C., 3 ph.	1,350	1 3	1¾	1 9	1¾	6 0	1¼	0·7	0 9	5	7 0	0·75
Warragul ..	4,700	,,	503	1 4	1½	1 10	1½	5 6	1	0·35	0 9	4	5 6	0·5
Werribee ..	1,700	,,	446	1 4	1½	1 10	1½	5 6	1	0·35	1 0	4½	5 6	0·5
Winchelsea ..	705	A.C.,1 ph.	103	1 6	1¾	2 0	1¾	7 0	1¼	0·7	1 0	6	7 0	0·75
Woodend ..	1,000	A.C., 3 ph.	214	1 6	1¾	2 0	1¾	6 0	1	0·35	1 0	6	5 6	0·5
Yarragon ..	400	,,	80	1 6	1½	2 0	1½	6 0	1	0·35	1 0	5	5 6	0·5
Yarrawonga ..	1,650	D.C., 230 v	338	1 4	1¾	1 10	1¾	7 6	1¾	..	1 0	6	10 0	..
Yinnar ..	50	A.C., 1 ph.	33	1 6	1½	2 0	1½	6 0	1	0·35	1 0	5	5 6	0·5

APPENDIX No. 5—*continued.*

NOTES.

(*a*) Service charge subject to discount of 5 per cent. if three motors, 10 per cent. if four motors, 15 per cent. if five motors, and 20 per cent. if six or more motors are installed.
Energy charge subject to discount of 5 per cent. if more than 5,000 units, 10 per cent. if more than 25,000 units, and 11 per cent. if more than 50,000 units be consumed per month.

(*b*) Supply between the hours of 10 p.m. and 6 a.m. or 11 p.m. and 7 a.m.
Service charge subject to the same discounts as for Commercial Power Two-part Tariff.

(*c*) Applicable to licensed hotels and boarding-houses.

(*d*) Unit charge subject to the following consumption discounts:—Up to 300 units per month, no discount; over 300 units per month, 10 per cent. on all units supplied; over 500 units per month, 20 per cent. on all units supplied; over 1,000 units per month, 40 per cent. on all units supplied.

(*e*) Applicable to the supply of small quantities of electricity for intermittent power, cooking or heating in shops, offices, or to motive power users with an installed capacity of not less than five horse-power.
Subject to following consumption discounts:—Up to 250 units per month, no discount; over 250 units per month, 10 per cent. on all units supplied; over 400 units per month, 20 per cent. on all units supplied; over 600 units per month, 30 per cent. on all units supplied; over 800 units per month, 40 per cent. on all units supplied.

(*f*) If the total horse-power installed is between 51–100 the S/C per H.P. per month is 6d. less; if between 101–200, 1s. less; if between 201–500, 1s. 6d. less; and if over 500, 2s. less.

(*g*) Industrial Power and Heating, Two-part Two-rate Tariff, and Water Heating Night Rate Tariff available after September 1st, 1932.

GEELONG ELECTRICITY SUPPLY TARIFFS.

CLASS I.—COMMERCIAL AND INDUSTRIAL SUPPLIES.

Lighting—
Tariff "A"—Block Rate—
For electricity consumed between two consecutive monthly meter readings—
Up to and including 500 kilowatt-hours .. .. 6½d. per kilowatt-hour.
For all further consumption in same period .. .. 4d. ,, ,,
Meter Rental.—See below.

Power and Heating—
Tariff "C"—Block and Max. Demand Rates—
For electricity consumed between two consecutive monthly meter readings—
Up to and including 500 kilowatt-hours .. .. 2½d. per kilowatt-hour.
For the next 1,000 kilowatt-hours .. .. 1¾d. ,, ,,
For all further consumption in the same period the consumer shall have the option of being charged according to one of the following alternatives:—
1. At the rate of 1¾d. per kilowatt-hour.
2. At the rate of 8s. 4d. per kilowatt of maximum demand and 0.6d. per kilowatt-hour consumed.
Provided that for each 1s. increase above or decrease below the standard cost of 30s. per ton, for 29 million B.T.U.'s in the fuel delivered into the bunkers at the Commission's Power Station, the sum of 0.01d. shall be respectively added to or subtracted from the above sum of 0.6d.
Any consumer electing to be charged under Option II. above shall be deemed to have agreed to his being charged accordingly for a period of not less than twelve consecutive calendar months.

Commercial Cooking—
Tariff "F"—
For electricity consumed in connexion with electric cooking where an electric range, electric oven, or like device of not less than 3 kilowatt capacity is used .. .. 1½d. per kilowatt-hour.
Meter Rental.—See below.
Minimum Charge under any of the above tariffs, 4s. per month.

CLASS II.—DOMESTIC SUPPLY.

Lighting, Power, Heating and Cooking (Private Houses and Flats)—
Tariff "G"—Two-part Rate (Service plus Energy Charge)—
Service Charge—
(Payable on an annual basis, quarterly in advance).
Private Houses and Flats—
1s. 3d. per room per month (minimum charge 5s. per month), whether the room is lighted or not, whether the room is erected at the time this application is made or at some time thereafter, and whether any or no electricity is consumed during the period in respect of which the charge is made.
Each room is assessed on the basis that every 350 square feet of floor area or part thereof constitutes one room. Maximum charge in respect of any one room, 3s. 9d. per month.
The following are exempt in assessing service charge—
Passages, pantries, cupboards, bathrooms, lavatories, cellars, entrance halls and porches, cloak rooms, sculleries, private worksheps and garages, washhouses, vestibules and verandahs unless such vestibules and verandahs are used as living rooms and outside lights for drives, paths, yards and the like.
Private Tennis Courts, Bowling Greens and Croquet Lawns—
6s. per month per court, green or lawn, payable quarterly in advance and whether any or no electricity is consumed during the period for which the charge is made, which shall be for not less than twelve consecutive calendar months.
Energy Charge—
1½d. per kilowatt-hour, payable quarterly upon rendering of account.
No Meter Rental.

CLASS III.—COMMERCIAL, INDUSTRIAL AND DOMESTIC SUPPLIES.

Water Heating—
Tariff "H" (continuously operated)—
For each 100 watts rating or part thereof of Heating Element continuously operated throughout the year—
A fixed charge, including electricity, of 4s. 6d. per month, payable quarterly in advance.
Any consumer applying to be charged under this Tariff shall be deemed to have agreed to his being charged for the wattage specified in his application, for a period of not less than twelve consecutive calendar months.
No Meter Rental.
Tariff "I"—(Night Rate)—
For electricity consumed through a separate meter by heating elements which are switched on only between 11 p.m. and 7 a.m. (11 a.m. on Sundays) by means of a time switch .. .. .. 0.6d. per kilowatt-hour.
The Commission reserves the right to—
Vary the times between which the restricted hour service is given.
Require consumers to enter into agreements including conditions deemed appropriate by the Commission in special cases.
No Meter or Time Switch Rental.

Boosting Elements—
Electricity consumed by boosting elements will be charged for according to meter registrations and at the appropriate rate for the class of supply concerned.

Meter Rental—
Tariff "A" (Block Rate).
Tariff "C" (Option I.—Block Rate) and
Tariff "F"—
For all 220 and 230 volt two-wire meters .. .. 6d. per month per meter.
For all 220 and 230 volt three-wire or three-phase meters and all 400 volt meters .. .. .. 1s. per month per meter.
Tariff "C" (Option II.—Max. Demand)—
For all Max. Demand meters .. .. 5s. per month per meter.

Appendix No. 5—*continued.*

COUNTRY ELECTRIC SUPPLY UNDERTAKINGS OPERATED BY MUNICIPAL AND PRIVATE UNDERTAKERS.

Locality.	Population.	Supply Authority.	System of Supply.	No. of Consumers.		Price per Unit.	
				Light.	Power.	Lighting.	Power.
Ararat ..	5,200	Ararat Borough Council	A.C., 230–400 v. ..	750	(total)	9d.	3½d.
*Aspendale, Chelsea, and Carrum	7,000	Carrum E.S. Co.	,, ..	1,600	..	8d.	4d.
Avoca ..	800	Avoca E.S. Co.	D.C., 230 v. ..	130	40	1s. 3d. to 1s. ..	6d. to 3d.
Bacchus Marsh	1,450	Bacchus Marsh Shire Council ..	A.C., 230–400 v. ..	343	(total)	9d.	6d.
Ballarat ..	40,000	Electric Supply Co. of Victoria Ltd.	,, ..	4,500	(total)	9d., and 9d. to 5d.	3½d. to 1½d., with fuel clause
			D.C., 220–440 v. ..				
Ballan ..	450	Ballan E.S. Co. Ltd.	A.C., 230–400 v. ..	109	..	1s. 3d. ..	6d.
Beaufort ..	1,400	Ripon Shire Council	,, ..	200	..	1s.	6d.
Beechworth ..	2,600	Beechworth Shire Council ..	,, ..	300	..	1s.	6d. (maximum)
Bendigo ..	35,000	Electric Supply Co. of Victoria Ltd.	,, ..	5,253	(total)	9d., and 9d. to 5d.	4d. and 1½d., with fuel clause
			D.C., 220–440 v. ..				
Beulah ..	550	Karkarooc Shire Council	D.C., 230–460 v. ..	129	25	1s. 3d. ..	9d. to 4d.
Birchip ..	1,031	Birchip E.S. Co. Ltd.	D.C., 230 v. ..	220	..	1s. ..	6d.
Boort ..	750	Boort Co-op. Butter and Ice Co. ..	,, ..	175	56	1s. 3d. to 9d. ..	6d. to 4½d.
Broadford ..	1,000	Broadford Shire Council	,, ..	200	..	9d.	9d.
Casterton ..	1,900	Casterton E.S. Co.	,, ..	250	15	1s.	7½d. to 4d.
Charlton ..	1,215	Charlton E.L. Co.	,, ..	350	(total)	1s. to 9d. ..	4½d.
Cohuna ..	..	Federal Milk Pty. Ltd.	,, ..	210	(total)	1s.	9d.
Coleraine .	900	Coleraine and W.D.B.F. Co. Ltd. ..	,, ..	161	13	1s. 2d.	10d. to 3d.
Daylesford ..	3,200	India Rubber G.P. and T.W. Co. ..	D.C., 230–460 v. ..	495	..	10d. ..	5d.
Dimboola ..	1,500	Dimboola Shire Council	,, ..	400	94	1s. 1d. ..	7d.
Donald ..	1,800	Donald Shire Council	D.C., 230 v. ..	400	..	1s.	6d.
†Doncaster ..	3,200	Doncaster Shire Council	A.C. 1 ph., 200–400 v.	350	..	8d. Doncr., 9d. T'stowe	4d.
Dunolly ..	580	Bet Bet Shire Council	A.C., 230–400 v. ..	105	..	1s. to 10d. ..	8d.
Eaglehawk ..	4,719	Eaglehawk Borough Council ..	D.C., 230–460 v. ..	630	..	9d.	5½d., and 4½d. to 1½d.
Elmore ..	700	Elmore Elec. Supply Co. ..	D.C., 230 v. ..	162	..	1s.	7d. to 4½d.
Foster ..	650	Toora Foster Elec. Co. Ltd. ..	A.C., 230–400 v. ..	See Toora		1s. ..	4d. to 1d.
Goroke ..	200	W. A. Bland	D.C., 230 v. ..	..	..	1s. 6d. ..	6d.
Hamilton ..	5,098	Hamilton E.S. Co.	D.C., 230 v. ..	1,008	(total)	10d. to 8d. ..	6d. to 1½d.
Healesville ..	2,400	Healesville Shire Council ..	A.C., 230–400 v. ..	363	127	10d. to 6d. ..	4d. to 3d.
Heathcote ..	1,200	McIvor Shire Council	D.C., 230 v. ..	235	..	1s. 1d. ..	6d.
Hepburn ..	200	Hepburn Springs E.S. Co. ..	A.C., 230–400 v. ..	132	..	1s.	6d.
Hopetoun ..	800	Karkarooc Shire Council ..	D.C., 230 v. ..	94	41	1s. 3d. ..	9d. to 4d.
Horsham ..	5,129	Horsham Borough Council ..	D.C. 230–460 v. ..	905	124	10d. ..	5d.
Inglewood ..	1,100	Inglewood Borough Council ..	D.C., 230 v. ..	180	..	1s.	6d. to 5d.
Inverloch ..	120	C.W. Wyeth	D.C. 110 v. ..	12	..	1s. 6d. ..	1s.
Jeparit ..	800	H. J. W. Block	D.C., 230 v. ..	225	(total)	1s.	6d.
Kaniva ..	550	Lawloit Shire Council	A.C., 230–400 v. ..	130	6	1s. 3d. ..	6d.
Kerang ..	2,750	Kerang Shire Council	D.C., 230 v. ..	550	(total)	10d. ..	5d. to 4d.
Kilmore ..	900	Kilmore Shire Council	,, ..	180	(total)	10d.	4d.
Koondrook ..	400	Kerang Shire Council	A.C., 230–400 v. ..	60	..	1s. 3d. ..	9d.
Koo-wee-rup ..	500	Koo-wee-rup E. L. Co.	A.C. 1 ph., 230 v. ..	70	..	Domestic light, 2s. per room per month, and 2d. per unit	
Korong Vale ..	500	Korong Shire Council	A.C., 230–400 v. ..	182	4	1s.	6d.
Lake Boga ..	300	,, ,, ,, ..	,, ..	..	..	1s. 3d. ..	6d.
Lorne ..	250	Winchelsea Shire Council ..	D.C., 230 v. ..	120	..	1s. 6d. to 1s.	
Maryborough ..	5,175	Maryborough Borough Council ..	A.C., 230–400 v. ..	1,130	(total)	1s.	5d. to 2d.
Mildura ..	6,000	Mildura Town Council	D.C., 230–460 v. ..	1,200	(total)	11d. ..	2½d., and 6d. to 1.49d.
			A.C., 230–400 v. ..				
Minyip ..	700	Dunmunkle Shire Council ..	D.C., 230 v. ..	165	(total)	1s. 2d. ..	8d. to 4d.
Murrayville ..	400	Walpeup Shire Council	A.C., 230–400 v. ..	80	..	1s. 3d. ..	8d. to 6d.
Murchison ..	600	Waranga Shire Council	A.C., 230–400 v. ..	100	..	1s. 3d. ..	6d.
Murtoa ..	1,140	Dunmunkle Shire Council ..	D.C., 230 v. ..	296	..	1s.	5d. to 4d.
Nagambie ..	750	Goulburn Shire Council	D.C., 230 v. ..	150	..	10d. ..	6d. to 5d.
Natimuk ..	559	H. C. Woolmer	A.C., 230–400 v. ..	105	..	1s. 3d. ..	9d.
Neerim ..	300	Neerim & Riv. Latrobe Hydro E. Co.	,, ..	..	..	9d.	4d.
Nhill	1,700	Lowan Shire Council	D.C., 230–460 v. ..	400	..	1s. 2d. ..	7d. to 3d.
Nyah ..	600	Swan Hill Shire Council	A.C., 230–400 v. ..	40	..	1s. 3d. ..	6d.
Omeo	..	Omeo Power Co.	,, ..	..	..	.. ..	..
Orbost ..	2,000	Orbost Butter and Cheese Co. ..	D.C., 230 v. ..	300	20	10d. ..	6d.
Ouyen ..	950	Walpeup Shire Council	,, ..	160	..	1s.	6d. to 3d.
Pyramid ..	475	Gordon Shire Council	A.C., 230–400 v. ..	78	12	1s. 3d. ..	9d.
Phillip Island ..	1,000	Phillip Island Shire Council ..	,, ..	50	..	1s. 1½d. ..	7d.
Portland ..	2,700	Portland Borough Council ..	,, ..	..	..	1s.	6d.
Quambatook ..	500	Kerang Shire Council	D.C., 230 v. ..	100	4	1s. 3d. ..	9d. to 6d.
Rainbow ..	900	Rainbow E.L. Co.	,, ..	145	4	1s.	1s. to 6d.
Rochester ..	1,487	Commonwealth E.S. Co.	,, ..	360	12	1s. to 6d. ..	7d. to 6d.
Rupanyup ..	700	Dunmunkle Shire Council ..	,, ..	125	..	1s. 3d. ..	8d.
Rushworth ..	1,200	Waranga Shire Council	,, ..	275	(total)	11d. ..	6d. to 1½d.
Sea Lake ..	600	Wycheproof Shire Council ..	,, ..	175	(total)	1s. 4d. ..	6d. to 4½d
Seymour ..	2,525	Seymour Shire Council	A.C., 230–400 v. ..	450	(total)	10d. to 6d. ..	5d. to 2d.
Stawell ..	5,000	Stawell Borough Council ..	,, ..	510	85	10d. ..	5d.
St. Arnaud ..	3,500	St. Arnaud Borough Council ..	,, ..	434	..	1s. and 11d. ..	6d. and 5d.
Swan Hill ..	3,031	Swan Hill Shire Council	,, ..	450	100	1s. 3d. to 2½d. ..	5d. to 1d, and 6d. to 1½d.

APPENDIX 5—*continued.*

COUNTRY ELECTRIC SUPPLY UNDERTAKINGS OPERATED BY MUNICIPAL AND PRIVATE UNDERTAKERS—*continued.*

Locality.	Population.	Supply Authority.	System of Supply.	No. of Consumers.		Price per Unit.	
				Light.	Power.	Lighting.	Power.
Toora ..	350	Toora Foster Elec. Co. Ltd. ..	A.C., 230–400 v. ..	170	(total)	1s. to 11d. ..	4d. to 3d.
Trentham ..	750	Kyneton Shire Council	,, ..	120	..	1s. 3d. ..	6d.
Ultima ..	250	Swan Hill Shire Council	.. ..	30	..	1s. 3d.	6d.
Violet Town ..	600	Violet Town Shire Council ..	A.C., 230–400 v. ..	91	23	1s. 6d. ..	6d. and 3d.
Warburton ..	1,000	Yuthong Electric Coy.	D.C., 230 v. ..	140	..	1s. per month per 25 c.p. lamp at 9d. per unit	4½d.
Warracknabeal	2,875	Warracknabeal E.L. Co.	A.C., 230–400 v. ..	350	..	1s.	6d. to 4d.
Wedderburn ..	1,000	Korong Shire Council	,, ..	182	4	1s.	6d.
Wodonga ..	2,300	Wodonga E.S. Co.	D.C., 230 v. ..	216	..	9d.	7d. to 5d.
Wonthaggi ..	6,000	State Coal Mine	A.C., 415–240 v. ..	1,100	194	7d.	3d. to 1½d.
Wycheproof ..	800	Wycheproof Shire Council ..	D.C., 230 v. ..	160	(total)	1s. 3d. ..	6d. to 4½d.
Yarram ..	1,200	Yarram H.E. Co.	A.C., 230–400 v. ..	250	..	11d. ..	4d. and 2d.
Yea	950	Yea Shire Council	,, ..	70	..	1s. (maximum)	

* The lighting tariff is applicable to commercial and industrial lighting, and the power tariff to intermittent power; the unit rate in both instances being subject to consumption discounts as set out under country centres served by the Commission. The other tariffs available at Carrum are similar to those for Frankston.

† The industrial power and heating two part tariff for Mulgrave (served by Commission) is also available at Doncaster.

APPENDIX No. 6.

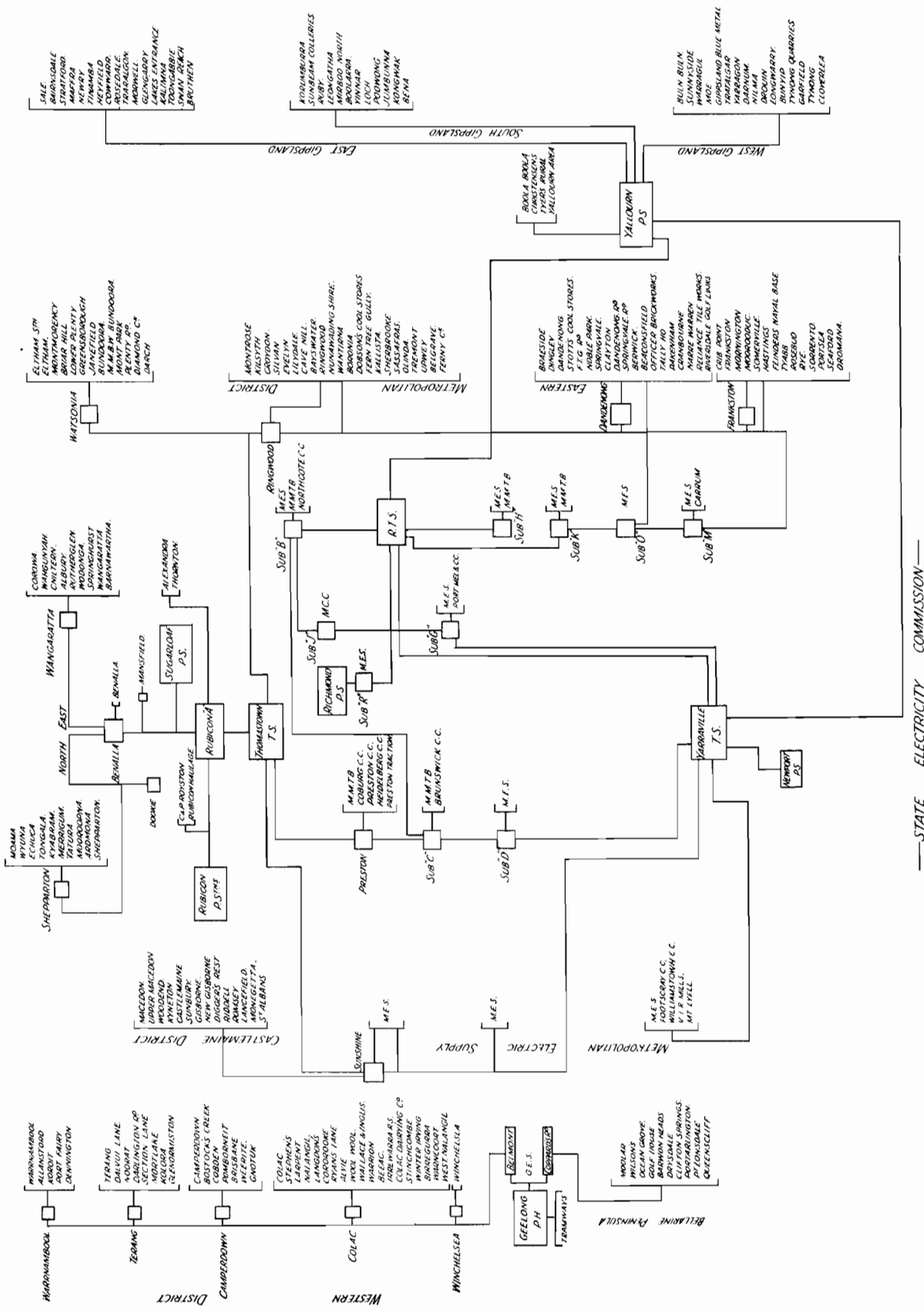
LIST OF UNDERTAKINGS ACQUIRED BY THE STATE ELECTRICITY COMMISSION OF VICTORIA SHOWING INCREASED DEVELOPMENT SINCE ACQUISITION. (EXCLUDES MELBOURNE ELECTRIC SUPPLY COMPANY'S UNDERTAKINGS.)

District and Town.	Acquisition Date.	After Acquisition for Year 1930-31.		Prior to Acquisition.			Average Revenue per Unit Sold.	
		Units Sold.	Revenue.	Units Sold.	Revenue.	For Year Ending.	1930-31.	Prior to Acquisition.
			£		£		*d.*	*d.*
METROPOLITAN AREA.								
Essendon and Flemington ..	1.8.22	13,328,124	119,732	1,720,000	35,800	31.7.22	2·16	4·99
Sunshine	1.3.27	2,726,658	17,247	272,680	4,622	30.6.25	1·52	4·07
WESTERN METROPOLITAN DISTRICT.								
Werribee	10.4.24	293,366	5,888	61,190	2,575	30.9.23	4·81	10·1
EASTERN METROPOLITAN DISTRICT.								
Dandenong	1.10.23	843,473	10,546	773,000	4,006	30.9.23	3·01	12·44
Frankston	21.2.28	894,946	12,021	293,000	8,859	30.9.27	3·23	7·25
Lilydale	1.4.25	250,518	4,131	39,950	1,816	30.9.24	3·96	10·9
Mornington	1.8.30	155,472	4,729	120,000	4,634	30.9.28	7·3	9·26
Ringwood and Croydon ..	1.4.25	676,289	9,055	181,600	4,393	30.9.24	3·21	5·81
GIPPSLAND DISTRICT.								
Bairnsdale	1.4.27	614,908	8,842	100,272	2,948	30.6.23	3·45	7·06
Drouin	3.10.24	246,101	2,741	19,500	743	30.9.21	2·67	9·15
Garfield	1.8.29	18,055	536	8,864	465	30.12.27	7·12	12·59
Korumburra	1.12.24	386,251	6,635	85,000	3,427	30.9.23	4·12	9·68
Leongatha	15.2.24	275,419	4,632	50,640	2,012	30.6.23	4·05	9·53
Maffra	1.9.24	645,263	6,957	62,000	2,651	30.9.22	2·59	10·26
Morwell	1.4.26	129,901	2,551	52,062	1,772	30.9.25	4·71	8·17
Sale	1.7.24	724,069	10,470	114,155	3,687	30.6.24	3·47	7·75
SOUTH-WESTERN DISTRICT.								
Camperdown	1.1.24	483,206	8,020	97,664	4,122	30.9.23	3·98	10·13
Colac	1.9.23	691,923	12,595	99,000	2,673	30.9.22	4·37	6·48
Koroit	1.12.28	95,824	2,235	50,000	2,319	30.9.28	5·6	11·13
Mortlake	16.5.24	183,539	2,933	35,306	1,626	30.9.22	3·83	11·05
Terang	4.3.24	274,061	5,531	78,839	3,439	30.9.23	4·84	10·45
CASTLEMAINE DISTRICT.								
Castlemaine	31.12.29	249,457	7,521	175,904	7,130	31.12.28	7·23	9·75
Gisborne	1.10.28	36,148	1,225	17,000	1,074	30.9.27	8·14	15·16
Kyneton	1.10.29	260,054	6,408	143,340	5,433	30.9.27	5·91	9·09
Sunbury	1.5.26	166,170	3,670	58,501	2,490	30.9.24	5·3	10·2
Woodend	1.8.29	107,526	3,020	51,000	2,555	30.9.27	6·75	12·0
NORTH-EASTERN DISTRICT.								
Alexandra	11.4.27	159,054	2,756	64,000 (app.)	1,875	30.9.26	4·15	7·00 (app.)
Benalla	1.5.26	358,668	7,355	70,800	3,373	30.9.24	4·92	11·43
Cobram	1.10.28	41,445	1,645	19,500	1,416	30.9.27	9·53	17·43
Euroa	20.3.28	110,710	3,207	46,618	1,782	30.9.25	6·96	9·17
Kyabram	1.12.26	235,329	4,884	92,312	3,462	4.7.25	4·98	9·00
Mansfield	1.6.28	66,677	1,885	25,000	1,341	30.9.27	6·79	12·88
Mooroopna	1.10.26	182,093	3,128	40,000	1,457	30.9.25	4·12	8·74
Rutherglen	15.10.26	107,156	3,180	28,392	1,377	30.9.24	7·12	11·64
Shepparton	1.1.25	1,001,668	14,520	163,400	4,625	30.6.24	3·48	6·79
Tatura	1.11.26	126,085	2,500	40,000	1,710	30.6.25	4·76	10·26
Wahgunyah	1.2.26	21,569	572	7,233	263	30.9.22	6·38	8·73
Wangaratta	12.3.27	900,306	11,554	151,600	4,788	30.9.25	3·08	7·58
Yarrawonga	1.8.25	162,993	4,186	47,000	2,149	30.9.24	6·16	10·97
Totals		28,230,477	341,243	5,556,322	146,889		2·9	6·34

COUNTRY DISTRICTS.—COMPARISON OF TOTAL FIGURES.

	Units Sold.	Revenue.	Average Revenue per Unit Sold.
		£	*d.*
After acquisition	12,175,695	204,264	4·02
Prior to acquisition	3,563,642	106,467	7·17
Increase in sales and revenue ..	8,612,053	97,797	2·72

APPENDIX No. 7.



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