

1941.
—
VICTORIA.

STATE ELECTRICITY COMMISSION OF
VICTORIA.

TWENTY-SECOND ANNUAL REPORT

COVERING THE

FINANCIAL YEAR ENDED 30TH JUNE, 1941,

TOGETHER WITH

APPENDICES.

PRESENTED TO PARLIAMENT PURSUANT TO SECTION 35 (b) OF STATE ELECTRICITY COMMISSION ACT No. 3/76.

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STATE ELECTRICITY COMMISSION OF VICTORIA.
FEATURES OF YEAR'S OPERATIONS.

		1940-41.	1939-40.	Increase or Decrease.	Percentage.
FINANCIAL.					
REVENUE—					
Electricity Supply	£	4,241,264	3,894,893	+ 346,371	+ 8·9
Briquetting (after Stock Adjustment and less Sales to Works)	£	379,847	400,125	— 20,278	— 5·1
Tramways	£	89,571	78,211	+ 11,360	+ 14·5
Miscellaneous	£	13,374	3,700	+ 9,674	+ 261·5
	£	4,724,056	4,376,929	+ 347,127	+ 7·9
EXPENDITURE (including Writings off, &c.) ..	£	4,563,376	4,250,416	+ 312,960	+ 7·4
NET SURPLUS	£	160,680	126,513	+ 34,167	+ 27·0
ACCUMULATED LOSS—At end of Year	£	220,960	381,640	— 160,680	— 42·1
CAPITAL EXPENDITURE—At end of Year ..	£	26,116,795	25,369,679	+ 747,116	+ 2·9
RESERVES—At end of Year	£	8,218,078	7,300,198	+ 917,880	+ 12·6
ELECTRICITY PRODUCTION AND SALES.					
MAXIMUM COINCIDENT DEMAND ON GENERATING STATIONS kW.		261,820	218,600	+ 43,220	+ 19·8
ELECTRICITY GENERATED kWh.—millions		1,155·1	1,024·3	+ 130·8	+ 12·8
ELECTRICITY SALES kWh.—millions		924·8	826·6	+ 98·2	+ 11·9
NUMBER OF CONSUMERS		284,373	271,749	+ 12,624	+ 4·6
AVERAGE SALES PER CONSUMER—					
Overall (excluding Bulk Supplies) kWh.		2,201	2,015	+ 186	+ 9·2
Domestic kWh.		658	626	+ 32	+ 5·1
AVERAGE PRICE PER kWh. SOLD—					
Excluding Bulk Supplies d.		1·342	1·413	— 0·071	— 5·0
Bulk Supplies d.		0·625	0·604	+ 0·021	+ 3·5
NUMBER OF FARMS SERVED		5,771	5,147	+ 624	+ 12·1
MOTORS CONNECTED—					
Number		46,114	41,530	+ 4,584	+ 11·0
Horse-power		299,988	275,458	+ 24,530	+ 8·9
BRIQUETTES—					
Produced tons		433,756	428,389	+ 5,367	+ 1·3
Sold (includes 6,857 tons from Stock in 1940-41) .. tons		438,068	425,850	+ 12,218	+ 2·9
TRAMWAY PASSENGERS		9,879,165	8,644,936	+ 1,234,229	+ 14·3

The absence of graphs and photographs, which usually form part of the Annual Report of the Commission, is due to the war-time need for economy in printing.

TWENTY-SECOND ANNUAL REPORT.

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

SIR,

In conformity with the provision of Section 35 (b) of the State Electricity Commission Act No. 3776, we have the honour to present the Twenty-second Annual Report of the Commission, covering the financial year ended 30th June, 1941, with Balance-sheet and Profit and Loss Account for the period.

The year has been one of continued progress in which operations show an improved financial result. The average price of electricity per kWh. overall in the areas served by the Commission was reduced by five per cent., and is now one half of the price which obtained in 1924-25.

During the year 925 million kWh. of electricity were sold in Victoria. Ninety-eight per cent. was generated by the State system and supplied to 395,000 consumers, of whom 284,000 (72 per cent.) are served directly by the Commission.

While the Commission is gratified at the increased electricity sales to all consumer classes, it cannot overlook the influence on its activities both now and in the post-war period of the abnormal and non-permanent requirements of war industries.

The year's progress necessarily has been subject to the difficulties inseparable from the war in maintaining personnel at effective strength and of procuring important items of plant and equipment for major construction works; despite these difficulties the Commission's plant and apparatus have been fully maintained and have operated satisfactorily in meeting the demand for electricity.

The Commission has set aside the first instalment of a special financial provision to overtake in the post-war period the war-time arrears in its planned country electrical development.

FINANCIAL.

ANNUAL ACCOUNTS.

The net surplus for the year was £160,680, compared with £126,513 for 1939-40. This amount remains after providing for the usual annual charges, including depreciation, sinking fund, provident fund, loan flotation expenses, administration of Electric Light and Power Act; for war emergency and precautionary measures, &c., and appropriations of £50,000 to Contingency Reserve, £75,000 to Rural Development Reserve and £60,000 to Rate Stabilization Reserve. The surplus was applied in the reduction of accumulated losses. These losses at 30th June, 1941, were thus further reduced to £220,960.

Electricity Supply revenue totalled £4,241,264, being an increase for the year of £346,371. Expenditure on account of Electricity Supply, exclusive of special expenditure and appropriations, amounted to £3,408,972, an increase of £89,997.

Revenue from briquette sales, after allowing for stocks on hand, amounted to £379,847, a decrease of £20,278, and expenditure totalled £376,438, a decrease of £23,436. These reductions are due in a large measure to the rationing of supplies to the household market.

Losses on tramways were:—Ballarat £14,854, Bendigo £18,334, and Geelong £17,025, making a total of £50,213 compared with £64,235 for the previous year. Tramways revenue increased by £11,360.

The General Profit and Loss Account, Balance-sheet and Schedules of Fixed Capital, of Loans raised by the Commission and of Debentures guaranteed by the Commission are contained in Appendices Nos. 1 to 4.

LOAN LIABILITY.

The total loan liability of the Commission at 30th June, 1941, amounted to £20,678,339. The commitments involved are:—Liability to the State of Victoria, £17,038,974; State Electricity Commission of Victoria Loans, £3,589,580; Municipal Debentures in respect of undertakings acquired, £49,785. Loan liability has increased by £154,328, made up as follows:—

(1) State Electricity Commission of Victoria Loan No. 7—	£	£
£150,000—State Superannuation Board—term 15 years;		
rate £4 5s. per cent. per annum. (Balance of the loan		
was subscribed in previous year)	17,300	
(2) State Electricity Commission of Victoria Loan No. 9—		
public subscription £300,000—term 16 years; rate £3 8s. 9d.		
per cent. per annum	300,000	
(3) Municipal Debentures—liability assumed	4,565	
		<u>321,865</u>
<i>Less—</i>		
(a) Reduction in indebtedness to State through National		
Debt Sinking Fund	126,508	
(b) Redemption of State Electricity Commission Loans ..	23,320	
(c) Repayment of fourth instalment on £100,000 borrowed for		
tramway reconstruction	6,765	
(d) Redemption of Municipal debentures guaranteed by the		
Commission	6,016	
(e) Repayment of discount and flotation expenses ..	4,928	
		<u>167,537</u>
		<u>£154,328</u>

RESERVES.

The Depreciation and Sinking Fund Reserves at 30th June, 1941, totalled £7,214,165, an increase of £700,491 for the year. Of the total, £1,231,117 was to the credit of the Commission in the National Debt Sinking Fund, £5,848,242 to the credit of the Depreciation Fund (which is invested in the business of the Commission), £109,267 to the credit of the State Electricity Commission Sinking Fund and £25,539 to the credit of the Commission in the National Recovery Loan Fund Reserve.

As a further provision for unforeseen happenings of a major nature, an appropriation of £50,000 was made to the Contingency Reserve. This reserve is invested outside the business in trustee securities.

The Rate Stabilization Reserve, established last year to offset any decrease in the revenue from munition manufacture and other special national defence works upon return to more normal conditions, was further strengthened by the transfer of £60,000, bringing the total of that reserve to £120,000.

The programme of rural development has again been retarded by conditions arising from the war, and £75,000 has been reserved to aid post-war plans for the acceleration of construction works to extend supply to rural areas.

The reserve for Uncollectable Accounts increased by £2,751, being the excess of the provision of one-eighth of 1 per cent. of revenue over the actual amount of Bad Debts for the year.

CAPITAL EXPENDITURE.

After deductions for retirements and the writing out of non-productive expenditure, the total expenditure on capital works increased by £747,116. Of this amount, £154,328 was met by an increase in the loan liability, the balance being provided mainly by the use of the Commission's Depreciation Funds.

The principal increases were in the following accounts :—

	£
<i>Coal Production</i>	26,401
<i>Power Production, Steam Stations—</i>	
Newport	60,984
Yallourn	17,309
<i>Power Production, Water Stations—</i>	
Kiewa	256,613
<i>Transmission Systems—</i>	
Main Transmission Systems	61,127
Provincial and Country Branches	66,675
<i>Distribution Systems—</i>	
Metropolitan Branch	50,767
Provincial and Country Branches	95,395

USE OF BROWN COAL FOR ESSENTIAL SERVICES.

At the request of the Honorable the Premier, the Chairman convened a conference with the Chairman of the Victorian Railways Commissioners and the Chairman of the Metropolitan Gas Company on the 7th October, 1940, to discuss the seriousness of the position which confronts this State in regard to its fuel supplies.

As a result of this conference, an Investigatory Committee, consisting of Mr. Norman Harris and Mr. W. O. Galletly, representing the Victorian Railways Commissioners, Mr. C. F. Broadhead, representing the Metropolitan Gas Company, and Dr. H. Herman as the Commission's representative and Chairman of the Committee, was established to investigate and report upon :—

- (a) the possibility of processed brown coal being used to meet portion of the fuel demands of essential services and industry, having regard to the possible long-continued emergency condition arising from war or industrial disturbance in which supplies of seaborne coal are uncertain or cease ; and
- (b) the practicability of brown coal, processed or otherwise, being utilized for all essential needs of the State with the ultimate object of completely freeing Victoria from dependence on imported black coal.

The first report of the Committee, dealing with (a), was presented on the 17th December, 1940. The Committee recommended :—

- (1) that the Old Open Cut at Yallourn be placed in a position to produce 2,000 tons of coal per day ; and
- (2) that the approved additions to the existing briquette factory and the further extensions to provide for a total normal output of 1,500 tons per day be treated as matters of great urgency.

The Committee's recommendations were adopted by the Government, at whose request immediate action was taken by the Commission to prepare the Old Cut for emergency purposes when required.

The second and final report of the Committee, dated 4th July, 1941, has been reviewed by the Commission, and its views submitted to the Government.

TRADING POWERS OF ELECTRICITY SUPPLY UNDERTAKINGS.

During the year, Parliament repealed the 1933 legislation and restored to the Commission the right to trade in electrical appliances in all cities within the State. Electricity supply authorities throughout Victoria were empowered to trade in electrical appliances, install fittings, wiring and service lines, and undertake the financing thereof. Preliminary discussions were entered upon between the Electrical Federation (Victoria) and the Commission concerning the application of these powers, but, owing to the shortage of essential materials and man power used in the production of electrical consuming appliances, these discussions have been postponed until there is a reasonable prospect of restoration of conditions favourable to extension of trading.

FURTHER CO-ORDINATION OF MAJOR POWER STATIONS.

Under agreement entered into between the Melbourne City Council and the Commission, the Council's generating station at Spencer-street now forms an integral part of the State generating system. This will materially assist stability of supply, especially at a time when national issues demand the fullest use of all available generating plant. Hitherto used solely for meeting the peak demands of the City of Melbourne, the station, with augmented capacity, now operates under the control of the Commission, although it continues to remain in the ownership of the Council.

The arrangement represents an important contribution to the principle laid down by Parliament when it entrusted the Commission with the co-ordination of all electrical undertakings in the State. Ninety-eight per cent. of the electricity used in the factories, homes, farms, &c., throughout Victoria is now generated by the State system.

The Commission's generating station at Ballarat, which has been operating as an independent local unit, will also be linked with the State system upon completion of the 66 kV. transmission line from the Commission's Newport generating station.

PROVISION FOR FUTURE GENERATING PLANT.

When Parliament approved in 1937 the Kiewa-Newport project, the estimated total cost was £8,783,000. While, at that time, the base wage was £3 15s. 0d. for a 48-hour week, it has since progressively increased, until the effective basic hourly rate is now 27 per cent. higher than in 1937. As already advised, these increases in labour costs enter directly into a large part of the total cost of the whole scheme, including the cost of local materials: the continued increase in the cost of imported materials is even greater. Should present levels of the cost factors persist over the whole construction period, the ultimate total cost of the works will be about £10,370,000, an increase of 18 per cent. on the amount submitted to Parliament.

These increased costs, however, do not relatively affect the economics of the complete scheme, as similar increases would be applicable to any alternative for increasing the State's power production resources.

The programme for the extension of the State generating system provided for the first of the additional plant ordered in England in 1939 to be in operation by the winter period of 1942. It was reported last year that should the delivery of the plant be further delayed and the present rate of increase in the system demand maintained, the Commission would be forced to rely upon employment to the full of all the available reserves of generating plant. Based on the latest overseas advice regarding the manufacture of the Kiewa and Newport plants it is now evident that this will have to be done.

EXTENSION OF YALLOURN BRIQUETTE FACTORY.

In December last, the Government, on the Commission's recommendation, authorized an extension of the present briquette factory, at an estimated cost of £355,000, to provide an additional output of 300 tons per day. This extra production is specifically required for war industries. Almost the whole of the new installation will be manufactured in Australia; the additional equipment comprises six driers, each of 1,600 square metre surface area, four twin presses, extra crushing and screening provision, and auxiliary plant and buildings. No addition to the existing boiler plant is necessary. The estimate includes an amount of £60,000 which the Commission advised in its Nineteenth Annual Report would be necessary to ensure the existing factory output of 1,200 tons per day. Apart from the extra production, the extension will ultimately afford much needed relief to the present overload conditions at the factory, which now operates continuously for three shifts on seven days a week.

The few Australian engineering shops capable of undertaking the manufacture of the new plant are under such conditions of stress that it is quite evident the time programme which provided for completion of the extension within two and a half years will be seriously delayed.

THE COMMISSION AND THE WAR.

In common with other public utilities, the Commission has found that the greatly increased demands on its services have created special problems. The war's influence on its finances and its developmental activities has been treated in the appropriate parts of this Report. There are, however, other aspects worthy of note. Outstanding is the general labour shortage, which has prevented the Commission from replacing many of its personnel who have joined the forces, or are otherwise serving the nation.

Normally, the Commission's personnel approximates 7,000. The number of officers and employees in the Defence Forces at 30th June, 1941, was:—

Enlistments serving with the Forces	566
Enlistments awaiting call	137
Personnel called for the duration	60
	<hr/>
	763
	<hr/>

In addition, 496 served the statutory periods in militia camps and 31 have been loaned to Commonwealth Departments to assist with war activities.

The Commission has borne its share of the problems arising from shortage and manufacturing delays with locally produced plant, materials and equipment. In the numerous instances where such products are subject to Commonwealth control, the Commission has received from the Department of Supply and the Ministry of Munitions every possible assistance, and it acknowledges with gratitude the understanding spirit in which its representations have been considered at all times.

Through the medium of an Emergency Supplies Committee of departmental officers, much useful work has been done in controlling the use of limited supplies, and of adapting methods and materials to best advantage.

The war precautionary measures mentioned in the last Annual Report have been brought to an advanced stage.

When war appeared inevitable, the Commission, in the discharge of its responsibility to the State and electricity consumers, especially the essential industries, earnestly applied itself to the planning of these precautionary measures to ensure within practicable limits the continuity of its service, and to restrict the extent of possible disturbance to its supply system.

Although designed to do no more than provide general protection against possible enemy action, these special measures were found to be so extensive that it was felt to be inexpedient and unwise to have them in plan form only. The plans, therefore, were steadily implemented as opportunity occurred, a process which involved many months of work despite the initial advantage derived from having most of the construction materials available in store. The more important measures are described in a supplement to this Report.

The Commission records its deep appreciation of the untiring fidelity of its personnel which, in addition to undertaking this abnormal work, is co-operating with all Federal and State Departments identified with the nation's war endeavour.

The Chairman of the Commission, Mr. G. G. Jobbins, after having served for two years, resigned as a member of the State Emergency Council for Civil Defence; the Commission's Secretary, Mr. W. J. Price, was appointed in his stead.

Activities on behalf of the Red Cross and the Australian Comforts Fund by the men and women of the Commission's service have been encouraged and co-ordinated by a representative Committee. It is most gratifying to record that, through the State Electricity Commission Patriotic Fund and by the separate local efforts at Yallourn, Ballarat, Bendigo, Geelong, and country centres, a total of over £8,000 has already been subscribed to patriotic funds and 5,000 garments have been made and distributed.

ELECTRICITY SUPPLY TARIFFS.

As reported last year, the Commission introduced a Special All-Purposes Tariff, State wide in its application to all large industrial consumers within range of its supply system. Several new industries are already operating under this tariff, and more are being established, notably at Ballarat and Bendigo where large munition works will receive supply. Altogether, 70 large industries in the extra-metropolitan area, consuming approximately 50 million kilowatt-hours per annum, benefit under this tariff by about £20,000 per annum.

Country Centres.—Consumers in Barwon Heads, Boronia, Cobram, Dromana, Nathalia, and Werribee were transferred to a lower scale of schedule tariffs as a result of increased electrical development.

The table below shows that the average selling price in the areas served by the Commission is now 49 per cent. lower than it was in 1924–25, the earliest year for which comparable figures are available. Since that year, consumption has increased fourfold; revenue only one and a half times. The 49 per cent. reduction represents a saving to consumers of £3,270,000 for 1940–41 if the rates of 1924–25 be used as the basis of comparison. To this amount, reductions in tariffs have directly contributed £616,000. The balance is the automatic result of price reductions which, as consumption increases, follow under the forms of tariff used by the Commission. The figures for 1924–25 and 1940–41 compare as follows:—

Year.	Total Retail Sales—kWh.	Revenue.	Average Price per kWh. Sold.
1924–25	124,536,000	£ 1,358,000	2·62d.
1940–41	613,227,000	3,429,000	1·34d.
	Increase 488,691,000 = 392%	Increase 2,071,000 = 152%	Decrease 1·28d. = 49%

In the domestic class, the reduction in average price to the consumer per kilowatt-hour is 62 per cent. In this case, the comparison is made with the year 1925–26, that being the first year of classification of consumer groups.

Year.	Total Domestic Sales—kWh.	Revenue.	Average Price per kWh. Sold.
1925–26	26,583,000	£ 600,000	5·42d.
1940–41	155,726,000	1,336,000	2·06d.
	Increase 129,143,000 = 486%	Increase 736,000 = 123%	Decrease 3·36d. = 62%

Details of the standard tariffs available to consumers at 30th June, 1941, are shown in Appendix No. 7.

COUNTRY ELECTRICAL DEVELOPMENT.

The number of consumers in country areas increased during the year by 9·1 per cent. to 65,662. The number of farms supplied increased by 12·1 per cent. to 5,771.

Appendix No. 9 shows the country undertakings acquired and their electrical development since acquisition. For the places listed, electricity sales have increased elevenfold, while the average price per kilowatt-hour sold has decreased from 8·32d. to 1·90d.

The principal rural extensions undertaken during the year were:—

Provincial Branches—

Daylesford, Hepburn Springs, Leigh Creek, and Waubra (Ballarat).
Raywood (Bendigo).

Eastern Metropolitan Branch—

Donnybrook, Harkaway and Kalkallo.

Gippsland Branch—

Archie's Creek, Boolara South, Dalyston, Glen Alvie, Koonwarra, Korrine, Leongatha South, Mirboo East, Narracan East, North Wonthaggi, Powlett River, Ranceby, Ryanstown, and Teetora Road.

Midland Branch—

Avoca and Bacchus Marsh.

North-Eastern Branch—

Bonegilla, Bonnie Doon, Ky Valley, Myrtleford, Picola, Tallangatta and Waaia.

South-Western Branch—

Areas west of Willaura and south of Glenthompson.

At Avoca, Bacchus Marsh, Daylesford, Hepburn Springs, Myrtleford and Tallangatta, the local undertakings were acquired and merged with the State supply system.

The Commission's long range plans for the extension of its transmission lines into the more remote country areas continue to be adversely affected by the shortage of essential materials, principally copper; the quantities available to the Commission are barely sufficient to meet the requirements of maintenance work and the defence and industrial projects associated with the war effort.

Lines constructed to give supply to defence establishments have brought some new areas into close proximity to the supply system, and, wherever possible, residents of these districts and individual properties have had a supply made available to them.

New Bendigo Offices.—On the 14th March, 1941, the Commission's new offices and showrooms at the corner of Williamson and Hargreaves streets, Bendigo, were officially opened by the Minister in charge of Electrical Undertakings, the Honorable F. E. Old, M.L.A., in the presence of Commissioners and representative citizens. This building, in addition to its importance as the centre for electrical development in Bendigo and district, provides much needed staff accommodation and improved convenience to consumers.

YALLOURN TERRITORY.

Population.—The total population of the Yallourn Territory at 30th June, 1941, was 4,120, of whom 3,148 were resident in the town.

Housing.—During the year, 32 four-roomed and 7 five-roomed houses were completed and occupied, bringing the total to 781 houses available as private residences.

Bush Fire Control.—A further 80 acres have been cleared as part of the planned bush fire precautionary measures to make a firebreak of from three to five chains in width. One hundred and eighty acres—about one half of the total area—remain to be cleared. From the steel lookout tower, erected last year, a number of outbreaks was observed and controlled in the early stages.

Sewerage.—The erection of the treatment plant, pump house and pipe testing depot was completed. Construction of the reticulation sewers and the effluent outfall line was commenced and satisfactory progress is being made.

Hospital and Medical Services.—The Yallourn Medical and Hospital Society administers the medical and hospital services which are financed by regular contributions from all employees. These services include a Health Centre in the town. The daily number of occupied beds at the hospital was 25·9, compared with 28·1 in 1939-40.

Technical School.—To meet the urgent need for additional accommodation at the technical school, the Education Department is undertaking extensions at an estimated cost of £7,270: the Commission and the Australian Paper Manufacturers Ltd. have agreed to share equally a contribution of £2,270 towards the cost of the project.

COAL SUPPLY.

The heavy demand upon the Yallourn generating station and the continuous operation of the briquette factory at maximum capacity have required a greatly increased production of coal: for 1940-41 the coal won was nearly 25 per cent. more than the pre-war year ended 30th June, 1939. Reference was made in last year's Report to the increasing depth of the overburden to be excavated as the coal workings are extended. As a result, the overburden removed during the year increased by approximately 50 per cent. These increases add materially to the difficulties being experienced on account of the shortage of man power and the delays occasioned by the non-delivery of essential plant and materials.

As reported last year, local resources are being used for the design and manufacture of specialized machinery in two important instances, viz., a machine for depositing and spreading the overburden by a continuous process into the worked-out part of the Open Cut and the construction of four electric locomotives. Although considerable progress has been attained in each case, delays in delivery of plant items and materials have retarded completion.

Towards the end of the year, an order was placed for a 5 cubic yard electrically-operated power-shovel. This machine will be used for overburden excavation, releasing other plant for coal winning. A smaller electric shovel, with dragline equipment, was also ordered for general auxiliary purposes and for operations at the Old Open Cut.

The decision of the Government to have the Old Open Cut prepared for an emergency production of 2,000 tons of coal per day necessitated, in addition to the cleaning up of coal faces and overhauling of plant, an extension of railway sidings, completion of staging for overburden disposal, erection of plant for crushing and delivering coal to railway trucks, provision of accommodation, water supply, sanitation and other services.

Overburden Removal.—1,605,900 cubic yards of overburden were removed, compared with 1,080,200 cubic yards the previous year, bringing the total removed to the 30th June, 1941, to 16,242,100 cubic yards. The area of the Open Cut increased from 320 to 340 acres at grass level, and from 290 to 310 acres at the surface of the coal.

Coal Winning.—Coal won during the year amounted to 4,485,241 tons compared with 3,944,515 tons in the previous year. The total coal excavated from the Cut since the commencement of operations now exceeds 39 million tons. Of the coal won for the year, 2,820,059 tons were delivered to the Yallourn generating station and 1,665,182 tons to the briquette factory. The average daily output for June, 1941, exceeded 15,000 tons, the highest output being 17,709 tons on 2nd June, 1941.

POWER PRODUCTION AND TRANSMISSION.

The maximum coincident demand on the generating stations for the year 1940-41 was 261,820 kW., representing an increase of 19·8 per cent., the total electricity generated being 1,155·1 million kWh. compared with 1,024·3 million kWh. in the previous year. The Melbourne City Council's Spencer-street power station was operated as an integral part of the Commission's generating system from 1st January, 1941.

All generating stations operated satisfactorily.

MAJOR EXTENSIONS.

NEWPORT GENERATING STATION.

As reported last year, this station, in its ultimate development, will contain three 30,000 kW. generating sets, the first of which, with the necessary boiler plant, is being manufactured in England. Work on excavation and foundations is practically complete, and contracts have been let for the building structure.

KIEWA HYDRO-ELECTRIC SCHEME.

NO. 3 DEVELOPMENT.

The first stage, which was begun in 1939, is that associated with No. 3 generating station, with an installed capacity of 24,000 kW., and located about 1½ miles downstream from the junction of the Pretty Valley and Rocky Valley branches of the East Kiewa River. The following progress has been made in respect of major items:—

Junction Dam.—Excavations for buttresses and cut-off wall were 55 per cent. complete, 13,000 cubic yards of material having been removed; concreting for foundations was 28 per cent. complete, 6,250 cubic yards having been poured.

Head Race Tunnel.—The pilot cut for the inclined tunnel at the Junction portal was completed in September, 1940. In January, 1941, the main drive had been advanced to 615 feet from the centre line of the dam, and the work then continued under contract to 2,541 feet at the 30th June, 1941, which is approximately 60 per cent. of the length of the upper tunnel. The pilot rise from the horizontal pipe line tunnel was completed in October, 1940; subsequent pressure tests proved satisfactory and the rise was enlarged to the full sectional area.

Generating Station.—Excavation work has proceeded preparatory to the erection of the building structure. The major portion of the generating plant, consisting of two 12,000 kW. alternator sets and auxiliary equipment, is being manufactured in England.

NO. 4 GENERATING STATION.

Exploratory work on this development was completed, and preparations made for construction to follow closely upon the completion of the works now in progress to convey water to No. 3 generating station. Modifications in the original design, involving a new location for an underground generating station about two miles upstream from the West Kiewa Bridge, were approved. The water from the turbines will be conveyed by a tail race tunnel 6,500 feet long, mainly in rock, to a point at the foot of Mount Beauty close to Tawonga Flats, from which an open channel, 4,300 feet long, will take the water to a regulating discharge pondage before it passes to the river on the Tawonga side of the West Kiewa Bridge.

GENERAL.

The access road constructed by the Country Roads Board was completed to its final extent—a point near the Pretty Valley Dam site. Additional buildings have been erected at Bogong for administrative headquarters and accommodation purposes. The bridge over the Pretty Valley branch of the Kiewa River above the junction has been completed. Surveys of areas for the future developments were continued and sub-surface investigations proceeded by diamond drilling and by pits and shafts at various locations. Preliminary investigations regarding an earth dam at Pretty Valley continued and stream flow and meteorological data were collated.

MAIN TRANSMISSION AND TRANSFORMATION.

To meet increased industrial loading, new sub-stations, each 20,000 kVA., are to be erected at Richmond, Footscray and South Melbourne. Orders have been placed for the manufacture locally of the necessary transformers—six of 10,000 kVA. capacity—and switchgear. The construction of a 66 kV. transmission line from the Commission's Newport generating station to Ballarat was commenced; this will link the local generating station with the main transmission system.

ELECTRICITY SUPPLY.

ANALYSIS OF DEVELOPMENT.

Electricity sold increased by 98,149,491 kWh., or 11·9 per cent. The metropolitan area, including bulk supplies, took approximately 84 million kWh. of the increase, due mainly to greater use by existing consumers and to the continued demands by industrialists engaged on work connected with national defence.

Kilowatt-hours sold during last five years:—

Year.						kWh.
1936-37	..	..	..	..	..	626,814,760
1937-38	..	..	..	..	..	679,808,810
1938-39	..	..	..	..	..	730,426,637
1939-40	..	..	..	..	..	826,623,171
1940-41	..	..	..	..	..	924,772,662

Domestic Class.—In the last five years the average yearly consumption per domestic consumer has grown to the following extent:—

Year.						Average consumption per domestic consumer.
1936-37	..	..	..	..	..	520 kWh.
1937-38	..	..	..	..	..	540 "
1938-39	..	..	..	..	..	566 "
1939-40	..	..	..	..	..	626 "
1940-41	..	..	..	..	..	658 "

Commercial Class.—The rate of upward trend in recent years of the use of electricity by commercial consumers was maintained, sales having increased by 8·5 per cent.

Industrial Class.—The increase in electric motors connected was 24,530 horse-power. Although less than the previous year (29,761 horse-power), this increase is substantial and represents a high proportion of the new business available in the Commission's supply areas. It includes large additions due to the continued general increase of industrial activity and to new and extended enterprises in country and provincial branches.

The use of electric heating in industrial processes has been considerably accelerated during the year. A comparatively new development is the use of "infra-red" lamps in special reflectors as a source of heat for drying and finishing processes.

Mining.—At the end of the year, 75 consumers were taking supply for mining purposes, their consumption amounting to 14·6 million kilowatt-hours compared with 17·7 million kilowatt-hours last year.

Rural.—The rural service section continues its investigations and advisory service with regard to the application of electricity on farms and other primary producing establishments. In this field, more than in any other sphere of new business, the war has caused serious setbacks to the Commission's developmental plans.

Public Lighting.—Although many additional lamps have been installed, the trend in recent years towards improved standards in public lighting has been arrested by war conditions.

COMMISSION'S ELECTRICITY SUPPLY UNDERTAKINGS FOR LOCAL DISTRIBUTION.

The following summary of statistical data relating to the nine branches of the Commission's Electricity Supply Department and excluding bulk sales to other undertakings is compiled from information contained in this Report:—

REVENUE increased by £253,727 (7·9 per cent.) to £3,463,992.

SALES OF ELECTRICITY increased by 72,302,376 kWh. (13·1 per cent.) to 622,695,988 kWh.

CONSUMERS increased by 12,575 (4·6 per cent.) to 283,371.

FARMS connected increased by 624 (12·1 per cent.) to 5,771.

Metropolitan Branch.—This branch covers an area of 198 square miles, and serves 191,148 consumers located in the seventeen municipalities of Brighton, Camberwell, Caulfield, Collingwood, Essendon, Fitzroy, Hawthorn, Kew, Malvern, Mentone, Moorabbin, Mordialloc, Oakleigh, Prahran, Richmond, St. Kilda, Sandringham, and South Melbourne; in portions of the City of Melbourne (Kensington and Flemington), and of the Braybrook, Broadmeadows, Keilor, Mulgrave and Werribee shires.

The remainder of the metropolitan area, including the City of Melbourne, is served by ten municipal undertakings, which, as distributors, first constituted under the *Electric Light and Power Act 1896*, purchase electricity in bulk from the State system.

Conversion of the system of supply from single phase to standard three phase proceeded in the suburbs of Brighton, Camberwell, Caulfield, Hawthorn, Kew, Malvern, Moorabbin, Prahran, St. Kilda and Sandringham. The conversion programme has been retarded by rationing of essential materials.

Twenty-five distribution sub-stations (9,230 kVA.), 5·0 route miles of high-tension and 26·6 route miles of low-tension line were erected. Apparatus and wiring for central control of public lighting were installed.

Ballarat Branch.—This branch, which also administers the Ballarat tramway system, supplies 10,753 consumers in an area of 149·7 square miles, extending from Ballan on the east to Skipton on the west, and from Buninyong on the south to Clunes and Hepburn Springs on the north.

During the year supply was extended to Daylesford and Hepburn Springs (where the local undertakings were acquired) and to Waubra and Leigh Creek.

In Ballarat the change-over from direct to standard alternating current was confined to a restricted number of consumers as, due to material and man-power shortages, the normal programme has been deferred; 2,456 installations (832 h.p. of motors) have been converted to date, leaving 435 consumers' installations yet to be changed.

Eighteen distribution sub-stations (1,975 kVA.), 43 route miles of high-tension and 22 route miles of low-tension line were erected.

The Ballan and Creswick feeders were converted from 6·6kV. to 22 kV. operation.

Bendigo Branch.—This branch, which also administers the Bendigo tramway system, supplies 7,963 consumers in an area of 60·2 square miles, embracing the City of Bendigo, the Borough of Eaglehawk, and portions of the Marong, Strathfieldsaye and Huntly shires. Supply was extended to Raywood during the year.

Two distribution sub-stations (225 kVA.) and 2·9 route miles of low-tension line were erected.

Eastern Metropolitan Branch.—This branch, with headquarters at Dandenong, serves 16,452 consumers in an area of 476 square miles, extending from Whittlesea and Healesville on the north to Flinders and the seaside resorts along Port Phillip Bay to Point Nepean on the south.

Extensions were completed to Donnybrook, Kalkallo and Harkaway.

Twenty-seven distribution sub-stations (940 kVA.), 21·8 route miles of high-tension and 20·4 route miles of low-tension line were erected.

Geelong Branch.—This branch, which also administers the Geelong tramway system, is bounded by Lara on the north, Torquay on the south, Queenscliff and Portarlington on the east, and Batesford on the west, and serves 14,039 consumers in an area of 101·5 square miles.

The conversion to 22 kV. supply of the Bellarine Peninsula and portion of the Northern area was completed, and both areas connected with the Geelong Terminal Station.

Eight distribution sub-stations (2,728 kVA.) and 4·1 route miles of low-tension line were erected. Apparatus and wiring for central control of public lighting were installed.

Gippsland Branch.—This branch, with headquarters at Traralgon, serves 14,126 consumers, and covers an area of 975 square miles, extending from beyond Lakes Entrance on the east to Tooradin on the west, and from Noojee, Valencia Creek and Bruthen on the north to Inverloch and Port Franklin on the south.

Supply was extended to Archie's Creek, Boolarra South, Dalyston, Glen Alvie, Koonwarra, Korrine, Leongatha South, Mirboo East, Narracan East, North Wonthaggi, Powlett River, Ranceby, Ryanstown, and Teetora Road.

Fifty-four distribution sub-stations (875 kVA.), 61·2 route miles of high-tension and 54 route miles of low-tension line were erected.

Midland Branch.—This branch, with headquarters at Castlemaine, supplies 6,526 consumers contained in an area of 357·8 square miles, extending from Keilor and Rockbank on the south to Dunolly on the north.

Supply was extended to Avoca and Bacchus Marsh, where the local undertakings were acquired.

Twenty-four distribution sub-stations (1,785 kVA.), 37·1 route miles of high-tension and 18·5 route miles of low-tension line were erected.

North-Eastern Branch.—This branch, with headquarters at Benalla, serves 12,823 consumers, and covers an area of 959 square miles, bounded by Tallangatta and Harrietville on the east, Rochester on the west, Acheron on the south, and the River Murray on the north. The municipalities of Albury, Corowa, Berrigan, Coreen, and Moama in New South Wales receive bulk supply from the branch transmission system.

Supply was extended to Myrtleford and Tallangatta, where the local undertakings were acquired, and to Bonegilla, Bonnie Doon, Ky Valley, Picola, and Waaia.

Sixty-eight distribution sub-stations (2,520 kVA.), 59·6 route miles of high-tension and 32·8 route miles of low-tension line were erected.

South-Western Branch.—This branch, with headquarters at Colac, serves 9,541 consumers, and covers an area of 697 square miles, bounded by Winchelsea on the east, Macarthur on the west, Willaura on the north, and Lorne on the south.

Preparatory work has commenced on the conversion of the branch transmission system from 44 kV. to 66 kV. Due to the rapid growth of load, this conversion is necessary earlier than anticipated: the programme provides for the work being completed by the middle of 1943, subject to availability of materials and equipment.

Supply was extended to the areas west of Willaura and south of Glenthompson.

The capacity of the following main sub-stations was increased—Belmont by 50 kVA. ; to 300 kVA. ; Terang and Colac by 750 kVA. to 1,500 kVA. ; Camperdown by 225 kVA. to 750 kVA.

Fifty-one distribution sub-stations (493 kVA.), 59·2 route miles of high-tension, and 9·4 route miles of low-tension line were erected.

TRAMWAYS—BALLARAT, BENDIGO, AND GEELONG.

A loss of £50,213 resulted from the operation of the three tramway systems, compared with £64,235 last year—a decrease of £14,022 (21·8 per cent.), the respective losses at Ballarat, Bendigo, and Geelong being £14,854, £18,334, and £17,025.

The total revenue was £89,571, an increase of £11,360 (14·5 per cent.). The total passengers carried—9,879,165—represents a substantial increase of 1,234,229 (14·3 per cent.) due to the regulated use of petrol, additional traffic to and from local defence camps, and greater industrial activity at Ballarat and Geelong.

The total expenditure was £139,784, a decrease of £2,662 (1·9 per cent.), chiefly attributable to reduced maintenance charges on rolling stock.

Concession fares are available to nurses and all ranks of naval, military and air forces when in uniform.

The short extension of the Geelong tramway system to Eastern Beach was opened to traffic on the 19th October, 1940, the rails and equipment of the dismantled section to the Moorabool wharf being re-used in the construction. Under an arrangement with the Ministry of Munitions, the Bendigo tramway system is being extended to the new ordnance factory site.

BRIQUETTE PRODUCTION AND DISTRIBUTION.

Production.—The factory output—433,756 tons—was the largest yet obtained in any one year, being an increase of 5,367 tons (1·3 per cent.) over the previous year; 1,665,182 tons of raw brown coal were consumed in the factory process.

The respective outputs of household and industrial types were 47,079 and 386,677 tons. The factory operated continuously seven days a week for the whole year, including statutory holidays, excepting monthly stoppages of eight hours' duration for inspection and adjustment.

Electricity generated at the factory amounted to 79,159,600 kWh., of which 57,697,300 kWh. were delivered to the main system; the remainder was used in the factory process.

Factory Extensions.—The decision to extend the briquette factory is referred to on page 8 of this Report. At the close of the year, the building for the crushing and screening plant had been commenced and preparations made for the early construction of the building for the drier and press plant. Three of the drier units have been completed, the remaining three being in the course of fabrication. The four twin presses and crushing and screening plant are being manufactured.

Distribution—

Sales	..	..	..	..	438,068 tons.
Revenue	..	..	..	..	£379,847
Expenditure	..	..	..	..	£376,438
Profit	..	..	..	..	£3,409

All charges, including interest and depreciation, are included in the expenditure.

As recorded in the last Annual Report, the fuel requirements of war industries so increased that, in November, 1939, it was necessary to ration supplies of household briquettes and reduce quantities by 50 per cent. The rapid growth in the demand by these industries continues, and, on 1st April, 1941, the supplies of briquettes for the household market were then restricted to their use for hot water systems only. The distribution and sale of briquettes in the industrial market is now subject to the control of the State Coal Committee of the Commonwealth Coal Board.

INDUSTRIAL.

The disposition of the Commission's wages employees at 30th June, 1941, was :—

	Operation.	Construction.
Power Generation	623	474
Main Transmission Lines, Terminal and Sub-stations	190	344
Electricity Supply—Metropolitan Branch	278	136
Electricity Supply—Country Branches	334	195
Briquette Production and Distribution	318	6
Coal winning—Yallourn	673	30
General Services and Workshops—Yallourn	510	41
General Services and Workshops elsewhere	763	110
Tramways—Ballarat, Bendigo, and Geelong	207	..
Total	3,896	1,336
GRAND TOTAL .. .. .	.. .. .	5,232

Alterations in base rates, due to increases in the cost of living figures, added £48,288 to the Commission's expenditure during the year.

There are 189 apprentices employed, principally in the engineering trades; 57 were indentured during the year, and reports of the progress of apprentices generally were satisfactory.

The Safety Council has continued its investigation with respect to the best methods of minimizing accidents and instructing personnel in first-aid and safety methods. Eleven hundred employees have completed a first-aid training course, and, to foster this work, regular competitions between representative teams are held throughout the service.

PUBLIC SAFETY AND OTHER REGULATORY RESPONSIBILITIES.

Electric Light and Power Act 1928.—During the year the following Orders in Council were approved by the Governor in Council, authorizing the undertakers to supply electricity within the prescribed areas :—

Order No.	Undertaker.	Area of Supply.
242	Hubert Alexander Block	Apollo Bay and environs (Order No. 223 transferred from Apollo Bay Electric Supply Co. Pty. Ltd.)
243	Boort Co-operative Butter and Ice Co. Ltd.	Boort and environs (Order No. 91 transferred from Shire of Gordon)
245	Hamilton Electric Supply Co. Ltd. ..	Flax Mill, Strathkellar
246	Goroke Butter and Freezing Co. ..	Goroke and environs (Order No. 212 expired 27th August, 1940)

The Governor in Council approved the revocation of the following Orders in Council :—

Order No.	Undertaker.	Area of Supply.	Reason for Revocation.
52	Daylesford Borough Council	Borough of Daylesford ..	Undertaking transferred to State ownership 31st October, 1940
147	Bacchus Marsh Shire Council	Bacchus Marsh, Maddingley and Darley	Undertaking transferred to State ownership 3rd June, 1941
183	Hepburn Springs Electric Supply Co. Ltd.	Hepburn, Hepburn Springs and environs	Undertaking transferred to State ownership 1st October, 1940
221	Towong Shire Council ..	Tallangatta and environs ..	Undertaking transferred to State ownership 1st November, 1940
222	Block and Sons Pty. Ltd.	Myrtleford	Undertaking transferred to State ownership 2nd December, 1940
225	Avoca Electric Light Co. Pty. Ltd.	Avoca and environs ..	Undertaking transferred to State ownership 1st August, 1940
91	Gordon Shire Council ..	Boort and environs ..	Undertaking transferred to Boort Co-operative Butter and Ice Co. Ltd. (New Order No. 243)
223	Apollo Bay Electric Supply Co. Pty. Ltd.	Apollo Bay and environs ..	Undertaking transferred to Hubert Alexander Block (New Order No. 242)

At the close of the financial year, 89 Orders in Council for supply of electricity were in force. Of these, 57 were issued to municipal councils (several of which operate under more than one order) and 32 to companies or persons.

In the exercise of the Commission's functions under the above Act, 42 electrical undertakings were inspected. In addition, special inspections were made of newly installed generating plant and of routes for high-tension lines, while several complaints of unsatisfactory service and poor voltage regulation were investigated.

Licensing of Electrical Mechanics.—The number of Electrical Mechanics' Licences in force at 30th June, 1941, was:—

Grade "A"	..	..	..	..	1,887
„ "B1"	..	..	..	..	102
„ "B"	..	..	..	..	611
„ "C"	..	..	..	..	387

In addition, there were issued 352 permits to engage in electrical wiring work under special conditions for periods not exceeding six months, and limited permits for periods not exceeding twelve months were granted in respect of certain classes of electrical maintenance work. At the close of the year 412 limited permits remained in force.

Two licensing examinations, each including theory and practice, were conducted during the year.

Two persons were fined for breaches of the Licensing of Electrical Mechanics Regulations.

Registration of Electrical Contractors.—At the 30th June, 1941, 478 Contractors' registrations were in force; 11 were cancelled during the year for various reasons.

Two convictions were recorded against unregistered persons undertaking electrical contracting.

Approval of Electrical Appliances and Equipment.—The Electrical Approvals Board, since it was constituted in 1934, has dealt with 1,192 applications for approval, of which 774 have been granted.

The articles brought within its purview include apparatus connectors, bread toasters, celluloid lampshades, cord connectors, cord extension sockets, decorative lighting outfits, earth leakage circuit-breakers Class 1, flexible cords, grillers, handlamps, irons (hand), jugs, kettles and saucepans, lamp-holder adaptors, plugs and sockets, plug socket adaptors, portable immersion heaters, radiators, razors, soldering irons and wall switches.

Two members of the Board retire each year: Mr. H. C. Condie, representing manufacturers of electrical goods, and Mr. S. G. Hall, representing electrical undertakers, the retiring members, were re-appointed. During the absence of Mr. S. G. Hall on military service, Mr. G. F. Wright, Electrical Engineer, Box Hill City Council, acted in his stead until 30th June, 1941, and Mr. J. A. Carmody, Electrical Engineer, Footscray City Council, was appointed acting member as from 1st July, 1941.

Installation Inspections.—To ensure uniform application of the Wiring Regulations and of the measures adopted to overcome difficulties arising from temporary shortages of supplies, close association was maintained with electricity supply authorities throughout the State. Inspection of wiring installations was continued in selected areas.

Large quantities of electrical apparatus, including luminous discharge signs, were examined while under construction at manufacturers' works.

Electrolysis Mitigation.—The Melbourne Electrolysis Committee, consisting of representatives of the Postmaster-General, Victorian Railways Commissioners, Melbourne and Metropolitan Board of Works, Melbourne and Metropolitan Tramways Board, Melbourne City Council, Metropolitan Gas Company, and the State Electricity Commission of Victoria, through the Electrolysis Research Engineer, operating in conjunction with its Technical Sub-Committee, continued the investigation of electrolysis conditions in the metropolitan area, and instituted additional remedial measures.

The number of faults reported for the year was the lowest recorded since the inauguration of the Electrolysis Committee, and the progressive decrease each year confirms the effectiveness of its work and the measures adopted to reduce the electrolytic corrosion on underground structures.

A comprehensive report of the technical investigations and action taken in reducing so substantially electrolysis damage on underground metallic conduits in Victoria, together with a brief history of the activities of the Melbourne Electrolysis Committee, is now being prepared and will be available shortly.

DEATH OF MR. C. A. NORRIS, COMMISSIONER, 1934-1941.

With great sorrow the Commission records the death on 30th September, 1941, of Mr. C. A. Norris, C.B.E., F.I.A. (London), who had been a Commissioner since the 1st May, 1934. During the whole of this time he had, with steadfastness of purpose, applied his energies and abilities, and his sound financial knowledge and judgment, to the advancement of the Commission's undertakings. In acknowledging the signal service he rendered in this and other spheres of public life, both State and Commonwealth, the Commission is conscious of a heavy sense of loss in the passing of a colleague whose counsel and co-operation were so highly valued, and whose personal qualities made him so much admired and respected.

COMMISSIONERS.

Mr. G. G. Jobbins, M.I.E.E., M.I.E. (Aust.), was re-appointed by the Government as Chairman of the Commission for a period of five years from the 21st December, 1940.

Mr. D. J. McClelland, M.C.E., M.Inst.C.E., M.I.E. (Aust.), resigned as a Commissioner on the 31st March, 1941, after holding office for nearly nine years. During this period the Commission had the full benefit of Mr. McClelland's sound judgment and extensive engineering knowledge and experience, and it has placed on record its high appreciation of the invaluable services he thus rendered in the development and administration of its undertakings. In October, 1940, the Tasmanian Government availed itself of Mr. McClelland's wide engineering experience and capabilities and appointed him to a Board of Inquiry constituted to report upon the Tasmanian Hydro-Electric Commission's activities.

Professor A. F. Burstall, Ph.D. (Camb.), M.Sc. (Birm.), D.Sc. (Melb.), M.I.Mech.E., M.I.E. (Aust.), Dean of the Faculty of Engineering, University of Melbourne, was appointed by the Government as a Commissioner for a period of three years from the 13th May, 1941, to fill the vacancy caused by the resignation of Mr. D. J. McClelland.

STAFF.

The Commission gratefully acknowledges the loyal and efficient service rendered by the staff under the continued stress of abnormal conditions.

Of the large number of our men who have enlisted in His Majesty's Forces, eight have died on service, four having been killed in action. The Commission records its regret and sympathy in respect of the death on active service of the following :—

Adamson, F. W., Private ..	Power Production Department, Yallourn ..	Accidentally drowned
Broderick, R. S., Private ..	Electricity Supply Department, South Western Branch	Killed in action
Dardel, J. H., Engineer ..	Power Production Department, Yallourn ..	Died of illness
Lieutenant-Commander		
Davies, B. A., Private ..	Electricity Supply Department, Metropolitan Branch	Died of illness
Edmonds, F. E., Corporal ..	Power Production Department, Yallourn ..	Killed in action
House, W. P. B., Private ..	Construction Branch, Yallourn ..	Died of illness
Spendlove, F. R., Private ..	Electricity Supply Department, Metropolitan Branch	Killed in action
Robertson, R. J. H., Corporal	Footscray Store	Killed in action

Dr. H. Herman, B.C.E., M.M.E., D.Sc., retired on the 16th August, 1940, after twenty years' service with the Commission. The vigorous policy of brown coal development which, as State Director of Geological Survey, Dr. Herman initiated in 1912, and his subsequent advocacy of the use of brown coal for the generation of electricity and the production of briquettes on a national basis were the prime factors which led to the appointment, in 1917, of the Brown Coal Advisory Committee, of which he was Chairman. The adoption of this Committee's report by the Government and by Parliament was the basis of the original legislation constituting the Electricity Commissioners.

As the Commission's Engineer in charge of Briquetting and Research, Dr. Herman not only directed the establishment and subsequent extension of the briquette industry, but also carried out valuable research into the possible uses of brown coal for purposes other than briquetting. His service was marked throughout by great ability and foresight. By the appointment of Dr. Herman as a consultant, the Commission continues to benefit from his extensive knowledge, particularly in the field of brown coal research.

Mr. C. Boehm, who was the Briquette Factory Manager at Yallourn, succeeds Dr. Herman in the post of Engineer in charge of Briquette Production.

During the year the following important staff promotions were made:—

Mr. E. Burgess	..	Office Manager, Gippsland Branch, Electricity Supply Department.
Mr. C. M. Longfield	..	Chairman's Research Engineer.
Mr. R. P. Norris	..	Chief Transport Officer.
Mr. W. G. Smellie	..	Works Manager, Briquette Production Department.
Mr. N. G. Weeks	..	Works Accountant, Yallourn.
Mr. A. Wilson	..	Mechanical Engineer, Briquette Production Department.

We have the honour to be,

Sir,

Your obedient servants,

G. G. JOBBINS, *Chairman*.

ANDREW W. FAIRLEY, *Commissioner*.

AUBREY F. BURSTALL, *Commissioner*.

W. J. PRICE,

Secretary,

7th November, 1941.

**STATE ELECTRICITY COMMISSION OF VICTORIA.
GENERAL BALANCE-SHEET AS AT 30th JUNE, 1941.**

[illegible]

There is a contingent asset and liability in respect of securities lodged as bona fides under Contracts to the extent of £52,065 held by the Bank on the Commission's behalf.

H. S. KILFOYLE, Chief Accountant.

AUDITOR-GENERAL'S CERTIFICATE.

The accounts of the State Electricity Commission of Victoria have been audited in accordance with Section 32 of Act 3776 and, in my opinion, the above Balance-sheet presents a true and correct view of the affairs of the undertaking at the 30th June, 1941.

1st November, 1941.

R. LIDDELOW, Manager.

23rd October, 1941.

E. A. PEVERILL, Auditor-General.

STATE ELECTRICITY COMMISSION OF VICTORIA.
SCHEDULE OF FIXED CAPITAL AT 30th JUNE, 1941.

	Expenditure during 1940-41.			Expenditure to 30th June, 1941.		
	£	s.	d.	£	s.	d.
Coal Production	19,282	9	6	981,425	10	10
Briquette Production	2,267	8	7	1,280,525	16	8
Power Production—Steam Stations—						
Ballarat	10,510	15	2	36,336	7	2
Geelong	2,764	0	7	344,231	11	10
Newport	43,622	3	2	1,514,797	9	1
Richmond	102	3	6	210,710	6	7
Yallourn	61,791	4	9	5,036,997	0	1
Power Production—Water Stations—						
Sugarloaf-Rubicon	1,794	12	7	813,693	6	8
Transmission Systems—						
Main Transmission Systems	27,191	14	6	2,882,426	19	6
Metropolitan Branch .. .. .	..	..	..	10,598	17	4
Ballarat Branch	19,919	18	10	47,801	18	1
Bendigo Branch	325	12	11	6,444	3	10
Eastern Metropolitan Branch	6,904	17	7	215,102	3	1
Geelong Branch	4,988	1	8	29,253	18	10
Gippsland Branch	11,840	17	9	318,507	4	5
Midland Branch	12,214	12	0	123,263	19	4
North-Eastern Branch	31,417	5	7	378,341	15	9
South-Western Branch	15,554	11	8	359,676	13	5
Terminal Stations	46,402	14	9	1,190,396	8	1
Distribution Systems—						
Metropolitan Branch	149,901	2	0	4,131,243	9	11
Ballarat Branch	17,314	13	11	189,302	2	11
Bendigo Branch	6,292	18	4	140,726	6	5
Eastern Metropolitan Branch	24,966	15	9	418,225	19	7
Geelong Branch	19,827	13	1	338,372	7	2
Gippsland Branch	29,194	14	4	407,063	12	6
Midland Branch	16,724	8	6	162,156	14	7
North-Eastern Branch	38,406	13	4	315,071	12	5
South-Western Branch	11,192	13	3	243,277	8	2
Yallourn Branch	975	16	1	23,135	5	4
Tramways—						
Ballarat	232	7	10	81,817	4	3
Bendigo	14	16	6	41,658	14	0
Geelong	12	18	7	172,015	6	5
General—						
Metropolitan Branch	9,039	15	5	717,983	6	9
Ballarat Branch	338	19	11	29,032	13	10
Bendigo Branch	481	6	0	15,792	17	5
Eastern Metropolitan Branch	232	13	0	34,830	9	8
Geelong Branch	1,534	4	9	31,866	8	1
Gippsland Branch	7,786	11	1	39,907	4	11
Kiewa Branch	65,413	0	8	73,117	19	3
Midland Branch	242	12	11	7,254	11	8
North-Eastern Branch	762	17	0	39,431	13	1
South-Western Branch	744	12	6	31,041	6	4
Yallourn Area	68,628	7	2	1,290,735	17	10
Metropolitan Area	23,102	19	7	441,140	18	10
CONSTRUCTION WORK IN PROGRESS						
Beginning of Year— <i>Deduct</i>	812,260	16	7	25,196,733	1	11
End of Year— <i>Add</i>	692,654	1	8	..	..	..
CONSTRUCTION WORK IN PROGRESS—						
End of Year— <i>Add</i>	119,606	14	11	25,196,733	1	11
<i>Deduct</i> —Proportion of Cost of Extensions Payable by Consumers	997,636	7	6	997,636	7	6
	1,117,243	2	5	26,194,369	9	5
	14,931	11	8	77,574	12	11
	1,102,311	10	9	26,116,794	16	6
				26,116,794	16	6

STATE ELECTRICITY COMMISSION OF VICTORIA.
DEBENTURES AND INSCRIBED STOCK.

ISSUED UNDER THE AUTHORITY OF THE STATE ELECTRICITY COMMISSION
ACTS Nos. 4087 and 4512.

Loan No.	Original Issue.	Amount Subscribed to 30th June, 1941.	Rate.	Term.	Due.	Sinking Fund.	Redeemed to 30th June, 1941.	Outstanding at 30th June, 1941.
	£	£	%	Years.		%	£	£
State Electricity Commission of Victoria Loan No. 1	600,000	600,000	3½	20	1954	1	36,000	564,000
" " " " " " 2	382,000	382,000	3½	20	1954	1	22,920	359,080
" " " " " " 3	100,000	100,000	4	15	1951	1	5,000	95,000
" " " " " " 4	800,000	800,000	3½	10	1948	1	24,000	776,000
" " " " " " 5	900,000	900,000	4½	10	1949	1	..	900,000
" " " " " " 6	200,000	200,000	4½	10	1949	1	2,000	198,000
" " " " " " 7	150,000	150,000	4½	15	1955	1	..	150,000
" " " " " " 8	250,000	250,000	3·8125	10	1950	1	2,500	247,500
" " " " " " 9	300,000	300,000	3·4375	16	1957	1	..	300,000
		3,682,000					92,420	3,589,580

ISSUED BY UNDERTAKINGS ACQUIRED BY THE STATE ELECTRICITY COMMISSION OF VICTORIA.

Municipality.	Loan No.	Actual Rate.	Rate under Financial Emergency Act.	Original Issue.	Date of Acquisition.	Outstanding at Date of Acquisition.	Redeemed Since Date of Acquisition.	Outstanding at 30th June, 1941.
		%	%	£		£ s. d.	£ s. d.	£ s. d.
Bendigo Branch.								
Marong Shire	2	5½	5	1,700	1.7.31	1,591 17 11	369 12 8	1,222 5 3
Eaglehawk Borough	8	4½	4½	3,500	1.10.35	3,150 13 3	1,126 18 11	2,023 14 4
" " " " " " 9	9	3½	3½	4,500	"	4,345 9 8	960 10 8	3,384 19 0
				9,700		9,088 0 10	2,457 2 3	6,630 18 7
Eastern Metropolitan Branch.								
Dandenong Shire	20	6	5	4,000	1.10.23	3,946 19 0	3,303 14 11	643 4 1
Flinders Shire	4	6½	5·0375	5,000	1.10.27	4,185 0 0	3,965 0 0	220 0 0
" " " " " " 5	5	5	4½	3,500	"	3,356 10 7	2,064 17 11	1,291 12 8
Frankston and Hastings Shire	16	6½	5·0375	5,000	21.2.28	4,665 15 5	2,933 1 5	1,732 14 0
Healesville Shire	2	6	4½	8,000	1.4.33	6,215 0 0	2,075 0 0	4,140 0 0
" " " " " " 3	3	6½	4½	2,000	"	1,585 0 0	515 0 0	1,070 0 0
" " " " " " 9	9	5½	5	3,000	"	2,728 11 2	582 16 7	2,145 14 7
Lillydale Shire	16	6½	5·0375	3,000	1.4.25	2,869 12 7	1,210 8 1	1,659 4 6
" " " " " " 13	13	6	5	1,200	"	1,200 0 0	..	1,200 0 0
" " " " " " 16	16	6½	5·0375	2,000	"	1,913 1 7	806 18 7	1,106 3 0
" " " " " " 17	17	6	5	4,000	"	3,600 0 0	3,200 0 0	400 0 0
Mornington Shire	11	5½	5	1,000	1.8.30	895 16 8	501 0 0	394 16 8
				41,700		37,161 7 0	21,157 17 6	16,003 9 6
Gippsland Branch.								
Maffra Shire	1	4½	4½	6,500	1.9.24	5,660 0 11	2,458 17 6	3,201 3 5
" " " " " " 2	2	5	5	1,000	"	877 5 7	556 4 6	321 1 1
				7,500		6,537 6 6	3,015 2 0	3,522 4 6
Metropolitan Branch.								
Werribee Shire	3	4½	4½	1,000	10.4.24	818 1 5	617 10 1	200 11 4
" " " " " " 4	4	5½	4½	1,000	"	856 16 2	587 4 8	269 11 6
				2,000		1,674 17 7	1,204 14 9	470 2 10
Midland Branch.								
Kyneton Shire	3	5½	4½	12,000	1.10.29	10,830 0 0	3,520 0 0	7,310 0 0
" " " " " " 5	5	6	4½	3,800	"	3,084 15 2	2,331 17 4	752 17 10
Newham and Woodend Shire	2	5	5	750	1.8.29	750 0 0	300 0 0	450 0 0
				16,550		14,664 15 2	6,151 17 4	8,512 17 10
North-Eastern Branch.								
Mansfield Shire	3	4½	4½	500	1.6.28	500 0 0	..	500 0 0
" " " " " " 6	6	6	5	1,200	"	1,200 0 0	..	1,200 0 0
" " " " " " 8	8	6	5	800	"	800 0 0	650 0 0	150 0 0
Numurkah Shire	4	4½	4½	4,200	1.10.31	2,600 0 0	1,800 0 0	800 0 0
" " " " " " 7	7	7	5·425	2,500	"	1,922 4 11	1,036 1 8	886 3 3
Rodney Shire	1	5	5	3,000	1.10.26	2,286 7 8	1,670 2 2	616 5 6
Rutherglen Borough	2	4½	4½	3,000	15.10.26	2,094 3 8	1,838 6 6	255 17 2
" " Shire	4	6	5	350	1.2.26	296 1 8	188 4 1	107 17 7
Towong Shire	1	4½	4½	6,500	1.11.40	4,565 0 0	246 14 9	4,318 5 3
Wangaratta Borough	8	6½	4½	6,500	12.3.27	6,078 12 8	2,352 8 11	3,726 3 9
" " " " " " 9	9	6	4½	1,500	"	1,412 2 5	566 2 1	846 0 4
Yarrawonga Shire	3	4	4	3,500	1.8.25	2,600 0 0	1,900 0 0	700 0 0
" " " " " " 4	4	4½	4½	800	"	576 3 8	528 18 6	47 5 2
" " " " " " 5	5	5	4½	500	"	387 11 1	312 8 2	75 2 11
" " " " " " 6	6	5	4½	500	"	406 1 8	290 2 1	115 19 7
				35,350		27,724 9 5	13,379 8 11	14,345 0 6
South-Western Branch								
Koroit Borough	1	4½	4½	6,500	1.12.28	4,000 0 0	3,700 0 0	300 0 0
				6,500		4,000 0 0	3,700 0 0	300 0 0
GRAND TOTAL				119,300		100,850 16 6	51,066 2 9	49,784 13 9

STATE ELECTRICITY COMMISSION OF VICTORIA.

TABULATION OF CAPITAL, REVENUE, AND OPERATING ACCOUNTS.

Year ended 30th June.	Capital.			Revenue.				Operating Expenditure Including Writings Off, &c.	+ Surplus. - Deduct.	
	Capital Expenditure.	Loan Liability.	Reserves.	Electricity Supply.	Briquetting.	Tramways.	Miscellaneous.		Year.	To date.
1922	£ 843,846	£ 1,760,121	£ ..	£ 70,698	£ ..	£ ..	£ ..	£ 70,654	£ 44 +	£ 44 +
1923	3,891,718	4,212,719	13,992	225,481	..	..	..	225,502	21 +	23 +
1924	6,234,213	6,522,482	22,532	392,999	..	..	19,798	471,282	58,485 -	58,462 -
1925	7,759,825	8,293,765	43,936	617,286	40,468	..	41,602	963,638	264,282 -	322,744 -
1926	9,032,464	10,120,794	67,616	713,252	122,379	..	19,476	1,125,077	269,970 -	592,714 -
1927	10,742,104	11,849,698	262,942	975,362	179,184	..	16,124	1,367,324	196,654 -	789,368 -
1928	12,762,939	13,567,546	493,935	1,262,787	192,256	..	10,698	1,463,868	1,873 +	787,495 -
1929	14,530,684	15,126,107	833,618	1,427,751	226,186	..	7,858	1,657,181	4,614 +	782,881 -
1930	16,397,608	16,778,413	1,151,139	1,624,255	264,459	..	9,153	1,892,601	5,266 +	777,615 -
1931	18,553,592	19,286,428	1,593,462	2,234,756	276,930	30,971	2,236	2,562,846	17,953 -	795,568 -
1932	19,337,273	19,735,177	2,135,205	2,456,696	357,056	35,450	717	2,846,888	3,031 +	792,537 -
1933	19,667,259	19,668,146	2,823,912	2,577,547	313,435	34,180	97	2,921,830	3,429 +	789,108 -
1934	19,748,318	19,109,659	3,332,096	2,717,992	309,936	33,510	74	3,028,393	33,119 +	755,989 -
1935	20,305,078	19,527,309	3,757,812	2,995,707	297,858	77,121	10,098	3,374,306	6,478 +	749,511 -
1936	20,866,242	18,806,748	4,380,047	3,164,703	348,650	78,207	8,180	3,572,012	27,728 +	721,783 -
1937	21,638,314	18,682,415	5,008,027	3,339,560	337,227	76,142	7,500	3,721,528	38,901 +	682,882 -
1938	22,698,893	19,242,265	5,672,343	3,539,974	394,634	75,567	1,008	3,957,354	53,829 +	629,053 -
1939	24,268,880	19,422,927	6,449,707	3,685,107	377,022	78,664	1,099	4,020,992	120,900 +	508,153 -
1940	25,369,679	20,524,010	7,300,198	3,894,893	400,125	78,211	3,700	4,250,416	126,513 +	381,640 -
1941	26,116,795	20,678,339	8,218,078	4,241,264	379,847	89,571	13,374	4,563,376	160,680 +	220,960 -

STATE ELECTRICITY COMMISSION OF VICTORIA. STANDARD TARIFFS.

(Applicable to Centres as Indicated in Appendix No. 8.)

Tariff.	Metropolitan. 1	Geelong. 2	Ballarat and Bendigo. 3	5	6	7	8
Residential Tariff (Domestic and Commercial Residential Premises)— Service charge per month per assessable room Rate per kWh. Maximum overall rate per kWh. 	11d. 0·9d. 5·0d.	1s. 2d. 1·25d. 8·0d.	1s. 2d. 1·4d. 8·0d.	1s. 2d. 1·4d. 8·0d.	1s. 3d. 1·4d. 9·0d.	1s. 5d. 1·4d. 11·0d.	Tariffs for the following centres are the same as shown in Column No. 5, except the Residential Tariff, details of which will be supplied on request:— Croydon Dandenong Frankston Heathmont Mt. Eliza Ringwood Seaford.
Commercial and Industrial Lighting— Block Tariff—rates per kWh. (based on monthly consumption)	First 20 at 4d. Balance at 3d.	First 100 at 5d. Balance at 3·5d.	First 100 at 5·5d. Next 200 at 4·5d. Balance at 3·5d.	First 100 at 6·0d. Next 200 at 5·0d. Balance at 4·0d.	First 100 at 8·0d. Next 200 at 6·0d. Balance at 5·0d.	First 100 at 9·0d. Next 200 at 7·0d. Balance at 6·0d.	
Commercial and Industrial—Power and Heating— Block Tariff—rates per kWh. (based on monthly consumption)	First 200 at 2d. Next 4,800 at 1·2d. " 20,000 at 0·9d. " 100,000 at 0·8d. " Balance at 0·7d. 11 p.m.—7 a.m.— 0·3d. 5s.	First 200 at 2·25d. Next 4,800 at 1·5d. " 20,000 at 1·0d. " 100,000 at 0·8d. " Balance at 0·7d. 10·30 p.m.—6·30 a.m.— 0·35d. 5s.	First 50 at 2·5d. Next 150 at 2·25d. " 4,800 at 1·5d. " 20,000 at 1·0d. " 100,000 at 0·9d. " Balance at 0·75d. 10·30 p.m.—6·30 a.m.— 0·35d. 5s.	First 50 at 3·0d. Next 150 at 2·25d. " 4,800 at 1·5d. " 20,000 at 1·0d. " 150,000 at 0·9d. " Balance at 0·8d. 10 p.m.—6 a.m.— 0·35d. 5s.	First 50 at 3·5d. Next 150 at 2·25d. " 4,800 at 1·5d. " 20,000 at 1·0d. " 150,000 at 0·9d. " Balance at 0·8d. 10 p.m.—6 a.m.— 0·35d. 5s.	First 50 at 4d. Next 150 at 2·25d. " 4,800 at 1·5d. " 20,000 at 1·0d. " 150,000 at 0·9d. " Balance at 0·8d. 10 p.m.—6 a.m.— 0·35d. 5s.	Details regarding tariffs in the following centres will be supplied on request:— Deer Park Kilsyth Montrose Mount Martha Lara Lara Lake Werribee South St. Albans.
Maximum Demand Tariff (see Note (2) below) £9 10s. per kW. per annum 0·225d. per kWh. 500 kW. (Minimum Demand Charge) Reset Monthly	0·9d.	1·25d.	1·4d.	1·4d.	1·4d.	1·4d.	
Commercial Cooking—Flat Tariff per kWh.	11 p.m.—7 a.m.— 0·35d.	10·30 p.m.—6·30 a.m.— 0·45d.	10·30 p.m.—6·30 a.m.— 0·45d.	10 p.m.—6 a.m.— 0·45d.	10 p.m.—6 a.m.— 0·45d.	10 p.m.—6 a.m.— 0·45d.	
Water Heating—Night Tariff per kWh.	2s. 6d.	3s.	3s.	3s. 6d.	3s. 6d.	3s. 6d.	
Minimum Charge .. per month							

SPECIAL ALL PURPOSES INDUSTRIAL TARIFF

Applicable throughout all areas of supply.

Block Tariff—rates per kWh. (based on monthly consumption)

First 20 at 4d.
Next 480 at 3d.
" 4,500 at 1·9d.
" 20,000 at 0·9d.
" 100,000 at 0·8d.
" Balance at 0·7d.

Prescribed hours—rate per kWh. .. 11 p.m.—7 a.m.—
0·3d.

Rental per Two-rate meter per month .. 5s.

A consumer adopting the Special Industrial All-Purposes Tariff must agree to pay a minimum charge of £10/5/10 per month, which will cover any consumption up to the first 1,000 kWh., irrespective of the hours during which the consumption may be recorded.

NOTES.—1. Details regarding the application of the above tariffs are shown in the Commission's published tariff schedules which are available on request.

2. The Maximum Demand Tariff is available only to consumers entering into a five-year agreement providing for high tension supply and for monthly payments based on the minimum demand indicated or half the stipulated rate of supply, whichever is the greater.

STATE OF VICTORIA.

ELECTRICITY SUPPLY UNDERTAKINGS AT 30TH JUNE, 1941.

SUMMARY.

	Population.	Consumers.		*Kilowatt-hours Sold.	
		Number.	Percentage of Grand Total.	Number.	Percentage of Grand Total.
STATE ELECTRICITY COMMISSION OF VICTORIA—					
Metropolitan	692,123	189,537	44·43	468,729,393	52·06
Provincial Cities—					
Ballarat	40,240	8,923	2·09	9,470,615	1·05
Bendigo	31,782	7,846	1·84	7,299,373	0·81
Geelong	50,020	12,405	2·91	26,196,685	2·91
Country	290,233	65,662	15·39	101,530,990	11·28
TOTAL	1,104,398	284,373	66·66	613,227,056	68·11
OTHER UNDERTAKINGS—					
Metropolitan (receiving Bulk Supply from State Electricity Commission of Victoria)	398,120	111,466	26·13	268,172,143	29·78
Country	134,000	30,770	7·21	19,000,000	2·11
TOTAL	532,120	142,236	33·34	287,172,143	31·89
GRAND TOTAL	1,636,518	426,609	100·00	900,399,199	100·00

* Retail sales to Victorian consumers by Electricity Supply undertakings.

CENTRES SERVED BY STATE ELECTRICITY COMMISSION OF VICTORIA.

Municipality or Centre.	Branch.	System of Supply.	Population.	Number of Consumers.	Tariffs as per Appendix No. 7 Column No.	Date Supply First Undertaken by Commission.
Metropolitan.						
Brighton	Metro.	A.C., 3 ph. and 1 ph. ..	692,123	189,537	1	1.9.30
Broadmeadows (Fawkner and Glenroy and portions of North Essendon and Pascoe Vale only)	„	A.C., 3 ph.				1.8.22
Camberwell	„	A.C., 3 ph. and 1 ph. ..				1.9.30
Caulfield	„	A.C., 3 ph. and 1 ph. ..				1.9.30
Collingwood	„	A.C., 3 ph.				1.9.30
Essendon	„	A.C., 3 ph.				1.8.22
Fitzroy	„	A.C., 3 ph.				1.9.30
Hawthorn	„	A.C., 3 ph. and 1 ph. ..				1.9.30
Kensington/Flemington	„	A.C., 3 ph.				1.8.22
Kew	„	A.C., 3 ph. and 1 ph. ..				1.9.30
Malvern	„	A.C., 3 ph. and 1 ph. ..				1.9.30
Moorabbin	„	A.C., 3 ph. and 1 ph. ..				1.9.30
Mordialloc	„	A.C., 3 ph.				1.9.30
Mulgrave (part)	„	A.C., 3 ph.				1.9.30
Oakleigh	„	A.C., 3 ph.				1.9.30
Prahran	„	A.C., 3 ph. and 1 ph. ..				1.9.30
Richmond	„	A.C., 3 ph.				1.9.30
St. Kilda	„	A.C., 3 ph. and 1 ph. ..				1.9.30
Sandringham	„	A.C., 3 ph. and 1 ph. ..				1.9.30
South Melbourne	„	A.C., 3 ph.				1.9.30
Sunshine	„	A.C., 3 ph.				1.3.27
Ballarat.						
City of Ballarat (including Alfredton, Ballarat East, Ballarat North, Brown Hill, Canadian and Mt. Pleasant)	Ball.	A.C., 3 ph. D.C., 3 wire	40,240	8,923	3	1.7.34
Borough of Sebastopol	„	A.C., 3 ph.				
Ballarat Shire (Wendouree only) ..	„	A.C., 3 ph.				
Bendigo.						
City of Bendigo (including Golden Square, Long Gully and White Hills)	Bend.	A.C., 3 ph.	31,782	7,846	3	1.7.34
Borough of Eaglehawk	„	A.C., 3 ph.				1.10.35
Huntly Shire (Portion only, including Epsom)	„	A.C., 3 ph. and 1 ph. ..				19.5.37 (Epsom)
Marong Shire (Portion only, including Kangaroo Flat)	„	A.C., 3 ph.				29.12.39
Strathfieldsaye Shire (Portion only)..	„	A.C., 3 ph.				1.7.34

CENTRES SERVED BY STATE ELECTRICITY COMMISSION OF VICTORIA—continued.

Municipality or Centre.	Branch.	System of Supply.	Population.	Number of Consumers.	Tariffs as per Appendix No. 7 Column No.	Date Supply First Undertaken by Commission.
Geelong.						
City of Geelong	Geel.	A.C., 3 ph.	50,020	12,405	2	1.9.30 (Fyansford 10.10.38)
City of Geelong West	"	D.C., 3 wire				
Newtown and Chilwell	"	A.C., 3 ph.				
Corio Shire (North Geelong, North Shore and Fyansford)	"	A.C., 3 ph.				
South Barwon Shire (Belmont, Grovedale and Highton)	"	A.C., 3 ph.				
Bellarine Shire (St. Albans) ..	"	A.C., 3 ph.				
Country.						
Acheron	N/E.	A.C., 1 ph.	70	16	7	24.11.37
Agnes	Gipps.	A.C., 1 ph.	100	21	7	1.11.38
Airey's Inlet	S/W.	A.C., 1 ph.*	40	23	7	24.12.36
Airly	Gipps.	A.C., 1 ph.	100	31	7	16.6.37
Alexandra	N/E.	A.C., 3 ph.	998	287	6	11.4.27
Allansford	S/W.	A.C., 1 ph.*	300	47	7	20.11.24
Allansford Rural	S/W.	A.C., 3 ph. and 1 ph.* ..	610	110	7	26.9.28
Altona	Metro.	A.C., 3 ph. and 1 ph. ..	2,340	585	6	9.12.24
Alvie	S/W.	A.C., 1 ph.*	130	25	7	15.10.24
Anglesea	S/W.	A.C., 1 ph.*	80	68	7	21.12.36
Archies Creek	Gipps.	A.C., 3 ph. and 1 ph. ..	230	21	7	1.9.40
Ardmona	N/E.	A.C., 1 ph.	355	140	7	25.3.38
Arundel	Mid.	A.C., 1 ph.	(See Keilor)		7	21.11.35
Ascot	Ball.	A.C., 1 ph.	25	3	7	7.12.38
Avoca	Mid.	A.C., 3 ph.	866	235	6	1.8.40
Bacchus Marsh	Mid.	A.C., 3 ph. and 1 ph. ..	2,386	386	6	3.6.41
Baddaginnie	N/E.	A.C., 1 ph.	92	18	7	23.7.36
Badger Creek	E/M.	A.C., 1 ph.	450	40	7	1.4.33
Bairnsdale	Gipps.	A.C., 3 ph. and 1 ph. ..	4,500	1,151	5	1.4.27
Bairnsdale Rural	Gipps.	A.C., 1 ph.	200	10	7	13.2.36
Bald Hills	Ball.	A.C., 1 ph.	25	3	7	13.7.38
Balintore	S/W.	A.C., 1 ph.*	50	6	7	1.6.37
Ballan	Ball.	A.C., 3 ph.	916	150	7	1.3.40
Ballendella	N/E.	A.C., 1 ph.	150	35	7	20.3.40
Balmattum East	N/E.	A.C., 1 ph.	34	8	7	8.10.37
Barnawartha	N/E.	A.C., 1 ph.	283	31	7	7.10.27
Barwon Heads	Geel.	A.C., 1 ph.	350	215	6	6.9.24
Batesford	Geel.	A.C., 1 ph.	150	15	7	28.2.39
Bayles	Gipps.	A.C., 3 ph. and 1 ph. ..	200	51	7	11.9.35
Bayswater	E/M.	A.C., 1 ph.	384	184	7	24.7.26
Beaconsfield	E/M.	A.C., 1 ph.	225	59	7	18.6.28
Beesac	S/W.	A.C., 1 ph.	470	93	7	21.5.24
Belgrave	E/M.	A.C., 3 ph.	1,813	820	5	24.8.25
Bena	Gipps.	A.C., 3 ph. and 1 ph. ..	250	65	7	10.7.30
Benalla	N/E.	A.C., 3 ph.	4,843	1,181	5	1.5.26
Bennison	Gipps.	A.C., 1 ph.	80	10	7	29.10.38
Berwick	E/M.	A.C., 1 ph.	940	216	7	7.5.28
Birregurra	S/W.	A.C., 1 ph.	400	114	7	30.10.24
Bittern	E/M.	A.C., 1 ph.	152	20	7	22.12.37
Boisdale	Gipps.	A.C., 1 ph.	550	106	7	13.7.37
Bona Vista	Gipps.	A.C., 1 ph.	90	25	7	30.12.38
Bonegilla	N/E.	A.C., 1 ph.	40	7	7	18.12.40
Bonnie Doon	N/E.	A.C., 1 ph.	270	36	7	31.1.41
Bookar	S/W.	A.C., 1 ph.	30	2	7	10.8.37
Boolarra	Gipps.	A.C., 3 ph. and 1 ph. ..	450	62	7	29.10.24
Boolarra South	Gipps.	A.C., 1 ph.	90	16	7	1.8.40
Boronia	E/M.	A.C., 1 ph.	551	275	6	23.1.27
Bostock's Creek	S/W.	A.C., 1 ph.*	50	14	7	15.12.24
Bowen Vale	Mid.	A.C., 1 ph.	50	2	7	10.5.40
Bowser	N/E.	A.C., 3 ph.	90	4	7	23.4.34
Braeside	Metro. and E/M.	A.C., 1 ph.	58	17	7	27.6.30
Brandy Creek	Gipps.	A.C., 1 ph.	50	8	7	15.2.39
Briagolong	Gipps.	A.C., 1 ph.	500	54	7	5.3.37
Briar Hill	E/M.	A.C., 1 ph.	297	106	6	12.5.26
Bridgewater	Bend.	A.C., 3 ph.	300	81	7	27.4.40
Broadmeadows	Metro.	A.C., 1 ph.	250	47	7	18.11.35
Bruthen	Gipps.	A.C., 1 ph.	600	101	7	1.10.30
Bulla	Mid.	A.C., 1 ph.	194	15	7	10.11.36
Bullock Swamp	S/W.	A.C., 1 ph.*	50	13	7	12.9.24
Buln Buln	Gipps.	A.C., 1 ph.	130	28	7	1.12.30
Bundalagwah	Gipps.	A.C., 1 ph.	150	33	7	13.11.36
Bundoora	E/M.	A.C., 1 ph.	53	33	7	31.12.27
Bungaree	Ball.	A.C., 3 ph.	150	31	7	14.5.40
Bung Bong	Mid.	A.C., 3 ph. and 1 ph. ..	20	4	7	21.4.41
Buninyong	Ball.	A.C., 3 ph.	650	72	7	14.1.37
Bunyip	Gipps.	A.C., 1 ph.	500	97	7	15.10.28
Burramine	N/E.	A.C., 1 ph.	72	4	7	12.9.35
Byrneside	N/E.	A.C., 1 ph.	63	7	7	24.5.37
Caldermeade	Gipps.	A.C., 1 ph.	150	50	7	6.9.35
Campbellfield	Metro.	A.C., 3 ph. and 1 ph. ..	260	42	7	14.9.36
Camperdown	S/W.	A.C., 3 ph.	3,700	786	5	30.12.23
Camperdown Rural	S/W.	A.C., 3 ph. and 1 ph.* ..	1,050	277	7	9.1.36

CENTRES SERVED BY STATE ELECTRICITY COMMISSION OF VICTORIA—continued.

Municipality or Centre.	Branch.	System of Supply.	Population.	Number of Consumers.	Tariffs as per Appendix No. 7 Column No.	Date Supply First Undertaken by Commission.
Country—continued.						
Caramut	S/W.	A.C., 1 ph.*	170	20	7	12.8.38
Carisbrook	Mid.	A.C., 1 ph.	200	79	7	24.11.37
Carranballac	S/W.	A.C., 1 ph.*	60	6	7	18.10.39
Castlemaine	Mid.	A.C., 3 ph. and 1 ph. ..	6,072	1,242	5	31.12.29
Catani	Gipps.	A.C., 1 ph.	100	37	7	27.10.36
Chewton	Mid.	A.C., 3 ph. and 1 ph. ..	705	55	7	23.9.38
Chiltern	N/E.	A.C., 3 ph.	1,726	142	7	1.9.26
Chocoolyn	S/W.	A.C., 1 ph.*	20	2	7	14.1.38
Clayton	Metro. and E/M.	A.C., 1 ph.	881	139	7	30.4.26
Clematis	E/M.	A.C., 1 ph.	41	28	7	24.8.34
Cloverlea	Gipps.	A.C., 1 ph.	230	60	7	7.4.30
Clunes	Ball.	A.C., 3 ph.	1,230	174	7	9.2.38
Clydebank	Gipps.	A.C., 1 ph.	100	16	7	9.4.36
Cobden	S/W.	A.C., 3 ph.	760	213	6	26.3.24
Cobram	N/E.	A.C., 3 ph.	1,040	231	6	1.10.28
Cobrioo	S/W.	A.C., 1 ph.*	20	1	7	22.12.38
Colac	S/W.	A.C., 3 ph. and 1 ph. ..	6,000	1,569	5	1.9.23
Colac Rural	S/W.	A.C., 3 ph. and 1 ph.* ..	900	153	7	9.1.36
Coldstream	E/M.	A.C., 3 ph. and 1 ph. ..	43	33	7	1.7.33
Congupna	N/E.	A.C., 3 ph.	58	9	7	7.9.34
Coragulac	S/W.	A.C., 1 ph.	100	15	7	30.4.24
Cora Lynn	Gipps.	A.C., 3 ph. and 1 ph. ..	300	69	7	9.8.35
Cororooke	S/W.	A.C., 3 ph.	400	60	7	27.3.24
Couangalt	Mid.	A.C., 3 ph. and 1 ph. ..	(See Gisborne)		7	— .8.37
Cowwarr	Gipps.	A.C., 3 ph. and 1 ph. ..	350	90	7	8.11.24
Cranbourne	E/M.	A.C., 1 ph.	590	103	7	12.9.28
Creswick	Ball.	A.C., 3 ph.	1,808	220	7	24.11.37
Crib Point	E/M.	A.C., 1 ph.	1,505	159	7	23.8.29
Crossley	S/W.	A.C., 1 ph.*	80	12	7	16.3.38
Croydon	E/M.	A.C., 3 ph. and 1 ph. ..	2,233	768	8	1.4.25
Cudgee	S/W.	A.C., 1 ph.*	40	4	7	7.12.38
Dalmore	Gipps.	A.C., 1 ph.	100	15	7	29.1.37
Dalyston	Gipps.	A.C., 1 ph.	160	15	7	15.11.40
Dandenong	E/M.	A.C., 3 ph. and 1 ph. ..	5,725	1,702	8	1.10.23
Darlington	S/W.	A.C., 1 ph.*	110	14	7	22.4.38
Darnum	Gipps.	A.C., 3 ph.	180	39	7	20.12.24
Dawson	Gipps.	A.C., 1 ph.	50	6	7	16.4.37
Daylesford	Ball.	A.C., 3 ph.	2,610	644	5	31.10.40
Deer Park		A.C., 3 ph. and 1 ph. ..	250	60	8	14.2.29
Dennington	S/W.	A.C., 3 ph. and 1 ph.* ..	310	49	7	1.2.29
Derrinallum	S/W.	A.C., 1 ph.	150	45	7	20.4.38
Devenish	N/E.	A.C., 3 ph.	208	25	7	14.2.40
Diamond Creek	E/M.	A.C., 1 ph.	470	103	7	10.5.29
Digger's Rest	Mid.	A.C., 1 ph.	181	21	7	15.3.29
Dingley	E/M.	A.C., 1 ph.	249	50	7	10.10.29
Donnybrook	E/M.	A.C., 1 ph.	100	18	7	11.3.41
Dookie	N/E.	A.C., 1 ph.	284	68	7	8.3.37
Driffield	Gipps.	A.C., 1 ph.	100	22	7	6.4.38
Dromana	E/M.	A.C., 3 ph. and 1 ph. ..	1,131	252	6	8.12.27
Drouin	Gipps.	A.C., 3 ph.	1,200	286	6	1.10.24
Drouin Rural	Gipps.	A.C., 1 ph.	100	10	7	13.11.28
Drouin West	Gipps.	A.C., 1 ph.	50	11	7	18.2.39
Drysdale	Geel.	A.C., 1 ph.	1,200	156	7	13.2.24
Dumbalk	Gipps.	A.C., 3 ph. and 1 ph. ..	150	50	7	14.9.36
Dumbalk North	Gipps.	A.C., 1 ph.	100	68	7	7.8.39
Dunkeld	S/W.	A.C., 1 ph.	370	41	7	10.8.39
Dunolly	Mid.	A.C., 3 ph.	615	153	7	31.3.38
East Oakleigh	E/M.	A.C., 3 ph.	112	38	1 and 7	19.7.26
Eastern View	S/W.	A.C., 1 ph.*	40	8	7	7.9.39
Echuca	N/E.	A.C., 3 ph.	5,140	993	5	10.11.24
Eildon Weir	N/E.	A.C., 1 ph.	115	19	7	28.4.39
Eldorado†	N/E.	A.C., 1 ph.	204	14	7	1.4.39
Elliminyt	S/W.	A.C., 1 ph.	(See Colac)		5	1.7.24
Ellinbank	Gipps.	A.C., 1 ph.	160	41	7	9.9.36
Elphinstone	Mid.	A.C., 1 ph.	108	10	7	4.11.38
Eltham	E/M.	A.C., 1 ph.	710	204	7	12.8.26
Emerald	E/M.	A.C., 1 ph.	286	113	7	7.8.34
Epping	E/M.	A.C., 1 ph.	126	43	7	15.7.36
Euroa	N/E.	A.C., 3 ph.	3,232	513	6	20.3.28
Exford	Mid.	A.C., 1 ph.	(See Melton)		7	20.12.39
Ferny Creek	E/M.	A.C., 1 ph.	177	35	7	2.9.27
Fish Creek	Gipps.	A.C., 3 ph. and 1 ph. ..	370	93	7	9.7.38
Flinders	E/M.	A.C., 1 ph.	480	77	7	28.10.38
Flynn	Gipps.	A.C., 1 ph.	150	37	7	5.9.38
Foster	Gipps.	A.C., 3 ph. and 1 ph. ..	700	151	7	30.4.38
Frankston	E/M.	A.C., 3 ph. and 1 ph. ..	5,387	1,663	8	21.2.28
Freshwater Creek	S/W.	A.C., 1 ph.*	20	4	7	30.4.41
Gainsborough	Gipps.	A.C., 1 ph.	120	29	7	28.9.36
Garfield	Gipps.	A.C., 1 ph.	420	70	7	1.8.29
Garvoc	S/W.	A.C., 1 ph.*	150	14	7	25.9.37
Girgarre	N/E.	A.C., 3 ph.	259	65	7	19.5.38
Gisborne	Mid.	A.C., 3 ph. and 1 ph. ..	1,073	140	7	1.10.28

CENTRES SERVED BY STATE ELECTRICITY COMMISSION OF VICTORIA—continued.

Municipality or Centre.	Branch.	System of Supply.	Population.	Number of Consumers.	Tariffs as per Appendix No. 7, Column No.	Date Supply First Undertaken by Commission.
Country—continued.						
Glen Alvie	Gipps.	A.C., 1 ph. ..	240	22	7	23.12.40
Glengarry	Gipps.	A.C., 3 ph. and 1 ph. ..	150	47	7	14.8.28
Glenormiston	S/W.	A.C., 3 ph. ..	100	19	7	10.9.29
Glenvale	E/M.	A.C., 1 ph. ..	27	14	7	12.4.40
Glen Waverley	E/M.	A.C., 1 ph. ..	350	65	7	1.6.28
Goorambat	N/E.	A.C., 1 ph. ..	73	18	7	19.2.40
Gordon	Ball.	A.C., 1 ph. ..	300	25	7	29.5.40
Gormandale	Gipps.	A.C., 3 ph. and 1 ph. ..	250	66	7	14.10.38
Gnotuk	S/W.	A.C., 1 ph. ..	120	16	7	—3.36
Grahamvale	N/E.	A.C., 1 ph. ..	(See Shepparton East)		7	20.7.37
Grassy Spur	Gipps.	A.C., 1 ph. ..	30	11	7	26.10.39
Greensborough	E/M.	A.C., 3 ph. ..	795	218	6	23.3.26
Greenvale	Metro.	A.C., 1 ph. ..	500	9	7	15.7.38
Hallam	E/M.	A.C., 1 ph. ..	108	35	7	27.8.37
Harcourt	Mid.	A.C., 3 ph. ..	380	42	7	9.4.33
Harkaway	E/M.	A.C., 1 ph. ..	60	15	7	31.7.40
Harrietville†	N/E.	A.C., 3 ph. ..	150	25	7	29.6.40
Harrisfield	E/M.	A.C., 1 ph. ..	261	21	7	22.10.35
Hastings	E/M.	A.C., 1 ph. ..	535	110	7	28.3.27
Haunted Hills	Gipps.	A.C., 1 ph. ..	320	68	7	18.9.36
Hawkesdale	S/W.	A.C., 1 ph.* ..	220	11	7	26.4.40
Hazelwood	Gipps.	A.C., 1 ph. ..	160	60	7	9.9.36
Hazelwood North	Gipps.	A.C., 1 ph. ..	100	43	7	21.12.37
Healesville	E/M.	A.C., 3 ph. and 1 ph. ..	1,362	544	6	1.4.33
Heathmont	E/M.	A.C., 1 ph. ..	85	24	8	25.3.37
Hepburn Springs	Ball.	A.C., 3 ph. ..	500	215	6	1.10.40
Hexham	S/W.	A.C., 1 ph.* ..	120	9	7	8.7.38
Heyfield	Gipps.	A.C., 3 ph. and 1 ph. ..	850	166	7	15.9.24
Hillside	Gipps.	A.C., 1 ph. ..	50	16	7	29.5.36
Illowa	S/W.	A.C., 1 ph.* ..	100	10	7	30.9.37
Inverloch	Gipps.	A.C., 1 ph. ..	450	116	7	1.10.34
Irrewarra	S/W.	A.C., 1 ph.* ..	150	14	7	23.2.26
Jancourt	S/W.	A.C., 1 ph. ..	50	4	7	25.5.39
Jindivick	Gipps.	A.C., 1 ph. ..	180	71	7	23.8.38
Johnsonville	Gipps.	A.C., 1 ph. ..	120	30	7	24.1.36
Jordanville	E/M.	A.C., 1 ph. ..	56	14	7	7.10.38
Joyce's Creek	Mid.	A.C., 1 ph. ..	54	2	7	16.12.39
Jumbunna	Gipps.	A.C., 1 ph. ..	400	53	7	24.10.30
Kalimna Point	Gipps.	A.C., 1 ph. ..	140	15	7	6.12.28
Kalkallo	E/M.	A.C., 1 ph. ..	26	5	7	11.3.41
Kallista	E/M.	A.C., 1 ph. ..	228	99	7	19.8.27
Kalorama	E/M.	A.C., 1 ph. ..	211	64	7	31.5.34
Kardella	Gipps.	A.C., 1 ph. ..	50	3	7	23.9.36
Kariah	S/W.	A.C., 1 ph.* ..	20	4	7	12.11.38
Katamatite	N/E.	A.C., 1 ph. ..	238	39	7	14.7.39
Keilor	Mid.	A.C., 1 ph. ..	301	41	7	21.11.35
Kiewa	N/E.	A.C., 1 ph. ..	155	40	7	12.4.39
Killarney	S/W.	A.C., 1 ph.* ..	80	9	7	14.5.35
Kilmany South	Gipps.	A.C., 1 ph. ..	100	7	7	1.7.39
Kilsyth	E/M.	A.C., 1 ph. ..	151	44	8	1.4.25
Kingston	Ball.	A.C., 1 ph. ..	270	16	7	16.9.39
Kirkstall	S/W.	A.C., 1 ph.* ..	80	4	7	9.4.40
Kolara	S/W.	A.C., 1 ph.* ..	70	13	7	21.3.25
Kongwak	Gipps.	A.C., 3 ph. and 1 ph. ..	220	59	7	10.10.30
Koonwarra	Gipps.	A.C., 1 ph. ..	100	16	7	24.9.40
Koo-wee-rup	Gipps.	A.C., 3 ph. and 1 ph. ..	700	169	7	31.7.35
Koroit	S/W.	A.C., 3 ph. ..	1,700	219	6	1.12.28
Korrine	Gipps.	A.C., 1 ph. ..	40	7	7	19.12.40
Korumburra	Gipps.	A.C., 3 ph. and 1 ph. ..	3,000	597	6	1.12.24
Korumburra Rural	Gipps.	A.C., 1 ph. ..	100	7	7	1.11.35
Kyabram	N/E.	A.C., 3 ph. ..	2,170	590	6	1.12.26
Kyneton	Mid.	A.C., 3 ph. ..	4,146	837	5	1.10.29
Ky Valley	N/E.	A.C., 1 ph. ..	250	11	7	27.7.40
Lake Bolac	S/W.	A.C., 1 ph.* ..	150	38	7	5.8.38
Lake Gillear	S/W.	A.C., 1 ph.* ..	50	3	7	8.7.38
Lakes Entrance	Gipps.	A.C., 1 ph. ..	950	190	7	19.12.28
Lancaster	N/E.	A.C., 1 ph. ..	118	13	7	—6.35
Lancefield	Mid.	A.C., 3 ph. and 1 ph. ..	708	110	7	27.3.29
Lang Lang	Gipps.	A.C., 3 ph. and 1 ph. ..	800	127	7	2.9.35
Lara	Geel.	A.C., 3 ph. ..	300	53	8	1.9.30
Lara Lake	Geel.	A.C., 3 ph. ..	(See Lara)		8	1.9.30
Lardner	Gipps.	A.C., 1 ph. ..	100	34	7	7.2.39
Lauriston	Mid.	A.C., 3 ph. ..	175	29	7	7.2.39
Laverton	Metro.	A.C., 1 ph. ..	400	62	7	22.11.38
Learmonth	Ball.	A.C., 3 ph. ..	350	49	7	19.3.38
Leigh Creek	Ball.	A.C., 1 ph. ..	36	6	7	27.8.40
Lemnos	N/E.	A.C., 1 ph. ..	412	27	7	—12.38
Leongatha	Gipps.	A.C., 3 ph. ..	2,000	592	6	15.2.25
Leongatha Rural	Gipps.	A.C., 1 ph. ..	50	43	7	1.8.28
Leongatha South	Gipps.	A.C., 1 ph. ..	150	39	7	24.9.40
Leopold	Geel.	A.C., 1 ph. ..	(See Drysdale)		7	13.2.24
Lilydale	E/M.	A.C., 3 ph. and 1 ph. ..	1,292	439	6	1.4.25

CENTRES SERVED BY STATE ELECTRICITY COMMISSION OF VICTORIA—continued.

Municipality or Centre.	Branch.	System of Supply.	Population.	Number of Consumers.	Tariffs as per Appendix No. 7, Column No.	Date Supply First Undertaken by Commission.
Country—continued.						
Lindenow	Gipps.	A.C., 1 ph.	400	80	7	6.4.35
Linton	Ball.	A.C., 3 ph.	450	52	7	7.9.39
Lismore	S/W.	A.C., 1 ph.	450	63	7	26.4.38
Lismore Rural	S/W.	A.C., 1 ph.*	600	115	7	26.4.38
Loch	Gipps.	A.C., 1 ph.	350	95	7	18.8.30
Lockwood	E/M.	A.C., 1 ph.	164	63	7	23.12.36
Longford	Gipps.	A.C., 3 ph.	50	3	7	8.3.35
Longwarry	Gipps.	A.C., 3 ph. and 1 ph. ..	360	93	7	11.10.28
Lorne	S/W.	A.C., 3 ph. and 1 ph. ..	450	319	6	15.12.36
Lorne Rural	S/W.	A.C., 3 ph. and 1 ph.* ..	220	16	7	24.12.36
Lovely Banks	Geel.	A.C., 1 ph.	100	4	7	17.5.41
Lower Ferntree Gully	E/M.	A.C., 3 ph. and 1 ph. ..	785	217	6	24.8.25
Lower Plenty	E/M.	A.C., 1 ph.	128	39	7	13.3.28
Lucknow	Gipps.	A.C., 3 ph.	150	48	5	—, 8.27
Lyndhurst	E/M.	A.C., 3 ph.	158	5	7	19.1.38
Lysterfield	E/M.	A.C., 3 ph. and 1 ph. ..	113	17	7	17.7.37
Macarthur	S/W.	A.C., 1 ph.	350	54	7	3.4.40
Macarthur Rural	S/W.	A.C., 1 ph.	450	74	7	3.4.40
Macedon	Mid.	A.C., 3 ph. and 1 ph. ..	1,514	252	7	14.6.29
Maffra	Gipps.	A.C., 3 ph.	2,400	577	6	1.9.24
Maffra Rural	Gipps.	A.C., 1 ph.	300	32	7	14.8.28
Maldon	Mid.	A.C., 3 ph. and 1 ph. ..	1,030	155	7	1.7.36
Malmsbury	Mid.	A.C., 1 ph.	742	32	7	22.12.37
Mansfield	N/E.	A.C., 1 ph.	836	263	6	1.6.28
Mardan	Gipps.	A.C., 1 ph.	150	27	7	31.7.36
Marshall	Geel.	A.C., 1 ph.	70	17	7	6.10.39
Maryborough	Mid.	A.C., 3 ph.	6,500	1,270	5	1.10.37
Maryvale	Gipps.	A.C., 3 ph. and 1 ph. ..	80	16	7	6.8.37
Meenyan	Gipps.	A.C., 1 ph.	300	94	7	14.9.36
Melton	Mid.	A.C., 3 ph. and 1 ph. ..	357	78	7	20.12.39
Melton South	Mid.	A.C., 1 ph.	(See Melton)		7	31.1.40
Mernda	E/M.	A.C., 1 ph.	220	25	7	28.9.37
Merricks North	E/M.	A.C., 1 ph.	17	12	7	24.5.40
Merrigum	N/E.	A.C., 3 ph.	329	100	7	22.2.27
Metropolitan Farm (Werribee)	Metro.	A.C., 3 ph. and 1 ph. ..	325	36	8	15.12.33
Metung	Gipps.	A.C., 1 ph.	150	33	7	23.12.35
Mickleham	Metro.	A.C., 1 ph.	84	4	7	12.6.39
Milawa	N/E.	A.C., 3 ph. and 1 ph. ..	100	21	7	27.7.39
Miner's Rest	Ball.	A.C., 1 ph.	60	8	7	14.2.38
Mirboo	Gipps.	A.C., 1 ph.	70	39	7	7.8.39
Mirboo East	Gipps.	A.C., 1 ph.	70	10	7	1.8.40
Mirboo North	Gipps.	A.C., 3 ph. and 1 ph. ..	700	183	7	1.10.24
Moe	Gipps.	A.C., 3 ph.	1,050	330	6	23.9.23
Moe East	Gipps.	A.C., 1 ph.	160	33	7	24.6.38
Moe Rural	Gipps.	A.C., 1 ph.	300	36	7	14.7.30
Monbulk	E/M.	A.C., 1 ph.	291	82	7	30.11.36
Monegeetta	Mid.	A.C., 1 ph.	76	15	7	3.5.29
Monomeith	Gipps.	A.C., 1 ph.	70	21	7	17.1.36
Montmorency	E/M.	A.C., 1 ph.	407	122	6	11.5.26
Montrose	E/M.	A.C., 3 ph. and 1 ph. ..	325	94	8	1.4.25
Moolap	Geel.	A.C., 1 ph.	(See Drysdale)		7	30.1.25
Moolort	Mid.	A.C., 1 ph.	83	5	7	14.2.38
Moorooduc	E/M.	A.C., 3 ph.	23	17	7	2.3.25
Mooroolbark	E/M.	A.C., 1 ph.	54	11	7	16.9.36
Mooroopna	N/E.	A.C., 3 ph.	1,733	269	6	1.10.26
Morang South	E/M.	A.C., 1 ph.	230	23	7	28.9.37
Mornington	E/M.	A.C., 3 ph. and 1 ph. ..	2,385	789	5	1.8.30
Mortlake	S/W.	A.C., 3 ph.	1,000	261	6	1.5.24
Morwell	Gipps.	A.C., 3 ph. and 1 ph. ..	2,400	599	5	1.4.26
Morwell Bridge	Gipps.	A.C., 1 ph.	250	58	7	26.11.28
Mossiface	Gipps.	A.C., 1 ph.	160	13	7	1.10.30
Mountain View	Gipps.	A.C., 1 ph.	100	9	7	14.6.40
Moyarra	Gipps.	A.C., 1 ph.	100	22	7	26.6.30
Moyne View	S/W.	A.C., 1 ph.*	30	4	7	27.5.37
Mt. Dandenong	E/M.	A.C., 1 ph.	131	105	7	20.6.33
Mt. Duneed	Geel.	A.C., 1 ph.*	40	7	7	5.10.39
Mt. Eliza	E/M.	A.C., 3 ph. and 1 ph. ..	524	175	8	21.2.28
Mt. Evelyn	E/M.	A.C., 1 ph.	356	82	7	9.1.28
Mt. Martha	E/M.	A.C., 1 ph.	414	157	8	1.8.30
Mt. Waverley	E/M.	A.C., 1 ph.	154	37	7	1.6.28
Myer's Flat	Bend.	A.C., 1 ph.	20	7	7	29.6.40
Myrtlebank	Gipps.	A.C., 1 ph.	50	26	7	3.3.38
Myrtleford	N/E.	A.C., 3 ph.	850	233	6	2.12.40
Nalangil	S/W.	A.C., 1 ph.*	100	22	7	19.12.24
Nanneella	N/E.	A.C., 1 ph.	513	100	7	17.10.38
Nar-Nar-Goon	Gipps.	A.C., 1 ph.	250	65	7	23.5.34
Narracan East	Gipps.	A.C., 1 ph.	52	10	7	23.7.40
Narre Warren	E/M.	A.C., 1 ph.	120	40	7	13.11.28
Narre Warren North	E/M.	A.C., 1 ph.	105	13	7	10.11.38
Nathalia	N/E.	A.C., 3 ph.	1,051	205	6	1.10.31
Nayook	Gipps.	A.C., 1 ph.	80	17	7	15.1.35
Neerim	Gipps.	A.C., 1 ph.	170	33	7	15.1.35
Neerim East	Gipps.	A.C., 1 ph.	90	47	7	21.12.36
Neerim Junction	Gipps.	A.C., 1 ph.	150	37	7	3.5.35
Neerim North	Gipps.	A.C., 1 ph.	50	18	7	11.4.38

CENTRES SERVED BY STATE ELECTRICITY COMMISSION OF VICTORIA—continued.

Municipality or Centre.	Branch.	System of Supply.	Population.	Number of Consumers.	Tariffs as per Appendix No. 7, Column No.	Date Supply First Undertaken by Commission.
Country—continued.						
Neerim South	Gipps.	A.C., 1 ph.	450	172	7	15.1.35
New Gisborne	Mid.	A.C., 1 ph.	239	29	7	1.3.29
Newry	Gipps.	A.C., 3 ph. and 1 ph. ..	350	63	7	25.10.26
Newstead	Mid.	A.C., 3 ph.	391	74	7	20.4.37
Nicholson	Gipps.	A.C., 1 ph.	80	3	7	12.12.34
Nilma	Gipps.	A.C., 1 ph.	180	49	7	23.12.27
Noble Park	E/M.	A.C., 3 ph.	1,466	233	5	5.12.24
Noojee	Gipps.	A.C., 1 ph.	120	34	7	15.1.35
Noorat	S/W.	A.C., 3 ph.	320	88	7	5.12.24
North Wonthaggi (portion only) ..	Gipps.	A.C., 1 ph.	30	5	7	17.2.41
Notting Hill	E/M.	A.C., 1 ph.	195	30	7	21.7.27
Numurkah	N/E.	A.C., 3 ph.	1,611	396	6	1.10.31
Nyora	Gipps.	A.C., 1 ph.	200	47	7	1.10.35
Oaklands Junction	Metro.	A.C., 1 ph.	10	1	7	10.12.35
Ocean Grove	Geel.	A.C., 1 ph.	300	120	7	27.9.24
Officer	E/M.	A.C., 1 ph.	170	38	7	12.4.28
Olinda	E/M.	A.C., 1 ph.	451	174	6	30.9.27
Orrvale	N/E.	A.C., 1 ph.	(See Shepparton East)	7	7	20.2.36
Outtrim	Gipps.	A.C., 1 ph.	200	20	7	13.11.39
Pakenham	E/M.	A.C., 1 ph.	550	149	7	18.6.28
Panmure	S/W.	A.C., 1 ph.*	200	22	7	3.9.37
Paynesville	Gipps.	A.C., 3 ph. and 1 ph. ..	450	56	7	25.2.38
Penshurst	S/W.	A.C., 1 ph.	720	108	7	16.9.38
Penshurst Rural	S/W.	A.C., 1 ph.	400	62	7	16.9.38
Picola	N/E.	A.C., 1 ph.	180	12	7	1.11.40
Pirron Yallock	S/W.	A.C., 1 ph.*	50	6	7	21.12.36
Point Cook (portion only)	Metro.	A.C., 1 ph.	12	3	7	1.7.40
Point Lonsdale	Geel.	A.C., 3 ph. and 1 ph. ..	250	169	7	30.12.23
Pomborneit North	S/W.	A.C., 1 ph.	100	20	7	1.9.26
Pomborneit South	S/W.	A.C., 1 ph.*	90	12	7	1.9.26
Poowong	Gipps.	A.C., 1 ph.	350	109	7	11.9.30
Poowong East	Gipps.	A.C., 1 ph.	50	22	7	17.10.38
Portarlington	Geel.	A.C., 1 ph.	800	132	7	27.2.24
Port Fairy	S/W.	A.C., 3 ph.	1,850	405	6	21.12.28
Port Fairy North	S/W.	A.C., 3 ph. and 1 ph. ..	(See Port Fairy)	6	7	—, 7.36
Port Fairy Rural	S/W.	A.C., 3 ph. and 1 ph.* ..	560	94	7	10.11.30
Port Franklin	Gipps.	A.C., 1 ph.	150	27	7	23.7.38
Portsea	E/M.	A.C., 3 ph.	486	147	6	1.10.27
Powlett River (portion only) ..	Gipps.	A.C., 1 ph.	40	8	7	17.1.41
Queenscliff	Geel.	A.C., 3 ph.	2,950	562	6	30.12.23
Ranceby	Gipps.	A.C., 1 ph.	60	4	7	23.6.41
Raywood	Bend.	A.C., 1 ph.	160	31	7	3.7.40
Red Hill	E/M.	A.C., 3 ph. and 1 ph. ..	388	67	7	30.6.37
Research	E/M.	A.C., 1 ph.	96	5	7	24.5.40
Riddell	Mid.	A.C., 1 ph.	361	49	7	7.3.29
Ringwood	E/M.	A.C., 3 ph. and 1 ph. ..	3,713	916	8	1.4.25
Rochester	N/E.	A.C., 3 ph.	1,826	387	6	1.8.35
Rockbank	Mid.	A.C., 3 ph. and 1 ph. ..	99	17	7	3.4.39
Rokeby	Gipps.	A.C., 3 ph. and 1 ph. ..	50	8	7	4.4.35
Romsey	Mid.	A.C., 3 ph. and 1 ph. ..	727	120	7	19.3.29
Rosebrook	S/W.	A.C., 1 ph.*	180	12	7	30.9.36
Rosebud	E/M.	A.C., 3 ph. and 1 ph. ..	1,567	493	6	8.12.27
Rosedale	Gipps.	A.C., 1 ph.	500	82	7	15.8.27
Rubicon	N/E.	A.C., 1 ph.	62	2	7	4.9.27
Ruby	Gipps.	A.C., 1 ph.	70	26	7	19.4.28
Rutherglen	N/E.	A.C., 3 ph.	1,402	311	6	15.10.26
Ryanstown	Gipps.	A.C., 1 ph.	150	5	7	14.1.41
Rye	E/M.	A.C., 1 ph.	268	99	7	16.12.27
Sale	Gipps.	A.C., 3 ph.	5,000	1,103	5	1.7.24
Sale Rural	Gipps.	A.C., 1 ph.	200	52	7	12.12.28
Sassafras	E/M.	A.C., 3 ph. and 1 ph. ..	581	188	6	9.7.27
Scarsdale	Ball.	A.C., 1 ph.	230	9	7	5.9.39
Scoresby	E/M.	A.C., 1 ph.	103	16	7	23.9.37
Seaford	E/M.	A.C., 3 ph. and 1 ph. ..	1,027	299	8	21.2.28
Selby	E/M.	A.C., 1 ph.	90	25	7	12.12.35
Shepparton	N/E.	A.C., 3 ph.	7,590	1,818	5	1.1.25
Shepparton East	N/E.	A.C., 1 ph.	1,263	195	7	25.2.36
Sherbrooke	E/M.	A.C., 1 ph.	159	46	7	29.7.27
Shoreham	E/M.	A.C., 1 ph.	29	5	7	24.5.40
Silvan	E/M.	A.C., 3 ph. and 1 ph. ..	208	36	7	13.6.28
Skipton	Ball.	A.C., 3 ph.	588	65	7	27.10.39
Smeaton	Ball.	A.C., 1 ph.	200	35	7	16.4.38
Smythesdale	Ball.	A.C., 1 ph.	280	14	7	2.9.39
Somers	E/M.	A.C., 1 ph.	192	63	7	24.12.35
Somerton	Metro.	A.C., 1 ph.	84	6	7	22.7.38
Somerville	E/M.	A.C., 3 ph. and 1 ph. ..	371	72	7	19.12.26
Sorrento	E/M.	A.C., 3 ph. and 1 ph. ..	1,337	428	6	1.10.27
South Belgrave	E/M.	A.C., 1 ph.	145	11	7	17.2.37
South Gisborne	Mid.	A.C., 3 ph. and 1 ph. ..	(See Gisborne)	7	7	1.5.37
South Purrumbete	S/W.	A.C., 1 ph.*	200	4	7	25.5.39
Southern Cross	S/W.	A.C., 1 ph.*	20	6	7	31.8.38
Springhurst	N/E.	A.C., 3 ph.	229	45	7	6.9.26

CENTRES SERVED BY STATE ELECTRICITY COMMISSION OF VICTORIA—continued.

Municipality or Centre.	Branch.	System of Supply.	Population.	Number of Consumers.	Tariffs as per Appendix No. 7, Column No.	Date Supply First Undertaken by Commission.
Country—continued.						
Springvale	E/M.	A.C., 3 ph. and 1 ph. ..	2,194	567	6	5.12.24
St. Albans	Mid.	A.C., 3 ph. and 1 ph. ..	820	123	8	14.2.30
St. James	N/E.	A.C., 3 ph.	260	31	7	14.2.40
Stanhope	N/E.	A.C., 3 ph.	402	96	7	14.6.38
Stavely	S/W.	A.C., 1 ph.*	20	2	7	8.11.40
Stoneyford	S/W.	A.C., 1 ph.*	100	8	7	20.12.37
Stony Creek	Gipps.	A.C., 1 ph.	70	26	7	14.9.36
Stratford	Gipps.	A.C., 3 ph. and 1 ph. ..	900	158	7	20.12.26
Strathallan	N/E.	A.C., 1 ph.	30	2	7	5.11.35
Strathmerton	N/E.	A.C., 1 ph.	170	19	7	19.2.35
Streatham	S/W.	A.C., 1 ph.*	180	19	7	28.9.39
Sunbury	Mid.	A.C., 3 ph.	1,250	225	6	1.5.26
Swan Marsh	S/W.	A.C., 1 ph.*	100	15	7	4.6.37
Swan Reach	Gipps.	A.C., 1 ph.	120	34	7	11.7.30
Sydenham	Mid.	A.C., 3 ph. and 1 ph. ..	97	18	7	14.10.38
Talbot	Mid.	A.C., 1 ph.	432	63	7	27.8.38
Tallangatta	N/E.	A.C., 3 ph.	850	214	6	1.11.40
Tallygaroopna	N/E.	A.C., 1 ph.	228	15	7	22.10.33
Tally Ho	E/M.	A.C., 3 ph.	50	20	7	9.3.28
Tambo Upper	Gipps.	A.C., 1 ph.	100	13	7	24.12.37
Tandarook	S/W.	A.C., 1 ph.	50	4	7	25.5.39
Tangambalanga	N/E.	A.C., 3 ph.	170	31	7	12.4.39
Tangil South	Gipps.	A.C., 1 ph.	100	29	7	27.5.37
Tarago	Gipps.	A.C., 1 ph.	50	13	7	23.8.38
Tatura	N/E.	A.C., 3 ph.	1,506	317	6	1.11.26
Tecoma	E/M.	A.C., 3 ph.	(See Belgrave)		5	3.9.28
Teetora Road	Gipps.	A.C., 1 ph.	50	5	7	27.5.41
Terang	S/W.	A.C., 3 ph. and 1 ph. ..	2,350	585	6	7.3.24
Terang Rural	S/W.	A.C., 3 ph. and 1 ph. ..	900	243	7	9.1.36
Tesbury	S/W.	A.C., 1 ph.*	200	3	7	15.5.39
The Basin	E/M.	A.C., 1 ph.	242	15	7	13.9.39
Thomastown	E/M.	A.C., 3 ph.	145	35	7	1.6.28
Thornton	N/E.	A.C., 1 ph.	170	62	7	19.7.27
Thorpdale	Gipps.	A.C., 1 ph.	200	36	7	23.12.37
Tinamba	Gipps.	A.C., 1 ph.	360	103	7	11.7.28
Tongala	N/E.	A.C., 3 ph.	478	193	7	12.9.26
Toolamba West	N/E.	A.C., 1 ph.	(See Ardmona)		7	1.12.39
Toongabbie	Gipps.	A.C., 1 ph.	200	28	7	11.3.29
Toora	Gipps.	A.C., 3 ph. and 1 ph. ..	450	144	7	10.5.38
Tooradin	Gipps.	A.C., 1 ph.	200	47	7	14.1.37
Toorloo Arm	Gipps.	A.C., 1 ph.	50	5	7	13.2.40
Torquay	Geol.	A.C., 3 ph.	300	174	7	1.9.30
Torwood	Gipps.	A.C., 1 ph.	50	18	7	22.1.40
Tourello	Ball.	A.C., 1 ph.	14	2	7	10.8.38
Tower Hill	S/W.	A.C., 1 ph.*	40	6	7	30.6.35
Trafalgar	Gipps.	A.C., 3 ph.	1,150	344	6	16.10.23
Trafalgar Rural	Gipps.	A.C., 1 ph.	400	109	7	3.4.28
Traralgon	Gipps.	A.C., 3 ph. and 1 ph. ..	3,200	902	5	24.11.23
Traralgon Rural	Gipps.	A.C., 1 ph.	200	17	7	27.11.28
Traralgon South	Gipps.	A.C., 1 ph.	120	25	7	12.8.37
Tremont	E/M.	A.C., 1 ph.	400	90	7	2.9.27
Trentham	Mid.	A.C., 3 ph.	868	159	7	8.5.39
Triholm	Gipps.	A.C., 1 ph.	70	18	7	17.10.38
Tullamarine (portion only)	Metro.	A.C., 1 ph.	5	1	7	18.3.39
Tungamah	N/E.	A.C., 3 ph.	308	58	7	14.2.40
Tyabb	E/M.	A.C., 1 ph.	251	38	7	20.1.28
Tyers	Gipps.	A.C., 3 ph. and 1 ph. ..	260	67	7	15.10.23
Tylden	Mid.	A.C., 1 ph.	256	24	7	6.7.39
Tynong	Gipps.	A.C., 1 ph.	300	67	7	14.1.29
Upper Beaconsfield	E/M.	A.C., 1 ph.	310	60	7	—, 8.34
Upper Ferntree Gully	E/M.	A.C., 3 ph. and 1 ph. ..	1,058	231	6	24.8.25
Upper Maffra West	Gipps.	A.C., 1 ph.	300	41	7	6.10.37
Upwey	E/M.	A.C., 3 ph. and 1 ph. ..	1,401	360	5	24.8.25
Valencia Creek	Gipps.	A.C., 1 ph.	100	13	7	11.6.38
Violet Town	N/E.	A.C., 3 ph.	680	119	7	2.3.36
Waaiia	N/E.	A.C., 1 ph.	50	12	7	5.11.40
Wahgunyah	N/E.	A.C., 3 ph.	560	90	7	1.2.26
Wallace	Ball.	A.C., 3 ph.	150	22	7	17.5.40
Walpa	Gipps.	A.C., 1 ph.	50	11	7	16.5.35
Wangaratta	N/E.	A.C., 3 ph.	5,721	1,331	5	12.3.27
Wangaratta North	N/E.	A.C., 3 ph.	26	8	7	20.5.36
Wangaratta South	N/E.	A.C., 3 ph.	57	1	7	3.5.38
Wangoom	S/W.	A.C., 1 ph.*	200	4	7	9.5.39
Wantirna	E/M.	A.C., 3 ph.	86	13	7	1.2.28
Warnooort	S/W.	A.C., 1 ph.*	30	7	7	19.12.25
Warragul	Gipps.	A.C., 3 ph. and 1 ph. ..	3,100	859	5	1.12.30
Warragul Rural	Gipps.	A.C., 1 ph.	100	85	7	19.6.28
Warrandyte	E/M.	A.C., 1 ph.	288	124	7	21.12.35
Warrior	S/W.	A.C., 1 ph.*	80	16	7	18.8.24
Warrnambool	S/W.	A.C., 3 ph. and 1 ph. ..	9,500	2,304	5	30.12.23
Warrnambool Rural	S/W.	A.C., 3 ph. and 1 ph.* ..	250	26	7	9.1.36
Warrong	S/W.	A.C., 1 ph.*	20	3	7	20.4.40
Watsonia	E/M.	A.C., 3 ph.	83	32	7	24.3.26
Waubra	Ball.	A.C., 1 ph.	110	15	7	18.12.40

CENTRES SERVED BY STATE ELECTRICITY COMMISSION OF VICTORIA—continued.

Municipality or Centre.	Branch.	System of Supply.	Population.	Number of Consumers.	Tariffs as per Appendix No. 7, Column No.	Date Supply First Undertaken by Commission.
Country—continued.						
Weerite	S/W.	A.C., 3 ph. ..	30	7	7	8.6.28
Welshpool	Gipps.	A.C., 3 ph. and 1 ph. ..	300	70	7	15.8.38
Werribee	Metro.	A.C., 3 ph. and 1 ph. ..	2,800	658	5	10.4.24
Werribee South	Metro.	A.C., 3 ph. and 1 ph. ..	468	79	8	24.11.36
Westbury	Gipps.	A.C., 1 ph. ..	60	10	7	27.5.37
Westmere	S/W.	A.C., 1 ph.* ..	50	12	7	30.9.38
Wheeler's Hill	E/M.	A.C., 1 ph. ..	124	25	7	1.2.26
Whittlesea	E/M.	A.C., 1 ph. ..	360	74	7	28.9.37
Willatook	S/W.	A.C., 1 ph.* ..	20	3	7	23.5.40
Willaura	S/W.	A.C., 1 ph. ..	400	87	7	23.9.38
Willaura Rural	S/W.	A.C., 1 ph. ..	1,000	150	7	23.9.38
Willowgrove	Gipps.	A.C., 1 ph. ..	50	32	7	22.5.39
Winchelsea	S/W.	A.C., 1 ph. ..	700	103	7	30.6.24
Wiseleigh	Gipps.	A.C., 1 ph. ..	130	8	7	24.10.30
Wodonga	N/E.	A.C., 3 ph. ..	3,381	557	6	1.11.33
Wonga Park	E/M.	A.C., 1 ph. ..	79	3	7	18.5.38
Woodend	Mid.	A.C., 3 ph. and 1 ph. ..	1,466	295	6	1.8.29
Woodglan	Gipps.	A.C., 1 ph. ..	30	7	7	16.4.40
Wool Wool	S/W.	A.C., 3 ph. ..	30	8	7	15.10.24
Woorndoo	S/W.	A.C., 1 ph.* ..	40	5	7	8.12.38
Wunghnu	N/E.	A.C., 1 ph. ..	210	20	7	—, 10.33
Wy Yung	Gipps.	A.C., 3 ph. and 1 ph. ..	50	8	7	28.9.28
Yackandandah	N/E.	A.C., 3 ph. ..	363	93	7	20.12.39
Yallock	Gipps.	A.C., 1 ph. ..	100	2	7	25.11.37
Yangery	S/W.	A.C., 1 ph.* ..	120	6	7	22.6.38
Yannathan	Gipps.	A.C., 1 ph. ..	270	80	7	8.2.36
Yan Yean	E/M.	A.C., 1 ph. ..	110	16	7	28.9.37
Yarra Glen	E/M.	A.C., 1 ph. ..	315	55	7	15.3.34
Yarragon	Gipps.	A.C., 3 ph. and 1 ph. ..	600	169	7	1.11.23
Yarrawonga	N/E.	A.C., 3 ph. ..	2,874	512	6	1.8.25
Yering	E/M.	A.C., 1 ph. ..	15	11	7	24.2.34
Yeringberg	E/M.	A.C., 1 ph. ..	20	10	7	7.7.33
Yinnar	Gipps.	A.C., 3 ph. and 1 ph. ..	450	136	7	28.11.27

* = 230 V. only.

† = Non-permanent supply.

ABBREVIATIONS.

Abbreviations.	Branch Title.	Location of Branch Headquarters.	Telephone.
Metro.	Metropolitan	238-242 Flinders-street, Melbourne	Cent. 10310
Ball.	Ballarat	1-7 Wendouree-parade, Ballarat	1825
Bend.	Bendigo	Cr. Hargreaves and Williamson streets, Bendigo	1700
E/M.	Eastern Metropolitan	197 Lonsdale-street, Dandenong	182
Geel.	Geelong	Corio-terrace, Geelong	1941
Gipps.	Gippsland	108-116 Franklin-street, Traralgon	114
Mid.	Midland	40 Lyttleton-street, Castlemaine	238
N/E.	North-Eastern	80 Bridge-street, Benalla	192
S/W.	South Western	119-121 Murray-street, Colac	660

System of Supply.—A.C. Single-phase—Metropolitan area, 200-400 volts.

Other areas, 230-460 volts.

A.C. Three-phase, 230-400 volts.

D.C. Three-wire, 230-460 volts.

ELECTRICITY SUPPLY UNDERTAKINGS (MUNICIPAL AND PRIVATE).

Municipality or Centre.	Supply Authority.	System of Supply.	Population.	Number of Consumers.	Tariffs.
METROPOLITAN.					
Supplied in Bulk by State Electricity Commission.					
City of Melbourne (excl. Flemington)	Melbourne City Council ..	{ D.C., 230-460 v. A.C., 3 ph., 230-400 v. }	74,900	26,389	Metropolitan Standard Tariffs apply in all these territories with the exception of that of the Melbourne City Council, which has the following Metropolitan Standard Tariffs only:—Residential, All Purposes, Night Rate Water Heating. In addition to the above, the Melbourne City Council has Tariffs different from Standard for commercial and industrial lighting, radiators, and power and heating.
Box Hill, Blackburn and Mitcham Shire	Box Hill City Council ..	A.C., 3 ph., 230-400 v.	24,120	6,918	
Brunswick ..	Brunswick City Council ..	A.C., 3 ph., 230-400 v.	55,100	14,362	
Coburg ..	Coburg City Council ..	A.C., 3 ph., 230-400 v.	45,000	11,843	
Footscray and part of Braybrook Shire	Footscray City Council ..	A.C., 3 ph., 230-400 v.	58,000	13,540	
Heidelberg (excl. Greensborough)	Heidelberg City Council ..	A.C., 3 ph., 230-400 v.	26,250	7,453	
Northcote ..	Northcote City Council ..	A.C., 3 ph., 230-400 v.	43,400	11,507	
Port Melbourne	Port Melbourne City Council ..	A.C., 3 ph., 230-400 v.	13,000	3,103	
Preston ..	Preston City Council ..	A.C., 3 ph., 230-400 v.	35,500	9,491	
Williamstown ..	Williamstown City Council ..	A.C., 3 ph., 230-400 v.	22,850	6,860	
			398,120	111,466	
COUNTRY.					
Apollo Bay ..	H. A. Block ..	D.C., 230 v. ..	500	120	1s. 3d. to 1s. .. 6d. to 2½d.
Ararat ..	Ararat Borough Council ..	A.C., 3 ph., 230-400 v.	5,300	1,198	9d. .. 3½d.
*Aspendale, Chelsea, and Carrum	Carrum E.S. Co. Ltd. ..	A.C., 3 ph., 230-400 v.	8,500	2,823	Similar to State Electricity Commission's Frankston centre.
Beaufort ..	Ripon Shire Council ..	A.C., 3 ph., 230-400 v.	1,500	258	9d. .. 3d.
Beechworth ..	Beechworth Shire Council ..	A.C., 3 ph., 230-400 v.	1,850	467	1s. .. 6d.
Berrillilock ..	Wycheproof Shire Council ..	A.C., 3 ph., 230-400 v.	..	(Incl. in Wycheproof)	11d. to 9d. .. 5d. to 2d.
Beulah ..	Karkaroc Shire Council ..	D.C., 230-460 v. ..	550	151	1s. 3d. .. 4d.
Birchip ..	Birchip E.S. Co. Ltd. ..	D.C., 230 v. ..	700	205	1s. .. 6d. to 4d.
Boort ..	Boort Co-op. Butter and Ice Co. Ltd. ..	D.C., 230 v. ..	700	201	1s. 3d. to 9d. .. 6d. to 4½d.
Bright ..	Block and Sons Pty. Ltd. ..	A.C., 3 ph., 230-400 v.	600	165	1s. 3d. to 1s. .. 6d. to 2d.
Broadford ..	Broadford Shire Council ..	D.C., 230 v. ..	1,000	201	9d. .. 6d.
Cardross ..	Mildura City Council ..	A.C., 3 ph., 230-400 v.	..	(Incl. in Mildura)	9½d. to 6½d. .. Dom. 2½d. Ind. 4½d. to 1d.
Casterton ..	Casterton E.S. Co. Pty. Ltd. ..	D.C., 230 v. ..	1,800	434	9d. to 7d. .. 4d. to 1.1d.
Charlton ..	Charlton E.L. and P. Co. Ltd. ..	D.C., 230 v. ..	1,400	380	1s. to 6d. .. 4½d. to 2½d.
Cohuna ..	Gunbower Co-op. Butter Factory and Trading Co. Ltd. ..	A.C., 3 ph., 230-400 v.	1,050	321	1s. to 9d. .. 6d. to 2d.
Coleraine ..	Hamilton E.S. Co. Ltd. ..	A.C., 3 ph., 230-400 v.	900	246	1s. to 9d. .. 6d. to 1.65d.
	Corindhap Hydraulic G.S. Co. N.L. ..	A.C., 3 ph. ..	..	..	No supply to consumers
Corryong ..	Shire of Upper Murray ..	A.C., 3 ph., 230-400 v.	500	187	1s. 3d. .. 6d. to 3d.
Culgoa ..	Wycheproof Shire Council ..	A.C., 3 ph., 230-400 v.	..	(Incl. in Wycheproof)	11d. to 9d. .. 5d. to 2d.
Dimboola ..	Dimboola Shire Council ..	D.C., 230-460 v. ..	1,650	458	1s. to 8d. .. 6d. to 3d.
Donald ..	Donald Shire Council ..	D.C., 230 v. ..	1,700	310	1s. .. 6d. to 2½d.
*Doncaster and Templestowe	Doncaster Shire Council ..	A.C., 1 ph., 200-400 v.	2,700	499	Metropolitan Standard Tariffs
Dumosa ..	Wycheproof Shire Council ..	A.C., 3 ph., 230-400 v.	..	(Incl. in Wycheproof)	11d. to 9d. .. 5d. to 2d.
Edenhope ..	Edenhope E.S. Co. Pty. Ltd. ..	D.C., 230 v. ..	650	77	1s. 3d. .. 9d.
Elmore ..	Elmore E.L. and P. Co. Ltd. ..	D.C., 230 v. ..	800	194	1s. .. 6d. and 4d.
Goroke ..	C. D. Block ..	D.C., 230 v. ..	300	41	1s. 4d. .. 6d.
Gunbower ..	Gunbower Co-op. Butter Factory and Trading Co. Ltd. ..	D.C., 230 v. ..	220	45	1s. to 9d. .. 6d. to 2d.
Hamilton ..	Hamilton E.S. Co. Ltd. ..	{ D.C., 230 v. A.C., 3 ph., 230-400 v. }	6,000	1,462	6d. to 5d. .. 4d. to 1d.
Heathcote ..	McIvor Shire Council ..	D.C., 230-460 v. ..	1,500	226	1s. .. 6d. to 4½d.
Heywood ..	S. F. Block ..	A.C., 3 ph., 230-400 v.	600	85	1s. 3d. to 1s. .. 6d. to 3d.
Hopetoun ..	Karkaroc Shire Council ..	D.C., 230 v. ..	800	191	10d. .. 4d.
Horsham ..	Horsham Borough Council ..	{ D.C., 230-460 v. A.C., 3 ph., 230-400 v. }	6,100	1,463	9d. to 6d. .. 4d. to 1½d.
Inglewood ..	Inglewood Borough Council ..	D.C., 230 v. ..	1,000	213	1s. to 9d. .. 6d. to 2d.
Irymple ..	Mildura City Council ..	A.C., 3 ph., 230-400 v.	..	(Incl. in Mildura)	9½d. to 6½d. .. Dom. 2½d. Ind. 4½d. to 1d.
Jeparit ..	Block and Sons Pty. Ltd. ..	D.C., 230 v. ..	800	255	1s. to 9d. .. 6d. to 4d.
Kaniva ..	Kaniva Shire Council ..	A.C., 3 ph., 230-400 v.	1,200	198	1s. .. 6d. and 5d.
Kerang ..	Kerang Shire Council ..	A.C., 3 ph., 230-400 v.	2,900	709	7d. to 4d. .. 4d. to 1½d.
Kilmore ..	Kilmore Shire Council ..	D.C., 230 v. ..	1,000	232	10d. to 6d. .. 4d.
Koondrook ..	Kerang Shire Council ..	A.C., 3 ph., 230-400 v.	600	96	1s. 3d. .. 9d. to 3½d.
Korong Vale ..	Korong Shire Council ..	A.C., 3 ph., 230-400 v.	..	(See Wedderburn)	1s. .. 5d. to 4d.
Lake Boga ..	Swan Hill Shire Council ..	A.C., 3 ph., 230-400 v.	..	(Incl. in Swan Hill)	1s. 1d. to 6d. .. 5d. to 3d.
Manangatang ..	J. Andrews ..	D.C., 230 v. ..	350	51	1s. 4d. .. 9d. to 1d.
Merbein ..	Mildura City Council ..	A.C., 3 ph., 230-400 v.	..	(Incl. in Mildura)	9½d. to 6½d. .. Dom. 2½d. Ind. 4½d. to 1d.

* Supplied in bulk by State Electricity Commission.

ELECTRICITY SUPPLY UNDERTAKINGS (MUNICIPAL AND PRIVATE)—continued.

Municipality or Centre.	Supply Authority.	System of Supply.	Popu- lation.	Number of Consumers.	Tariffs.	
COUNTRY—con- tinued.					Lighting.	Power.
Mildura ..	Mildura City Council ..	A.C., 3 ph., 230-400 v.	14,500	3,610	City, 7d. to 5½d.; District, 9½d. to 6½d.	City — Dom. 2d., Ind. 4½d. to 0·9d. Dist. —Dom. 2½d., Ind. 4½d. to 1d.
Minyip ..	Dunmunkle Shire Council ..	D.C., 230 v. ..	700	213	1s.	8d. to 2d.
Murchison ..	Waranga Shire Council ..	A.C., 3 ph., 230-400 v.	650	133	1s. 2d. to 9d. ..	5½d. to 2d.
Murrayville ..	Walpeup Shire Council ..	A.C., 3 ph., 230-400 v.	450	78	1s. 3d.	6d. to 2d.
Murtoa ..	Dunmunkle Shire Council ..	D.C., 230 v. ..	1,240	336	9d.	4d. to 2d.
Nagambie ..	Goulburn Shire Council ..	D.C., 230-460 v. ..	800	196	10d.	6d.
Natimuk ..	H. C. Woolmer ..	A.C., 230-400 v. ..	500	103	1s. 3d. to 1s. ..	6d. to 3d.
Nhill ..	Lowan Shire Council ..	D.C., 230-460 v. ..	1,990	482	9d.	5d. to 2d.
Nullawil ..	Wycheproof Shire Council ..	A.C., 3 ph., 230-400 v.	..	(Incl. in Wycheproof)	11d. to 9d. ..	5d. to 2d.
Nyah and Nyah West	Swan Hill Shire Council ..	A.C., 3 ph., 230-400 v.	..	(Incl. in Swan Hill)	1s. 1d. to 6d.	5d. to 3d.
Omeo ..	Omeo E.S. and Motor Co. Pty. Ltd.	A.C., 3 ph., 230-400 v.	500	133	1s. 3d.	6d. to 4d.
Orbost ..	Orbost Butter Produce Co. Ltd.	D.C., 230 v. ..	1,600	399	10d. to 8d. ..	5d. to 3d.
Ouyen ..	Walpeup Shire Council ..	D.C., 230-460 v. ..	1,100	242	11d.	3d. to 2d.
Phillip Island ..	Phillip Island Shire Council ..	A.C., 3 ph., 230-400 v.	1,200	127	1s. 1½d.	7d.
Portland ..	Portland Borough Council ..	A.C., 3 ph., 230-400 v.	3,000	773	10d. to 7d. ..	5d. to 3d.
Pyramid ..	Gordon Shire Council ..	A.C., 3 ph., 230-400 v.	550	96	1s. 3d. to 6d.	6d. to 3d.
Quambatook ..	Kerang Shire Council ..	D.C., 230 v. ..	500	115	1s. 1d. to 1s. ..	6d. to 4d.
Rainbow ..	Rainbow E.L. Co. ..	D.C., 230 v. ..	1,000	187	1s. to 8d. ..	6d.
Red Cliffs ..	Mildura City Council ..	A.C., 3 ph., 230-400 v.	..	(Incl. in Mildura)	9½d. to 6½d. ..	Dom. 2½d. Ind. 4½d. to 1d.
Rupanyup ..	Dunmunkle Shire Council ..	D.C., 230 v. ..	600	170	1s. 1d. to 8d.	8d. to 2d.
Rushworth ..	Waranga Shire Council ..	D.C., 230 v. ..	1,200	300	8d.	3½d. to 2d.
Sea Lake ..	Wycheproof Shire Council ..	A.C., 3 ph., 230-400 v.	..	(Incl. in Wycheproof)	11d. to 9d. ..	5d. to 2d.
Seymour ..	Seymour Shire Council ..	A.C., 3 ph., 230-400 v.	5,000	734	10d.	3d. to 2d.
Stawell ..	Stawell Borough Council ..	A.C., 3 ph., 230-400 v.	4,500	1,126	9d.	4d. to 3d.
St. Arnaud ..	St. Arnaud Borough Council ..	A.C., 3 ph., 230-400 v.	3,000	721	10d. to 9d. ..	4d. to 1½d.
Swan Hill ..	Swan Hill Shire Council ..	A.C., 3 ph., 230-400 v.	6,000	1,606	Town 8d. to 3d. District, 1s. 1d. to 6d.	Town 5d. to 1½d. District, 5d. to 3d.
Ultima ..	Swan Hill Shire Council ..	A.C., 3 ph., 230-400 v.	..	(Incl. in Swan Hill)	1s. 1d. to 6d.	5d. to 3d.
Underbool ..	A. J. Gloster ..	D.C., 230 v. ..	250	33	1s. 3d.	6d.
Warburton ..	Upper Yarra E.S. Co. Pty. Ltd.	A.C., 3 ph., 230-400 v.	1,200	253	8d.	4d.
Warracknabeal ..	Warracknabeal E.L. Co. Ltd. ..	A.C., 3 ph., 230-400 v.	2,800	693	10d.	6d. to 3d.
Wedderburn (Incl. Korong Vale)	Korong Shire Council ..	A.C., 3 ph., 230-400 v.	1,510	Wedderburn, 161 Korong Vale, 80	1s.	5d. to 4d.
Wonthaggi ..	State Coal Mine ..	A.C., 3 ph., 240-415 v.	8,300	1,650	7d.	3d. to 1½d.
Woorinen ..	Swan Hill Shire Council ..	A.C., 3 ph., 230-400 v.	..	(Incl. in Swan Hill)	1s. 1d. to 6d.	5d. to 3d.
Wycheproof (Incl. Sea Lake and Inter- mediate Towns)	Wycheproof Shire Council ..	A.C., 3 ph., 230-400 v.	2,300	527	11d. to 9d. ..	5d. to 2d.
Yarram ..	Yarram H.E. Co. Ltd. ..	A.C., 3 ph., 230-400 v.	5,000	470	11d.	4d. to 1d.
Yea ..	Yea Shire Council ..	A.C., 3 ph., 230-400 v.	950	252	10d. to 9d. ..	4d. to 3d.

NEW SOUTH WALES UNDERTAKINGS (BULK SUPPLIES).

(Not included in Summary.)

Municipalities of Albury, Berrigan, Coreen, Corowa, and Moama purchased from the State Electricity Commission of Victoria 9,826,189 kWh. during the year.

STATE ELECTRICITY COMMISSION OF VICTORIA.

COUNTRY UNDERTAKINGS ACQUIRED—INCREASED DEVELOPMENT SINCE ACQUISITION.

Location.	Acquisition Date.	After Acquisition, Year 1940-41.		Prior to Acquisition.			Average Revenue per kWh. Sold.	
		kWh. Sold.	Revenue.	kWh. Sold.	Revenue.	For Year Ended.	1940-41.	Prior to Acquisition.
			£		£		d.	d.
Metropolitan Branch.								
Werribee	10.4.24	1,367,350	11,310	61,190	2,575	30.9.23	1.99	10.10
Ballarat Branch.								
Ballan	1.3.40	47,778	1,041	13,261	964	30.6.39	5.23	17.45
Wallace	17.5.40	78,364	474	1,320	90	30.6.39	1.45	16.36
Bendigo Branch.								
Eaglehawk	1.2.36	280,379	5,082	198,580	4,472	30.9.35	4.35	5.40
Eastern Metropolitan Branch.								
Dandenong	1.10.23	2,300,320	18,662	77,300	4,006	30.9.23	1.95	12.44
Frankston	21.2.28	2,508,897	21,613	293,000	8,859	30.9.27	2.07	7.25
Healesville	1.4.33	762,323	8,510	108,910	4,196	30.9.31	2.68	9.24
Lilydale	1.4.25	1,174,568	6,696	39,950	1,816	30.9.24	1.37	10.91
Mornington	1.8.30	1,200,499	12,190	120,000	4,634	30.9.28	2.44	9.26
Ringwood and Croydon	1.4.25	1,610,482	15,257	181,600	4,393	30.9.24	2.27	5.81
Sorrento and Portsea	1.10.27	1,038,338	12,788	47,500*	2,440	30.9.27	2.96	12.33*
Gippsland Branch.								
Bairnsdale	1.4.27	1,433,862	13,840	100,272	2,948	30.6.23	2.32	7.06
Drouin	3.10.24	721,106	4,557	19,500	743	30.9.21	1.52	9.15
Garfield	1.8.29	49,126	640	8,864	465	30.12.27	3.13	12.59
Inverloch	1.10.34	65,572	734	4,000*	200	30.6.34	2.69	12.00*
Koo-wee-rup	1.8.35	335,860	3,604	17,481	686	9.8.33	2.58	9.42
Korumburra	1.12.24	816,684	7,032	85,000	3,427	30.9.23	2.07	9.68
Leongatha	15.2.24	729,207	7,397	50,640	2,012	30.6.23	2.43	9.53
Maffra	1.9.24	1,467,530	11,028	62,000	2,651	30.9.22	1.80	10.26
Morwell	1.4.26	5,658,011	21,155	52,062	1,772	30.9.25	0.90	8.17
Neerim South-Noojee	15.1.35	745,698	5,576	59,550	1,193	30.6.33	1.79	4.81
Sale	1.7.24	1,836,597	16,286	114,155	3,687	30.6.24	2.13	7.75
Toora-Foster	1.5.38	423,660	4,084	116,330	2,348	30.6.36	2.31	4.84
Thorpdale	23.12.37	34,171	497	5,000*	312*	23.12.37	3.49	14.98*
Warragul	1.12.30	1,241,576	11,913	150,000*	4,830	30.11.30	2.30	7.73*
Welshpool	13.8.38	44,050	691	5,280	172*	13.8.38	3.76	7.82*
Midland Branch.								
Castlemaine	31.12.29	1,216,665	12,092	175,904	7,130	31.12.28	2.39	9.73
Dunolly	1.4.38	60,459	1,218	32,667	1,188	30.9.37	4.84	8.73
Gisborne	1.10.28	120,903	1,516	17,000	1,074	30.9.27	3.01	15.16
Kyneton	1.10.29	540,912	7,077	143,340	5,433	30.9.27	3.14	9.00
Maryborough	1.10.37	1,279,424	13,338	421,018	10,215	30.9.37	2.50	5.82
Sunbury	1.5.26	355,120	4,134	58,501	2,490	30.9.24	2.79	10.21
Trentham	8.5.39	74,112	1,438	21,000*	989	30.9.38	4.66	11.30*
Woodend	1.8.29	226,283	2,925	51,000	2,555	30.9.27	3.10	12.02
North-Eastern Branch.								
Alexandra	11.4.27	239,880	2,776	64,000*	1,875	30.9.26	2.78	7.00*
Benalla	1.5.26	1,151,559	12,521	70,800	3,373	30.9.24	2.61	11.43
Cobram	1.10.28	182,793	2,307	19,500	1,416	30.9.27	3.03	17.43
Euroa	20.3.28	294,600	4,540	46,618	1,782	30.9.25	3.70	9.17
Kyabram	1.12.26	815,499	7,372	92,312	3,462	4.7.25	2.17	9.00
Mansfield	1.6.28	204,610	2,700	25,000	1,341	30.9.27	3.17	12.88
Mooroopna	1.10.26	1,072,994	5,771	40,000	1,457	30.9.25	1.29	8.74
Nathalia and Numurkah	1.10.31	597,028	6,334	96,763	3,619	30.9.31	2.55	8.97
Rochester	1.8.35	377,987	3,992	191,310	4,223	31.7.35	2.53	5.80
Rutherglen	15.10.26	2,011,053	8,554	28,392	1,377	30.9.24	1.02	11.64
Shepparton	1.1.25	3,090,404	25,448	163,400	4,625	30.6.24	1.98	6.79
Stanhope	14.6.38	176,250	1,888	5,150*	341	14.6.38	2.57	15.89*
Tatura	1.11.26	471,581	4,630	40,000	1,710	30.6.25	2.36	10.26
Violet Town	1.3.36	59,877	1,061	14,650*	1,160	30.9.35	4.25	19.00*
Wahgunyah	1.2.26	53,254	731	7,233	263	30.9.22	3.29	8.73
Wangaratta	12.3.27	8,565,748	36,341	151,600	4,788	30.9.25	1.02	7.58
Wodonga	1.11.33	404,888	5,460	64,500*	3,000*	30.6.33	3.24	11.16*
Yarrawonga	1.8.25	866,153	6,755	47,000	2,149	30.9.24	1.87	10.97
South-Western Branch.								
Camperdown	1.1.24	888,578	8,293	97,664	4,122	30.9.23	2.24	10.13
Colac	1.9.23	1,704,331	18,278	99,000	2,673	30.9.22	2.57	6.48
Koroit	1.12.28	173,702	2,118	50,000	2,319	30.9.28	2.93	11.13
Lorne	15.12.36	410,094	4,087	24,000	1,658	30.9.36	2.39	16.58
Mortlake	16.5.24	188,552	2,320	35,306	1,626	30.9.22	2.95	11.05
Terang	4.3.24	451,492	5,830	78,839	3,439	30.9.23	3.10	10.47
Total		56,298,793	446,502	4,466,207	154,763		1.90	8.32

* Approximate only.

COMPARISON OF TOTAL FIGURES.

	kWh. Sold.	Revenue.	Average Revenue per kWh.
After acquisition	56,298,793	446,502	1.90
Prior to acquisition	4,466,207	154,763	8.32
Increase in sales and revenue	1,160.6%	188.5%	Decrease 6.42 = 77.2%

STATE ELECTRICITY COMMISSION OF VICTORIA.
TRANSMISSION AND DISTRIBUTION SYSTEMS.

Description.	Increase during Year ended 30th June, 1941.		Total at 30th June, 1941.	
	Route Miles.	Cable Miles.	Route Miles.	Cable Miles.
OVERHEAD LINES.				
Yallourn to Yarraville 132 kV. .. ..	..	..	110·0	660·0
Yallourn to Richmond 132 kV. .. ..	..	..	80·0	480·0
Yarraville to Geelong 66 kV. .. ..	..	..	45·3	136·0
Sugarloaf to Thomastown 66 kV. .. ..	..	..	62·0	345·0
Thomastown to Bendigo 66 kV. .. ..	..	..	93·4	436·8
Main Metropolitan Transmission Lines 66 kV. .. ..	..	..	16·0	64·5
.. .. 22 kV.	3·4	10·2	162·1	540·2
Branches—				
Metropolitan 22 kV.	4·3	13·1	39·9	117·1
.. .. 7·2, 6·6, 4·16 kV.	0·7	12·5	301·3	843·2
.. .. Low tension	26·6	106·1	1,482·6	6,288·2
Ballarat 22 kV.	103·5	303·9	136·9	401·3
.. .. 6·6 kV.	— 60·5	— 178·8	35·3	162·7
.. .. Low tension	22·0	69·0	168·5	607·4
Bendigo 22 kV.	— 2·9	1·0	55·3	166·5
.. .. Low tension	2·9	7·5	130·9	565·1
Eastern Metropolitan 22 kV.	5·0	16·3	356·2	923·8
.. .. 6·6 kV.	16·8	34·5	119·4	285·4
.. .. Low tension	20·4	81·5	532·1	1,701·1
Geelong 22 kV.	67·3	176·3	80·1	214·7
.. .. 6·6 kV.	— 66·4	— 177·4	56·5	222·2
.. .. Low tension	4·1	12·5	169·2	610·7
Gippsland 22 kV.	61·2	134·8	935·7	2,327·3
.. .. 6·6 kV. .. ..	..	..	0·9	1·7
.. .. Low tension	54·0	170·5	571·5	1,949·5
Midland 22 kV.	37·1	106·4	243·0	671·5
.. .. 6·6 kV. .. ..	..	..	1·6	4·7
.. .. Low tension	18·5	71·0	194·7	644·5
North-Eastern 66 kV.	6·0	18·0	187·4	574·8
.. .. 22 kV.	53·6	125·2	647·1	1,903·7
.. .. Low tension	32·8	65·4	341·7	1,178·3
South-Western 44 kV. .. ..	..	..	116·2	487·4
.. .. 22 kV.	59·2	118·7	640·0	1,366·0
.. .. 6·6 kV.	— 0·6	— 1·7	117·9	291·7
.. .. Low tension	9·4	18·7	293·1	768·8
Yallourn 6·6 kV. .. ..	..	..	4·5	13·6
.. .. Low tension	0·6	1·9	10·7	30·7
Summary—				
.. .. 132 kV. .. ..	..	..	190·0	1,140·0
.. .. 66 kV.	6·0	18·0	404·1	1,557·1
.. .. 44 kV. .. ..	..	..	116·2	487·4
.. .. 22 kV.	391·7	1,005·9	3,296·3	8,632·1
.. .. 7·2, 6·6, 4·16 kV.	— 110·0	— 310·9	637·4	1,765·2
.. .. Low tension	191·3	604·1	3,895·0	14,344·3
	479·0	1,317·1	8,539·0	27,926·1

Description.	Cable Miles.	Cable Miles
22 kV.	1·85	133·33
11, 7·2, 6·6, 4·16 and 3·3, kV.	3·40	446·57
Pilot, telephone, and supervisory	2·40	57·36
Low tension	2·53	105·29
	10·18	742·55

Description.	Number.	Capacity kVA.	Number.	Capacity kVA.
SUB-STATIONS.				
Terminal Stations .. ..	..	20,000	6	291,900
Main Metropolitan Transmission Sub-stations .. ..	..	6,000	24	297,750
Distribution Sub-stations at Line Voltage .. ..	..	..	13	27,530
Branches—				
Metropolitan	25	9,230	690	172,785
Ballarat	18	1,975	98	8,145
Bendigo	2	225	41	13,900
Eastern Metropolitan	27	940	441	14,809
Geelong	8	2,728	129	19,317
Gippsland	54	875	694	15,675
Midland	24	1,785	157	13,625
North-Eastern	68	2,520	358	38,750
South-Western	51	2,268	550	22,537
Yallourn .. ..	..	..	10	1,265
	277	48,546	3,211	1,037,988

STATE ELECTRICITY COMMISSION OF VICTORIA.

SUPPLEMENT TO TWENTY-SECOND ANNUAL REPORT.

WAR PRECAUTIONARY MEASURES.

When war appeared inevitable, the Commission in the discharge of its responsibility to the State and electricity consumers, especially the essential industries, earnestly applied itself to the planning of war precautionary measures to ensure within practicable limits the continuity of its service, and to restrict the extent of possible disturbance to its supply system.

Although designed to do no more than provide general protection against possible enemy action, these special measures were found to be so extensive that it was felt to be inexpedient and unwise to have them in plan form only. The plans, therefore, were steadily implemented as opportunity occurred, a process which involved many months of work despite the initial advantage derived from having most of the construction materials available in store. The more important steps taken by the Commission are described in this supplement.

1. Reserve Stocks.

Additional imported items of spare plant and essential stores (including coal) have been acquired and separately stored. The total cost of such stores as at 30th June, 1941, is £146,416, but this does not, of course, represent their value at to-day's greatly enhanced prices. The Commission notes with satisfaction that the reserve was accumulated with almost complete freedom from losses at sea. In recent months it has been necessary to draw for the first time upon some items, and, in view of the limitations on overseas orders, the time is at hand when the special reserve will fulfil the purpose for which it was established.

2. Anti-Sabotage.

For the protection of the Commission's main assets against possible sabotage, the Commission has supplemented the limited number of the Home Guard and State Police on duty by providing, at its own cost, an auxiliary police force of more than 200. These men are drawn from the Commission's wages personnel, and, having been sworn in as Special Police are under the general direction of the Chief Commissioner of Police. The force functions, necessarily, on a three-shift basis, and costs approximately £70,000 per annum to maintain. Additional fencing, patrol, lighting, and other facilities have necessitated an outlay of nearly £20,000.

During the year the practice of closing works to visitors was maintained. All other main works areas, additional to the already declared Yallourn and Newport areas, were gazetted by the Commonwealth Government as Prohibited Places.

It should be recorded that there are no enemy aliens employed by the Commission.

3. First Aid and Anti-Gas Precautions.

For this important work additional stocks of medical supplies have been obtained. The trained personnel normally available has been materially increased. There are now 1,100 persons in the Commission's employ with St. John Ambulance Association first aid certificates. (First Year 800, Second Year 130, Third Year 170.)

This progress has been made possible only by much appreciated help from the medical profession, particularly at Yallourn, and from the St. John Ambulance Association. Included in the training curriculum is instruction in dealing with gas casualties, this being additional to the preliminary advice on personal protection against gas given to more than 1,000 Commission employees some two years ago.

Regular practices in first aid are held, and interest is maintained by a series of competitions which embraces the whole service.

4. Decontamination of Plant and Buildings.

A group of 300 men, organized into squads of six men each, has been specially trained in methods of decontamination. A limited number of suits of protective clothing and of respirators has been supplied by the State Emergency Council for training purposes. Additional equipment of this nature will be made available through the Council should an emergency arise.

5. Fire Fighting.

To supplement the normal fire protection provisions at principal plants, the Commission has given effect, at a cost of £30,000, to its plans for the installation of water spray systems and additional oil drainage measures; additional water services and hydrants; emergency petrol driven pumps (fixed and mobile); foam-making apparatus for oil fires and additional fire hose and extinguishers.

With the hearty co-operation and valued assistance of the Metropolitan Fire Brigade Board there has been trained in fire-fighting measures an additional force of 300 men, with particular attention to methods of controlling and extinguishing incendiary bombs.

6. Protection of Plant and Personnel.

The Commission's plans are based upon code standard, as laid down by the British Home Office, adapted to Australian needs.

The measures are not designed to meet the consequences of a direct hit; they are to protect against blast and splinter effects of a 500-lb. high explosive bomb bursting not closer than 50 feet. Although seriously hampered by shortage of labour, which is now common to all Commission activities, the works have been completed at some of the main assets, and the remainder are nearing completion. The construction consists mainly of timber and earth revetments and brick and concrete block barriers; it provides lateral and overhead protection in buildings and open air structures, and also overhead protection for plant. For key personnel, concrete shelters are provided, while shelters to code requirements are to be provided for other personnel. These works ultimately will involve an outlay of £90,000.

Appropriate air raid precaution measures to British standard practice are now embodied in the designs of new Commission establishments or plant installations. Outstanding examples are the new pattern storage at Footscray Central Store, the roof of the boiler house and turbine room at Newport "C," and the roof of the extensions to the briquette factory.

7. Lighting Restrictions.

In accordance with the National Security (Lighting Restriction) Regulations, the Commission had planned the provision of apparatus essential for screened street lighting and the appropriate switching control. The discharge of this task extends to the areas served by metropolitan municipal distributing authorities. The work was carried to completion during the year. The State Emergency Council is thus enabled, in event of emergency, to give immediate effect to its street lighting restriction measures for protection of the civilian population in the several areas which have been "declared." Under the Victorian concept of war-time street lighting, screened lamps and centralized controls are complementary. Two-thirds of the usual number of street lamps will be removed from service; the remainder will be screened and no lamp will be larger than 100 watts. These lamps are grouped and their switching will be controlled from selected police stations, where switching by police officers will occur on advice to them through their Department's communication system. The lighting screens are in store.

The switch control system involves the operation of some 1,600 automatic switches. Large-scale tests thereon have already been undertaken by the State Emergency Council. This work, already, has cost the Commission and the bulk supply municipalities £22,000. An additional £4,000 will be involved if the screens have to be installed.

It has been laid down by the Government and the State Emergency Council that the community, and industry in particular, should equip itself for operation under conditions of lighting restriction. In conformity with this policy the Commission has in all its establishments and premises throughout the "declared" areas placed in position materials and equipment specially purchased for this purpose. Electric tramcars on the Geelong system have been treated so as to comply with the lighting restriction standards established for Melbourne.

In order that the Commission's operating personnel may secure experience in functioning under lighting restriction conditions, the measures set up for the power station, briquette factory and open cut, and central workshops at Yallourn, have now been in regular continuous operation for the past three months. The street lights of the town have been screened.

The Commission's Engineer and Manager, Electricity Supply, Mr. W. H. Connolly, B.E.E., A.M.I.E. (Aust.), acts in conjunction with the Chief Distribution Engineer of the Sydney County Council, Mr. C. J. Craggs, A.M.I.E. (Aust.), as an honorary technical adviser to the Commonwealth Department of Home Security.

8. Communications.

The Commission expects soon to obtain delivery and to install additional carrier wave apparatus, which has been on order for many months. This apparatus will strengthen and extend, particularly for war emergency needs, its private telephone system. Tests are also proceeding for the wider application of radio telephony for Commission purposes.

Siren warning systems at main works have been augmented.

9. Town of Yallourn.

As the Commission stands in the position of a municipality for the Town of Yallourn and some adjacent territory, it has special obligations to the residents, and particularly at a time of emergency. Plans for the assistance of householders in shelter provision, as well as for the erection of independent shelters in selected parts of the town have been carried to the stage of purchase of all essential materials. The township at the old Brown Coal Open Cut is also provided for.

The Commission has co-operated with householders in the provision of lighting restriction measures.

Yallourn is included among the zones involved in the evacuation plans of the State Emergency Council.

At the suggestion of the Commonwealth authorities two new wards are being added to the Yallourn hospital and equipped on an emergency basis. This accelerates extension proposals which the Commission had in view and will meet the normal needs of the community for the next ten years.

10. WORK FOR COMMONWEALTH GOVERNMENT.

The Commonwealth Government has been aided substantially in the following amongst other directions :—

(a) Electricity Supply.

The Commission has undertaken numerous extensions of supply to munition and defence establishments. The largest was the 66,000 volt transmission line from Yarraville to Ballarat for a new guncotton factory. Normally, this extension would have been undertaken only when the Ballarat power station had reached the limit of its capacity.

The total expenditure on account of these supplies will exceed £200,000. Most of the work will form part of the Commission's system under post-war conditions. The Commonwealth contribution to this outlay is therefore limited to special individual extensions and approximates to £70,000.

(b) Defence Establishments.

The Commission's Power Production Department undertook the design and otherwise assisted with the installation of boiler plants in munition factories in Victoria and South Australia.

The Commission's Electricity Supply Department undertook the following works :—

- (i) *Supplies of Electricity* given *ab initio* to military camps, internment camps, R.A.A.F. centres, training schools, &c., totalled about 1,700 kVA. in respect of 17 establishments.
- (ii) *Electrical Installations*.—Specifications were prepared and contracts administered in respect of electrical installations and certain local generating plant in camps and other establishments.
- (iii) *Lighting*.—Assistance was given in connexion with general illumination standards in various establishments, also on special matters including security lighting and R.A.A.F. dark adaptation tests.
- (iv) *Refrigeration*.—Contracts for the manufacture and installation of refrigeration equipment in defence establishments throughout Victoria and preparation of like units for despatch overseas were arranged and supervised.

(c) Munition Production.

The Commission's workshops at Richmond, Yallourn, and Yarraville have undertaken, under conditions of stress, and to the limit of available capacity the manufacture of aeroplane and mechanical parts for the Aircraft Production Commission and the Ordnance Branch of the Munitions Department respectively. The Richmond shops also carried out the development and construction of an optical testing unit for the R.A.A.F.; the design, assembly, and testing of a number of 25 kVA. petrol electric generator sets for the Army Ordnance Department; and developmental work for the Ministry of Munitions in connexion with the mechanical governing of automotive engines.

(d) Research.

Assistance generally has been given by Commission officers in specialized research, including the development of scientific equipment for the preparation of dried blood serum.

11. Substitute Fuels for Motor Vehicles.

The transport operations of the Commission have been re-arranged in an endeavour to reduce petrol consumption by at least 25 per cent. This reduction can be secured only at a real sacrifice of efficiency and mileage ; but by equipping vehicles to operate on substitute fuels the Commission will minimize the effect on its activities. Twenty-nine vehicles are already operating on producer gas. Compressed town gas is also about to be used in some 60 vehicles. This latter fuel involved the construction of a compressor gas station in Church-street, Richmond, and the purchase of 200 high-pressure steel cylinders. This development was undertaken by the Commission not only as a local war-time need, but as a substantial contribution to the national cause. The Commission is collaborating with other public bodies, viz., the Melbourne and Metropolitan Tramways Board, which is erecting a similar plant, and the Victorian Railways Commissioners.

An experimental plant for the production of charcoal briquettes is being established at South Melbourne in order that the satisfactory results of small-scale experiments can be further developed, and if possible, on a commercial basis. In this work there has been collaboration with the Forests Commission of Victoria ; and the Commonwealth Department of Supply and Development and the Council for Scientific and Industrial Research have given warm encouragement. Several electric battery vehicles of the latest type have been purchased for use within the metropolitan area.

In all, the Commission has undertaken a £25,000 programme in the field of substitute fuels.

12. Financial.

During the year 1940-41 an expenditure of £193,000 was incurred on measures allied to war. At 30th June, 1941, the total expenditure on such measures over the past two and a half years amounted to £420,000, including the recurring expenditure on special patrols, and £146,000 for reserve stores and spare equipment.

13. Co-operation with Other Authorities.

Within the sphere allotted the Commission under the organization of the State Emergency Council for Civil Defence, it has continued to assist that body in the work of planning for the protection of the civil population. Special assistance was afforded not only with restrictions for public lighting, but in technical advice regarding the application of lighting restrictions in industrial and commercial premises so that they can function under emergency conditions.

The Commission has also fulfilled its responsibilities to other supply authorities in the State under the National Security (Lighting Restriction) Regulations by affording them requisite guidance which has also extended to the protection of their undertakings.

The Commission's Chief Architect (Mr. W. E. Gower) is associated with the Victorian State Defence Camouflage Committee, which functions under the Commonwealth Defence Central Camouflage Committee. The Commission has assisted with ideas and technical advice in the development of special camouflage having particular relation to the protection of its own assets, besides making a contribution to the general technique of camouflage as applied for the protection of industrial undertakings.