1935.

VICTORIA.

STATE ELECTRICITY COMMISSION OF VICTORIA.

SIXTEENTH ANNUAL REPORT

COVERING THE

FINANCIAL YEAR ENDED 30TH JUNE, 1935:

TOGETHER WITH

APPENDICES.

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

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SIXTEENTH ANNUAL REPORT.

The Hon. F. E. Old, M.L.A.,
Minister in Charge of Electrical Undertakings,
Melbourne.

SIR,

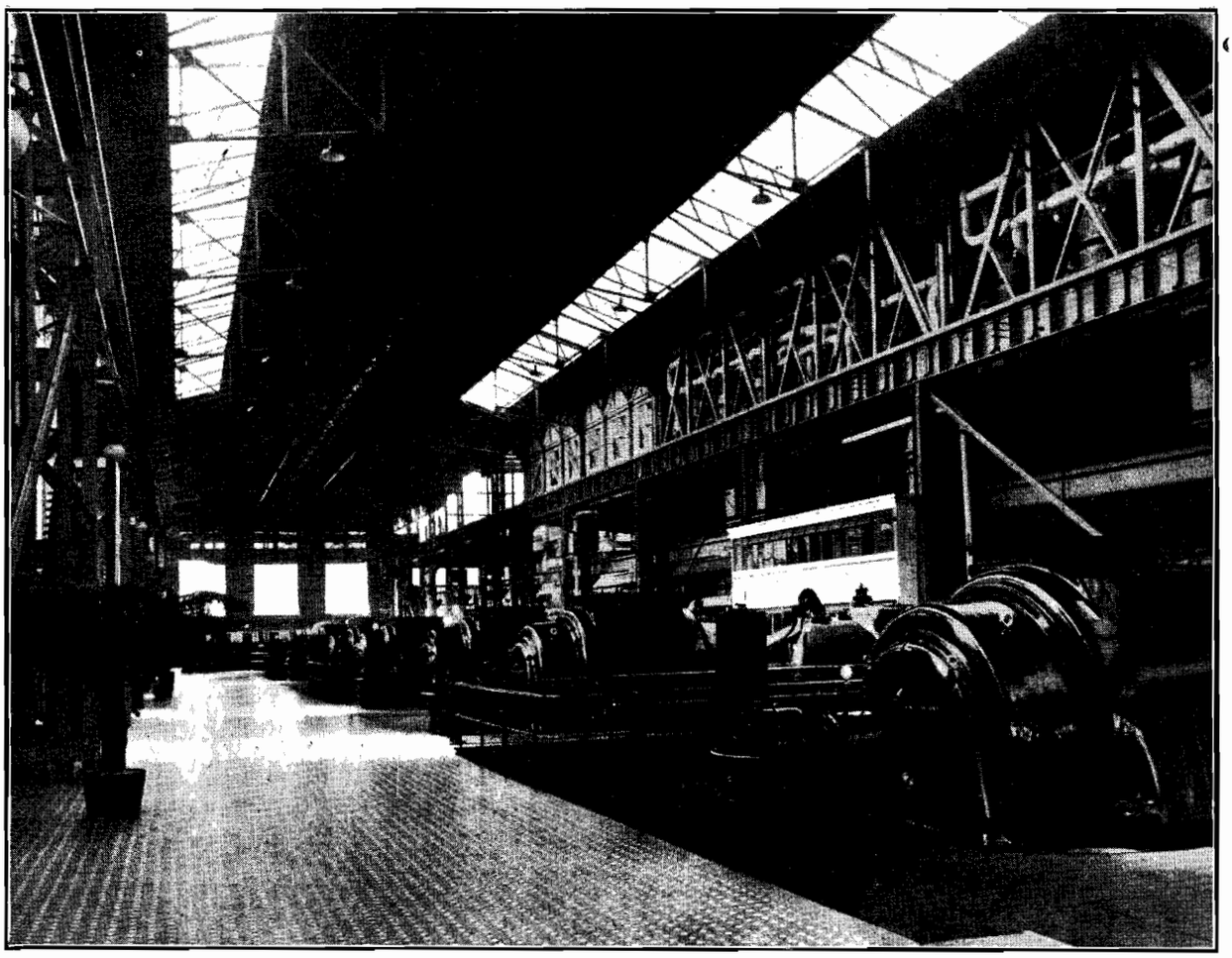
In conformity with the provisions of Section 35 (*b*) of the *State Electricity Commission Act* (*No.* 3776), we have the honour to present the Sixteenth Annual Report of the Commission, covering the financial year ended the 30th June, 1935, with Balance-sheet and Profit and Loss Accounts for that period.

PART I.—ADMINISTRATION.

MAJOR EXTENSION—MAIN SUPPLY SYSTEM.

The programme approved by Parliament in 1928 provided for the addition of 75,000 kw. of generating plant at Yallourn, in three yearly instalments of 25,000 kw. each, beginning in 1931. Decline in the demand for electricity began to manifest itself in 1930 as a consequence of the depression, hence the installation of the first of the 25,000 kw. sets was postponed until 1932, leaving the installation of the second and third sets to be determined by the exigencies of the demand for power. In accordance with the modified programme of plant installation, the second set was completed and put on load in August, 1935, thus bringing the installed capacity of the Yallourn station up to 125,000 kilowatts. With the other power stations of the system, this will provide for the estimated load until the winter of 1937.

In the programme for the above extension, ten boilers were included so as to ensure a normal output of 50,000 kw. from the new generating plant. Operating experience with the four boilers already in use has been so favourable that it is now certain the complete installation could safely deal with a load of 65,000 kw., and even of 75,000 kw. under favourable conditions of operation. In view of this, the Commission has already decided that the design of the extended power station shall provide for a fourth 25,000 kw. set, bringing the installed capacity of the extension to 100,000 kw. instead of 75,000 kw. as originally contemplated. Due to improvement in price conditions, a saving of £110,000 will be made on the provision of the three generating sets and ten boilers, which in 1928 were estimated to cost £2,200,000. After allowing for this saving, the total expenditure is now estimated to be £2,263,000 for an installed capacity $33\frac{1}{3}$ per cent. greater than that initially decided upon. Another and very important factor is the material advance made during the last few years in the development of high-pressure steam for power generation, and the opportunity is now afforded of bringing this extension into line with the most modern practice. By the adoption of a pressure and temperature of 650 lb. and 900° F. respectively in the six boilers which remain to be installed, it will be possible to increase the load carrying capacity of the extension from the 65,000 kw. already mentioned to 77,500 kw. for an expenditure of only £290,000; to secure the same capacity on the basis of the existing pressure and temperature (260 lb. and 650° F. respectively) would involve a capital outlay exceeding £400,000, and an additional operating expenditure of about £12,000 per annum.



Yallourn Power Station, Turbine Room. The installed capacity (125,000 kw. in six 12,500 kw. sets and two 25,000 kw. sets) is to be increased progressively to 200,000 kw., by the provision of two further 25,000 kw. sets and two 12,500 kw. sets, the latter to be high pressure.

Yallourn Power Station, No. 2 Boiler House, showing four (pressure and temperature 250 lb. and 650° F. respectively) of the ten boilers to be installed to complete the installation. The remaining six boilers will operate at a pressure and temperature of 650 lb. and 900° F. respectively.

The first stage of the modified programme provides for two of the high-pressure boilers (Nos. 15 and 16) and the third 25,000 kw. turbo-generator (No. 9) to be in operation in the winter of 1937. The remaining stages will be undertaken as dictated by the demand for power. Upon present estimates of load development, they are likely to be in the following order :—

Second Stage (1938) :

Nos. 19 and 20 boilers ;

No. 8A high-pressure turbine (12,500 kw.) ;

No. 9A high-pressure turbine (12,500 kw.).

The above two generating sets will act as pressure-reducing links between the new high-pressure and the existing low-pressure pipe systems.

Third Stage (1939) :

Nos. 17 and 18 boilers.

Fourth Stage (1940) :

No. 10 turbo-generator (25,000 kw.).

The expenditure during the year on the Yallourn Power Station extensions approved in 1928, was £32,453, bringing the total to £1,314,407.

The provision of new generating plant at Yallourn involves the question of additional coal winning resources, and the purchase of a further major unit of coal winning plant will become necessary. It has been decided, therefore, that Mr. R. J. McKay, who was recently appointed Engineer in charge of Coal Supply, shall visit Europe in February next to study the latest developments in open cut coal winning and transport machinery preparatory to the purchase by the Commission of further plant. As it is only in Germany that similar brown coal deposits of large extent exist, and as they have been exhaustively studied and worked there for the last 50 years, it will be of advantage that Mr. McKay make first-hand acquaintance with the most up-to-date methods evolved in that country.

FLOODING OF YALLOURN OPEN CUT.

The greatest individual disaster of the unprecedented floods which, on the 1st December, 1934, devastated such a wide area of the State, particularly that portion of Gippsland through which the Latrobe River flows, was undoubtedly the inundation of the Yallourn Open Cut. Not only did the flood cause a sudden and complete cessation of coal-winning operations at Yallourn, but extensive damage was done to plant, roads, railways, the power station weir, the bridge leading to the Old Brown Coal open cut, and the pumping station for the supply of water to the town and works. In addition to heavy restoration works, the Commission was involved in considerable emergency measures to avoid restrictions in the public use of electricity and briquettes. It is gratifying to be able to record that these emergency measures were completely successful, and also that the restoration works, including the major task of dewatering the open cut, proceeded so satisfactorily that the full normal outputs of coal required for all purposes were being secured from the upper level of the cut five months after the flooding. The lower level, whence the coal is delivered by trains to the electric steep haulage, was cleared of water two months later ; but so great was the deposit of mud over the whole of this level, and the damage done by an extensive washaway at the east end of the cut, that at the close of the financial year restoration of this level and its equipment had not been completed.

The Commission gratefully acknowledges the sympathetic and valuable co-operation of other public bodies, which, as far as their own flood troubles would allow, readily placed their plant resources at its disposal. The same spirit of co-operation was displayed by local manufacturers. With only sketches to work upon in some cases, they produced in a minimum of time plant and parts for the pumping that stood up to all the demands made upon them.

Intensity of the Flood.—Hydrological data have disclosed the fact that the discharge in the river at Yallourn was at least 110,000 cubic feet per second, or more than five times greater than that of the previous highest flood known (October, 1927). While there may have been greater rainfalls in the Latrobe catchment in previous years, these were of comparatively brief duration and confined to small areas. It was the intensity, duration and unusually widespread distribution

of the rainfall, aggravated by the saturated state of the soil following an excessively wet period, that resulted in the unprecedented flood in December. Individual falls up to 800 points were recorded during the 24 hours preceding the flood, and the average for the 48 hours preceding the flood was 852 points, compared with an average of only 155 points for the 48 hours preceding the 1927 Latrobe flood. At Warragul the rainfall records go back 55 years, during the whole of which time the heaviest fall on any one day was 300 points less than that during the December flood period, and even this fall occurred only once. The heaviest fall of rain during the flood period was 19½ inches at Fumina South ; this is not an official gauging, but is regarded as reasonably reliable.

The effect of the flood damage on the operations at Yallourn was—

(1) To prevent entirely the production of coal and the removal and disposal of overburden from the Yallourn open cut, and to delay the emergency re-opening of the Old Brown Coal open cut (closed down in 1928).

(2) To restrict power-house operations to a scale related to the limited quantities of stored fuel available.

(3) To throw the Briquette Factory out of operation.

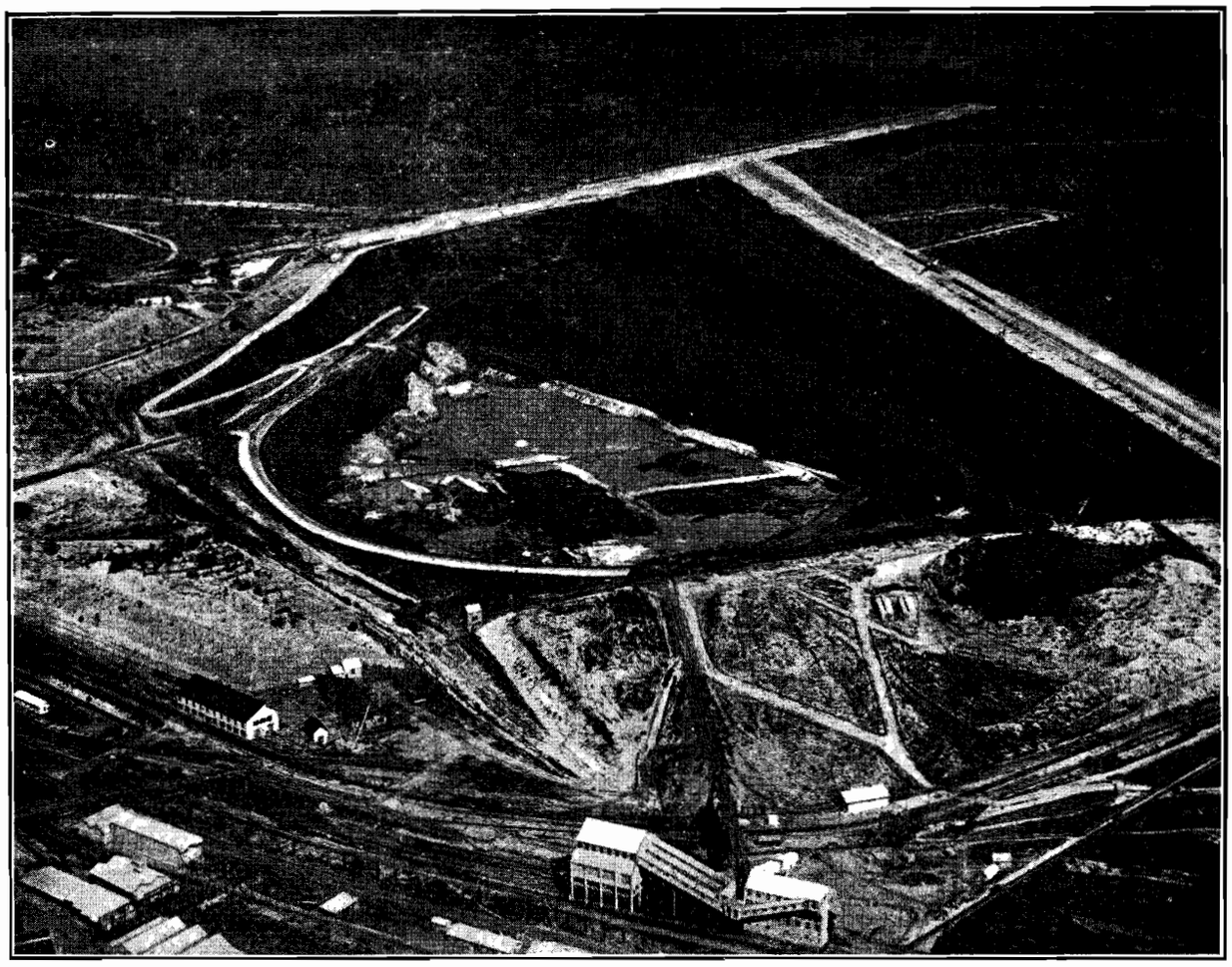
In addition to the difficulties at Yallourn, flooding also temporarily put out of action the Commission's peak-load station at Richmond, on the Yarra River. The Commission's other metropolitan peak load station at Newport was also out of action at the time, undergoing a complete overhaul. This station is situated near the mouth of the Yarra, and the flood conditions were such that at one stage its circulating water system seemed likely to become affected.

As normal stocks of briquettes (maintained principally in the metropolitan area) were sufficient to meet immediate regular seasonal requirements for this class of fuel, the initial problem was to maintain supplies of electricity. The normal system loading to be provided at the time was 105,000 kw., about 75 per cent. of which was being carried by the Yallourn station. The Richmond station was very quickly restored to full operating efficiency, while no time was lost in bringing Newport back on to full load. With the Sugarloaf-Rubicon hydro-electric group of stations, the resources of the Commission's system, apart from Yallourn, were thus 58,000 kw.—Richmond 15,000, Newport 20,000, Sugarloaf-Rubicon 23,000. The station which the Railways Commissioners also have at Newport was able to assist to the extent of 17,000 kw., and the Melbourne City Council's Spencer-street station relieved the Main Supply System of about 8,000 kw. of the city's requirements. This left 22,000 kw. to be supplied by the Yallourn station, but as this could be guaranteed for a period of a month at most, in view of the limited reserves of fuel on hand, it was imperative that the Old Brown Coal open cut should be made accessible and re-equipped for overburden-removal and actual coal-winning at the earliest possible moment.

Over 1,000 extra men were immediately engaged for the restoration measures adopted. The railway to the old open cut was completely repaired ; 30 feet of the 90 feet of the flood-scoured abutment of the access bridge filled in, and the remaining 60 feet spanned by an extension of the bridge structure ; the damaged bridge itself was repaired and strengthened, and the old open cut re-equipped with overburden removal machinery and facilities for the hand-winning and transport of coal, so that on Boxing Day, or less than 26 days after the flood had reached its maximum, electric trains, hauling rakes of 20-ton trucks, entered the old cut for their first loads of coal. In addition, a rubble bank had been thrown across the new river channel at the weir, thus averting the danger of the water being diverted from or brought below the level of the inlet conduit to the power station. Outputs of old cut coal exceeding 3,000 tons a day were soon being won, and this enabled the power station to meet the loading it was being required to carry and the Briquette Factory to resume partial operation and produce up to 850 tons of briquettes a day. The position was thus made safe until the onset of the heavy winter demands for electricity and briquettes.

It was essential that the water in the Yallourn open cut should be removed so that something approaching normal coal-winning conditions should operate before the winter.

The success achieved by the officers concerned with emergency plant in the performance of a most exacting and strenuous engineering task is recorded with satisfaction by the Commission. It proceeded according to schedule, and obviated any embarrassments which the Commission might have experienced in meeting the full public demands for electricity and briquettes. By the 9th March over 50 feet in depth of the water had been removed, the top of No. 1 coal face had been fully exposed, No. 1 coal dredge was being overhauled and a power shovel had commenced excavating from a bank containing about 200,000 tons of coal on top of this level. As the power shovel attained an output of 2,500 tons a day, it became possible



Aerial View of Yallourn Open Cut, taken four days before the flooding.

Aerial View of Flooded Yallourn Open Cut, taken on 1st December, 1934.

for the power station to take up a much larger share of the load on the system, while the Briquette Factory (using old cut coal) was enabled to progress up to full output. By the 19th of April the whole of the first 90 feet face of coal had been exposed and cleaned up, and No. 1 coal dredge had resumed operations, quickly reaching an output of about 8,000 tons a day, so that the Commission's own system was able without any assistance whatever to meet the steadily increasing seasonal demand for power. At the beginning of May the Briquette Factory was able to revert to new cut coal, and, by the end of that month, No. 1 coal dredge was producing approximately 10,000 tons a day; the Yallourn station was operating normally, and coal-winning from the old cut was no longer necessary.

As the methods which were adopted are of considerable engineering interest, and as it is advisable to place on historical record for future reference an account in some detail of the manner in which the Commission had dealt with the special problem of dewatering the open cut, such record has been embodied in Appendix No. 1 (page 39), with the further advantage of eliminating much detail from the general body of this report.

Future Protection of Yallourn Workings.—The protective levee system as it existed at December, 1934, provided a margin of safety of approximately ten feet over any known flood. As a guide to the margin of safety it will be advisable to provide in the future, every factor which contributed to the exceptional severity of the December flood was exhaustively reviewed by the Commission, and rainfall and other data, covering in some cases nearly 100 years, were carefully re-examined. It was decided to provide protection against a flood with a flow 33 per cent. greater than the maximum of that which inundated the cut and adjoining works. The common levee system, which is to be not less than ten feet wide at summit level, will be thirteen feet higher in places than the old banks, and protect all branches of the Commission's operations. It is estimated to cost £60,000, and is now under construction as an urgent work.

HYDROGENATION OF BROWN COAL.

The Commission's Engineer in charge of Briquetting and Research (Dr. H. Herman), who is the Victorian State Government's representative on the Committee appointed by the Federal Government to inquire into the relative merits of black and brown coal for hydrogenation, should such a nationally-assisted petrol and oil industry be established in Australia, will visit England in October this year for the purpose of conferring with the Fuel Research Board, London, on the investigations regarding the hydrogenation of Victorian brown coal that have been proceeding at the Board's plant, East Greenwich, during the last twelve months. Mr. G. Baragwanath, a chemical engineer on the Commission's staff, who has been associated with the Board's investigations since their inception, will return to Melbourne on their completion. The circumstances in which the investigations were instituted by the Commission were fully explained in its Fifteenth Annual Report.

During his visit abroad, Dr. Herman will extend his investigations to Germany, and, while there, take the opportunity to inquire into the latest practices in briquetting so that, if occasion requires, the Commission will be prepared for any future extension of the Yallourn factory. As it is necessary for the Commission to keep abreast with research and developments in regard to probable uses of brown coal other than for briquetting and electrical generation, such, for example, as for railway traction and gas production, Dr. Herman will also take the opportunity to obtain first-hand information regarding the specialized work on this class of fuel that is carried on in that country. On the briquetting investigations he will be accompanied by Mr. W. G. Smellie, Process Engineer of the Briquetting and Research Branch, who will leave Australia so that his arrival in Germany shall coincide with that of Dr. Herman.

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

During the past year the loading in the metropolitan area increased materially, the main increase being in the industrial field. The load curve (see Graph No. 1) is common to most electricity supply systems, and any improvement in its characteristics can only be in the direction of increased consumption of electricity during the late evening and early morning hours. The lower curve of the graph, which shows the demand on the Commission's system, maintained the improvement recorded in the previous year, the rise in the maximum demand being again associated with an increase in load factor. The portion of the graph coloured yellow represents the energy generated at the Railways Commissioners' Newport " A " Station.

The maximum load carried by each of the Commission's power stations for some years past is shown in Graph No. 2. This, however, does not indicate the demand on each station at the time of the maximum simultaneous demand on the system. Yallourn Power Station carried 84,000 kw. as against 86,000 kw. in 1934, the drop being caused by the restriction in output imposed by flood damage. A record was again established for the system demand, which reached 132,000 kw., or 10,400 kw. in excess of the previous year's figure.

Graph No. 3 shows the rapid 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 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 general financial stress on the progress of the State undertaking.

Graph No. 5 shows the coincident maximum demand on the main supply system, the kilowatt-hours generated, and the resulting load factor. The energy from the generating stations is fed into the Main Supply System and transformed at terminal stations for the requirements of the local distributing systems in the metropolitan area and country districts.

Appendices Nos. 3 and 4 give details of the length of overhead lines erected and cables laid, and the number of sub-stations erected to date in the Commission's system.

Appendix No. 5 gives the contribution from all supply sources to the total energy used 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 and up to the date of this report were to Inverloch, Neerim South, Neerim Junction, Nayook, Noojee, Emerald, Selby, Clematis, Upper Beaconsfield, Mount Dandenong, Lindenow, Kilmany Boys' Home, Longford National Broadcasting Station, Eldorado, Strathmerton, Rochester, Koo-wee-rup, Lang Lang, and Cora Lynn.

The total number of centres now supplied by the State Power System is 229, of which 167 did not previously enjoy the benefits of electricity supply.

TOWN OF YALLOURN.

Housing.—To meet normal requirements, 26 new houses were either erected or in course of construction during the year. These will bring the total number of dwellings at Yallourn to 568. While this will enable the Commission to overtake the arrears in its building programme that resulted from the lack of funds for capital works during the three or four years preceding 1934, the housing problem at Yallourn since and including December last has been rendered more than ordinarily acute by reason of the largely increased labour personnel necessitated by the flood restoration works. However, this abnormal condition has been progressively eased as works have advanced or been completed, although the various organized camps are still full and every house is occupied.

The population figures for the Yallourn territory at the 30th June, 1935, were as follow :—

Town of Yallourn	2,592
Brown Coal Mine	659
West Camp	334
South Camp	186
Outlying Areas	36
Total	3,807

The population of settlements adjacent to the Commission's works totals 754.

Visitors to Yallourn.—Yallourn was honoured by a visit of His Royal Highness Prince Henry, Duke of Gloucester, K.G., P.C., K.P., G.C.V.O., on the 27th October, 1934. Among other distinguished visitors during this Centenary year were His Excellency the Governor, Lord Huntingfield, and many International, Victorian, and inter-State celebrities. School children to the number of 635 also inspected the town and works in the period from June to December. In consequence of the dislocation brought about by the December flood, organized tours of Yallourn had to be disallowed, and the issue of permits to view the works severely restricted ; hence the total number of visitors to Yallourn during the year was much less than usual.

Hospital.—The Hospital and general medical services (including the Health Centre), administered by the Medical and Hospital Society and financed by regular weekly contributions from all employees in the territory, had a particularly busy year, owing to the large number of extra men employed on flood reclamation works, the daily average of occupied beds being 24·4, compared with 17·4 in the preceding year. The various medical services continue to be maintained at a high level of efficiency, encouraged by the keen interest of the residents in the welfare and appearance of the hospital and its grounds.

Technical School.—The ever-increasing numbers attending the various technical classes having necessitated an addition to the temporary accommodation provided by the Commission, the acceptance, shortly after the close of the financial year, of a tender by the Education Department for the erection of a modern, well-equipped Technical School building at Yallourn has been very gratifying to both the Commission and the residents. The estimated cost of the school and its equipment is £10,500, towards which amount the Commission has undertaken to contribute £2,000.

INDUSTRIAL.

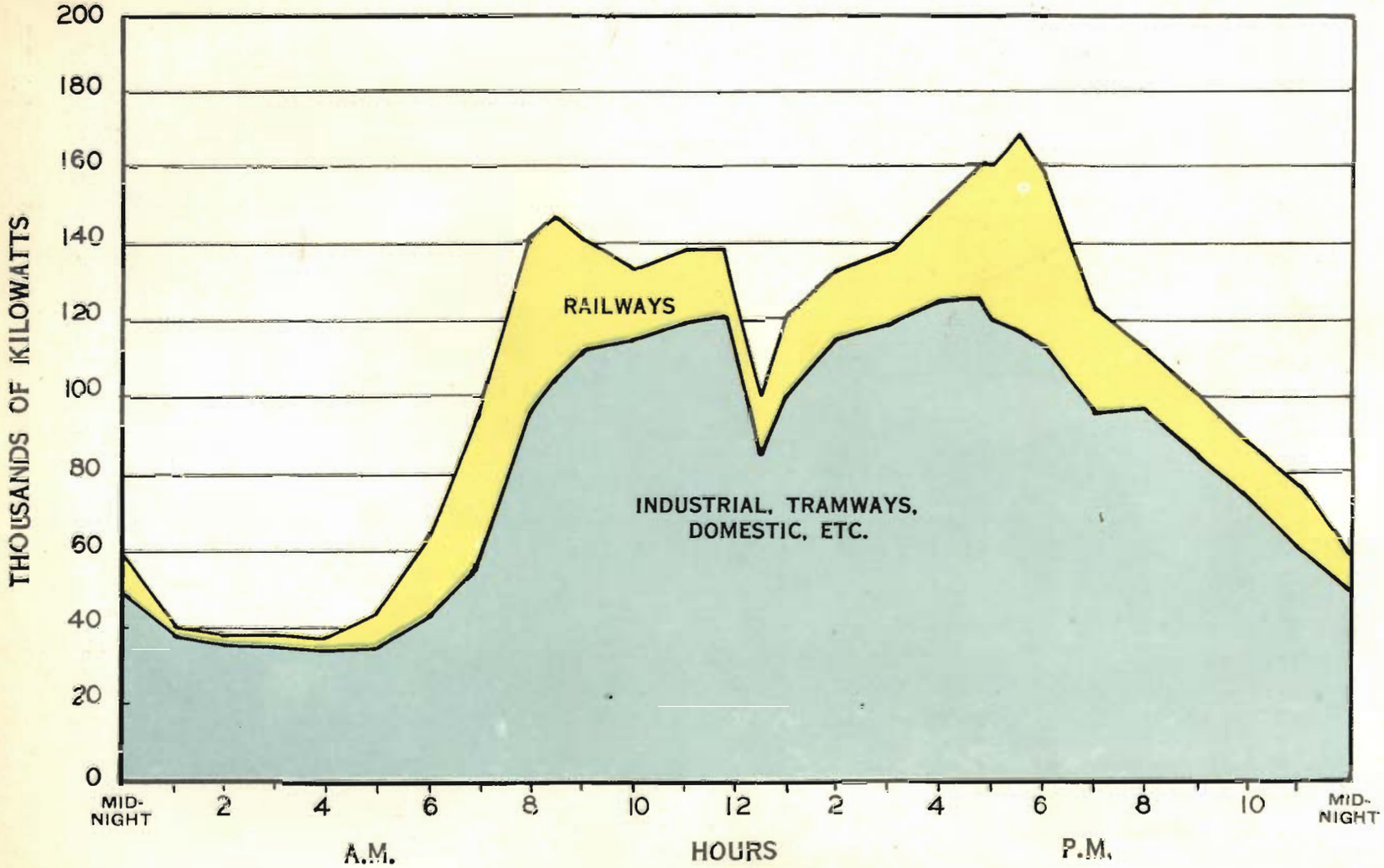
Disposition of Commission's labour forces at 30th June, 1934 :—

	Operation.	Construction.
Power Generation	274	Nil
Main Transmission Lines, Terminal Stations, &c.	230	48
Metropolitan Electricity Supply	319	159
Country Electricity Supply	323	62
Briquette Production and Distribution	274	7
Coal-winning—Yallourn	523	Nil
General Services and Workshops, Yallourn	398	66
General Services—elsewhere	525	58
Tramways—Geelong, Ballarat, and Bendigo	208	178
Flood Works—Yallourn	480	Nil
Totals	3,554	578

Grand Total—4,132.

STATE OF VICTORIA

TYPICAL WINTER DAILY LOAD WITHIN METROPOLITAN AREA 1935

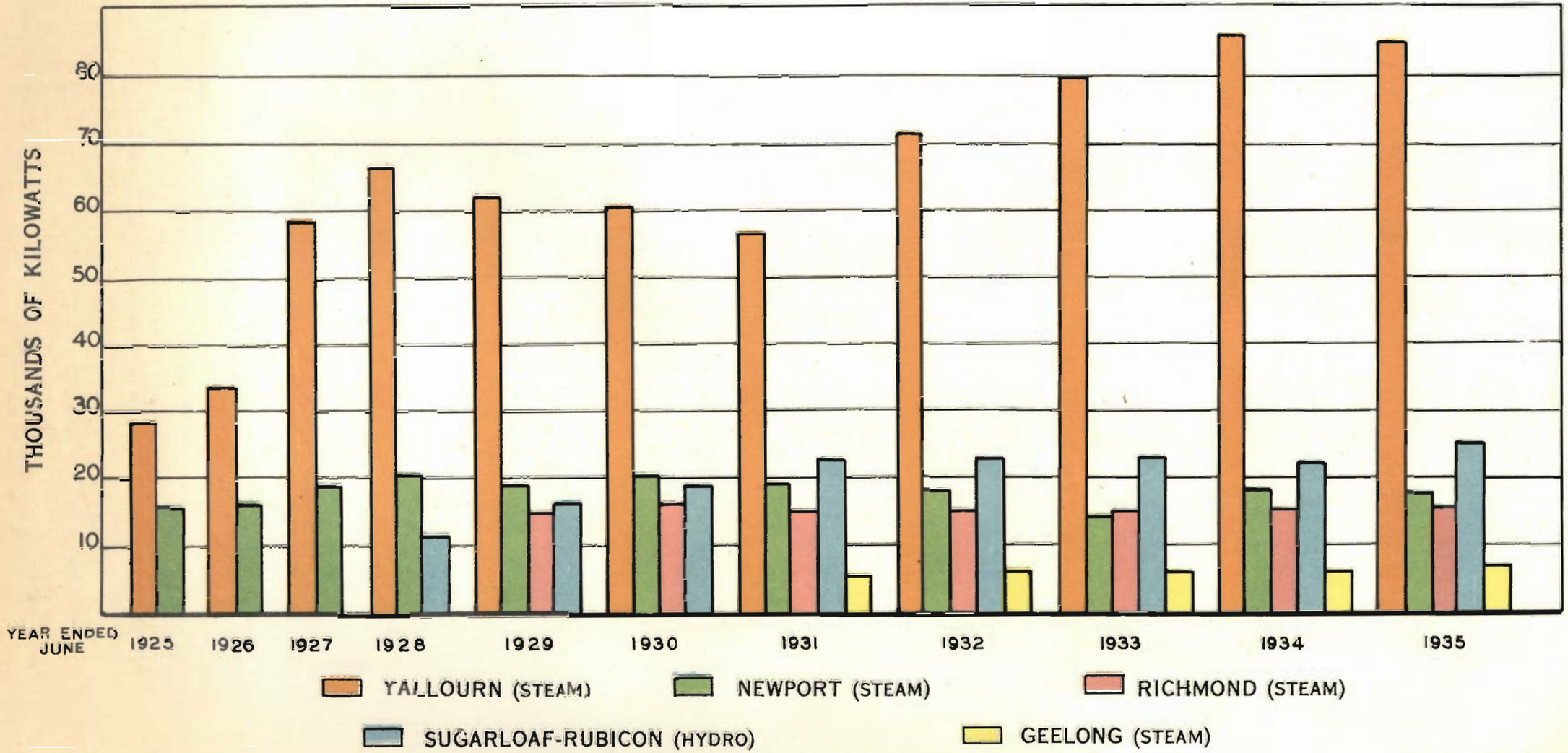


GRAPH NO. 1

The portion of the graph coloured yellow represents the energy generated by the Victorian Railways Commissioners at their Newport "A" Station.

STATE POWER SYSTEM

MAXIMUM DEMANDS AT GENERATING STATIONS

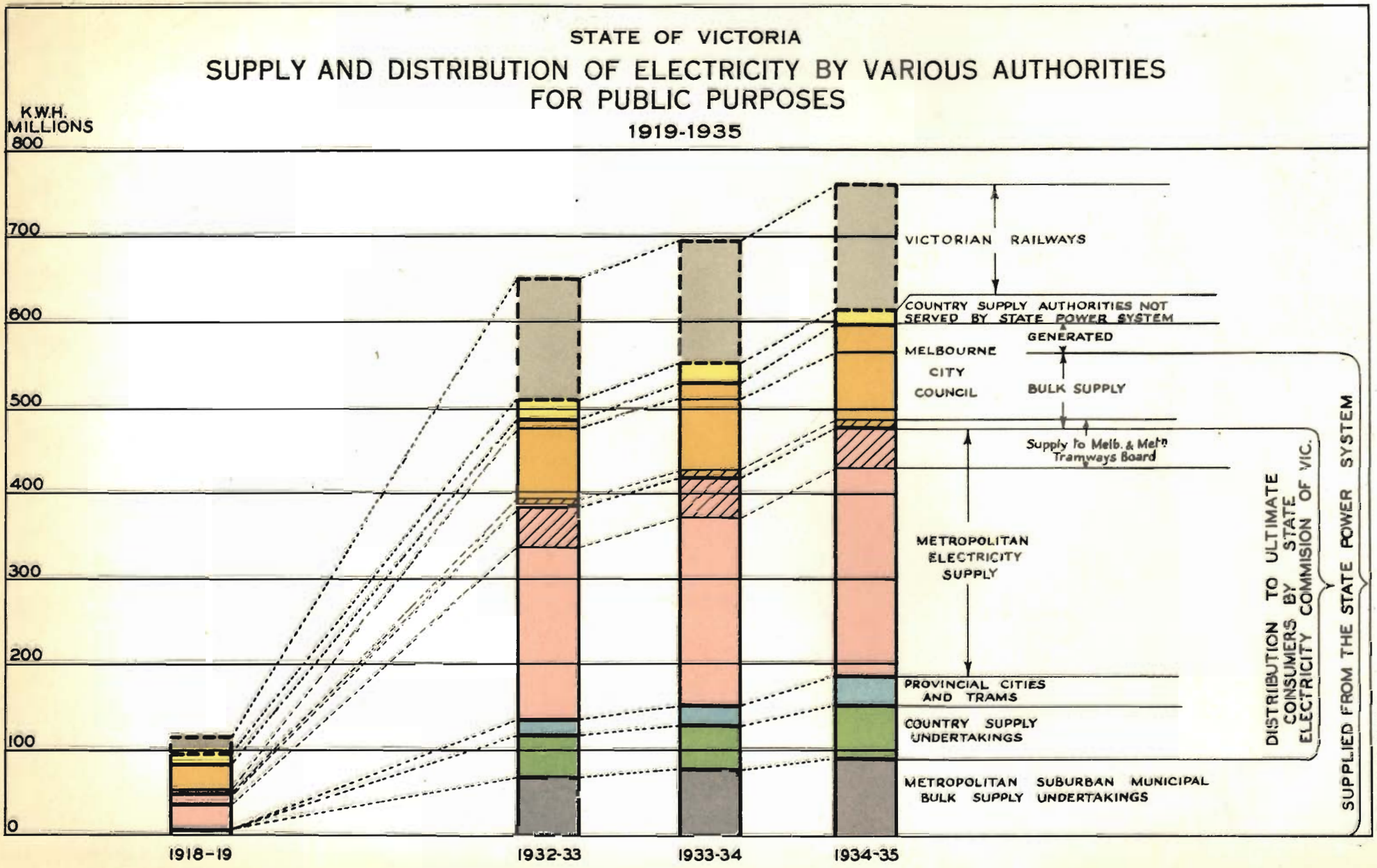


GRAPH NO. 2

STATE OF VICTORIA

SUPPLY AND DISTRIBUTION OF ELECTRICITY BY VARIOUS AUTHORITIES FOR PUBLIC PURPOSES

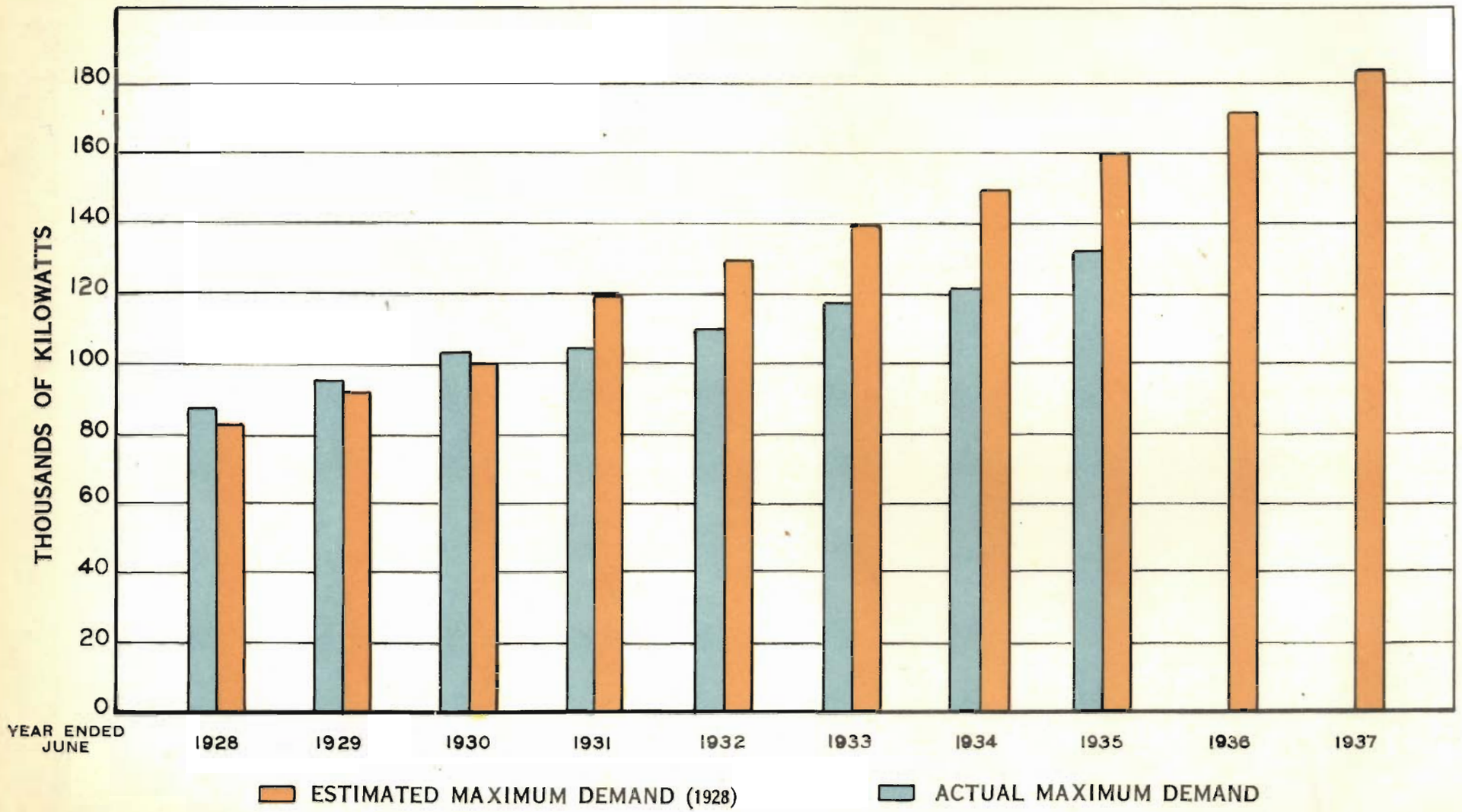
1919-1935



GRAPH No. 3

STATE ELECTRICITY COMMISSION OF VICTORIA

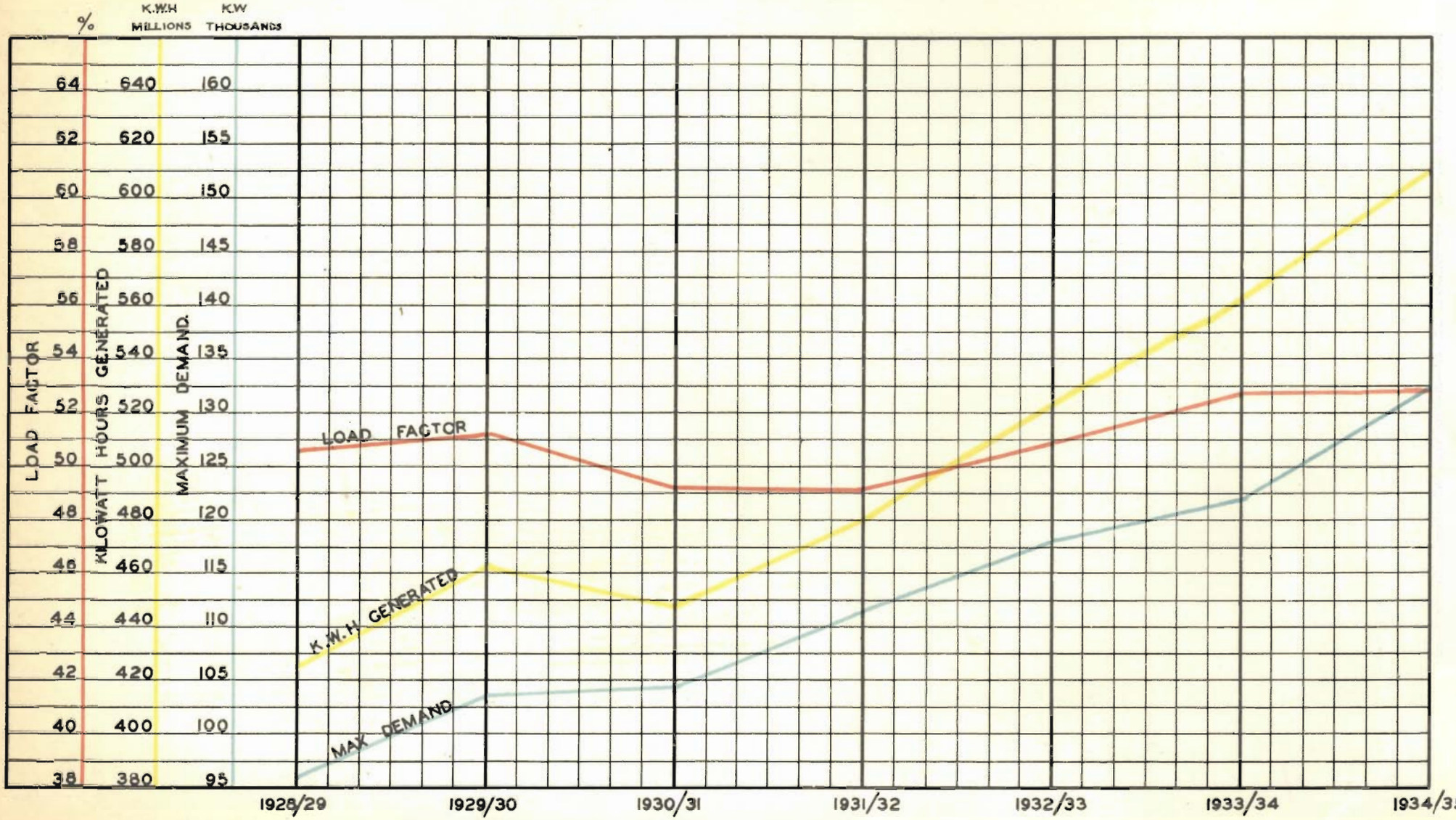
LOADING ON MAIN SUPPLY SYSTEM



GRAPH NO. 4

STATE ELECTRICITY COMMISSION OF VICTORIA

ENERGY GENERATED FOR MAIN SUPPLY SYSTEM



GRAPH NO. 5

The increase of 1,463 during the year is due to Yallourn flood restoration works, re-construction of Ballarat and Bendigo tramways, and the transfer, as at 1st July, 1934, of the undertakings in Ballarat and Bendigo formerly owned by The Electric Supply Company of Victoria Ltd.

The trend of the cost of living index figures was upward throughout the year, but as a result of the decision of the Arbitration Court to alter rates of wages only when a change in the figures equals at least 2s. a week, there was but one variation in base rates during the period. This added £17,600 to the year's expenditure of the Commission.

ELECTRIC LIGHT AND POWER ACT ACT 1928.

Since the passing of the *Electric Light and Power Act* 1896, 227 Orders in Council have been granted. Of these 123 have been issued to Municipal Councils and 101 to Companies or persons. Eighty-four Orders have been revoked, including a number relating to undertakings which have passed into the control of the Commission.

During the year Orders in Council for the supply of electricity were recommended by the Commission and approved by the Governor in Council as under :—

Number.	Undertaker.	Area.	Tariff.			System of Supply.
			Light.	Power.	Minimum Charge per Month.	
			s. *d.*	*s.* *d.*	*s.* *d.*	
223	Apollo Bay Electric Supply Co. Pty. Ltd.	Township of Apollo Bay	1 6	0 9	7 6	D.C. 230 v.
224	Shire of Upper Murray	Township of Corryong	1 3	0 6	7 6	A.C. 230/400 v.
225	Avoca Electric Light Co. Pty. Ltd.	Township of Avoca ..	1 3	0 9	5 0	D.C. 230 v.
226	Upper Yarra Electric Supply Co. Pty. Ltd.	Township of Warburton	0 9	0 4½	7 6	A.C. 230/400 v.
227	James Andrews ..	Township of Mananga-tang	1 4	0 9	8 0	D.C. 230 v.

Orders Nos. 223, 224, and 227 relate to new areas of supply. Orders Nos. 225 and 226 were issued in substitution for old Orders in respect of areas already supplied with electricity.

LICENSING OF ELECTRICAL MECHANICS.

The *State Electricity Commission Act* 1934 provides for substantial alterations in the system of licensing of electrical mechanics, previously known as " wiremen ". An important provision is that which makes it illegal for any person who is not licensed as an electrical mechanic to engage in electrical wiring. The provisions with respect to the licensing of electrical mechanics were given effect under regulations made by the Governor in Council on 20th November, 1934, and 4th December, 1934.

These regulations set out, *inter alia*, the qualifications required of electrical mechanics in each of the respective grades " A ", " B1 ", " B ", and " C ", and define the class of work in which an electrical mechanic of any grade is permitted to engage. They also lay down the procedure to be adopted by electrical mechanics for obtaining and annually renewing their licences, as well as that to be followed in connexion with the licensing examinations. Certain examinations and courses which will exempt applicants for licences from theory examinations are specified.

Under the Act and Regulations, renewal of licences is required as from the 1st January, 1935.

The following list shows the number of licences renewed and issued during the year :—

Grade.	Licences renewed as Electrical Mechanics' Licences up to 30th June, 1935.	New Electrical Mechanics' Licences issued up to 30th June, 1935.	Total Electrical Mechanics' Licences in force at 30th June, 1935.
"A"	1,362	96	1,458
"B1"	96	17	113
"B"	459	73	532
"C"	51	88	139

In addition to the above, 138 permits to engage in electrical wiring work under certain conditions, and limited in each case to six months, were issued during the year, at the close of which 79 were in force.

On the 9th May, 1935, a total of 724 persons who held wiremen's licences had not renewed their licences. This total included 412 "A" Grade, 21 "B1" Grade, 270 "B" Grade, and 21 "C" Grade. It was then estimated that about 150 men who had not renewed their licences might still be working at the trade. The remainder, in all probability, have left the State or have given up electrical installation work or are deceased. After allowing a reasonable period to ensure that all electrical mechanics are aware of the renewal provisions of the Regulations, inquiries will be instituted in regard to all electrical mechanics who have not renewed licences.

The difficulties experienced in the past in keeping in touch with wiremen and discrepancies which have been disclosed in connexion with applications for renewal of licences have definitely proved the value of the new provisions of the Act and Regulations with respect to annual renewal of licences and compulsory notification of change of address.

In future, complete lists of licensed electrical mechanics will be published about April of each year.

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

ELECTRICAL CONTRACTORS.

Regulations dealing with the registration of electrical contractors, for which the 1934 Act makes provision, were in course of preparation at the close of the financial year.

APPROVAL OF ELECTRICAL APPLIANCES AND EQUIPMENT.

The *State Electricity Commission Act* 1934 vests in the Commission certain powers and responsibilities with respect to the approval of electrical appliances and equipment with the object of ensuring their safety in service.

The first step taken to give effect to this legislation was the appointment, in December, 1934, of an Electrical Approvals Board. The original constitution of this Board was as follows :—

Mr. D. Dunham ..	State Electric Inspector—Chairman.
Mr. S. G. Hall ..	representing Electricity Supply Undertakers.
Mr. B. G. Firth ..	representing the Wholesale Electrical Traders of Victoria.
Mr. A. Stuart ..	representing Victorian Manufacturers of Electrical Goods.
Mr. W. Cumming ..	representing Electrical Contractors.
Mr. W. H. Stock ..	representing the Fire Underwriters' Association.
Mr. A. W. Henderson	representing workers in the Electrical Trade.

Mr. B. H. Miller, of the Commission's staff, was appointed Deputy Chairman. Mr. Firth resigned shortly before the close of the financial year, and Mr. E. B. Foster has since been appointed in his stead.

The Board was occupied for some months with the preparation of regulations and the determination of procedure necessary to give full effect to the new legislation. With the unanimous acceptance of the Board, regulations, as recommended by the Commission, were made by the Governor in Council under Section 7 of the *State Electricity Commission Act* and certain provisions of the *Public Authorities Marks Act* 1930. These regulations, which were gazetted on the 19th June, 1935, provide for the examination, testing and approval or disapproval of appliances, fittings, wires, apparatus and materials intended, suggested or designed for use in or for purposes of or for connexion to any electrical installation; for the fees payable for examination and testing and reports thereon; and for the stamping or marking of approved appliances, &c. They also set out the steps to be taken respecting subsequent re-submissions of approved articles; the re-inspection of a disapproved article at the request and cost and in the presence of a dissatisfied applicant and the appointment of a Registrar to keep the register of approved articles.

The Act provides for the prescribing, by Order in Council, of appliances which must be submitted for examination, testing and approval and the dates after which it will be illegal to sell or expose, offer or advertise for sale any appliances so prescribed unless they have been approved by the Commission.

The first group of equipment so prescribed comprises lampholder adaptors, plug sockets and plugs, plug socket adaptors, apparatus connectors, cord connectors, flexible cords, bread toasters and grillers with open or only partly enclosed elements, and handlamps. Restrictions on non-approved articles in this category operate from 1st October, 1935.

Under the law the Commission must act on the recommendation of the Electrical Approvals Board in respect of the approval or disapproval of any article except where the use of any article may detrimentally affect the distributing systems of supply authorities or of the Commission itself, or the supply of electricity to individual consumers, but the Commission is not bound by the decisions of the Board in cases of appeal; these the Commission is required to hear and finally determine.

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, and
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 the electrolysis conditions in the metropolitan area, both as regards damage alleged to have been caused by electrolytic corrosion and as regards conditions favorable to the creation of such corrosion. The Sub-Committee has continued to recommend and apply remedial measures with success.

The total number of faults in the metropolitan area reported to the Committee during the year under review was 90. The figures for the last six years are as follow:—

1929–30	..	..	..	261
1930–31	..	..	..	243
1931–32	..	..	..	174
1932–33	..	..	..	121
1933–34	..	..	..	113
1934–35	..	..	..	90

It will be noted that there has been a steady and considerable decrease in faults during the above period, which connotes a more or less proportional reduction in the corresponding yearly cost of damage done to the underground works of the parties concerned. This is a fact which is a source of considerable gratification to all the authorities concerned.

PART II.—FINANCIAL AND COMMERCIAL.

FINANCIAL.

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. 2. The outstanding features of the principal accounts are hereunder reviewed.

LOAN LIABILITY.

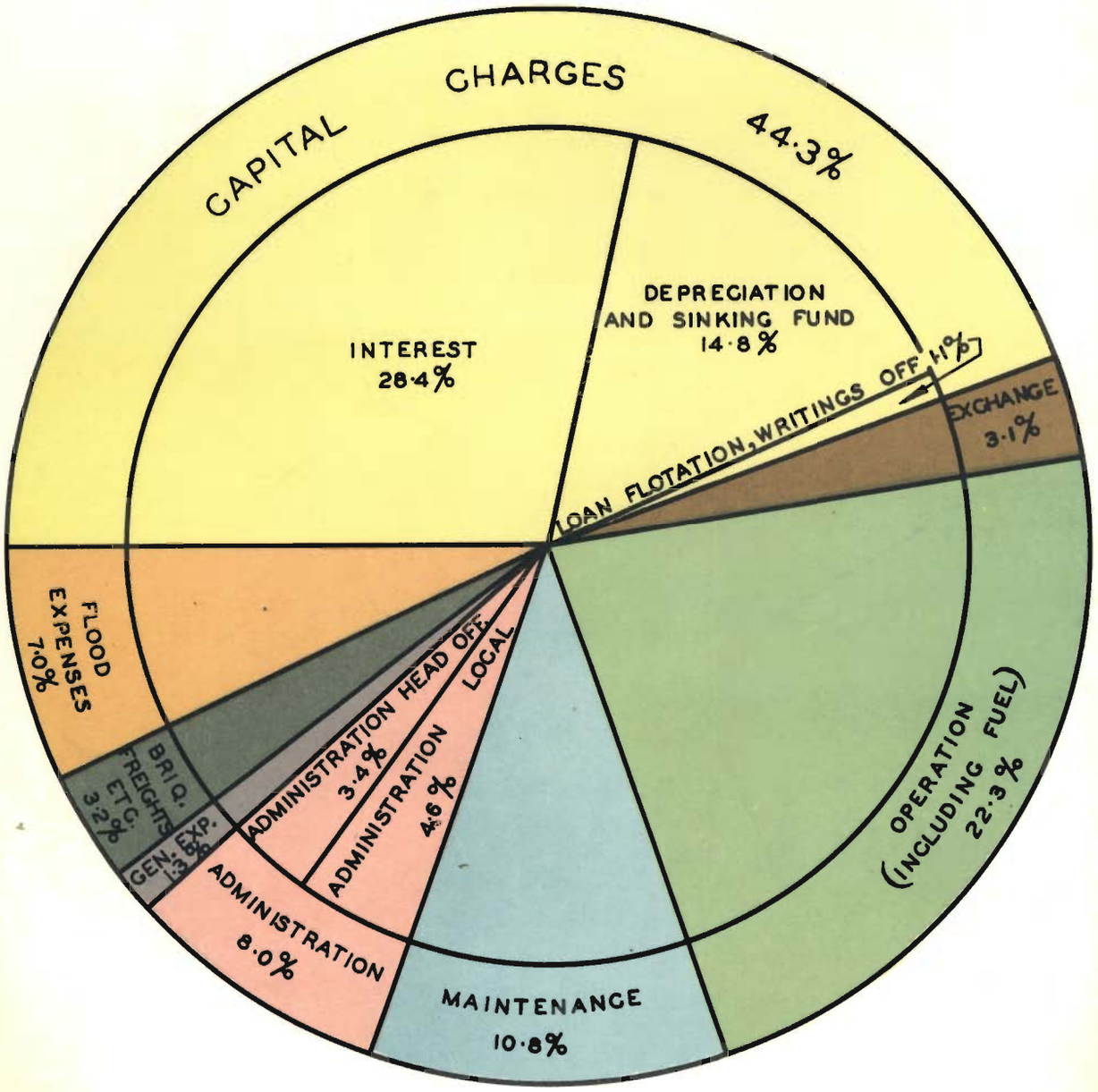
The total loan indebtedness of the Commission at 30th June, 1935, amounted to £19,527,309, including the liability to the State of Victoria of £17,665,982, Melbourne Electric Supply Company Debentures £700,000, Municipal Debentures £85,327, Unemployment Relief Fund £100,000, and State Electricity Commission of Victoria Debenture Loans £976,000.

In comparison with the loan indebtedness of the previous year, this figure showed an increase of £417,651, accounted for as follows :—

Victorian Government Advances—			
Discount expenses on renewal of Loans—			
1933–34		53,247	
1934–35		1,718	
			54,965
Treasury Public Account—			
Flotation expenses London Conversion Loans (repayable 12 years)		41,542	
Less repayment for year		3,470	
			38,072
Advance from Unemployment Relief Fund for Tramway Reconstruction, Ballarat and Bendigo			100,000
State Electricity Commission Debenture Loans Nos. 1 and 2		982,000	
Less Sinking Fund Redemption Loan No. 1		6,000	
			976,000
			1,169,037
Less—			
Reduction in indebtedness to State through National Debt Sinking Fund		91,396	
Redemption of debentures as follows :—			
Melbourne Electric Supply 5 per cent. First Mortgage	£187,449		
Melbourne Electric Supply 5 per cent. Consolidated	157,392		
Melbourne Electric Supply 6 per cent. General Mortgage	256,113		
Sundry Municipal Debentures ..	7,579		
		608,533	
Repayment of portion of amount of £101,770 charged to Commission in 1922. (A balance of £5,973 only now remains to be repaid)		50,000	
Repayment of portion of exchange on Treasury Bills, repayable over 10 years		1,457	
			751,386
			£417,651

STATE ELECTRICITY COMMISSION OF VICTORIA

DIAGRAMMATIC SUBDIVISION OF TOTAL OPERATING EXPENDITURE FOR FINANCIAL YEAR 1934-35



EXERCISE OF BORROWING POWERS.

The borrowing powers vested in the Commission by the *State Electricity Commission Borrowing Act* (*No.* 4087) 1933, were further exercised for the purpose of redemption of two 5 per cent. Melbourne Electric Supply Company debenture issues, for which notice of intention to redeem in November, 1934, had been given, and for this purpose a loan of £382,000 was raised in London at £95 carrying interest at 3½ per cent., repayable in 20 years, with 1 per cent. Sinking Fund.

Out of the total debenture liability under the purchase agreement there remain only the £300,000 6½ per cent. and £400,000 7 per cent. issues of the Company. The Commission has given notice of intention to redeem these issues on 31st October, 1935.

RESERVES.

The Depreciation and Sinking Funds at 30th June, 1935, stood at £3,683,590. Of this amount, £557,570 was to the credit of the National Debt Sinking Fund, £3,120,020 to the credit of the Depreciation Fund, which is invested in the business of the Commission, and £6,000 to the credit of the State Electricity Commission Debenture Sinking Fund—the last-mentioned being the first annual provision of 1 per cent. of the £600,000 State Electricity Commission Loan No. 1 in accordance with terms of issue. The increase in Depreciation and Sinking Funds for the year was £594,059 (including £100,062 interest on the Depreciation Fund), such increase being £48,020 more than last year.

An additional amount of £45,996 was written off certain assets which are depreciated on a straight line basis.

The Reserve for Doubtful Debts was increased by £3,750 to £10,088 after providing for doubtful debts at the rate of ¼ of 1 per cent. of revenue. The Bad Debts for the year amounted to £4,153, representing 0·124 per cent. of a total revenue of £3,329,459. This percentage showed a decrease of 0·027 per cent., and as the Sundry Debtor Account £478,158 was reduced by £13,798 in comparison with a higher revenue, this phase of the Commission's finances reflects a satisfactory position.

The Contingency and Other Reserves of £64,134 contain an amount of £53,645 for unforseen contingencies, the balance being special reserves of a smaller nature for the writing out of plant, &c., of limited life.

UNEMPLOYMENT RELIEF WORK.

Towards the cost of the tramways reconstruction work at Ballarat and Bendigo an advance of £100,000 was obtained from the Government Unemployment Relief Fund, carrying interest at 4 per cent. and being repayable over fifteen years, the first two years to be free of interest and principal repayments. A further sum of £50,000 was received from the Government as a contribution towards the cost of the work. The balance required to complete the work will be provided by the Commission.

In connexion with the replacements and repairs necessitated by the damage caused by flood at Yallourn during December, 1934, the Government agreed to grant the Commission on a £1 for £1 basis an amount not exceeding £30,000. Of this amount, £21,000 was received by the Commission during the year.

CAPITAL EXPENDITURE.

After allowing for writings off and adjustments the net addition to fixed capital accounts was £661,158 in comparison with £298,540 for the preceding year. The increase is largely accounted for by the inclusion of £278,585 for the acquisition of the Ballarat and Bendigo undertakings. The accounts mainly affected are as follow :—

		£
Power Stations—		
Mainly acquisition of Ballarat and Bendigo undertakings		73,500
Transmission Lines and Sub-stations		99,170
Distributing Systems—		
Including acquisition of Ballarat and Bendigo undertakings		407,600
Coal Supply		12,400
Briquette Factory		24,800
Tramways Reconstruction—		
Ballarat and Bendigo	65,900	
Less contribution by Government	50,000	
		15,900
General		27,700

CURRENT AND ACCRUED ASSETS.

The item " Sundry Debtors " has been already commented on in regard to the Doubtful Debts Reserve. The Stores Account—£334,480—showed a net increase of £20,746. The gross increase was £56,497, due partly to the acquisition of Ballarat and Bendigo stocks and to the purchase of additional pole stocks, but against this figure Briquette Stocks, &c., were reduced by £35,751. The Investments Account of £614,120 has been accumulated for the purpose of meeting known commitments, such as Interest and Debenture Redemptions falling due in the coming year.

EXPENDITURE TREATED AS IN SUSPENSE.

Overburden Removal and Disposal—£540,675.—This account was increased during the year by £2,612, representing the difference between the cost of removing overburden during the year, which amounted to £60,536, and the amount charged from this account to Coal Winning for the year at 8d. per ton of coal won—£57,924.

Loan Flotation Expenses—£322,158.—The addition of discount and flotation expenses on the renewal and conversion of loans charged by the State of Victoria, together with the flotation expenses incurred in raising the State Electricity Commission Loans Nos. 1 and 2, amounted to £124,169. On the other hand, an amount of £17,850 was written off in accordance with the Commission's usual practice of writing out this expenditure over the periods of the loans.

Amount charged to Commission by Treasury in accordance with 1922 *decision of the Government*—£37,023.—This amount represents the outstanding balance of £62,023 charged to the Commission under the above decision of the Government, and is being reduced by £5,000 annually.

Hospital and Health Centre, Yallourn—£31,571.—This figure represents a decrease of £899 from the previous year, after allowing for interest and amortization, which is being effected over a period of years. These assets are being entirely maintained by the Yallourn Medical and Hospital Society.

Miscellaneous—£98,141.—The main item covered by this account is an Exchange Suspense Account arising from the conversion of the Melbourne Electric Supply Company 7½ per cent. American Gold Bonds, which is being liquidated over a period of ten years.

PROFIT AND LOSS ACCOUNT.

Compared with the previous year's figure, the total revenue increased by nearly 9½ per cent. Against this was the cost (£236,082) of the flood restoration works, and the net profit was £6,478, compared with £33,119 in 1933–34. After deducting the net profit for the year, the accumulated loss stood at £749,511.

Compared with 1933–34, Electricity Supply expenditure increased by £218,510 (including £103,927 for Ballarat and Bendigo), as against an increase in Revenue of £277,715 (including £134,584 for Ballarat and Bendigo). The loss on briquetting of £11,268 improved by £4,180 on that of the previous year. Interest was less by £35,611, due mainly to overseas conversions, which also had the effect of reducing the amount of exchange for the year by £35,213.

STATE ELECTRICITY COMMISSION OF VICTORIA.

RESULTS OF OPERATIONS OF ALL ACTIVITIES.

SUMMARY OF INCOME AND EXPENDITURE.

Year Ended 30th June, 1934.				Year Ended 30th June, 1935.			Compared with Year Ended 30th June, 1934. + or −
£	£	£		£	£	£	£
		2,717,992	Electricity Supply Revenue			2,995,707	+ 277,715
		309,936	Briquetting Revenue			297,858	− 12,078
		33,510	Tramways Revenue			77,121	+ 43,611
		74	Miscellaneous Revenue			10,098	+ 10,024
		3,061,512	Total Revenue			3,380,784	+ 319,272
		1,227,470	*Less* Working and Administration Expenses			1,494,071	+ 266,601
		1,834,042	Surplus on Operations			1,886,713	+ 52,671
	992,274	..	*Less* Interest		956,663	..	− 35,611
	477,350	..	Depreciation and Sinking Fund		494,992	..	+ 17,642
			Flood Expenditure		236,082	..	+ 236,082
	139,618	..	Exchange on Overseas Remittances		104,405	..	− 35,213
	21,804	..	Provident Fund Contributions		24,061	..	+ 2,257
			Available for Appropriation—				
94,000	..	..	To Contingency Reserve	..	..	..	− 94,000
28,342	..	..	Special Writings off	16,000	..	..	− 12,342
14,288	..	..	Redemption of Debentures	5,835	..	..	− 8,453
12,000	..	..	Loan Flotation Expenses	17,850	..	..	+ 5,850
			Special Expenditure—				
10,589	..	..	Water Power Investigation, &c.	12,651	..	..	+ 2,062
5,658	..	..	Administration of Electric Light and Power Act	6,696	..	..	+ 1,038
5,000	..	..	Liquidation of liability of £62,023 imposed by State Government in 1922	5,000	..	..	
—	169,877				64,032		− 105,845
		1,800,923				1,880,235	+ 79,312
		33,119	Net Profit			6,478	− 26,641

COMMERCIAL.

ELECTRICITY SUPPLY.—DISTRIBUTION AND SALES.

Contributions of Consumer Classes to Year's Results.—The all-round improvement in sales of electricity recorded in the Fifteenth Annual Report was sustained during the year, when 45,114,751 more kwh. were sold than in 1933–34. This is 8,000,000 kwh. greater than the annual normal increase in sales registered before 1930–31, when electricity supply in Victoria began to feel the effects of the world-wide economic stress, sales in that year showing a decrease, instead of the estimated increase of 37,000,000 kwh. However, since 1930–31, progress has been steady and substantial, as the following sales figures show :—1929–30—394,754,454 kwh. ; 1930–31—379,572,140 kwh. ; 1931–32—403,984,629 kwh. ; 1932–33—439,030,189 kwh. ; 1933–34—474,452,023 kwh. ; 1934–35—519,566,774 kwh.

Comparisons of sales in 1934–35 with those in previous years are affected by the transfer of the Ballarat and Bendigo undertakings to the Commission on the 1st July, 1934, and by the fact that 11,545,300 kwh. which would ordinarily have been supplied by the Commission to the Melbourne City Council were generated by that body during the emergency period following the flooding of the Yallourn open cut.

Analysis of the figures given in the tables below shows the contributions to the year's overall improvement by each class of consumer directly served by the Commission :—Industrial, 10·5 per cent., commercial, 9·8 per cent., domestic, 13·1 per cent., metropolitan bulk supplies, 8·6 per cent. The increase in the industrial sales has been the greatest single factor in the recovery during the last four years, both in the Commission's own areas of supply and in those of the metropolitan bulk supply authorities as a whole.

VARIATION IN CONSUMPTION OF RETAIL CONSUMER CLASSES AND OF BULK SUPPLY AUTHORITIES.

The following table shows the overall improvement during the year in the industrial, commercial, and domestic use of energy in the Commission's undertakings :—

	Industrial.		Commercial.		Domestic.	
	1934–35 compared with 1933–34.	1933–34 compared with 1932–33.	1934–35 compared with 1933–34.	1933–34 compared with 1932–33.	1934–35 compared with 1933–34.	1933–34 compared with 1932–33.
	%	%	%	%	%	%
Metropolitan Electricity Supply	+ 7·9	+ 6·9	+ 7·5	+10·9	+13·7	+ 9·1
Provincial Cities—						
Ballarat Electricity Supply	+22·6	+33·7	+10·0	+ 1·7	+19·1	+ 6·7
Bendigo Electricity Supply	+92·7*	+ 4·4	+17·7	+ 8·0	+20·7	+ 1·7
Geelong Electricity Supply	+ 2·2	+14·7	+ 8·2	+ 2·7	+ 9·0	+11·4
Country Districts	+40·5*	+10·1	+17·4	+12·3	+ 9·5	+ 8·5
Overall	+10·5	+ 7·7	+ 9·8	+10·2	+13·1	+ 9·0

* These abnormal increases are due to the development in gold mining.

In regard to domestic supplies, the improvement expressed as an increase in the consumption per consumer, was 4·5 per cent. compared with 1933–34, or 39·9 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, to 446 in 1933–34, and to 466 in 1934–35. The figures for 1934–35 are affected by the inclusion for the first time of those for Ballarat and Bendigo, where the average yearly consumption per domestic consumer is only about 200 kwh. Excluding the Ballarat and Bendigo figures, the improvement for the year is 8·5 per cent.

METROPOLITAN MUNICIPAL DISTRIBUTING AUTHORITIES.

The following table shows that all of the metropolitan distributing authorities purchased more bulk energy in 1934–35 than they did in 1933–34. The increase was again most marked in industrial areas :—

	1934–35 compared with 1933–34.	1933–34 compared with 1932–33.
	%	%
Box Hill	+ 13·3	+ 12·1
Brunswick	+ 16·2	+ 12·0
Coburg	+ 7·4	+ 4·7
Footscray	+ 16·3	+ 17·9
Heidelberg	+ 11·6	+ 10·0
Melbourne	+ 5·5	+ 4·9
Northcote	+ 5·6	+ 8·2
Port Melbourne	+ 9·6	+ 14·2
Preston	+ 9·1	+ 14·0
Williamstown	+ 8·7	+ 10·2
Overall	+ 8·6	+ 8·2

COMMISSION'S ELECTRICITY SUPPLY UNDERTAKINGS FOR LOCAL DISTRIBUTION.

ABSTRACT OF OPERATING ACCOUNTS FOR YEAR 1934–35.

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

	Earnings.	Working and Administrative Expenses.	Interest.	Depreciation and Sinking Fund.	Surplus or Deficit.
	£	£	£	£	£
Metropolitan Bulk Supplies	475,133	429,808	..	..	S. 45,325
Metropolitan Electricity Supply	1,797,754	1,204,837	198,606	93,365	S. 300,946
Ballarat Electricity Supply and Tramways ..	94,895	65,501	3,923	3,433	S. 22,038
Bendigo Electricity Supply and Tramways ..	83,494	70,756	3,046	3,600	S. 6,092
Castlemaine District	30,057	16,216	9,275	4,961	D. 395
Eastern Metropolitan District	106,126	60,045	19,221	9,989	S. 16,871
Geelong Electricity Supply and Tramways ..	172,742	116,357	19,508	13,695	S. 23,182
Gippsland District	88,483	54,269	16,721	9,119	S. 8,374
North-Eastern District	128,159	79,393	24,606	12,596	S. 11,564
South-Western District	78,256	51,629	17,170	9,009	S. 448
Western Metropolitan District	11,268	7,732	1,502	783	S. 1,251
Yallourn and Brown Coal Mine Townships	6,460	4,750	795	383	S. 532
	3,072,827	2,161,293	314,373	160,933	S. 436,228
* Transfer to appropriate columns Interest, Depreciation and Sinking Fund included in Working and Administration Expenses	..	*603,312	415,942	187,370	..
	3,072,827	1,557,981	730,315	348,303	S. 436,228

The following summary is extracted from the statistical data contained in this Report :—

(*a*) The total number of consumers taking supply at the end of the year was 212,935, an increase for the year of 8,388, or 4·1 per cent.

(*b*) Sales of electricity for all purposes amounted to 339,799,864 kwh., an increase of 32,444,693 kwh., or 10·6 per cent. over the previous year. The Domestic, Commercial and Industrial classes all showed substantial improvement.

(*c*) Revenue for the year from the ten Electricity Supply Districts was £2,514,894, an increase of £123,428, or 5·2 per cent. over the previous period, while the average price per kwh. decreased from 1·867d. to 1·776d., or by 4·9 per cent.

Metropolitan Electricity Supply.—The seventeen suburban municipalities formerly served by the Melbourne Electric Supply Co. Ltd., together with Essendon, Flemington, Sunshine and Deer Park, are supplied by this undertaking.

During the year substantial progress was made in sales to the domestic, commercial and industrial classes, the increases amounting to 13·7 per cent., 7·5 per cent. and 10·6 per cent. (excluding traction) respectively. The average price per kilowatt-hour sold in each class decreased as the result of increased sales and reduced tariffs.

Close attention was given to motive power conversions and the use of electricity for heating purposes, as these appear to be the chief fields for future development in the industrial demand. With the assistance of favourable tariffs, substantial progress was made in regard to all fields.

The number of consumers at the end of the year, viz., 154,489, represented an increase of 5,151, of whom 4,999 were domestic. An increase of 28,914 kw. in the connected load brought the total to 451,712 kw.

Ballarat Electricity Supply.—This undertaking supplies an area embracing the City of Ballarat, the Borough of Sebastopol, and portion of the Ballarat Shire. The local tramway operations are co-ordinated with the electricity supply undertaking.

As in Bendigo, the period under review was largely taken up with the work of reconstructing the assets of the undertaking, in order to bring them into conformity with the Commission's standards.

The domestic field presents distinct opportunities for development, in regard to increasing the number of consumers and the use they make of the service. Satisfactory improvement was made during the year, the number of consumers increasing from 6,823 to 7,098, and sales by 19·1 per cent., 10·1 per cent. and 22·5 per cent. in the domestic, commercial and industrial classes respectively.

The h.p. of motors connected at the 30th June totalled 5,333, an increase of 237.

Bendigo Electricity Supply.—This undertaking supplies Bendigo and environs, and has co-ordinated with it the local tramway service. Features of its operations during the year were the reconditioning of the low tension reticulation and the augmentation of supply by a 22,000 volt extension from Castlemaine. This latter work was completed in March. The completion of the main 66,000 volt transmission line from Melbourne to Bendigo will assure ample supplies of power for the future requirements of the undertaking.

The year's improvement in sales of electricity was satisfactory, those to domestic consumers increasing by 20·7 per cent., to commercial consumers by 17·7 per cent. and to industrial consumers by 92·7 per cent. The last-mentioned increase was chiefly due to the revival of gold mining. The number of consumers increased by 261 to 5,714. The horse power of motors installed was 4,920 at the close of the year, showing the substantial increase of 1,179 for the period.

Castlemaine District.—This undertaking has its headquarters at Castlemaine, serves an area of 115 square miles, and embraces fourteen centres, beginning with Sunbury in the south, and extending to Castlemaine and Harcourt in the north.

The activity in gold mining, the improved conditions generally, and the reductions in tariffs combined to produce substantial increases in sales of electricity during the year, viz., domestic 9·9 per cent., commercial 12·6 per cent. and industrial 11·7 per cent.

An increase of 133 consumers brought the total to 2,674.

Eastern Metropolitan District.—This undertaking, administered from Dandenong, extends from Healesville and Mt. Dandenong to the seaside resorts skirting Port Phillip Bay as far as Portsea, and serves an area of 326 square miles. The number of towns and townships receiving supply is 70.

During the year, extensions of supply were made to Emerald, Selby, Clematis, Upper Beaconsfield and Mt. Dandenong.

Sales of electricity exceeded those of last year by 5 per cent., all consumer classes contributing to the result. Extensions of supply to new areas, and the improved demand, particularly in country and seaside holiday resorts, were features of the year's operations.

The number of consumers at the end of the year was 10,082, an increase of 850, of whom 733 were domestic consumers.

Geelong Electricity Supply.—The area served by this undertaking includes Geelong and environs and extends into the surrounding districts as far as Lara in the north and Torquay in the south. Associated with electricity supply are the Geelong tramways.

The whole of the Bellarine Peninsula, including Queenscliff, Point Lonsdale, and Barwon Heads, was transferred to Geelong Electricity Supply from the South-Western District on 1st July, 1935.

The horse power of motors increased from 17,058 to 17,488, chiefly through the additional loading of established industries.

Consumers at the end of the year numbered 9,970, an increase of 341.

Sales of electricity to domestic, commercial and industrial consumers increased by 8·9 per cent., 8·2 per cent. and 2·2 per cent. respectively. Industrial consumers absorbed 71·4 per cent. of the total electricity sold.

Gippsland District.—This undertaking covers 379 square miles. It extends from Narnar-goon to Lakes Entrance and Bruthen and from Morwell via Korumburra to numerous centres in South Gippsland. Its administrative centre is Traralgon.

During the year, transmitted supply from the Commission was substituted for private services in Inverloch, Neerim, Neerim South, Neerim Junction, Nayook, and Noojee, these local undertakings being transferred to the Commission. The first-named township had been receiving a limited supply, while the remaining towns were formerly served by the Neerim and Latrobe Hydro-electric Company. Other extensions of supply were those to Lindenow, the Kilmany Boys' Home, the new National Broadcasting Station at Longford, and a group of consumers at Longwarry. Constructional work for supply to Koo-wee-rup, Lang Lang, Bayles, Cora Lynn and Nyora was in progress at the end of the year.

The total number of consumers at the end of the year was 7,320, an increase of 562. Extensions of supply to new areas accounted for 269 of this increase.

Severe floods and moderate prices for primary products militated against the welfare of the Gippsland district during the year. On the other hand, flood reclamation works, which had to be undertaken by public bodies, including the Commission, brought about a big increase in employment, so that business generally showed an improvement. Sales of electricity increased in the domestic, commercial and industrial classes by 7·1 per cent., 11·9 per cent. and 12·9 per cent. respectively.

Due mainly to additional motors installed at dairy produce factories, motor connexions increased from 4,002 to 4,111 horse power.

North-Eastern District.—This district supplies 27 centres in an area of 314 square miles, bounded by Alexandra in the south and Echuca and Wodonga in the north. Its headquarters are at Benalla.

The local generating stations at Cobram and Yarrawonga, which had been operated for some years by the Commission, were closed down upon the connexion of those centres to the transmission system, which was also extended to Eldorado and Strathmerton.

Consumers increased by 508, bringing the total to 8,005. The requirements of gold mining companies and fruit processing factories were the chief factors which increased the horse-power of connected motors from 3,101 to 5,906.

The rates of increase in sales of electricity for the year under the various classes of supply were domestic 14 per cent., commercial 7·1 per cent., and industrial 187·1 per cent.

South-western District.—This district is administered from Colac, and serves 36 centres, in an area which stretches from Winchelsea to Warrnambool and Port Fairy.

Further extensions to farms were made during the year, and the number of consumers increased by 252, making the total 6,778.

The horse-power of motors connected at the end of the year was 4,392, compared with 4,234 in the previous period.

Sales in the domestic and industrial classes increased by 3·1 per cent. and 21·8 per cent. respectively.

Western Metropolitan District.—Werribee, Point Cook, Altona and Laverton are served by this undertaking.

Increases of 8·8 per cent. and 26·3 per cent. were recorded in sales in the domestic and industrial classes respectively, the latter increase being chiefly due to the additional demand of the Melbourne and Metropolitan Board of Works farm at Werribee. The number of consumers increased by 55, bringing the total to 805.

COMMISSION'S ELECTRICITY SUPPLY UNDERTAKINGS FOR LOCAL DISTRIBUTION.

ALL UNDERTAKINGS—TOTAL.

	1931–32.	1932–33.	1933–34.	1934–35.
Population of Supply Area	820,360	827,980	876,218	968,575*
Number of Consumers	180,393	185,491	192,271	212,935
Percentage of Consumers to Population	22.62	22.74	21.96	21.98
†Sales of Energy, in Classes—				
Bulk Supplies	5,048,036	5,507,335	5,735,781	5,843,348
Street Lighting	11,004,004	10,899,531	11,028,474	11,653,587
Domestic	59,382,046	63,808,876	69,687,339	80,584,630
Industrial	151,934,753	168,048,625	180,810,718	203,113,490
Commercial	28,012,557	29,677,282	32,901,671	38,604,809
	255,381,396	277,941,649	300,163,983	339,799,864
Revenue	£2,063,311	£2,152,785	£2,265,233	£2,514,894
Average Revenue per kwh. sold	1.939d.	1.859d.	1.811d.	1.776d.
Number of Motors	18,662	19,760	21,007	24,260
Total h.p. of Motors	163,949	169,646	173,699	191,550

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

RESULTS OF EACH UNDERTAKING.

METROPOLITAN ELECTRICITY SUPPLY.

	1931–32.*	1932–33.	1933–34.	1934–35.
Population of Supply Area	631,600	632,800	637,993	649,600
Number of Consumers	141,282	144,664	149,338	154,489
Percentage of Consumers to Population	23.19	23.3	23.4	23.78
†Sales of Energy, in Classes—				
Bulk Supplies	272,396	264,405	177,810	214,050
Street Lighting	9,918,931	9,786,249	9,878,734	9,989,098
Domestic	49,360,879	53,133,386	57,972,963	65,912,275
Industrial	131,524,241	146,679,857	156,798,023	169,158,605
Commercial	20,847,179	22,296,540	24,722,916	26,583,841
	211,923,626	232,160,437	249,550,446	271,857,869
Revenue	£1,557,575	£1,631,210	£1,716,276	£1,798,789
Average Revenue per k.w.h. sold	1.764d.	1.686d.	1.65d.	1.588d.
Maximum Demand in kw.	68,566	73,386	77,630	83,423
Number of Motors (excluding Bulk Supplies)	14,172	15,038	15,961	17,193
Total h.p. of Motors (excluding Bulk Supplies)	131,365	135,647	139,317	144,218

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

* BALLARAT ELECTRICITY SUPPLY.

	1934–35.
Population of Supply Area	41,750
Number of Consumers	7,098
Percentage of Consumers to Population	17.00
†Sales of Energy, in Classes—	
Street Lighting	155,777
Domestic	1,030,845
Industrial	1,657,171
Commercial	1,466,597
	4,310,390
Revenue	£71,950
Average Revenue per kwh. sold	4.006d.
Maximum Demand in kw. (Local Generation)	1,663
Number of Motors	999
Total h.p. of Motors	5,333

* Transferred to Commission on 1st July, 1934.

† Revenue and sales of energy, in classes, excludes adjustment for unread meters and service charges paid in advance at end of year.

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

* BENDIGO ELECTRICITY SUPPLY.

	1934–35.
Population of Supply Area	33,730
Number of Consumers	5,714
Percentage of Consumers to Population	16·94
†Sales of Energy, in Classes—	
Street Lighting	317,973
Domestic	818,289
Industrial	3,177,078
Commercial	995,961
	5,309,301
Revenue	£61,628
Average Revenue per kwh. sold	2·786d.
Maximum Demand in kw. (Local Generation)	1,580
Maximum Demand in kw. (Transmitted Supply)	631
Number of Motors	643
Total h.p. of Motors	4,920

* Transferred to Commission on 1st July, 1934.

CASTLEMAINE DISTRICT.

	1931–32.	1932–33.	1933–34.	1934–35.
Population of Supply Area	13,550	13,550	16,665	17,330
Number of Consumers	2,393	2,428	2,541	2,674
Percentage of Consumers to Population	17·66	17·9	15·25	15·43
†Sales of Energy, in Classes—				
Street Lighting	110,182	114,318	114,485	113,200
Domestic	547,377	598,683	628,076	690,378
Industrial	140,525	289,183	421,147	470,509
Commercial	483,756	457,795	516,434	581,434
	1,281,840	1,459,979	1,680,142	1,855,521
Revenue	£28,447	£29,010	£30,155	£30,206
Average Revenue per kwh. sold	5.325d.	4.76d.	4.307d.	3·907d.
Maximum Demand in kw.	360	430	599	669
Number of Motors	172	193	201	204
Total h.p. of Motors	757	929	1,011	849

EASTERN METROPOLITAN DISTRICT.

	1931–32.	1932–33.	1933–34.	1934–35.
Population of Supply Area	28,300	31,600	58,800	58,800
Number of Consumers	7,881	8,702	9,232	10,082
Percentage of Consumers to Population	27·84	27·2	15·7	17·15
†Sales of Energy, in Classes—				
Bulk Supplies	—	—	—	—
Street Lighting	206,205	216,307	232,365	249,458
Domestic	3,003,430	3,123,383	3,477,038	3,891,722
Industrial	1,765,330	2,160,400	2,300,701	1,345,673
Commercial	1,273,354	1,352,499	1,612,159	2,522,957
	6,248,319	6,852,589	7,622,263	8,009,810
Revenue	£86,595	£90,485	£99,037	£106,227
Average Revenue per kwh. sold	3.33d.	3.169d.	3.118d.	3·183d.
Maximum Demand in kw.	2,181	2,637	2,852	2,955
Number of Motors	496	475	551	533
Total h.p. of Motors	3,448	3,532	3,330	3,316

GEELONG ELECTRICITY SUPPLY.

	1931–32.	1932–33.	1933–34.	1934–35.
Population of Supply Area	45,000	45,000	45,000	45,000
Number of Consumers	8,966	9,249	9,629	9,970
Percentage of Consumers to Population	19·9	21·1	21·79	22·16
†Sales of Energy, in Classes—				
Bulk Supplies	—	—	—	—
Street Lighting	223,676	223,465	224,832	227,607
Domestic	1,863,145	2,023,788	2,253,064	2,454,602
Industrial	10,805,083	10,507,664	12,049,433	12,315,124
Commercial	1,955,722	1,982,118	2,035,034	2,201,204
	14,847,626	14,737,035	16,562,363	17,198,537
Revenue	£125.074	£126,429	£136,265	£139,445
Average Revenue per kwh. sold	2·02d.	2·059d.	1·975d.	1.946d.
Maximum Demand in kw.	4,193	4,181	4,261	4,474
Number of Motors	1,725	1,772	1,861	2,058
Total h.p. of Motors	17,336	17,380	17,058	17,488

† Revenue and sales of energy, in classes, excludes adjustment for unread meters and service charges paid in advance at end of year.

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

GIPPSLAND DISTRICT.

	1931–32.	1932–33.	1933–34.	1934–35.
Population of Supply Area	30,200	31,390	34,210	38,075
Number of Consumers	6,383	6,558	6,758	7,320
Percentage of Consumers to Population	21·13	20·9	19·75	19·22
†Sales of Energy, in Classes—				
Street Lighting	191,004	200,541	202,364	209,292
Domestic	1,650,133	1,718,466	1,838,133	1,969,347
Industrial	2,671,737	2,991,351	3,552,113	4,010,108
Commercial	1,056,524	1,101,615	1,184,726	1,326,166
	5,569,398	6,011,973	6,777,336	7,514,913
Revenue	£78,948	£80,105	£83,045	£88,666
Average Revenue per kwh. sold	3·4d.	3·198d.	2·94d.	2·832d.
Maximum Demand in kw.	2,020	2,100	2,335	2,620
Number of Motors	694	762	797	882
Total h.p. of Motors	3,772	3,956	4,002	4,111

NORTH-EASTERN DISTRICT.

	1931–32.	1932–33.	1933–34.	1934–35.
Population of Supply Area	36,410	36,940	43,050	43,390
Number of Consumers	6,677	6,845	7,497	8',005
Percentage of Consumers to Population	18·34	18·53	17·4	18.45
†Sales of Energy, in Classes—				
Bulk Supplies	4,775,640	5,242,930	5,557,971	5,629,298
Street Lighting	163,378	170,981	190,273	206,500
Domestic	1,299,693	1,458,984	1,625,645	1,853,488
Industrial	2,182,802	2,518,792	2,429,803	6,975,455
Commercial	1,342,081	1,373,888	1,559,269	1,669,358
	9,763,594	10,765,575	11,362,961	16,334,099
Revenue	£100,895	£108,213	£111,553	£128,319
Average Revenue per kwh. sold	2·48d.	2·413d.	2·356d.	1·885d.
Minimum Demand in kw.	2,690	2,874	3,159	4,558
Number of Motors (excluding Bulk Supplies)	590	665	710	803
Total h.p. of Motors (excluding Bulk Supplies)	3,152	3,640	3,822	5,906

SOUTH-WESTERN DISTRICT.

	1931–32.	1932–33.	1933–34.	1934–35.
Population of Supply Area	31,200	32,200	36,200	36,600
Number of Consumers	6,126	6,339	6,526	6,778
Percentage of Consumers to Population	19·63	19·7	18·03	18·52
†Sales of Energy, in Classes—				
Street Lighting	153,751	153,878	163,725	162,986
Domestic	1,460,737	1,548,605	1,678,156	1,730,616
Industrial	2,307,863	2,303,397	2,528,483	3,080,160
Commercial	986,377	1,017,773	1,067,220	1,064,343
	4,908,728	5,023,653	5,437,534	6,038,105
Revenue	£76,480	£77,806	£78,438	£78,299
Average Revenue per kwh. sold	3·74d.	3·717d.	3·462d.	3·112d.
Maximum Demand in kw.	(*a*) 1,680	(*a*) 1,720	(*a*) 1,870	(*a*) 1,820
	(*b*) 225	(*b*) 213	(*b*) 260	(*b*) 236
Number of Motors	726	772	831	843
Total h.p. of Motors	3,347	3,706	4,234	4,392

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

WESTERN METROPOLITAN DISTRICT.

	1931–32.*	1932–33.	1933–34.	1934–35.
Population of Supply Area	4,100	4,500	4,300	4,300
Number of Consumers	685	706	750	805
Percentage of Consumers to Population	16·7	15.7	17·44	18·72
†Sales of Energy, in Classes—				
Street Lighting	36,877	33,792	21,696	21,696
Domestic	196,652	203,581	214,264	233,068
Industrial	537,172	597,981	731,065	923,607
Commercial	67,564	95,054	203,913	192,948
	838,265	930,408	1,170,938	1,371,319
Revenue	£9,197	£9,527	£10,464	£11,365
Average Revenue per kwh. sold	2·63d.	2·457d.	2·146d.	1·989d.
Maximum Demand in kw.	326	371	405	448
Number of Motors	87	93	95	102
Total h.p. of Motors	822	856	925	1,017

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

† Revenue and sales of energy, in classes, excludes adjustment for unread meters and service charges paid in advance at end of year.

PROMOTION OF BUSINESS.

Residential Class.—The increase in the residential use of electricity registered during the year is fully dealt with on page 20 of this Report.

Industrial Class.—Having regard to the comparatively small amount of industrial motor loading which had not already been secured, the increase of 9,000 horse-power in conversions to electric drive and extensions of existing plants during the year must be regarded as very satisfactory. Considerable attention is now being given to electric furnaces, and several interesting installations were made during the year. As the result of development in a new field of activity, two well-known makes of improved electric road vehicles are now on the market in Melbourne.

Many proposals involving extensions to mining consumers were investigated, and an appreciable number was brought to completion. The Bendigo area is already taking some 1,000 horse-power, which is likely to be increased to 3,000 horse-power during 1935–36. In the North-eastern District a substantial supply for a treatment works was made available. This load should soon reach 500 horse-power. Negotiations were completed for a further large supply at Eldorado, some 800 horse-power being involved. In addition, several other proposals were approaching completion at the close of the year, and should lead to further substantial load increments.

Rural.—Steady progress was made with extensions to farms, of which about 100 were connected to the Commission's mains during the year. The continued low prices of farm products are militating against the rural expansion which the Commission seeks to achieve, some farm reticulation schemes being held up by the prospective consumers for this reason.

The work undertaken in previous years of demonstrating profitable applications of electricity to farm needs was continued. It is obvious that rural electrification cannot be undertaken on a practicable basis if considered merely in terms of electric light. Only through the general adoption of electricity for power on farms can rural lines with their low consumer density be made self-supporting, and, consequently, special attention is continually being given to developing the use of electricity in ways which will be of economic advantage to the farmer.

The Commission's pioneering efforts in popularizing the electric incubation of chickens have been successful, the total hatching capacity of electric machines now in use in Victoria exceeding half a million. Two experimental installations of the lighting of poultry pens for increasing egg production demonstrated the value of electricity for this purpose.

The use of electricity for dairy water heating is developing rapidly, and new equipment has been developed which is expected to become an aid to the hygienic treatment of milk in farm dairies.

All-Electrical Exhibition.—An All-Electrical Exhibition is being held at the Exhibition Building from 14th September to 5th October, 1935. The Commission is co-operating with the metropolitan municipal distributing authorities and other interested parties in the provision of spectacular displays, as well as in the demonstration of the various uses and advantages of electricity in the home, &c.

Lighting.—The successful illumination schemes undertaken by the Commission to assist public bodies during the Centenary celebrations created much interest, and while being of distinct educational value to the public in general, stimulated the attention that is being directed to architectural and flood lighting for everyday purposes.

TARIFF REDUCTIONS.

The direct reductions in its schedule tariffs made by the Commission since its inception up to the 30th June, 1935, represent a benefit to consumers of £181,000 per annum, based on the consumption figures at the time the reductions were made. These savings are additional to and independent of the benefits accruing to consumers from the automatic reductions in the average price per kwh. due to the beneficial effect of the Commission's form of tariffs. Evidence of these latter benefits is provided by a comparison between the returns for 1924–25 and 1934–35 :—

Year.	Total Retail Sales in kwh.	Revenue.	Average Selling Price per kwh.
		£	
1924–25	124,536,000	1,358,000	2·62d.
1934–35	337,072,000	2,496,000	1·78d.
	Increase 212,536,000 = 171%	Increase 1,138,000 = 84%	Decrease 0·84d. = 32%

The increase in revenue of only 84 per cent., compared with the increase of 171 per cent. in consumption, illustrates the benefits accruing to consumers from the characteristics of the Commission's standard tariffs. This represents a decrease of nearly 32 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 recorded separately :—

Year.	Total Retail Sales in kwh.	Revenue.	Average Selling Price per kwh.
		£	
1925–26	26,583,000	600,000	5·42d.
1934–35	81,367,000	1,020,000	3·01d.
	Increase 54,784,000 = 206%	Increase 420,000 = 70%	Decrease 2·41d. = 45%

This represents a decrease of nearly 45 per cent. in the average cost per kwh. to metropolitan and country domestic consumers.

A further illustration of the manner in which the Commission's form of tariffs benefits consumers is afforded by Appendix No. 8 of this Report. This 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, direct reductions were made in schedule tariffs, as detailed below and corresponding to a total saving to consumers of £84,000 per annum when based on consumption at the time the reductions became effective :—

1*st July*, 1934—

Metropolitan Area—

(*a*) The price of all consumption in excess of 5,000 kwh. per month under metropolitan standard commercial and industrial lighting tariff "A" was reduced from 3d. to 2d. per kwh.

(*b*) The price of all consumption in excess of 125,000 kwh. per month between the hours of 7 a.m. and 11 p.m. under metropolitan standard industrial power and heating tariff "C" was reduced from 0·8d. to 0·75d. per kwh.

1*st October*, 1934—

Metropolitan Area—

(*c*) The energy charge of the metropolitan standard domestic two-part tariff was reduced from 1·25d. to 1·1d. per kwh.

(*d*) The price of the first block of 500 kwh. per month under metropolitan commercial and industrial lighting tariff "A" was reduced from 5·75d. to 5d. per kwh.

Geelong Electricity Supply—

(*e*) The price of the first block of 500 kwh. per month under the commercial and industrial lighting tariff was reduced from 6.5d. to 6d. per kwh.

Country Undertakings—

(*f*) The energy charge of the domestic two-part tariff was reduced from 1·75d. to 1·5d. per kwh. in all places where the higher charge was operating.

(*g*) The commercial and industrial lighting tariffs were reduced from 9d. to 8d. per kwh. in the larger towns, from 10d. to 9d. per kwh. in towns of intermediate size and from 1s. to 10d. per kwh. in smaller towns, the reduced tariffs being subject to the same consumption discounts as formerly.

(*h*) The energy charge of the commercial light and power two-part tariff was reduced from 1·75d. to 1·5d. per kwh. in all places where the higher charge was operating.

All Areas—

(*i*) The domestic two-part tariffs in all areas were modified by the abolition of the four-room minimum service charge and by the fixing of overall rates per kwh. above which any consumer whose total monthly bill exceeds the prescribed minimum charge will not be charged.

Other reductions in contemplation will be introduced after the close of the financial year.

BRIQUETTE MANUFACTURE AND DISTRIBUTION.

Sales	**312,488 tons**
Revenue	**£297,858**
Expenditure	**£309,126**
Loss	**£11,268**

The expenditure covered all charges, including interest and depreciation.

Sales were 16,170 tons less than for 1933–34. This decrease was entirely due to an enforced regulation of supply during that portion of the flood period when the factory was unable to obtain normal raw coal, particulars of which are given elsewhere in this Report. Private customers were not affected, the restriction being applied solely to the use of briquettes in the Commission's own operations.

Although the demand for briquettes in both markets, Industrial and Domestic, was greater than formerly, continuity of fuel supply to customers was uninterrupted, due to the Commission's policy of maintaining substantial reserve stocks, particularly in the metropolitan area. Furthermore, the reserves of briquettes at Yallourn played an important part in tiding the power station over the first difficult days of the flood, some 3,000 tons being absorbed in this way.

Despite the difficulties experienced during the year, the loss (£11,268) was £4,179 less than that for 1933–34.

Sales of briquettes, especially for domestic purposes, continued to receive stimulation from the growing appreciation of their value when used in suitable appliances. In this respect, considerable interest has developed in the use of briquette grates in open fireplaces and in the installation of briquette hot water systems, thus contributing to an increase in sales in the household section of the briquette market amounting to 14 per cent. during the year.

TRAMWAYS.

Under agreements with the municipal councils concerned, any loss on tramways is a charge against electricity supply in the particular provincial city in which it is incurred.

The total loss for the year on the three provincial systems was £15,995, made up as follows :—Ballarat, £1,807 ; Bendigo, £721 ; Geelong, £13,467. The figures for Ballarat and Bendigo came into the accounts for the first time, and at this stage are not comparable with those for Geelong, which has to bear the usual interest, depreciation and maintenance charges, whereas Ballarat and Bendigo tramways are in course of complete reconstruction, so that while there were reduced maintenance costs, no depreciation was charged, in addition to which that portion of the money provided for their reconstruction which is interest-bearing (£100,000 from the National Recovery Loan, at 4 per cent., repayable in fifteen years) is interest free for the first two years.

The persistent heavy losses on the Geelong Tramways cannot be regarded with equanimity. During the year the loss was £235 more than in the previous period, notwithstanding that economies in operation amounting to £11,300 have been effected during the last four years. The limit of such economies having been reached, the easing of the burden on the local electricity supply undertaking depends entirely upon greater public patronage of the tramways. The position in this respect is not encouraging, as the number of car passengers carried during the year was 24,129 less than in 1933-34, or a drop of 272,000 in three years.

A pleasing feature of the year's operations in Ballarat and Bendigo was an increase in the number of car passengers carried in both cities, that for Ballarat being 14,113, and that for Bendigo 81,369.

The programme for the complete reconditioning of the permanent way and overhead equipment of the tramways in Ballarat and Bendigo was begun about the middle of 1934. By the 30th June, 1935, the overhead equipment had been almost completely reconditioned, while 2·7 miles of permanent way at Ballarat and 3·44 miles at Bendigo had been reconstructed. Three additional tram cars were added to the rolling-stock at Bendigo and four at Ballarat. The number of men engaged during the year through the local Government Labour Bureaux at Ballarat and Bendigo totalled 156 and 189 respectively. The unskilled work was rationed in co-operation with the bureaux.

PART III.—DESIGN, CONSTRUCTION, AND OPERATION.

FLOOD DAMAGE AT YALLOURN.

The major items of damage caused by the flood at Yallourn were :—

1. Complete inundation of the Yallourn open cut and submergence of the whole of its mechanical equipment, together with three electric locomotives, one coal train of six trucks, one overburden train of eleven trucks, and 40 5-cubic yard trucks. In addition, the arc rectifier station, the steep haulage winch house and the overburden disposal plant were all partially submerged.
2. Destruction of superstructure of the power station weir, and the scouring of a new channel 280 feet wide through solid ground on the south side of the weir, thus jeopardizing the supply of circulating water to the power station condensers.
3. Breaking of the outlet conduit of the circulating water system of the power station.
4. Silting and clogging of power station screen house and water circulating system, making the sustained operation of the power station during the flood period a work of extreme difficulty and anxiety.
5. Silting (up to 5 feet deep), scouring and shifting of railways on river side of the works territory (including railway to the old open cut on the opposite side of the Latrobe River) ; scouring of 90 feet of the southern abutment of the bridge carrying the railway line into the old cut (the Commission's only alternative permanent coal reserve), and the serious weakening of the bridge structure.
6. Destruction of roads on river side of the works territory.
7. Partial destruction of the pumping station for the supply of water to the works and township.
8. General dislocation of power distribution system in the Yallourn area.

Re-opening of Old Brown Coal Open Cut.

As normal supplies of coal from the Yallourn open cut could not be available for some months, it was a matter of the utmost urgency that access to the old cut should be restored and the cut re-equipped for overburden removal and the hand-winning of coal. This necessitated the restoration of the roadway, railway and bridge leading into the cut to which machines for excavating and rolling-stock for disposing of overburden had to be taken, together with a considerable quantity of other heavy material. The railway and roadway were restored by the 17th December, while the lengthening and strengthening of the bridge carrying the railway into the cut were sufficiently advanced by the 26th December to enable the transport of coal from the cut to the power station to begin. A dragline and two power shovels were then taken across the river and on to the overburden. Five steam locomotives, twenty 5-cubic yard trucks and 22 3-cubic yard trucks were transported by motor truck to the overburden working faces ; 3 ft. 6 in. gauge railway tracks were installed ; the overburden dump platform was repaired and redecked, and the water service thereto and the high-pressure pump at the river reconditioned. The removal of overburden was thus enabled to proceed at a rate in keeping with coal-winning requirements.

The dewatering of the bottom of the old cut, the clearing therefrom of a considerable accumulation of slurry, and the rebuilding of a timber ramp destroyed by a fire after the closing down of the cut some years ago, assisted in progressively increasing the output of coal from the initial production of 750 tons a day. Up to the 21st January all the coal won went to the power station, but by that date the output of the cut had increased to 2,000 tons a day, portion of which was diverted to the briquette factory, thus enabling it to resume partial operation. By the 1st March, the regular daily output had increased to 3,000 tons, most of which went to the briquette factory. The greatest output on a single day was 3,444 tons, which is easily a record for the cut, as production on such a large scale had never been attempted when it was previously worked. The daily production of 3,000 tons was maintained until the 1st May. The briquette factory was then able to draw its requirements from the Yallourn open cut, and the daily output from the old cut was reduced to 700 tons. The briquette factory ceased to take old cut coal on the 3rd May. By the 31st May the power station was also fully supplied from the Yallourn open cut, and operations at the old cut were discontinued, upon which the dragline and one power shovel were transferred to the Yallourn open cut to assist in the restoration work there. The shovel left at the old cut continued to remove overburden until the 26th June, in order to increase the reserves of uncovered coal against any future emergency.

Reconstruction of the Power Station Weir.

In order to safeguard the supply of circulating water to the condensers in the Yallourn power station one of the first works undertaken after the flood was the building of a rubble bank across the new channel that had been scoured through solid ground at the south side of the weir. This was subsequently sheet-piled to serve as a cofferdam for an extension of the weir over the full width of the new channel. Floods in April, second only in intensity to that in December, swamped the coffer dam, and caused considerable delay to the excavation work in progress. At the end of June the excavation was well advanced, driving of sheet-piling cut-offs was about 80 per cent. complete, concrete piles for the foundation of the western portion of the retaining wing wall on the south bank were all driven, and a good start had been made on the placing of concrete. The weir extension includes an opening 100 feet wide almost down to the river bed. This opening will be closed by a cylindrical steel gate about 10 feet in diameter, and will be rolled up on inclined racks on the occasions of floods, thus leaving a free passage for trees, silt, &c.

Town Water Supply Pumping Plant.

The mechanical plant was practically undamaged by the flood, but the reinforced concrete building housing the plant was demolished, and the severe erosion of the river bank resulted in complete loss of stability of the intake works, screens and suction piping supports. A new installation of vertical pumps is to be constructed in a pit at a safe distance up the hillside. This work was well in hand at the close of the year.

COAL SUPPLY.

Yallourn Open Cut.

The comparisons of quantities with those for 1933–34 indicate the extent to which operations in the cut were affected by rainfall and flooding.

Overburden Removal.—The quantity of overburden removed during the year was 547,000 cubic yards (previous year 735,500 cubic yards). The total quantity of overburden removed since operations commenced is 8,842,290 cubic yards. At the end of the year the area of the cut had increased from 195 acres to 206 acres at grass level and from 164 acres to 175 acres at the level of the surface of the coal.

Coal-winning.—The coal won during the year amounted to 1,737,718 tons (previous year 2,692,874 tons). The total coal excavated from the cut since the commencement of operations is 17,992,801 tons.

Of the coal won during the year 912,769 tons went to the power station and 824,949 tons to the briquette factory.

The amount of coal produced from the old cut was 252,924 tons, of which 93,906 tons went to the power station, and 159,018 tons to the briquette factory.

ELECTRICITY SUPPLY—GENERATION AND TRANSMISSION.

Yallourn Power Station.

Maximum load during year	**85,000 kw.**
Generated during year	**280,802,000 kwh.**
Received from briquette factory	**30,015,500 kwh.**
Total	**310,817,500 kwh.**

Due to the emergency operating conditions arising from the flooding of the Yallourn open cut, this station, instead of supplying its normal 75 per cent. of the total production of the whole of the Commission's system, contributed only 50 per cent.

As indicated in the Fifteenth Annual Report, work was commenced during the year on the erection of the second of the three 25,000 kw. sets provided for in the plan adopted in 1928. It would have been completed in time for the winter had the necessity not arisen for two of the pumps associated with the set to be used in the dewatering of the open cut. Consequently, it was not possible to put it into service until the 1st August, 1935. It is operating most satisfactorily.

Boiler Plant.—The whole of the boiler plant performed excellently, although in the early part of 1935 adjustments under emergency conditions had to be made to furnaces to forestall the effects of the more severe conditions imposed by the temporary use of the drier coal from the old cut. The modifications and adjustments proved quite effective, as also did those taken to reinstate the furnaces immediately coal from the new cut again became available.

The elimination of cinders in the flue gases is a complex problem to which a large amount of experimental work was again devoted in regard to the adaptation of orthodox equipment to brown coal and the application of methods developed in the course of the investigations. As a result, a distinct advance towards a practical and economical solution of the problem has been made.

In order to provide for the increasing needs of the power station, a contract was placed during the year for the erection of a new line of coal conveyors from the terminal bunker to No. 2 boiler house. The new coal-handling plant represents another instalment of the plan for the ultimate full equipment of this section of the power station to deal with loading requirements as they develop.

The next two boilers will be required early in 1937, and will constitute the first section of the modern high-pressure steam plant of the power station.

Richmond Power Station.

Maximum load during year	**15,500 kw.**
Generated during year	**56,463,000 kwh.**

This station, which is one of the two metropolitan peak load stations, and uses briquettes exclusively, operated satisfactorily. The extent to which the station was called upon to meet the deficiency at Yallourn, owing to the flooding there, is evidenced by an increase in the output of 33,893,000 kwh. over that of the previous year.

Newport Power Station.

Maximum load during year	**15,200 kw.**
Generated during year	**54,600,573 kwh.**

Sugarloaf–Rubicon Hydro Electric Stations.

Maximum load during year	**23,300 kw.**
Generated during year	**155,336,600 kwh.**

The output of these stations during the year was a record, the heavy rainfall generally experienced enabling them to operate at their maximum over a great part of the period. They supplied 30 per cent. of the total of the year's requirements, and produced over 44,000,000 kwh. more than in the previous year.

Yallourn–Melbourne 132,000 Volt Transmission Lines.

Both the Yallourn–Yarraville and the Yallourn–Richmond main transmission lines operated throughout the year without incident, other than two brief interruptions on individual circuits due to lightning.

Thomastown–North Eastern 66,000 Volt Transmission Line.

Lightning caused an interruption of six minutes' duration on one of the Rubicon "A"–Thomastown 66,000 volt circuits; otherwise there were no failures of any kind during the year.

Thomastown–Bendigo 66,000 Volt Transmission Line.

An important work undertaken during the year was the extension to Bendigo of the 66,000 volt Castlemaine line, and the duplication of the Sunbury–Castlemaine section of the line. The construction of the final section of the line from Sunbury to Thomastown Terminal Station is now proceeding, and will provide a single-circuit line 94 miles long and permit about 6,000 kw. to be delivered to Bendigo. Pending the completion of the line, Bendigo is receiving an interim supply at 22,000 volts via an extension of the Castlemaine feeder, the Bendigo power station being operated in parallel with the Commission's main supply system. In this way, mining loads, which were beyond the capacity of the Bendigo power station, were provided for. A temporary main sub-station was built at Bendigo, in order to step down the energy received at 22,000 volts to 6,600 volts for connexion to the power station busbars.

TERMINAL STATIONS.

The plant in the terminal stations at Yarraville, Richmond and Thomastown performed satisfactorily throughout the year, the only untoward incidents being the shut-down of the synchronous condenser at Richmond for a few days to repair the field connexion and the failure of a 22,000 volt trifurcating box at Yarraville.

The dry-out and assembly of the new 37,500 kva. transformer at the Yarraville terminal station were proceeded with, and preparations made for its installation in the switchyard.

CENTRAL SUPPLY FEEDERS AND SUB-STATIONS.

The 22,000 volt overhead lines of the Central Supply feeder system for the metropolitan area had another year of satisfactory operation, despite the conditions experienced towards the end of 1934, the very few troubles encountered being due to extraneous factors, such as lightning and wire maliciously thrown over the conductors by persons unknown.

Underground 22,000 volt cables were laid from Richmond terminal station to the St. Kilda and Richmond sub-stations respectively.

The only incidents to report in a year of satisfactory performance of sub-stations were two transformer failures, one at Spencer-street and the other at Preston. Repairs were quickly effected.

An 8,000 kva. synchronous condenser was installed at the Collingwood sub-station, and operated most satisfactorily.

The abnormal December flood in the Yarra River scoured the bed of the stream and brought in its flow debris, including trees, which damaged beyond repair five 22,000 volt cables laid in the river bed. Service was re-established by the erection of three new overhead circuits across the river at Church-street, Richmond, and by installing two new lengths of cable across Queen's Bridge, Melbourne, to replace the cable in the river at that point. Three cables were afterwards laid in pipes across the Church-street bridge, while the two overhead circuits at Queen's Bridge were left to do service for the time being. The cost of the cables abandoned was £3,000.

Special attention to protective systems resulted in a further improvement in relay performance. A record of 90 per cent. correct operations during the year indicates the efficiency of the system in use, and the attention paid to the maintenance and checking of the relays and protective circuits.

A four element automatic oscillograph was installed at a point where valuable records of any system surges will be obtainable, and an experimental Klydonograph was built and installed in the field to afford the opportunity of studying lightning characteristics.

WATER POWER INVESTIGATIONS.

These investigations were actively pursued throughout the year, both in the field and by means of office studies.

As the result of diamond drilling, it was definitely established that satisfactory rock formations on the Bogong High Plains exist for most of the works necessary for a scheme on the Kiewa River. These drilling plants are now testing the formations on the lower parts of this scheme.

Hydrological studies on the Bogong High Plains were continued throughout the year, and yielded results of considerable value.

Detailed contour surveys over the areas concerned in the Kiewa catchment were continued, and the technical data and other information in regard thereto were brought to completion.

The possibilities of power generation at the Hume dam were also given consideration during the year.

River gauging, which is the basis of all water power investigations, was maintained throughout the year on all streams likely to be of value for power generation in the future, and 22 gauging stations are now maintained, all but three of which are equipped with automatic recording gauges.

During the previous year, the automatic gauge installation on the Snowy River was destroyed by a flood, the peak of which rose some 60 feet above normal water level, and an interesting replacement was carried out, the gauge being now installed over a shaft excavated in the solid rock cliff on the river bank.

Collaboration was maintained with the Water Conservation and Irrigation Commission of New South Wales in regard to gaugings of the Murray and Mitta Rivers, which discharge into the Hume storage.

ELECTRICITY SUPPLY—DISTRIBUTION AND SALES.

Metropolitan Electricity Supply.—As a result of the definite improvement of conditions in the building and industrial fields and increased loading generally, the number of sub-stations had to be increased by 14, to a total of 528; the increase in kva. capacity was 2,995.

Portions of South Melbourne, St. Kilda, Caulfield, Moorabbin and Malvern were converted from single-phase to three-phase, together with that section of Oakleigh which had not already been changed to three-phase.

Notwithstanding the damage caused by the exceptional storm experienced on the 30th November, 1934, there was no increase over previous years in the number of interruptions to supply.

Ballarat Electricity Supply.—Over 4 route miles of 6·6 kv. feeders were erected during the year, in order that ring main facilities, with a consequential improvement in operating conditions, might be available.

More than 500 consumers were changed over from direct current to alternating current, this work involving the changing of 56 motors aggregating 286 horse-power. No serious interruptions to supply occurred.

Bendigo Electricity Supply.—Approximately 500 consumers were changed over from direct to alternating current during the year, the work, where possible, being carried out in conjunction with the reconstruction programme.

Eight sub-stations, aggregating 2,950 kva. were erected to improve the distribution system and to enable supply to be given to additional consumers, while a 100 kva. sub-station to augment supply in the Kennington area was in course of construction at the end of the year.

Nearly 9½ route miles of 22 kv. conductor were erected, mainly for the purpose of supplying various mines. Ultimately a ring main will be constructed for this purpose.

Interruptions to supply were all of a minor nature.

Castlemaine District.—The 66 kv. transmission line to Bendigo, a distance of 22·4 route miles, was placed in service during March, 1935, at a pressure of 22 kv.

Two minor extensions were made during the year, each necessitating the erection of a short 22 kv. line and a step-down aerial sub-station. The first, at Castlemaine, involved the erection of a 250 kva. sub-station to supply the Devonshire mine; the second, at Upper Macedon, included the installation of a 25 kva. sub-station to provide for the increased loading and for voltage regulation purposes.

No prolonged interruption to supply occurred during the year.

Eastern Metropolitan District.—The 22 kv. and 6·6 kv. high tension lines were increased by 14·31 route miles and 9·83 route miles respectively. The former increase was largely due to the extension of transmitted supply to Upper Beaconsfield; the latter was for extensions to Emerald, Selby, and Clematis.

Twelve distribution sub-stations, totalling 119 kva., were erected during the year.

Geelong Electricity Supply.—Alterations were carried out on the south and east feeders, each sub-station now having an alternative feed for use during maintenance operations, thereby eliminating the necessity of most pre-arranged maintenance interruptions to supply in these areas. The average period of such interruptions decreased from two hours nine minutes (1934) to one hour ten minutes (1935), and as a result of the improvements made to the system further decreases are anticipated in the future.

A 6·6 kv. extension was carried out to make supply available at Lovely Banks, while the 6·6 kv. feeder to the south area sub-station was reconstructed along a different route and its capacity increased.

Gippsland District.—The route miles of 22 kv. conductors erected increased by 46·9, chiefly as a result of extensions of supply during the year to Inverloch, Neerim–Noojee area, Lindenow, Kilmany Boys' Home and the National Broadcasting Station, Longford.

A 2,000 kva. automatic step-type regulator was installed at the Maffra main sub-station, and a 15 kva. single-phase sub-station erected in Mine-road, Korumburra, considerable improvements being thereby effected in the voltage regulation in the areas concerned.

The floods experienced in December, 1934, caused a number of interruptions to supply and some damage to lines, but supply, except on the Tyers feeder, was not seriously affected.

North-Eastern District.—During the year, six sub-stations were placed in service for rural supplies and 74·95 route miles of 22 kv. lines erected to give a transmitted supply to Cobram, Yarrawonga, Eldorado, and Strathmerton.

The capacity of transformers in circuit was increased by 2,430 kva. to meet substantial increases in loading.

South-Western District.—No serious interruptions were experienced during the year.

Alterations that were effected in the system of operation of the main 44 kv. feeder resulted in a reduction of pre-arranged maintenance interruptions, while generally improving the continuity of supply.

Re-arrangement of the control circuits and adjustments to the regulating equipment at Belmont sub-station were instrumental in improving voltage regulation.

BRIQUETTING AND RESEARCH.

As a result of the flooding of the Yallourn open cut on the 1st December the briquetting works ceased operations from that date until the 21st January, when raw coal supplies began to arrive from the old brown coal mine. During the period in which the factory was shut down opportunity was taken to have a more extensive overhaul of plant than is usual at the customary Christmas suspension of factory operations, which lasts for a fortnight.

The output of briquettes for the twelve months ended 30th June, 1935, was 288,242 tons (previous year 323,613 tons). The respective outputs for " H ", " I ", and " N " type briquettes were 99,782, 100,357, and 88,103 tons.

The monthly production of briquettes and the sources of supply of the raw coal were as shown in the table hereunder :—

	From New-cut Coal.	From Old-cut Coal.	Total.
1934—	tons.	tons.	tons.
July	29,956	..	29,956
August	32,499	..	32,499
September	29,590	..	29,590
October	32,135	..	32,135
November	31,130	..	31,130
December	..	..	..
1935—			
January	..	3,537	3,537
February	..	13,101	13,101
March	..	31,398	31,398
April	..	27,342	27,342
May	27,041	635	27,676
June	29,878	..	29,878
	212,229	76,013	288,242

At the date of this report the two new triple presses mentioned in the Fifteenth Annual Report were in operation.

The reduced output of briquettes, due to the enforced restriction of raw coal supplies, was accompanied by a consequent reduction in the by-product electrical energy generated at the factory. The total output was 42,045,550 kwh. (previous year 63,111,580 kwh.), of which 30,015,500 kwh. were delivered at the power station (previous year 47,867,490 kwh.) and 257,985 kwh. used on No. 4 ropeway. The energy consumed by the factory amounted to 11,772,065 kwh.

The whole of the factory plant operated throughout the year without major troubles.

During the year an improved system of louvre barricades was installed in both " A " and " B " storage sheds, resulting in better ventilation and easier inspection of the dumps in both sheds, while the stored briquettes now will be entirely under cover.

Press-mouth dust extraction plant is to be installed in " A " factory, an additional railway siding provided on the eastern side of " A " loading shed, and the truck traverser extended to command all sidings on either side of " A " shed.

The mechanical loading system installed about three years ago in " B " loading shed having been found to work in a very satisfactory manner, similar plant is to be installed in " A " loading shed.

PART IV.—GENERAL.

LEAVE OF ABSENCE TO COMMISSIONER.

Mr. Commissioner C. A. Norris, who made a business visit abroad during the year, was granted leave of absence for five months, from the 27th March, 1935.

STAFF.

The Commission desires to acknowledge in the warmest possible terms its appreciation of the services rendered by its staff. Superimposed upon the ordinary duties of a busy year of marked progress were the heavy work and emergency measures necessitated by the flooding of the Yallourn open cut, added to which again were the anxieties and strenuous labours involved by the maintenance of services at Yallourn, in the metropolis and other parts of the State during the extremely stormy conditions that were associated with the floods in December, 1934. Wherever the utmost effort was called for, either individually or collectively, it was cheerfully put forth, no matter how hazardous or disagreeable the conditions. The immediate and after effects of the flooding at Yallourn were thus rendered far less calamitous than they would have been otherwise, expedition being commonly accepted as the sole consideration in the planning and execution of the restoration works, regardless of any personal sacrifices entailed thereby. The loyalty and unselfish devotion to duty displayed by the staff and employees in every case are indicative of a high sense of public service, which is most gratifying to the Commission.

On the 31st October, 1934, Mr. J. M. Bridge resigned the position of General Superintendent, Yallourn, and Engineer in Charge Coal Supply, after more than fourteen years' devoted and distinguished service for the Commission. In the oversight of coal-winning operations at Yallourn, from the small first beginnings to the large and completely mechanized system which exists to-day, he combined skilful engineering with calm and sound judgment. The latter characteristic was also conspicuous in his dealings with men and matters in the general development of the town and works.

Following a consequential re-arrangement of staff, Mr. R. D. Dixon was appointed General Superintendent, and Mr. R. J. McKay, Engineer in Charge Coal Supply, these officers having been the principal assistants in the respective sections of the work.

Mr. H. R. Harper, who has been Chief Engineer of the Commission since its inception, left for England on the 19th March, 1935. During his sojourn abroad he will study for the Commission the latest advances in the technique of electricity supply, particularly in regard to generation and transmission on the large scale represented by the recently-completed comprehensive English "grid" system. During his absence the Electrical Engineer, Mr. E. Bate, acts as Chief Engineer, Electricity Supply (Generation and Transmission).

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

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

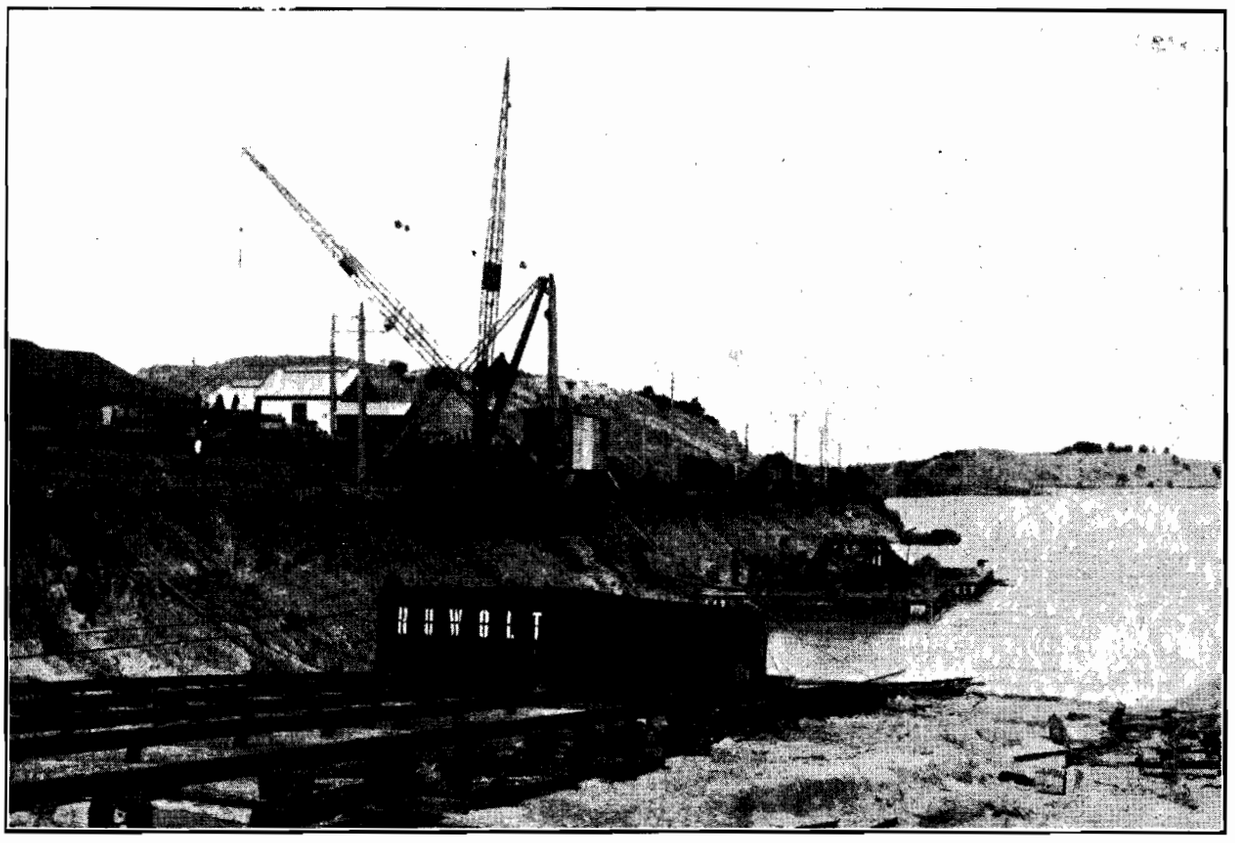
20th September, 1935.

APPENDIX No. 1.

DEWATERING OF THE FLOODED YALLOURN OPEN CUT.

When the flood in the Latrobe River was at its height on the 1st December, 1934, the water over the Yallourn open cut reached a maximum level of R.L.143·4 (height above sea level), or a depth of approximately 210 feet from the bottom of the cut. As the flood in the surrounding area receded, the level of the water in the cut settled down to approximately R.L.136.5, or 6 ft. 7 in. below its maximum. It was further reduced 9 ft. 6 in. by gravitational drainage through a channel about 500 feet long that was excavated from the south-east corner of the cut to the Morwell River. Water commenced to flow out of the open cut through this channel on the 20th December. The overburden dredge and its tracks were thus freed from water, while the electrical parts of the 175 Bucyrus power shovel and No. 1 Marion power shovel were salvaged and reconditioned a month earlier than would have been possible otherwise. The travel motor of the overburden dredge was salvaged before the flood water could reach it, so that the only reconditioning of the dredge necessary was the opening and cleaning of the driving bogies and propelling gear, the replacing and rewiring of the motor and the opening up and cleaning of the bearings of the idlers on the lower sections of the bucket ladder. This work was complete by the end of December, when the machine was again put into operation.

YALLOURN OPEN CUT DE-WATERING.



2ND FEBRUARY, 1935—LOOKING EAST.

Pontoon launching ways, showing a section of a pontoon being prepared for assembly with three others to make a complete pontoon.

It was obvious that the great bulk of the water in the open cut could only be removed by pumping, and after investigating various possible methods four sets of pumping plants were designed, the first consisting of one low-head pump of the Rees Roturbo type, 350 h.p. motor, 400 volts, 727 r.p.m. This pump, which was immediately available from the Richmond power station, had a capacity of 1,000,000 gallons per hour at a 27-ft. head. To expedite completion, it was accommodated on a composite pontoon (No. 1) built up of timber trusses, major buoyancy being obtained from six steel cylinders 40 feet long by 4 ft. 6 in. diameter. This particular plant was designed so that when the water level had been reduced to the limit at which the pump would function, the pontoon could be beached upon a convenient shelf, and other pumps coupled in series to deal with the higher head.

The remaining three plants, each consisting of a pair of pumps arranged to operate in parallel at first and later in series by an adjustment of pipe connexions, were mounted upon steel box pontoons built in Melbourne, and constructed for transport by railway to Yallourn in four sections, 50 feet long, 9 ft. 6 in. wide, and 4 ft. 6 in. deep.

These pontoons were fitted up as follows :—

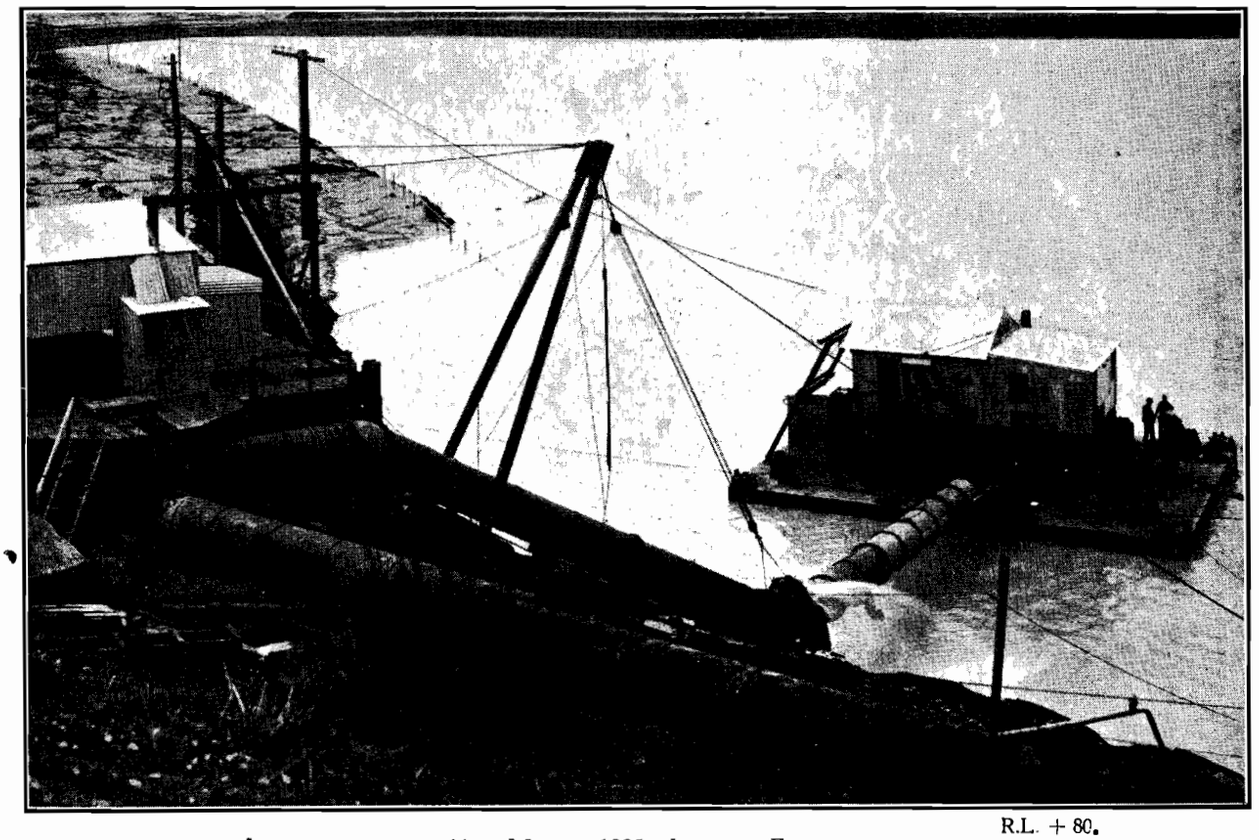
No. 2.—Two double-entry Volute type, vertical spindle pumps, from the Yallourn power station, each having a capacity of 700,000 gallons per hour at 45-ft. head to 1,400,000 gallons per hour at 26-ft. head ; 270 h.p. motor, 2,200 volts, 585 r.p.m.

No. 3.—Two double-entry Volute type, vertical spindle pumps, also from the Yallourn power station, each having a capacity of 440,000 gallons per hour at 55¼-ft. head to 880,000 gallons per hour at 26-ft. head ; 260 h.p. motor, 400 volts, 580 r.p.m.

No. 4.—Two Rees Roturbo type pumps, belt driven, purchased in Adelaide, each having a capacity of 600,000 gallons per hour at 59-ft. head to 1,000,000 gallons per hour at 35-ft. head ; speed of pumps, 440 r.p.m. ; both pumps were driven from one 750 h.p., 6,600 volts, 725 r.p.m.

The pontoons were assembled and launched at the old 1 in 10 grade run-in near the maintenance shed. The pumps, motors, piping and other gear were placed on board by a 10-ton stiff leg derrick crane, with an 80-ft. jib, erected on the bank, up to which a 5 ft. 3 in. railway branch siding was provided, enabling the heavy pumps, motors, &c., to be transferred by the crane directly from trucks to pontoons.

YALLOURN OPEN CUT DE-WATERING.



R.L. + 80.

11TH MARCH, 1935—LOOKING EAST.

No. 3 Pontoon, with one of its Pumps operating in series with No. 1 Pontoon (beached at high level).

Each pontoon discharge was fitted with a reflux valve, recoil carriage, and rubber flexible tube connected to a length of pipe, which could have its elevation adjusted to the take-off on the bank. The take-off itself was fitted with a ball and socket pipe which required to be moved forward and downward from time to time.

To provide an outlet to the Latrobe River from the dewatering pumps, it was necessary to construct waterways under railway tracks and a roadway at two separate points. A pair of 48-in. reinforced concrete pipe culverts were installed at each place. To protect these pipes from scour heavy protective structures of timber and concrete were erected at the outlet of both sets and at the inlet of the set nearer the river.

For use in the dewatering operations, the Melbourne Harbour Trust made available about 3,000 feet of 42-in. diameter steel pipes, with ball and socket joints, bends, winches, bollards, and other gear forming portion of one of its large suction dredges.

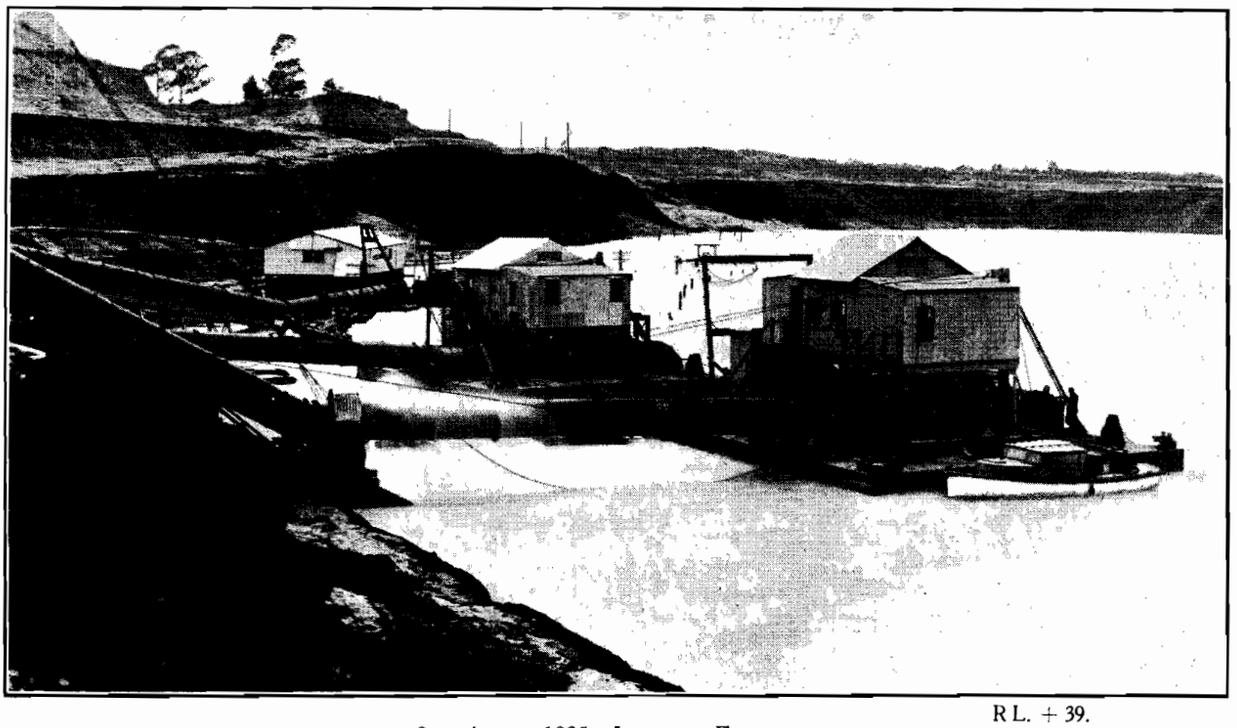
In the early stages of the pumping, the pumps worked in parallel, pumping into separate pipes which converged into two main outlet pipes leading to the twin culverts already mentioned, but as all the pumps were of the low-lift variety, ranging in effective head from 27 feet to 59 feet, it was necessary, as the pumping head increased, to couple

them in various arrangements of series-parallel and finally full series connexions. This involved, not only an extensive initial lay-out of the delivery pipe system, but also continuous alterations in this lay-out to provide for the changing pumping connexions.

In view of the large size of the pipes the movable flexible connexions between the fixed pipes on land and the pumps on the floating pontoons had to be limited in length, so that it was necessary to extend the fixed land pipe to a lower level as soon as the water level had fallen a few feet. Due to the irregular nature of the berms and batters on the face of the open cut, these frequent pipe extensions involved heavy and difficult work, especially as all surfaces which had been under the flood water were covered with a soft deposit of clayey mud, varying in thickness from a few inches at the top to two feet as the bottom was approached. This unfavorable condition was aggravated by the rainy weather experienced during the whole of the pumping operations, the worst months being February (661points) and March (815 points).

The pumping plants came into operation progressively, No. 1 on the 26th January, No. 2 on the 12th February, No. 3 on the 19th February, and No. 4 on the 11th March.

YALLOURN OPEN CUT DE-WATERING.



R L. + 39.

9TH APRIL, 1935—LOOKING EAST.

Pumps in series on No. 2 Pontoon in series with No. 1 Pontoon, and pumps in series on each of Nos. 3 and 4 Pontoons discharging direct to pipe lines.

The rate oi pumping was at a maximum of about 4,500,000 gallons per hour, with the first three plants operating independently into three pipe lines lifting over a crest of about 26 feet. The re-arrangements of pumps and pipe lines effected from time to time were conceived so as to maintain the rate of pumping at the maximum possible with the available combination of pumps. As the last stage was approached, the re-arrangement consisted of five pumps operating in series, three beached and two afloat, lifting to a height of 199 feet at a rate of approximately 650,000 gallons per hour.

Finally, after the level was reduced to R.L.—59, one pump was taken out of the series and pumping continued intermittently at a rate of about 450,000 gallons per hour until the previously-submerged permanent high lift pumps of smaller capacity in the cut were salvaged and put into operation, when the temporary pumping plant was dismantled.

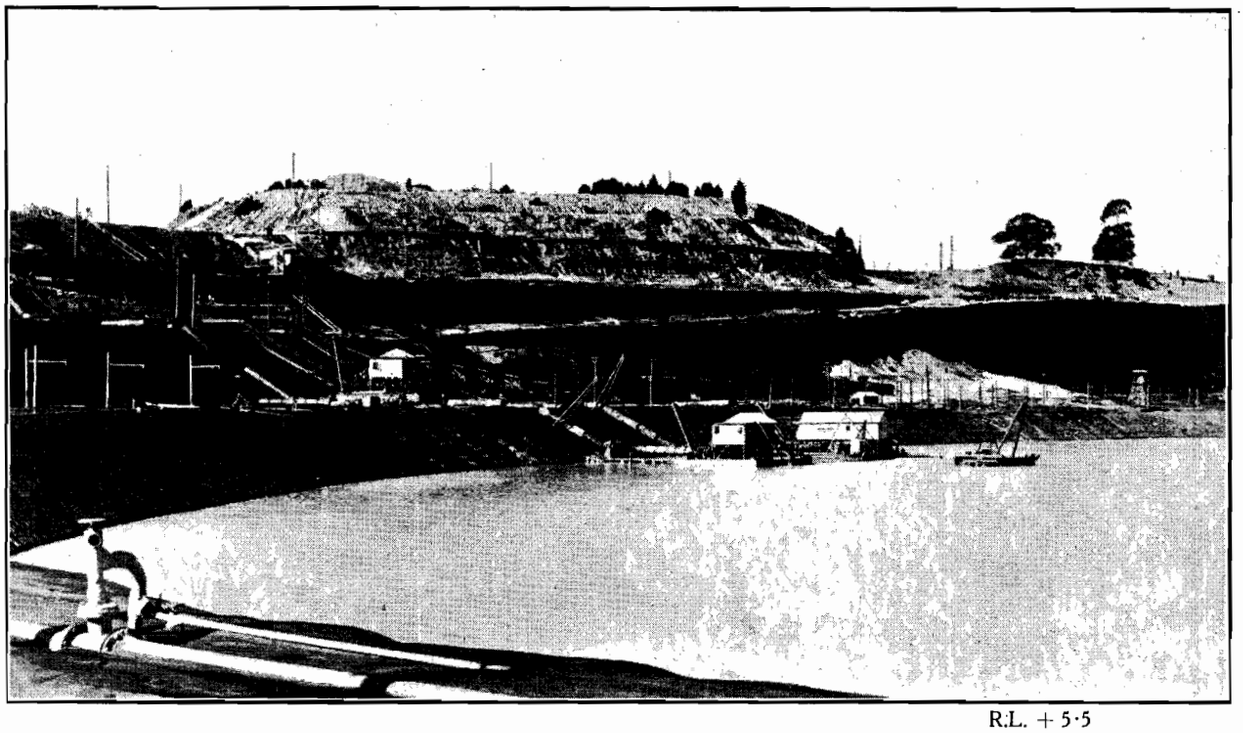
The whole of the main pumping operations lasted from the 26th January to the 14th June, or twenty weeks including stoppages, and the total quantity of water so dealt with was roughly 4,000,000,000 gallons, or an average rate, including stoppages, of 1,200,000 gallons per hour.

The accompanying diagram gives a continuous record of the pumping operations as well as of the lay-out and methods adopted.

RECONDITIONING OF PLANT DAMAGED BY FLOOD WATERS.

As the flood waters carried a large amount of clay and silt in suspension, especially in the open cut, all machines after their submergence were entirely covered with thick slimy mud. As each machine re-appeared above water it was hosed down, and as soon as access could be gained to its interior workings a start was made with dismantling and cleaning all moving parts. The electrical motors, control gear, wiring and connexions suffered most from the mud and water. As soon as possible all the electrical gear was completely stripped from a machine and taken to the electrical workshops for cleaning, drying out and reconditioning. This work, which was of considerable magnitude, had of necessity to be carried out with the utmost despatch, and although the workshop resources were severely taxed uniformly satisfactory results were obtained.

YALLOURN OPEN CUT DE-WATERING.



R.L. + 5·5

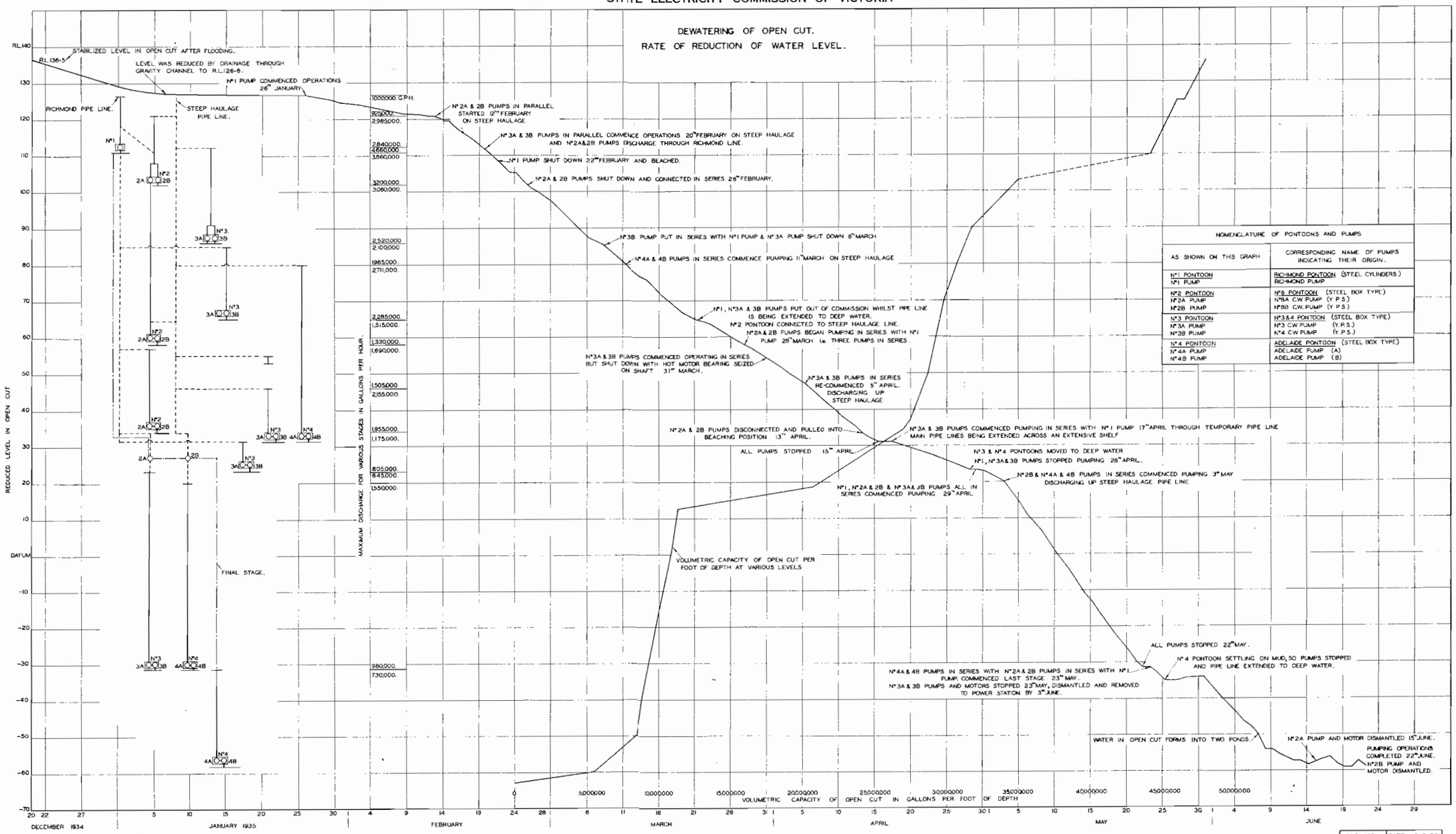
8TH MAY, 1935—LOOKING NORTH-EAST.

Two pumps on No. 3 Pontoon, one pump on No. 2 Pontoon (beached at R.L. + 31), and the pump on No. 1 Pontoon (beached at high level) all working in series to one pipe line; two pumps on No. 4 Pontoon, and the second pump on No. 2, all working in series to another pipe line.

The electrical equipment affected by flood waters included that of the 175 Bucyrus shovel, 250 Ruston shovel, No. 1 Marion shovel, No. 1 coal dredge (less a considerable portion of the electrical equipment that was salvaged while the waters were rising in the cut), No. 2 coal dredge, steep haulage winch, arc rectifier plant, four electric locomotives, dump plough, electric operating gear on one trackshifter, No. 2 ropeway winch, No. 3 overburden feeder and No. 6 conveyor of the overburden disposal plant, about 25 electrically-driven pumps of varying sizes, about 14 transformers ranging in size from 15 kva. to 250 kva., and all electric power and lighting lines and railway electric trackswitching and signalling gear in the open cut. In the cases of the coal dredges, special electric cable that was damaged and required replacement had to be imported. As plant was reconditioned it was put back into service, and at the date of this report there are very few items outstanding. One of these is the steep haulage winch. The winch house was flooded to the level of the window sills. All the plant excepting the top third of the main winch had been under water and had to be dismantled for cleaning, with the exception of the winding drums and the lower half of the main bearings, which were cleaned in place. A number of the large roller bearings of the winch were damaged by corrosion, and had to be sent to Sweden for reconditioning. Sufficient of the roller bearings were undamaged to enable (with the use of available spares) the driving gear at one end of the winch to be assembled completely, and with only one drum working with a single motor drive, the steep haulage has been handling light loads since 1st June in transporting plant and material to and from the open cut. One of the main motors of the haulage, after drying out, was used to drive two of the larger pumps used in the dewatering of the open cut.

STATE ELECTRICITY COMMISSION OF VICTORIA

DEWATERING OF OPEN CUT.
RATE OF REDUCTION OF WATER LEVEL.



NOMENCLATURE OF PONTOONS AND PUMPS	
AS SHOWN ON THIS GRAPH	CORRESPONDING NAME OF PUMPS INDICATING THEIR ORIGIN.
N°1 PONTOON N°1 PUMP	RICHMOND PONTOON (STEEL CYLINDERS.) RICHMOND PUMP
N°2 PONTOON N°2A PUMP N°2B PUMP	N°8 PONTOON (STEEL BOX TYPE) N°8A C.W. PUMP (Y.P.S.) N°8B C.W. PUMP (Y.P.S.)
N°3 PONTOON N°3A PUMP N°3B PUMP	N°3&4 PONTOON (STEEL BOX TYPE) N°3 C.W. PUMP (Y.P.S.) N°4 C.W. PUMP (Y.P.S.)
N°4 PONTOON N°4A PUMP N°4B PUMP	ADELAIDE PONTOON (STEEL BOX TYPE) ADELAIDE PUMP (A) ADELAIDE PUMP (B)

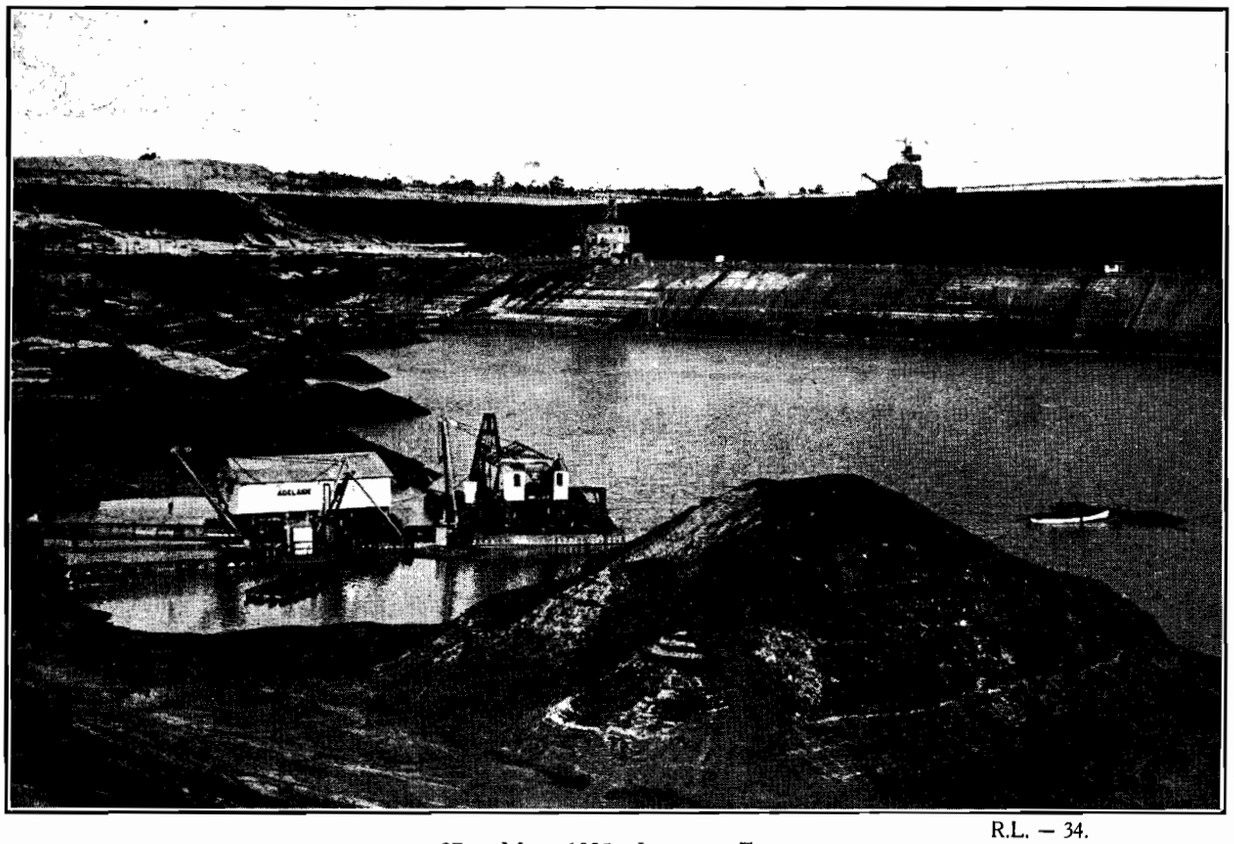
M.G. 143 | DATE 9.9.35.

C.J. Boyd

The trestleway of the steep haulage suffered considerable damage from a fall of coal, several trestles and girders on the eastern track being badly bent and twisted and the western half of the trestleway pushed out of alignment. Repairs have still to be completed.

Among numerous items of general damage was that done to the overburden railway tracks by washaways at the east end of the open cut, a total length of 2,900 feet of track being so badly affected as to necessitate relaying in new positions.

YALLOURN OPEN CUT DE-WATERING.



R.L. — 34.

27TH MAY, 1935—LOOKING EAST.

Approaching last stage. Single pipe line with five pumps in series. No. 4 Pontoon is shown connected to pipe line. At the rear No. 3 Pontoon is being dismantled.

APPENDIX No. 2.

STATE ELECTRICITY COMMISSION OF VICTORIA

GENERAL PROFIT AND LOSS ACCOUNT FOR YEAR ENDED 30th JUNE, 1935.

Dr. *To Expenditure—*	£ s. d.	£ s. d.
Electricity Supply—		
Purchased Power	67,202 7 10	
Generation and Transmission	1,385,582 9 3	
Distribution	1,107,617 0 5	
	2,560,401 17 6	
Deduct Cost of Power transferred to Works	16,918 7 9	
		2,543,483 9 9
Briquetting—		
Manufacturing	185,862 8 7	
Distribution and Selling	159,132 12 3	
	344,995 0 10	
Deduct Cost of Briquettes transferred to Works	35,869 0 5	
		309,126 0 5
Tramways		93,115 18 8
Miscellaneous		19,346 17 2
Sinking Fund Contributions		5,835 0 0
Provident Fund Contributions		24,060 16 11
Loan Flotation Expenses		17,850 0 0
Exchange on Overseas Remittances		104,405 0 7
Proportion of Amount charged to Commission by Treasury in accordance with decision of Cabinet, 22nd July, 1922		5,000 0 0
Special Writings off		16,000 0 0
Flood Expense		236,082 9 7
Profit carried down		6,478 0 1
		3,380,783 13 2
To Balance as at 30th June, 1934		755,989 3 10
		£755,989 3 10

Cr. *By Income—*	£ s. d.	£ s. d.
Electricity Supply—		
Bulk Supply	500,159 10 11	
Street Lighting	123,459 11 10	
Domestic	1,019,826 7 6	
Industrial	790,749 11 4	
Commercial	551,023 16 10	
Miscellaneous	11,268 13 6	
	2,996,487 11 11	
Add Meters unread 30th June, 1935, and Service Charges received in advance 30th June, 1934	179,991 17 4	
	3,176,479 9 3	
Deduct Meters unread 30th June, 1934, and Service Charges received in advance 30th June, 1935	180,772 14 7	
		2,995,706 14 8
Briquetting—		
Briquette Sales	333,751 14 4	
Add Briquettes on hand 30th June, 1935	20,365 6 6	
	354,117 0 10	
Deduct Briquettes on hand 30th June, 1934	56,258 15 0	
		297,858 5 10
Tramways		77,120 14 4
Miscellaneous		10,097 18 4
		3,380,783 13 2
By Profit for year		6,478 0 1
By Balance as at 30th June, 1935, carried to General Balance-sheet		749,511 3 9
		£755,989 3 10

GENERAL BALANCE-SHEET AS AT 30th JUNE, 1935.

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		145,835 12 8	
		18,179,506 17 11	
Deduct Redeemed or cancelled Securities		557,569 14 8	
		17,621,937 3 3	
Advance from National Recovery Loan Fund		100,000 0 0	
Advances by Treasury from Public Account, &c.		44,045 3 6	
Debentures (as per Schedule)		785,326 19 3	
State Electricity Commission of Victoria Debenture Loans Nos. 1 and 2	£982,000 0 0		
Deduct Redeemed or cancelled Securities	6,000 0 0		
		976,000 0 0	
			19,527,309 6 0
Current and Accrued Liabilities—			
Sundry Creditors		69,510 6 9	
Sundry Creditors, Retention		5,509 9 4	
Consumers' Deposits		29,332 17 7	
Service Charges received in Advance		67,393 1 6	
Unclaimed Wages		94 9 7	
Consumers' Advances for Construction		8,630 18 8	
Other Deposits and Trust Moneys		10,634 16 3	
Interest Accrued		52,702 4 7	
Salaries and Wages Accrued		28,890 1 2	
Insurances, Telephone Charges, and Rents Accrued		8,799 1 1	
Miscellaneous Current and Accrued Liabilities		20,812 1 4	
			302,309 7 10
Reserves—			
Depreciation and Sinking Funds		3,683,590 9 1	
Doubtful Debts		10,087 12 0	
Contingency and other		64,134 3 8	
			3,757,812 4 9
			£23,587,430 18 7

ASSETS

	£ s. d.	£ s. d.
Fixed Capital—		
Coal Supply Works	975,003 15 11	
Briquette Works	1,255,921 9 1	
Power Stations—		
Steam	4,771,605 8 3	
Hydro	815,148 1 1	
Transmission Lines	2,196,636 2 0	
Terminal Stations	914,531 16 7	
Transmission Sub-stations	623,521 14 7	
Distributing Systems	5,451,986 10 2	
Tramways	202,697 11 6	
Townships	720,927 19 4	
General	1,435,743 0 10	
Unfinished Construction	960,999 7 2	
	20,324,722 16 6	
Deduct Proportion of cost of extensions payable by Consumers	19,645 0 8	
		20,305,077 15 10
Current and Accrued Assets—		
Cash	32,856 17 2	
Sundry Debtors	478,158 2 9	
Stores	334,479 12 7	
Advances	1,013 0 0	
Investments	614,120 0 0	
Miscellaneous Current and Accrued Assets	6,950 1 9	
		1,467,577 14 3
Reserve Funds—		
Sinking Fund	8,793 18 11	
		8,793 18 11
Suspense—		
Overburden Removal and Disposal	540,674 13 8	
Preliminary Investigations	397 6 5	
Chargeable Work	5,730 18 3	
Paid in Advance Accounts	1,773 8 6	
Unamortised Loan Flotation Expense	322,157 15 2	
Work in Progress	19,001 4 10	
Amount charged to Commission by Treasury in accordance with decision of Cabinet, 22nd July, 1922	37,023 6 8	
Hospital and Health Centre, Yallourn	31,570 14 10	
Miscellaneous	98,140 17 6	
Profit and Loss Account as at 30th June, 1934 £755,989 3 10		
Less Profit for year 1934–35 6,478 0 1		
	749,511 3 9	
		1,805,981 9 7
		£23,587,430 18 7

There is a contingent asset and liability in respect of securities lodged as bona fides under Contracts to the extent of £6,760 3s., and held by the Bank on the Commission's behalf.

H. S. KILFOYLE, Chief Accountant.

R. LIDDELOW, Manager.

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, 1935. The values of the stores have been accepted on the certificates of the storekeepers.

3rd October, 1935.

J. A. NORRIS, Auditor-General.

APPENDIX No. 2—*continued.*

STATE ELECTRICITY COMMISSION OF VICTORIA.

ELECTRICITY SUPPLY UNDERTAKINGS.

Profit and Loss Accounts for Year ended 30th June, 1935.

—	Metropolitan Electricity Supply.	Ballarat Electricity Supply.	Bendigo Electricity Supply.	Castlemaine District.	Eastern Metropolitan District.	Geelong Electricity Supply.	Gippsland District.	North-Eastern District.	South-Western District.	Western Metropolitan District.	Grand Total.
EXPENDITURE.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.
To Power	834,383 5 2	22,861 13 8	23,882 13 1	5,730 2 6	25,202 9 3	54,160 12 4	23,134 0 9	29,347 5 9	24,198 3 8	3,917 1 3	1,046,817 7 5
Transmission	..	..	..	6,062 14 3	7,469 19 9	..	15,327 19 9	30,605 13 6	17,154 1 3	1,339 16 5	77,960 4 11
Generation	..	..	..	..	..	..	..	3,711 16 2	..	..	3,711 16 2
Overhead and Underground Lines	96,152 8 4	4,141 17 10	10,149 0 9	1,202 17 4	6,089 16 11	8,498 13 6	3,061 10 5	7,093 11 7	4,380 10 3	1,125 1 11	141,895 8 10
Substations	30,864 11 3	223 10 3	419 0 2	563 1 9	2,745 1 4	1,832 11 6	1,877 18 3	2,770 0 3	1,326 10 1	96 0 7	42,718 5 5
Meters	17,756 15 10	1,154 19 7	827 13 8	398 4 11	1,057 7 5	1,904 15 2	890 3 11	1,409 10 10	701 15 7	106 15 0	26,208 1 11
Consumers' Premises ..	21,545 0 1	334 8 1	316 6 5	775 10 11	2,267 16 7	1,201 8 8	1,955 16 4	1,880 17 2	481 12 1	61 19 1	30,820 15 5
Commercial Lamps	1,964 6 2	215 3 8	135 16 7	8 13 3	..	..	..	46 12 9	..	..	2,370 12 5
Public Lighting	25,078 1 0	572 17 3	1,075 19 4	561 1 4	847 0 2	1,690 15 6	833 5 10	1,388 1 11	486 2 1	244 12 6	32,777 16 11
Meter Reading, Billing and Collecting	68,066 16 4	4,119 7 1	3,285 5 11	1,134 0 2	3,789 15 6	3,770 16 1	2,925 1 8	4,237 16 11	1,186 10 5	488 17 10	93,004 7 11
Administration—Local ..	80,379 2 1	5,607 6 0	6,018 8 0	4,284 14 5	12,025 8 4	8,979 4 3	10,564 7 3	13,185 5 8	11,431 18 8	502 3 10	152,977 18 6
Head Office ..	21,524 0 8	860 2 9	875 3 1	667 7 8	1,901 15 4	1,661 6 3	1,478 15 9	1,891 17 8	1,350 7 1	177 10 8	32,388 6 11
Superintendence—Head Office	1,034 0 7	161 10 0	139 14 9	377 0 9	412 13 8	104 13 11	410 16 0	408 9 4	400 6 1	154 0 7	3,603 5 8
Interest	198,605 18 5	3,922 18 6	5,045 17 11	5,450 12 0	16,512 15 6	10,748 18 2	11,017 2 11	11,734 2 5	9,547 16 4	1,166 3 5	273,752 5 7
Depreciation	93,364 12 0	3,433 0 0	3,599 12 2	3,136 2 1	8,569 6 10	7,734 0 0	6,302 17 1	6,358 9 3	4,907 8 11	605 7 6	138,010 15 10
Insurance	860 16 3	37 6 3	31 8 11	..	18 4 0	78 6 5	48 4 4	63 5 3	17 8 10	4 17 8	1,159 17 11
Workers' Compensation Insurance	694 5 6	38 4 7	35 5 7	24 11 2	77 10 2	58 6 2	59 7 1	141 4 4	38 18 3	4 16 1	1,172 8 11
Uncollectable Accounts ..	4,533 12 11	177 14 8	227 17 5	75 15 4	268 4 5	351 15 10	221 4 2	320 16 0	198 10 0	21 17 10	6,397 8 7
Total	1,496,807 12 7	47,862 0 2	56,065 3 9	30,452 9 10	89,255 5 2	102,776 3 9	80,108 11 6	116,594 16 9	77,807 19 7	10,017 2 2	2,107,747 5 3
INCOME.											
By Sales	1,797,754 5 3	71,706 13 6	62,877 12 7	30,056 15 2	106,126 8 0	139,424 11 0	88,483 3 9	128,158 10 8	78,256 7 3	11,268 9 4	2,514,112 16 6
Operating Surplus, from which has to be deducted flood expenditure, exchange, sinking fund, provident fund and other indirect charges detailed in General Profit and Loss Account ..											406,365 11 3

SALE OF ELECTRICAL APPLIANCES.—The operating accounts include in respect of this function :—Revenue, £27,323 4s. 9d. ; Expenditure, £27,818 7s. 8d. (including Interest and Depreciation, £2,781 14s. 8d.).

ELECTRICITY SUPPLY UNDERTAKINGS.

Balance-sheets as at 30th June, 1935.

—	Metropolitan Electricity Supply.	Ballarat Electricity Supply.	Bendigo Electricity Supply.	Castlemaine District.	Eastern Metropolitan District.	Geelong Electricity Supply.	Gippsland District.	North-Eastern District.	South-Western District.	Western Metropolitan District.
ASSETS.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.
Fixed Capital—										
Power Stations—Steam	..	33,028 18 3	42,757 6 8	..	..	329,641 19 4	..	..	..	..
Transmission Lines	..	..	..	96,848 5 2	64,474 8 1	..	132,331 8 2	263,269 3 2	119,223 19 10	7,931 14 10
Transmission Substations	..	..	..	4,720 17 7	..	..	7,935 12 6	61,529 0 5	47,764 15 10	..
Distributing Systems	3,675,105 17 0	101,513 8 4	126,195 15 9	118,105 11 1	371,528 18 4	260,878 10 8	263,048 19 1	263,605 0 3	227,882 13 2	26,404 1 9
Tramways	..	251 7 2	2,336 4 7	..	..	200,109 19 9	..	..	..	..
General	583,990 3 3	5,672 17 10	7,235 9 2	3,832 12 6	19,544 15 2	24,409 16 6	6,208 9 1	17,431 6 9	12,403 5 4	153 12 0
Unfinished Construction	30 11 1	41,358 13 6	43,261 14 7	23,204 1 4	..	45 19 7	11,466 6 4	8,993 0 2	63 17 10	..
	4,259,126 11 4	181,825 5 1	221,786 10 9	246,711 7 8	455,548 1 7	815,086 5 10	420,990 15 2	614,827 10 9	407,338 12 0	34,489 8 7
Deduct Proportion of Cost of Extensions payable by Consumers	4,599 19 10	611 16 4	6,418 4 5	199 7 6	3,911 11 4	57 15 0	1,064 7 4	2,387 6 0	381 12 0	13 0 11
	4,254,526 11 6	181,213 8 9	215,368 6 4	246,512 0 2	451,636 10 3	815,028 10 10	419,926 7 10	612,440 4 9	406,957 0 0	34,476 7 8
Current and Accrued Assets—										
Cash	12,148 4 0	402 10 2	1,548 8 1	209 1 8	273 8 2	1,445 13 10	136 13 3	420 15 8	621 8 11	8 16 3
Sundry Debtors	274,078 17 11	11,548 9 11	9,636 17 5	3,567 2 10	16,294 14 4	18,143 6 0	13,625 19 7	22,589 5 7	10,160 14 4	2,005 9 8
Stores	87,634 10 4	7,339 13 7	13,705 9 11	3,036 13 11	8,408 14 7	18,771 17 9	10,227 8 9	17,675 4 1	6,130 2 6	360 0 1
Miscellaneous Current and Accrued Assets	2,962 14 11	135 19 2	104 15 1	11 6 9	27 10 3	16 8 5	27 16 9	3,306 17 11	18 0 5	1 6 7
Reserve Funds—										
Sinking Fund	..	..	..	4,311 13 7	1,514 17 9	..	2,183 19 6	717 15 0	65 13 1	..
Suspense—										
Chargeable Work	4,353 12 9	..	3 4 10	1,015 2 5	131 4 11	..	13 0 5	..	..	..
Paid in Advance Accounts	914 5 5	61 0 6	43 6 8	1 4 10	82 6 1	234 18 11	2 12 6	23 14 1	18 3 2	..
Work in Progress	9,464 2 9	..	..	..	..	..	..	..	..	..
Miscellaneous	180 1 3	16 13 4	..	..	..	..	..	..	..	..
Total	4,646,263 0 10	200,717 15 5	240,410 8 4	258,664 6 2	478,369 6 4	853,640 15 9	446,143 18 7	657,173 17 1	423,971 2 5	36,852 0 3
LIABILITIES.										
Capital Liabilities—										
Head Office	3,276,017 13 8	189,102 13 8	226,593 14 4	216,622 7 6	362,467 6 5	719,446 7 9	360,893 5 8	533,241 4 7	324,439 14 9	27,646 15 2
Debentures	700,000 0 0	..	1,469 1 2	16,003 16 0	36,379 13 9	..	7,276 12 6	18,881 1 10	4,300 0 0	1,016 14 0
Current and Accrued Liabilities—	125,330 6 11	8,005 3 1	8,561 9 6	3,063 18 6	11,306 13 8	6,910 15 10	8,563 15 5	9,942 2 8	6,606 13 6	927 2 3
Reserves—										
Depreciation	537,923 2 0	3,434 14 2	3,600 0 0	22,756 0 6	67,877 5 3	126,594 8 11	68,678 10 3	94,090 2 0	88,242 0 10	7,166 7 2
Doubtful Debts	2,491 18 3	175 4 6	186 3 4	218 3 8	338 7 3	689 3 3	731 14 9	1,019 6 0	382 13 4	95 1 8
Miscellaneous	4,500 0 0	..	..	..	..	..	..	..	..	..
Total	4,646,263 0 10	200,717 15 5	240,410 8 4	258,664 6 2	478,369 6 4	853,640 15 9	446,143 18 7	657,173 17 1	423,971 2 5	36,852 0 3

APPENDIX No. 2—*continued.*

STATE ELECTRICITY COMMISSION OF VICTORIA.

SCHEDULES OF FIXED CAPITAL AT 30th JUNE, 1935.

	Expenditure during 1934–35.			Total Expenditure at 30th June, 1935.					
	£	s.	d.	£	s.	d.	£	s.	d.
COAL SUPPLY WORKS—									
Yallourn	25,396	7	11	952,039	12	7			
Brown Coal Mine	*Cr.* 162	19	3	22,964	3	4			
							975,003	15	11
BRIQUETTE FACTORY—YALLOURN	16,740	6	5	1,255,921	9	1			
							1,255,921	9	1
POWER STATIONS—STEAM—									
Yallourn	43,734	7	7	3,384,266	5	9			
Newport "B"	21	2	5	835,039	12	2			
Richmond	..			146,871	6	1			
Ballarat	36,040	18	3	33,028	18	3			
Bendigo	46,837	6	8	42,757	6	8			
Geelong	*Cr.* 64	1	1	329,641	19	4			
							4,771,605	8	3
POWER STATION—HYDRO	*Cr.* 1,925	10	0	815,148	1	1			
							815,148	1	1
TRANSMISSION LINES—									
Yallourn to Yarraville	*Cr.* 331	9	3	713,904	9	1			
Newport to Yarraville	..			26,785	18	5			
Sugarloaf to Thomastown	4	5	0	202,084	6	8			
Sugarloaf–Rubicon Area	..			33,684	7	7			
Central Supply System	16,369	8	9	536,098	1	0			
Castlemaine District	14,929	4	8	96,848	5	2			
Eastern Metropolitan District	610	1	6	64,474	8	1			
Gippsland District	6,343	16	0	132,331	8	2			
North-Eastern District	17,208	19	6	263,269	3	2			
South-Western District	9	16	10	119,223	19	10			
Western Metropolitan District	..			7,931	14	10			
							2,196,636	2	0
TERMINAL STATIONS—									
Yarraville	681	8	11	536,226	9	5			
Thomastown	*Cr.* 342	5	4	96,597	4	3			
Richmond	435	13	5	213,286	16	11			
Rubicon	1,322	8	8	68,421	6	0			
							914,531	16	7
TRANSMISSION SUB-STATIONS—									
Central Supply System	14,438	11	2	501,571	8	3			
Castlemaine District	4,720	17	7	4,720	17	7			
Gippsland District	1,587	8	11	7,935	12	6			
North-Eastern District	5	6	9	61,529	0	5			
South-Western District	1,527	3	11	47,764	15	10			
							623,521	14	7
DISTRIBUTING SYSTEMS—									
Metropolitan Electricity Supply	69,020	8	2	3,675,105	17	0			
Ballarat Electricity Supply	101,513	8	4	101,513	8	4			
Bendigo Electricity Supply	126,195	15	9	126,195	15	9			
Castlemaine District	1,854	15	4	118,105	11	1			
Eastern Metropolitan District	24,885	19	3	371,528	18	4			
Geelong Electricity Supply	7,166	19	1	260,878	10	8			
Gippsland District	17,394	8	3	263,048	19	1			
North-Eastern District	20,501	1	8	263,605	0	3			
South-Western District	2,498	10	4	227,882	13	2			
Western Metropolitan District	236	4	2	26,404	1	9			
Yallourn	386	18	4	16,094	15	0			
Brown Coal Mine	159	8	2	1,622	19	9			
							5,451,986	10	2
TRAMWAYS—									
Ballarat	251	7	2	251	7	2			
Bendigo	2,336	4	7	2,336	4	7			
Geelong	650	10	6	200,109	19	9			
							202,697	11	6
TOWNSHIPS—									
Yallourn	15,545	14	7	711,811	2	6			
Brown Coal Mine	..			9,116	16	10			
							720,927	19	4
GENERAL—									
Metropolitan Electricity Supply	31,059	8	7	583,990	3	3			
Ballarat Electricity Supply	6,516	4	5	5,672	17	10			
Bendigo Electricity Supply	8,195	4	9	7,235	9	2			
Castlemaine District	410	10	11	3,832	12	6			
Eastern Metropolitan District	1,391	10	11	19,544	15	2			
Geelong Electricity Supply	446	15	6	24,409	16	6			
Gippsland District	1,690	14	10	6,208	9	1			
North-Eastern District	2,067	12	10	17,431	6	9			
South-Western District	1,206	0	0	12,403	5	4			
Western Metropolitan District	2	15	8	153	12	0			
Yallourn	1,441	14	11	478,547	1	8			
Metropolitan Area	15,560	6	4	276,313	11	7			
							1,435,743	0	10
	706,725	9	3	19,363,723	9	4	19,363,723	9	4
UNFINISHED CONSTRUCTION—									
Beginning of year—*Deduct*	890,194	17	11	..			..		
	Cr. 183,469	8	8	19,363,723	9	4	19,363,723	9	4
UNFINISHED CONSTRUCTION—									
End of year—*Add*	960,999	7	2	960,999	7	2	960,999	7	2
	777,529	18	6	20,324,722	16	6	20,324,722	16	6
Deduct—Proportion of Cost of Extensions payable by Consumers	8,048	11	10	19,645	0	8	19,645	0	8
	769,481	6	8	20,305,077	15	10	20,305,077	15	10

STATE ELECTRICITY COMMISSION OF VICTORIA.

SCHEDULE OF DEBENTURES:

LOANS RAISED UNDER THE AUTHORITY OF THE STATE ELECTRICITY COMMISSION ACT No. 4087.

Loan No.	Original Issue.	Rate.	Term.	Due.	Sinking Fund.	Redeemed to 30th June, 1935.	Outstanding at 30th June, 1935.
	£	%			%	£	£
State Electricity Commission of Victoria Debenture Loan No. 1	600,000	3½	20 years	1954	1	6,000	594,000
State Electricity Commission of Victoria Debenture Loan No. 2	382,000	3½	20 years	1954	1	..	382,000

DEBENTURES GUARANTEED BY THE STATE ELECTRICITY COMMISSION OF VICTORIA.

—	Undertaking.	Details.	Nominal Rate.	Rate under Financial Emergency Act.	Original Issue.	Date of Acquisition by Commission.	Outstanding at Acquisition.	Redeemed since Acquisition.	Outstanding at 30th June, 1935.	Total Outstanding.
			%	%						
		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	197,463 0 0	..	
		Consolidated Debenture Stock	5	5	250,000 0 0	,,	188,596 0 0	188,596 0 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	275,595 0 0	..	
		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	1,134,256 14 10	700,000 0 0	700,000 0 0
		COUNTRY.								
Bendigo Electricity Supply	Kangaroo Flat ..	Marong Shire .. .. Loan No. 2	5⅞	5	1,700 0 0	1.7.31	1,591 17 11	122 16 9	1,469 1 2	1,469 1 2
Castlemaine District ..	Gisborne	Gisborne Shire .. .. ,, 3	6½	5·0375	900 0 0	1.10.28	781 15 5	382 8 8	399 6 9	
	Kyneton	Kyneton Shire .. .. ,, 3	5⅝	5	12,000 0 0	1.10.29	10,830 0 0	1,340 0 0	9,490 0 0	
	,, ...	,, ,, ... ,, 5	6	5	3,800 0 0	,,	3,084 15 2	920 5 11	2,164 9 3	
	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	4,642 14 7	16,003 16 0	16,003 16 0
		Carried forward								

Schedule of Debentures Guaranteed by the State Electricity Commission of Victoria—*continued.*

	Undertaking.	Details.	Nominal Rate.	Rate under Financial Emergency Act.	Original Issue.	Date of Acquisition by Commission.	Outstanding at Acquisition.	Redeemed since Acquisition.	Outstanding at 30th June, 1935.	Total Outstanding.
			%	%						
		COUNTRY—*continued.*								
		Brought forward								
Eastern Metropolitan District	Dandenong	Dandenong Shire .. .. Loan No. 19	6¼	5	6,600 0 0	1.10.23	5,941 7 1	4,754 10 3	1,186 16 10	
	,, ...	,, ,, ... ,, 20	6	5	4,000 0 0	,,	3,946 19 0	1,773 5 6	2,173 13 6	
	Frankston	Frankston and Hastings Shire ,, 10	6½	5·0375	5,000 0 0	21.2.28	3,690 16 11	2,717 11 2	973 5 9	
	,, ...	,, ,, ,, ,, 11	6	5	3,000 0 0	,,	2,277 2 3	1,576 3 0	700 19 3	
	,, ...	,, ,, ,, ,, 13	6¼	5	4,000 0 0	,,	3,366 6 2	1,918 3 0	1,448 3 2	
	,, ...	,, ,, ,, ,, 15	6⅜	5·0375	3,000 0 0	,,	2,290 0 0	2,290 0 0	..	
	,, ...	,, ,, ,, ,, 16	6½	5·0375	5,000 0 0	,,	4,665 15 5	1,277 7 6	3,388 7 11	
	Healesville	Healesville Shire .. ,, 2	6	5	8,000 0 0	1.4.33	6,215 0 0	430 0 0	5,785 0 0	
	,, ...	,, ,, ... ,, 3	6½	5·0375	2,000 0 0	,,	1,585 0 0	105 0 0	1,480 0 0	
	,, ...	,, ,, ... ,, 4	6⅜	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	143 6 10	2,585 4 4	
	Lilydale	Lilydale Shire .. .. ,, 16	6½	5·0375	3,000 0 0	1.4.25	2,869 12 7	617 6 5	2,252 6 2	
	Mornington ..	Mornington Shire .. ,, 7	6⅛	5·0375	4,445 0 0	1.8.30	3,195 0 0	1,175 0 0	2,020 0 0	
	,, ..	,, ,, .. ,, 9	6½	5·0375	1,200 0 0	,,	630 0 0	630 0 0	..	
	,, ..	,, ,, .. ,, 11	5¾	5	1,000 0 0		895 16 8	189 13 5	706 3 3	
	Ringwood and Croydon	Lilydale Shire .. .. ,, 11	5	5	2,100 0 0	1.4.25	1,100 0 0	1,100 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	411 10 10	1,501 10 9	
	,, ,,	,, ,, ... ,, 17	6	5	4,000 0 0	,,	3,600 0 0	2,000 0 0	1,600 0 0	
	Sorrento and Portsea	Flinders Shire .. .. ,, 3	6	5	3,600 0 0	1.10.27	2,700 0 0	1,600 0 0	1,100 0 0	
	,, ,,	,, ,, ... ,, 4	6½	5·0375	5,000 0 0	,,	4,185 0 0	1,820 0 0	2,365 0 0	
	,, ,,	,, ,, ... ,, 5	6	5	3,500 0 0	,,	3,356 10 7	943 7 9	2,413 2 10	
					77,645 0 0		65,351 19 5	28,972 5 8	36,379 13 9	36,379 13 9
Gippsland District ..	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	1,361 0 7	4,299 0 4	
	,, ...	,, ,, ... ,, 2	5¼	5	1,000 0 0	,,	877 5 7	299 13 5	577 12 2	
	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	5,440 14 0	7,276 12 6	7,276 12 6
		Carried forward			120,695 0 0		100,307 14 5	39,178 11 0	61,129 3 5	61,129 3 5

Schedule of Debentures Guaranteed by the State Electricity Commission of Victoria—*continued.*

—	Undertaking.	Details.	Nominal Rate.	Rate under Financial Emergency Act.	Original Issue.	Date of Acquisition by Commission.	Outstanding at Acquisition.	Redeemed since Acquisition.	Outstanding at 30th June, 1935.	Total Outstanding.
			%	%	£ s. d.		£ s. d.	£ s. d.	£ s. d.	£ s. d.
		COUNTRY—*continued.*								
		Brought forward			120,695 0 0		100,307 14 5	39,178 11 0	61,129 3 5	61,129 3 5
North-Eastern District	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	311 4 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	734 6 7	204 17 5	
	,, ...	,, ,, ... ,, 9	6¼	5	1,500 0 0	,,	1,320 4 0	835 19 11	484 4 1	
	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	350 0 0	450 0 0	
	Mooroopna ..	Rodney Shire .. .. ,, 1	5	5	3,000 0 0	1.10.26	2,286 7 8	832 10 7	1,453 17 1	
	Nathalia	Numurkah Shire .. .. ,, 4	4¾	4¾	4,200 0 0	1.10.31	2,600 0 0	700 0 0	1,900 0 0	
	,, ...	,, ,, ... ,, 8	6¼	5	3,500 0 0	,,	2,257 15 5	990 12 8	1,267 2 9	
	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	200 0 0	..	
	,, ...	,, ,, ... ,, 7	7	5·425	2,500 0 0	,,	1,922 4 11	305 16 0	1,616 8 11	
	Rutherglen ..	Rutherglen Borough .. ,, 2	4½	4½	3,000 0 0	15.10.26	2,094 3 8	962 0 10	1,132 2 10	
	Wahgunyah ..	,, Shire .. ,, 4	6	5	350 0 0	1.2.26	296 1 8	94 10 8	201 11 0	
	Wangaratta ..	Wangaratta Shire .. ,, 8	6½	5·0375	6,500 0 0	12.3.27	6,078 12 8	1,112 0 5	4,966 12 3	
	,, ..	,, ,, .. ,, 9	6	5	1,500 0 0	,,	1,412 2 5	272 8 9	1,139 13 8	
	Yarrawonga ..	Yarrawonga Borough .. ,, 3	4	4	3,500 0 0	1.8.25	2,600 0 0	1,100 0 0	1,500 0 0	
	,, ..	,, ,, .. ,, 4	4½	4½	800 0 0	,,	576 3 8	285 11 7	290 12 1	
	,, ..	,, ,, .. ,, 5	5	5	500 0 0	,,	387 11 1	165 14 10	221 16 3	
	,, ..	,, ,, .. ,, 6	5	5	500 0 0	,,	406 1 8	153 18 2	252 3 6	
					61,650 0 0		51,288 1 6	32,406 19 8	18,881 1 10	18,881 1 10
South-Western District	Camperdown ..	Hampden Shire .. .. Loan No. 1	4	4	8,000 0 0	8.1.24	2,600 0 0	1,600 0 0	1,000 0 0	
	,, ..	,, ,, ... ,, 3	4	4	1,400 0 0	,,	750 0 0	550 0 0	200 0 0	
	Koroit	Koroit Borough .. .. ,, 1	4¼	4¼	6,500 0 0	1.12.28	4,000 0 0	1,700 0 0	2,300 0 0	
	Terang	Hampden Shire .. .. ,, 2	4	4	3,000 0 0	4.3.24	1,600 0 0	1,100 0 0	500 0 0	
	,, ...	,, ,, ... ,, 4	4	4	1,500 0 0	,,	850 0 0	550 0 0	300 0 0	
					20,400 0 0		9,800 0 0	5,500 0 0	4,300 0 0	4,300 0 0
Western Metropolitan District	Werribee	Werribee Shire .. .. Loan No. 1	5	5	4,000 0 0	10.4.24	2,200 0 0	2,200 0 0	..	
	,, ...	,, ,, ... ,, 3	4¾	4¾	1,000 0 0	,,	818 1 5	341 16 1	476 5 4	
	,, ...	,, ,, ... ,, 4	5½	5	1,000 0 0	,,	856 16 2	316 7 6	540 8 8	
	,, ...	,, ,, ... ,, 5	6½	5·0375	1,000 0 0	,,	760 0 0	760 0 0	..	
					7,000 0 0		4,634 17 7	3,618 3 7	1,016 14 0	1,016 14 0
	Total for Country				209,745 0 0		166,030 13 6	80,703 14 3	85,326 19 3	85,326 19 3
	Total for Metropolis				2,013,769 0 0		1,834,256 14 10	1,134,256 14 10	700,000 0 0	700,000 0 0
	GRAND TOTAL				2,223,514 0 0		2,000,287 8 4	1,214,960 9 1	785,326 19 3	785,326 19 3

APPENDIX No. 3.

STATE ELECTRICITY COMMISSION OF VICTORIA.

OVERHEAD TRANSMISSION LINES.

Description.	Erected during Year ended 30th June, 1935.		Total Erected to 30th June, 1935.	
	Route Miles.	Cable Miles.	Route Miles.	Cable Miles.
132,000-Volt Transmission Lines.				
Yallourn–Yarraville	..	..	110	660
Yallourn–Richmond	..	..	80	240
Metropolitan Electricity Supply.				
22,000-volt Lines	..	..	143·5	430·5
6·6, 7·2, and 4·16 kv.	7·54	27·95	269·83	716·90
Eastern Metropolitan District.				
22,000-volt Lines	14·31	31·55	156·032	417·065
6,600-volt Lines	9·83	21·57	116·217	303·725
Ballarat Electricity Supply.				
6,600-volt Lines	4·3	12·9	16·6	49·8
Bendigo Electricity Supply.				
22,000-volt Lines	9·34	31·54	9·34	31·54
6,600-volt Lines	..	..	9·1	27·3
Geelong Electricity Supply.				
6,600-volt Lines	2·98	11·90	69·28	263·60
Castlemaine District.				
66,000-volt Lines	22·2	171·6	74·7	329·1
22,000-volt Lines	0·64	1·91	57·99	172·44
Gippsland District.				
22,000-volt Lines	46·92	110·35	335·9	945·37
6,600-volt Lines	..	..	13·65	33·45
North-Eastern District.				
66,000-volt Lines	..	..	170·283	686·366
22,000-volt Lines	77·00	231·00	253·3	888·0
6,600-volt Lines	..	..	7·59	17·18
South-Western District.				
44,000-volt Lines	..	..	116·2	484·896
22,000-volt Lines	0·58	1·16	21·18	63·06
6,600-volt Lines	1·058	2·116	140·726	356·856
Western Metropolitan District.				
22,000-volt Lines	..	..	18·9	56·8
6,600-volt Lines	..	..	4·8	9·5
Yallourn District.				
11,000-volt Lines	..	..	1·415	8·49

SUMMARY OF OVERHEAD TRANSMISSION LINES.

Description.	Erected during Year ended 30th June, 1935.		Total Erected to 30th June, 1935.	
	Route Miles.	Cable Miles.	Route Miles.	Cable Miles.
132,000 volts	..	..	190·0	900·0
66,000 volts	22·2	171·6	244·983	1,015·466
44,000 volts	..	..	116·2	484·896
22,000 volts	148·79	407·52	996·142	3,004·775
11,000 volts	..	..	1·415	8·49
6,600 volts	25·708	72·436	647·793	1,778·311
Total	196·698	649·556	2,196·533	7,191·938

UNDERGROUND CABLES.

—	Cable Miles Laid during Year ended 30th June, 1935.	Total Cable Miles Laid at 30th June, 1935.
22,000 volts	3·647	104·829
4.16, 6.6, and 7·2 kv.	3·123	389·352
400 volts	10·794	15·420
Pilot and Telephone	3·651	59·94
Supervisory Control	..	10·376
Miscellaneous	0·464	13·517
Total	21·669	593·434

APPENDIX No. 4.

STATE ELECTRICITY COMMISSION OF VICTORIA.

NUMBER AND CAPACITY OF SUB-STATIONS AS AT 30th JUNE, 1935.

	Number.	Total Kva.
Terminal Stations	4	186,900
Central Supply Transmission Sub-stations	16	165,000
Distribution Sub-stations at Line Voltage	14	29,450
Transmission and Distribution Transformer Sub-stations.		
Metropolitan Electricity Supply—		
Distribution Transformer Sub-stations	539	131,395
Eastern Metropolitan District—		
Distribution Transformer Sub-stations	209	6,247
Ballarat Electricity Supply—		
Distribution Transformer Sub-stations	23	2,325
Bendigo Electricity Supply—		
Transmission Sub-stations	1	1,500
Distribution Transformer Sub-stations	24	4,387
Geelong Electricity Supply—		
Distribution Transformer Sub-stations	60	7,970
Castlemaine District—		
Distribution Transformer Sub-stations	43	1,705
Gippsland District—		
Transmission Sub-stations	3	900
Distribution Transformer Sub-stations	164	5,945
North-eastern District—		
Transmission Sub-stations	7	11,000
Distribution Transformer Sub-stations	94	8,430
South-western District—		
Transmission Sub-stations	5	5,250
Distribution Transformer Sub-stations	91	4,432
Sugarloaf–Rubicon Area—		
Distribution Transformer Sub-stations	2	450
Town of Yallourn, &c.—		
Distribution Transformer Sub-stations	23	6,175
Total Erected	1,322	569,561

APPENDIX No. 5.

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

	State Electricity Commission.	Melbourne City Council.	Melbourne Electric Supply Coy. Ltd.	Totals.	Railway Purposes. Newport "A" Power Station of Victorian Railways.	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
1934–35	457,292,158	35,305,100	..	492,597,258	169,642,201	662,239,459

APPENDIX No. 6.

STATE OF VICTORIA.

TARIFFS AND STATISTICAL DATA OF ELECTRICITY SUPPLY UNDERTAKINGS (AS AT 1st SEPTEMBER, 1935).

METROPOLITAN AREA.

TERRITORIES SERVED BY STATE ELECTRICITY COMMISSION OF VICTORIA.

District.	Population.	System of Supply.	Number of Consumers.	Tariffs.
Brighton	649,600	A.C., 1 ph., 200–400 v. ..	154,489	See Standard Metropolitan Tariffs.
Camberwell		,, ,, ..		
Caulfield		,, ,, .. & 3 ph., 230–400 v. ..		
Collingwood		A.C. 3 ph., 230–400 v. ..		
Essendon		,, ,, ..		
Flemington		,, ,, ..		
Fitzroy		,, ,, ..		
Hawthorn		A.C., 1 ph., 200–400 v. ..		
Kew		,, ,, ..		
Mentone		,, ,, ..		
Malvern		,, ,, .. & 3 ph., 230–400 v. ..		
Moorabbin		A.C., 1 ph., 200–400 v. .. & 3 ph., 230–400 v. ..		
Mordialloc		A.C., 1 ph., 200–400 v. ..		
Oakleigh		A.C., 3 ph., 230–400 v. ..		
Prahran		A.C., 1 ph., 200–400 v. .. & 3 ph., 230–400 v. ..		
Richmond..		A.C., 3 ph., 230–400 v. ..		
St. Kilda		A.C., 1 ph., 200–400 v. .. & 3 ph., 230–400 v. ..		
Sandringham		A.C., 1 ph., 200–400 v. ..		
South Melbourne		A.C., 1 ph., 200–400 v. .. & 3 ph., 230–400 v. ..		
Sunshine		A.C., 3 ph., 230–400 v. ..		

TERRITORIES SERVED BY MUNICIPAL UNDERTAKINGS PURCHASING BULK ENERGY FROM STATE ELECTRICITY COMMISSION OF VICTORIA.

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.	28,584	The Commission's Standard Metropolitan Tariffs (see statement following) apply in all these centres. The Melbourne City Council has the Standard Two-part Residential Tariff in operation, but its power tariffs are :—Block Rate : First 500 kilowatt-hours in any one month, 1¾d. per kilowatt-hour ; next 500 kilowatt-hours 1d. ; next 100,000 kilowatt-hours 0·8d. ; all further consumption in any one month, 0·75d. per kilowatt-hour. Maximum Demand Rate : 2d. per kilowatt-hour for the quantity of electricity equivalent to 90 hours' use per month of consumers' maximum demand, and 0·3d. per kilowatt-hour for all kilowatt-hours over that quantity
Box Hill, Blackburn and Mitcham Shire ..	21,565	Box Hill City Council ..	A.C., 3 ph., 230–400 v.	6,120	
Brunswick ..	54,178	Brunswick City Council..	,, ,, ..	13,440	
Coburg ..	40,000	Coburg City Council ..	,, ,, ..	11,130	
Footscray ..	54,000	Footscray City Council ..	,, ,, ..	11,583	
Heidelberg ..	26,541	Heidelberg City Council	,, ,, ..	6,232	
Northcote ..	41,826	Northcote City Council ..	,, ,, ..	10,615	
Port Melbourne	12,900	Port Melbourne City Council	,, ,, ..	2,715	
Preston ..	32,000	Preston City Council ..	,, ,, ..	7,750	
Williamstown ..	22,206	Williamstown City Council	,, ,, ..	5,811	

APPENDIX No. 6—*continued.*

STANDARD METROPOLITAN TARIFFS (AS AT 1st SEPTEMBER, 1935).

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	5d. per kilowatt-hour.
For all further consumption in the same period	3d. ,, ,,

Meter Rental.—See below.

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 the next	100,000 ,,	0·8d.	,, ,,
For all further consumption in the same period		0·75d.	,, ,,

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.

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 12 consecutive calendar months.

The Commission reserves the right to—

Alter the time 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.

All Purposes—

Tariff "D"—

Option I.—Block Rate—

For electricity consumed for all purposes (Power, Heating, and Lighting), between two consecutive monthly meter readings—

Up to and including	500 kilowatt-hours	5d.	per kilowatt-hour.
For the next	2,000 ,,	3d.	,, ,,
,, ,,	2,500 ,,	1¼d.	,, ,,
,, ,,	20,000 ,,	0·9d.	,, ,,
,, ,,	100,000 ,,	0·8d.	,, ,,
For all further consumption in the same period		0·75d.	,, ,,

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.

Any person applying to take supply under this tariff shall agree to do so for a period of at least 12 consecutive calendar months, and shall agree to pay for at least 1,500 kilowatt-hours consumption per month between the hours of 7 a.m. and 11 p.m.

The Commission reserves the right to—

Alter the time 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 requirements under Option II. to enter into a special agreement including conditions deemed appropriate by the Commission to the particular circumstances.

Meter Rental.—See below.

Cooking—

Tariff "F"—

Applicable to cafes, restaurants, cake and other prepared food shops and the like where an electric range, electric oven, or like device of not less than 3 kilowatt capacity is used.

For electricity consumed in connexion with electric cooking .. .. 1¼d. per kilowatt-hour.

Meter Rental.—See below.

CLASS II.—RESIDENTIAL SUPPLY.

Lighting, Power, Heating, and Cooking—

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

Applicable to electricity supply to premises such as:—

(*a*) Private houses, flats and separately metered dwellings of a like nature associated with shops, schools, office buildings, and factories.
Invoices rendered quarterly.

(*b*) Boarding and apartment houses, hotels, hospitals, convents, boarding schools, residential clubs, and institutions.
Invoices rendered monthly.

Service Charge—

1s. per month per room.

5s. per month for each electrically-lighted tennis court, bowling green or croquet lawn.

Energy Charge—

1d. per kilowatt-hour.

Advance Service Charge—

An amount equivalent to the Service Charge for one quarter for (*a*) supplies, and one month for (*b*) supplies must be paid in advance.

Note—

Where the amount of the invoice is more than the declared minimum charge referred to below, no consumer will be charged under this tariff at an overall rate (service and energy charges combined) in excess of 6d. per kilowatt-hour.

Assessment of Premises for Service Charge—

An assessable room is any room (whether lighted by electricity or not, and other than those exempted below) erected for use as a dining-room, kitchen, bedroom, dressing-room, sun-room, ballroom, lounge, servery, library, billiard-room, sleepout, dormitory, ward, laboratory, dispensary, operating theatre, class-room, gymnasium or the like, or any enclosed verandah or vestibule used for such purposes.

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

The following are normally exempt in assessing service charge:—Passages, pantries, lobbies, bathrooms, lavatories, cellars, entrance halls, porches, garages, private workshops, sculleries and wash-houses where not combined with kitchens verandahs and vestibules, unless such verandahs when enclosed or vestibules are used for the purposes stated above.

APPENDIX No. 6—*continued.*

STANDARD METROPOLITAN TARIFFS AS AT 1st SEPTEMBER, 1935—*continued.*

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

Water Heating—

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 prescribed hour service is given, or to 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 at the appropriate rate for the class of supply concerned.

Meter Rental—

Tariff "A" (Block Rate)	For all 200 and 230 volt two-wire meters, 6d. per month per meter.
Tariff "C" or "D" (Option I.—Block Rate), and Tariff "F"	For all 200 and 230 volt three-wire or three-phase meters and all 400 volt meters, 1s. per month per meter.
Tariff "C" or "D" (Option II.—Two-Rate)	For all Two-Rate meters, 5s. per month per meter.

MINIMUM CHARGE.

Commercial and Industrial Supplies—

2s. 6d. per month, inclusive of meter rent.

Residential Supplies—

2s. 6d. per month.

PROVINCIAL CITIES SERVED BY THE STATE ELECTRICITY COMMISSION OF VICTORIA.

BALLARAT ELECTRICITY SUPPLY.

District.	Population.	System of Supply.	No. of Consumers.
City of Ballarat	41,750	A.C., 3-ph., 230–400 v.	7,098
Borough of Sebastopol		D.C., 3-wire, 220–440 v.	
		A.C., 3-ph., 230–400 v.	
Ballarat Shire (portion only)		A.C., 3-ph., 230–400 v.	

TARIFFS AS AT 1ST SEPTEMBER, 1935.

COMMERCIAL AND INDUSTRIAL SUPPLIES.

Lighting—

Commercial Lighting Flat Tariff "A"—

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	3½d. 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.

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 0·7d. 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—

Flat Tariff, F./15—

Applicable to cafes, restaurants, cake and other prepared food shops, and the like, where an electric range, oven, or like device of not less than three kilowatt capacity is used. For electricity consumed in connexion with electric cooking—1½d. per kilowatt-hour.

Meter Rental—See below.

APPENDIX No. 6—*continued*,

PROVINCIAL CITIES SERVED BY THE STATE ELECTRICITY COMMISSION OF VICTORIA—*continued*.

BALLARAT ELECTRICITY SUPPLY—TARIFFS AS AT 1ST SEPTEMBER, 1935—*continued*.

RESIDENTIAL SUPPLY.

Lighting, Power, Heating, and Cooking—

Two-part Tariff "G" 156 (Service Charge plus Energy Charge)—

Applicable to electricity supply to premises such as:—

(*a*) Private houses, flats, and separately metered dwellings of a like nature associated with shops, schools, office buildings, and factories.
Invoices rendered quarterly.

(*b*) Boarding and apartment houses, hotels, hospitals, convents, boarding schools, residential clubs, and institutions.
Invoices rendered monthly.

Service Charge—
1s. 3d. per month per room.
6s. per month for each electrically lighted tennis court, bowling green, or croquet lawn.

Energy Charge—
1½d. per kilowatt-hour.

Advance Service Charge—

An amount equivalent to the Service Charge for one quarter for (*a*) supplies and one month for (*b*) supplies must be paid in advance.

NOTE.—Where the amount of the invoice is more than the declared minimum charge referred to below, no consumer will be charged under this tariff at an overall rate (service and energy charges combined) in excess of 9d. per kilowatt-hour.

Assessment of premises for Service Charge—

An assessable room is any room (whether lighted by electricity or not and other than those exempted below) erected for use, as a dining room, kitchen, bedroom, dressing room, sun-room, ballroom, lounge, servery, library, billiard room, sleepout dormitory, ward, laboratory, dispensary, operating theatre, class room, gymnasium, or the like, or any enclosed verandah or vestibule used for such purposes.

Each room assessed is subject to service charge on the basis that every 350 square feet of floor area, or part thereof, constitutes one room, but the maximum service charge in respect of any one room is 3s. 9d. per month.

The following are normally exempt in assessing service charge:—Passages, pantries, lobbies, bathrooms, lavatories, cellars, entrance halls, porches, garages, private workshops, sculleries and washhouses where not combined with kitchens, verandahs and vestibules, unless such verandahs when enclosed or vestibules are used for the purposes stated above.

COMMERCIAL, INDUSTRIAL, AND RESIDENTIAL SUPPLIES.

Water Heating—

Tariff "H" (Continuous Rate)—

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.

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 supply for a period of not less than twelve consecutive calendar months.

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—

Applicable to Tariffs "A," "C," and "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 400 volt meters	1s. per month per meter.
For all lighting maximum demand indicators	1s. per month per indicator.
For all two-rate meters	5s. per month per meter.

Minimum Charge—

Commercial, Industrial, and Residential Supplies—

3s. per month, inclusive of meter rent.

BENDIGO ELECTRICITY SUPPLY.

District.	Population.	System of Supply.	No. of Consumers.
City of Bendigo Strathfieldsaye (portion only) Marong Shire (portion only) including Kangaroo Flat	33,730	A.C., 3 ph., 230–400 v. D.C., 3 wire, 220–440 v. A.C., 3 ph., 230–400 v. A.C., 3 ph., 230–400 v.	5,714

TARIFFS AS AT 1ST SEPTEMBER, 1935.

COMMERCIAL AND INDUSTRIAL SUPPLIES.

Lighting—

Commercial Lighting Flat Tariff "A"—

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.

APPENDIX No. 6—*continued.*

PROVINCIAL CITIES SERVED BY THE STATE ELECTRICITY COMMISSION OF VICTORIA—*continued.*

BENDIGO ELECTRICITY SUPPLY—TARIFFS AS AT 1ST SEPTEMBER, 1935—*continued.*

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	3½d. 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. .. 0·35d. 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 0·35d. 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—

Flat Tariff, F/15—

Applicable to cafes, restaurants, cake and other prepared food shops and the like, where an electric range, oven, or like device of not less than 3 kilowatt capacity is used. For electricity consumed in connexion with electric cooking .. 1½d. per kilowatt-hour.

Meter Rental.—See below.

RESIDENTIAL SUPPLY.

Lighting, Power, Heating, and Cooking—

Two-part Tariff "G" 156 (Service Charge plus Energy Charge)—

Applicable to electricity supply to premises such as—

(*a*) Private houses, flats, and separately metered dwellings of a like nature associated with shops, schools, office buildings, and factories.
Invoices rendered quarterly.

(*b*) Boarding and apartment houses, hotels, hospitals, convents, boarding-schools, residential clubs, and institutions.
Invoices rendered monthly.

Service Charge—

1s. 3d. per month per room.

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

Energy Charge—

1½d. per kilowatt-hour.

Advance Service Charge—

An amount equivalent to the Service Charge for one quarter for (*a*) supplies and one month for (*b*) supplies must be paid in advance.

Note.—Where the amount of the invoice is more than the declared minimum charge referred to below, no consumer will be charged under this tariff at an overall rate (service and energy charges combined) in excess of 9d. per kilowatt-hour.

Assessment of Premises for Service Charge—

An assessable room is any room (whether lighted by electricity or not and other than those exempted below) erected for use as a dining-room, kitchen, bedroom, dressing-room, sun-room, ballroom, lounge, servery, library, billiard-room, sleepout, dormitory, ward, laboratory, dispensary, operating theatre, class-room, gymnasium or the like, or any enclosed verandah or vestibule used for such purposes.

Each room assessed is subject to service charge on the basis that every 350 square feet of floor area or part thereof constitutes one room, but the maximum service charge in respect of any one room is 3s. 9d. per month.

The following are normally exempt in assessing service charge:—Passages, pantries, lobbies, bathrooms, lavatories, cellars, entrance halls, porches, garages, private workshops, scullories and washhouses where not combined with kitchens, verandahs and vestibules, unless such verandahs when enclosed or vestibules are used for the purposes stated above.

COMMERCIAL, INDUSTRIAL, AND RESIDENTIAL SUPPLIES.

Water Heating—

Tariff "I/50"—(Night Rate)—

For electricity consumed through a separate meter by heating elements which are switched on only between 10 p.m. and 6 a.m. (10 a.m. on Sundays) by means of a time-switch .. 0·5d. per kilowatt-hour.

The Commission reserves the right to—

Vary the times between which the prescribed hour service is given.

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

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—

Applicable to Tariffs "A," "C," and "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 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.

Minimum Charge—

Commercial, Industrial, and Residential Supplies—

3s. per month, inclusive of meter rent.

APPENDIX No. 6—*continued.*

PROVINCIAL CITIES SERVED BY THE STATE ELECTRICITY COMMISSION OF VICTORIA—*continued.*

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, 220–440 v.	9,824 (excluding Torquay).
City of West Geelong		A.C., 3 ph., 230–400 v.	
Newtown and Chilwell		„ „	
Corio (Portion of Shire only), ...		„ „	
South Barwon (Portion of Shire only) ..		„ „	
Bellarine (portion of Shire only)		„ „	

TARIFFS AS AT 1ST SEPTEMBER, 1935.

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 .. .. 6d. per kilowatt-hour.

For all further consumption in the 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 .. .. 2⅜d. 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—

Flat Tariff, F/15—

Applicable to cafes, restaurants, cake and other prepared food shops and the like, where an electric range, oven, or like device of not less than 3 kilowatt capacity is used. For electricity consumed in connexion with electric cooking .. .. 1½d. per kilowatt-hour.

Meter Rental.—See below.

RESIDENTIAL SUPPLY.

Lighting, Power, Heating, and Cooking—

Two-part Tariff "G" 156 (Service Charge plus Energy Charge)—

Applicable to electricity supply to premises such as:—

(*a*) Private houses, flats and separately metered dwellings of a like nature associated with shops, schools, office buildings, and factories.

Invoices rendered quarterly.

(*b*) Boarding and apartment houses, hotels, hospitals, convents, boarding schools, residential clubs, and institutions.

Invoices rendered monthly.

Service Charge—

1s. 3d. per month per room.

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

Energy Charge—

1½d. per kilowatt-hour.

Advance Service Charge—

An amount equivalent to the Service Charge for one quarter for (*a*) supplies and one month for (*b*) supplies must be paid in advance.

Note.—Where the amount of the invoice is more than the declared minimum charge referred to below, no consumer will be charged under this tariff at an overall rate (service and energy charges combined) in excess of 9d. per kilowatt-hour.

Assessment of premises for Service Charge—

An assessable room is any room (whether lighted by electricity or not and other than those exempted below) erected for use as a dining-room, kitchen, bedroom, dressing-room, sun-room, ballroom, lounge, servery, library, billiard-room, sleepout, dormitory, ward, laboratory, dispensary, operating theatre, classroom, gymnasium or the like, or any enclosed verandah on vestibule used for such purposes.

Each room assessed is subject to service charge on the basis that every 350 square feet of floor area or part thereof constitutes one room, but the maximum service charge in respect of any one room is 3s. 9d. per month.

The following are normally exempt in assessing service charge:—Passages, pantries, lobbies, bathrooms, lavatories, cellars, entrance halls, porches, garages, private workshops, sculleries and washhouses where not combined with kitchens, verandahs, and vestibules, unless such verandahs when enclosed or vestibules are used for the purposes stated above.

COMMERCIAL, INDUSTRIAL, AND RESIDENTIAL SUPPLIES.

Water Heating—

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 prescribed hour service is given.

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

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 Maximum Demand Meters .. .. 5s. per month per meter.

Minimum Charge—

Commercial, Industrial, and Residential Supplies—

3s. per month inclusive of meter rent.

APPENDIX No. 6—*continued.*

COUNTRY CENTRES SERVED BY STATE ELECTRICITY COMMISSION OF VICTORIA AS AT 1st SEPTEMBER, 1935.

Centre.	Population.	System of Supply Single-Ph. 230/460-V. Three-Ph. 230/400-V.	No. of Consumers.	Residential Two-part Tariff.		(*a*) Industrial Power and Heating Two-part Tariff.		(*b*) Industrial Power and Heating Two-part Two-rate Tariff.	(*c*) Commercial Cooking Flat Tariff.	(*d*) Commercial Lighting Flat Tariff.	(*e*) Commercial Power Flat Tariff.	(*f*) Water Heating Night Rate.
				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.	Charge per kWh.	Charge per kWh.
				s. d.	*d.*	*s. d.*	*d.*	*d.*	*d.*	*s. d.*	*d.*	*d.*
Alexandra ..	850	A.C., 3 ph.	220	1 6	1½	6 0	1	0·35	1½	0 10	6	0·5
Allansford ..	310	A.C., 3 ph. and 1 ph.	32	1 6	1½	6 0	1	0·35	1½	0 10	6	0·75
Altona	2,000	A.C. 1 ph.	321	1 4	1½	5 6	1	0·35	1½	0 9	4½	0·5
Alvie	(See	Cororooke)										
Bairnsdale ..	4,465	A.C., 3 ph. and 1 ph.	908	1 3	1½	5 0	1	0·35	1½	0 8	4	0·5
Barnawartha ..	240	A.C., 1 ph.	24	1 6	1½	6 0	1	0·35	1½	0 10	6	0·5
Barwon Heads ..	600	,,	167	1 6	1½	6 0	1	0·35	1½	0 10	5½	0·75
Bayswater ..	370	,,	116	1 6	1½	6 0	1	0·35	1½	0 10	5	0·5
Beaconsfield ..	220	,,	31	1 6	1½	6 0	1	0·35	1½	0 10	5	0·5
Beeac	466	,,	102	1 6	1½	6 0	1	0·35	1½	0 10	6	0·75
Belgrave ..	1,525	A.C., 3 ph.	559	1 6	1½	6 0	1	0·35	1½	0 10	5	0·5
Bena	200	A.C., 3 ph. and 1 ph.	36	1 6	1½	6 0	1	0·35	1½	0 10	5	0·5
Benalla	4,000	A.C., 3 ph.	839	1 3	1½	5 0	1	0·35	1½	0 8	5	0·5
Berwick	900	A.C., 1 ph.	113	1 6	1½	6 0	1	0·35	1½	0 10	5	0·5
Birregurra ..	448	,,	98	1 6	1½	6 0	1	0·35	1½	0 10	6	0·75
Boolarra	300	A.C., 3 ph. and 1 ph.	59	1 6	1½	6 0	1	0·35	1½	0 10	5	0·5
Boronia	320	A.C., 1 ph.	76	1 6	1½	6 0	1	0·35	1½	0 10	5	0·5
Bostock Creek ..	(See	Camp'rd'wn)										
Briar Hill ..	260	A.C., 1 ph.	61	1 6	1½	6 0	1	0·35	1½	0 10	5	0·5
Bruthen	580	,,	96	1 6	1½	6 0	1	0·35	1½	0 10	5	0·5
Buln Buln ..	80	A.C., 1 ph.	18	1 6	1½	6 0	1	0·35	1½	0 10	5	0·5
Bunyip	370	A.C., 1 ph.	59	1 6	1½	6 0	1	0·35	1½	0 10	5	0·5
Camperdown ..	3,620	A.C., 3 ph. and 1 ph.	671	1 3	1½	5 0	1	0·35	1½	0 8	5	0·75
Castlemaine ..	4,980	A.C., 3 ph. and 1 ph.	837	1 3	1½	5 0	1	0·35	1½	0 8	5	0·5
Chiltern	1,500	A.C., 3 ph.	116	1 6	1½	6 0	1	0·35	1½	0 10	6	0·5
Clayton	800	A.C., 1 ph.	81	1 6	1½	6 0	1	0·35	1½	0 10	5	0·5
Clematis	40	A.C., 1 ph.	7	1 6	1½	6 0	1	0·35	1½	0 10	5	0·5
Cloverlea	80	A.C., 1 ph.	20	1 6	1½	6 0	1	0·35	1½	0 10	5	0·5
Cobden	800	A.C., 3 ph.	168	1 6	1½	6 0	1	0·35	1½	0 10	6	0·75
*Cobram	850	A.C., 3 ph.	164	1 6	1¾	7 6	1¾	..	..	1 6	6	..
Colac	6,840	A.C., 3 ph. and 1 ph.	1,352	1 3	1½	5 0	1	0·35	1½	0 8	5	0·75
Coldstream ..	40	A.C., 1 ph.	11	1 6	1½	6 0	1	0·35	1½	0 10	5	0·5
Coragulac ..	(See	Cororooke)										
Cora Lynn ..	..	A.C., 3 ph.	6	1 6	1½	6 0	1	0·35	1½	0 10	5	0·5
Cororooke ..	752	A.C., 3 ph. and 1 ph.	88	1 6	1½	6 0	1	0·35	1½	0 10	6	0·75
Cowwarr ..	270	A.C., 3 ph. and 1 ph.	65	1 6	1½	6 0	1	0·35	1½	0 10	5	0·5
Cranbourne ..	580	A.C., 1 ph.	73	1 6	1½	6 0	1	0·35	1½	0 10	5	0·5
Crib Point ..	1,475	A.C., 1 ph.	127	1 6	1½	6 0	1	0·35	1½	0 10	6	0·5
Croyden	1,950	A.C., 3 ph. and 1 ph.	536	1 0	1¼	5 0	1	0·35	1½	0 7	3	0·5
Dandenong ..	4,840	A.C., 3 ph. and 1 ph.	1,204	1 2	1¼	5 0	1	0·35	1½	0 8	4	0·5
Darnum	210	A.C., 3 ph. and 1 ph.	28	1 6	1½	6 0	1	0·35	1½	0 10	5	0·5
Deer Park ..	100	A.C., 3 ph. and 1 ph.	34	1 4	1½	5 6	1	0·35	1½	0 10	5½	0·5
Dennington ..	(See	Port Fairy)										
Diamond Creek ..	450	A.C., 1 ph.	80	1 6	1½	6 0	1	0·35	1½	0 10	5	0·5
Diggers Rest ..	100	A.C., 1 ph.	19	1 6	1½	6 0	1	0·35	1½	0 10	6	0·5
Dingley	265	A.C., 1 ph.	31	1 6	1½	6 0	1	0·35	1½	0 10	5	0·5
Dromana ..	830	A.C., 3 ph. and 1 ph.	178	1 6	1½	6 0	1	0·35	1½	0 10	6	0·5
Drouin	850	A.C., 3 ph. and 1 ph.	198	1 6	1½	6 0	1	0·35	1½	0 9	5	0·5
Drysdale ..	400	A.C., 1 ph.	76	1 6	1½	6 0	1	0·35	1½	0 10	5½	0·75
East Oakleigh ..	110	A.C., 3 ph.	20	1 6	1½	6 0	1	0·35	1½	0 10	5	0·5
Echuca	4,420	A.C., 3 ph.	838	1 3	1½	5 0	1	0·35	1½	0 8	5	0·5
Elliminyt ..	(See	Colac)										
Eltham	630	A.C., 1 ph.	146	1 6	1½	6 0	1	0·35	1½	0 10	5	0·5
Emerald	250	A.C., 1 ph.	51	1 6	1½	6 0	1	0·35	1½	0 10	5	0·5
Euroa	2,500	D.C., 230 v.	434	1 4	1¾	7 6	1¾	..	1½	0 9	5	..
Ferntree Gully ..	1,580	A.C., 3 ph. and 1 ph.	215	1 6	1½	6 0	1	0·35	1½	0 10	5	0·5
Ferny Creek ..	100	A.C., 1 ph.	25	1 6	1½	6 0	1	0·35	1½	0 10	5	0·5
Frankston ..	4,250	A.C., 3 ph. and 1 ph.	1,105	1 2	1¼	5 0	1	0·35	1½	0 8	4	0·5
Garfield ..	330	A.C., 1 ph.	53	1 6	1½	6 0	1	0·35	1½	0 10	5	0·5

* The local generating station was shut down on transmitted supply becoming available; tariffs are now being reviewed.

APPENDIX No. 6—*continued.*

COUNTRY CENTRES SERVED BY STATE ELECTRICITY COMMISSION OF VICTORIA AS AT 1st SEPTEMBER, 1935—*continued.*

Centre.	Population.	System of Supply Single-Ph. 230/460-V. Three-Ph. 230/400-V.	No. of Consumers.	Residential Two-part Tariff.		(*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*).	(*c*) Commercial Cooking Flat Tariff.	(*d*) Commercial Lighting Flat Tariff.	(*e*) Commercial Power Flat Tariff.	(*f*) Water Heating Night Rate.
				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.	Charge per kWh.	Charge per kWh.
				s. d.	*d.*	*s. d.*	*d.*	*d.*	*d.*	*s. d.*	*d.*	*d.*
Gisborne ..	700	A.C., 3 ph. and 1 ph.	123	1 6	1½	6 0	1	0·35	1½	0 10	6	0·5
Glengarry ..	120	A.C., 3 ph.	19	1 6	1½	6 0	1	0·35	1½	0 10	5	0·5
Glenormiston ..	(See	Terang)										
Glen Waverley ..	340	A.C., 1 ph.	38	1 6	1½	6 0	1	0·35	1½	0 10	5	0·5
Gnotuk	(See	Camp'rd'wn)										
Greensborough ..	1,025	A.C., 3 ph.	184	1 6	1½	6 0	1	0·35	1½	0 10	5	0·5
Grovedale ..	(See	Geelong)										
Harcourt ..	400	A.C., 3 ph.	27	1 6	1½	6 0	1	0·35	1½	0 10	6	0·5
Hastings ..	470	A.C., 1 ph.	80	1 6	1½	6 0	1	0·35	1½	0 10	6	0·5
Healesville ..	1,700	A.C., 3 ph. and 1 ph.	486	1 4	1½	5 6	1	0·35	1½	0 9	4	0·5
Heyfield	750	A.C., 3 ph. and 1p h.	137	1 6	1½	6 0	1	0·35	1½	0 10	5	0·5
Inverloch ..	450	A.C., 1 ph.	71	1 6	1½	6 0	1	0·35	1½	0 10	5	0·5
Irrewarra ..	(See	Cororooke)										
Jumbunna ..	250	A.C., 1 ph.	37	1 6	1½	6 0	1	0·35	1½	0 10	5	0·5
Kallista	150	A.C., 1 ph.	38	1 6	1½	6 0	1	0·35	1½	0 10	5	0·5
Kilsyth	140	,,	32	1 0	1¼	5 0	1	0·35	1½	0 7	3	0·5
Kolora	(See	Mortlake)										
Kongwak ..	100	A.C., 3 ph. and 1 ph.	22	1 6	1½	6 0	1	0·35	1½	0 10	5	0·5
Koo-wee-rup ..	500	A.C., 3 ph.	90	1 6	1½	6 0	1	0·35	1½	0 10	5	0·5
Koroit	1,200	A.C., 3 ph.	241	1 4	1½	5 6	1	0·35	1½	0 9	5½	0·75
Korumburra ..	3,650	A.C., 3 ph. and 1 ph.	560	1 4	1½	5 6	1	0·35	1½	0 9	4½	0·5
Kyabram ..	1,700	A.C., 3 ph.	424	1 4	1½	5 6	1	0·35	1½	0 9	5½	0·5
Kyneton ..	3,200	,,	683	1 3	1½	5 0	1	0·35	1½	0 8	5	0·5
Lakes Entrance ..	1,240	A.C., 1 ph.	144	1 6	1½	6 0	1	0·35	1½	0 10	5	0·5
Lancefield ..	600	A.C., 3 ph. and 1 ph.	96	1 6	1½	6 0	1	0·35	1½	0 10	6	0·5
Lara	(See	Geelong)										
Lara Lake ..	(See	Geelong)										
Leongatha ..	2,000	A.C., 3 ph. and 1 ph.	447	1 4	1½	5 6	1	0·35	1½	0 9	4½	0·5
Leopold	(See	Drysdale)										
Lilydale	1,180	A.C., 3 ph. and 1 ph.	317	1 4	1½	5 6	1	0·35	1½	0 9	4	0·5
Lindenow ..	235	A.C., 1 ph.	45	1 6	1½	6 0	1	0·35	1½	0 10	5	0·5
Loch	450	,,	71	1 6	1½	6 0	1	0·35	1½	0 10	5	0·5
Longwarry ..	280	A.C., 3 ph. and 1 ph.	46	1 6	1½	6 0	1	0·35	1½	0 10	5	0·5
Lower Plenty ..	80	A.C., 1 ph.	19	1 6	1½	6 0	1	0·35	1½	0 10	5	0·5
Lucknow ..	(See	Bairnsdale)										
Macedon ..	1,280	A.C., 3 ph. and 1 ph.	214	1 6	1½	6 0	1	0·35	1½	0 10	6	0·5
Maffra	2,345	A.C., 3 ph. and 1 ph.	533	1 4	1½	5 6	1	0·35	1½	0 9	4½	0·5
Mansfield ..	650	A.C., 1 ph.	217	1 6	1½	6 0	1	0·35	1½	0 10	6	0·5
Merrigum ..	200	A.C., 3 ph.	56	1 6	1½	6 0	1	0·35	1½	0 10	6	0·5
Mirboo North ..	750	A.C., 3 ph. and 1 ph.	125	1 6	1½	6 0	1	0·35	1½	0 10	5	0·5
Moe	900	A.C., 3 ph. and 1 ph.	187	1 6	1½	6 0	1	0·35	1½	0 10	5	0·5
Monegeeta ..	50	A.C., 1 ph.	10	1 6	1½	6 0	1	0·35	1½	0 10	6	0·5
Montmorency ..	350	,,	82	1 6	1½	6 0	1	0·35	1½	0 10	5	0·5
Montrose ..	320	A.C., 3 ph. and 1 ph.	72	1 0	1¼	5 0	1	0·35	1½	0 7	3	0·5
Moolap	(See	Drysdale)										
Moorooduc ..	20	A.C., 3 ph.	5	1 6	1½	6 0	1	0·35	1½	0 10	6	0·5
Mooroopna ..	1,500	A.C., 3 ph.	226	1 4	1½	5 6	1	0·35	1½	0 9	5½	0·5
Mornington ..	2,170	A.C., 3 ph. and 1 ph.	598	1 4	1½	5 6	1	0·35	1½	0 9	4	0·5
Mortlake ..	844	A.C., 3 ph.	219	1 6	1½	6 0	1	0·35	1½	0 10	6	0·75
Morwell	1,780	A.C., 3 ph. and 1 ph.	315	1 4	1½	5 6	1	0·35	1½	0 9	4½	0·5
Morwell Bridge ..	(See	Morwell)										
Mossiface ..	(See	Bruthen)										
Mt. Dandenong ..	330	A.C., 1 ph.	87	1 6	1½	6 0	1	0·35	1½	0 10	5	0·5
Mt. Eliza ..	400	A.C., 3 ph. and 1 ph.	114	1 2	1¼	5 0	1	0·35	1½	0 8	4	0·5
Mt. Evelyn ..	340	A.C., 1 ph.	38	1 6	1½	6 0	1	0·35	1½	0 10	5	0·5
Mt. Martha ..	330	,,	81	1 4	1½	5 6	1	0·35	1½	0 9	4	0·5
Mt. Waverley ..	205	,,	20	1 6	1½	6 0	1	0·35	1½	0 10	5	0·5
Nalangil	(See	Cororooke)										
Nar-nar-goon ..	150	A.C., 1 ph.	18	1 6	1½	6 0	1	0·35	1½	0 10	5	0·5
Narre Warren ..	115		17	1 6	1½	6 0	1	0·35	1½	0 10	5	0·5

APPENDIX No. 6—*continued.*

COUNTRY CENTRES SERVED BY STATE ELECTRICITY COMMISSION OF VICTORIA AS AT 1st SEPTEMBER, 1935—*continued.*

Centre.	Population.	System of Supply Single-Ph. 230/460-V. Three-Ph. 230/400-V.	No. of Consumers.	Residential Two-part Tariff.		(*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*).	(*c*) Commercial Cooking Flat Tariff.	(*d*) Commercial Lighting Flat Tariff.	(*e*) Commercial Power Flat Tariff.	(*f*) Water Heating Night Rate.
				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.	Charge per kWh.	Charge per kWh.
				s. d.	*d.*	*s. d.*	*d.*	*d.*	*d.*	*s. d.*	*d.*	*d.*
Nathalia ..	860	A.C., 3 ph.	177	1 6	1½	6 0	1	0·35	1½	0 10	6	0·5
Nayook	80	A.C., 1 ph.	13	1 6	1½	6 0	1	0·35	1½	0 10	5	0·5
Neerim	210	,,	44	1 6	1½	6 0	1	0·35	1½	0 10	5	0·5
Neerim South ..	210	A.C., 3 ph. and 1 ph.	70	1 6	1½	6 0	1	0·35	1½	0 10	5	0·5
New Gisborne ..	200	A.C., 1 ph.	24	1 6	1½	6 0	1	0·35	1½	0 10	6	0·5
Newry	280	A.C., 3 ph.	36	1 6	1½	6 0	1	0·35	1½	0 10	5	0·5
Nicholson ..	20	A.C., 1 ph.	3	1 6	1½	6 0	1	0·35	1½	0 10	5	0·5
Nilma	130	,,	25	1 6	1½	6 0	1	0·35	1½	0 10	5	0·5
Noble Park ..	1,320	A.C., 3 ph.	117	1 6	1½	6 0	1	0·35	1½	0 10	5	0·5
Noojee	140	A.C., 1 ph.	26	1 6	1½	6 0	1	0·35	1½	0 10	5	0·5
Noorat	360	A.C., 3 ph.	77	1 6	1½	6 0	1	0·35	1½	0 10	6	0·75
North Shore ..	(See Geelong)											
Notting Hill ..	190	A.C., 1 ph.	19	1 6	1½	6 0	1	0·35	1½	0 10	5	0·5
Numurkah ..	1,350	A.C., 3 ph.	332	1 4	1½	5 6	1	0·35	1½	0 9	5	0·5
Ocean Grove ..	100	A.C., 1 ph.	42	1 6	1½	6 0	1	0·35	1½	0 10	5½	0·75
Officer	160	,,	8	1 6	1½	6 0	1	0·35	1½	0 10	5	0·5
Olinda	420	,,	92	1 6	1½	6 0	1	0·35	1½	0 10	5	0·5
Pakenham ..	540	,,	95	1 6	1½	6 0	1	0·35	1½	0 10	5	0·5
Point Lonsdale ..	700	,,	132	1 6	1½	6 0	1	0·35	1½	0 10	5½	0·75
Pomborneit ..	190	,,	26	1 6	1½	6 0	1	0·35	1½	0 10	6	0·75
Poowong ..	250	,,	45	1 6	1½	6 0	1	0·35	1½	0 10	5	0·5
Portarlington ..	700	,,	108	1 6	1½	6 0	1	0·35	1½	0 10	5½	0·75
Port Fairy ..	2,665	A.C., 3 ph. and 1 ph.	303	1 4	1½	5 6	1	0·35	1½	0 9	5½	0·75
Portsea	450	A.C., 3 ph.	120	1 6	1½	6 0	1	0·35	1½	0 10	6	0·5
Queenscliff ..	3,000	,,	489	1 4	1½	5 6	1	0·35	1½	0 9	5	0·75
Riddell	280	A.C., 1 ph.	29	1 6	1½	6 0	1	0·35	1½	0 10	6	0·5
Ringwood ..	3,175	A.C., 3 ph. and 1 ph.	663	1 0	1¼	5 0	1	0·35	1½	0 7	3	0·5
Rochester ..	1,487	A.C., 3 ph.	400	1 4	1½	5 6	1	0·35	1½	0 9	5½	0·5
Romsey	600	A.C., 3 ph. and 1 ph.	103	1 6	1½	6 0	1	0·35	1½	0 10	6	0·5
Rosebud ..	1,080	A.C., 3 ph. and 1 ph.	206	1 6	1½	6 0	1	0·35	1½	0 10	6	0·5
Rosedale ..	300	A.C., 1 ph.	68	1 6	1½	6 0	1	0·35	1½	0 10	5	0·5
Ruby	50	A.C., 3 ph.	6	1 6	1½	6 0	1	0·35	1½	0 10	5	0·5
Rutherglen ..	1,160	,,	274	1 4	1½	5 6	1	0·35	1½	0 9	5½	0·5
Rye	210	A.C., 1 ph.	43	1 6	1½	6 0	1	0·35	1½	0 10	6	0·5
Sale	4,700	A.C., 3 ph. and 1 ph.	902	1 3	1½	5 0	1	0·35	1½	0 8	4	0·5
Sassafras ..	520	A.C., 3 ph. and 1 ph.	140	1 6	1½	6 0	1	0·35	1½	0 10	5	0·5
Seaford	880	A.C., 3 ph. and 1 ph.	221	1 2	1¼	5 0	1	0·35	1½	0 8	4	0·5
Selby	55	A.C., 1 ph.	11	1 6	1½	6 0	1	0·35	1½	0 10	5	0·5
Shepparton ..	6,000	A.C., 3 ph.	1,298	1 3	1½	5 0	1	0·35	1½	0 8	5	0·5
Sherbrooke ..	150	A.C., 1 ph.	39	1 6	1½	6 0	1	0·35	1½	0 10	5	0·5
Silvan	200	A.C., 3 ph. and 1 ph.	22	1 6	1½	6 0	1	0·35	1½	0 10	5	0·5
Somerville ..	350	A.C., 3 ph. and 1 ph.	67	1 6	1½	6 0	1	0·35	1½	0 10	6	0·5
Sorrento	1,200	A.C., 3 ph. and 1 ph.	326	1 6	1½	6 0	1	0·35	1½	0.10	6	0·5
Springhurst ..	150	A.C., 3 ph.	32	1 6	1½	6 0	1	0·35	1½	0 10	6	0·5
Springvale ..	2,000	A.C., 3 ph. and 1 ph.	315	1 6	1½	6 0	1	0·35	1½	0 10	5	0·5
St. Albans ..	600	A.C., 1 ph.	79	1 4	1½	5 6	1	0·35	1½	0 10	5½	0·5
Stratford ..	800	A.C., 3 ph. and 1 ph.	109	1 6	1½	6 0	1	0·35	1½	0 10	5	0·5
Strathmerton ..	140	A.C., 1 ph.	19	1 6	1½	6 0	1	0·35	1½	0 10	6	0·5
Sunbury	1,050	A.C., 3 ph.	209	1 4	1½	5 6	1	0·35	1½	0 10	5½	0·5
Swan Reach ..	50	A.C., 1 ph.	10	1 6	1½	6 0	1	0·35	1½	0 10	5	0·5
Tallygaroopna ..	200	,,	12	1 6	1½	6 0	1	0·35	1½	0 10	6	0·5
Tally Ho ..	50	A.C., 3 ph.	8	1 6	1½	6 0	1	0·35	1½	0 10	5	0·5
Tatura	1,300	A.C., 3 ph.	267	1 4	1½	5 6	1	0·35	1½	0 9	5½	0·5
Tecoma	(See Belgrave)											
Terang	2,622	A.C., 3 ph. and 1 ph.	612	1 4	1½	5 6	1	0·35	1½	0 9	5½	0·75
Thomastown ..	140	A.C., 3 ph.	22	1 6	1½	6 0	1	0·35	1½	0 10	5	0·5
Thornton ..	150	A.C., 1 ph.	56	1 6	1½	6 0	1	0·35	1½	0 10	6	0·5
Tinamba ..	230	A.C., 1 ph. and 3 ph.	27	1 6	1½	6 0	1	0·35	1½	0 10	5	0·5
Tongala	250	A.C., 3 ph.	96	1 6	1½	6 0	1	0·35	1½	0 10	6	0·5
Toongabbie ..	100	A.C., 1 ph.	14	1 6	1½	6 0	1	0·35	1½	0 10	5	0·5

APPENDIX No. 6—*continued.*

COUNTRY CENTRES SERVED BY STATE ELECTRICITY COMMISSION OF VICTORIA AS AT 1st SEPTEMBER, 1935—*continued.*

Centre.	Population.	System of Supply Single-Ph. 230/460-V. Three-Ph. 230/400-V.	No. of Consumers.	Residential Two-part Tariff.		(*a*) Industrial Power and Heating Two-part Tariff.		(*b*) Industrial Power and Heating Two-part Two-rate Tariff.	(*c*) Commercial Cooking Flat Tariff.	(*d*) Commercial Lighting Flat Tariff.	(*e*) Commercial Power Flat Tariff.	(*f*) Water Heating Night Rate.
				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.	Charge per kWh.	Charge per kWh.
				s. d.	*d.*	*s. d.*	*d.*	*d.*	*d.*	*s. d.*	*d.*	*d.*
Torquay	160	A.C., 3 ph.	146	1 6	1½	6 0	1	0·35	1½	0 10	6	0·75
Trafalgar ..	1,220	A.C., 3 ph. and 1 ph.	255	1 6	1½	6 0	1	0·35	1½	0 10	5	0·5
Traralgon ..	2,500	A.C., 3 ph. and 1 ph.	545	1 4	1½	5 6	1	0·35	1½	0 8	4½	0·5
Tremont ..	380	A.C., 1 ph.	66	1 6	1½	6 0	1	0·35	1½	0 10	5	0·5
Tyabb	230	,,	28	1 6	1½	6 0	1	0·35	1½	0 10	6	0·5
Tyers	150	,,	53	1 6	1½	6 0	1	0·35	1½	0 10	5	0·5
Tynong	200	,,	20	1 6	1½	6 0	1	0·35	1½	0 10	5	0·5
Upper Beaconsfield	300	,,	38	1 6	1½	6 0	1	0·35	1½	0 10	5	0·5
Upwey	1,150	A.C., 3 ph. and 1 ph.	199	1 6	1½	6 0	1	0·35	1½	0 10	5	0·5
Wahgunyah ..	500	A.C., 3 ph.	70	1 6	1½	6 0	1	0·35	1½	0 9	6	0·5
Walpa	(See	Lindenow)										
Wangaratta ..	4,790	A.C., 3 ph.	1,004	1 3	1½	5 0	1	0·35	1½	0 8	5	0·5
Warncoort ..	(See	Cororooke)										
Warragul ..	2,600	A.C., 3 ph. and 1 ph.	603	1 4	1½	5 6	1	0·35	1½	0 9	4	0·5
Warrion	(See	Cororooke)										
Warrnambool ..	9,400	A.C., 3 ph. and 1 ph.	1,647	1 3	1½	5 0	1	0·35	1½	0 8	5	0·75
Watsonia ..	..	A.C., 3 ph.	11	1 6	1½	6 0	1	0·35	1½	0 10	5	0·5
Weerite	(See	Camp'rd'wn										
Werribee ..	2,300	A.C., 3 ph.	484	1 4	1½	5 6	1	0·35	1½	0 9	4½	0·5
Wheelers Hill ..	115	A.C., 1 ph.	12	1 6	1½	6 0	1	0·35	1½	0 10	5	0·5
Winchelsea ..	560	,,	96	1 6	1½	6 0	1	0·35	1½	0 10	6	0·5
Wodonga ..	2,300	A.C., 3 ph.	370	1 4	1½	5 6	1	0·35	1½	0 9	5½	0·5
Woodend ..	1,090	A.C., 3 ph. and 1 ph.	221	1 6	1½	6 0	1	0·35	1½	0 10	6	0·5
Wool Wool ..	(See	Cororooke)										
Wunghnu ..	180	A.C., 1 ph.	12	1 6	1½	6 0	1	0·35	1½	0 10	6	0·5
Yarra Glen ..	300	,,	41	1 6	1½	6 0	1	0·35	1½	0 10	5	0·5
Yarragon ..	470	A.C., 3 ph. and 1 ph.	83	1 6	1½	6 0	1	0·35	1½	0 10	5	0·5
Yarrawonga ..	2,000	A.C., 3 ph.	426	1 4	1½	5 6	1	0·35	1½	0· 9	5½	0·5
Yering	15	A.C., 1 ph.	4	1 6	1½	6 0	1	0·35	1½	0 10	5	0·5
Yeringberg ..	20	,,	6	1 6	1½	6 0	1	0·35	1½	0 10	5	0·5
Yinnar	200	A.C., 3 ph. and 1 ph.	46	1 6	1½	6 0	1	0·35	1½	0 10	5	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 kilowatt-hours; 10 per cent. if more than 25,000 kilowatt-hours; 11 per cent. if more than 50,000 kilowatt-hours; and 12 per cent. if more than 100,000 kilowatt-hours consumed per month.

(*b*) For 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 cafes, restaurants, cake and other prepared food shops and the like, where an electric range, oven or like device of not less than 3 kilowatt capacity is used.

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

(*e*) Applicable to apparatus of an installed capacity of less than five horse-power. Subject to the following consumption discounts:—Up to 250 kilowatt-hours per month, no discount; over 250 kilowatt-hours per month, 10 per cent. on all kilowatt-hours supplied; over 400 kilowatt-hours per month, 20 per cent. on all kowatt-hours supplied; over 600 kilowatt-hours per month, 30 per cent. on all kilowatt-hours supplied; over 800 kilowatt-hours per month, 40 per cent. on all kilowatt-hours 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).

(*g*) Minimum charge. The minimum charge in all country centres (except Cobram) is 3s. 6d. per month, inclusive of meter rent. In Cobram the minimum charge is 5s. per month inclusive of meter rent.

APPENDIX No. 6—*continued.*

COUNTRY ELECTRIC SUPPLY UNDERTAKINGS OPERATED BY MUNICIPAL AND PRIVATE UNDERTAKERS AT 1st JULY, 1935.

Locality.	Population in Supply Area.	Supply Authority.	System of Supply.	No. of Consumers.		Price per Unit.	
				Light.	Power.	Lighting.	Power.
Apollo Bay	500	Apollo Bay E.S. Co. Pty. Ltd.	D.C., 230 v.	55	..	1s.	9d.
Ararat	5,400	Ararat Borough Council ..	A.C., 230–400 v.	970	(total)	9d.	3½d.
*Aspendale, Chelsea, and Carrum	7,000	Carrum E.S. Co. ..	„	2,398	..	8d.	4d.
Avoca	900	Avoca E.L. Co. Pty. Ltd.	D.C., 230 v.	179	40	1s. 3d. ..	9d.
Bacchus Marsh	1,510	Bacchus Marsh Shire Council	A.C., 230–400 v.	401	(total)	1s. to 9d. ..	6d. to 4½d.
Ballan	450	Ballan E.S. Co. Pty. Ltd.	A.C., 230–400 v.	102	..	1s. 3d. ..	Dom., 9d.; Ind., 6d.
Beaufort	1,500	Ripon Shire Council ..	„	226	..	10d.	5d.
Beechworth	1,800	Beechworth Shire Council	„	318	..	1s.	6d. (maximum)
Beulah	460	Karkarooc Shire Council ..	D.C., 230–460 v.	122	(total)	1s. 3d. ..	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 1s. ..	6d. to 4½d.
Bright	650	Block and Sons Pty. Ltd.	A.C., 230–400 v.	104	..	1s. 3d. ..	6d.
Broadford	1,000	Broadford Shire Council ..	D.C., 230 v.	209	..	9d.	6d.
Casterton	1,800	Casterton E.S. Co. Pty. Ltd.	„	455	15	1s.	7½d. to 4d.
Charlton	1,300	Charlton E.L. & P. Co. ..	„	425	(total)	1s. to 9d. ..	4½d.
Cohuna	1,000	Federal Milk Pty. Ltd. ..	„	215	(total)	1s. to 9d. ..	6d. to 3d.
Coleraine	950	Coleraine and W.D.B.F. Co. Ltd. ..	„	197	13	1s. 2d. ..	10d. to 6d.
Corindhap	..	Corindhap Hydraulic G.S. Co., N.L.	A.C., 3 ph.	No supply to consumers			
Corryong	500	Shire of Upper Murray ..	A.C., 230–400 v.	134	..	1s. 3d. ..	6d.
Daylesford	3,800	Ex. of late M. Pollard ..	D.C., 230–460 v.	530	..	10d. ..	5d.
Dimboola	1,690	Dimboola Shire Council ..	„	444	(total)	1s. to 9d. ..	6d. to 4d.
Donald	1,700	Donald Shire Council ..	D.C., 230 v.	367	..	1s.	6d.
†Doncaster	2,500	Doncaster Shire Council ..	A.C. 1 ph., 200–400 v.	423	..	7d.	4d. to 2d.
Dunolly	500	Bet Bet Shire Council ..	A.C., 230–400 v.	142	..	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	800	Elmore Elec. L. & P. Co.	D.C., 230 v.	192	..	1s.	7d.
Foster	900	Toora Foster Elec. Co. Ltd.	A.C., 230–400 v.	See Toora		1s. to 8d. ..	4d. to 3d.
Goroke	200	W. A. Bland	D.C., 230 v.	33	..	1s. 6d. ..	6d.
Hamilton	5,300	Hamilton E.S. Co. Ltd. ..	D.C., 230 v.	1,094	(total)	8d. to 6d. ..	6d. to 1½d.
Heathcote	1,200	McIvor Shire Council ..	D.C., 230 v.	211	..	1s. 1d. ..	6d. to 3d.
Hepburn	350	Hepburn Springs E.S. Co. Ltd.	A.C., 230–400 v.	172	..	1s. to 9d. ..	4d.
Hopetoun	800	Karkarooc Shire Council ..	D.C., 230 v.	162	41	1s. ..	4d.
Horsham	5,271	Horsham Borough Council	D.C., 230–460 v.	1,041	(total)	9d. to 6d. ..	4d. to 1½d.
Inglewood	1,000	Inglewood Borough Council	D.C., 230 v.	194	..	1s.	6d. to 4d.
Jeparit	800	Block & Sons Pty. Ltd. ..	D.C., 230 v.	275	(total)	1s.	6d.
Kaniva	1,200	Lawloit Shire council ..	A.C., 230–400 v.	161	(total)	1s. 2d. ..	6d.
Kerang	2,750	Kerang Shire Council ..	D.C., 230 v.	613	(total)	9d.	5d. to 4d.
Kilmore	990	Kilmore Shire Council ..	„	206	(total)	10d. to 6d. ..	4d.
Koondrook	500	Kerang Shire Council ..	A.C., 230–400 v.	76	..	1s. 3d. ..	9d.
Korong Vale	1,500	Korong Shire Council ..	A.C., 230–400 v.	273	(total)	1s.	5d.
Lake Boga	250	Swan Hill Shire Council ..	„	Included in Swan Hill		1s. 3d. ..	6d.
Lorne	250	Winchelsea Shire Council ..	D.C., 230 v.	120	..	1s. 6d. to 1s.	
Manangatang	350	J. Andrews	D.C., 230 v.	50	..	1s. 4d. ..	9d.
Maryborough	5,600	Maryborough Borough Council	A.C., 230–400 v.	1,052	(total)	10d. ..	5d. to 1¾d.
Mildura	13,500	Mildura City Council ..	D.C., 230–460 v.	2,180	(total)	City, 7d. to 5¾d.;	Ind.—City, 4·75 to 1d.;
			A.C., 230–400 v.			District, 10d. to 7¾d.	Dist., 5d. to 1¾d.
Minyip	700	Dunmunkle Shire Council	D.C., 230 v.	185	(total)	1s. 2d. ..	8d. to 4d.
Myrtleford	600	Block and Sons Pty. Ltd.	A.C., 230–400 v.	100	..	1s. 1d. ..	6d.
Murrayville	450	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 2d.
Murtoa	1,232	Dunmunkle Shire Council	D.C., 230 v.	313	..	10d.	5d. to 4d.
Nagambie	800	Goulburn Shire Council ..	D.C., 230 v.	226	..	10d.	6d. to 5d.
Natimuk	500	H. C. Woolmer	A.C., 230–400 v.	94	..	1s. 3d. ..	9d.
Nhill	1,990	Lowan Shire Council ..	D.C., 230–460 v.	413	..	1s.	6d. to 3d.
Nyah	400	Swan Hill Shire Council ..	A.C., 230–400 v.	Included in Swan Hill		1s. 3d. ..	6d.
Omeo	500	Omeo Power Co. ..	„	85	..	1s. 3d. ..	6d.
Orbost	1,600	Orbost Butter and Cheese Co.	D.C., 230 v.	340	(total)	10d. ..	6d. to 4d.
Ouyen	1,000	Walpeup Shire Council ..	„	189	..	11d.	5d. to 2d.
Pyramid	400	Gordon Shire Council ..	A.C., 230–400 v.	70	(total)	1s. 3d. to 9d. ..	6d.
Phillip Island	200	Phillip Island Shire Council	„	72	..	1s. 1½d. ..	7d.
Portland	2,300	Portland Borough Council	„	425	..	1s.	6d.
Quambatook	500	Korang Shire Council ..	D.C., 230 v.	111	(total)	1s. 3d. ..	9d. to 6d.
Rainbow	1,007	Rainbow E.L. Co. ..	„	158	(total)	1s. to 8d. ..	1s. to 6d.
Rupanyup	700	Dunmunkle Shire Council	„	141	..	1s. 3d. ..	8d. to 4d.
Rushworth	1,200	Waranga Shire Council ..	„	273	(total)	1s.	6d. to 2d.
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. 6—*continued.*

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

Locality.	Population in Supply Area.	Supply Authority.	System of Supply.	No. of Consumers.		Price per Unit.	
				Light.	Power.	Lighting.	Power.
Seymour ..	2,250	Seymour Shire Council	A.C., 230–400 v. ..	675 (total)		10d.	4d. to 2d.
Stawell ..	4,500	Stawell Borough Council ..	,, ..	839 (total)		9d.	4d. to 3d.
St. Arnaud ..	3,000	St. Arnaud Borough Council ..	,, ..	570	..	11d. ..	5d.
Swan Hill ..	5,000	Swan Hill Shire Council	,, ..	1,370	..	1s. 3d. to 3d. ..	6d. to 1½d.
			inc. Nyah, Lake Boga, and Ultima				
Tallangatta ..	650	Shire of Towong	A.C., 230–400 v. ..	144	..	1s. 3d. ..	6d.
Toora ..	900	Toora Foster Elec. Co. Ltd. ..	,, ..	197 (total)		1s. to 8d. ..	4d. to 3d.
Trentham ..	700	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. 3d. ..	6d.
Violet Town ..	600	Violet Town Shire Council ..	A.C., 230–400 v. ..	106	..	1s. 6d. ..	6d. and 3d.
Warburton ..	1,200	Upper Yarra E.S. Co. Pty. Ltd. ..	D.C., 230 v. ..	180	..	9d.	4½d.
			A.C., 230–400 v.				
Warracknabeal	2,500	Warracknabeal E.L. Co. Ltd. ..	A.C., 230–400 v. ..	485	..	11d.	6d. to 4d.
Wedderburn ..	1,500	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	,, ..	246	..	11d. ..	6d. to 4d.

Total Population, 170,871. Total Consumers, 28,797.

REFERENCE TO APPENDIX No. 7.

DIAGRAM OF SUPPLY SYSTEM.

The diagrammatic representation of the method of supplying the various centres served by the Commission appearing on the opposite page shows the generating stations, terminal stations, main sub-stations, transmission lines, &c. The following information should be read in conjunction therewith :—

Main Supply System comprises the generating stations at Yallourn, Sugarloaf–Rubicon, Newport and Richmond, the terminal stations at Richmond, Thomastown and Rubicon " A " and the transmission lines connecting the generating stations and terminal stations ; from this system, energy is delivered to the Gippsland and North-Eastern Districts and to the

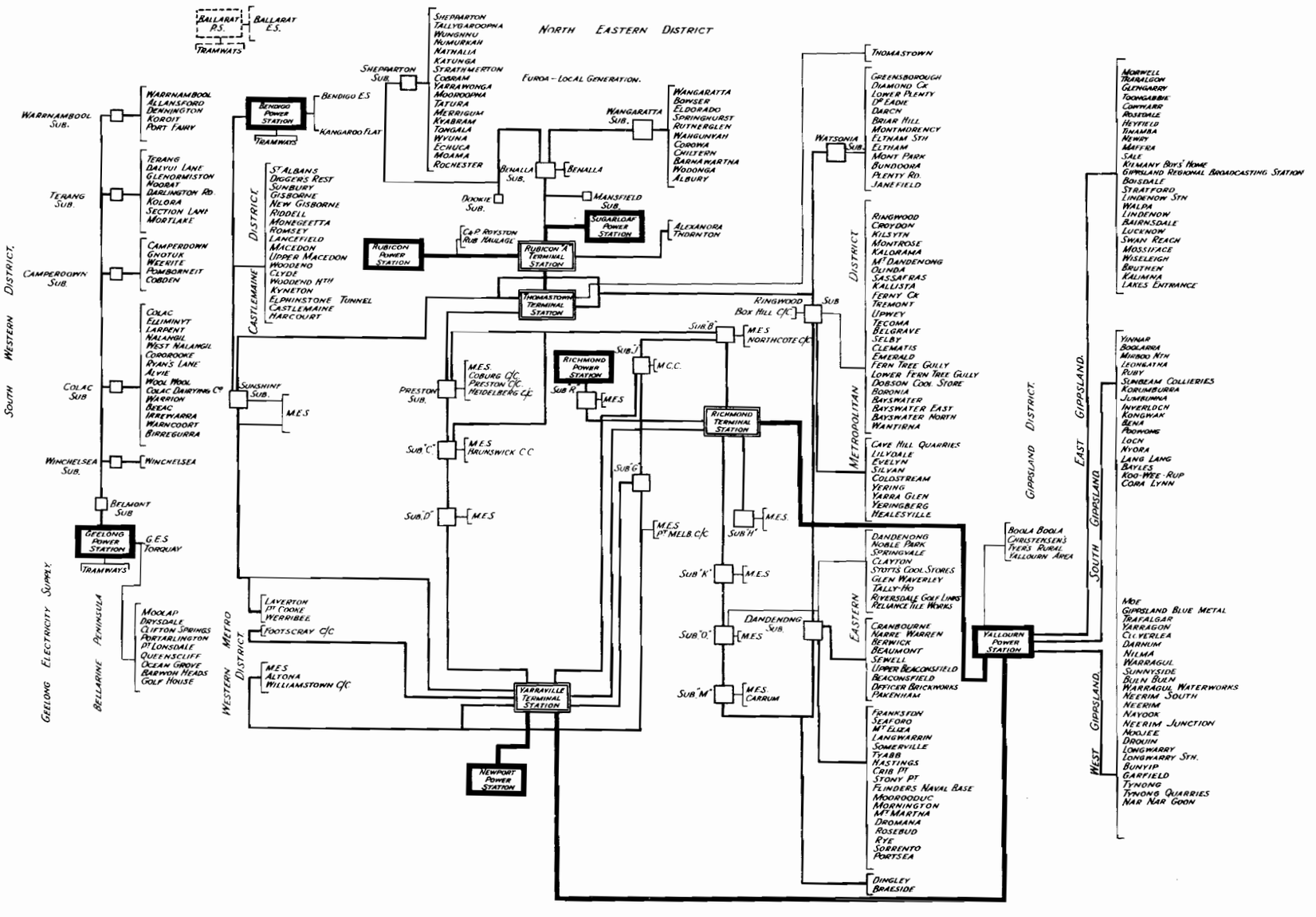
Central Supply System, which comprises the Melbourne metropolitan main sub-stations and the network of overhead lines and underground cables connecting the terminal stations to those sub-stations and interconnecting the main sub-stations themselves. Energy from this system is delivered to the Commission's Metropolitan Electricity Supply, Western Metropolitan, Eastern Metropolitan, Castlemaine and Bendigo Districts and also to the Melbourne municipalities which distribute electricity.

Bendigo, Ballarat, and Geelong power stations are operated independently of the Commission's Main Supply System.

STATE ELECTRICITY COMMISSION OF VICTORIA

DIAGRAM OF SUPPLY SYSTEM

AT 30TH JUNE 1935.



APPENDIX No. 8.

COUNTRY UNDERTAKINGS ACQUIRED BY THE STATE ELECTRICITY COMMISSION OF VICTORIA.—INCREASED DEVELOPMENT SINCE ACQUISITION.

District and Town.	Acquisition Date.	After Acquisition. Year 1934-35.		Prior to Acquisition.			Average Revenue per Kwh. Sold.	
		Kwh. Sold.	Revenue.	Kwh. Sold.	Revenue.	For Year Ended.	1934-35.	Prior to Acquisition.
			£		£		*d.*	*d.*
CASTLEMAINE DISTRICT.								
Castlemaine	31.12.29	465,978	8,110	175,904	7,130	31.12.28	4·18	9·73
Gisborne	1.10.28	61,759	1,149	17,000	1,074	30.9.27	4·47	15·16
Kyneton	1.10.29	360,851	6,427	143,340	5,433	30.9.27	4·27	9·09
Sunbury	1.5.26	204,234	3,577	58,501	2,490	30.9.24	4·20	10·21
Woodend	1.8.29	143,046	2,779	51,000	2,555	30.9.27	4·66	12·02
EASTERN METROPOLITAN DISTRICT.								
Dandenong	1.10.23	897,516	12,130	77,300	4,006	30.9.23	3·24	12·44
Frankston	21.2.28	1,263,283	14,390	293,000	8,859	30.9.27	2·73	7·25
Healesville	1.4.33	227,434	5,225	108,910	4,196	30.9.31	5·51	9·24
Lilydale	1.4.25	428,984	4,724	39,950	1,816	30.9.24	2·64	10·91
Mornington	1.8.30	372,587	6,588	120,000	4,634	30.9.28	4·24	9·26
Ringwood and Croydon ..	1.4.25	755,680	9,435	181,600	4,393	30.9.24	3·00	5·81
GIPPSLAND DISTRICT.								
Bairnsdale	1.4.27	747,869	10,044	100,272	2,948	30.6.23	3·22	7·06
Drouin	3.10.24	267,787	2,820	19,500	743	30.9.21	2·53	9·15
Garfield	1.8.29	24,699	436	8,864	465	30.12.27	4·24	12·59
Korumburra	1.12.24	1,082,834	8,348	85,000	3,427	30.9.23	1·85	9·68
Leongatha	15.2.24	319,016	4,588	50,640	2,012	30.6.23	3·45	9·53
Maffra	1.9.24	955,898	8,172	62,000	2,651	30.9.22	2·05	10·26
Morwell	1.4.26	153,168	2,718	52,062	1,772	30.9.25	4·26	8·17
Sale	1.7.24	948,076	11,329	114,155	3,687	30.6.24	2·87	7·75
NORTH-EASTERN DISTRICT.								
Alexandra	11.4.27	142,189	2,285	64,000 (approx.)	1,875	30.9.26	3·86	7·00 (approx.)
Benalla	1.5.26	509,039	8,402	70,800	3,373	30.9.24	3·96	11·43
Cobram	1.10.28	63,736	1,719	19,500	1,416	30.9.27	6·47	17·43
Euroa	20.3.28	133,566	3,466	46,618	1,782	30.9.25	6·23	9·17
Kyabram	1.12.26	308,023	4,680	92,312	3,462	4.7.25	3·65	9·00
Mansfield	1.6.28	92,748	1,994	25,000	1,341	30.9.27	5·16	12·88
Mooroopna	1.10.26	310,719	3,308	40,000	1,457	30.9.25	2·56	8·74
Nathalia and Numurkah ..	1.10.31	265,962	5,580	96,763	3,619	30.9.31	5·04	8·97
Rutherglen	15.10.26	236,136	3,395	28,392	1,377	30.9.24	3·45	11·64
Shepparton	1.1.25	1,400,226	16,147	163,400	4,625	30.6.24	2·77	6·79
Tatura	1.11.26	156,811	2,558	40,000	1,710	30.6.25	3·92	10·26
Wahgunyah	1.2.26	30,498	608	7,233	263	30.9.22	4·78	8·73
Wangaratta	12.3.27	5,416,039	26,458	151,600	4,788	30.9.25	1·17	7·58
Yarrawonga	1.8.25	211,401	4,215	47,000	2,149	30.9.24	4·79	10·97
SOUTH-WESTERN DISTRICT.								
Camperdown	1.1.24	559,162	7,404	97,664	4,122	30.9.23	3·18	10·13
Colac	1.9.23	847,350	13,117	99,000	2,673	30.9.22	3·72	6·48
Koroit	1.12.28	116,470	1,984	50,000	2,319	30.9.28	4·09	11·13
Mortlake	16.5.24	144,326	2,523	35,306	1,626	30.9.22	4·20	11·05
Terang	4.3.24	290,761	5,095	78,839	3,439	30.9.23	4·21	10·47
WESTERN METROPOLITAN DISTRICT.								
Werribee	10.4.24	673,037	6,767	61,190	2,575	30.9.23	2·41	10·10
Total	..	21,588,898	244,694	3,073,615	114,282	..	2·72	8·92

COMPARISON OF TOTAL FIGURES.

	Kwh. Sold.	Revenue.	Average Revenue per Kwh.
		£	*d.*
After acquisition	21,588,898	244,694	2·72
Prior to acquisition	3,073,615	114,282	8·92
Increase in sales and revenue ..	602%	114%	Decrease 6·20 = 70%

By Authority: H. J. GREEN, Government Printer, Melbourne.