1934.

VICTORIA.

STATE ELECTRICITY COMMISSION OF VICTORIA.

FIFTEENTH ANNUAL REPORT

COVERING THE

FINANCIAL YEAR ENDED 30TH JUNE, 1934:

TOGETHER WITH

APPENDICES.

PRESENTED TO PARLIAMENT PURSUANT TO SECTION 35 (*b*) OF STATE ELECTRICITY COMMISSION ACT No. 3776.

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FIFTEENTH ANNUAL REPORT.

The Hon. G. L. Goudie, M.L.C.,
Minister in Charge of Electrical Undertakings,
Melbourne.

SIR,

In conformity with the provisions of Section 35 (*b*) of the *State Electricity Commission Act* (*No.* 3776), we have the honour to present the Fifteenth Annual Report of the Commission, covering the financial year ended the 30th June, 1934, with Balance-sheet and Profit and Loss Accounts for that period.

PART I.—ADMINISTRATION.

MAJOR EXTENSION—MAIN SUPPLY SYSTEM.

The expenditure during the year on the major extension project approved by Parliament in 1928 was £22,516 on the Yallourn section of the work, bringing the total for all sections at 30th June, 1934, to £1,712,793, as follows :—

	£
Yallourn Power Station extensions	1,281,954
132,000-volt transmission line	216,699
Richmond Terminal Station	214,140
	£1,712,793

The circumstances which have effected the major extension programme are surveyed in previous Annual Reports. This programme, which was based on the normal yearly increase in the demand for electricity up to 1928, provided for the addition of 75,000 kw. of generating plant at Yallourn, in three yearly instalments of 25,000 kw. each, commencing in 1931. Following the postponement for one year of the first instalment, owing to the depression, the installation of the second and third 25,000 kw. sets was left to be determined by developments, which were very closely watched, because, while it was desired to avoid expenditure that could safely be deferred, it was essential to assure the adequacy and reliability of supply. The partial recovery in the demand for electricity during the financial year ended 30th June, 1933, pointed to the probable necessity of having the second set installed in time for the winter of 1935. This indication was confirmed by the manner in which the recovery in the demand was sustained during the year covered by this Report. The second 25,000 kw. set is, therefore, now being installed so that it will be ready for operation by that time. The purchase and installation of the third set remain to be determined by future load development.

Graph No. 5 on page 25 shows the actual yearly maximum demand upon the system since 1928, compared with the estimated yearly demand from 1928 to 1937, upon which the major extension programme was originally based. This discloses the manner in which the decline in system loading brought about by the adverse business conditions of the last three or four years checked the normal rate of electrical development experienced in Victoria during the preceding twenty years, which formed the basis of the estimates.

BALLARAT AND BENDIGO ELECTRICITY SUPPLY AND TRAMWAYS.

The Ballarat and Bendigo electricity supply and tramways undertakings of the Electric Supply Company of Victoria Ltd. passed into the possession of the Commission on the 1st July, 1934, under an agreement for acquisition entered into on the 14th June, 1929, and ratified by the *State Electricity Commission (Ballarat and Bendigo) Purchase Act* 1929. In the agreement, the 1st July, 1931, is specified as the date of sale, and from that date until the date of possession the operations of the Company came under the control and supervision of the Commission.

The purchase price, inclusive of stores, was £296,472. This is independent of capital moneys (£100,300) provided by the Commission under the terms of the agreement, mainly in order to meet the normal developmental requirements of the undertakings since 1st July, 1931.

The purchase price was paid to the Company on the date of possession at its head office in England, the money having been raised by loan in London under the authority of the *State Electricity Commission (Borrowing) Act* 1932.

Developmental Plans, Electricity Supply.—The cities of Ballarat and Bendigo occupy key positions in any development of the State power system in the north and north-western districts. Under the agreement for acquisition the Company undertook to purchase transmitted energy from the Commission as soon as it could be provided, the intention of the Commission at the time being to make such energy available to Ballarat and Bendigo and various places *en route*, on or about the 1st July, 1931. Actually, the transmission line had been erected as far as Castlemaine before the financial stringency intervened in 1929. It has now been found necessary to augment immediately the Bendigo power station output to the extent of about 500 kw. by an extension of the transmission line from Castlemaine. The necessary connexion will be constructed so as to form part of the 66,000-volt system, but at the outset it will operate at 22,000 volts. Beyond this extension no decision has as yet been made, but the matter of supply for the wide area contemplated when the acquisition of the Ballarat and Bendigo undertakings was negotiated is now under close examination. The Castlemaine section already gives supply to thirteen centres, eight of which did not previously enjoy a service of electricity.

Reductions in rates have already been made as part of the Commission's developmental plans for Ballarat and Bendigo. During the 1931–1934 transition period, the Commission's two-part domestic tariff was introduced into both cities, together with street lighting charges, which enabled a much improved service to be provided at no increased cost to the municipalities, while reductions in commercial and industrial power and lighting charges provided total annual savings of approximately £12,000 to the consumers concerned in Ballarat and Bendigo.

Tramways.—In 1927 when negotiations for the purchase of the Ballarat and Bendigo electricity supply undertakings were entered upon, the State committed itself to the obligation of continuing the tramways in those cities. Following completion of the negotiations, the various councils concerned, having in view the fact that the Geelong undertaking (which was to pass to the Commission in 1930) also included tramways, made urgent representations to the Government in 1928 that the Commission be constituted the tramways authority in all three cities. As a small system of electric traction can be operated more economically in conjunction with electricity supply than as a separate entity, the Commission finally, but reluctantly, consented to accept the responsibility, provided each of the councils entered into a uniform agreement embodying the conditions under which the Commission was prepared to accept the responsibility for tramways operation. One of the main conditions was that any loss on the tramways should be carried by electricity supply in the centre respectively concerned. A disturbing factor in regard to the Ballarat and Bendigo undertakings was the urgent need of reconstructing the tramway systems in both cities.

The agreement having been entered into, Parliament enacted the necessary legislation in 1929.

In view of the State commitment, the Commission in 1933 recommended to the Government that application be made for a grant of the money necessary for the reconstruction of the Ballarat and Bendigo tramways from Unemployment Relief Funds, free of interest, and also free of obligation for the later return of the money. Before making the recommendation, the Commission made investigations which proved that the alternatives of trolley buses, petrol buses or owner-driven buses were less attractive financially than the proposal to reconstruct the tramways, and it pointed this out to the Government in a special report.

Finally an arrangement was made whereby the estimated cost of the work (£170,000) is to be provided as follows :—

£100,000 loan to the Commission—To be provided from the National Recovery Loan Fund, free of interest for two years, bearing interest thereafter at 4 per cent. per annum ; repayable by the Commission in 15 years.

£50,000 grant to the Commission—To be provided by the State Government, and

£20,000—To be provided from the Commission's own resources.

Details of the contemplated expenditure appeared in the Commission's Fourteenth Annual Report.

The Commission's plans provide for a single construction programme for both cities, with as little interference as possible with the normal operations of the tramways. Full gangs will be engaged on the work about the middle of September, 1934. Some slight modifications to the existing routing of the tramways in Ballarat have been the subject of protracted discussion with the municipalities concerned.

In view of the use of National Recovery Loan Funds, which were raised for the relief of unemployment, the work of reconstruction is to be conducted largely as one of unemployment relief.

FINANCIAL MISSION ABROAD.

In March, 1934, the Commission's Manager (Mr. R. Liddelow) visited London to arrange financial matters connected with the acquisition of the undertakings of the Melbourne Electric Supply Company Ltd. and those of the Electric Supply Company of Victoria Ltd. The sound financial position of the Commission, coupled with the high level of Australia's credit abroad, ensured a good reception for the Commission's proposals from London financial circles. The results of the mission are dealt with in the financial section of this Report.

ENFORCEMENT OF STANDARDS OF EFFICIENCY FOR ELECTRICAL APPLIANCES, MATERIALS AND INSTALLATIONS.

The regulatory powers of the Commission as administrator of the *Electric Light and Power Act* 1928 do not extend to the legal enforcement of appropriate standards of safety and reliability for electrical appliances. The law as it stood was also inadequate in regard to the fixing of responsibility for faulty materials and installations. In other respects experience and the rapid development of the use of electricity had shown the necessity for strengthening the existing legislation so that full effect might be given to the intentions of Parliament to ensure the safety of the public. Following consultations between the Commission, the Electrical Federation of Victoria and the Electrical Trades Union, a measure generally acceptable to the three parties and designed to remedy shortcomings in the existing law and to vest the Commission with the necessary powers of enforcement, was passed by Parliament during the 1934 session. The measure deals mainly with four distinct aspects of regulating the supply and use of electricity, viz. :—

(1) The registration of electrical contractors.

(2) The testing and approval of electrical appliances and devices from the point of view of safety in use.

(3) The licensing of electrical mechanics.

(4) The examination and inspection of—

  (*a*) electric lines and works of the various supply authorities ;

  (*b*) installations, i.e., the wiring on a consumer's premises.

In regard to (1), the Commission under the original Act was required to undertake the responsibility for the licensing of wiremen or men actually performing wiring work. Although these men alone were indictable for defective materials or workmanship, it was the Commission's experience that the fault for defective wiring or materials rested not so much with the workman as his employer ; hence the necessity under the amending measure for electrical contractors to be registered. In the future no person not registered as such will be permitted to carry on the business of an electrical contractor, but to avoid carrying registration to unreasonable lengths and thus causing public inconvenience, there are exemptions in regard to certain classes of work, or classes of employees.

In regard to (2), the Amending Act provides penalties for the sale, or the presentation for sale, of any electrical fittings, material or appliances which do not bear the Commission's mark of approval as conforming to a reasonable standard of safety and reliability. Local manufacturers, many of whom have been in the habit of voluntarily submitting their manufactures or wares to the Commission for laboratory test, will undoubtedly welcome the new provision, as tending to increase the confidence of the public in electrical appliances, while the public will appreciate the guarantee of safety and serviceability of the appliances they buy. The provision will also tend to protect both the Australian manufacturer and the public against unsafe imported electrical goods.

For the purpose of the amending legislation, the Commission has to appoint an Electrical Approvals Board of seven members—representing manufacturers, wholesalers and retailers of electrical appliances, the electric supply authorities, the Fire Underwriters' Association and the Electrical Trades Union, with a representative of the Commission as chairman. Samples of each type of apparatus sought to be marketed will be required to be submitted to the Commission for inspection and laboratory test, and the results of such inspection and testing will be submitted to the Approvals Board. The Commission must act upon the Board's recommendations in the sole matter of safety of appliances, but the Commission is not bound to accept the Board's recommendations if it believes that any apparatus in question will detrimentally affect the distributing systems of the supply authorities or of the Commission, or the supply of electricity to individual consumers. Any party aggrieved by the Approvals Board's advice may appeal to the Commission, which must itself hear the appeal, and its decision is to be final. The fees for testing apparatus will be fixed so as to place no onerous burden on trading.

In regard to (3), the Amending Act alters the term " wireman " to " electrical mechanic," which is more descriptive of the work performed, and is the same as the term applied in awards of the Commonwealth Arbitration Court. It also requires the annual renewal of electrical mechanics' licences in order to facilitate the administration of the licensing provision.

In regard to (4) : Opportunity has been taken to place on a more satisfactory basis existing practices governing the inspection of lines and works of supply authorities, and also the inspection of electrical installations on consumers' premises. In this latter respect, the legislation allows a supply authority's inspector to be clothed with the authority of the Commission in insisting that installations shall comply with the regulations, thus avoiding specific inspections by the Commission's own officers.

The Amending Act also provides that undertakers shall furnish the Commission with such statistical information relating to their operations as it may reasonably require.

STATE ELECTRICITY COMMISSION (TRADING) ACT (No. 4197).

Reference was made in the Commission's Fourteenth Annual Report to a measure then before Parliament to prohibit the Commission from trading in electrical appliances and from carrying out any electrical wiring installation on consumers' premises. The Commission at the time reviewed the whole situation in a published report, which pointed out that should the measure become law the persistent efforts of the Commission to cheapen the cost of electricity to the consumer would be adversely affected, both directly and as a result of the check given to electrical development, especially in the major (metropolitan) field of operations.

As originally presented to Parliament, the provisions of the measure were to apply to the whole State, but as passed the Act applies to cities only. The areas affected at the time the Act became law were the metropolis of Melbourne and the cities of Geelong and Warrnambool. When the Shire of Heidelberg was subsequently proclaimed a city, the town of Greensborough, which is included therein, and which is served by the Commission, came within the scope of the prohibition. The Commission is now also precluded from selling electrical appliances in the cities of Ballarat and Bendigo, where the undertakings of the Electric Supply Company of Victoria Ltd. passed into its possession on the 1st July, 1934.

The number of consumers of the State Electricity Commission in city areas coming under the prohibition is 149,337, compared with 24,000 in those country districts to which the prohibition does not extend.

The Commission was allowed three months from the date of the passing of the Act in which to dispose of its stocks within those areas in which its trading in appliances is prohibited. This period expired on the 31st March, 1934, and the disposal of stocks before that date involved a forced sale in metropolitan and provincial city showrooms. The forced sale of stocks in Melbourne, Geelong, and Warrnambool almost entirely accounts for the loss on the sales of appliances during the year. It is estimated that the continuance of the developmental work in the domestic field under the altered conditions will involve the Commission in an expenditure of £8,500 per annum. In the past, this expenditure has been met out of the sales of appliances.

QUESTION OF HYDROGENATION OF AUSTRALIAN COAL FOR PETROL PRODUCTION.

Early in 1934 successive Press announcements indicated that the Federal Government was giving serious consideration to the establishment of a nationally-assisted Australian industry for the production of oil and petrol by the hydrogenation of coal, involving a capital outlay by the private corporation concerned (Imperial Chemical Industries Ltd.) of £8,000,000 or £9,000,000. As New South Wales black coal only was mentioned in connexion with the project, the Commission directed the attention of the State Government to the importance, from a national as well as a commercial point of view, of a full investigation by the Federal Government of the relative merits of black and brown coal before taking definite action in the matter. Following representations which were thereupon made by the State Government, the Federal Government appointed a Committee of Investigation, consisting of nominees of the Commonwealth, the States and Imperial Chemical Industries Ltd., to inquire into and report upon the whole question. The Victorian Government's nominee on the Committee is Dr. H. Herman, B.C.E., M.M.E., D.Sc., Engineer in Charge of Briquetting and Research to the Commission.

In its report to the State Government, the Commission pointed out that, with the sanction of successive Governments, it has, during the last six years, as part of its responsibilities for developing the use of brown coal, directed its attention to the possible establishment by private enterprise of an oil and petrol-producing industry in Victoria, based on brown coal. Close contact had been established with Imperial Chemical Industries Ltd., which had, at its own request and cost, been supplied with some hundreds of tons of brown coal for testing purposes in England. A site at Yallourn had also been made available to this Company at its request for the purpose of an experimental plant for brown coal hydrogenation, but so far the Company has confined its experimental work to a large-scale pilot plant at Billingham, England, for the hydrogenation of black coal.

The numerous discussions which have taken place between the Commission and Imperial Chemical Industries Ltd. have been based on the utilization of brown coal at Yallourn or near Welshpool. As late as December, 1933, the Company assured the Commission that no decision had been arrived at either to establish plant in Australia or to establish it in connexion with black coal if and when hydrogenation in Australia should actually be decided upon. The Billingham plant is not expected to commence operating until early in 1935, and the Company has intimated that it is unlikely to be in a position to formulate any definite proposal for Australia until it has had at least six months' experience of commercial operation at Billingham. When, therefore, the Commonwealth Government announced its intention of assisting in the erection of a pilot plant in New South Wales, the Commission became apprehensive lest a relation thus formed should lead to the establishment of hydrogenation of coal in Australia without due consideration having been given to the claims of Victorian brown coal. The English experiments on Victorian brown coal have proved the technical practicability of its hydrogenation, and the German industry (which has recently been largely extended) is entirely based on brown coal, despite the availability in that country of rich fields of black coal; hence brown coal must possess some very definite advantages which demand close investigation before the location of hydrogenation plant in Australia can rationally be made.

In order to obtain reliable data on brown coal hydrogenation the Commission has made arrangements with the Fuel Research Board of London (which has special plant and an experienced staff for the purpose) to carry out a series of investigations on Victorian brown coal. One of the Commission's chemical engineers (Mr. G. Baragwanath, B.Sc.,) is associated on the spot with these investigations, which are now in progress at the Board's plant at East Greenwich.

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

The characteristics of the total loading in kilowatts in the metropolitan area for all purposes is illustrated by Graph No. 1, page 11. These characteristics have not materially altered for some years past. The daily peaks are round about 8 a.m. and 6 p.m. when the industrial, traction, lighting and domestic loads overlap. The lower curve of the graph which shows the demand on the Commission's system, including the small portion of the metropolitan requirements supplied by the Melbourne City Council, maintained the improvement recorded in the previous year, the rise in the maximum demand being again associated with an increase in load factor.

Graph No. 2 records the maximum demand made on each of the Commission's generating stations during each year of operation. Yallourn as the base load station carries the major portion of the load, assisted by the Sugarloaf-Rubicon hydro-electric group, the two metropolitan power houses of the Commission (Newport " B " and Richmond) acting as peak load stations. The maximum sustained demand on the system during 1933–34 was 121,600 kilowatts. This is the highest yet recorded, and was 4,100 kilowatts in excess of the previous year's figure. The Yallourn station carried the whole of the increase, the maximum demand there being 86,000 kilowatts, which is 6,000 kilowatts more than the figure for the previous year.

Graph No. 3 shows the growth in the demand for electricity in Victoria since 1918–19, and the manner in which this growth has been catered for, particularly by the State Power System, which now carries the great bulk of the load.

Graph No. 4 shows the total energy supplied to, the maximum demand on and the load factor of the main supply system, which comprehends the generation and 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.

Graph No. 5, page 25, discloses the actual yearly growth of load on the State Power System since 1928 compared with the estimate of growth framed in that year, and is given in order to show the effect of the depression period on the progress of the undertaking.

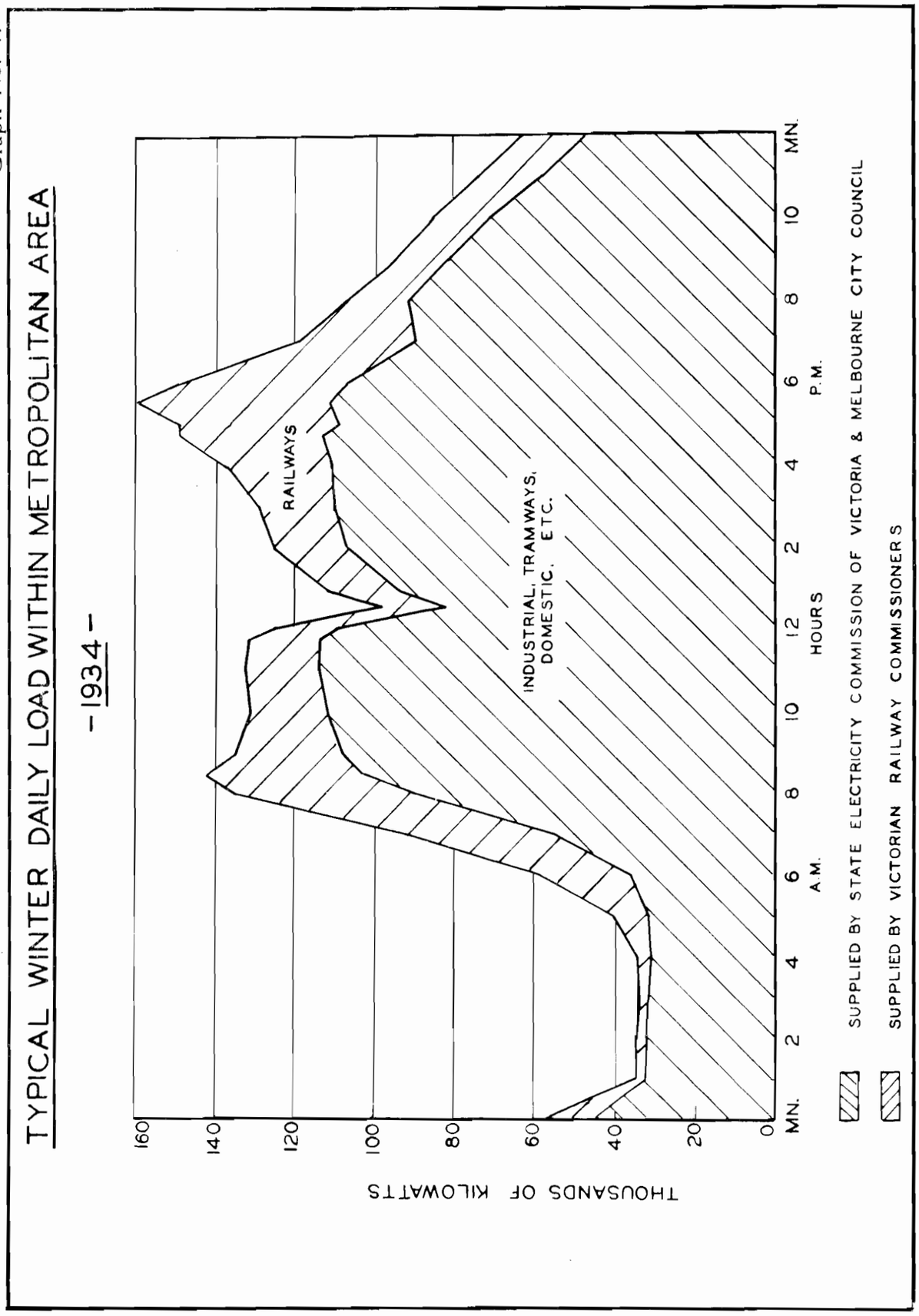
Appendices Nos. 2 and 3 give details of the Commission's transmission and distribution systems.

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

Areas 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, Heidelberg, Northcote, Port Melbourne, Preston, and Williamstown. 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. Bulk supply is also given to the outer metropolitan municipality of Doncaster, to the Carrum Electric Supply Company (which supplies Aspendale, Carrum and Chelsea), and to the municipal councils of Albury, Corowa and Moama, in New South Wales.

Country extensions of supply made during the year were to Harcourt, Tallygaroopna, Wunghnu, Bowser, Thornton, North Berwick, Langwarrin, Officer, Yering, Yeringberg, Yarra Glen, and Nar-Nar-Goon, in all of which centres supply was initiated by the Commission. The Wodonga undertaking was acquired by the Commission during the same period. The total number of centres now supplied by the State Power System is 194, of which 120 did not previously enjoy the benefits of electricity supply.

Graph No. 1.


TYPICAL WINTER DAILY LOAD WITHIN METROPOLITAN AREA
- 1934 -
THOUSANDS OF KILOWATTS
160
140
120
100
80
60
40
20
0
MN.
2
4
6
8
10
12
2
4
6
8
10
MN.
A.M.
HOURS
P.M.
RAILWAYS
INDUSTRIAL, TRAMWAYS, DOMESTIC, ETC.
SUPPLIED BY STATE ELECTRICITY COMMISSION OF VICTORIA & MELBOURNE CITY COUNCIL
SUPPLIED BY VICTORIAN RAILWAY COMMISSIONERS

TOWN OF YALLOURN.

Housing.—A building programme, embracing six four-roomed, semi-detached cottages and twenty-five other low-rental wooden houses, was put in hand during the year. At the close of the period, sixteen of the dwellings had been completed, and the remaining fifteen were still in course of erection. There remain to be met a number of long-standing applications from permanent operatives, and sixteen new homes will be built during 1934–35, with the probability of further homes being also required in the following year. Only now is the Commission commencing to overtake the arrears in its programme of housing provision brought about by the lack of funds for capital works during the past three to four years. When the present programme has been completed, the number of houses at Yallourn will be 558.

The population figures for Yallourn territory at 30th June, 1934, were as follows :—

Town of Yallourn	2,233
Brown Coal Mine	589
West Camp	176
South Camp	167
Outlying areas	32
Total	3,197

The population of settlements adjacent to the Commission's territory totals 642.

Visitors to Yallourn.—During the twelve months visitors to the number of 14,000 were conducted over the Yallourn works by the Commission's guides. The number included 9,295 scholars and friends from metropolitan and country schools. The total number of visitors was 1,000 more than in the preceding year. This growing public interest in the works and township is welcomed by the Commission. Yallourn has been included in the itinerary of H.R.H. the Duke of Gloucester during his visit at the time of the Victorian Centenary celebrations.

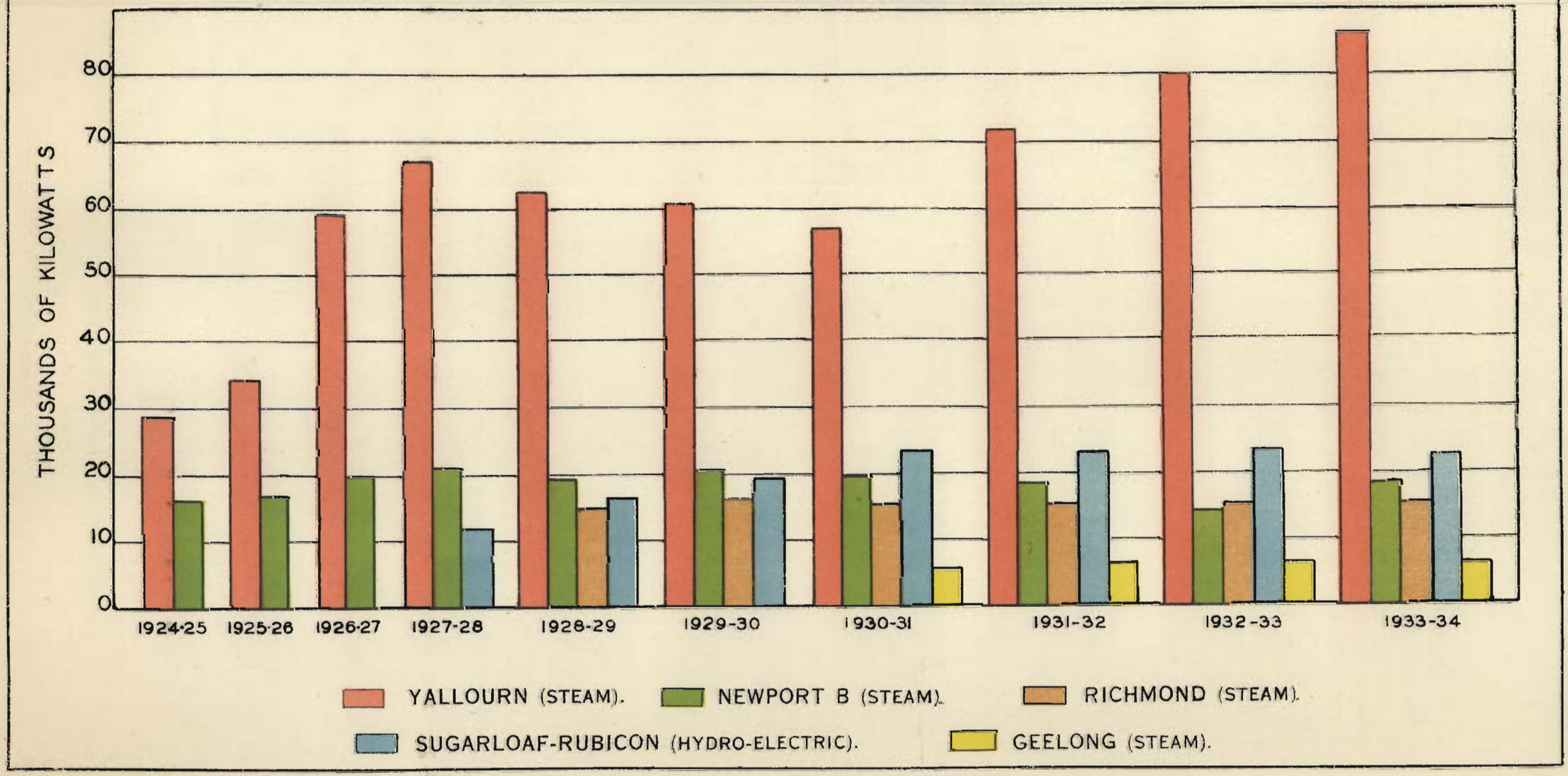
Hospital.—The hospital and general services (including the Health Centre) financed by the Medical and Hospital Society by means of regular weekly contributions from all employees in the territory continue to be maintained at a very high level of efficiency, although the income of the Society has fallen off considerably as a result of the reduction in the number of employees at Yallourn during recent years following on the completion of major construction works. The interest of the community in the welfare and appearance of the hospital remain a very pleasing and helpful feature of the activities of the institution.

Educational Facilities.—The announcement that the Education Department has approved of the erection of a new technical school building at Yallourn is most gratifying to the residents and the Commission, as the present temporary and inadequate provisions have long been a source of inconvenience and dissatisfaction. As noted in the Fourteenth Annual Report, the Commission agreed to provide up to £2,000 towards the cost of a new building, and a plan was prepared by the Public Works Department. It was hoped that the erection of the school would be proceeded with immediately, because it was apparent that unless this was done it would become necessary to add to the crude temporary provisions represented by the three wooden houses made available by the Commission. The necessity for some extra facilities was evidenced by the addition of a machine shop and mechanical laboratory (two portable garages) which were provided by the Commission during the year ; while, due to the insufficient school accommodation at the three wooden cottages, certain classes have had to be held in the Fire Brigade Hall. Two senior technical school scholarships were won in the last term by Yallourn students in competition with the remainder of the State.

Community and Welfare.—As usual, the various clubs and organizations contributed greatly to the active community spirit of the town.

MAXIMUM DEMANDS AT GENERATING STATIONS.

STATE POWER SYSTEM.

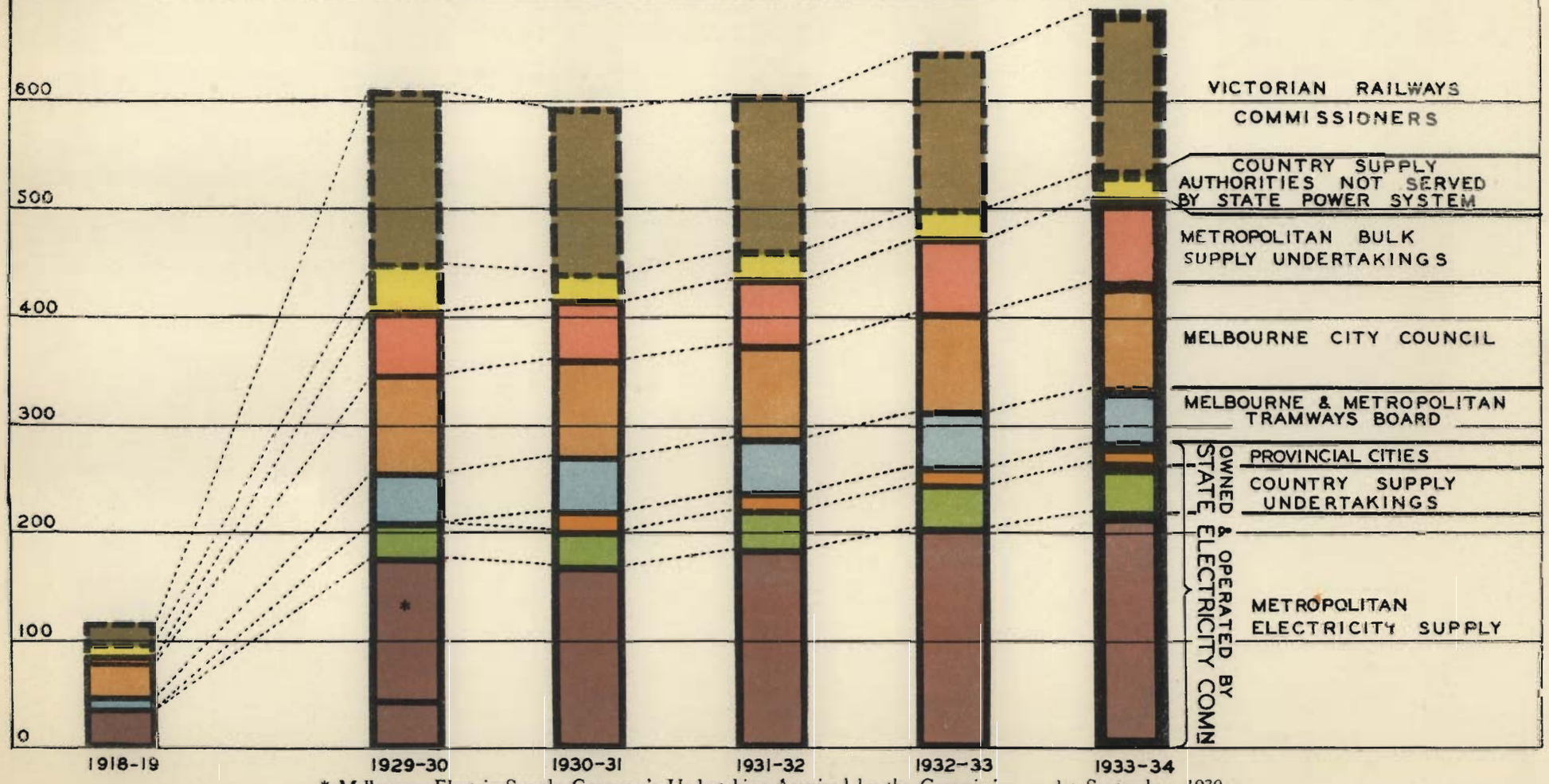


Graph No. 2.

STATE OF VICTORIA.

GENERATION AND DISTRIBUTION OF ELECTRICITY FOR PUBLIC USE

1919—1934.



* Melbourne Electric Supply Company's Undertaking Acquired by the Commission on 1st September, 1930.

Graph No. 3.

INDUSTRIAL.

Disposition of Commission's labour forces at 30th June, 1934 :—

	Operation.	Construction.
Power Generation	337	15
Main Transmission Lines, Terminal Stations, &c.	186	187
Metropolitan Electricity Supply	534	139
Country Electricity Supply	248	38
Briquette Production and Distribution ..	276	Nil
Coal-winning—Yallourn	249	Nil
General Services and Workshops—Yallourn ..	259	Nil
General Services—elsewhere	59	74
Tramways—Geelong only	68	Nil
Totals	2,216	453

Grand Total—2,669.

Arbitration.—A further application was made to the Court by the combined unions for a restoration of the 10 per cent. wage reduction. The Court decided (*a*) to rescind the 10 per cent. wage reduction, (*b*) to discontinue payment of what is known as the " Powers 3s. per week," and (*c*) to assess wages on the basis of the " all items " table, in lieu of the " all houses " table. The effect of the decision has been an addition of approximately £9,000 per annum to the Commission's working expenses. The principal unions have since served logs of wages and conditions on employers, and the hearing of their claims will again engage the attention of the Arbitration Court.

At the close of the financial year the Conciliation Commissioner was engaged in hearing claims by the Federated Engine-drivers' and Firemen's Association. Claims by the Carters' and Drivers' Union, which were served in 1926 and mentioned in Court in 1928, were heard by Chief Justice Dethridge towards the close of the financial year, and the parties are now awaiting judgment.

In addition to the foregoing, logs of wages and conditions have been served on employers by the metal trades group of unions, which includes members of engineering, blacksmithing, ironworking and electrical trades.

ELECTRIC LIGHT AND POWER ACT 1928.

Since the passing of the *Electric Light and Power Act* 1896, 219 Orders in Council have been granted. Of these, 122 have been issued to municipal councils, and 97 to companies or persons. Eighty-one Orders have been revoked, including a number relating to undertakings which have passed into the control of the Commission.

The Orders in Council for new centres of supply that were recommended by the Commission during the year and approved by the Governor in Council were as follow :—

Number.	Undertaker.	Area.	Tariff.			Remarks.
			Light.	Power.	Minimum Charge per Month.	
			s. d.	*s. d.*	*s. d.*	
220	A. J. Gloster	Township of Underbool	1 6	0 6	7 6	D.C. 230 v.
221	Shire of Towong ..	Township of Tallangatta	1 3	0 6	7 6	A.C. 230/400 v.
222	Block and Sons Pty. Ltd.	Township of Myrtleford	1 3	0 6	7 6	A.C. 230/400 v.

Investigations, extending throughout the year, into alternative schemes for the future supply of electricity in Hamilton put forward by the Hamilton Borough Council and the Hamilton Electric Supply Co. Ltd. (the present undertakers), showed that the Company would be in a position to supply electricity to Hamilton consumers at a lower average rate than the Council. The Commission consequently decided to recommend to the Governor in Council the granting of a new Order to the Company for a period of fifteen years after the expiration of its existing Order on the 4th July, 1935. Tariffs throughout the period of the extension will be controlled by the Commission, and the Hamilton undertaking will be converted from the present 230-V. D.C. system to the standard system of supply with the object of ensuring adequate and well-regulated supply of electricity to consumers. It is anticipated that negotiations now in progress will lead to the extension of the Hamilton supply to the neighbouring township of Coleraine and the inauguration of this high-pressure service will open the way for future extensions to other townships in the Hamilton district.

The approaching termination of a 14 years' agreement between the Upper Yarra Shire Council and the Yuthong Electric Supply Pty. Ltd., for the supply of electricity in Warburton necessitated investigations being made into alternative schemes for the continuance of electricity supply which were submitted to the Council by the Yuthong Electric Supply Pty. Ltd., the Upper Yarra Electric Supply Co. Pty. Ltd., and Mr. Hugh H. Douglas. After lengthy negotiations with the Shire Council and exhaustive examination of the three proposals, the Commission decided to recommend the Governor in Council to approve of the revocation of the Shire Council's Order in Council and the granting of a new Order for a period of 20 years to the Upper Yarra Electric Supply Co. Pty. Ltd. The Warburton undertaking is to be converted from the existing 230 V. D.C. system to the standard system of supply, in order to secure effective pressure regulation and to enable the ultimate linking up of this undertaking with the State system and, pending this, the extension of the Warburton scheme to neighbouring townships, should this become economically desirable.

Preliminary steps were taken to secure Orders in Council by the Apollo Bay Electric Supply Co. Pty. Ltd., and the Shire of Upper Murray, and an extension of the area of supply by the Avoca Electric Light Co. Pty. Ltd.

WIRING REGULATIONS.

Completely revised Wiring Regulations were published in June, 1934, after receiving the approval of the Governor in Council on the 22nd May, 1934. These Regulations, which were brought into operation on 1st July, 1934, aim at securing more uniform practice in electric wiring by prescribing sufficient detail to avoid, as far as is practicable, the necessity for individual inspectors placing interpretations on general instructions. The Regulations are divided into two parts dealing respectively with wiring methods and materials.

In the preparation of these Regulations opportunity was taken to confer with the Standards Association of Australia, the Fire Underwriters' Association, supply authorities' engineers and other bodies and persons representative of interests concerned in their application. Every effort was made to base the Regulations on well-founded electric wiring methods as practised in Victoria and in other Australian States and overseas. Provision is made in the new Regulations for the application to installations of the multiple earthed neutral system with a view to providing the maximum degree of safety in the use of electricity.

LICENSING OF WIREMEN.

The number of wiremen's licences issued to the 30th June, 1934, and also the number issued during the twelve months previous to that date, are given below.

Grade.	Number Issued to 30th June, 1933.	Number Issued from 1st July, 1933, to 30th June, 1934.	Total.
"A"	1,737	50	1,787
"B1"	233	22	255
"B"	1,260	66	1,326
"C"	1,605	53	1,658
Special "A"	69	..	69
Special "A" in force	..	..	3
Permits	3,585	118	3,703
Permits in force	..	..	63

During the year two examinations in theory and practice were held. The Board of Examiners reports an increase in the number of candidates who attended examinations and also an increase in the percentage of candidates who passed the " B " Grade examinations. There was a decrease in the percentage of candidates who passed the " A " and " B1 " Grade examinations.

During the year the Syllabus of Examinations in connexion with the Licensing of Wiremen was revised for the purposes of including recent developments in the use of electricity and to facilitate co-operation with the Apprenticeship Commission in respect of the instruction given to electrical trades apprentices at technical schools.

ELECTROLYSIS—METROPOLITAN AREA.

The Electrolysis Committee, consisting of representatives of :—

The Postmaster-General's Department,
The Victorian Railways Commissioners,
The Melbourne and Metropolitan Board of Works.
The Melbourne and Metropolitan Tramways Board,
The Melbourne City Council,
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 during the year under review the investigation of cases of alleged electrolytic corrosion on underground pipe, cable, and duct systems in the metropolitan area, and has successfully effected a further considerable improvement in the conditions found to obtain.

The total number of faults in the metropolitan area reported to the Committee for 1933–34 was 113, and this figure compares well with faults reported in the four previous years, as follows :—1929–30, 261 ; 1930–31, 243 ; 1931–32, 174 ; 1932–33, 121, thus showing a reduction of over 57 per cent. as against 1929–30.

The improvement was again most marked in the telephone cable system, with regard to which only 40 faults were reported during the year.

PART II.—FINANCIAL AND COMMERCIAL.

ANNUAL ACCOUNTS.

The Balance-sheet and General Profit and Loss Account, accompanied by summarized Operating Accounts 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. The outstanding features of the principal accounts are hereunder reviewed.

LOAN LIABILITY.

The Commission's loan indebtedness at the close of the financial year, including its liability for debentures of the Melbourne Electric Supply Company, and of Municipal Councils, transferred to the Commission as part of the consideration for the purchase of undertakings, amounted to £19,109,658.

Of this amount, the liability to the State of Victoria is £17,715,799, on account of Melbourne Electric Supply Company debentures £1,300,954, and of Municipal debentures £92,905.

The total loan indebtedness compared with the previous year shows a decrease of £558,487 :—

	£
Reduction in indebtedness to State of Victoria mainly through National Debt Sinking Fund	88,763
Reduction in Debentures, including £446,040 7½ per cent. American Gold Bonds of Melbourne Electric Supply Company	469,724
	558,487

The deduction for redeemed or cancelled securities is based on a certificate by the State Treasurer that this Commission's share in the debentures redeemed by the Trustees of the National Debt Sinking Fund up to 30th June, 1934, is £466,173. The redemption of the 7½ per cent. American Gold Bonds of the Melbourne Electric Supply Company was effected in December, 1933, from the Commission's cash resources, and involved a payment of £112,625 for Exchange. This surcharge is being liquidated as rapidly as possible, having been written down by £43,750 in the last year's accounts. This transaction represents a saving in last year's accounts at the rate of £17,000 per annum.

EXERCISE OF BORROWING POWERS.

The Commission in May, 1934, exercised the borrowing powers vested in it by the *State Electricity Commission Borrowing Act* (*No.* 4087) 1933, such powers being specifically to meet the liabilities arising under debentures of the Melbourne Electric Supply Company, and for the purchase price of the Ballarat and Bendigo undertakings of the Electric Supply Company of Victoria. On that occasion a loan of £600,000 sterling was raised in London and partly used to meet the latter commitment of £296,472, the balance being applied to the redemption of £256,113—6 per cent. Melbourne Electric Supply Company debentures held in London. The loan was raised at £96 carrying 3½ per cent., term 15 years, with 1 per cent. Sinking Fund. The flotation expenses will be partly written out in the accounts for 1934 35 by the utilization of reserves created through the redemption of certain of these debentures from revenue.

This being the introduction of Victorian Electricity Bonds to the London market, it was important to secure proper recognition of the value of the security offered. It is consequently the more pleasing to be able to record such satisfactory terms for the relatively small sum required, and any later transactions of a similar nature will benefit accordingly. It is also satisfactory to have such proof of the recognition in the London financial market of the soundness of the Commission's finances, and confidence in its future.

The borrowings in question are specially secured on the revenues of the Undertakings acquired from the Melbourne Electric Supply Company, the stability of which may be judged from the steadily rising revenues, as shown hereunder :—

Revenue in—	£
1921	582,000
1924	1,060,000
1928	1,375,000
1933	1,450,000

The Commission has given notice of intention to redeem in November, 1934, two 5 per cent. Melbourne Electric Supply Company debenture issues amounting to £344,841. Out of the total liability of £1,834,257 transferred to the Commission under the purchase agreement, there will then remain for redemption in 1935—£300,000 6½ per cent. and £400,000 7 per cent. issues of the Company. A substantial percentage of these issues is held in London. The Commission's borrowing powers at present unexercised amount to £1,650,000 plus Exchange.

RESERVES.

The Depreciation and Sinking Funds stood at 30th June, 1934, at £3,138,120. Of this amount £446,173 was to the credit of the National Debt Sinking Fund and £48,590 to the credit of the Debenture Sinking Fund Reserve, the amount to the credit of the Depreciation Fund being £2,643,357, which is invested in the business of the Commission. After adjusting the charge against the Depreciation Fund on account of boiler reconstruction at Yallourn, the increase in the Depreciation and Sinking Funds for the year was £546,039 (including £104,079 interest on the Depreciation Fund), the amount charged being £46,384 more than last year.

In addition to these provisions, an amount of £35,390 was written off the value of certain assets which are depreciated on a straight line basis.

The Doubtful Debts Reserve of £6,338 is a surplus after providing for doubtful debts at the rate of ¼ of 1 per cent., which experience has shown to be ample for the purpose. On a revenue exceeding £3,000,000, bad debts for 1933–34 amounted to £4,773, or ·151 per cent. Electricity Supply debtors accounted for £4,192 or ·112 per cent. on electricity supply revenue; briquette debtors involved £139 or ·043 per cent. of briquetting revenue. Results of this order have been consistently achieved for some years and show that the Sundry Debtors Account of £491,956 in the balance-sheet is in a healthy condition, both as to collection value and in relation to the Commission's total income.

The item "Contingency and Other Reserves" stands at £187,636. It includes the reserve established through the surplus moneys paid to the Commission under its agreement for the purchase of the Electric Supply Company of Victoria's assets. Now that the undertakings are in the ownership of the Commission, this reserve is in process of adjustment in the opening account entries of the financial year 1934–35 to the credit of the Ballarat and Bendigo undertakings. Other provisions in the principal figure include, in addition to the ordinary contingency provision, special reserves on account of motor vehicles, and for certain smaller operating parts or apparatus of limited life. It is intended to increase substantially this provision as opportunity permits, and to invest the funds in readily negotiable securities, to be held against any sudden unforseen emergency that may arise in the course of the Commission's business.

CAPITAL EXPENDITURE.

THE FOLLOWING TABLE SHOWS THE GROWTH OF FIXED CAPITAL SINCE THE COMMISSION COMMENCED TO SUPPLY ELECTRICITY IN 1924–25.

Year.	Total.	Electricity Supply.				Coal Winning.	Briquette Production.	Townships.	Electric Tramways.	Workshops, Stores, Offices, General Services.	Unfinished Construction.
		Power Generation.	Transmission Lines and Sub-stations.	Terminal Stations.	Distributing Systems.						
	£	£	£	£	£	£	£	£	£	£	£
1924–25	7,060,765	2,793,581	1,291,587	470,180	581,948	509,187	493,145	336,590	..	584,547	..
1925–26	8,075,526	2,964,117	1,670,850	554,838	737,780	668,468	508,688	360,019	..	610,766	..
1926–27	9,195,720	3,261,866	1,989,735	570,913	965,677	798 981	525,347	434,651	..	648,550	..
1927–28	10,664,474	3,992,574	2,147,682	604,915	1,115,012	987,356	573,521	521,813	..	721,601	..
1928–29	11,625,204	4,351,639	2,221,953	618,257	1,288,243	1,121,536	616,406	652,735	..	754,435	..
1929–30	13,239,404	4,709,510	2,539,675	782,750	1,456,543	1,263,945	980,470	685,724	..	820,787	..
1930–31	18,509,158	4,955,542	2,707,330	699,950	4,901,530*	900,794	1,213,960	722,155	198,674	833,351	1,375,872
1931–32	19,276,315	4,985,714	2,739,675	916,597	5,016,854	935,840	1,221,052	718,083	198,743	1,067,011	1,476,746
1932–33	19,592,421	4,993,853	2,762,757	918,346	4,997,729	955,839	1,234,227	718,491	199,414	1,243,889	1,567,876
1933–34	19,663,565	5,493,011	2,762,736	912,434	5,124,470	956,043	1,239,181	717,382	199,459	1,368,654	890,195

*Transfer of the Melbourne and Geelong undertakings of the Melbourne Electric Supply Company Ltd.

NOTE.—Up to and including 1928–29, Interest during Construction, which was then held in a separate account, is not included in above figures. At 30th June, 1925, this amounted to £514,642, increasing to £609,852 by 30th June, 1929.

CAPITAL EXPENDITURE.

The addition to fixed capital accounts for the year was £298,540 after allowing for writings off and minor adjustments, and occurred in respect of the following assets :—

	£
Power stations	59,332
Transmission lines and sub-stations	26,389
Distributing systems	150,700
Coal supply	14,163
Briquette production	2,727
General	38,224

The addition for the preceding year was £347,990. The table annexed shows the history of the Commission's fixed capital as distributed over its principal activities and operations.

CURRENT AND ACCRUED ASSETS.

Apart from the item "Sundry Debtors" which has already been commented on in dealing with the reserve for bad and doubtful debts, the only item calling for special mention is that of stores—£313,733, which includes briquette stocks—£56,259. The Stores Account is now considered to be almost at its irreducible total under existing construction and operating conditions, and reflects the excellent co-operation of the technical and storekeeping officers in their efforts over a long period to reduce to a minimum the amount of capital so invested.

EXPENDITURE TREATED AS IN SUSPENSE.

For convenience of arrangement of the balance-sheet, accounts aggregating £938,149 are grouped under the heading "Suspense."

Details of the principal items so treated are :—

Overburden, Removal, and Disposal—£538,063.—This relates to the operation of stripping overburden from the coal so that it may be won in the Yallourn open cut; each yard of overburden removed uncovers four tons of coal, the process being continuous and carried on well in advance of coal production. The expenditure is held in a separate account, and is liquidated by adding 8d. per ton to the cost of each ton of coal. Last year £89,762 was deducted from the account as the proportion chargeable against the 2,692,874 tons of coal won during the year; £66,843 was added, representing the cost of overburden removed during the same period. The balance in the Overburden Removal Account will represent an asset so long as production of coal continues in the Yallourn cut.

Loan Flotation Expenses—£215,839.—This represents the outstanding balance of the costs incurred by the State of Victoria in raising the loans represented by the Commission's liability to Treasury—at present £17,715,799. The Commission is following the usual practice of liquidating this expenditure over the periods covered by the loans—an average of 25 years.

Amount Charged to Commission by Treasury in Accordance with 1922 Decision of the Government—£42,023.—This is the outstanding balance of an amount of £62,023 charged to the Commission as part of an arrangement not completed in its entirety whereby, in addition to separating its revenues from Consolidated Revenue, the Commission was to be vested with borrowing powers and status akin to the Melbourne Harbour Trust. The items comprised in this amount include expenditure on regulatory functions, investigations, and other work carried on for the State by the Commission, but having no relation to the business of production and sale of electricity. The amount is being liquidated at the rate of £5,000 per year.

Hospital and Health Centre, Yallourn—£32,470.—This represents an essential provision for the employees at Yallourn. The cost of these facilities is being amortised over a period of 30 years, which is the calculated life of the assets involved. Maintenance to the satisfaction of the Commission is the responsibility of the Yallourn Medical and Hospital Society, which operates quite independently of the Commission and has full responsibility for the provision and maintenance of medical and hospital services in the territory.

Miscellaneous—£97,100.—Comprises mainly an Exchange Suspense Account arising from the conversion of 7½ per cent. American Gold Bonds of the Melbourne Electric Supply Company already referred to.

Profit and Loss Account.—The accumulated loss shown in the Profit and Loss Account was reduced by £33,118 during the year, and now stands at £755,989. The whole of the accumulation is associated with two distinct stages in the pioneering of the State system of electricity and fuel supply.

The first stage occupied five years, in the construction of buildings, plant, transmission, and distribution systems, works necessary for opening up Yallourn's brown coal resources convenient to the power station, and the establishment of the briquette industry. This stage, although not revenue-producing, involved expenditure not directly concerned with the production and sale of electricity by the State. As such expenditure could not form a reasonable charge to capital, it had to be charged to operation.

The second stage began in the middle of 1924, when the Yallourn power station commenced to function, and was entirely developmental, being occupied in the building up of a payable load for the new State Power System. The developmental period was singularly short, the undertaking beginning to earn profits in a little more than three years of commercial operation. The deficiencies thus arising in these two stages make up the whole of the accumulated loss, which includes an amount of £225,000 for full depreciation in the developmental period prior to the revenue being sufficient to meet such provision. As the loss stands to-day, nearly £150,000 arises from the expenditure by the Commission on administration of regulations, special investigations and other functions not related to its ordinary commercial activities, but carried out in the broad interests of electricity supply in the State.

The liquidation of the accumulated loss has been given secondary importance to the promotion and encouragement of the use of electricity, which the Commission has achieved by means of direct and indirect reductions in its charges to consumers. The substantial nature of these reductions is referred to elsewhere in this Report. The greatest single factor which has directly operated against a material reduction in the accumulated loss is exchange, which has added £500,000 to the Commission's costs of operation during the unexpected financial conditions of the past four years.

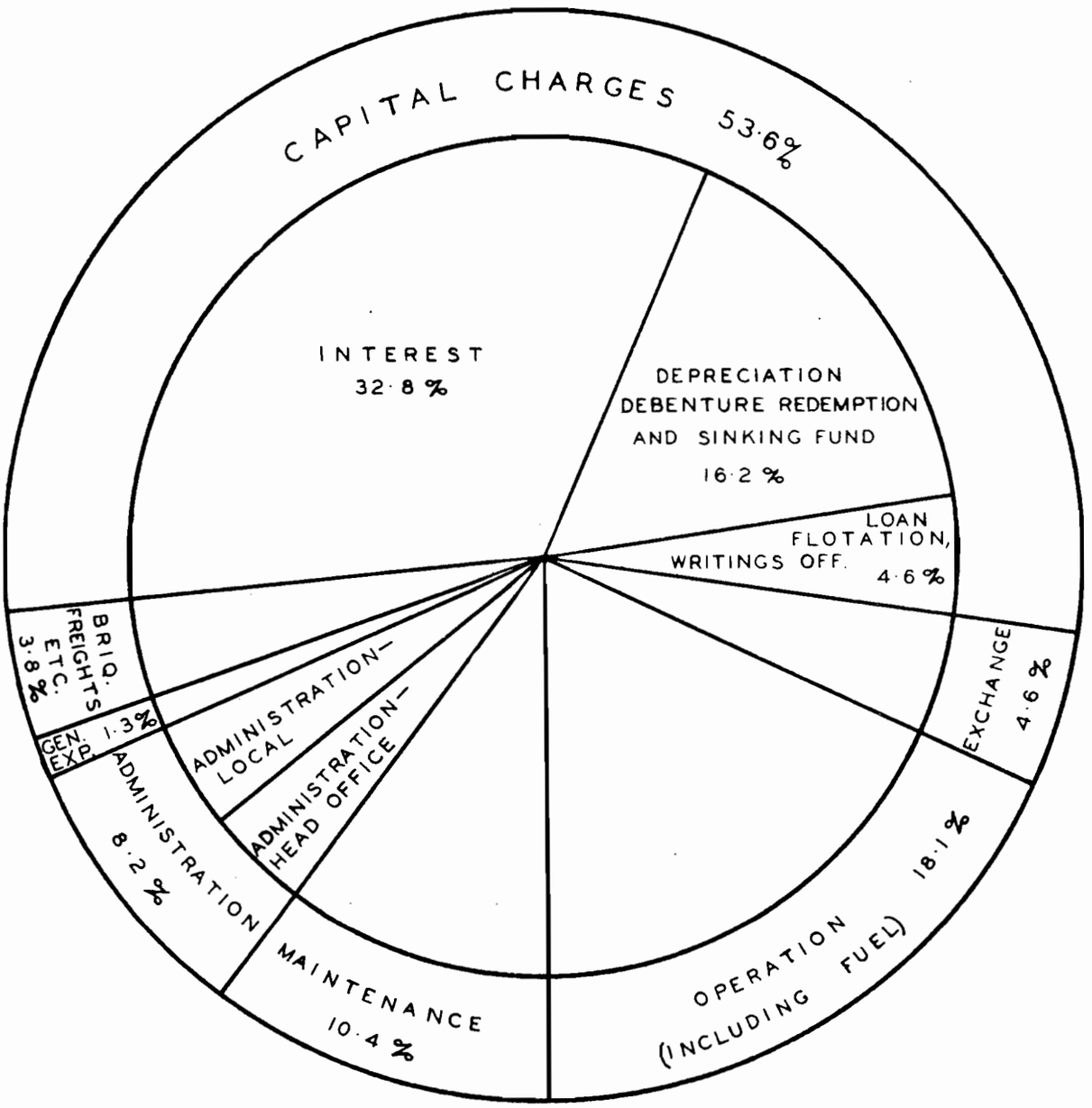
RESULTS OF OPERATIONS OF ALL ACTIVITIES.

SUMMARY OF INCOME AND EXPENDITURE.

Year Ended 30th June, 1933.				Year Ended 30th June, 1934.			Compared with Year Ended 30th June, 1933. + or −
£	£	£		£	£	£	£
		2,577,546	Electricity Supply Revenue			2,717,992	+ 140,446
		313,436	Briquetting Revenue			309,936	− 3,500
		34,180	Tramways Revenue			33,510	− 670
		97	Miscellaneous Revenue			74	− 23
		2,925,259	Total Revenue			3,061,512	+ 136,253
		1,150,878	*Less* Working and Administration Expenses			1,227,470	+ 76,592
		1,774,381	Surplus on Operations			1,834,042	+ 59,661
	1,000,379	..	*Less* Interest		992,274	..	− 8,105
	453,093	..	Depreciation and Sinking Fund		477,350	..	+ 24,257
	146,644	..	Exchange on Overseas Remittances		139,618	..	− 7,026
	26,486	..	Provident Fund Contributions		21,804	..	− 4,682
			Available for Appropriation—				
80,000	..	..	To Contingency Reserve	94,000	..	..	+ 14,000
..	..	..	Special Writings off	28,342	..	..	+ 28,342
23,585	..	..	Redemption of Debentures	14,288	..	..	− 9,297
12,000	..	..	Loan Flotation Expenses	12,000	..	..	..
			Special Expenditure—				
6,866	..	..	Water Power Investigation, &c.	10,589	..	..	+ 3,723
16,899	..	..	Administration of Electric Light and Power Act	5,658	..	..	− 11,241
5,000	..	..	Liquidation of liability of £62,023 imposed by State Government in 1922	5,000	..	..	
	144,350				169,877		+ 25,527
		1,770,952				1,800,923	+ 29,971
		3,429	Net Profit			33,119	+ 29,690

STATE ELECTRICITY COMMISSION OF VICTORIA.

DIAGRAMMATIC SUBDIVISION OF TOTAL OPERATING EXPENDITURE FOR FINANCIAL YEAR 1933-34.



DEVELOPMENT OF THE USE OF ELECTRICITY.

Conditions of System Loading, 1933–34.—The all-round improvement in the demand for electricity recorded in the Fourteenth Annual Report was sustained in 1933–34, when sales totalled 474,452,023 kwh., compared with 439,030,189 kwh. in 1932–33, 403,984,624 kwh. in 1931–32, 379,572,140 kwh. in 1930–31, and 394,754,454 kwh. in 1929–30. Until the end of 1929–30, the effects of the world-wide economic crisis had not made themselves seriously felt in regard to electricity supply, and the increase in the demand for electricity from the Commission's system was being maintained at 37,000,000 kwh. per annum. The industrial and commercial decline in 1930–31 is reflected in the figures for electricity supply in that year, when sales dropped by over 20,000,000 kwh., or 57,000,000 kwh. below normal. Although the recovery since has been appreciable, the momentum lost through the depression is evidenced by the fact that the total sales for 1933–34 would have been 543,000,000 kwh., or 69,000,000 kwh. more, had the growth in the demand not been checked. However, it is both interesting and encouraging to note that the rate of increase in 1932–33 and 1933–34 was little below the rate of increase in sales of electricity registered prior to 1930–31.

Analysis of the following figures shows the contributions to the year's overall improvement of each class of consumer directly served by the Commission to be as follows:—Industrial, 7·6 per cent.; Commercial, 10·6 per cent.; Domestic, 9·1 per cent.; Metropolitan bulk supplies, 8·2 per cent. The year's improvement in the industrial field follows that of 11·5 per cent. in the preceding period. The industrial consumption has been the greatest single factor in the recovery during the last three years, both in the Commission's own areas of supply and in those of the metropolitan bulk supply authorities.

VARIATION IN CONSUMPTION OF CONSUMER CLASSES AND BULK SUPPLY AUTHORITIES.

The following table shows the overall improvement during the year in the industrial and commercial demands for energy in the Commission's districts:—

INDUSTRIAL AND COMMERCIAL CONSUMERS—PERCENTAGE INCREASE IN TOTAL KWH. SOLD.

	Industrial.		Commercial.	
	1933–34 compared with 1932–33.	1932–33 compared with 1931–32.	1933–34 compared with 1932–33.	1932–33 compared with 1931–32.
	%	%	%	%
Metropolitan Electricity Supply	+ 6·9	+11·5	+10·9	+ 6·9
Geelong Electricity Supply	+14·7	− 2·7	+ 2·7	+ 1·4
Country	+10·1	+13·1	+12·3	+ 2·3
Overall	+ 7·6	+10·6	+10·6	+ 5·6

DOMESTIC CLASS—PERCENTAGE INCREASE IN KWH. SOLD.

	1933–34 compared with 1932–33.	1932–1933 compared with 1931–32.
	%	%
Metropolitan Electricity Supply	+ 9·1	+7·7
Geelong Electricity Supply	+11·4	+8·6
Country	+ 8·5	+6·4
Overall	+9·1	+7·5

Expressed as an increase in the consumption per domestic consumer, the improvement during the year was 5·4 per cent. compared with 1932–33, or 34·0 per cent. compared with 1929–30, the number of kwh. used per domestic consumer rising from 333 in 1929–30 to 369 in 1930–31, to 390 in 1931–32, to 423 in 1932–33 and to 446 in 1933–34.

Metropolitan Municipal Distributing Authorities.

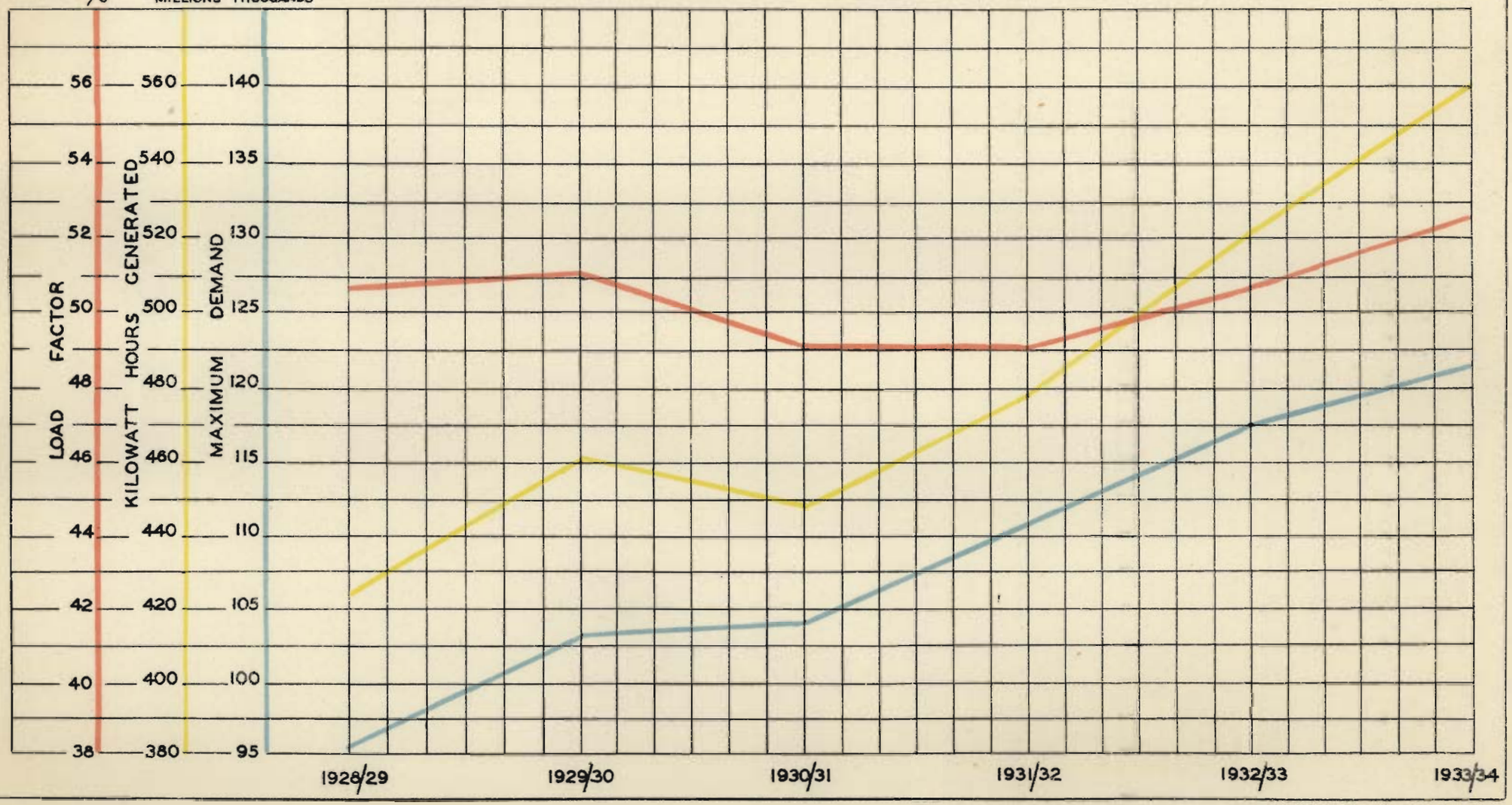
The following table shows that all of the metropolitan distributing authorities purchased more bulk energy in 1933–34 than they did in 1932–33. The recovery was most marked in the industrial areas :—

Bulk Supplies.

	1933–34 compared with 1932–33.	1932–33 compared with 1931–32.
	%	%
Box Hill	+ 12.1	+ 9.5
Brunswick	+ 12.0	+ 15·2
Coburg	+ 4.7	+ 15·4
Footscray	+ 17.9	+ 21·1
Heidelberg	+ 10·0	+ 2·5
Melbourne	+ 4·9	+ 4·5
Northcote	+ 8·2	+ 8·3
Port Melbourne	+ 14·2	+ 3·9
Preston	+ 14·0	+ 12·4
Williamstown	+ 10·2	+ 14·9
Overall	+ 8·2	+ 8·5

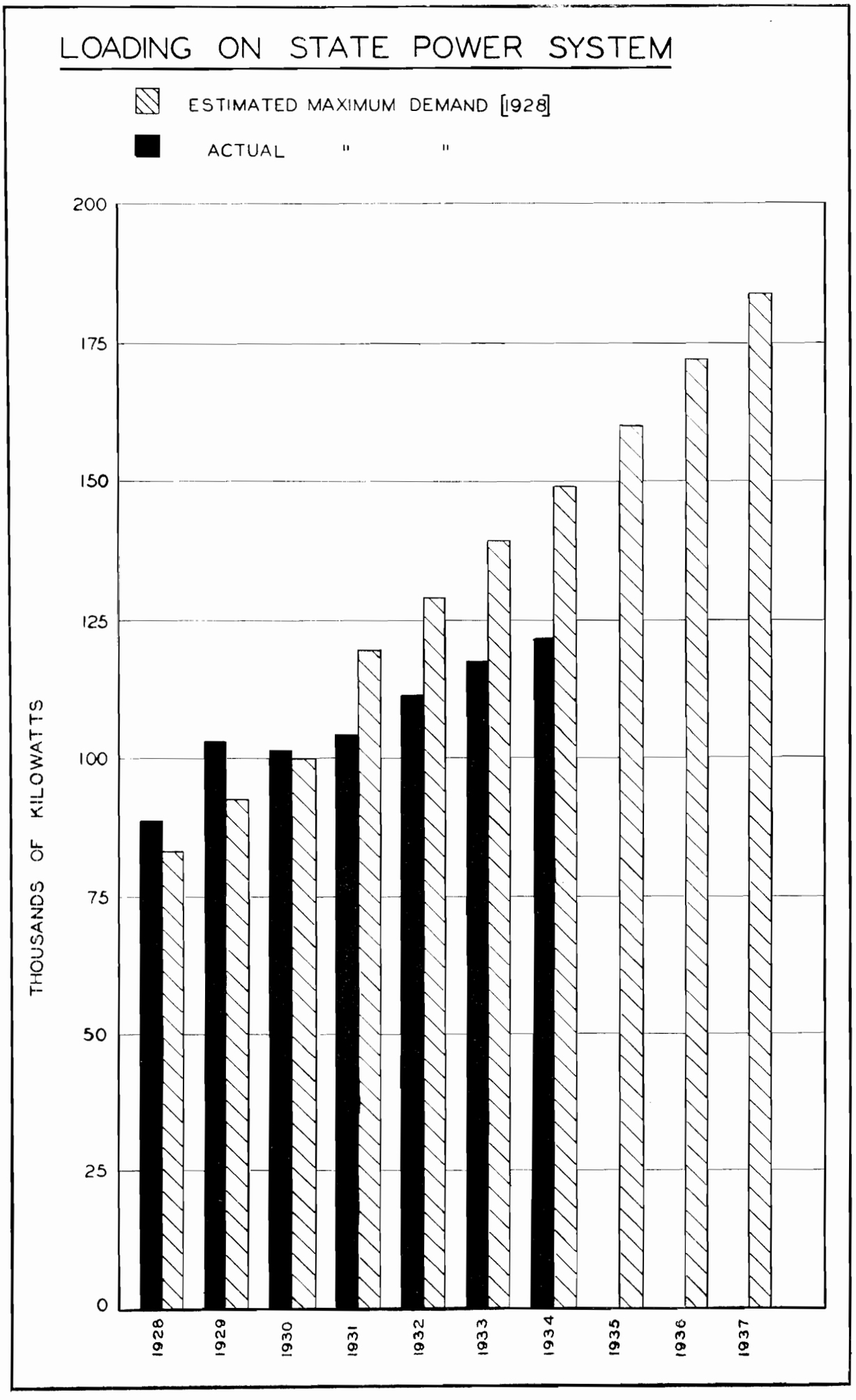
STATE ELECTRICITY COMMISSION
OF VICTORIA.

ENERGY GENERATED FOR MAIN SUPPLY SYSTEM.



Graph No. 4.

Graph No. 5.


LOADING ON STATE POWER SYSTEM
ESTIMATED MAXIMUM DEMAND [1928]
ACTUAL " "
THOUSANDS OF KILOWATTS
200
175
150
125
100
75
50
25
0
1928
1929
1930
1931
1932
1933
1934
1935
1936
1937

PROMOTION OF NEW BUSINESS.

Domestic.—The average consumption of electricity per domestic consumer in the Commission's supply districts increased by 23 kwh. to 446 kwh.

Industrial.—Conversions to electric drive and extensions of existing plants, amounting to 4,054 h.p., were recorded during the year. This is an appreciable percentage of the comparatively small amount of industrial loading remaining to be secured.

Gold Mining.—Inquiries for power for gold mining purposes have been active. Apart from Central Victoria, the largest inquiry came from Cock's Pioneer Gold and Tin Mine at El Dorado, which is now on supply. Inquiries from Bendigo and associated areas have necessitated a close investigation into plant capacity, which matter is now receiving attention.

Innovation in Public Lighting.—During the year a test public lighting installation, consisting of hot cathode gaseous discharge lamps, was erected for demonstration purposes. These lamps, the first of their kind to be so exhibited in Australia, created great interest, and future developments will be closely watched.

Architectural Lighting.—Considerable interest is now being displayed in modern architectural lighting for general purposes, and it is expected that a great fillip will be given to lighting generally as a result of the many lighting schemes that are being carried out in connexion with the Centenary illuminations.

Rural.—Steady progress has been made in the provision of electricity supply to farmers, and the erection of 24 additional rural sub-stations was rendered necessary for this class of supply. During the year the Rural Service Section completed a detailed survey of the areas in the vicinity of present and future electricity supply mains to form the basis of a study as to what can be expected in the way of farm extensions in the future.

Considerable assistance has been afforded to rural industry by the development of automatic refrigeration plants which, running unattended, make the best use of the low tariffs now offering for off-peak consumptions.

A comprehensive manual on pumping was issued during the year for the benefit of consumers, and the demand for the publication necessitated a reprint.

All-Australian Exhibition.—At the Centenary All-Australian Exhibition, to be held in the Exhibition Building from the 13th October to the 10th November (both days inclusive) the Commission will be represented by comprehensive displays showing the application of electric lighting for decorative purposes and the use of electricity in the home for all purposes.

ELECTRICITY SUPPLY—DISTRIBUTION AND SALES.

ABSTRACT OF OPERATING ACCOUNTS FOR YEAR 1933–34.

Note.—From the surplus disclosed in this abstract has yet to be deducted Exchange, Sinking Fund, Provident Fund and other indirect annual charges detailed in the General Profit and Loss Account.

Account.	Earnings.	Working and Administrative Costs.	Interest.	Depreciation and Sinking Fund.	Surplus or Deficit.
	£	£	£	£	£
Metropolitan Bulk Supplies	437,662	428,865	..	..	S. 8,797
Metropolitan Electricity Supply	1,723,472	1,093,388	215,572	93,524	S. 320,988
Geelong Electricity Supply and Tramways	169,830	113,440	21,828	14,372	S. 20,190
Castlemaine District	30,132	17,916	9,175	4,988	D. 1,947
Eastern Metropolitan District	99,517	56,770	18,437	10,148	S. 14,162
Gippsland District	83,597	50,991	17,212	9,123	S. 6,271
North-eastern District	112,183	64,197	24,375	12,623	S. 10,988
South-western District	78,505	51,608	18,653	9,088	D. 844
Western Metropolitan District	10,435	7,624	1,576	626	S. 609
Yallourn and Brown Coal Mine Townships	6,168	4,413	796	382	S. 577
	2,751,501	1,889,212	327,624	154,874	S. 379,791
Deduct Interest, Depreciation, and Sinking Fund included in cost to Branches and add to correct column	..	839,874	572,091	267,783	..
	2,751,501	1,049,338	899,715	422,657	S. 379,791

BRANCH ELECTRICITY SUPPLY UNDERTAKINGS.

From the statistical data contained in this section of the Report, the following summary is extracted :—

(*a*) The total number of consumers served at the end of the year was 192,271, an increase of 6,780 over the previous period.

(*b*) Sales of energy for all purposes within the Commission's branches amounted to 300,163,983 kwh., an increase of 22,222,334 kwh. over the previous year.

(*c*) The revenue from sales of energy within the Commission's branches amounted to £2,265,233, an increase of £112,448 over the previous year. The average price per kwh. was 1·811d., compared with 1·859d. in the previous year, or a reduction of 2·58 per cent., or 28 per cent., compared with the average price per kwh. in 1924–25.

The progress of the branches during the year is shown by the following :—

Metropolitan Electricity Supply.—This undertaking includes the seventeen suburban municipalities formerly served by the Melbourne Electric Supply Company Ltd., together with Essendon–Flemington, Sunshine, and Deer Park.

Uniform development of the demand of the main consumer classes was the feature of the year's operations. The improvement in the domestic demand was assisted by the renewed activity in the building trade, especially in the better-class residential areas, and the average price per kwh. decreased by 4·3 per cent. The normal development of street lighting was retarded by several of the municipalities effecting reductions in the number and wattage of lamps upon the renewal of their public lighting agreements. The total number of street lamps serviced at 30th June was 20,301, representing a connected load of 2,166 kilowatts. The average size of lamps is 106·7 watts, which is 1·7 watts below the maximum average recorded in 1931–32.

Conversions to electric drive from steam, gas, and crude oil, added 478 kilowatts to the connected industrial load. The increase in the number of consumers was 4,674, of whom 4,324 were domestic. The year's additions to the connected load aggregated 21,559 kilowatts, making the total connected load at 30th June 422,798 kilowatts. One of the main avenues for industrial development in the future lies in the use of electricity for heating purposes, and this is being energetically explored.

A feature of the year's activities was the large increase in the number of time switches in circuit, due mainly to the introduction of prescribed hour tariffs. Time switches to the number of 1,104 and 26 relays were required for water-heating installations, while the number of time switches for industrial installations now total 248. The increasing popularity of the cheap rates under prescribed hour tariffs is indicated by an increase from 13,000 kva. to 19,000 kva. in the minimum loading registered at 4 a.m.

The total number of meters in circuit at 30th June was 202,486, of which 10,822 were tested on consumers' premises during the year, and 14,620 in the Commission's meter department.

The convenience to the public of the Flinders-street building is demonstrated by the fact that payments of accounts over the counter by consumers increased by 27 per cent., compared with payments in person made at the old Queen-street offices. The volume of the work carried out by Metropolitan Electricity Supply may be gauged by the following figures :—

Meter registrations recorded, 1,118,000 ; machine postings to consumers' accounts, 3,302,000 ; total calls made by collectors, 562,200 ; inwards letters and remittances by post, 267,800 ; outwards letters, notices and accounts, 663,000 ; addressograph impressions for outwards notices and accounts and internal memoranda, &c., 7,249,000 ; personal inquiries at Services Department, 38,588 ; telephone inquiries, 53,954.

The dangerous and illegal practice of playing football in streets continues to be one of the main causes of interruptions of supply. Sixty-eight convictions were obtained during the year. By the co-operation of the Police Department in detecting offenders, and by the education of the public, particularly through the medium of the teaching staff at schools, it is hoped eventually to eliminate such interruptions.

Castlemaine District.—This district, which is served by the first section of the Bendigo transmission line, is the smallest of the country branches, and takes its title from the town in which operations are centred. It serves thirteen centres, including the towns on the main highway from Sunbury to Harcourt, and also Romsey, Lancefield, Macedon, &c. The reticulation of Harcourt was carried out during the year.

Sales of electricity to all classes increased—domestic by 4·9 per cent. ; commercial by 12·8 per cent. ; and industrial by 45·6 per cent., compared with the previous year's figures. The most appreciable reductions in the average price per kwh. were in regard to industrial and commercial energy (11·1 per cent. and 9·8 per cent. respectively).

Consumers increased by 113, bringing the total number at the end of the year to 2,541. The number of new services erected during the year was 110. The total number of cooking ranges installed at the end of the year was 172, while 82 h.p. of motors were added, making the total horse-power of motors connected 1,011.

Eastern Metropolitan District.—This branch, which has its head-quarters at Dandenong, serves 66 towns, including outer metropolitan centres, the mountain resorts of the Dandenongs and the seaside resorts skirting Port Phillip Bay from Frankston to Portsea.

Extensions of supply to Thomastown, North Berwick, Langwarrin, Officer, Yering, Yeringberg and Yarra Glen were made during the year. A pleasing feature of the year's operations was the improved demand in the holiday resorts, both country and seaside. Of the 530 new customers connected to supply, 422 were domestic, and 101 commercial. Sales of electricity showed a marked improvement in all classes, viz., domestic 11·3 per cent., commercial 19·2 per cent., industrial 6·5 per cent., and street lighting 7·4 per cent.

Extensions to Selby, Clematis, Emerald, Mount Dandenong and Kalorama were all nearing completion at the end of the financial year, and further development is expected from the seaside and country holiday resorts that are already on supply.

As the direct result of the Commission's promotional and developmental activities, 84 ranges and 18 water-heaters were connected during the year, bringing the totals to 887 and 199 respectively.

The number of meters in circuit is 12,846, representing an increase of 237 for the year. As part of the periodical testing programme, 2,270 meters were tested on consumers' premises and 1,140 in the Commission's meter department.

Thirty-eight miles of low-tension conductors were erected, bringing the total to 1,015 miles. New services to the number of 462 were erected, and 45 additional conductors were added to existing services. The number of street lighting lamps was increased by 52 to 1,288, representing a connected load of 110 kilowatts.

Geelong Electricity Supply.—This undertaking serves Geelong and surrounding districts, including Lara to the north and Torquay in the south. Electricity supply is co-ordinated with the local Tramways operations in the branch organization.

The sales of electricity to Domestic consumers increased by 11·3 per cent. and Industrial by 14·7 per cent., while the price per kilowatt-hour sold decreased by 3·8 per cent. and 3·1 per cent. respectively. Steady progress was maintained, 380 new consumers being added, increasing the total to 9,629. Approximately 450 more consumers are taking supply now than prior to the depression. Geelong's industrial activity is indicated by the fact that 73 per cent. of the total electricity sold during the year was for this purpose.

The total mileage of low-tension conductors in service is 443. The new services erected during the year numbered 182. The meters in circuit number 14,397, of which 2,870 were tested *in situ* and 1,615 in the Commission's meter department. The total number of street lamps in Geelong is 1,172, which light 114½ miles of streets and represent a connected load of 84 kws.

The excellent results of the operations of the Electricity Supply Undertaking at Geelong were again adversely affected by the loss on Tramways operations.

Gippsland District.—The 42 towns served by this branch, which has its head-quarters at Traralgon, include centres throughout Gippsland, from Nar-nar-goon to Lakes Entrance and Bruthen, and also various centres in South Gippsland.

Following the extension to Nar-nar-goon, eighteen new consumers were connected to supply, and a similar number at a major rural extension near Maffra. In all, 200 new consumers were connected in the district, increasing the total to 6,758.

Notwithstanding the unfavorable markets prevailing for rural products, the district made fair progress, and sales of electricity to all classes increased appreciably. The average price per unit to industrial, commercial, and domestic consumers was reduced by 7·3 per cent., 5·6 per cent., and 3·7 per cent. respectively.

The total horse-power of motors at 30th June was 4,002—an increase of 46 for the year. Twenty-eight ranges and twenty water-heaters were added to the loading during the year, bringing the totals for these appliances to 466 and 119 respectively.

The mileage of low-tension conductors erected was fifteen and a half, making the total 715 miles. The number of new services erected was 199. Of the total of 8,804 meters in circuit 1,095 were tested *in situ*, in addition to 403 in the Commission's meter department.

North-Eastern District.—Benalla is the centre of this district, which supplies 26 centres. The private undertaking at Wodonga was acquired during the year, and in addition, supply was made available at Tallygaroopna, Wunghnu, and Bowser. Aided by these new centres of supply, sales of electricity increased by 11·4 per cent. to domestic users, and by 13·4 per cent. to commercial users, with a reduction in the price per kilowatt-hour of 8·4 per cent. and 2·1 per cent. respectively. The reductions in the average price per kwh. to commercial users was largely due to direct reductions in scheduled charges.

New consumers numbering 652 were connected, increasing the total to 7,497. The number of cooking ranges in service at the end of the year was 217, and of water heaters 199, representing an increase of 21 and 19 respectively.

During the year 13 route miles of low tension conductors were erected, bringing the total to 165 route miles. The new services erected numbered 249. Of the total of 9,748 meters in circuit 1,444 were tested on consumers' premises and 1,700 in the Commission's meter department.

South-Western District.—This branch has its centre at Colac, and consists of 36 centres and townships, including areas from Winchelsea to Warrnambool and Port Fairy, and the seaside resorts and townships to the south of Geelong.

No major extensions were executed, the activities being confined to the development of existing areas of supply; 528 h.p. of motors, five ranges, and six water heaters were added, bringing the respective totals to 4,234, 281, and 88. During the year 187 new consumers, of which 164 were domestic, were added, making the total 6,526. The overall sales of electricity increased by 10 per cent.

Reductions in tariffs contributed towards the following decreases in the average price per kilowatt-hour sold:—Industrial, 10·1 per cent.; commercial, 4·6 per cent.; and domestic, 3 per cent.

Western Metropolitan District.—This branch includes Werribee, Point Cook, Altona, and Laverton. The number of consumers is 750. Sales of electricity for the year amounted to 1,170,938 kwh., being an increase of 240,530 kwh. The major portion of the increase was contributed by industrial and commercial consumers, whose average consumption increased by 16,635 kwh. and 741 kwh. respectively. The average price per kwh. sold to domestic, commercial, and industrial consumers decreased by 2·4 per cent., 7·1 per cent., and 38·9 per cent. respectively.

COMMISSION'S ELECTRICITY SUPPLY UNDERTAKINGS FOR LOCAL DISTRIBUTION.

ALL BRANCHES.

	1931–32.	1932–33.	1933–34.
Population of Supply Area	820,360	827,980	876,218*
Number of Consumers	180,393	185,491	192,271
Percentage of Consumers to Population	22·62 per cent.	22·74 per cent.	21·96 per cent.
Sales of Energy, in Classes—			
Bulk Supplies	5,048,036 kwh.	5,507,335 kwh.	5,735,781 kwh.
Street Lighting	11,004,004 ,,	10,899,531 ,,	11,028,474 ,,
Domestic	59,382,046 ,,	63,808,876 ,,	69,687,339 ,,
Industrial	151,934,753 ,,	168,048,625 ,,	180,810,718 ,,
Commercial	28,012,557 ,,	29,677,282 ,,	32,901,671 ,,
Excluding adjustment for unread meters and service charges paid in advance at end of year	255,381,396 ,,	277,941,649 ,,	300,163,983 ,,
Revenue	£2,063,311	£2,152,785	£2,265,233
Average Revenue per kwh. sold	1·939d.	1·859d.	1·811d.
Number of Motors	18,662	19,760	21,007
Total h.p. of Motors	163,949	169,646	173,699

* Population figures cover an area of supply one quarter of a mile on each side of high and low tension mains.

BRANCH RESULTS.

METROPOLITAN ELECTRICITY SUPPLY.

	1930–31.*	1931–32.†	1932–33.	1933–34.
Population of Supply Area	626,300	631,600	632,800	637,993
Number of Consumers	139,646	141,282	144,664	149,338
Percentage of Consumers to Population	22·88 per cent.	23·19 per cent.	23·3 per cent	23·4 per cent.
Sales of Energy, in Classes—				
Bulk Supplies	237,630 kwh.	272,396 kwh.	264,405 kwh.	177,810 kwh.
Street Lighting	7,964,045 ,,	9,918,931 ,,	9,786,249 ,,	9,878,734 ,,
Domestic	37,771,450 ,,	49,360,879 ,,	53,133,386 ,,	57,972,963 ,,
Industrial	96,854,280 ,,	131,524,241 ,,	146,679,857 ,,	156,798,023 ,,
Commercial	16,937,833 ,,	20,847,179 ,,	22,296,540 ,,	24,722,916 ,,
Excluding adjustment for unread meters and service charges paid in advance at end of year	159,765,238 ,,	211,923,626 ,,	232,160,437 ,,	249,550,446 ,,
Revenue	£1,252,167	£1,557,575	£1,631,210	£1,716,276
Average Revenue per kwh. sold	1·88d.	1·764d.	1·686d.	1·65d.
Maximum Demand in kw.	66,560	68,566	73,386	77,630
Number of Motors (Excluding Bulk Supplies)	..	14,172	15,038	15,961
Total h.p. of Motors (Excluding Bulk Supplies)	108,010	131,365	135,647	139,317

* 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.

CASTLEMAINE DISTRICT.

	1929–30.	1930–31.	1931–32.	1932–33.	1933–34.
Population of Supply Area	13,550	13,550	13,550	13,550	16,665
Number of Consumers	2,275	2,361	2,393	2,428	2,541
Percentage of Consumers to Population	16·8 per cent.	17·4 per cent.	17·66 per cent.	17.9 per cent.	15·25 per cent.
Sales of Energy, in Classes—					
Street Lighting	76,450 kwh.	107,058 kwh.	110,182 kwh.	114,318 kwh.	114,485 kwh.
Domestic	256,065 ,,	483,290 ,,	547,377 ,,	598,683 ,,	628,076 ,,
Industrial— Large	127,604 ,,	45,870 ,,	140,525 ,,	289,183 ,,	421,147 ,,
Industrial— Small	34,384 ,,	55,578 ,,			
Commercial	361,079 ,,	460,553 ,,	483,756 ,,	457,795 ,,	516,434 ,,
Excluding adjustments for unread meters and service charges paid in advance at end of year	855,582 ,,	1,152,349 ,,	1,281,840 ,,	1,459,979 ,,	1,680,142 ,,
Revenue	£23,620	£29,505	£28,447	£29,010	£30,155
Average Revenue per kwh. sold	6·625d.	6·15d.	5·325d.	4·76d.	4·307d.
Maximum Demand in kw.	350	350	360	430	599
Number of Motors	166	183	172	193	201
Total h.p. of Motors	683	769	757	929	1,011

EASTERN METROPOLITAN DISTRICT.

	1929–30.	1930–31.	1931–32.	1932–33.	1933–34.
Population of Supply Area	26,200	28,300	28,300	31,600	58,800
Number of Consumers	7,189	7,845	7,881	8,702	9,232
Percentage of Consumers to Population	27·4 per cent.	27·72 per cent	27·84 per cent.	27·2 per cent	15·7 per cent.
Sales of Energy, in classes—					
Bulk Supplies	199,330 kwh.	15,450 kwh.	—	—	—
Street Lighting	187,373 ,,	215,993 ,,	206,205 kwh.	216,307 kwh.	232,365 kwh.
Domestic	2,331,636 ,,	2,826,097 ,,	3,003,430 ,,	3,123,383 ,,	3,477,038 ,,
Industrial— Large	1,396,087 ,,	1,142,864 ,,	1,765,330 ,,	2,160,400 ,,	2,300,701 ,,
Industrial— Small	772,412 ,,	706,851 ,,			
Commercial	1,052,194 ,,	1,202,675 ,,	1,273,354 ,,	1,352,499 ,,	1,612,159 ,,
Excluding adjustments for unread meters and service charges paid in advance at end of year	5,939,032 ,,	6,109,930 ,,	6,248,319 ,,	6,852,589 ,,	7,622,263 ,,
Revenue	£88,046	£90,362	£86,595	£90,485	£99,037
Average Revenue per kwh. sold	3·558d.	3·558d.	3·33d.	3·169d.	3·118d.
Maximum Demand in kw.	2,082	2,014	2,181	2,637	2,852
Number of Motors (Excluding Bulk Supplies)	439	469	496	475	551
Total h.p. of Motors (Excluding Bulk Supplies)	3,979	3,545	3,448	3,532	3,330

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

GEELONG ELECTRICITY SUPPLY.

	1930–31.*	1931–32.	1932–33.	1933–34.
Population of Supply Area	45,000	45,000	45,000	45,000
Number of Consumers	9,200	8,966	9,249	9,629
Percentage of Consumers to Population	20·45 per cent.	19·9 per cent.	21.1 per cent.	21.79 per cent
Sales of Energy, in Classes—				
Bulk Supplies	..	..	..	
Street Lighting	177,072 kwh.	223,676 kwh.	223,465 kwh.	224,832 kwh.
Domestic	1,411,679 ,,	1,863,145 ,,	2,023,788 ,,	2,253,064 ,,
Industrial—				
Large	8,112,887 ,,	10,805,083 ,,	10,507,664 ,,	12,049,433 ,,
Small	1,535,921 ,,	1,955,722 ,,	1,982,118 ,,	2,035,034 ,,
Commercial	11,237,559 ,,	14,847,626 ,,	14,737,035 ,,	16,562,363 ,,
(Excluding adjustments for unread meters and service charges paid in advance at end of year)				
Revenue	£102,366	£125,074	£126,429	£136,265
Average Revenue per kwh. sold	2·186d.	2·02d.	2·059d.	1·975d.
Maximum Demand in kw.	3,402	4,193	4,181	4,261
Number of Motors	1,672	1,725	1,772	1,861
Total h.p. of Motors	16,676	17,336	17,380	17,058

*Includes ten months' figures only.

GIPPSLAND DISTRICT.

	1929–30.	1930–31.	1931–32.	1932–33.	1933–34.
Population of Supply Area	26,870	30,200	30,200	31,390	34,210
Number of Consumers	5,534	6,315	6,383	6,558	6,758
Percentage of Consumers to Population	20·59 per cent.	20·91 per cent.	21·13 per cent	20·9 per cent.	19·75 per cent.
Sales of Energy, in classes—					
Street Lighting	163,600 kwh.	189,833 kwh.	191,004 kwh.	200,541 kwh.	202,364 kwh.
Domestic	1,257,630 ,,	1,566,443 ,,	1,650,133 ,,	1,718,466 ,,	1,838,133 ,,
Industrial—					
Large	288,840 ,,	414,806 ,,	2,671,737 ,,	2,991,351 ,,	3,552,113 ,,
Small	1,749,864 ,,	2,011,040 ,,			
Commercial	929,264 ,,	1,010,087 ,,	1,056,524 ,,	1,101,615	1,184,726 ,,
(Excluding adjustments for unread meters and service charges paid in advance at end of year)	4,389,198 ,,	5,192,209	5,569,398 ,,	6,011,973 ,,	6,777,336 ,,
Revenue	£69,489	£78,319	£78,948	£80,105	£83,045
Average Revenue per kwh. sold	3·8d.	3·62d.	3·4d.	3·198d.	2·94d.
Maximum Demand in kw.	1,730	2,020	2,020	2,100	2,335
Number of Motors	699	686	694	762	797
Total h.p. of Motors	3,260	3,647	3,722	3,956	4,002

NORTH-EASTERN DISTRICT

	1929–30.	1930–31.	1931–32.	1932–33.	1933–34.
Population of Supply Area	34,200	34,200	36,410	36,940	43,050
Number of Consumers	6,045	6,070	6,677	6,845	7,497
Percentage of Consumers to Population	17·7 per cent.	17·74 per cent.	18·34 per cent.	18·53 per cent.	17·4 per cent.
Sales of Energy, in classes—					
Bulk Supplies	4,396,140 kwh.	4,213,321 kwh.	4,775,640 kwh.	5,242,930 kwh.	5,557,971 kwh.
Street Lighting	158,142 ,,	161,598 ,,	163,378 ,,	170,981 ,,	190,273 ,,
Domestic	1,102,004 ,,	1,216,506 ,,	1,299,693 ,,	1,458,984 ,,	1,625,645 ,,
Industrial—					
Large	881,210 ,,	773,527 ,,	2,182,802 ,,	2,518,792 ,,	2,429,803 ,,
Small	1,365,785 ,,	1,147,536 ,,			
Commercial	1,196,154 ,,	1,224,692 ,,	1,342,081 ,,	1,373,888 ,,	1,559,269 ,,
(Excluding adjustments for unread meters and service charges paid in advance at end of year)	9,099,435 ,,	8,737,180 ,,	9,763,594 ,,	10,765,575 ,,	11,362,961 ,,
Revenue	£99,534	£97,387	£100,895	£108,213	£111,553
Average Revenue per kwh. sold	2·625d.	3·021d.	2·48d.	2·413d.	2·356d.
Maximum Demand in kw.	2,559	2,995	2,690	2,874	3,159
Number of Motors (Excluding Bulk Supplies)	537	560	590	665	710
Total h.p. of Motors (Excluding Bulk Supplies)	3,023	3,385	3,152	3,640	3,822

SOUTH-WESTERN DISTRICT.

	1929–30.	1930–31.	1931–32.	1932–33.	1933–34.
Population of Supply Area	31,200	31,200	31,200	32,200	36,200
Number of Consumers	5,741	6,011	6,126	6,339	6,526
Percentage of Consumers to Population	18·4 per cent.	19·26 per cent.	19·63 per cent	19·7 per cent.	18·03 per cent
Sales of Energy, in classes—					
Street Lighting	156,438 kwh.	163,343 kwh.	153,751 kwh.	153,878 kwh.	163,725 kwh.
Domestic	1,202,741 ,,	1,380,442 ,,	1,460,737 ,,	1,548,605 ,,	1,678,156 ,,
Industrial—					
Large	807,520 ,,	1,430,273 ,,	2,307,863 ,,	2,303,397 ,,	2,528,433 ,,
Small	784,271 ,,	761,204 ,,			
Commercial	991,976 ,,	964,634 ,,	986,377 ,,	1,017,773 ,,	1,067,220 ,,
(Excluding adjustments for unread meters and service charges paid in advance at end of year)	3,942,946 ,,	4,699,900 ,,	4,908,728 ,,	5,023,653 ,,	5,437,534 ,,
Revenue	£73,166	£75,943	£76,480	£77,806	£78,438
Average Revenue per kwh. sold	4·454d.	3·878d.	3·74d.	3·717d.	3·462d.
Maximum Demand in kw.	(*a*) 1,340	(*a*) 1,570	(*a*) 1,680	(*a*) 1,720	(*a*) 1,870
	(*b*) 211	(*b*) 211	(*b*) 225	(*b*) 213	(*b*) 260
Number of Motors	597	767	726	772	831
Total h.p. of Motors	2,951	3,490	3,347	3,706	4,234

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

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

WESTERN METROPOLITAN DISTRICT.

	1929–30.	1930–31.	1931–32.*	1932–33.	1933–34.
Population of Supply Area	10,300	10,300	4,100	4,500	4,300
Number of Consumers	1,997	1,919	685	706	750
Percentage of Consumers to Population	19·4 per cent.	18·63 per cent.	16·7 per cent.	15·7 per cent	17·44 per cent.
Sales of Energy, in Classes—					
Street Lighting	97,105 kwh.	94,317 kwh.	36,877 kwh.	33,792 kwh.	21,696 kwh.
Domestic	517,811 ,,	560,000 ,,	196,652 ,,	203,581 ,,	214,264 ,,
Industrial— Large (Excluding adjustments for unread meters and service charges paid in advance at end of year)	3,431,601 ,,	2,433,345 ,,	537,172 ,,	597,981 ,,	731,065 ,,
Industrial— Small (Excluding adjustments for unread meters and service charges paid in advance at end of year)	326,983 ,,	267,062 ,,			
Commercial (Excluding adjustments for unread meters and service charges paid in advance at end of year)	164,518 ,,	166,590 ,,	67,564 ,,	95,054 ,,	203,913 ,,
	4,538,018 ,,	3,521,314 ,,	838,265 ,,	930,408 ,,	1,170,938 ,,
Revenue	£29,921	£26,662	£9,197	£9,527	£10,464
Average Revenue per kwh. sold ..	1·582d.	1·817d.	2·63d.	2·457d.	2·146d.
Maximum Demand in kw.	1,916	1,885	326	371	405
Number of Motors	389	391	87	93	95
Total h.p. of Motors	5,136	5,222	822	856	925

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

TARIFF REDUCTIONS.

The direct reductions in its scheduled tariffs made by the Commission since its inception represent a benefit to consumers of £90,000 per annum, based on the consumption figures at the time the reductions were made. These savings are quite independent of the benefits accruing to consumers from the automatic reductions in the average price per unit due to the combined effect of increased consumption and the form of the Commission's tariffs. Evidence of these latter benefits is provided by a comparison between figures for the years 1924–25 and 1933–34 :—

Year.	Total Retail Sales in Kwh.	Revenue.	Average Revenue per Kwh.
		£	
1924–25	120,342,000	1,266,000	2·52d.
1933–34	300,163,000	2,265,000	1·81d.
	Increase 179,821,000 = 149%	Increase 999,082 = 79%	Decrease 0·71d.

The increase in revenue of only 79 per cent., compared with the increase of 149 per cent. in consumption, illustrates the benefits accruing to consumers from the characteristics of the Commission's standard tariffs. This represents, in addition to the direct reductions, a decrease of nearly 30 per cent. in the average cost per kwh. to metropolitan and country consumers since the Commission commenced operations; the value of this benefit amounts to several hundreds of thousands of pounds per annum.

Dealing specifically with the domestic class, a similar analysis is set out below ; in this case the comparison is made with the year 1925–26, this being the first year in which the consumptions of the various consumer classes were kept separately :—

Year.	Total Retail Sales in Kwh.	Revenue.	Average Revenue per Kwh.
		£	
1925–26	26,583,000	600,000	5·42d.
1933–34	70,409,000	927,000	3·16d.
	Increase 43,826,000 = 165%	Increase 327,000 = 55%	Decrease 2·26d.

This represents a decrease of nearly 42 per cent. in the average cost per kwh. to metropolitan and country domestic consumers since the Commission commenced operations.

A further illustration of the manner in which the Commission's form of tariffs benefits consumers is afforded by the last column of Appendix No. 6 of this Report. This column shows the great extent to which country undertakings acquired by the Commission have benefited and developed by the change in control.

The foregoing analyses exclude benefits which have accrued to users of electricity in metropolitan districts supplied in bulk by the Commission, the municipal undertakers therein being required to offer the Commission's standard tariffs to their consumers.

During the year under review, reduced charges for commercial lighting in Koroit and Port Fairy became effective from 1st December, 1933, as indicated in the Fourteenth Annual Report. In addition, the following direct reductions in scheduled charges, representing a total saving of £22,000 per annum when based on consumption at the time the reductions came into force, were made :—

Public Lighting.—On 1st January, 1934, a reduction of about 6 per cent. was made in public lighting charges in the metropolitan area, in Geelong, and in country districts. A corresponding reduction in Ballarat and Bendigo became effective on 1st May, 1934. These reductions mean an annual saving to the municipalities concerned of £7,000.

South-Western District.—On 1st March, 1934, reductions were made in the industrial power and heating two-part tariffs in the South-Western District, the service charges being reduced by 1s. per h.p. per month (less the usual discounts for large installations) the energy charge during prescribed (off-peak) hours being reduced from 0·7d. to 0·35d. per kwh. and the energy charge during other periods of the day being reduced from 1¼d. to 1d. per kwh. These alterations brought the tariffs in the South-Western District into line with corresponding tariffs in other country districts and resulted in a saving of about £3,000 per annum to consumers taking supply at the time of the alterations.

Ballarat and Bendigo.—On 1st May, 1934, the commercial and industrial lighting rates in Ballarat and Bendigo were reduced from 9d. to 7d. per kwh. and the maximum demand power tariffs in those cities were replaced by block rates, while, as mentioned above, alterations were also made in the public lighting rates. These reductions more than fulfil the promise given to Ballarat and Bendigo that their rates would be reduced when the Commission assumed full control of those undertakings, as they were made effective before the actual date of transfer, viz., 1st July, 1934. Excluding the reductions made at the same time in the charges for public lighting, the benefit of the reduced rates to consumers in Ballarat was about £6,900 per annum, and in Bendigo about £5,000 per annum.

Other tariff modifications made during the year were :—

(*a*) Special rates for decorative lighting during the Centenary celebrations. These rates, which will be available from October, 1934, to June, 1935 (both months inclusive) are :—

1d. per kwh. in Metropolitan Electricity Supply.
2d. per kwh. in Geelong Electricity Supply.
2½d. per kwh. in Ballarat Electricity Supply and Bendigo Electricity Supply.
3d. per kwh. in Country Districts.

(*b*) Increase to 12 per cent. of the discount on the energy charge in the industrial power and heating two-part tariffs available in country districts for consumptions of over 100,000 kwh. per month.

(*c*) Conditions under which standby supplies will be made available, including the following main provisions :—

(i) A consumer requiring a standby supply either for lighting or power purposes will be required to pay a standing charge of 3s. 6d. in the metropolitan area and 4s. in Geelong, Ballarat and Bendigo per kw. of demand per month. (In the country districts, scheduled tariffs and their associated rulings are applicable to standby supplies).

(ii) Electricity equivalent to the amount of standing charge at the standard lighting or power tariffs (excluding night tariffs) may be used without further charge, any consumption beyond this amount to be paid for at the appropriate rates.

BRIQUETTE MANUFACTURE AND DISTRIBUTION.

Sales	**328,658 tons**
Revenue	**£309,936**
Expenditure	**£325,383**
Loss	**£15,447**

The expenditure covers all charges, including interest and depreciation.

Sales show an increase of 26,174 tons. Of this increase the Commission's power stations at Richmond, Geelong, Ballarat and Bendigo account for 13,735 tons. The year's sales are 8 per cent. greater than those of 1932–33, which in turn were also 8 per cent. greater than those of 1931–32.

Little change can be recorded in the abnormally low price levels and the extremely competitive conditions which have prevailed in the general fuel market since 1929–30. These depressed conditions applied alike to the industrial and domestic fields, and were reflected in the operations of all wholesale fuel suppliers. Additionally, in the household field the market was narrowed by the continuance of Government distribution of free firewood (approximately 70,000 tons) in the relief of distress.

In the circumstances, the loss of £15,447 for the year was not unexpected—in fact, it is much less than was estimated, and £3,395 less than in 1932–33. The Briquette factory was maintained in production at full capacity throughout the whole period, thus contributing substantially to economies in general operations at Yallourn, notably in coal-winning, thereby cheapening the cost of producing electricity at the source. As in the past, these savings in electricity production more than offset the comparatively small deficiency in the briquetting accounts, while other material advantages continue to accrue to the public of Victoria as the direct result of the existence of this standard and uninterrupted fuel supply.

As formerly, the distribution of household briquettes was effected through the retail fuel merchants, who offered them for sale, mainly in the winter season, in conjunction with their other forms of domestic fuel. There are 800 regular fuel merchants in the metropolitan area, but the number increases to 1,500 during the winter season. Sales of household briquettes in recent years have not followed a regular trend owing to the necessity in 1929–30, prior to the extension of the factory, to ration domestic uses in order to meet the requirements of the industrial market, supplies to which were interrupted for a long period by a strike on the New South Wales black coalfields. The new industrial business thus gained was retained, and until the extended factory attained full production supplies to householders continued to be restricted. The following figures show the household sales of briquettes in Melbourne during the last six years :—

1928–29	65,553	tons
1929–30	46,014	,,
1930–31	51,499	,,
1931–32	69,137	,,
1932–33	68,133	,,
1933–34	70,927	,,

In the industrial market, where competitive factors compel the Commission to effect direct sales and service to individual factories, the increase in demand has been much more marked. While the consumption of other forms of industrial fuel (especially Newcastle coal) has shown a falling off, due in part to conversion to electric drive, industrial briquettes have maintained a continuous and substantial increase in turnover each year, as follows :—

1928–29	76,192	tons
1929–30	107,242	,,
1930–31	153,337	,,
1931–32	196,970	,,
1932–33	219,679	,,
1933–34	242,589	,,

The Commission is at a disadvantage in having no direct contact with the eventual consumer in the household market, so, with the object of stimulating sales by educating householders regarding the advantages possessed by briquettes, the Commission instituted a systematic house-to-house canvass during the year, orders obtained being passed on to the fuel merchant named by the householder. Much good has been done in directing the attention of householders to the benefits to be gained in the economy and superior heating qualities of briquettes, particularly when consumed in suitable appliances. Specially designed briquette grates and fireplaces are now being turned out in large numbers by Victorian manufacturers and distributed by city and suburban ironmongers to meet the public demand created as a result of the Commission's research and developmental efforts.

GEELONG TRAMWAYS.

The loss on the tramways in Geelong was £13,228, after providing £5,962 for depreciation. The loss is only £624 less than that in the previous year, although the cost of operating the tramways was reduced by £1,300, or a total reduction of £11,300 in three years. The revenue during the year declined by £670, following on the drop of £1,300 in the previous year. The number of car passengers carried was 76,000 less than in the previous year, or a drop of 248,000 in two years. Stress is again laid on the fact that the extent to which it will be possible in the future to reduce the burden to be borne by electricity supply in Geelong entirely depends upon the patronage given by the citizens to their local tramways.

PART III.—DESIGN, CONSTRUCTION, AND OPERATION.

COAL SUPPLY.

Yallourn Open Cut.

Overburden Removal.—Working one shift a day, the dredge was able to maintain sufficient reserves of uncovered coal. The quantity of overburden removed during the year was 735,550 cubic yards, which brings the total quantity of overburden removed since operations commenced to 8,295,290 cubic yards. At the end of the year, the area of the open cut had increased from 177 acres to 195 acres at "grass level", and from 150 acres to 164 acres at the level of the surface of the coal.

Coal Winning.—The coal won during the year amounted to 2,692,874 tons. The total quantity of coal excavated from the cut since the commencement of operations is 16,255,083 tons, of which 3,908,335 tons have been won from the lower (No. 2) level, where the dredge, working in conjunction with the electric steep haulage, is reaching down to the bottom of the coal.

Of the coal won during the year, 1,438,929 tons went to the power station, and 1,253,945 tons to the briquette factory.

Boring.—Boring operations have been continued in the area between the railway and the Morwell River. The eleven bores put down aggregated 2,712 feet, and showed coal averaging 201 feet in thickness, covered by an average of 38½ feet of overburden over an area of approximately 100 acres, representing 27,300,000 tons of coal.

ELECTRICITY SUPPLY—GENERATION AND TRANSMISSION.

Yallourn Power Station.

Maximum load during year ended 30th June, 1934	**86,000 kw.**
Generated during year ended 30th June, 1934	**381,443,400 kwh.**
Received from briquetting factory during year	**47,867,090 kwh.**
Total	**429,310,490 kwh.**

The production of this station established a new record both in regard to the load carried and the kwh. generated. Compared with the previous year, when the highest recordings up to that time were made, the loading was 6,000 kw. greater, and the kwh. generated 43,152,240 more. To this latter increase the power station contributed 37,219,300 kwh., and the briquette factory 5,932,940 kwh.

Two failures of alternator cables occurred in quick succession in April, but supply from the station was interrupted for a few minutes only. New cables are to replace the faulty ones, and will be installed in such a manner that each alternator will have a separate route for its cables, so that the failure of any one will not affect the others.

Boiler Plant.—The reconstruction of the original boiler plant was completed in October, 1933, when No. 7 boiler went back into service, fully reconditioned. The reconstruction resulted in an all-round improvement in the performance of the old boilers, as well as in the general conditions of both boiler houses, the absence of dust and fumes being a noticeable feature. The performance of both the new and old boiler plant was most satisfactory.

Experimental work is being directed towards the elimination of cinders in the flue gases, and the indications are that a suitable method of trapping these cinders will soon be evolved.

Increased coal requirements are taxing the capacity of the present coal handling plant, and consideration is being given to an extension of the existing facilities.

On occasions during the year, the turbo-generator plant had to meet demands of from 80 per cent. to 86 per cent. of its aggregate capacity. Towards the end of the year, therefore, the work of installing the second 25,000 kw. set was commenced.

Considerable preliminary investigation has been conducted in regard to the possible increase in capacity of the station to be derived from the use of higher steam pressures and temperatures for future extensions of plant.

RICHMOND POWER STATION.

Maximum load during year ended 30th June, 1934	**15,120 kw.**
Generated during year ended 30th June, 1934	**22,570,000 kwh.**

This station, which is one of the two metropolitan peak load stations, and which uses briquettes exclusively, operated most satisfactorily. The energy sent out was practically the same as in the previous year.

NEWPORT " B " POWER STATION.

Maximum load during year ended 30th June, 1934	**18,500 kw.**
Generated during year ended 30th June, 1934	**7,564,173 kwh.**

This station was in commission for six months of the year, compared with two months in the preceding period.

SUGARLOAF–RUBICON HYDRO STATIONS.

Maximum load during year ended 30th June, 1934	**22,800 kw.**
Generated during year ended 30th June, 1934	**100,986,100 kwh.**

Another year of low output was experienced, the number of kwh. being 11,000,000 less than in the previous year and 22,000,000 less than in 1931–32. This was due to the continuance of unfavourable weather conditions, which affected all stations and caused that at Sugarloaf to be shut down for a longer period than usual.

YALLOURN–MELBOURNE 132,000-VOLT TRANSMISSION LINES.

Both the Yallourn–Yarraville and the Yallourn–Richmond main transmission lines operated without major trouble throughout the year. In February last, one of the circuits was struck by lightning, but supplies to Melbourne were not affected.

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

The 66,000-volt line from Rubicon " A " to Melbourne suffered one major interruption. This was caused by lightning, the cross-arms and one pole of an " H " structure being burned. Pending repairs the loading was carried by the fuel-burning stations, and the requirements of the system were met without dislocation of supply.

TERMINAL STATIONS.

Terminal station equipment at Yarraville, Richmond and Thomastown, including transformers, oil circuit breakers, rotating machines, bus and control systems, gave little trouble and no maintenance of an extraordinary character was necessary. The erection of switchgear at the Yarraville terminal station is proceeding, preparatory to the installation of a new 37,500 kva. transformer.

CENTRAL SUPPLY DISTRIBUTION.

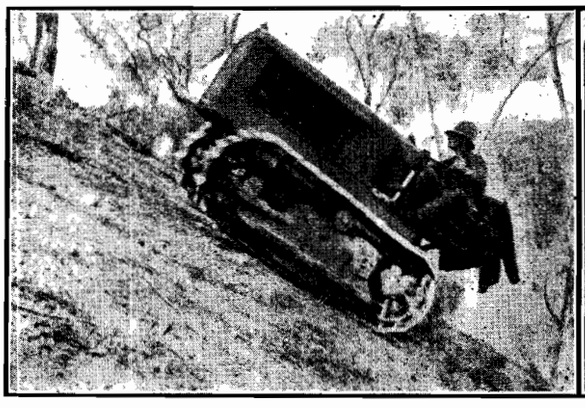
A high degree of reliability of supply was again achieved on the 22,000-volt overhead and underground metropolitan distribution system. No failures of any description occurred on the underground cable network, and the few interruptions to overhead lines were attributable to extraneous interferences, such as that caused by footballs, &c. Insulator failures in service were confined to a number of the strain type which developed cracks. Main sub-station equipment as a whole functioned satisfactorily, the only failures of consequence being those of two of the transformers at sub-station " K " (Camberwell), which necessitated the replacement of portions of the low tension windings.

In regard to the installation of synchronous condensers at sub-station " B " (Collingwood), a novel method of assembly had to be followed on account of the restricted space available. A travelling gantry was substituted for the usual crane, and the stator (fitted with temporary rollers) was rolled into position and threaded over the rotor in one operation. A saving of from £3,000 to £4,000 in land, buildings and crane was thereby effected. The assembly of the first machine has been completed, and the switchgear well advanced, with the object of bringing the machine into operation in September.

A commencement was made on the new 22,000-volt underground cable and pilot cables between Richmond terminal station and sub-station " H " (St. Kilda). To enable a periodical examination to be made a joint located at the top of a steep gradient falling to the River Yarra, will be housed in a permanent concrete inspection pit, which will enable a study of oil migration to be made.

OVERHEAD LINE CONSTRUCTION IN DIFFICULT COUNTRY.

Construction was commenced during the summer months on the deviation of the Sugarloaf - Benalla transmission line in the neighbourhood of Mt. Enterprise, involving conversion of eleven spans (carried on that number of wooden structures and one steel structure) to three spans of steel masts. Each mast will carry one conductor only, and three masts will be at each of the four strain positions. In the hilly to mountainous country traversed, transport of material to the sites of the structures presented features not often encountered in line construction. The material was loaded on a barge at Eildon Weir, taken seven miles by water, and then hauled a further seven or eight miles by caterpillar tractor. When grades were encountered which could not be negotiated directly, the tractor was driven to the top of the grade. Then, with the loaded trailer attached by a steel wire rope passing through a snatch block attached to a stout tree, the tractor was driven down hill, the trailer being thus hauled up. The accompanying photographs illustrate the operations involved. This is the first time that mechanical transport has been used in this fashion in the mountainous country concerned. Previously large bullock teams were employed, and they took considerably longer to haul a quarter of the weight up the stiff grades.



20 h.p. Caterpillar Tractor ascending grade of approximately 1 in 2, Bald Hill, north of Mt. Enterprise.

Caterpillar Tractor descending same grade after being attached to wire rope, by which trailer was drawn up the hill as tractor descended.

The work when completed will materially reduce maintenance costs on this section, in addition to increasing the reliability of transmission.

WATER POWER INVESTIGATIONS.

The possibilities of a hydro electric scheme on the Mitta River operating in conjunction with the Hume Reservoir, were further investigated, a start being made on the testing of the rock formations at suitable dam sites. Following the purchase of a diamond drilling plant, drilling has proceeded on the Mitta River below Gibbo Creek.

Other dam sites on the Mitta have also been surveyed and examined geologically, the whole of this work being carried out in close collaboration with the geologists of the Mines Department.

As mentioned in the Fourteenth Annual Report, the necessity for the verification of certain important hydrological aspects of the proposals for the possible Kiewa Scheme led to a special study of meteorological data, and the establishment of a meteorological and research station on the Bogong High Plains, this work being carried out with the assistance of the Commonwealth Meteorological Bureau. Regular observations and research are being maintained at this station. The accompanying photograph shows the region in which this work is proceeding.

The collection and study of stream flow records were actively continued throughout the year, and at the end of the period the Commission was maintaining twenty-two gauging stations, nineteen of these being equipped with automatic recording gauges.

Careful maintenance of stations and regular current meter measurements have ensured a high degree of accuracy in these gaugings.

This view, taken on the Bogong High Plains at an elevation of over 5,000 feet above sea level, shows a part of the catchment area feeding the streams under investigation for hydro-electric development.

Much of the Kiewa catchment is of basin-like character, well suited to the construction of reservoirs in which the water from the heavy winter snow can be conserved for use throughout the year.

ELECTRICITY SUPPLY—DISTRIBUTION AND SALES.

Metropolitan Electricity Supply.—To cope with the normal additional loading from all classes of consumers—domestic, commercial and industrial—construction activities chiefly concerned the strengthening of mains, increasing the capacity at existing sub-stations, and the erection of new sub-stations.

There are 514 transformer sub-stations now in operation, representing an increase of 28 and involving an increase of 22 transformers with an additional kva. capacity of 5,090.

By co-ordination of the wireless broadcasting service with the motor transport and patrolling activities, steady progress has been maintained in decreasing the duration of interruptions to supply. Since 1928 the average period of each interruption has been decreased by more than 50 per cent.

Geelong Electricity Supply.—The construction work carried out being of a minor nature, opportunity was taken to give particular attention to maintenance and the correction of loading where necessary. Two aerial type sub-stations were erected, while a 300 kv. transformer giving a temporary supply to the Albion Woollen Mills was dismantled, as a result of which the total kva. capacity of installed transformers was reduced by 100 to 8,955 kva.

Castlemaine District.—With the exception of the reticulation within the township of Harcourt, which was completed early in the year, construction activities were confined to works of a minor nature. No serious operating difficulties were experienced.

Eastern Metropolitan District.—Major constructional works were entailed by several extensions of supply. At the end of the year, the erection of 6·6 kv. lines to supply Selby, Clematis and Emerald was nearing completion.

Gippsland District.—The 22 kv. line was extended from Tynong to Nar-nar-goon, in order to make supply available to the latter town. Other major construction works involved the supply to the pumping station at Sale, and to a rural group at Maffra, while several smaller extensions, including the erection of three rural sub-stations, were effected.

The operating difficulties encountered were of a minor nature, the most serious interruptions being due to lightning, the effect of which is being mitigated by the installation of arrestors of the oxide film type.

North-Eastern District.—The 22 kv. line from Shepparton to Numurkah, which was constructed towards the end of the last financial year, was further extended from Numurkah to Nathalia. The latter towns now receive alternating current from the main supply system, the local generating plants having been dismantled. Following the acquisition of the Wodonga undertaking, the system of supply there was converted from direct current to alternating current. In the Alexandra, Wodonga, Kyabram and Numurkah areas, sub-stations were erected to supply rural consumers.

Severe lightning damaged two transformers at Dookie, and one at Mansfield.

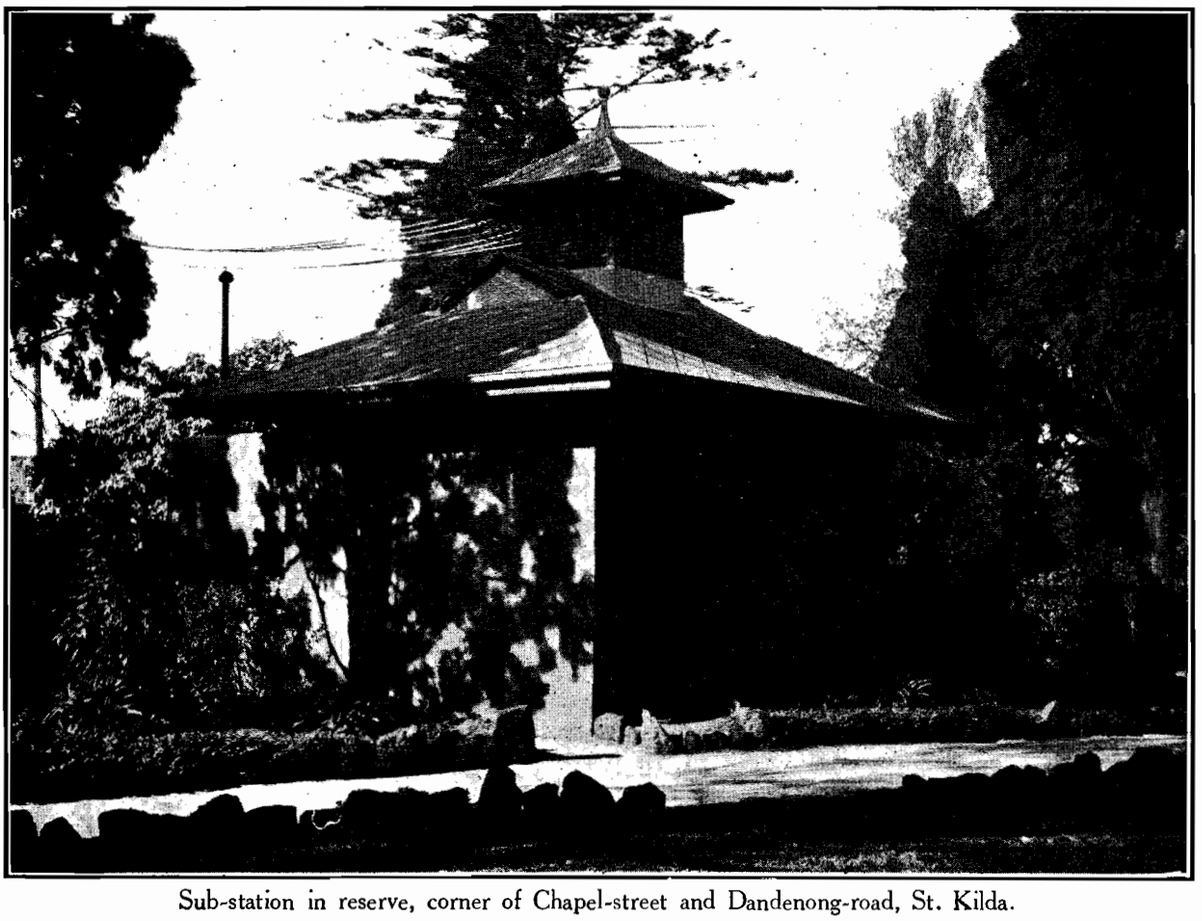
At the conclusion of the year a 22 kv. line to supply the Cock's Pioneer Gold and Tin Mine at Eldorado, was under construction. The ultimate demand of this Company is expected to reach 1,500 horse power.

The Rubicon "A"–Benalla 66,000-volt transmission line operated without interruption throughout the year.

TYPES OF SUB-STATIONS, METROPOLITAN ELECTRICITY SUPPLY.

Buildings are designed to harmonize with the architectural and other features of the localities in which they are placed.

Sub-station on land adjoining St. John's Church of England, Toorak.



Sub-station in reserve, corner of Chapel-street and Dandenong-road, St. Kilda.

South-Western District.—Reconstruction work was carried out on a section involving 3·6 miles of the 6·6 kv. feeder between Warrnambool and Allansford. The construction activities were confined to those of a routine and minor nature. Operations proceeded normally.

With the exception of a brief interruption due to lightning, supply was maintained continuously over the Belmont–Warrnambool 44,000-volt transmission line throughout the year.

MAIN AND BRANCH DISTRIBUTION SYSTEMS.

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.

BRIQUETTING AND RESEARCH.

The output of the Yallourn briquette factory for the year was 323,613 tons, an increase of 5·1 per cent. on the previous twelve months' production. The respective outputs for "H", "I" and "N" briquettes were 103,740 tons, 112,574 tons and 107,299 tons.

The increasing demand for industrial nut "N" briquettes, which are the smallest of the types made at the factory, has had the effect of somewhat reducing press capacity, as the output per press of this very small briquette is less than of the large industrial briquette "I", and the still larger household briquette "H". In order to maintain factory capacity and to provide standby plant, which the factory has lacked in the past, two additional triple presses, electrically driven, are being installed. Practically all parts for these presses, excepting the electric motors (which are being obtained from England) are being fabricated in Australia.

The total energy generated at the factory was 63,111,580 kwh., of which there was delivered at the power station 47,867,490 kwh., the remainder being used in the factory. In the previous year, the total energy generated at the factory was 56,533,080 kwh., of which 41,934,150 kwh. was delivered at the power station.

The factory operated satisfactorily throughout the year. The continuous sludge filtration plant installed towards the end of 1933 for disposing of the coal dust collected from the closed conveyors by the factory fan exhaust systems is proving effective.

PART IV.—GENERAL.

RE-APPOINTMENT OF COMMISSIONERS.

On the 22nd December, 1933, the Governor in Council approved the re-appointment of Sir Thomas Lyle, K.B., and Sir Robert Gibson, G.B.E., as Commissioners for a further term of three years from the 10th January, 1934.

DEATH OF COMMISSIONER SIR ROBERT GIBSON, G.B.E.

On the 1st January, 1934, the public of Australia and the Commission suffered a severe loss by the death of Sir Robert Gibson. The following minute was recorded by the Commission :—

"With great sorrow and a heavy sense of loss, the Commission records the death, on the 1st January, 1934, of Sir Robert Gibson, G.B.E., who had been a Commissioner since July, 1919, and had rendered invaluable service in the establishment and development of the State Electricity undertaking, to the affairs of which his time and conspicuous talents were generously applied. His work in this regard is the more appreciated by his colleagues because of the heavy calls that were made upon him by his other public duties, particularly those as Chairman of the Board of Directors of the Commonwealth Bank, in which capacity he wisely and successfully guided the financial affairs of the Commonwealth during one of the most difficult periods in its history. The Commissioners share the profound and sincere public regret at the passing of a great citizen."

APPOINTMENT OF COMMISSIONER.

To fill the vacancy caused by the death of Sir Robert Gibson, the Governor in Council, on 1st May, 1934, approved the appointment of Mr. C. A. Norris, F.I.A. (London), for a term of five years.

STAFF.

The high level of efficiency attained by the Commission's undertakings in all their aspects reflects the loyal and efficient services rendered by the staff, and the Commission has again very great pleasure in recording its appreciation of the manner and spirit in which the various duties are performed.

(Sgd.) F. W. CLEMENTS, Chairman.
THOMAS R. LYLE, Commissioner.
D. J. McCLELLAND, Commissioner.
C. A. NORRIS, Commissioner.

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

17th September, 1934.

APPENDIX No. 1.

AUDITOR-GENERAL.—VICTORIA.

Melbourne.

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, 1934. The values of the stores have been accepted on the certificates of the storekeepers.

J. A. NORRIS,
Auditor-General,
21st September, 1934.

APPENDIX No. 1.

STATE ELECTRICITY COMMISSION OF VICTORIA.

GENERAL BALANCE-SHEET AS AT 30th JUNE, 1934.

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		10,876,334 0 0	
Add Expenditure under Treasury Act No. 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	
,, ,, ,, ,, ,, 2026		92,327 19 8	
		18,125,999 4 11	
Deduct Redeemed or cancelled Securities		466,173 9 4	
		17,659,825 15 7	
Advances by Treasury from Public Account (Section 39, Act 3776)		55,973 10 0	
Debentures (as per Schedule)		1,393,859 10 2	
			19,109,658 15 9
CURRENT AND ACCRUED LIABILITIES—			
Sundry Creditors		36,038 12 0	
Sundry Creditors' Retention		6,480 4 8	
Consumers' Deposits		27,093 8 1	
Service Charges received in Advance		59,822 13 9	
Unclaimed Wages		118 18 1	
Consumers' Advances for Construction		8,716 13 8	
Other Deposits and Trust Moneys		7,744 19 10	
Interest Accrued		78,912 3 6	
Salaries and Wages Accrued		18,061 18 11	
Insurances, Telephone Charges, and Rents Accrued		6,804 1 2	
Miscellaneous Current and Accrued Liabilities		15,859 10 9	
			265,653 4 5
RESERVES—			
Depreciation and Sinking Fund		3,138,120 14 5	
Doubtful Debts		6,338 0 2	
Contingency and other		187,636 9 2	
			3,332,095 3 9
			£22,707,407 3 11

ASSETS.

	£ s. d.	£ s. d.	£ s. d.
FIXED CAPITAL—			
Coal Supply Works	956,043 10 1		
Briquette Works	1,239,181 2 8		
Power Stations—			
Steam	4,675,937 12 3		
Hydro.	817,073 11 1		
Transmission Lines	2,161,493 10 6		
Terminal Stations	912,434 10 11		
Transmission Sub-stations	601,242 6 3		
Distributing Systems	5,124,470 4 5		
Tramways	199,459 9 3		
Townships	717,382 4 9		
General	1,368,652 4 4		
Unfinished Construction	890,194 17 11		
	19,663,565 4 5		
Deduct Proportion of cost of extensions payable by consumers	11,596 8 10		
		19,651,968 15 7	
CURRENT AND ACCRUED ASSETS—			
Cash	102,754 10 11		
Sundry Debtors	491,956 7 11		
Stores	313,733 15 7		
Advances	97,666 4 7		
Investments	342,608 5 5		
Miscellaneous Current and Accrued Assets	2,876 3 3		
		1,351,595 7 8	
RESERVE FUNDS—			
Sinking Funds	9,704 14 2		
		9,704 14 2	
SUSPENSE—			
Overburden Removal and Disposal	538,063 6 4		
Chargeable Work	2,085 18 5		
Paid in Advance Accounts	1,592 2 5		
Unamortised Loan Flotation Expense	215,839 1 10		
Work in Progress	8,975 0 10		
Amount charged to Commission by Treasury in accordance with decision of Cabinet, 22nd July, 1922	42,023 6 8		
Hospital and Health Centre, Yallourn	32,470 4 6		
Miscellaneous	97,100 1 8		
Profit and Loss—			
As at 30th June, 1933 £789,107 18 10			
Less Profit for year 1933–34 33,118 15 0			
	755,989 3 10		
		1,694,138 6 6	
			£22,707,407 3 11

There is a contingent asset and liability in respect of securities lodged as bona fides under Contracts to the extent of £10,352 4s. 7d., and held by the Bank on the Commission's behalf.

H. S. KILFOYLE,
Chief Accountant.

R. LIDDELOW,
Manager.

STATE ELECTRICITY COMMISSION OF VICTORIA

GENERAL PROFIT AND LOSS ACCOUNT FOR YEAR ENDED 30th JUNE, 1934.

Dr. *To Expenditure*—	£	s.	d.	£	s.	d.
Electricity Supply—						
Purchased Power	28,991	13	11			
Generation and Transmission	1,331,103	2	4			
Distribution	980,517	12	10			
	2,340,612	9	1			
Deduct Cost of Power transferred to Works	15,639	13	3			
				2,324,972	15	10
Briquetting—						
Manufacturing	212,187	12	7			
Distribution and Selling	171,149	3	8			
	383,336	16	3			
Deduct Cost of Briquettes transferred to Works	57,953	5	8			
				325,383	10	7
Tramways				46,738	6	9
Miscellaneous				16,246	13	0
Sinking Fund Contributions				14,288	6	8
Provident Fund Contributions				21,803	11	3
Loan Flotation Expenses				12,000	0	0
Exchange on Overseas Remittances				139,617	19	1
Proportion of amount charged to Commission by Treasury in accordance with decision of Cabinet, 22/7/22				5,000	0	0
Contingency Reserve				94,000	0	0
Special Writings off				28,342	7	8
To Profit carried down				33,118	15	0
				3,061,512	5	10
To Balance as at 30th June, 1933				789,107	18	10
				£789,107	18	10

By Income—	£	s.	d.	£	s.	d.
Electricity Supply—						
Bulk Supply	462,473	10	8			
Street Lighting	119,069	10	11			
Domestic	927,280	11	3			
Industrial	712,375	5	10			
Commercial	479,501	18	10			
Miscellaneous	8,362	14	8			
	2,709,063	12	2			
Add Meters unread 30th June, 1934, and Service Charges received in advance 30th June, 1933	170,620	1	7			
	2,879,683	13	9			
Deduct Meters unread 30th June, 1933, and Service Charges received in advance 30th June, 1934	161,691	10	4			
				2,717,992	3	5
Briquetting—						
Briquette Sales	321,181	12	4			
Add Briquettes on hand 30th June, 1934	56,258	15	0			
	377,440	7	4			
Deduct Briquettes on hand 30th June, 1933	67,504	7	8			
				309,935	19	8
Tramways				33,510	2	11
Miscellaneous				73	19	10
				3,061,512	5	10
By Profit for year				33,118	15	0
By Balance as at 30th June, 1934, carried to General Balance-sheet				755,989	3	10
				£789,107	18	10

Cr.

BRANCH ELECTRICITY SUPPLY UNDERTAKINGS.

Balance-sheet as at 30th June, 1934.

—	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	..	..	..	329,706 0 5	..	..	..	..
Transmission Lines	..	81,919 0 6	63,864 6 7	..	125,989 3 8	246,060 3 8	139,214 3 0	7,931 14 10
Transmission Sub-stations	..	..	..	..	6,348 3 7	61,523 13 8	46,237 11 11	..
Distributing Systems	3,622,290 8 10	117,286 16 1	348,807 0 6	275,370 0 11	246,970 10 10	244,957 18 7	225,384 2 10	26,231 17 7
Tramways	..	..	..	199,459 9 3	..	..	..	..
General	558,733 6 6	3,465 11 11	19,307 15 10	3,279 4 2	5,161 5 5	16,130 14 4	11,415 19 8	199 16 8
Unfinished Construction	..	..	4,913 19 0	..	..	2,267 0 6	29 2 0	..
	4,181,023 15 4	202,671 8 6	436,893 1 11	807,814 14 9	384,469 3 6	570,939 10 9	422,280 19 5	34,363 9 1
Deduct Proportion of Cost of Extensions Payable by Consumers	3,625 19 8	199 7 6	3,986 11 4	57 15 0	1,044 17 4	2,307 6 0	374 12 0	..
	4,177,397 15 8	202,472 1 0	432,906 10 7	807,756 19 9	383,424 6 2	568,632 4 9	421,906 7 5	34,363 9 1
Current and Accrued Assets—								
Cash	14,761 1 4	128 13 7	174 1 1	2,702 6 5	134 14 2	354 14 5	748 8 1	29 6 5
Sundry Debtors	294,190 12 2	4,622 16 9	14,802 16 6	17,688 9 11	12,296 12 7	21,540 11 3	10,954 18 11	1,449 3 3
Stores	74,507 0 10	3,004 5 5	7,800 19 6	19,907 7 6	8,127 17 10	13,103 5 5	5,852 11 8	315 7 3
Miscellaneous Current and Accrued Assets	2,405 19 1	13 11 11	50 17 3	4 3 7	12 5 0	40 15 1	11 13 4	1 1 11
Reserve Funds—								
Sinking Funds	..	4,057 11 0	2,612 11 3	..	2,053 8 9	917 10 10	63 12 4	..
Suspense—								
Chargeable Work	1,771 19 9	..	0 7 8	12 5 5	3 1 8	4 11 7	18 3 2	14 1 5
Paid in Advance Accounts	841 19 0	1 5 0	79 10 5	239 4 10	2 12 9	..	..	..
Work in Progress	3,874 4 5	..	..	..	..	..	..	..
Total	4,569,750 12 3	214,300 4 8	458,427 14 3	848,310 17 5	406,054 18 11	604,593 13 4	439,555 14 11	36,172 9 4
LIABILITIES.								
Capital Liabilities—								
Head Office	2,721,121 5 5	176,755 9 7	348,136 11 5	743,364 13 10	331,439 19 8	492,701 17 7	350,659 18 1	27,668 17 5
Debentures	1,300,954 6 3	16,544 15 5	41,956 3 6	..	7,466 11 10	20,644 18 5	5,000 0 0	1,292 14 9
Current and Accrued Liabilities—	117,942 8 10	2,666 7 7	10,670 10 9	5,768 3 2	7,823 10 0	9,996 3 2	7,155 11 11	909 9 3
Reserves—								
Depreciation	426,557 11 6	18,167 3 4	57,490 2 1	98,802 14 6	58,779 4 6	80,510 4 10	76,454 3 0	6,225 10 0
Doubtful Debts	975 0 3	166 8 9	174 6 6	375 5 11	545 12 11	740 9 4	286 1 11	75 17 11
Miscellaneous	2,200 0 0	..	..	..	..	..	..	..
Total	4,569,750 12 3	214,300 4 8	458,427 14 3	848,310 17 5	406,054 18 11	604,593 13 4	439,555 14 11	36,172 9 4

STATE ELECTRICITY COMMISSION OF VICTORIA.

BRANCH ELECTRICITY SUPPLY UNDERTAKINGS.

Profit and Loss Accounts for Year ended 30th June, 1934.

	Metropolitan Electricity Supply.	Castlemaine.	Eastern Metropolitan.	Geelong Electricity Supply.	Gippsland.	North-Eastern.	South-Western.	Western Metropolitan.	Grand Total.
	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.
EXPENDITURE.									
To Power	757,069 4 4	5,877 6 4	26,162 13 2	52,748 0 8	23,186 4 0	16,749 1 0	22,073 3 11	3,824 8 8	907,689 16 1
Transmission	..	7,495 1 7	7,220 15 1	..	13,418 1 2	31,332 6 5	18,840 16 8	1,372 11 1	79,679 12 0
Generation	..	..	..	..	..	5,273 5 2	..	..	5,273 5 2
Overhead and Underground Lines	81,356 11 5	1,220 7 2	4,890 0 6	8,426 13 10	3,038 7 10	5,313 9 3	5,353 1 4	1,901 5 9	110,599 17 1
Sub-stations	26,451 4 10	661 7 10	1,748 5 3	1,097 2 11	2,057 17 6	3,480 3 0	1,294 7 1	101 7 1	36,891 15 6
Meters	17,471 16 2	460 14 9	922 14 10	1,892 4 1	1,049 7 7	990 19 10	631 3 11	77 14 2	23,496 15 4
Consumers' Premises	15,285 9 1	743 16 6	1,917 0 0	1,330 12 4	1,574 15 8	1,726 3 8	468 0 9	64 3 1	23,110 1 1
Commercial Lamps	1,990 1 9	1 10 10	..	.	..	43 12 1	..	..	2,035 4 8
Public Lighting	25,709 9 2	473 11 5	774 3 5	1,534 3 11	789 0 10	1,125 15 10	569 12 6	277 12 1	31,253 9 2
Meter Reading, Billing, and Collecting	64,762 16 4	1,094 8 8	3,487 18 7	3,166 12 6	2,724 10 1	3,587 18 8	1,124 3 3	433 0 10	80,381 8 11
Administration—									
Local	71,736 2 7	4,171 16 8	11,057 19 11	9,146 2 11	9,458 15 2	10,991 11 10	11,370 12 5	492 14 11	128,425 16 5
Head Office	24,539 7 1	733 9 10	2,106 2 10	2,000 5 10	1,717 3 9	2,106 4 0	1,658 5 10	166 6 1	35,027 5 3
Superintendence—Head Office	1,247 9 5	356 17 9	442 7 3	8 6 4	392 13 4	447 19 3	393 5 7	137 6 3	3,426 5 2
Interest	215,572 9 11	5,533 12 1	15,544 16 4	12,544 16 3	11,290 10 6	11,187 6 4	10,333 3 9	1,222 18 8	283,229 13 10
Depreciation	93,523 16 10	3,162 13 0	8,727 13 5	8,410 0 0	6,308 6 6	6,382 9 5	4,986 7 1	624 11 1	132,125 17 4
Insurance	786 13 0	Cr. 9 9 0	33 19 0	188 6 8	41 8 7	61 13 10	21 4 3	3 17 8	1,127 14 0
Workers' Compensation Insurance	665 15 3	25 15 0	68 0 8	59 3 11	71 13 3	116 10 8	34 9 6	4 16 3	1,046 4 6
Uncollectable Accounts	4,315 17 6	75 14 6	250 13 3	348 19 11	207 0 3	278 17 7	197 14 9	21 2 4	5,696 0 1
Total	1,402,484 4 8	32,078 8 11	85,355 3 6	102,901 12 1	77,325 16 0	101,195 7 10	79,349 12 7	9,825 16 0	1,890,516 1 7
INCOME.									
By Sales	1,723,471 18 11	30,131 15 2	99,517 10 7	136,319 14 10	83,597 3 4	112,183 8 9	78,505 4 4	10,434 18 4	2,274,161 14 3
Operating Surplus, from which has to be deducted exchange, sinking fund, provident fund and other indirect charges detailed in General Profit and Loss Account								..	383,645 12 8

SALE OF ELECTRICAL APPLIANCES.—The Branch operating accounts include in respect of this function :—Revenue £84,589 3s. 8d., Expenditure £94,450 11s. 11d. (including Interest and Depreciation £5,098 15s. 3d.) ; the deficit covers the loss arising from the forced sale in March, 1934.

STATE ELECTRICITY COMMISSION OF VICTORIA

SCHEDULES OF FIXED CAPITAL AS AT 30th JUNE, 1933, AND 30th JUNE, 1934.

—	Expenditure to 30th June, 1933.	Expenditure for Year.	Total.	Less Written Off During Year.	Expenditure to 30th June, 1934.	Total.
	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.
COAL SUPPLY WORKS—						
Yallourn	932,711 9 0	6,674 9 5	939,385 18 5	6,469 10 11	932,916 7 6	
Brown Coal Mine	23,127 2 7	..	23,127 2 7	..	23,127 2 7	
						956,043 10 1
BRIQUETTE FACTORY—YALLOURN—	1,234,227 2 11	6,881 15 10	1,241,108 18 9	1,927 16 1	1,239,181 2 8	
						1,239,181 2 8
POWER STATIONS—STEAM—						
Yallourn	2,860,842 16 0	656,608 13 10	3,517,451 9 10	153,109 13 10	3,364,341 16 0	
Newport "B"	835,938 6 6	..	835,938 6 6	919 16 9	835,018 9 9	
Richmond	146,871 6 1	..	146,871 6 1	..	146,871 6 1	
Geelong	329,462 17 8	243 2 9	329,706 0 5	..	329,706 0 5	
						4,675,937 12 3
POWER STATIONS—HYDRO.—						
Sugarloaf Rubicon	820,737 12 8	707 7 7	821,445 0 3	4,371 9 2	817,073 11 1	
						817,073 11 1
TRANSMISSION LINES—						
Yallourn to Yarraville	715,190 16 3	*Cr.* 904 17 5	714,285 18 10	50 0 6	714,235 18 4	
Newport to Yarraville	26,785 18 5	..	26,785 18 5	..	26,785 18 5	
Sugarloaf to Thomastown	202,067 9 4	12 12 4	202,080 1 8	..	202,080 1 8	
Sugarloaf–Rubicon Area	33,684 7 7	..	33,684 7 7	..	33,684 7 7	
Central Supply System	525,888 10 9	*Cr.* 592 6 7	525,296 4 2	5,567 11 11	519,728 12 3	
Castlemaine District	81,331 17 3	587 3 3	81,919 0 6	..	81,919 0 6	
Eastern Metropolitan District	65,286 10 7	*Cr.* 1,422 4 0	63,864 6 7	..	63,864 6 7	
Gippsland District	125,466 13 7	852 10 1	126,319 3 8	330 0 0	125,989 3 8	
North-Eastern District	233,031 3 6	13,029 0 2	246,060 3 8	..	246,060 3 8	
South-Western District	139,079 13 0	134 10 0	139,214 3 0	..	139,214 3 0	
Western Metropolitan District	7,931 14 10	..	7,931 14 10	..	7,931 14 10	
						2,161,493 10 6
TERMINAL STATIONS—						
Yarraville	535,129 3 2	415 17 4	535,545 0 6	..	535,545 0 6	
Thomastown	101,719 10 4	*Cr.* 4,780 0 9	96,939 9 7	..	96,939 9 7	
Richmond	214,139 13 4	*Cr.* 1,288 9 10	212,851 3 6	..	212,851 3 6	
Rubicon	67,357 14 9	..	67,357 14 9	258 17 5	67,098 17 4	
						912,434 10 11
TRANSMISSION SUB-STATIONS—						
Central Supply System	492,488 6 4	*Cr.* 1,703 18 2	490,784 8 2	3,651 11 1	487,132 17 1	
Gippsland District	6,348 11 1	*Cr.* 0 7 6	6,348 3 7	..	6,348 3 7	
North-Eastern District	61,548 15 2	*Cr.* 25 1 6	61,523 13 8	..	61,523 13 8	
South-Western District	46,626 6 9	*Cr.* 200 4 0	46,426 2 9	188 10 10	46,237 11 11	
						601,242 6 3
DISTRIBUTING SYSTEMS—						
Metropolitan Electricity Supply	3,535,058 12 10	92,948 10 0	3,628,007 2 10	5,716 14 0	3,622,290 8 10	
Geelong Electricity Supply	272,215 4 6	3,259 16 5	275,475 0 11	105 0 0	275,370 0 11	
Castlemaine District	115,471 16 8	4,490 18 7	119,962 15 3	2,675 19 2	117,286 16 1	
Eastern Metropolitan District	337,441 6 5	16,970 6 9	354,411 13 2	5,604 12 8	348,807 0 6	
Gippsland District	245,537 15 1	6,292 2 5	251,829 17 6	4,859 6 8	246,970 10 10	
North-Eastern District	224,957 12 7	23,707 4 3	248,664 16 10	3,706 18 3	244,957 18 7	
South-Western District	224,190 2 9	2,243 9 2	226,433 11 11	1,049 9 1	225,384 2 10	
Western Metropolitan District	25,894 3 5	1,614 9 9	27,508 13 2	1,276 15 7	26,231 17 7	
Yallourn	15,621 2 7	86 14 1	15,707 16 8	..	15,707 16 8	
Brown Coal Mine	1,341 4 2	122 7 5	1,463 11 7	..	1,463 11 7	
						5,124,470 4 5

Schedule of Fixed Capital as at 30th June, 1933, and 30th June, 1934—*continued.*

—	Expenditure to 30th June, 1933.	Expenditure for Year.	Total.	Less Written Off During Year.	Expenditure to 30th June, 1934.	Total.
	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.
Brought forward						
TRAMWAYS—						
Geelong	199,413 17 8	45 11 7	199,459 9 3	..	199,459 9 3	199,459 9 3
TOWNSHIPS—						
Yallourn	709,374 11 1	*Cr.* 640 0 0	708,734 11 1	469 3 2	708,265 7 11	
Brown Coal Mine	9,116 16 10	..	9,116 16 10	..	9,116 16 10	717,382 4 9
GENERAL—						
Metropolitan Electricity Supply	427,570 5 5	140,150 2 6	567,720 7 11	8,987 1 5	558,733 6 6	
Geelong Electricity Supply	3,949 15 3	69 4 4	4,018 19 7	739 15 5	3,279 4 2	
Castlemaine District	3,666 16 5	*Cr.* 40 18 3	3,625 18 2	160 6 3	3,465 11 11	
Eastern Metropolitan District	17,167 2 1	2,700 4 3	19,867 6 4	559 10 6	19,307 15 10	
Gippsland District	4,672 7 6	897 6 7	5,569 14 1	408 8 8	5,161 5 5	
North-Eastern District	14,241 9 3	2,449 18 10	16,691 8 1	560 13 9	16,130 14 4	
South-Western District	11,018 7 5	413 2 5	11,431 9 10	15 10 2	11,415 19 8	
Western Metropolitan District	219 15 5	28 9 0	248 4 5	48 7 9	199 16 8	
Yallourn	487,443 19 0	4,247 3 11	491,691 2 11	8,539 5 3	483,151 17 8	
Metropolitan Area	273,938 16 7	2,407 12 3	276,346 8 10	8,539 16 8	267,806 12 2	1,368,652 4 4
	18,024,544 10 4	979,693 9 1	19,004,237 19 5	230,867 12 11	18,773,370 6 6	18,773,370 6 6
UNFINISHED CONSTRUCTION—						
Beginning of year—*Add*	1,567,876 3 7	..	..	..	..	..
Deduct	..	1,567,876 3 7	..	..	..	..
	19,592,420 13 11	*Cr.* 588,182 14 6	19,004,237 19 5	230,867 12 11	18,773,370 6 6	18,773,370 6 6
UNFINISHED CONSTRUCTION—						
End of year—*Add*	..	890,194 17 11	890,194 17 11	..	890,194 17 11	890,194 17 11
	19,592,420 13 11	302,012 3 5	19,894,432 17 4	230,867 12 11	19,663,565 4 5	19,663,565 4 5
Deduct Proportion of Cost of Extensions payable by Consumers ..	8,932 15 8	3,471 12 1	12,404 7 9	807 18 11	11,596 8 10	11,596 8 10
Total Fixed Capital	19,583,487 18 3	298,540 11 4	19,882,028 9 7	230,059 14 0	19,651,968 15 7	19,651,968 15 7

SCHEDULE OF DEBENTURES GUARANTEED BY THE 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, 1934.	Total Outstanding.
			%	%	£ s. d.		£ s. d.	£ s. d.	£ s. d.	£ s. d.
		METROPOLIS.								
Metropolitan Electricity Supply	Melbourne Electric Supply Company	First Mortgage Debenture Stock ..	5	5	250,000 0 0	1.9.30	197,463 0 0	10,013 14 0	187,449 6 0	
		Consolidated Debenture Stock ..	5	5	250,000 0 0	,,	188,596 0 0	31,203 18 0	157,392 2 0	
		Gold Bonds	7½	7½	513,769 0 0	,,	472,602 14 10	472,602 14 10	..	
		General Mortgage Debenture Stock ..	6	6	300,000 0 0	,,	275,595 0 0	19,482 1 9	256,112 18 3	
		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	533,302 8 7	1,300,954 6 3	1,300,954 6 3
		COUNTRY.								
Castlemaine	Gisborne	Gisborne Shire .. .. Loan No. 3	6½	5.0375	900 0 0	1.10.28	781 15 5	316 15 8	464 19 9	
	Kyneton	Kyneton Shire .. .. ,, 3	5¾	5	12,000 0 0	1.10.29	10,830 0 0	1,055 0 0	9,775 0 0	
	,, ...	,, ,, ... ,, 5	6	5	3,800 0 0	,,	3,084 15 2	729 19 6	2,354 15 8	
	Sunbury	Bulla Shire .. .. ,, A	4¼	4¼	5,000 0 0	1.5.26	2,500 0 0	1,500 0 0	1,000 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	300 0 0	450 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	4,101 15 2	16,544 15 5	16,544 15 5
Eastern Metropolitan ..	Dandenong ..	Dandenong Shire .. .. Loan No. 19	6¼	5	6,600 0 0	1.10.23	5,941 7 1	4,195 1 0	1,746 6 1	
	,, ...	,, ,, ... ,, 20	6	5	4,000 0 0	,,	3,946 19 0	1,566 18 6	2,380 0 6	
	Frankston	Frankston and Hastings Shire ,, 10	6½	5.0375	5,000 0 0	21.2.28	3,690 16 11	2,275 13 3	1,415 3 8	
	,, ...	,, ,, ,, ,, 11	6	5	3,000 0 0	,,	2,277 2 3	1,323 10 4	953 11 11	
	,, ...	,, ,, ,, ,, 13	6¼	5	4,000 0 0	,,	3,366 6 2	1,608 9 6	1,757 16 8	
	,, ...	,, ,, ,, ,, 15	6½	5.0375	3,000 0 0	,,	2,290 0 0	2,090 0 0	200 0 0	
	,, ...	,, ,, ,, ,, 16	6½	5.0375	5,000 0 0	,,	4,665 15 5	1,058 1 9	3,607 13 8	
	Healesville	Healesville Shire .. .. ,, 2	6	5	8,000 0 0	1.4.33	6,215 0 0	210 0 0	6,005 0 0	
	,, ...	,, ,, ... ,, 3	6½	5.0375	2,000 0 0	,,	1,585 0 0	50 0 0	1,535 0 0	
	,, ...	,, ,, ... ,, 4	6½	5.0375	1,500 0 0	,,	1,500 0 0	..	1,500 0 0	
	,, ...	,, ,, ... ,, 7	6½	5.0375	1,500 0 0	,,	1,500 0 0	..	1,500 0 0	
	,, ...	,, ,, ... ,, 9	5¾	5	3,000 0 0	,,	2,728 11 2	83 11 2	2,645 0 0	
	Lilydale	Lilydale Shire .. .. ,, 16	6½	5.0375	3,000 0 0	1.4.25	2,869 12 7	540 0 4	2,329 12 3	
	Mornington ..	Mornington Shire .. .. ,, 7	6½	5.0375	4,445 0 0	1.8.30	3,195 0 0	910 0 0	2,285 0 0	
	,, ..	,, ,, ... ,, 9	6½	5.0375	1,200 0 0	,,	630 0 0	550 0 0	80 0 0	
	,, ..	,, ,, ... ,, 11	5¾	5	1,000 0 0	,,	895 16 8	147 6 5	748 10 3	
	Ringwood and Croydon	Lilydale Shire .. .. ,, 11	5	5	2,100 0 0	1.4.25	1,100 0 0	1,000 0 0	100 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	360 0 1	1,553 1 6	
	,, ,,	,, ,, ... ,, 17	6	5	4,000 0 0	,,	3,600 0 0	1,800 0 0	1,800 0 0	
	Sorrento and Portsea	Flinders Shire .. .. ,, 3	6	5	3,600 0 0	1.10.27	2,700 0 0	1,300 0 0	1,400 0 0	
	,, ,,	,, ,, ... ,, 4	6½	5.0375	5,000 0 0	,,	4,185 0 0	1,535 0 0	2,650 0 0	
	,, ,,	,, ,, ... ,, 5	6	5	3,500 0 0	,,	3,356 10 7	792 3 7	2,564 7 0	
					77,645 0 0		65,351 19 5	23,395 15 11	41,956 3 6	41,956 3 6
		Carried forward								

Schedule of Debentures Guaranteed by the 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, 1934.	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	1,206 5 6	4,453 15 5	
	,, ...	,, ,, ... ,, 2	5½	5	1,000 0 0	,,	877 5 7	264 9 2	612 16 5	
	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	5,250 14 8	7,466 11 10	7,466 11 10
North-Eastern ..	Alexandra	Alexandra Shire .. Loan No. 1	6	5	4,500 0 0	11.4.27	3,832 18 10	3,832 18 10	..	
	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	265 7 0	45 17 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	608 5 6	330 18 6	
	,, ...	,, ,, ... ,, 9	6¼	5	1,500 0 0	,,	1,320 4 0	693 8 9	626 15 3	
	Mansfield	Mansfield Shire .. .. ,, 6	6	5	1,200 0 0	1.6.28	1,200 0 0	..	1,200 0 0	
	,, ...	,, ,, ... ,, 3	4½	4½	500 0 0	,,	500 0 0	..	500 0 0	
	,, ..	,, ,, ... ,, 8	6	5	800 0 0	..	800 0 0	300 0 0	500 0 0	
	Mooroopna ..	Rodney Shire .. .. ,, 1	5	5	3,000 0 0	1.10.26	2,286 7 8	715 10 2	1,570 17 6	
	Nathalia	Numurkah Shire .. .. ,, 4	4¾	4¾	4,200 0 0	1.10.31	2,600 0 0	500 0 0	2,100 0 0	
	,, ...	,, ,, ... ,, 8	6¼	5	3,500 0 0	,,	2,257 15 5	719 13 4	1,538 2 1	
	Numurkah	,, ,, ... ,, 3	4½	4½	700 0 0	,,	300 0 0	200 0 0	100 0 0	
	,, ...	,, ,, ... ,, 5	4¾	4¾	800 0 0	,,	200 0 0	100 0 0	100 0 0	
	,, ...	,, ,, ... ,, 7	7	5.425	2,500 0 0	,,	1,922 4 11	210 15 10	1,711 9 1	
	Rutherglen ..	Rutherglen Borough .. ,, 2	4½	4½	3,000 0 0	15.10.26	2,094 3 8	836 6 2	1,257 17 6	
	Wahgunyah ..	,, Shire .. ,, 4	6	5	350 0 0	1.2.26	296 1 8	81 18 1	214 3 7	
	Wangaratta ..	Wangaratta Shire .. ,, 8	6½	5.0375	6,500 0 0	12.3.27	6,078 12 8	947 14 8	5,130 18 0	
	,, ...	,, ,, .. ,, 9	6	5	1,500 0 0	,,	1,412 2 5	232 16 11	1,179 5 6	
	Yarrawonga ..	Yarrawonga Borough .. ,, 3	4	4	3,500 0 0	1.8.25	2,600 0 0	900 0 0	1,700 0 0	
	,, ..	,, ,, .. ,, 4	4½	4½	800 0 0	,,	576 3 8	250 19 5	325 4 3	
	,, ..	,, ,, .. ,, 5	5	5	500 0 0	,,	387 11 1	145 5 0	242 6 1	
	,, ..	,, ,, .. ,, 6	5	5	500 0 0	,,	406 1 8	134 17 7	271 4 1	
					61,650 0 0		51,288 1 6	30,643 3 1	20,644 18 5	20,644 18 5
South-Western ..	Camperdown ..	Hampden Shire .. .. Loan No. 1	4	4	8,000 0 0	8.1.24	2,600 0 0	1,400 0 0	1,200 0 0	
	,, ..	,, ,, ... ,, 3	4	4	1,400 0 0	,,	750 0 0	500 0 0	250 0 0	
	Koroit	Koroit Borough .. .. ,, 1	4¼	4¼	6,500 0 0	1.12.28	4,000 0 0	1,400 0 0	2,600 0 0	
	Terang	Hampden Shire .. .. ,, 2	4	4	3,000 0 0	4.3.24	1,600 0 0	1,000 0 0	600 0 0	
	,, ...	,, ,, ... ,, 4	4	4	1,500 0 0	,,	850 0 0	500 0 0	350 0 0	
					20,400 0 0		9,800 0 0	4,800 0 0	5,000 0 0	5,000 0 0
Western Metropolitan	Werribee	Werribee Shire .. .. Loan No. 1	5	5	4,000 0 0	10.4.24	2,200 0 0	2,000 0 0	200 0 0	
	,, ...	,, ,, ... ,, 3	4¾	4¾	1,000 0 0	,,	818 1 5	302 18 10	515 2 7	
	,, ...	,, ,, ... ,, 4	5½	5	1,000 0 0	,,	856 16 2	279 4 0	577 12 2	
	,, ...	,, ,, ... ,, 5	6½	5.0375	1,000 0 0	,,	760 0 0	760 0 0	..	
					7,000 0 0		4,634 17 7	3,342 2 10	1,292 14 9	1,292 14 9
	Total for Country				208,045 0 0	..	164,438 15 7	71,533 11 8	92,905 3 11	92,905 3 11
	Total for Metropolis				2,013,769 0 0	..	1,834,256 14 10	533,302 8 7	1,300,954 6 3	1,300,954 6 3
	GRAND TOTAL				2,221,814 0 0		1,998,695 10 5	604,836 0 3	1,393,859 10 2	1,393,859 10 2

APPENDIX No. 2.

OVERHEAD TRANSMISSION LINES.

Description.	Erected during Year ending 30th June, 1934.		Total Erected to 30th June, 1934.	
	Route Miles.	Cable Miles.	Route Miles.	Cable Miles.
132,000-Volt Transmission Lines.				
Yallourn–Yarraville	..	..	110	660
Yallourn–Richmond	..	..	80	240
Eastern Metropolitan District.				
22,000-volt Lines	11·922	24·42	141·722	385·515
6,600-volt Lines	0·935	4·97	106·387	282·155
Geelong Electricity Supply.				
6,600-volt Lines	0·39	1·34	66·3	251·7
Gippsland District.				
22,000-volt Lines	8·4	17·3	285·0	794·85
6,600-volt Lines	..	..	11·70	27·75
Metropolitan Area.				
22,000-volt Lines	..	..	141·0	423·0
6·6, 7·2, and 4·16 kv.	−0·9	+16·4	262·29	688·95
North-Eastern District.				
66,000-volt Lines	..	..	170·283	686·366
22,000-volt Lines	42·11	127·93	176·3	657·0
6,600-volt Lines	..	..	7·59	17·18
North-Western District.				
66,000-volt Lines	..	..	52·5	157·5
22,000-volt Lines	..	..	41·95	121·95
South-Western District.				
44,000-volt Lines	..	..	116·200	484·896
22,000-volt Lines	..	..	20·600	61·900
6,600-volt Lines	..	..	139·668	354·738
Western Metropolitan District.				
22,000-volt Lines	1·7	5·1	18·9	56·8
6,600-volt Lines	..	..	33·17	99·35
Yallourn District.				
11,000-volt Lines	..	..	1·415	8·49

SUMMARY OF OVERHEAD TRANSMISSION LINES.

Description.	Erected during Year ending 30th June, 1934.		Total Erected to 30th June, 1934.	
	Route Miles.	Cable Miles.	Route Miles.	Cable Miles.
132,000 Volts	..	..	190·0	900·0
66,000 Volts	..	..	222·783	843·866
44,000 Volts	..	..	116·200	484·896
22,000 Volts	64·132	174·8	825·472	2,501·015
11,000 Volts	..	..	1·415	8·49
6,600 Volts	0·425	22·710	627·105	1,721·823
Total	64·577	207·510	1,982·975	6,460·090

UNDERGROUND CABLES.

Class of Cable.	Cable Miles Laid during Year ended 30th June, 1934.	Total Cable Miles Laid at 30th June, 1934.
22,000 Volts	..	101·182
6,600 Volts	1·406	386·229
400 Volts	0·931	4·626
Pilot and Telephone	..	56·299
Supervisory Control	..	10·376
Miscellaneous	0·229	13·053
Totals	2·666	571·765

APPENDIX No. 3.

TABLE SHOWING NUMBER AND CAPACITY OF SUB-STATIONS AS AT 30th JUNE, 1934.

	No.	*Total Kva*
Terminal Stations	4	186,900
Central Supply Transmission Sub-stations ..	16	165,500
Distribution Subs. at Line Voltage	14	27,150
Transmission and Distribution Transformer Sub-stations—		
METROPOLITAN ELECTRICITY SUPPLY.		
Distribution Transformer Sub-stations ..	525	128,200
CASTLEMAINE DISTRICT.		
Distribution Transformer Sub-stations ..	40	1,655
EASTERN METROPOLITAN DISTRICT.		
Distribution Transformer Sub-stations ..	188	6,128
GEELONG ELECTRICITY SUPPLY.		
Distribution Transformer Sub-stations ..	56	8,955
GIPPSLAND DISTRICT.		
Transmission Sub-stations	3	900
Distribution Transformer Sub-stations ..	145	5,451
NORTH-EASTERN DISTRICT.		
Transmission Sub-stations	7	11,000
Distribution Transformer Sub-stations ..	78	6,000
SOUTH-WESTERN DISTRICT.		
Transmission Sub-stations	5	5,250
Distribution Transformer Sub-stations ..	89	4,365
SUGARLOAF-RUBICON AREA.		
Distribution Transformer Sub-stations ..	2	450
TOWN OF YALLOURN, ETC.		
Distribution Transformer Sub-stations ..	28	7,027
Total Erected ..	1,200	564,931

APPENDIX No. 4.

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

—	State Electricity Commission.	Melbourne City Council.	Melbourne Electric Supply Company.	Total 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	..	383,629,431	175,276,998	558,906,429
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	155,608,442	540,927,171
1932–33 ..	399,449,114	12,081,000	..	411,530,114	160,209,177	571,739,291
1933–34 ..	440,557,929	17,947,700	..	458,505,629	162,345,834	620,851,463

APPENDIX No. 5.

STATE OF VICTORIA.

TARIFFS AND STATISTICAL DATA OF ELECTRIC SUPPLY UNDERTAKINGS.

METROPOLITAN AREA.

DISTRICTS SERVED BY STATE ELECTRICITY COMMISSION OF VICTORIA.

District.	Population.	System of Supply.	Number of Consumers.	Tariffs.
Brighton	637,993	A.C., 1 ph., 200–400 v. ..	149,338	See Standard Metropolitan Tariffs.
Collingwood		A.C., 3 ph., 230–400 v. ..		
Camberwell		A.C., 1 ph., 200–400 v. ..		
Caulfield		„ „ ..		
Essendon		A.C., 3 ph., 230–400 v. ..		
Flemington		„ „ ..		
Fitzroy		„ „ ..		
Hawthorn		A.C., 1 ph., 200–400 v. ..		
Kew		„ „ ..		
Mentone		„ „ ..		
Malvern		„ „ ..		
Moorabbin		„ . .		
Mordialloc		„ „ ..		
Oakleigh		„ „ ..		
Prahran		& 3 ph., 230-400 v. .. A.C., 1 ph., 200–400 v. .. A.C., 3 ph., 230–400 v...		
Richmond..		A.C., 3 ph., 230–400 v. ..		
St. Kilda		A.C., 1 ph.. 200–400 v. .. A.C., 3 ph., 230–400 v. ..		
Sandringham		A.C., 1 ph., 200–400 v. ..		
South Melbourne		A.C., 3 ph., 230–400 v. ..		
Sunshine		„ „ ..		

DISTRICTS SERVED BY MUNICIPAL UNDERTAKINGS PURCHASING BULK SUPPLY FROM STATE ELECTRICITY 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.	27,543	The Commission's Standard Metropolitan Tariffs (see statement following) 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, 1¼d. per unit ; next 500 units in any one month, 1d. ; all further consumption in any one month, 0·8d. 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, Blackburn and Mitcham Shire ..	21,565	Box Hill City Council ..	A.C., 3 ph., 230-400 v.	5,659	
Brunswick ..	55,108	Brunswick City Council..	„ „ ..	13,327	
Coburg ..	38,122	Coburg City Council ..	„ „ ..	9,478	
Footscray ..	50,496	Footscray City Council ..	„ „ ..	11,272	
Heidelberg ..	26,370	Heidelberg City Council	„ „ ..	6,155	
Northcote ..	41,826	Northcote City Council ..	„ „ ..	10,541	
Port Melbourne	13,100	Port Melbourne City Council	„ „ ..	2,600	
Preston ..	32,000	Preston City Council ..	„ „ ..	8,500	
Williamstown ..	22,206	Williamstown City Council	„ „ ..	5,773	

APPENDIX No. 5—*continued.*

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.

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)—

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 the application is made for a supply 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)—

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 THE STATE ELECTRICITY COMMISSION OF VICTORIA.

GEELONG ELECTRICITY SUPPLY.

District.	Population.	System of Supply.	No. of Consumers.
City of Geelong	45,000	A.C., 3 ph., 230–400 v. D.C., 3 wire, 220–400 v.	9,493 (excluding Torquay)
City of Geelong West		A.C., 3 ph., 230–400 v.	
Newtown and Chilwell		,, ,, ...	
Corio Shire (Portion only)		,, ,, ...	
South Barwon Shire (Portion only) ..		,, ,, ...	
Bellarine Shire (Portion only)		,, ,, ...	

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.

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 .. .. 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 the 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 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—

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.—Two-rate)—

For all Max. Demand Meters .. .. 5s. per month per meter.

APPENDIX No. 5—*continued.*

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

BALLARAT ELECTRICITY SUPPLY AND BENDIGO ELECTRICITY SUPPLY.

—	Population.	System of Supply.	Number of Consumers.
Ballarat Electricity Supply	41,750	D.C., 3-wire, 220–440 V., A.C., 3-ph., 230–400 V. ..	6,823
Bendigo Electricity Supply	33,730	D.C., 3-wire, 220–440 V., A.C., 3-ph., 230–400 V. ..	5,453

TARIFFS.

COMMERCIAL AND INDUSTRIAL SUPPLIES.

Lighting.—

Commercial Lighting Flat Tariff "A"—

Applicable to shops, offices, churches, factories, hotels, &c.—

For electricity consumed between two consecutive monthly meter readings—

(*a*) At a uniform rate of 7d. per kilowatt-hour; or

(*b*) On the maximum demand system at 7d. per kilowatt-hour for the first 60 hours' use per month of the maximum demand, and 5d. per kilowatt-hour thereafter.

Power and Heating—

Tariff "C"—

Option I.—Block Rate—

For electricity consumed between two consecutive monthly meter readings—

Up to and including 24 kilowatt-hours	3½ per kilowatt hour.
For the next 476 kilowatt-hours	2½d. „ „
For the next 4,500 kilowatt-hours	1¾d. „ „
For the next 10,000 kilowatt-hours	1⅛d. „ „
For all further consumption in the same period	0.9d. „ „

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

For electricity consumed between the hours of 10 p.m. and 6 a.m., 0.7d. per kilowatt-hour.

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

Meter Rental—See below.

DOMESTIC SUPPLY.

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

Tariff No. G./156—Two-part Rate (Service charge plus Energy Charge)—

Service Charge—

(Payable on annual basis, quarterly in advance)—

1s. 3d. per room per month (minimum charge, 5s. per month), payable whether the room is lighted or not, whether the room is erected at the time application for supply 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 assessable on the basis that every 350 square feet of floor area or part thereof constitutes one room. The maximum charge in respect of any one room is 3s. 9d. per month.

6s. per month for each electrically-lighted tennis court, bowling green, croquet lawn, payable 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.

The following are exempt in assessing service charge:—Bathrooms, cellars, cloak rooms, cupboards, entrance halls, garages lavatories, lobbies, pantries, passages, porches, scullieries, washhouses, workshops, vestibules, verandahs (unless such vestibules or verandahs are used as living rooms), and outside lights for drives, paths, yards and the like.

Energy Charge—

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

No Meter Rental.

COMMERCIAL, INDUSTRIAL AND DOMESTIC SUPPLIES.

Water Heating—

Continuous Water Heating Tariff, No. H/60—

For each 100 watts rating or part thereof of heating elements continuously operated throughout the year—

A fixed charge, including electricity, of 5s. per month payable quarterly in advance.

No Meter Rental.

Boosting Elements—

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

Meter Rentals—

Applicable to Tariffs "A" and "C"—

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 400 volt meters	1s. „ „
For all lighting maximum demand indicators	1s. per month per indicator.
For all two-rate meters	5s. per month per meter.

APPENDIX No. 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 —Service Charge per H.P. per Month as under (a).	(d) Commercial and Industrial Lighting.	(e) Commercial Power Flat Tariff.	Water Heating.	
				Service Charge per Room per Month.	Charge per kWh.	Service Charge per Room per Month.	Charge per kWh.	Service Charge per H.P. per Month. H.P., 1–50.	Service Charge per H.P. per Month. Charge per kWh.		Charge per kWh.	Charge per kWh.	Charge per kWh.	Continuous Rate per 100 watts per Month	(f) Night Rate. Charge per kWh.
				s. d.	*d.*	*s. d.*	*d.*	*s. d.*	*d.*		*d.*	*s. d.*	*d.*	*s. d.*	*d.*
Alexandra ..	850	A.C., 3 ph.	213	1 6	1¾	2 0	1¾	6 0	1		0·35	1 0	6	5 6	0·5
Allansford ..	296	A.C., 1 ph.	32	1 6	1¾	2 0	1¾	6 0	1		0·35	1 0	6	7 0	0·75
Altona ..	2,000	,,	292	1 4	1½	1 10	1½	5 6	1		0·35	0 10	4½	5 6	0·5
Alvie ..	(See Cororooke)														
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	,,	830	1 3	1½	1 9	1½	5 0	1		0·35	0 9	4	5 6	0·5
Barnawartha ..	240	A.C., 1 ph.	23	1 6	1¾	2 0	1¾	6 0	1		0·35	1 0	6	5 6	0·5
Barwon Heads ..	600	,,	164	1 6	1½	2 0	1½	5 6	1		0·35	1 0	5½	6 6	0·75
Bayswater ..	450	,,	84	1 6	1½	2 0	1½	6 0	1		0·35	0 10	5	5 6	0·5
Beaconsfield ..	150	,,	25	1 6	1½	2 0	1½	6 0	1		0·35	0 10	5	5 6	0·5
Beeac	300	,,	96	1 6	1¾	2 0	1¾	6 0	1		0·35	1 0	6	7 0	0·75
Belgrave ..	1,800	A.C., 3 ph.	531	1 6	1½	2 0	1½	6 0	1		0·35	0 10	5	5 6	0·5
Bena	180	,,	34	1 6	1½	2 0	1½	6 0	1		0·35	1 0	5	5 6	0·5
Benalla ..	4,000	,,	766	1 3	1¾	1 9	1¾	5 0	1		0·35	0 9	5	5 6	0·5
Berwick ..	650	A.C., 1 ph.	102	1 6	1½	2 0	1½	6 0	1		0·35	0 10	5	5 6	0·5
Birregurra ..	400	,,	90	1 6	1¾	2 0	1¾	6 0	1		0·35	1 0	6	7 0	0·75
Boolarra ..	685	A.C., 3 ph.	56	1 6	1½	2 0	1½	6 0	1		0·35	1 0	5	5 6	0·5
Boronia ..	700	A.C., 1 ph.	57	1 6	1½	2 0	1½	6 0	1		0·35	0 10	5	5 6	0·5
Bostock's Creek ..	(See Cobden)														
Braeside ..	..	A.C., 1 ph.	3	1 6	1½	2 0	1½	6 0	1		0·35	0 10	5	5 6	0·5
Briar Hill ..	200	A.C., 1 ph.	66	1 6	1½	2 0	1½	6 0	1		0·35	0 10	5	5 6	0·5
Bruthen ..	580	,,	88	1 6	1½	2 0	1½	6 0	1		0·35	1 0	5	5 6	0·5
Bullock Swamp	(See Cororooke)														
Buln Buln ..	100	A.C., 1 ph.	18	1 6	1½	2 0	1½	6 0	1		0·35	1 0	5	5 6	0·5
Bunyip ..	600	A.C., 1 ph.	57	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.	637	1 3	1¾	1 9	1¾	5 0	1		0·35	0 9	5	7 0	0·75
Castlemaine ..	5,650	,,	788	1 3	1¾	1 9	1¾	5 0	1		0·35	0 9	5	5 6	0·5
Chiltern ..	1,500	,,	114	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 ..	800	A.C., 3 ph.	185	1 6	1¾	2 0	1¾	6 0	1		0·35	1 0	6	7 0	0·75
Cobram ..	850	D.C., 230 v.	152	1 6	1¾	2 0	1¾	7 6	1¾		..	1 6	6	..	..
Colac	5,200	A.C., 3 ph.	1,198	1 3	1¾	1 9	1¾	5 0	1		0·35	0 8	5	7 0	0·75
Coldstream ..	..	A.C., 1 ph.	11	1 6	1½	2 0	1½	6 0	1		0·35	0 10	5	5 6	0·5
Coragulac ..	(See Cororooke)														
Cororooke ..	800	A.C., 3 ph.	173	1 6	1¾	2 0	1¾	6 0	1		0·35	1 0	6	7 0	0·75
Cowwarr ..	200	A.C., 3 ph. and 1 ph.	66	1 6	1½	2 0	1½	6 0	1		0·35	1 0	5	5 6	0·5
Cranbourne ..	300	A.C., 1 ph.	69	1 6	1½	2 0	1½	6 0	1		0·35	0 10	5	5 6	0·5
Crib Point ..	150	,,	117	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.	490	1 0	1¼	1 6	1¼	5 0	1		0·35	0 7	3	5 6	0·5
Dandenong ..	5,700	,,	1,160	1 2	1¼	1 9	1½	5 0	1		0·35	0 9	4	5 6	0·5
Darnum ..	100	A.C., 3 ph.	27	1 6	1½	2 0	1½	6 0	1		0·35	1 0	5	5 6	0·5
Deer Park ..	100	A.C., 3 ph. and 1 ph.	21	1 4	1¾	1 10	1¾	5 6	1		0·35	1 0	5½	5 6	0·5
Ferrenglen ..	(See Port Fairy)														
Diamond Creek ..	100	A.C., 1 ph.	71	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	,,	27	1 6	1½	2 0	1½	6 0	1		0·35	0 10	5	5 6	0·5
Dromana ..	350	A.C., 3 ph. and 1 ph.	159	1 6	1¾	2 0	1¾	6 0	1		0·35	1 0	6	7 0	0·5
Drouin ..	850	A.C., 3 ph.	188	1 6	1½	2 0	1½	6 0	1		0·35	0 9	5	5 6	0·5
Drysdale ..	1,200	A.C., 1 ph.	123	1 6	1½	2 0	1½	5 6	1		0·35	1 0	5½	6 6	0·75
East Oakleigh ..	..	A.C., 3 ph.	22	1 6	1½	2 0	1½	6 0	1		0·35	0 10	5	5 6	0·5
Echuca ..	4,632	A.C., 3 ph.	771	1 3	1¾	1 9	1¾	5 0	1		0·35	0 9	5	5 6	0·5
Elliminyt ..	(See Colac)														
Eltham ..	700	A.C., 1 ph.	136	1 6	1½	2 0	1½	6 0	1		0·35	0 10	5	5 6	0·5
Euroa	2,200	D.C., 230 v.	410	1 4	1¾	1 10	1¾	7 6	1¾		..	0 9	5	..	..
Ferntree Gully ..	1,200	A.C., 3 ph. and 1 ph.	200	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.	23	1 6	1½	2 0	1½	6 0	1		0·35	1 0	5	5 6	0·5
Frankston ..	5,000	A.C., 3 ph. and 1 ph.	1,020	1 2	1¼	1 9	1½	5 0	1		0·35	0 9	4	5 6	0·5
Garfield ..	200	A.C., 1 ph.	55	1 6	1½	2 0	1½	6 0	1		0·35	1 0	5	5 6	0·5
Gisborne ..	600	A.C., 3 ph.	107	1 6	1½	2 0	1¾	6 0	1		0·35	1 0	6	5 6	0·5
Glengarry ..	120	,,	18	1 6	1½	2 0	1½	6 0	1		0·35	1 0	5	5 6	0·5
Glenormiston ..	(See Mortlake)														
Glen Waverley ..	350	A.C., 3 ph. and 1 ph.	37	1 6	1½	2 0	1½	6 0	1		0·35	0 10	5	5 6	0·5
Gnotuk ..	(See Cobden)														
Greensborough ..	930	A.C., 3 ph.	159	1 6	1½	2 0	1½	6 0	1		0·35	0 10	5	5 6	0·5
Harcourt ..	250	A.C., 3 ph.	23	1 6	1¾	2 0	1¾	6 0	1		0·35	1 0	6	5 6	0·5
Hastings ..	488	A.C., 1 ph.	73	1 6	1¾	2 0	1¾	6 0	1		0·35	1 0	6	7 0	0·5
Healesville ..	2,400	A.C., 3 ph. and 1 ph.	475	1 4	1½	1 10	1½	5 6	1		0·35	0 10	4	5 6	0·5
Heyfield ..	760	A.C., 3 ph.	134	1 6	1½	2 0	1½	6 0	1		0·35	1 0	5	5 6	0·5
Irrewarra ..	(See Cororooke)														
Jumbunna ..	400	A.C. 1 ph.,	37	1 6	1½	2 0	1½	6 0	1		0·35	1 0	5	5 6	0·5
Kallista ..	150	A.C., 1 ph.	37	1 6	1½	2 0	1½	6 0	1		0·35	1 0	5	5 6	0·5

APPENDIX No. 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. —Service Charge per H.P. per Month as under (*a*).	(*d*) Commercial and Industrial Lighting.	(*e*) Commercial Power Flat Tariff.	Water Heating.	
				Service Charge per Room per Month.	Charge per kWh.	Service Charge per Room per Month.	Charge per kWh.	Service Charge per H.P. per Month. H.P., 1–50.	Charge per kWh.	Charge per kWh.	Charge per kWh.	Charge per kWh.	Continuous Rate per 100 watts per Month.	(*f*) Night Rate. Charge per kWh.
				s. d.	*d.*	*s. d.*	*d.*	*s. d.*	*d.*	*d.*	*d.*	*d.*	*s. d.*	*d.*
Kilsyth ..	150	A.C., 1 ph.	34	1 0	1¼	1 6	1¼	5 0	1	0·35	0 7	3	5 6	0·5
Kolora ..	(See	Mortlake)												
Kongwak ..	80	A.C., 3 ph. and 1 ph.	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.	235	1 4	1¾	1 10	1¾	5 6	1	0·35	0 10	5½	7 0	0·75
Korumburra ..	3,000	,,	553	1 4	1½	1 10	1½	5 6	1	0·35	0 10	4½	5 6	0·5
Kyabram ..	1,700	,,	409	1 4	1¾	1 10	1¾	5 6	1	0·35	0 10	5½	5 6	0·5
Kyneton ..	3,195	,,	655	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.	143	1 6	1½	2 0	1½	6 0	1	0·35	1 0	5	5 6	0·5
Lancefield ..	600	A.C., 3 ph.	94	1 6	1¾	2 0	1¾	6 0	1	0·35	1 0	6	5 6	0·5
Lara	(See	Geelong)												
Leongatha ..	1,700	A.C., 3 ph.	435	1 4	1½	1 10	1½	5 6	1	0·35	0 10	4½	5 6	0·5
Lilydale ..	1,800	,,	290	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.	45	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.	18	1 6	1½	2 0	1½	6 0	1	0·35	0 10	5	5 6	0·5
Macedon ..	250	A.C., 3 ph. and 1 ph.	204	1 6	1¾	2 0	1¾	6 0	1	0·35	1 0	6	5 6	0·5
Maffra ..	2,000	A.C., 3 ph.	498	1 4	1½	1 10	1½	5 6	1	0·35	0 10	4½	5 6	0·5
Mansfield ..	650	A.C., 1 ph.	202	1 6	1¾	2 0	1¾	6 0	1	0·35	1 0	6	5 6	0·5
Merrigum ..	200	A.C., 3 ph.	54	1 6	1¾	2 0	1¾	6 0	1	0·35	1 0	6	5 6	0·5
Mirboo North ..	600	,,	131	1 6	1½	2 0	1½	6 0	1	0·35	1 0	5	5 6	0·5
Moe	600	,,	174	1 6	1½	2 0	1½	6 0	1	0·35	1 0	5	5 6	0·5
Monegeeta ..	50	A.C., 1 ph.	10	1 6	1¾	2 0	1¾	6 0	1	0·35	1 0	6	5 6	0·5
Montmorency ..	400	,,	63	1 6	1½	2 0	1½	6 0	1	0·35	0 10	5	5 6	0·5
Montrose ..	100	,,	70	1 0	1¼	1 6	1¼	5 0	1	0·35	0 7	3	5 6	0·5
Moolap ..	(See	Drysdale)												
Moorooduc ..	..	A.C., 3 ph.	8	1 6	1¾	2 0	1¾	6 0	1	0·35	1 0	6	7 0	0·5
Mooroopna ..	1,500	A.C., 3 ph.	218	1 4	1¾	1 10	1¾	5 6	1	0·35	0 10	5½	5 6	0·5
Mornington ..	2,100	A.C., 3 ph. and 1 ph.	553	1 4	1½	1 10	1½	5 6	1	0 35	0 10	4	5 6	0·5
Mortlake ..	1,400	A.C., 3 ph.	223	1 6	1¾	2 0	1¾	6 0	1	0·35	1 0	6	7 0	0·75
Morwell ..	1,846	,,	285	1 4	1½	1 10	1½	5 6	1	0·35	0 9	4½	5 6	0·5
Mt. Dandenong ..	..	A.C., 1 ph.	14	1 6	1½	2 0	1½	6 0	1	0·35	1 0	5	5 6	0·5
Mt. Eliza ..	..	,,	94	1 2	1¼	1 9	1½	5 0	1	0·35	0 9	4	5 6	0·5
Mt. Evelyn ..	..	,,	31	1 6	1½	2 0	1½	6 0	1	0·35	0 10	5	5 6	0·5
Mt. Martha ..	..	,,	75	1 4	1½	1 10	1½	5 6	1	0·35	0 10	4	5 6	0·5
Mt. Waverley ..	150	,,	18	1 6	1½	2 0	1½	6 0	1	0·35	0 10	5	5 6	0·5
Nalangil ..	(See	Cororooke)												
Nar-nar-goon ..	200	A.C., 1 ph.	18	1 6	1½	2 0	1½	6 0	1	0·35	1 0	5	5 6	0·5
Narre Warren ..	100	A.C., 1 ph.	15	1 6	1½	2 0	1½	6 0	1	0·35	0 10	5	5 6	0·5
Nathalia ..	860	A.C., 3 ph.	181	1 6	1¾	2 0	1¾	6 0	1	0·35	1 0	6	5 6	0·5
New Gisborne ..	500	A.C., 1 ph.	31	1 6	1¾	2 0	1¾	6 0	1	0·35	1 0	6	5 6	0·5
Newry ..	300	A.C., 3 ph.	34	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	,,	107	1 6	1½	2 0	1½	6 0	1	0·35	0 10	5	5 6	0·5
Noorat ..	120	A.C., 3 ph.	72	1 6	1¾	2 0	1¾	6 0	1	0·35	1 0	6	7 0	0·75
Notting Hill ..	280	A.C., 1 ph.	17	1 6	1½	2 0	1½	6 0	1	0·35	0 10	5	5 6	0·5
Nunurkah ..	1,350	A.C., 3 ph.	324	1 4	1¾	1 10	1¾	5 6	1	0·35	0 9	5	5 6	0·5
Ocean Grove ..	150	A.C., 1 ph.	39	1 6	1½	2 0	1½	5 6	1	0·35	1 0	5½	6 6	0·75
Officer ..	50	,,	7	1 6	1½	2 0	1½	6 0	1	0·35	0 10	5	5 6	0·5
Olinda ..	250	,,	81	1 6	1½	2 0	1½	6 0	1	0·35	1 0	5	5 6	0·5
Pakenham ..	400	,,	90	1 6	1½	2 0	1½	6 0	1	0·35	0 10	5	5 6	0·5
Point Lonsdale ..	700	A.C., 1 ph.	123	1 6	1½	2 0	1½	5 6	1	0·35	0 10	5½	6 6	0·75
Pomborneit ..	70	,,	25	1 6	1¾	2 0	1¾	6 0	1	0·35	1 0	6	7 0	0·75
Poowong ..	100	,,	44	1 6	1½	2 0	1½	6 0	1	0·35	1 0	5	5 6	0·5
Portarlington ..	600	,,	110	1 6	1½	2 0	1½	5 6	1	0·35	1 0	5½	6 6	0·75
Port Fairy ..	2,000	A.C., 3 ph.	276	1 4	1¾	1 10	1¾	5 6	1	0·35	0 10	5½	7 0	0·75
Portsea ..	150	,,	110	1 6	1¾	2 0	1¾	6 0	1	0·35	1 0	6	7 0	0·5
Queenscliff ..	3,100	A.C., 3 ph.	416	1 4	1½	1 10	1½	5 0	1	0·35	0 10	5	6 6	0·75
Riddell ..	350	A.C., 1 ph.	23	1 6	1¾	2 0	1¾	6 0	1	0·35	1 0	6	5 6	0·5
Ringwood ..	3,019	A.C., 3 ph.	646	1 0	1¼	1 6	1¼	5 0	1	0·35	0 7	3	5 6	0·5
Romsey ..	600	,,	95	1 6	1¾	2 0	1¾	6 0	1	0·35	1 0	6	5 6	0·5
Rosebud ..	200	,, and 1 ph.	181	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	A.C., 3 ph.	6	1 6	1½	2 0	1½	6 0	1	0·35	1 0	5	5 6	0·5
Rutherglen ..	1,160	,,	264	1 4	1¾	1 10	1¾	5 6	1	0·35	0 10	5½	5 6	0·5
Rye	50	A.C., 1 ph.	35	1 6	1¾	2 0	1¾	6 0	1	0·35	1 0	6	7 0	0·5
Sale	3,971	A.C., 3 ph.	855	1 3	1½	1 9	1½	5 0	1	0·35	0 9	4	5 6	0·5
Sassafras ..	500	A.C., 3 ph. and 1 ph.	130	1 6	1½	2 0	1½	6 0	1	0·35	1 0	5	5 6	0·5
Seaford ..	..	A.C., 3 ph. and 1 ph.	207	1 2	1¼	1 9	1½	5 0	1	0·35	0 9	4	5 6	0·5
Shepparton ..	6,000	A.C., 3 ph.	1,224	1 3	1¾	1 9	1¾	5 0	1	0·35	0 9	5	5 6	0·5
Sherbrooke ..	..	A.C., 1 ph.	38	1 6	1½	2 0	1½	6 0	1	0·35	1 0	5	5 6	0·5
Silvan	650	A.C., 3 ph. and 1 ph.	21	1 6	1½	2 0	1½	6 0	1	0·35	0 10	5	5 6	0·5

APPENDIX No. 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.		(*c*) Commercial Light and Power.		(*a*) Industrial Power and Heating Two-part Tariff.		(*b*) Industrial Power and Heating Two-part Two-rate Tariff.	(*f*) Commercial and Industrial Lighting.	(*e*) Commercial Power Flat Tariff.	Water Heating.	
				Service Charge per Room per Month.	Charge per kWh.	Service Charge per Room per Month.	Charge per kWh.	Service Charge per H.P. per Month. H.P., 1–50.	Charge per kWh.	Service Charge per H.P. per Month as under (*a*). Charge per kWh.	Charge per kWh.	Charge per kWh.	Continuous Rate per 100 watts per Month.	Night Rate (*f*) Charge per kWh.
				s. d.	*d.*	*s. d.*	*d.*	*s. d.*	*d.*	*d.*	*s. d.*	*d.*	*s. d.*	*d.*
Somerville ..	200	A.C., 3 ph. and 1 ph.	59	1 6	1¾	2 0	1¾	6 0	1	0·35	1 0	6	7 0	0·5
Sorrento ..	500	A.C., 3 ph.	308	1 6	1¾	2 0	1¾	6 0	1	0·35	1 0	6	7 0	0·5
Springhurst ..	100	,,	30	1 6	1¾	2 0	1¾	6 0	1	0·35	1 0	6	5 6	0·5
Springvale ..	1,250	A.C., 3 ph. and 1 ph.	291	1 6	1½	2 0	1½	6 0	1	0·35	0 10	5	5 6	0·5
St. Albans ..	600	A.C., 2 ph. of 3-ph. system	76	1 4	1¾	1 10	1¾	5 6	1	0·35	1 0	5½	5 6	0·5
Stratford ..	800	A.C., 3 ph.	105	1 6	1½	2 0	1½	6 0	1	0·35	1 0	5	5 6	0·5
Sunbury ..	1,100	,,	196	1 4	1¾	1 10	1¾	5 6	1	0·35	1 0	5½	5 6	0·5
Sunnyside ..	..	A.C., 1 ph.	9	1 4	1½	1 10	1½	5 6	1	0·35	0 10	4	5 6	0·5
Swan Reach ..	..	,,	11	1 6	1½	2 0	1½	6 0	1	0·35	1 0	5	5 6	0·5
Tallygaroopna ..	200	,,	12	1 6	1¾	2 0	1¾	6 0	1	0·35	1 0	6	5 6	0·5
Tally Ho ..	110	A.C., 3 ph. and 1 ph.	8	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.	263	1 4	1¾	1 10	1¾	5 6	1	0·35	0 10	5½	5 6	0·5
Tecoma ..	(See Belgrave)													
Terang ..	2,350	A.C., 3 ph.	498	1 4	1⅜	1 10	1⅜	5 6	1	0·35	0 10	5½	7 0	0·75
Thomastown ..	..	,,	20	1 6	1½	2 0	1½	6 0	1	0·35	0 10	5	5 6	0·5
Thornton ..	150	A.C., 1 ph.	44	1 6	1⅜	2 0	1⅜	6 0	1	0·35	1 0	6	5 6	0·5
Tinamba ..	50	,,	25	1 6	1½	2 0	1½	6 0	1	0·35	1 0	5	5 6	0·5
Tongala ..	250	A.C., 3 ph.	90	1 6	1⅜	2 0	1⅜	6 0	1	0·35	1 0	6	5 6	0·5
Toongabbie ..	150	A.C., 1 ph.	13	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.	136	1 6	1¾	2 0	1¾	7 0	1¼	0·7	1 0	6	7 0	0·75
Trafalgar ..	1,000	A.C., 3 ph.	244	1 6	1½	2 0	1½	6 0	1	0·35	1 0	5	5 6	0·5
Traralgon ..	2,300	,,	534	1 4	1½	1 10	1½	5 6	1	0·35	0 8	4½	5 6	0·5
Tremont ..	200	A.C., 1 ph.	61	1 6	1½	2 0	1½	6 0	1	0·35	1 0	5	5 6	0·5
Tyabb ..	..	,,	26	1 6	1¾	2 0	1¾	6 0	1	0·35	1 0	6	7 0	0·5
Tyers	250	,,	48	1 6	1½	2 0	1½	6 0	1	0·35	1 0	5	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. and 1 ph.	158	1 6	1½	2 0	1½	6 0	1	0·35	0 10	5	5 6	0·5
Wahgunyah ..	500	A.C., 3 ph.	69	1 6	1¾	2 0	1¾	6 0	1	0·35	0 9	6	5 6	0·5
Wangaratta ..	4,300	,,	937	1 3	1¾	1 9	1¾	5 0	1	0·35	0 9	5	5 6	0·5
Warncoort ..	(See Cororooke)													
Warragul ..	2,800	A.C., 3 ph.	551	1 4	1½	1 10	1½	5 6	1	0·35	0 9	4	5 6	0·5
Warrion ..	(See Cororooke)													
Warrnambool ..	8,900	A.C., 3 ph.	1,592	1 3	1¾	1 9	1¾	5 0	1	0·35	0 9	5	7 0	0·75
Weerite ..	(See Cobden)													
Werribee ..	2,500	A.C., 3 ph.	458	1 4	1½	1 10	1½	5 6	1	0·35	0 10	4½	5 6	0·5
Wheeler's Hill ..	..	A.C., 1 ph.	17	1 6	1½	2 0	1½	6 0	1	0·35	0 10	5	5 6	0·5
Winchelsea ..	705	,,	97	1 6	1¾	2 0	1¾	6 0	1	0·35	1 0	6	7 0	0·75
Wodonga ..	2,300	A.C., 3 ph.	347	1 4	1¾	1 10	1¾	5 6	1	0·35	0 9	5½	5 6	0·5
Woodend ..	1,000	,, and 1 ph.	220	1 6	1¾	2 0	1¾	6 0	1	0·35	1 0	6	5 6	0·5
Wool Wool ..	(See Cororooke)													
Wunghnu ..	187	A.C., 1 ph.	9	1 6	1¾	2 0	1¾	6 0	1	0·35	1 0	6	5 6	0·5
Yarra Glen ..	580	,,	39	1 6	1½	2 0	1½	6 0	1	0·35	1 0	5	5 6	0·5
Yarragon ..	400	A.C., 3 ph.	77	1 6	1½	2 0	1½	6 0	1	0·35	1 0	5	5 6	0·5
Yarrawonga ..	2,000	D.C. 230 v.,	357	1 4	1¾	1 10	1¾	7 6	1¾	..	1 0	6	10 0	..
Yering ..	..	A.C., 1 ph.	4	1 6	1½	2 0	1½	6 0	1	0·35	1 0	5	5 6	0·5
Yeringberg ..	..	,,	6	1 6	1½	2 0	1½	6 0	1	0·35	0 10	5	5 6	0·5
Yinnar ..	685	A.C., 3 ph.	44	1 6	1½	2 0	1½	6 0	1	0·35	1 0	5	5 6	0·5

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.

If the total horse-power installed is between 51–100, the service charge 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.

Electricity charge subject to discount of 5 per cent. if more than 5,000 kwhs.; 10 per cent. if more than 25,000 kwhs.; and 11 per cent. if more than 50,000 kwhs. consumed per month.

(*b*) For the electricity supplied between the hours of 10 p.m. and 6 a.m. or other prescribed hours. Service charge subject to same discounts as for Industrial Power and Heating Two-part Tariff.

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

(*d*) Electricity charge subject to the following consumption discounts:—Up to 300 kwhs. per month, no discount; over 300 kwhs. per month, 10 per cent. on all kwhs. supplied; over 500 kwhs. per month, 20 per cent. on all kwhs. supplied; over 1,000 kwhs. per month 40 per cent. on all kwhs. 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 less than five horse-power. Subject to the following consumption discounts:—

Up to 250 kwhs. per month, no discount; over 250 kwhs. per month, 10 per cent. on all kwhs. supplied; over 400 kwhs. per month, 20 per cent. on all kwhs. supplied; over 600 kwhs. per month, 30 per cent. on all kwhs. supplied; over 800 kwhs. per month, 40 per cent. on all kwhs. supplied.

(*f*) Water Heating Night Rate Tariff. For electricity supplied between the hours of 10 p.m. and 6 a.m. (10 a.m. Sundays) or 10.30 p.m. and 6.30 a.m. (10.30 a.m. Sundays).

APPENDIX No. 5—*continued.*

COUNTRY ELECTRIC SUPPLY UNDERTAKINGS OPERATED BY MUNICIPAL AND PRIVATE UNDERTAKERS AT 1st JULY, 1934.

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.	960	(total)	9d.	3½d.
*Aspendale, Chelsea, and Carrum	7,000	Carrum E.S. Co.	,,	2,398	..	8d.	4d.
Avoca	800	Avoca E.S. Co.	D.C., 230 v.	179	40	1s. 3d. to 1s.	6d. to 3d.
Bacchus Marsh	1,510	Bacchus Marsh Shire Council	A.C., 230–400 v.	398	(total)	1s. to 9d.	6d. to 4½d.
Ballan	450	Ballan E.S. Co. Ltd.	A.C., 230–400 v.	102	..	1s. 3d.	Dom., 9d.; Ind., 6d.
Beaufort	1,400	Ripon Shire Council	,,	225	..	10d.	6d.
Beechworth	2,600	Beechworth Shire Council	,,	318	..	1s.	6d. (maximum)
Beulah	460	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.	205	..	1s.	6d.
Boort	650	Boort Co-op. Butter and Ice Co.	,,	318	56	1s. 3d. to 9d.	6d. to 4½d.
Bright	650	Block and Sons Pty. Ltd.	A.C., 230–400 v.	90	..	1s. 3d.	6d.
Broadford	1,264	Broadford Shire Council	D.C., 230 v.	203	..	9d.	6d.
Casterton	1,900	Casterton E.S. Co.	,,	455	15	1s.	7½d. to 4d.
Charlton	1,330	Charlton E.L. Co.	,,	419	(total)	1s. to 9d.	4½d.
Cohuna	950	Federal Milk Pty. Ltd.	,,	236	(total)	1s.	6d.
Coleraine	900	Coleraine and W.D.B.F. Co. Ltd.	,,	163	13	1s. 2d.	10d. to 6d.
Corindhap	..	Corindhap Hydraulic G.S. Co., N.L.	A.C., 3 ph.	No supply to consumers			
Daylesford	3,200	Ex. of late M. Pollard	D.C., 230–460 v.	550	..	10d.	5d.
Dimboola	1,690	Dimboola Shire Council	,,	435	94	1s. to 9d.	6d. to 4d.
Donald	1,800	Donald Shire Council	D.C., 230 v.	346	..	1s.	6d.
†Doncaster	3,400	Doncaster Shire Council	A.C. 1 ph., 200–400 v.	401	..	8d. Doncr., 9d. T'stowe	4d. to 1d.
Dunolly	580	Bet Bet Shire Council	A.C., 230–400 v.	116	..	1s. to 10d.	8d.
Eaglehawk	3,789	Eaglehawk Borough Council	D.C., 230–460 v.	750	..	9d.	5½d., and 4½d. to 1½d.
Edenhope	400	Bird, A. J.	D.C., 230 v.	30	..	1s. 6d.	1s.
Elmore	700	Elmore Elec. Supply Co.	D.C., 230 v.	192	..	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.	33	..	1s. 6d.	6d.
Hamilton	5,786	Hamilton E.S. Co.	D.C., 230 v.	1,085	(total)	8d. less 1½d. dis.	6d. to 1½d.
Heathcote	1,200	McIvor Shire Council	D.C., 230 v.	199	..	1s. 1d.	6d.
Hepburn	230	Hepburn Springs E.S. Co.	A.C., 230–400 v.	168	..	1s.	6d.
Hopetoun	800	Karkarooc Shire Council	D.C., 230 v.	162	41	1s. 4d.	9d. to 4d.
Horsham	5,271	Horsham Borough Council	D.C. 230–460 v.	1,053	124	9d.	4d. to 2½d.
Inglewood	1,100	Inglewood Borough Council	D.C., 230 v.	193	..	1s.	6d. to 5d.
Inverloch	120	C. W. Wyeth	D.C. 110 v.	18	..	1s.	1s.
Joparit	785	H. J. W. Block	D.C., 230 v.	275	(total)	1s.	6d.
Kaniva	600	Lawloit Shire Council	A.C., 230–400 v.	150	6	1s. 2d.	6d.
Kerang	2,750	Kerang Shire Council	D.C., 230 v.	579	(total)	10d.	5d. to 4d.
Kilmore	900	Kilmore Shire Council	,,	203	(total)	10d.	4d.
Koondrook	400	Kerang Shire Council	A.C., 230–400 v.	63	..	1s. 3d.	9d.
Koo-wee-rup	500	Koo-wee-rup E. L. Co.	A.C. 1 ph., 230 v.	81	..	Domestic light, 2s. per room per month, and 2d. per unit	
Korong Vale	500	Korong Shire Council	A.C., 230–400 v.	201	4	1s.	6d.
Lake Boga	250	Swan Hill Shire Council	,,	..	..	1s. 3d.	6d.
Lorne	250	Winchelsea Shire Council	D.C., 230 v.	120	..	1s. 6d. to 1s.	
Maryborough	5,600	Maryborough Borough Council	A.C., 230–400 v.	940	(total)	10d.	Dom.—Town, 2d.; Dist., 3d.
Mildura	6,614	Mildura Town Council	D.C., 230–460 v. A.C., 230–400 v.	1,931	(total)	Town, 7d. to 5¾d; District, 10d. to 7¾d.	Ind.—Town, 4·75 to 1d.; Dist., 5d. to 1¾d.
Minyip	700	Dunmunkle Shire Council	D.C., 230 v	185	(total)	1s. 2d.	8d. to 4d.
Myrtleford	850	Block and Sons Pty. Ltd.	A.C., 230–400 v.	85	..	1s. 3d.	6d.
Murrayville	400	Walpeup Shire Council	A.C., 230–400 v.	58	..	1s. 3d.	6d. to 3d.
Murchison	600	Waranga Shire Council	A.C., 230–400 v.	103	..	1s. 4d.	7d. to 1½d.
Murtoa	1,140	Dunmunkle Shire Council	D.C., 230 v.	311	..	10d.	5d. to 4d.
Nagambie	750	Goulburn Shire Council	D.C., 230 v.	184	..	10d.	6d. to 5d.
Natimuk	559	H. C. Woolmer	A.C., 230–400 v.	93	..	1s. 3d.	9d.
Neerim	300	Neerim & Riv. Latrobe Hydro E. Co.	,,	131	..	9d.	4d.
Nhill	1,900	Lowan Shire Council	D.C., 230–460 v.	406	..	1s. 1d.	7d. to 3d
Nyah	400	Swan Hill Shire Council	A.C., 230–400 v.	See Swan Hill		1s. 3d.	6d.
Omeo	500	Omeo Power Co.	,,	64	..	1s. 3d.	6d.
Orbost	2,000	Orbost Butter and Cheese Co.	D.C., 230 v.	330	20	10d.	6d. 1d. dis.
Ouyen	950	Walpeup Shire Council	,,	189	..	11d.	5d. to 3d.
Pyramid	450	Gordon Shire Council	A.C., 230–400 v.	85	12	1s. 3d.	9d.
Phillip Island	1,000	Phillip Island Shire Council	,,	70	..	1s. 1½d.	7d.
Portland	2,500	Portland Borough Council	,,	353	..	1s.	6d.
Quambatook	500	Kerang Shire Council	D.C., 230 v.	110	4	1s. 3d.	9d. to 6d.
Rainbow	1,007	Rainbow E.L. Co.	,,	139	4	1s. to 8d.	1s. to 6d.
Rochester	1,487	Commonwealth E.S. Co.	,,	330	12	1s. to 6d.	7d. to 6d.
Rupanyup	700	Dunmunkle Shire Council	,,	141	..	1s. 3d.	8d.
Rushworth	1,200	Waranga Shire Council	,,	272	(total)	1s.	6d. to 1½d.
Sea Lake	600	Wycheproof Shire Council	D.C., 230 v.	203	(total)	1s. 3d.	6d. to 3d.

* 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. 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.
Seymour ..	2,525	Seymour Shire Council	A.C., 230–400 v. ..	594 (total)		10d. to 6d. ..	4d. to 2d.
Stawell ..	4,600	Stawell Borough Council ..	,, ..	830	85	10d. ..	5d. to 2d.
St. Arnaud ..	3,500	St. Arnaud Borough Council ..	,, ..	525	..	1s. 1d. dis. ..	6d. 1d. dis.
Swan Hill ..	4,900	Swan Hill Shire Council	,, ..	1,320	..	1s. 3d. to 2½d...	5d. to 1d., and 6d. to 1½d.
			inc. Nyah, Lake Boga, and Ultima				
Tallangatta ..	570	Shire of Towong	A.C., 230–400 v. ..	110	..	1s. 3d. ..	6d.
Toora ..	350	Toora Foster Elec. Co. Ltd. ..	,, ..	197 (total)		1s. to 11d. ..	4d. to 3d.
Trentham ..	750	Kyneton Shire Council	,, ..	105	..	1s. 3d. ..	6d.
Ultima ..	250	Swan Hill Shire Council	,, ..	inc. in Swan Hill		1s. 3d.	6d.
Underbool ..	250	A. J. Gloster	D.C., 230. v. ..	25	..	1s. 6d. ..	6d.
Violet Town ..	600	Violet Town Shire Council ..	A.C., 230–400 v. ..	102	..	1s. 6d. ..	6d. and 3d.
Warburton ..	1,000	Yuthong Electric Coy.	D.C., 230 v. ..	211	..	1s. per month per 25 c.p. lamp or 9d. per unit	4½d.
Warracknabeal	2,875	Warracknabeal E.L. Co.	A.C., 230–400 v. ..	457	..	1s.	6d. to 4d.
Wedderburn ..	1,000	Korong Shire Council	,, ..	See Korong Vale		1s.	5d.
Wonthaggi ..	9,000	State Coal Mine	A.C., 415–240 v. ..	1,650	194	7d.	3d. to 1½d.
Wycheproof ..	800	Wycheproof Shire Council ..	D.C., 230 v. ..	203 (total)		1s. 3d. ..	6d. to 4½d.
Yarram ..	1,200	Yarram H.E. Co.	A.C., 230–400 v. ..	250	..	10d. ..	4d. and 2d.
Yea	950	Yea Shire Council	,, ..	244	..	11d. ..	6d. to 4d.

Total Population, 131,223. Total Consumers, 26,738.

APPENDIX No. 6.

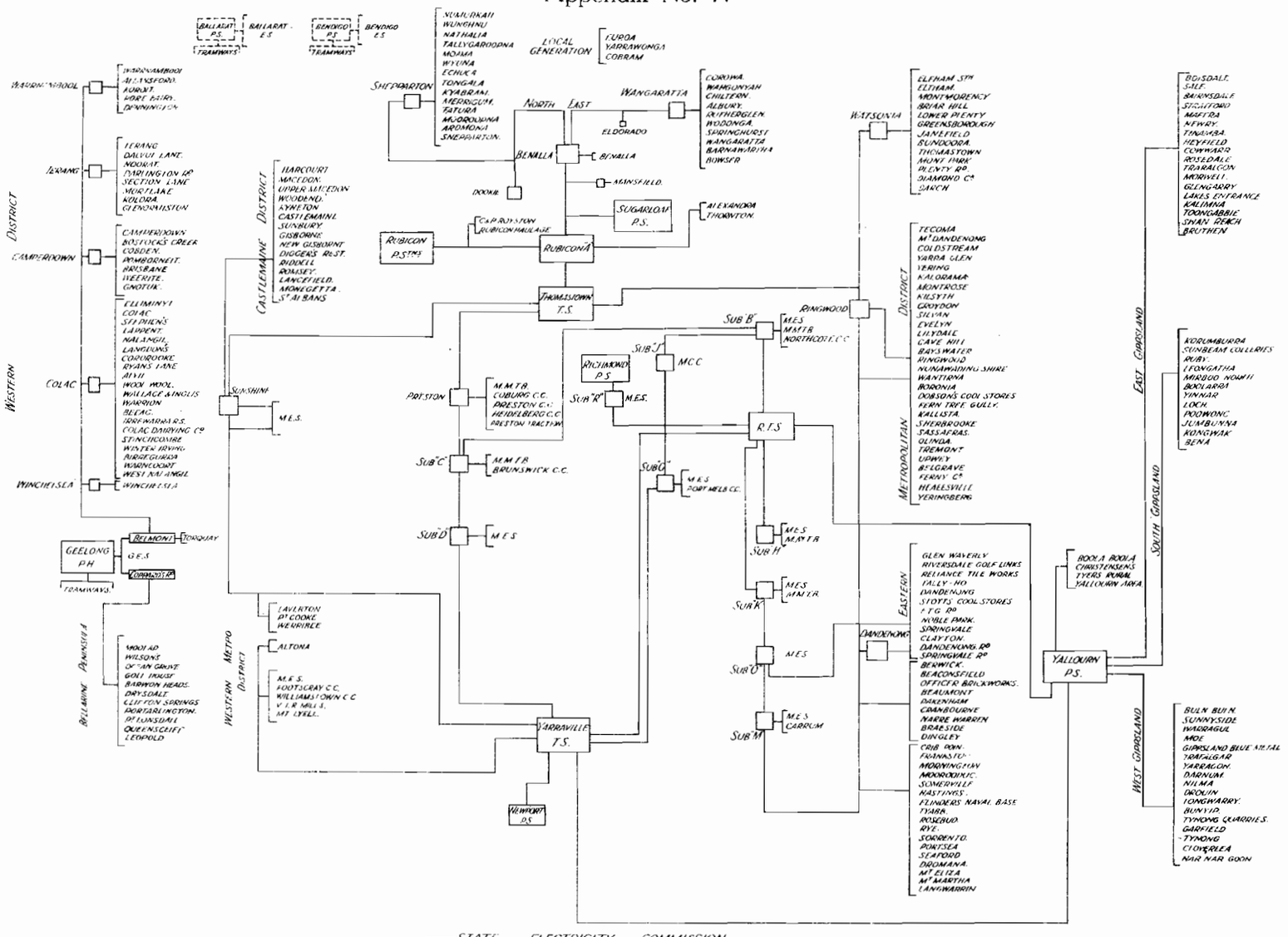
LIST OF UNDERTAKINGS ACQUIRED BY THE STATE ELECTRICITY COMMISSION OF VICTORIA, SHOWING INCREASED DEVELOPMENT SINCE ACQUISITION. (EXCLUDES MELBOURNE ELECTRIC SUPPLY COMPANY'S UNDERTAKINGS.)

District and Town.	Acquisition Date.	After Acquisition. Year 1933-34.		Prior to Acquisition.			Average Revenue per Unit Sold.	
		Units Sold.	Revenue.	Units Sold.	Revenue.	For Year Ended.	1933-34.	Prior to Acquisition.
			£		£		*d.*	*d.*
METROPOLITAN AREA.								
Essendon and Flemington ..	1.8.22	17,799,927	132,320	1,720,000	35,800	31.7.22	1·78	4·99
Sunshine	1.3.27	4,033,273	21,125	272,680	4,622	30.6.25	1·25	4·07
WESTERN METROPOLITAN DISTRICT.								
Werribee	10.4.24	579,433	6,346	61,190	2,575	30.9.23	2·63	10·10
EASTERN METROPOLITAN DISTRICT.								
Dandenong	1.10.23	1,271,992	13,281	77,300	4,006	30.9.23	2·50	12·44
Frankston	21.2.28	1,134,739	13,390	293,000	8,859	30.9.27	2·83	7·25
Healesville	1.4.33	168,457	4,522	103,910	4,196	30.9.31	6·44	9·24
Lilydale	1.4.25	350,179	4,322	39,950	1,816	30.9.24	2·96	10·91
Mornington	1.8.30	297,642	5,835	120,000	4,634	30.9.28	4·70	9·26
Ringwood and Croydon ..	1.4.25	687,295	8,498	181,600	4,393	30.9.24	2·96	5·81
GIPPSLAND DISTRICT.								
Bairnsdale	1.4.27	699,892	9,508	100,272	2,948	30.6.23	3·26	7·06
Drouin	3.10.24	242,058	2,647	19,500	743	30.9.21	2·62	9·15
Garfield	1.8.29	24,401	529	8,864	465	30.12.27	5·2	12·59
Korumburra	1.12.24	1,031,432	8,452	85,000	3,427	30.9.23	1·91	9·68
Leongatha	15.2.24	300,813	4,477	50,640	2,012	30.6.23	3·57	9·53
Maffra	1.9.24	840,072	7,511	62,000	2,651	30.9.22	2·14	10·26
Morwell	1.4.26	140,194	2,553	52,062	1,772	30.9.25	4·37	8·17
Sale	1.7.24	881,073	10,689	114,155	3,687	30.6.24	2·91	7·75
SOUTH-WESTERN DISTRICT.								
Camperdown	1.1.24	490,153	7,464	97,664	4,122	30.9.23	3·65	10·13
Colac	1.9.23	823,366	13,401	99,000	2,673	30.9.22	3·9	6·48
Koroit	1.12.28	118,833	2,123	50,000	2,319	30.9.28	4·29	11·13
Mortlake	16.5.24	146,551	2,543	35,306	1,626	30.9.22	4·16	11·05
Terang	4.3.24	289,723	5,137	78,839	3,439	30.9.23	4·25	10·47
CASTLEMAINE DISTRICT.								
Castlemaine	31.12.29	355,607	7,474	175,904	7,130	31.12.28	5·04	9·73
Gisborne	1.10.28	41,008	1,051	17,000	1,074	30.9.27	6·15	15·16
Kyneton	1.10.29	336,018	6,294	143,340	5,433	30.9.27	4·49	9·09
Sunbury	1.5.26	186,693	3,490	58,501	2,490	30.9.24	4·48	10·21
Woodend	1.8.29	124,416	2,719	51,000	2,555	30.9.27	5·24	12·02
NORTH-EASTERN DISTRICT.								
Alexandra	11.4.27	133,463	2,351	64,000 (approx.)	1,875	30.9.26	4·23	7·00 (approx.)
Benalla	1.5.26	444,370	7,881	70,800	3,373	30.9.24	4·25	11·43
Cobram	1.10.28	63,354	1,776	19,500	1,416	30.9.27	6·72	17·43
Euroa	20.3.28	122,221	3,326	46,618	1,782	30.9.25	6·53	9·17
Kyabram	1.12.26	287,851	4,668	92,312	3,462	4.7.25	3·89	9·00
Mansfield	1.6.28	80,423	1,951	25,000	1,341	30.9.27	5·82	12·88
Mooroopna	1.10.26	199,335	2,974	40,000	1,457	30.9.25	3·58	8·74
Nathalia and Numurkah ..	1.10.31	231,740	5,405	96,763	3,619	30.9.31	5·59	8·97
Rutherglen	15.10.26	171,307	3,278	28,392	1,377	30.9.24	4·59	11·64
Shepparton	1.1.25	1,341,551	16,000	163,400	4,625	30.6.24	2·86	6·79
Tatura	1.11.26	137,458	2,530	40,000	1,710	30.6.25	4·41	10·26
Wahgunyah	1.2.26	29,696	605	7,233	263	30.9.22	4·89	8·73
Wangaratta	12.3.27	1,051,624	12,817	151,600	4,788	30.9.25	2·92	7·58
Yarrawonga	1.8.25	187,048	4,115	47,000	2,149	30.9.24	5·28	10·97
Totals	..	37,906,681	377,378	5,066,295	154,704	..	2·39	7·328

COUNTRY DISTRICTS.—COMPARISON OF TOTAL FIGURES.

	Units Sold.	Revenue.	Average Cost per Unit.
		£	*d.*
After acquisition	16,073,481 ..	223,933 ..	3·34
Prior to acquisition	3,073,615 ..	114,282 ..	8·92
Increase in sales and revenue ..	423% ..	96%	Decrease 5·58 = 63%

Appendix No. 7.



STATE ELECTRICITY COMMISSION

DIAGRAM OF SUPPLY SYSTEM

AS AT JUNE 30TH 1934

H. J. Green, Printer, Melbourne.