

1946.  
VICTORIA.

---

STATE ELECTRICITY COMMISSION OF  
VICTORIA.

---

TWENTY-SEVENTH ANNUAL REPORT

COVERING THE

FINANCIAL YEAR ENDED 30<sup>TH</sup> JUNE, 1946.

TOGETHER WITH

APPENDICES.

---

---

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

---

---

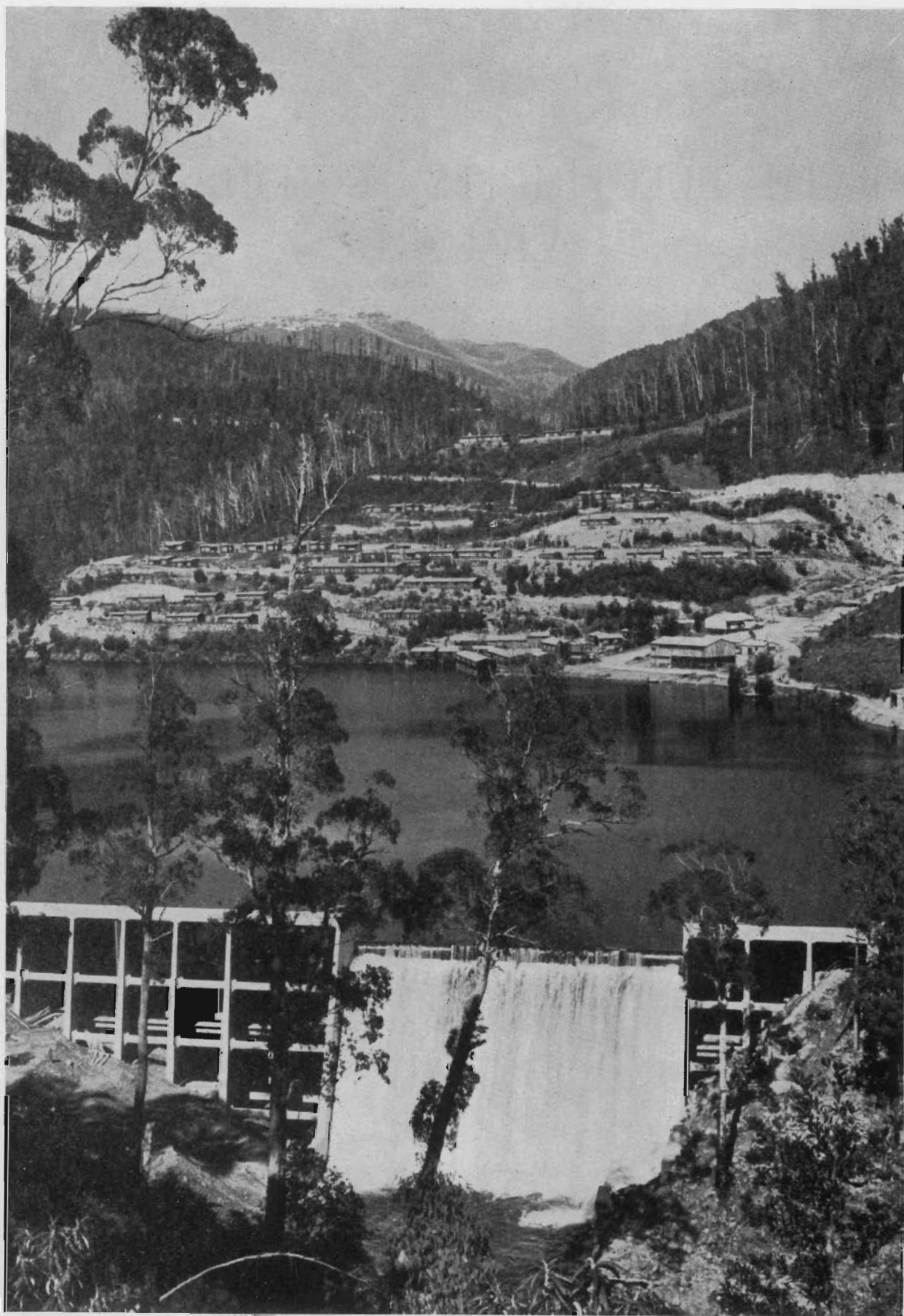
[*Approximate Cost of Paper.*—Preparation not given. Printing (1,200 copies), £300.]

By Authority:

J. J. GOURLEY, GOVERNMENT PRINTER, MELBOURNE.

10530/46.—No. 26.—1s. 9d.

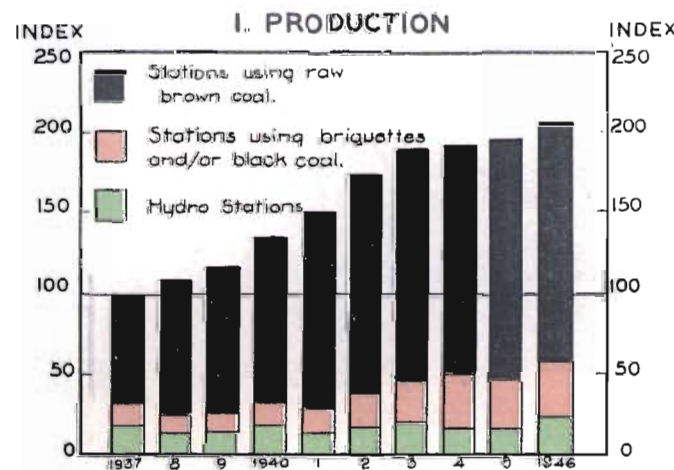
KIEWA HYDRO-ELECTRIC SCHEME



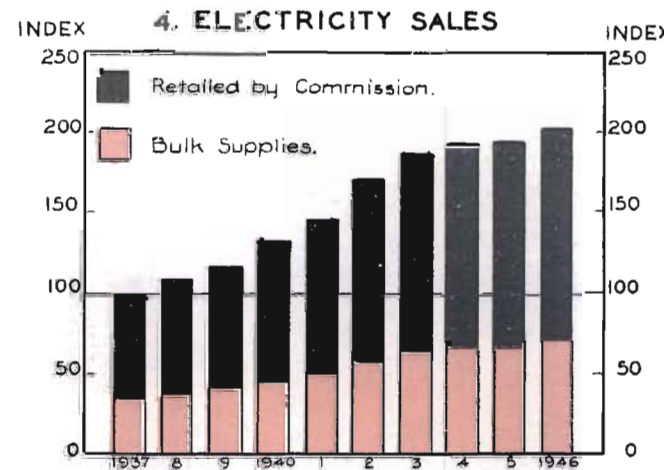
LAKE GUY AND BOGONG TOWNSHIP.



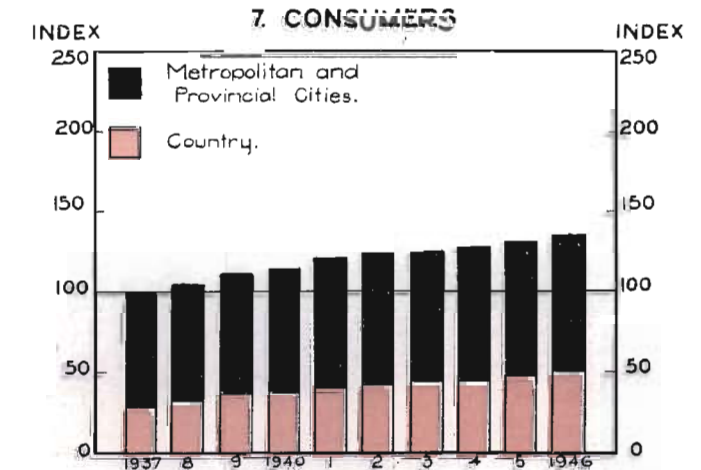
# TEN YEAR STATISTICAL REVIEW BASE YEAR 1936/7 = 100



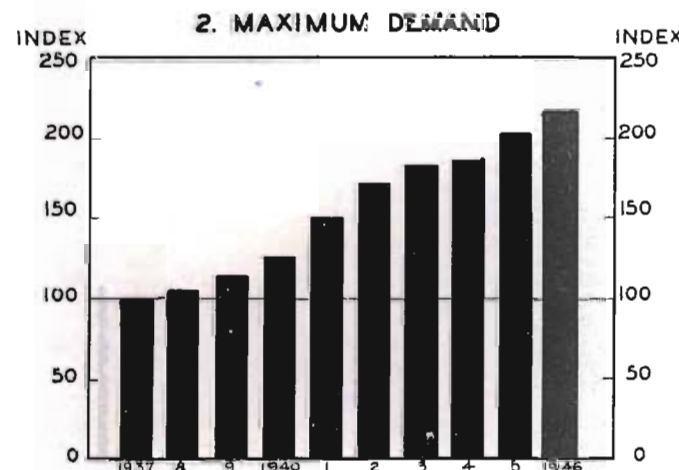
Production of Electricity (1595 million kw.hs. in 1945/6) has more than doubled since 1936/7.



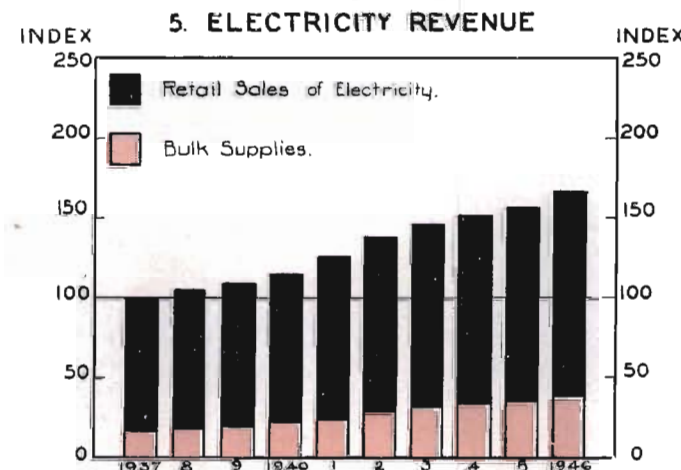
Sales (1274.5 million kw.hs. in 1945/6) have risen rapidly (103% since 1937) particularly during the early war years. The war increment has been sustained.



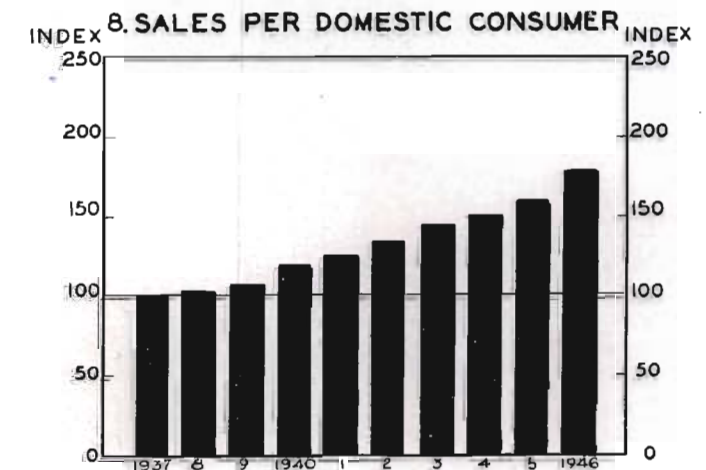
The number of consumers being supplied (521,631 at 30/6/46) has increased steadily. Country consumers have increased by 95% while total consumers increased 33%.



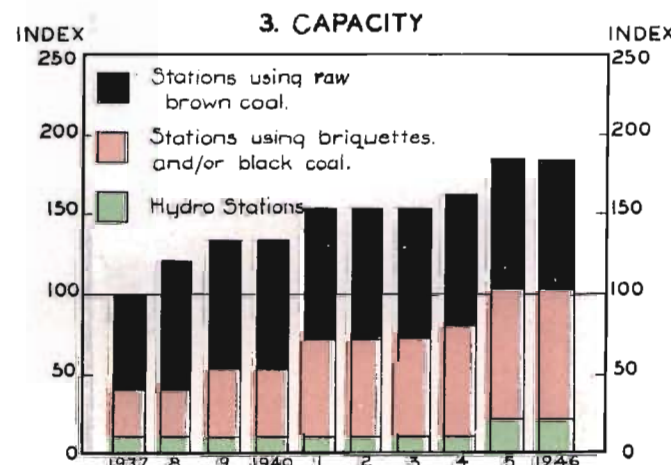
Maximum Demand upon generators (377,100 kw. on 11/7/45) has also more than doubled. Note the greatly accelerated increase during the war years.



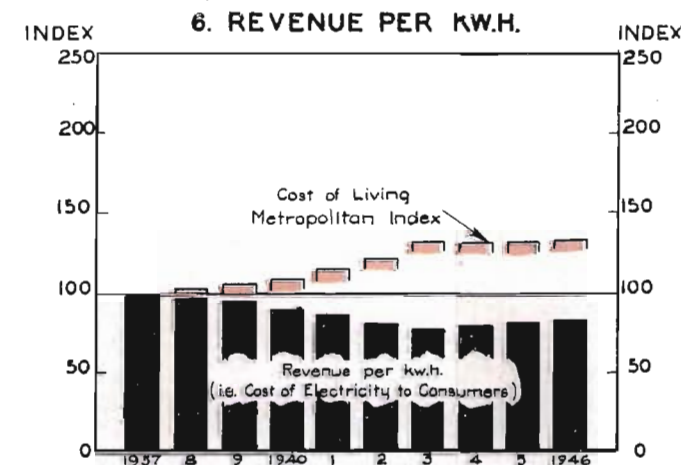
Revenue (£5.6 million in 1945/6) has not increased to the same extent as sales (68% since 1937). Commission tariffs ensure that the cost per kw.h. decreases as consumption increases.



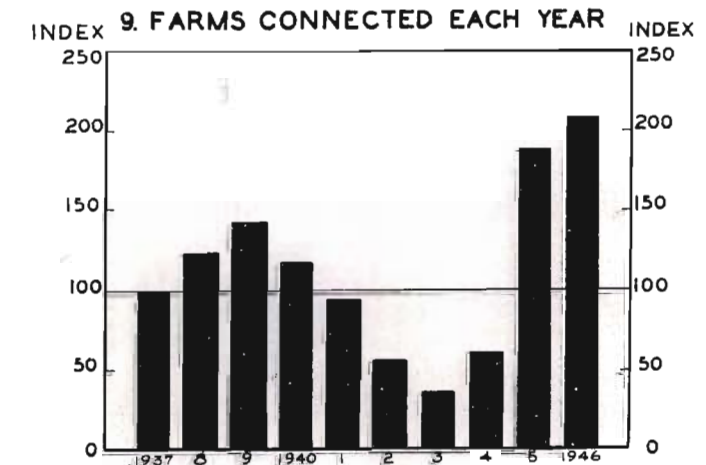
Consumption per domestic consumer rose steadily; the 1946 increment is the largest yet recorded.



Installed Capacity of Generators (409,715 kw. at 30/6/46) has not increased at the same rate as demands - new works were seriously retarded because of the war.



Revenue per kw.h. sold has steadily dropped as a result of tariff reductions and increased consumption at lower rates.



There was a downward trend in the number of farms connected during the war years owing to the acute shortage of resources. Priority was given by the Commonwealth to rural extensions during the latter stages of the war. The prewar progress is now being overshadowed - 1437 farms were connected during 1945/6.



## TABLE OF CONTENTS.

	PAGE.
Ten-Year Statistical Review .. .. .	3
Features of Year's Operations .. .. .	6
Operating Conditions .. .. .	7
Financial .. .. .	7
Electricity Supply .. .. .	7
Absence of Reserve Generating Plant .. .. .	7
Planning for Electricity Production .. .. .	7
Planning for Fuel Production .. .. .	8
Graph—Electricity Production—Rate of Growth .. .. .	8
Annual Accounts .. .. .	9
Loan Liability .. .. .	9
Reserves .. .. .	9
Capital Expenditure .. .. .	10
Commonwealth Loan Investments .. .. .	10
Further Major Developments of the State's Brown Coal Resources .. .. .	10
Fuel for Power Generation—Restrictions on the Use of Electricity .. .. .	11
Hydro-Electric Resources of the Snowy River .. .. .	11
Utilization of the Hume Waters for Power Generation .. .. .	12
Overseas Investigations .. .. .	12
Creation of Personnel Division .. .. .	12
Rural Electrification .. .. .	13
Electricity Supply Tariffs .. .. .	13
Vice-Regal Visit to Yallourn .. .. .	14
Yallourn Territory .. .. .	14
Yallourn Shopping Facilities .. .. .	15
Coal Supply .. .. .	16
Power Production and Transmission .. .. .	17
Major Extensions Programme—	
Newport Generating Station .. .. .	19
Kiewa Hydro-Electric Scheme .. .. .	19
Yallourn Generating Station .. .. .	19
Main Transmission and Transformation .. .. .	19
Electricity Supply	
Analysis of Development .. .. .	22
Commission's Electricity Supply Undertakings for Local Distribution .. .. .	23
Tramways	
Ballarat, Bendigo and Geelong .. .. .	23
Briquette Production and Distribution .. .. .	26
Industrial .. .. .	26
Technical Library Service .. .. .	27
Public Safety and other Regulatory Responsibilities .. .. .	27
Commissioners .. .. .	28
Personnel .. .. .	28

### SUPPLEMENTS.

"A"—Report to the Honorable the Premier 29th August, 1946, on Future Planning .. .. .	30
"B"—Pamphlet "Why Electricity Rationing?" .. .. .	34

### APPENDICES.

No. 1. General Profit and Loss Account .. .. .	35
2. General Balance-sheet .. .. .	36
3. Schedule of Fixed Capital .. .. .	37
4. Schedule of Debentures and Inscribed Stock .. .. .	38
5. Tabulation of Capital, Revenue and Operating Accounts .. .. .	39
6. Electricity Sales—Revenue and Consumer Statistics .. .. .	40
7. Standard Tariffs .. .. .	41
8. Electricity Supply Undertakings .. .. .	42
9. Country Electricity Supply Undertakings Acquired .. .. .	54
10. Transmission and Distribution Systems .. .. .	55
11. Generation of Electricity .. .. .	56

## STATE ELECTRICITY COMMISSION OF VICTORIA.

## FEATURES OF YEAR'S OPERATIONS.

		1945-46.	1944-45.	Increase or Decrease.	Percentage.
FINANCIAL.					
REVENUE—					
Electricity Supply .. .. .	£	5,605,333	5,259,881	+ 345,452	+ 6.5
Briquetting (after Stock Adjustment and less Sales to Works) .. .. .	£	341,761	329,428	+ 12,333	+ 3.7
Brown Coal .. .. .	£	25,702	24,443	+ 1,259	+ 5.1
Tramways .. .. .	£	146,503	146,605	— 102	— 0.1
Miscellaneous .. .. .	£	40,886	38,804	+ 2,082	+ 5.3
	£	6,160,185	5,799,161	+ 361,024	+ 6.2
EXPENDITURE (including Reserves, Appropriations, Writings off, &c.) .. .. .	£	6,096,722	5,739,953	+ 356,769	+ 6.2
NET SURPLUS .. .. .	£	63,463	59,208	+ 4,255	+ 7.2
ACCUMULATED PROFIT—At end of Year .. .. .					
	£	252,398	188,935	+ 63,463	+ 33.6
CAPITAL EXPENDITURE—At end of Year .. .. .	£	33,622,088	31,297,130	+ 2,324,958	+ 7.4
RESERVES—At end of Year .. .. .	£	14,448,315	12,902,334	+ 1,545,981	+ 12.0
ELECTRICITY PRODUCTION AND SALES.					
MAXIMUM COINCIDENT DEMAND ON GENERATING STATIONS (This Year—11th July, 1945) .. kW					
		377,100	351,600	+ 25,500	+ 7.2
ELECTRICITY GENERATED .. .. kWh—millions		1,595.3	1,503.0	+ 92.3	+ 6.1
ELECTRICITY SALES .. .. kWh—millions		1,274.5	1,207.7	+ 66.8	+ 5.5
NUMBER OF CONSUMERS (excluding Bulk Supplies) ..		321,631	311,172	+ 10,459	+ 3.4
AVERAGE kWh SOLD PER CONSUMER—					
Domestic .. .. .		928	838	+ 90	+ 10.7
Industrial .. .. .		44,960	50,470	— 5,510	— 10.9
Commercial .. .. .		3,104	2,934	+ 170	+ 5.8
All Consumers (excluding Bulk Supplies) .. ..		2,616	2,582	+ 34	+ 1.3
AVERAGE PRICE PER kWh SOLD—					
Domestic .. .. .	d.	1.700	1.783	— 0.083	— 4.6
Industrial .. .. .	d.	0.857	0.830	+ 0.027	+ 3.2
Commercial .. .. .	d.	1.814	1.781	+ 0.033	+ 1.8
All Consumers (excluding Bulk Supplies) .. ..	d.	1.266	1.246	+ 0.020	+ 1.6
NUMBER OF FARMS SERVED .. .. .		10,209	8,772	+ 1,437	+ 16.4
MOTORS CONNECTED—					
Number .. .. .		71,796	65,983	+ 5,813	+ 8.8
Horse-power .. .. .		430,452	401,085	+ 29,367	+ 7.3
BRIQUETTES—					
Produced .. .. .	tons	493,144	431,344	+ 61,800	+ 14.3
Sold .. .. .	tons	491,441	442,578	+ 48,863	+ 11.0
TRAMWAY PASSENGERS .. .. .		16,514,067	16,715,416	— 201,349	— 1.2



# TWENTY-SEVENTH ANNUAL REPORT

*The Honorable P. J. Kennelly, M.L.C.,  
Minister in Charge of Electrical Undertakings,  
Melbourne.*

Sir,

In conformity with the provisions of Section 35 (b) of the State Electricity Commission Act No. 3776, we have the honour to present the Twenty-seventh Annual Report of the Commission covering the financial year ended 30th June, 1946, together with the Balance-sheet and Profit and Loss Account for the period.

**Operating Conditions.**—As the Commission was denied sufficient fuel for its several generating stations outside Yallourn, severe rationing measures had to be introduced during the 1946 winter.

It is a disappointment to the Commission that its record of service to its consumers since Yallourn commenced to operate in 1924 has been thus marred. At a time when the Commission might reasonably have felt that it had met and overcome the working difficulties inseparable from war, it finds the State's electrical undertaking involved, with other Australian States, in the problems arising from dependence upon New South Wales black coal, though fortunately in a markedly less degree as the result of its generating stations having been equipped to rely entirely upon the State's own product—brown coal or its derivative, briquettes.

The circumstances in which electricity restrictions were brought about are noted on page 11, and in a supplement to this report. Not the least of the many adverse effects of these restrictions is the loss of revenue of £185,000 at the date of this report.

**Financial.**—The net surplus for the year was £63,463 after appropriation had been made primarily for the following purposes:—

- (1) Strengthening of reserves to meet future known expenditure and unforeseen happenings: a further £300,000 has been reserved to aid rural development and £100,000 for contingencies.
- (2) To meet expenditure in respect of accumulated maintenance: a further £125,000 has been reserved towards this liability.

**Electricity Supply.**—Over 1,274 million kWh were sold in Victoria during the year, 98 per cent. being generated by the Commission's system. There are now 469,000 consumers, of whom 322,000 (69 per cent.) are supplied directly by the Commission.

Although, during the year, sales to industry declined because of reduced war production, the overall increase in sales was 67 million kWh.

Despite continued shortages of essential materials, 1,437 farms were connected during the year—the highest number yet recorded in one year; over 10,000 farms are now served by the State system.

**Absence of Reserve Generating Plant.**—Plant installed during and since the war has met the extraordinary demands placed upon it. Nevertheless, the Commission must reiterate that it is concerned at the lack of reserve generating capacity for the system. The Commission's practice of maintaining an adequate safety margin of generating plant for an emergency proved an extremely valuable contribution to the nation's war effort. It would not have been possible otherwise for the Victorian system to have met the phenomenal growth in electricity consumption (70 per cent.) over the war years. (See Graph "Electricity Production—Rate of Growth" facing page 8.)

The principal Australian supply authorities are under the same serious handicap in respect of reserve plant as are also the larger United Kingdom generating authorities, since Great Britain necessarily conformed to the wartime policy of refusing permits for the manufacture of reserve generating plant.

**Planning for Electricity Production.**—The Commission has adopted a ten-year plan prepared by its engineering staff in May, 1945, under which there will be installed new generating plant totalling 383,000 kW, of which 75,000 kW represents the replacement of existing plant. The total installed generating capacity of the system will thus be brought to 717,715 kW.

This projected net plant increment represents an increase of 75 per cent. on the total installed capacity of 409,715 kW in 1945. Included in this plant increment is provision to restore a measure of reserve upon which the future operating stability of the generating system will depend.

This plan is described in broad outline in a report on future planning forwarded for the information of the Honorable the Premier on 29th August, 1946. As a matter of record, this plan is included as a supplement. (See page 30.)

**Planning for Fuel Production.**—Engineering and economic studies have progressed sufficiently to enable the early completion of a comprehensive report to the Government regarding the development of a new open cut and briquette factory to the south of Morwell.

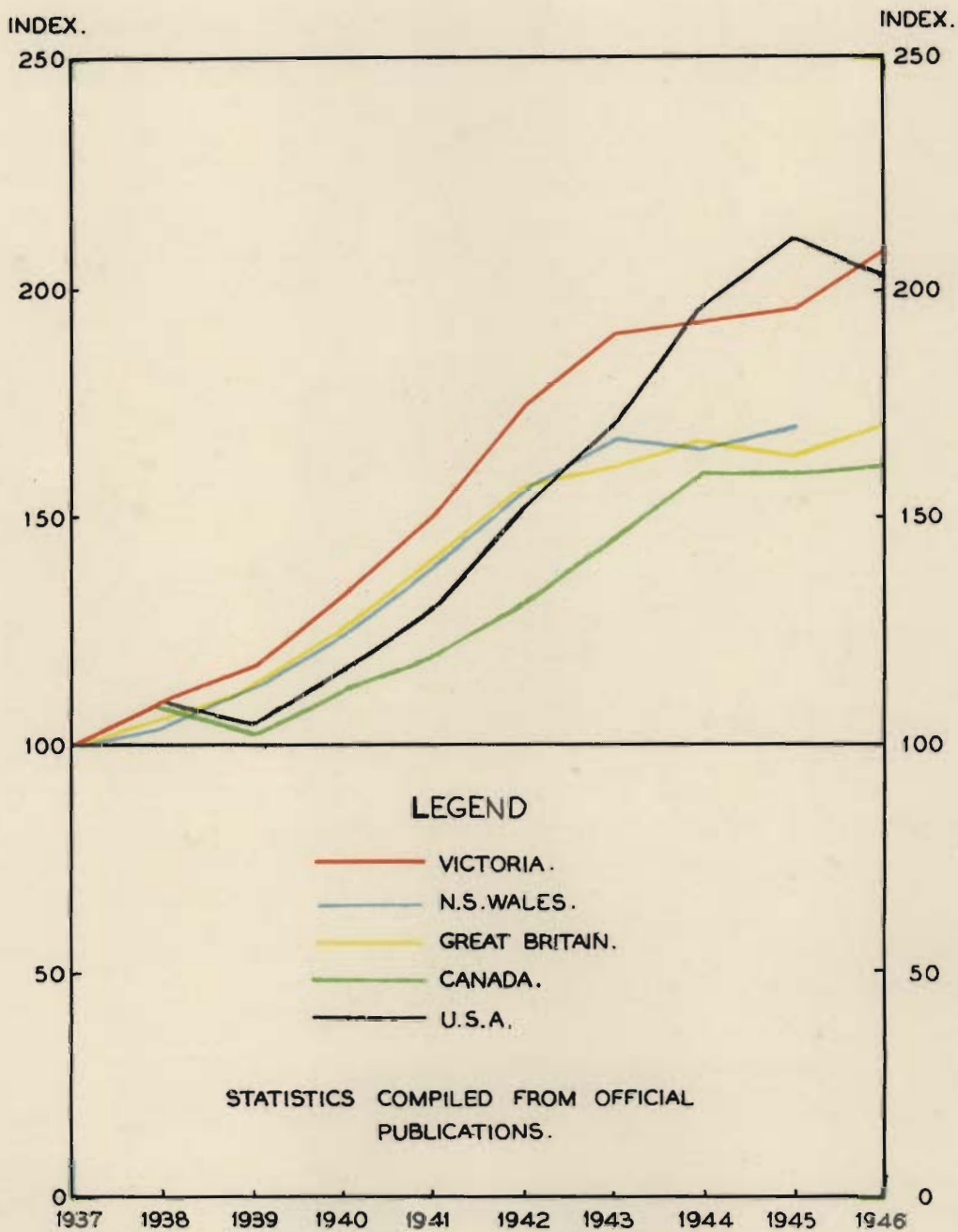
---



# ELECTRICITY PRODUCTION. RATE OF GROWTH.

1937 - 1946.

VICTORIA COMPARED WITH N.S.W., GREAT BRITAIN, CANADA,  
AND U.S.A.





### ANNUAL ACCOUNTS.

The net surplus for the year was £63,463 compared with £59,208 for 1944-45. 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, and appropriations.

Electricity supply revenue totalled £5,605,333—an increase for the year of £345,452. Expenditure on account of electricity supply, exclusive of special expenditure and appropriations, amounted to £4,518,382—an increase of £353,181.

Revenue from briquette sales, after allowing for stocks on hand, amounted to £341,761—an increase of £12,333: expenditure totalled £365,755—a decrease of £10,859.

Tramway results were:—Ballarat—profit £947; Bendigo—loss £14,188; and Geelong—loss £3,165; a total loss of £16,406 as compared with £21,503 for the previous year.

The General Profit and Loss Account, Balance-sheet and Schedules of Fixed Capital, and 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, 1946, was £20,927,313.

The commitments involved are—

	£
Liability to the State of Victoria .. .. .	16,427,432
State Electricity Commission of Victoria Loans .. .. .	4,471,230
Municipal Debentures in respect of Undertakings Acquired .. .. .	28,651
	<hr/>
	20,927,313

Loan Liability has decreased this year by £70,513:—

	£
(a) Reduction of indebtedness to State through National Debt Sinking Fund .. .. .	158,994
(b) Redemption of State Electricity Commission Loans .. .. .	32,462
(c) Repayment of ninth instalment on £100,000 borrowed for tramway reconstruction .. .. .	8,231
(d) Redemption of Municipal Debentures guaranteed by Commission .. .. .	4,346
(e) Repayment of discount and flotation expenses .. .. .	3,372
	<hr/>
	207,405
Less—Increase in indebtedness to State in respect of proportion of cost of repatriation of certain London Loans to Australia .. .. .	136,892
	<hr/>
	70,513

For the 1946-47 works programme of more than three million pounds, the Commission sought approval to the raising by loan of £2,000,000; the balance of the programme would be met from the Commission's own resources. The Loan Council approved of £1,500,000 and is to review the balance of the application in January, 1947. The State Savings Bank of Victoria has loaned these moneys at £3 6s. 3d. per cent. (term—ten years.)

### RESERVES.

The Depreciation and Sinking Fund Reserve at 30th June, 1946, totalled £11,548,242, an increase of £986,401 for the year. Of the total, £1,417,845 was to the credit of the Commission in the National Debt Sinking Fund Reserve, £9,759,802 to the credit of the Depreciation Reserve (which, with the exception of £517,514 applied to the National Debt Sinking Fund Reserve, is invested in the business of the Commission), £315,177 to the credit of the State Electricity Commission Sinking Fund Reserve and £55,418 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 £100,000, bringing the total up to £909,062, was made to the Contingency Reserve. This reserve is invested outside the business in trustee securities.

The Rural Development Reserve, established in 1940-41 to facilitate post-war plans for extensions to rural areas, was strengthened by the transfer of £300,000, bringing the total of the reserve to £1,100,000, and an additional amount of £125,000 was placed to the credit of the Deferred Maintenance Reserve established last year, making the total £250,000.

### CAPITAL EXPENDITURE.

After deductions for retirements and the writing out of non-productive expenditure, the total expenditure on capital works increased by £2,324,958. The principal increases were in the following accounts :—

	£
Coal Production .. .. .	173,247
Power Production, Steam Stations—Newport .. .. .	510,503
Power Production, Hydro Stations—Kiewa .. .. .	295,269
Transmission Systems—	
Main Transmission Systems .. .. .	293,013
Provincial and Country Branches .. .. .	182,689
Distribution Systems—	
Metropolitan .. .. .	75,470
Provincial and Country Branches .. .. .	270,277
Briquette Production—Factory Extension .. .. .	122,226

### COMMONWEALTH LOAN INVESTMENTS.

Investments in Commonwealth Loans at 30th June, 1946, totalled £1,247,920. Of this sum, £558,650, is invested on behalf of the Staff Provident Fund ; the remainder, £689,570, is an investment of the Contingency Reserve and other funds.

### FURTHER MAJOR DEVELOPMENTS OF THE STATE'S BROWN COAL RESOURCES.

The Commission last year reported that, eventually, all major coal bearing areas in the Latrobe Valley would need to be resumed by the State ; also, in the context of its 1941 recommendation (approved in 1943) in connection with plans for a new open cut and briquette factory, it reported that the Morwell South deposit had been chosen for such a development. When a new brown coal burning power station is contemplated, it may be necessary to develop a further open cut, probably in the vicinity of Traralgon.

Engineering investigations and estimates of financial and operating results of the Morwell South project have progressed to the stage where a comprehensive and detailed scheme can be presented.

A report to the Government is almost completed—it embraces the survey of the fuel market, estimated solid fuel requirements of Victoria, a study of the State's brown coal resources, technical details of the proposed open cut and briquette factory and ancillary works, with estimated capital and operating costs, and the related time construction programme. The presentation of this report on what is known departmentally as the Maryvale South project is imminent.

There has been close collaboration with other State and Municipal organizations whose interests are involved in the project, and in particular the Victorian Housing Commission has been kept informed concerning the important aspect of housing provision for the personnel who will construct and operate these new works.

## **FUEL FOR POWER GENERATION—RESTRICTIONS ON THE USE OF ELECTRICITY.**

The recurring crises in Victoria with respect to fuel since the early war years have been referred to in each successive report from 1942 onwards. The Commission's grave concern since its reserve coal stocks were exhausted has been emphasized on each occasion. Repeated endeavours have failed to assure the Commission of stable fuel supplies for its several generating stations outside Yallourn.

Considerable sums were expended on the conversion of certain boiler plant at Newport and Spencer-street stations to allow the Commission's own product—briquettes—to be used as a fuel and thus to establish complete independence of the State's generating system from the uncertainties of production and transport of black coal.

On the approach of the 1946 winter, complete absence of fuel stocks brought this unhappy position to a real climax in May last ; rationing of electricity became inevitable when, as the Commission had long foreseen, the general shortage of solid fuel in Victoria dominated the Commission's electricity supply and briquette undertakings. The Government, in these circumstances, declared its responsibility for electricity rationing.

The generating capacity was sufficient to have met adequately all demands for electricity without rationing during the winter of 1946 had the Commission been untrammelled in the delivery of briquettes to its generating stations. In view of public uncertainty about the reason which made necessary the rationing of electricity, the Commission felt it necessary to issue for the information of its own personnel a pamphlet "Why Electricity Rationing?". Because of its public importance, the pamphlet has been included as a supplement to this report.

## **HYDRO-ELECTRIC RESOURCES OF THE SNOWY RIVER.**

Reference has been made in earlier reports to alternative proposals for the utilization of the Snowy River waters for irrigation and hydro-electricity. There are three proposals :—

- (a) A New South Wales hydro-electric project for the development of up to 250,000 kW of generating capacity for that State, and a separate power development in Victoria of about 150,000 kW. Adoption of proposal (b) would cause the abandonment of these power developments.
- (b) The diversion of the Snowy at a point near Jindabyne, New South Wales, by a tunnel northwards to the Murrumbidgee River—primarily for irrigation and water supply purposes—with which would be associated a relatively limited hydro-electric development.
- (c) The diversion of the Snowy into the Murray, providing for a maximum utilization of water for power generation, irrigation, stock and domestic requirements, at the same time avoiding the curtailment of potential power resources which is inherent in the proposal to divert to the Murrumbidgee.

A conference was held at Canberra on the 25th June, 1946, of representatives of the Commonwealth, New South Wales, and Victorian Governments, Victoria being represented by the Honorable the Premier and the Honorable the Minister of Water Supply ; the Chairman of the State Rivers and Water Supply Commission and the Chief Engineer of this Commission were in attendance.

It was agreed that a preliminary investigation be made by the Commonwealth Government and the result presented to a further conference six months later, such investigation to establish whether, as between the diversion to the Murray River and the diversion to the Murrumbidgee River, there was a case for more exhaustive inquiry or whether one of these alternatives should be eliminated.

### UTILIZATION OF THE HUME WATERS FOR POWER GENERATION.

As a consequence of the adoption by the Commonwealth Government and the States concerned of the proposal of the River Murray Commission to increase the capacity of the Hume Reservoir from  $1\frac{1}{4}$  to 2 million acre feet, the State electricity authorities of New South Wales and Victoria have agreed to accept from the River Murray Commission a charge of 0.008d. per kilowatt-hour for the use of the water for the generation of electricity. Designs, which are to be prepared by the Victorian Electricity Commission, are proceeding in respect of the generating station at the Weir, to comprise two 21,000 kW turbo generators and possibly a third unit of like capacity.

Details of the agreement between the New South Wales and Victorian electrical authorities have not been completed, but it is expected that, as the station will be located in New South Wales, the capital moneys will be provided by that State; the output from the station and the annual costs will be shared by the Victorian and New South Wales electricity supply authorities.

It is again emphasized that the Hume waters are used primarily for irrigation during the summer period, when the demands for electricity are lowest; for the remaining period of the year there would be no output of electricity from the proposed station.

### OVERSEAS INVESTIGATIONS.

Two officers of the Commission (Messrs. G. E. Baragwanath, B.Sc., A.A.C.I., and W. H. Finlayson, Dip. Mech. Eng.) are still overseas as members of the Commonwealth Government Mission which is exploring scientific, technical, and industrial developments, particularly in Germany.

During the year, Mr. W. Morrison, B.Sc. (Eng.), A.M.I.C.E., Assistant Engineer in Charge Coal Supply, visited England and the Continent to arrange for the purchase of drawings and to explore the facilities for the manufacture of coal winning and briquetting machinery. Mr. F. H. Roberts, A.M.I.E. (Aust.), Assistant Mechanical Engineer, has been despatched to confer with British boiler manufacturers regarding special features and the details of new boiler plant required for Yallourn, and to investigate in Germany the latest developments in the combustion of high moisture content raw brown coal on the scale contemplated for Yallourn.

Mr. E. L. Merigan, B.E.E., Assistant Electrical Engineer, and Mr. L. H. Lorimer, B.E.E., A.M.I.E. (Aust.), Assistant Engineer, Civil Branch, are in America studying modern developments in design and practice relating to large-scale transmission and transformation of electricity at extra high voltages. These investigations will have an important bearing on the transmission of electricity from Kiewa to Melbourne.

### CREATION OF PERSONNEL DIVISION.

There has been created within the Commission's organization a Personnel Division, which comprehends, in addition to the normal scope of personnel management—rates of pay and conditions of employment,—matters related to personnel welfare, training, education, and safety. Mr. A. M. Carter, previously Manager, Commercial Division of the Electricity Supply Department, has been appointed Manager of the Personnel Division.

Committees of senior commercial and engineering officers, acting in conjunction with the Amenities and Welfare Officer and the Education Officer, are directing training and educational programmes, an important feature of which is the special provision for the rehabilitation of ex-servicemen. Training of engineering cadets, electrical operators, and apprentices is following up-to-date trends in this important task of assuring that ample trained personnel are available from within the service. The special school for the training of linesmen has been transferred from Footscray to Oakleigh, where still more comprehensive training is possible.

In addition to such training and rehabilitation matters, the Personnel Division is responsible for the standards of workers' accommodation, amenities in the workshop and at other centres of employment, and the provision of recreational facilities.

Because of the Commission's widespread activities, many avenues of employment are peculiar to its service. Through the medium of these education and training measures, personnel will be encouraged to seek advancement, with resultant benefit to the individual and to his service to the community through the Commission's undertakings.



### RURAL ELECTRIFICATION.

During the financial year, 4,700 new consumers in extra-metropolitan areas (including 1,437 farms) were connected—an increase of over 50 per cent. on the highest number of farms connected in any pre-war year.

The following shows the extent of the Commission's country electrical development during the last decade.

	Total Consumers Served by Commission.	Extra-Metropolitan Consumers.	Farms Supplied.
1935-36 .. .. .	225,534	63,760	1,970
1940-41 .. .. .	284,373	93,226	5,771
1945-46 .. .. .	321,631	119,424	10,209

Thus, extra metropolitan consumers have almost doubled in the last ten years, and the number of farms has increased five-fold. For further detail see Graphs Nos. 7 and 9—ten-year statistical review—in the front of this report.

The resources available to the Commission for line construction have, during the last two years, been used almost wholly on extensions to serve rural communities. The Commonwealth plan for the production of foodstuffs, under which the Commission was required to give priority of supply to farms approved by District War Agricultural Committees, terminated on 1st March, 1946.

There are still serious shortages of trained personnel and essential materials, the latter being directly related to the difficulties experienced by manufacturers and producers.

To overcome the lag of the war years, a linesmen's school has been re-established for the training of personnel to augment the line construction gangs.

### ELECTRICITY SUPPLY TARIFFS.

The result of operations and the imminence of further increased costs confirms the previously expressed view that there can be no prospect of any major reductions in tariffs under ruling conditions.

However, in accordance with the Commission's policy of progressive simplification of tariffs, metropolitan standard rates have been extended to all country industrial consumers (factories and other industrial establishments) as from the 1st October, 1946.

By this decision no less than 1,250 country electricity consumers of relatively limited consumption will benefit to the extent of £23,000 per annum. This group was not eligible for supply under the standard Industrial All-Purposes Tariff first introduced on a State-wide basis in 1940. Also, as from the 1st October, 1946, the charges for public lighting in extra-metropolitan areas have been standardized. Provincial rates will apply throughout, and country municipalities will benefit overall to the extent of £2,910 per annum.

As a result of electrical development within the City of Chelsea and at Wodonga, consumers in these supply areas were placed on lower schedules of tariffs.

### VICE-REGAL VISIT TO YALLOURN.

His Royal Highness the Governor General and Her Royal Highness the Duchess of Gloucester visited Yallourn on the 26th November, 1945. They were received by the Chairman on behalf of the Commission, and Dr. J. M. Andrew, President of the Yallourn Civic Association tendered an Address of Welcome at a public function in the Town Square. Later Their Royal Highnesses were conducted on a tour of the town and an inspection of the Open Cut Works.



The President of the Yallourn Civic Association, Dr. J. M. Andrew, presenting an address of welcome to Their Royal Highnesses.

### YALLOURN TERRITORY.

*Population.*—5,009, of whom 3,914 are resident in the Town of Yallourn.

*Housing.*—41 residences were completed during the year, bringing the total to 935. A further 48 houses are in course of erection and on their completion the town for all practical purposes will be at its maximum development.

Accordingly the Housing Commission is proceeding as an urgent measure with the erection of 200 houses at Moe. This will provide a measure of relief but building must be continued if possible at an accelerated rate if the full requirements of the existing Yallourn personnel alone are to be met. It is estimated that there will be needed, in the Moe-Morwell district, a further 600-800 houses for Yallourn personnel.

*Sewerage of the Town.*—The treatment plant was completed in 1941; the construction of reticulation sewers, which has been at a standstill, was recommenced in March, 1946. It is expected that the first connections to the system will be effected by the end of 1946.

*Hospital and Medical Services.*—These are administered by the Yallourn Medical and Hospital Society, financed by regular contributions from all employees. The hospital accommodates 44 (emergency capacity 71), and the daily average number of occupied beds (31) was substantially lower than last year (38).

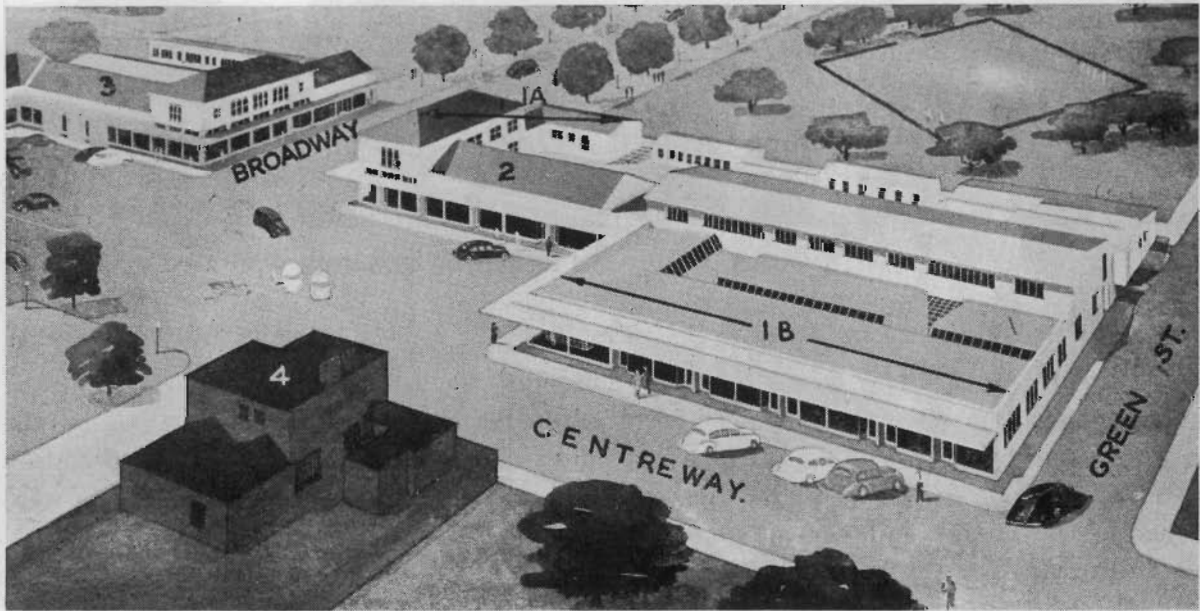
*Fire Protection.*—A Fire Officer and Senior Assistant have been appointed and a new station with quarters for the permanent members of the fire brigade is in course of erection. The customary precautionary measures included protective burning of the forest floor, removal of dead timber in the surrounding bush and the maintenance of access tracks. A new pump-house for the B.C.M. Open Cut is under construction. No serious fire occurred on the territory during the year.

### YALLOURN SHOPPING FACILITIES.

As reported last year additional shops are to be built and leased to private traders. The complete project will develop the whole area between Broadway, Centreway, Greenstreet, and the Bowling Green Reserve as a shopping block to cater for all needs. Eventually up to 25 shops will be erected.

Because of the priority of housing over other classes of building, the project has of necessity been divided into two stages; the first, for which tenders have been let, is an extension of an existing building in Broadway to provide five shops, a storage area and offices; the second stage, which will be commenced as soon as building conditions improve, provides for the completion of the project.

In addition to the development of a permanent shopping centre, six temporary wooden shops have been erected near the picture theatre, and as soon as conditions permit, permanent lock-up shops are to be built outside the entrance gates to the main works.

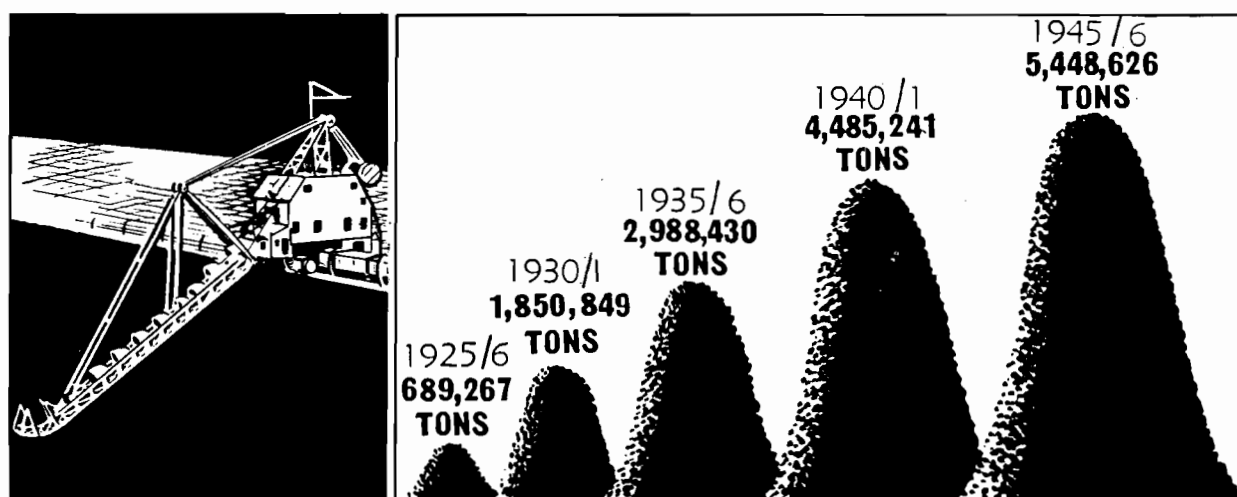


PROPOSED YALLOURN SHOPPING CENTRE.

1A.—Five shops (contract approved); 1B.—Proposed second stage; 2—Existing butcher's shop;  
3—Existing general store; 4—Post office.

**COAL SUPPLY.****YALLOURN OPEN CUT—COAL PRODUCTION.**

					Tons.
1925-26	..	..	..	..	689,267
1930-31	..	..	..	..	1,850,849
1935-36	..	..	..	..	2,988,430
1940-41	..	..	..	..	4,485,241
1945-46	..	..	..	..	5,448,626



Increase in Annual Brown Coal Production, 1925-1946.

*Coal Winning.*—The year's operations brought the total coal excavated from the Yallourn Open Cut since the commencement of operations to 64·96 million tons. Of the coal won during the year 3,525,235 tons were delivered to the Yallourn generating station and 1,923,391 tons to the briquette factory. On the 3rd August, 1945, 21,251 tons were produced—the largest daily output yet achieved.

*Overburden Removal.*—1,493,850 cubic yards of overburden were removed, compared with 1,663,750 cubic yards during the previous year, bringing the total removed at the 30th June, 1946, to 24,890,800 cubic yards. Shortage of labour and exceptionally wet weather during the latter half of the financial year again seriously curtailed operations.

The area of the open cut has increased from 453 to 480 acres at grass level and from 397 to 417 acres at the surface of the coal.

*Plant.*—The conveyor belt system for coal transport from the open cut to the extended briquette factory was completed. A conveyor is being erected to provide an alternative outlet to the generating station for No. 2 coal level.

Two additional electric locomotives, especially designed for coal transportation, and ten additional overburden trucks were placed in service.

*B.C.M. Open Cut.*—49,237 tons of coal were produced and sold for industrial purposes, making a total of 1,606,530 tons produced to date.

Five tournapulls with scrapers and trailers, two caterpillar tractors, and one grader were obtained in June, 1946, for overburden removal to enable the production of increased supplies of raw brown coal for industry.

### POWER PRODUCTION AND TRANSMISSION.

The State generating system comprises interconnected generating stations at Yallourn, Melbourne (Newport, Spencer-street City, and Richmond), Geelong, Ballarat, Kiewa, and Sugarloaf-Rubicon; terminal stations are located at Richmond, Yarraville, Brunswick, Thomastown, East Malvern, Rubicon "A", and Geelong. The transmission system includes the lines from the power stations to the terminal stations and from the terminal stations to the main metropolitan substations, together with those interconnecting the main substations. Electricity is transmitted to the Commission's various Electricity Supply branches, Melbourne and Country, and also to those Melbourne municipal undertakings which purchase in bulk.

Under emergency conditions, frequency changers are used for supply to and from the Victorian Railways system (25 cycle), the maximum capacity being 22,000 kW.

The installed capacity of generating plant at the 30th June, 1946, was as follows :—

#### *Thermal Stations—*

					kW
Yallourn, including Briquette Factory	..	..	..	..	183,000
Melbourne—					
Newport	..	..	..	..	108,000
Spencer-street	..	..	..	..	36,900
Richmond	..	..	..	..	15,000
Geelong	..	..	..	..	10,500
Ballarat	..	..	..	..	5,900

#### *Hydro Stations—*

Sugarloaf-Rubicon	..	..	..	..	26,415
Kiewa (1st Stage)	..	..	..	..	24,000

Details of the loading (a) on generating stations throughout the State, and (b) on Commission's generating stations, are given in Appendix No. 11.

#### LOADING ON COMMISSION'S GENERATING STATIONS.

Generating Stations.	Maximum Demand (kW).		kWh Generated (Millions).	
	1945-46.†	1944-45.	1945-46.‡	1944-45.
Yallourn* (Thermal) .. .. .	190,500	187,000	1,136.7	1,133.2
Melbourne—Newport (Thermal) .. .. .	93,500	89,500	136.9	92.1
Spencer-street (Thermal) .. .. .	34,200	35,070	55.0	59.3
Richmond (Thermal) .. .. .	15,600	15,530	33.1	40.2
Geelong (Thermal) .. .. .	11,900	11,200	31.2	38.8
Ballarat (Thermal) .. .. .	5,350	5,000	16.0	18.9
Sugarloaf-Rubicon (Hydro) .. .. .	25,650	25,500	134.3	101.1
Kiewa (Hydro) .. .. .	26,000	24,000	51.4	18.7
Total .. .. .	377,100†	351,600†	1,594.6	1,502.3

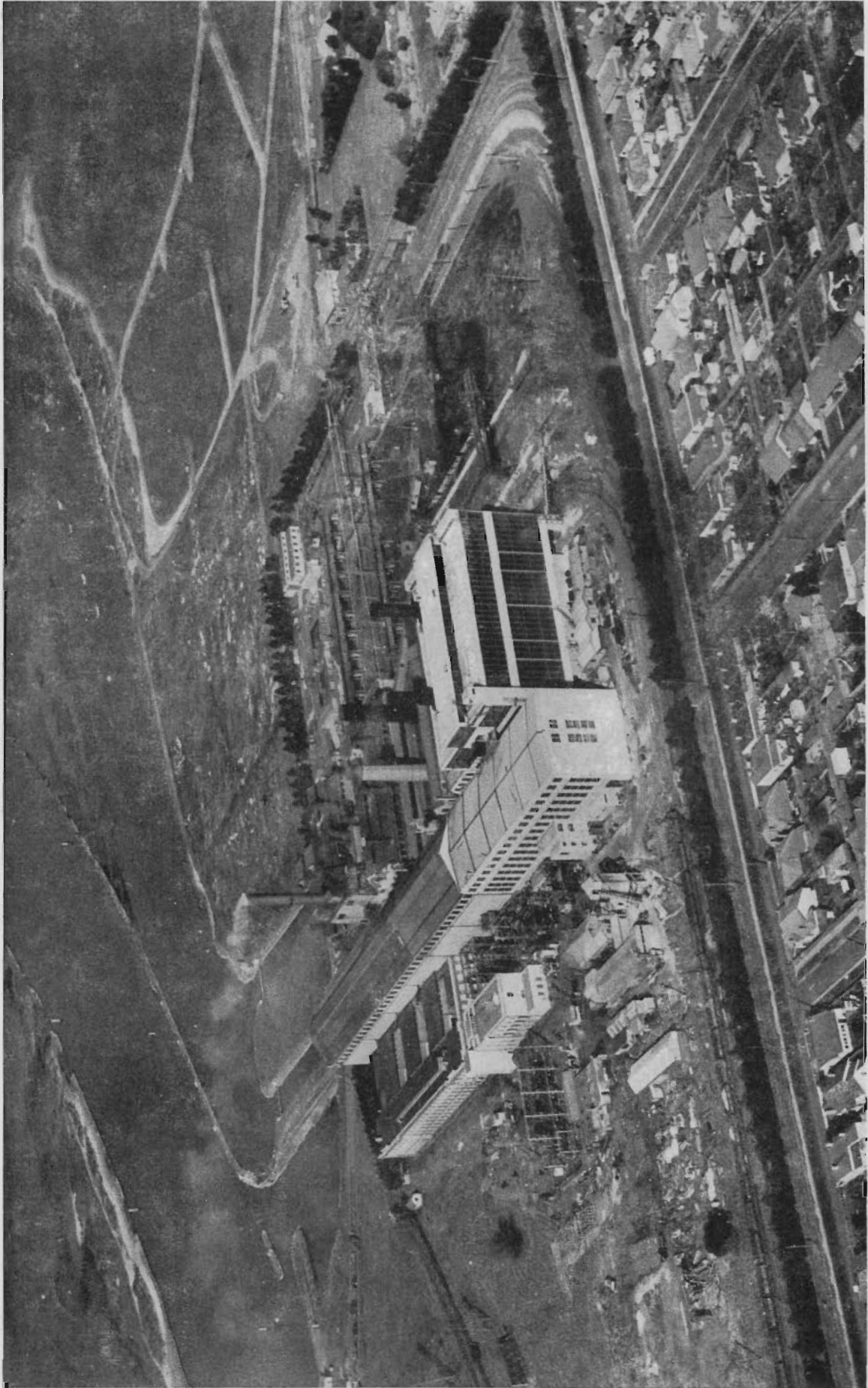
\* Including Briquette Factory.

† Maximum Coincident Demand.

‡ Restrictions on use of electricity in force from 18th May, 1946.

The year's output of the hydro-electric stations increased by 55 per cent. Climatic conditions were more favourable, and the Kiewa plant installed last year was available for the full twelve months' period.





NEWPORT GENERATING STATION

Commission's Station in the foreground—Victorian Railways Commissioners' Station (Metropolitan Railway Traction) adjoining at the rear.



## MAJOR EXTENSIONS PROGRAMME.

(PLANNED DEVELOPMENT—INSTALLED CAPACITY 237,000 kW).

### Newport Generating Station (Four 30,000 kW sets, Nos. 4, 5, 6, and 7).

No. 4 set placed in service during April, 1945, at reduced output, was brought to full output during September, 1945, and has operated successfully. No. 5 set arrived from England during January, and, together with the necessary boiler plant, has been placed in service since the close of the financial year.

Orders have been placed for sets Nos. 6 and 7 and associated boiler plant; the first of these 30,000 kW machines is expected to be ready for service by the winter of 1948 and the other in 1949 or 1950.

To augment the station fuel-handling provisions, a 165-ft. gantry grab crane was placed in service in February, 1946, and a 78-ft. grab transporter purchased from the Ministry of Munitions is being erected.

### Kiewa Hydro-Electric Scheme.

(ULTIMATE DEVELOPMENT—INSTALLED CAPACITY 117,000 kW).

Additional construction plant and labour available since the cessation of hostilities have made possible an active prosecution of those planned construction works in abeyance during the war. Delays in delivery of some important items of construction plant from overseas are still a cause for concern.

*No. 3 Development—Bogong (Installed Capacity 24,000 kW).*—Completed towards the end of the previous financial year.

*No. 4 Development—Mt. Beauty—(Installed Capacity 39,000 kW).*—Tail race channel and pondage embankment are well advanced, and excavation of the generating station shaft has been commenced (the station will be located 450 feet underground). Preparatory work is in hand for the head race tunnel.

Three 13,000 kW turbo-generators have been ordered for delivery in 1949.

Stores, workshops, residences, living quarters, trading facilities, water supply, etc., are being developed.

*Nos. 1 and 2 (Upper) Developments (Installed Capacity 21,000 kW and 33,000 kW respectively).*—Drilling work at the sites of the main dams has proceeded and the designs of these structures are in hand.

...

...

...

During the year close attention has been given to territorial fire-protection works, and measures directed towards the preservation of the catchment area have been taken in collaboration with the Soil Conservation Board.

### Yallourn Generating Station.

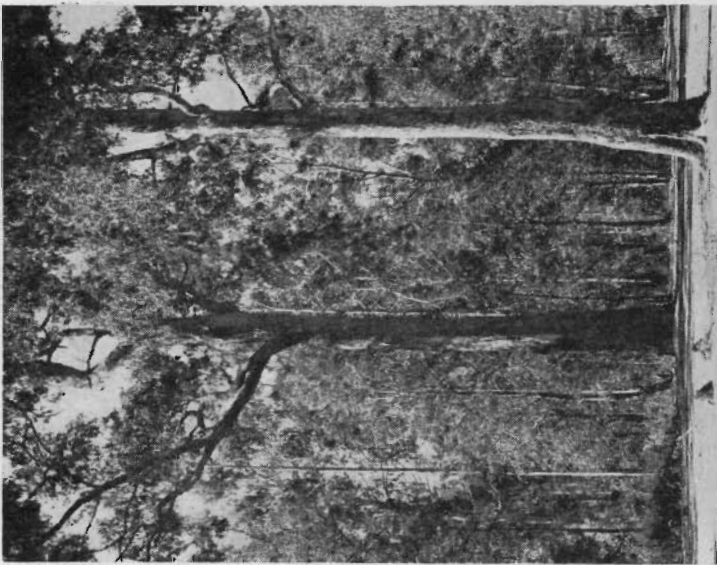
The design and layout for additional generating plant at Yallourn is under special investigation. Tenders have been called for two 50,000 kW turbines to replace six 12,500 kW units in "A" Station: also for associated boiler plant.

## MAIN TRANSMISSION AND TRANSFORMATION.

Access and patrol roadways are under construction for use in the erection of the Kiewa-Melbourne transmission line.

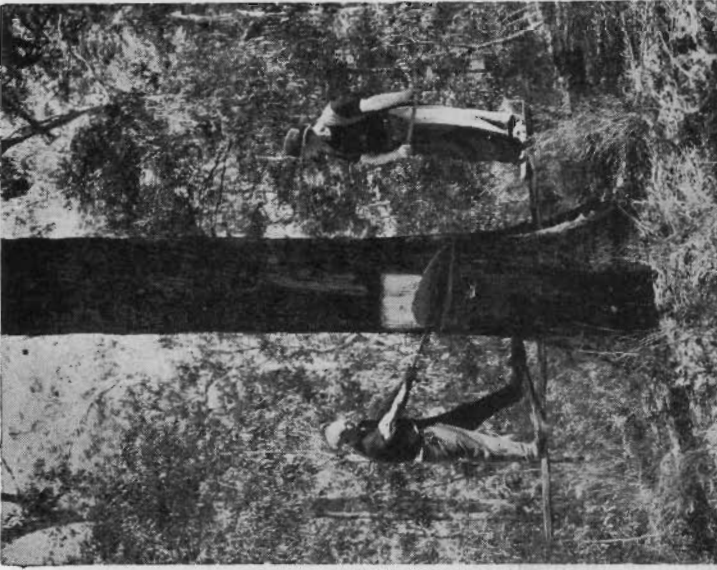
Switchhouse and control buildings at the Brunswick Terminal Station are nearing completion, and 22 kV switchgear has been installed. Construction of the new terminal station at East Malvern is well advanced. Orders have been placed for two 40,000 kVA synchronous condensers for installation at Brunswick and East Malvern Terminal Stations.

A third transformer and permanent 6.6 kV transformer switchgear have been erected at substation "FY" at Footscray. A new main substation "NB" at North Brighton has been placed in service, and construction of main substations at Surrey Hills and Fairfield is about to commence.

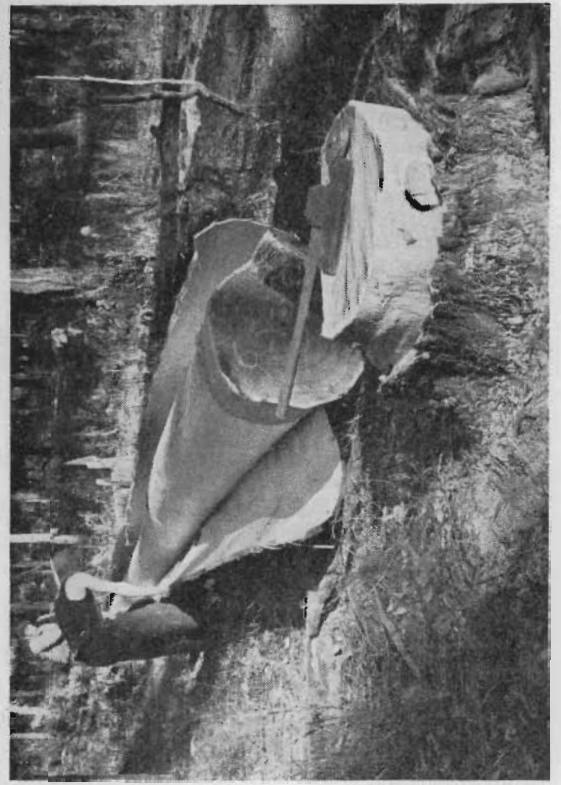


FROM FOREST  
TO TRANSMISSION LINE  
20,000 POLES ANNUALLY

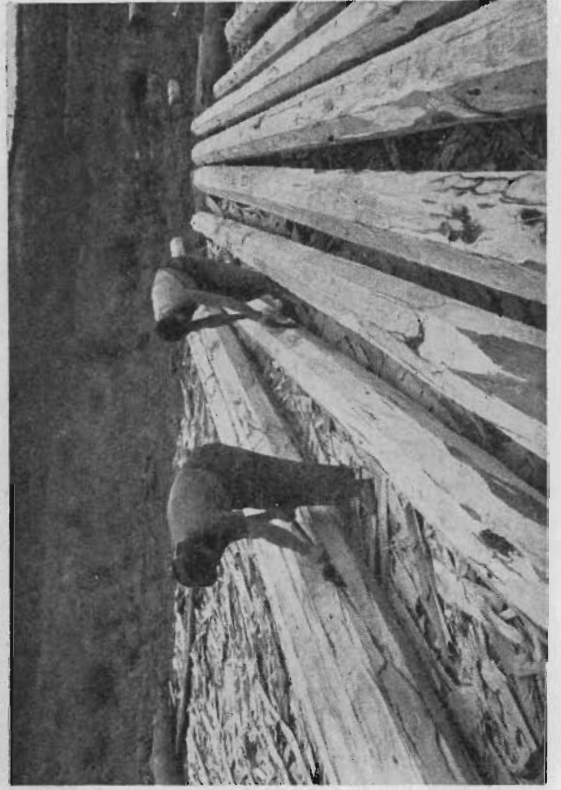
The Forest-  
Colquhoun,  
Gippsland.



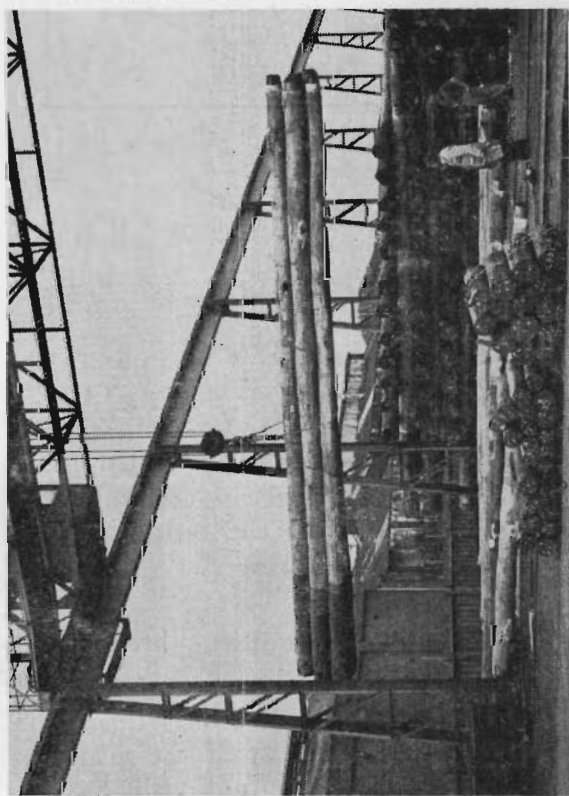
Felling  
the  
Tree.



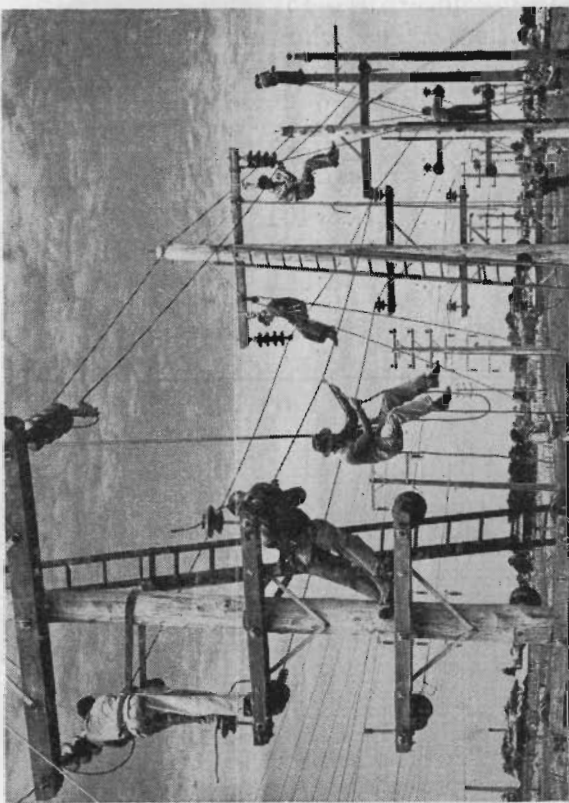
Stripping the Bark.



Preparing Octagonal Poles.



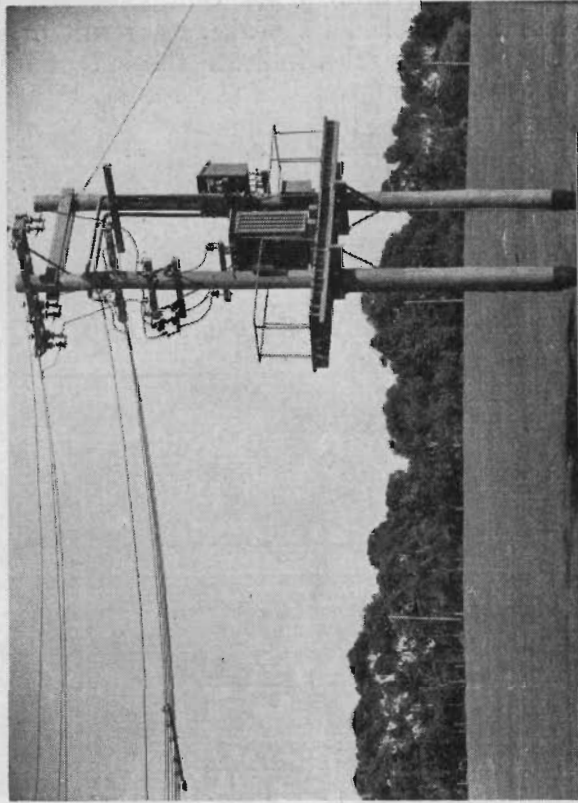
Section of Central Pole Store - Footscray



Learning to Erect Poles and Overhead Equipment: Linesmans' Training School, Oakleigh.



Erection of Poles - Truck fitted with Winch and Earth Boring Machine.



Typical Rural Substation.

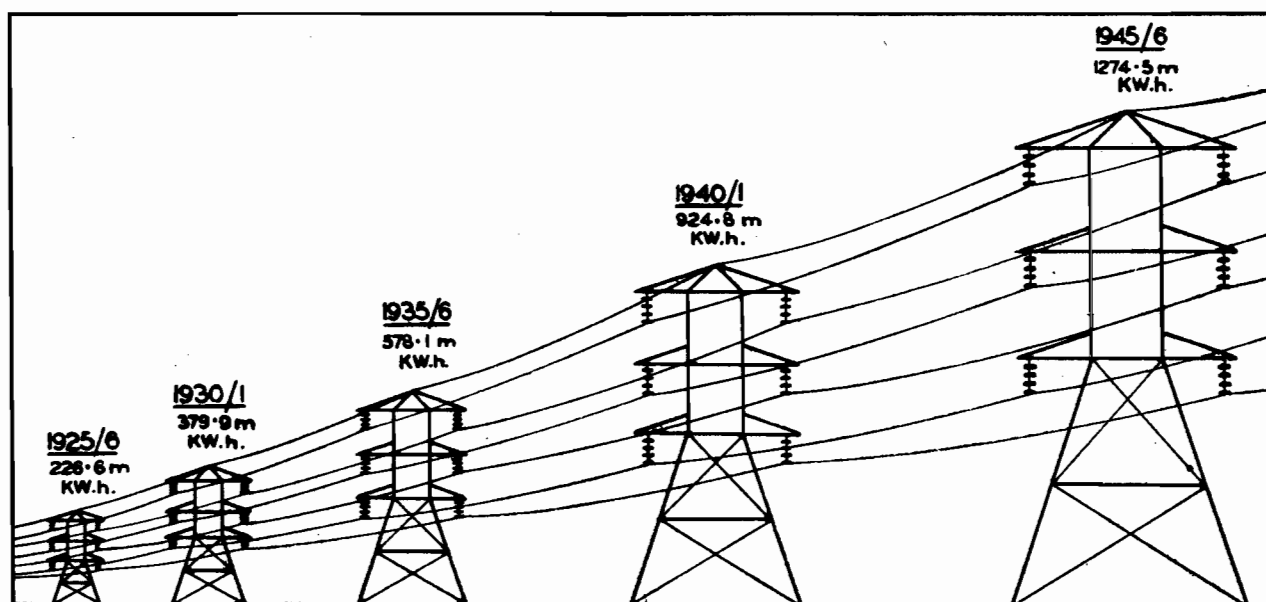
## ELECTRICITY SUPPLY.

### ANALYSIS OF DEVELOPMENT.

Electricity sold to all consumers, including bulk supplies, increased by nearly 67 million kWh or 5·5 per cent., the largest increment since 1942-43 when industrial consumption reached its peak as a result of war production. The following statistics of annual electricity sales indicate the extent of development since 1925-26 :—

					kWh (Millions).
1925-26	..	..	..	..	226·588
1930-31	..	..	..	..	379·925
1935-36	..	..	..	..	578·104
1940-41	..	..	..	..	924·773
1945-46	..	..	..	..	1,274·541

### INCREASE IN ANNUAL ELECTRICITY SALES 1925 TO 1946.



*Domestic Class.*—The average consumption per consumer showed the largest increment yet recorded, the statistics for the last five years being as follows :—

					Average Consumption per Domestic Consumer. kWh.
1941-42	..	..	..	..	703
1942-43	..	..	..	..	756
1943-44	..	..	..	..	793
1944-45	..	..	..	..	838
1945-46	..	..	..	..	928

This year's increase is, in the main, the result of a more general use of existing apparatus, although in part attributable to additional appliances, particularly hot water services—some types of new appliances are still difficult to obtain. As the restrictions on the use of electricity (referred to on page 11) commenced on the 18th May, 1946, they do not have a marked effect on the above statistics.

*Commercial Class.*—Gradual resumption of peace-time trading conditions brought about a 9·5 per cent. increase in sales.

*Industrial Class.*—The year's sales decreased by 0·7 per cent. because of reduced war production, but there was a slight upward trend over the second half of the year. The total reduction in industrial consumption for the three years since the 1942-43 peak has been only 7 per cent.—industrial sales for 1942-43 exceeded 1938-39 by 77 per cent.

An additional 29,365 horse-power of electric motors has been connected during the year.

*Mining.*—Although showing signs of a post-war revival, gold mining continued on a much restricted basis. The number of consumers increased from 29 to 43, and sales increased from 5·9 to 6·1 million kilowatt-hours. In 1939-40, sales were 17·7 million kilowatt-hours.



*Rural.*—Reference is made earlier in this report to the progress and planned development of rural extensions.

*Public Lighting.*—There was an increase of 2·8 per cent. in consumption, mainly as a result of additional lamps connected.

### 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 is compiled from information contained in this Report :—

**Revenue** increased by £259,817 (6·3 per cent.) to £4,414,586.

**Sales of Electricity** increased by 37,250,995 kWh (4·6 per cent.) to 841,749,019.

**Consumers** increased by 10,413 (3·4 per cent.) to 320,418.

**Farms** connected increased by 1,437 (16·4 per cent.) to 10,209.

Branch.	Area of Supply (Square Miles.)	Number of Consumers.	Electricity Sold kWh (Millions).	Constructed this Year.				Number of Farms Supplied.
				Sub-stations.		Distribution Lines.		
				Number.	Capacity kVA.	H.V. Route Miles.	L.V. Route Miles.	
Metropolitan .. .. .	243·9	202,208	596·990	46	13,815	15·8	36·4	950
Ballarat .. .. .	172·7	12,992	17·394	13	1,735	8·8	8·7	243
Bendigo .. .. .	108·3	9,263	12·787	22	1,030	11·7	8·7	234
Geelong .. .. .	143·4	15,483	35·946	28	2,135	21·2	17·5	333
Eastern Metropolitan .. .. .	550·0	24,985	39·333	61	3,213	34·7	50·0	1,869
Gippsland .. .. .	1,065·0	17,360	45·995	24	1,660	12·4	36·8	2,849
Midland .. .. .	472·5	8,078	14·148	22	925	40·0	17·5	433
North Eastern .. .. .	1,437·0	17,777	57·829	125	7,650	101·1	63·3	1,668
South Western .. .. .	855·5	12,272	21·327	165	1,891	53·6	30·5	1,630
Total .. .. .	5,048·3	320,418	841·749	506	34,054	299·3	269·4	10,209

### BRANCH TRANSMISSION AND DISTRIBUTION.

Conversion of the metropolitan system of supply from single phase to standard three phase was continued in areas where three phase supply was required by industrial consumers or where the single phase systems were becoming overloaded. The conversion of nine substations was completed during the year in the districts of Kew, Brighton, and St. Kilda.

The conversion to 66 kV of the South Western Branch main transmission line between Camperdown and Terang is proceeding, including new main substations at Terang and Warrnambool. A 66 kV transmission line from Yallourn to Maffra and a new main substation at Maffra were constructed.

### ACQUISITION OF SUPPLY UNDERTAKINGS.

The undertaking at Murchison was acquired from the Shire of Waranga on the 30th November, 1945. Arrangements are proceeding for the acquisition of the Beechworth, Elmore, Hamilton-Coleraine, Inglewood, and Yarram undertakings during the next financial year.

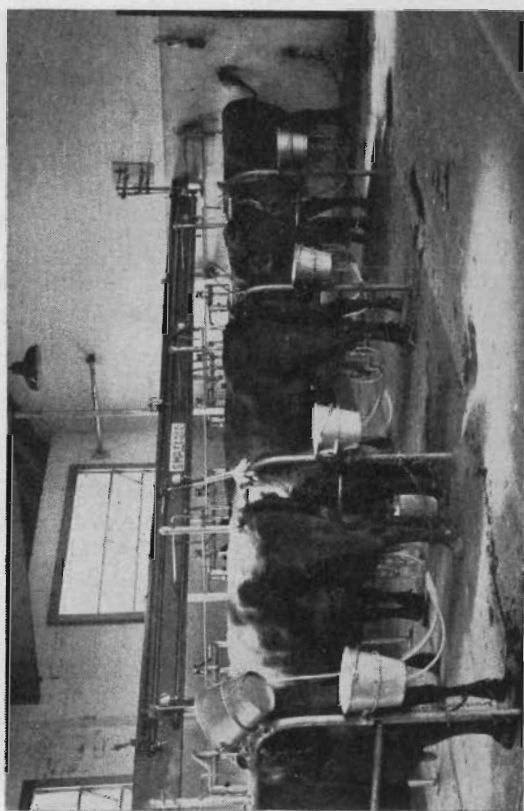
### TRAMWAYS—BALLARAT, BENDIGO, AND GEELONG.

A loss of £16,406 resulted from the operations of the three tramways systems compared with £21,503 last year—a reduction of £5,097 (23·7 per cent.). Losses at Bendigo and Geelong were £14,188 and £3,165 respectively, while at Ballarat there was a surplus of £947.

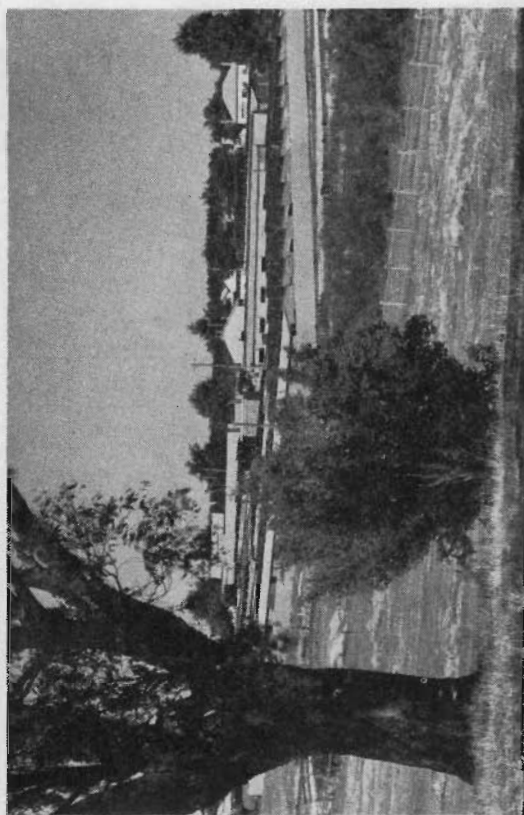
Total revenue was £146,503, a decrease of £102 (0·1 per cent.). The number of passengers carried—16,514,067—decreased by 201,349 (1·2 per cent.) chiefly as a result of the closing of military camps and reduced activities in munition and other defence establishments.

Total expenditure was £162,909, a decrease of £5,199 (3·1 per cent.). Tramway capital is now almost wholly written off, and this decrease is the sole result of a further reduction in annual capital charges.

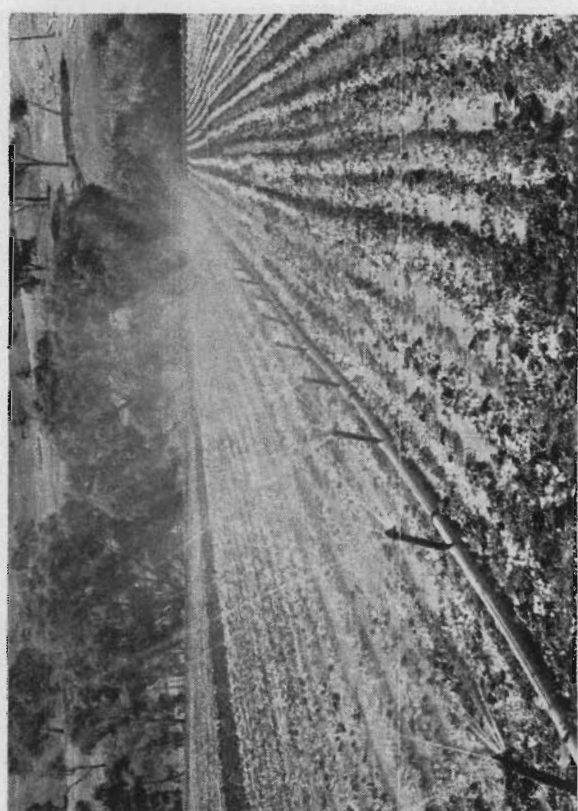
# RURAL INDUSTRY TYPICAL USES OF ELECTRICITY



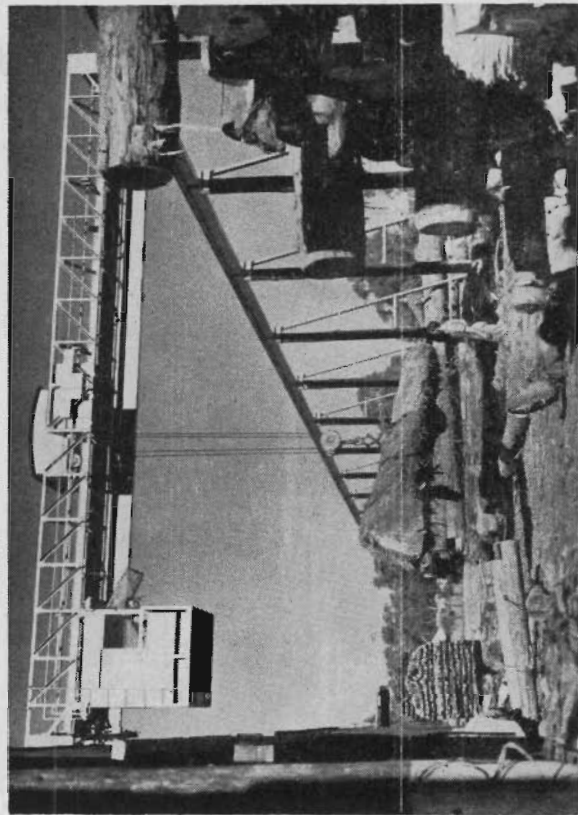
Dairying — Werribee.



Poultry Farm — Ballarat.

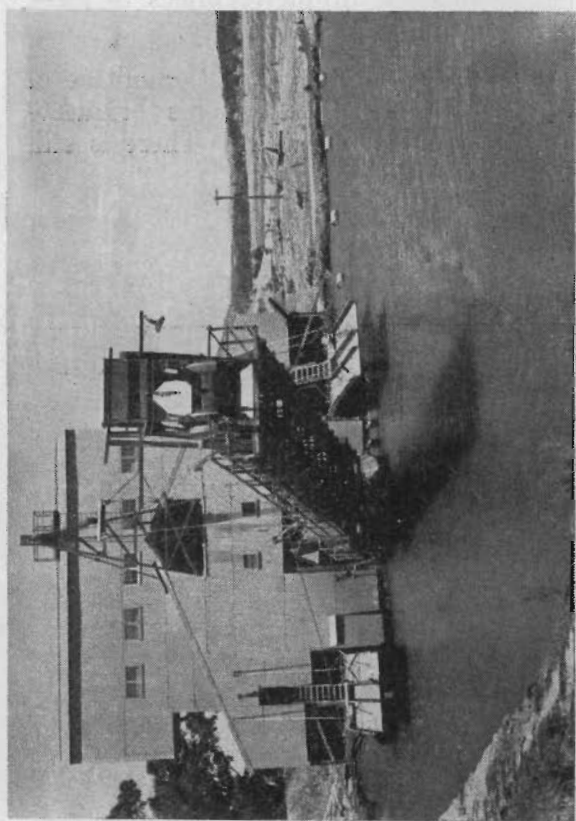


Irrigation — Bacchus Marsh.

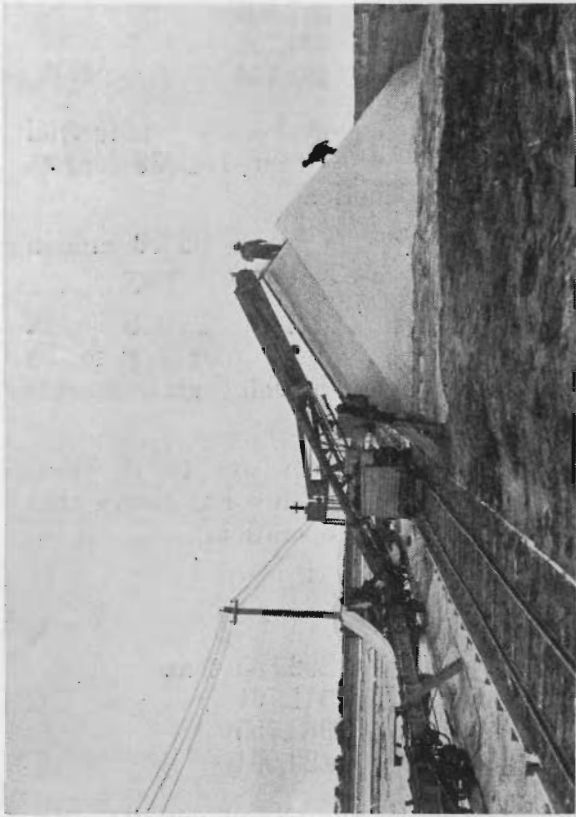


Timber Mill — Ringwood.

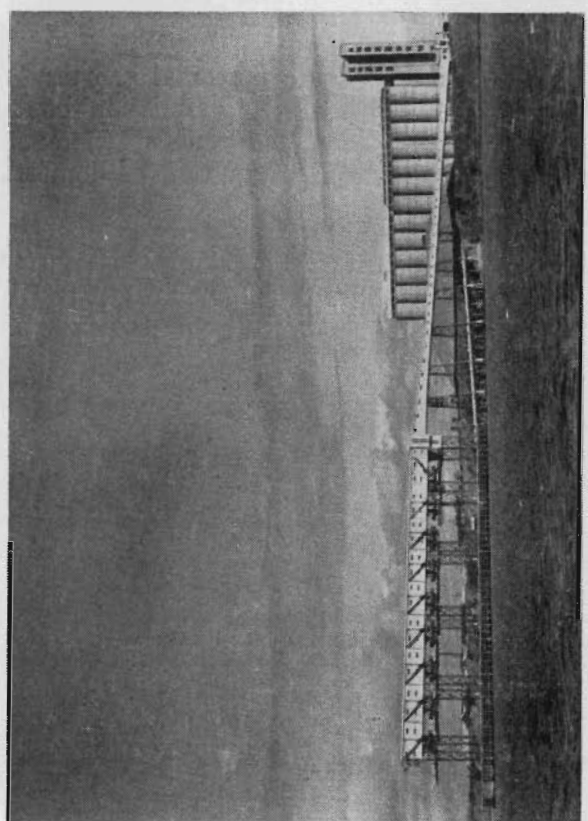




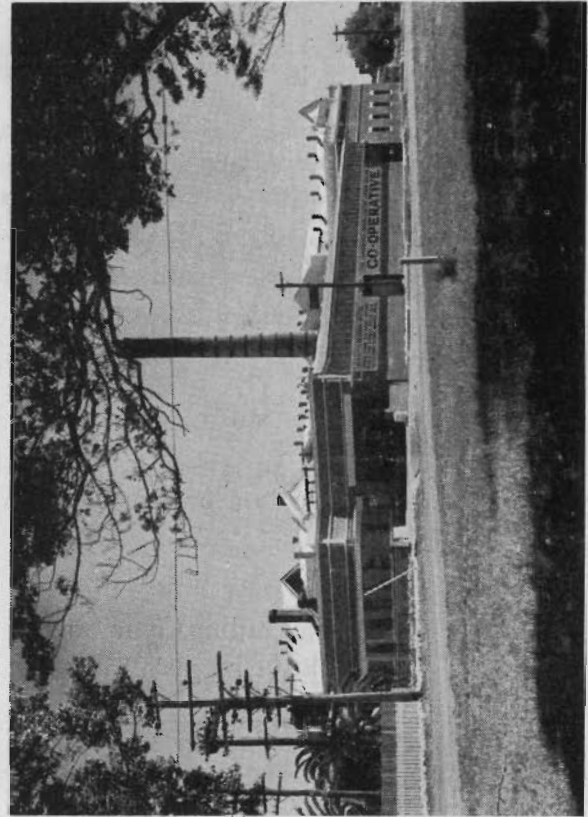
Gold Dredging — Newstead.



Salt Works — Geelong.



Grain Silo and Loading Wharf — North Geelong.



Butter Factory — Camperdown.

### BRIQUETTE PRODUCTION AND DISTRIBUTION.

						Tons.
1925-26	..	..	..	..	..	86,576
1930-31	..	..	..	..	..	225,473
1935-36	..	..	..	..	..	357,601
1940-41	..	..	..	..	..	433,756
<b>1945-46</b>	..	..	..	..	..	<b>493,144</b>

The whole output was of the industrial type: production of the "Y" industrial briquette, which was commenced in 1943 on a small scale, increased from 174,339 tons to 253,505 tons, representing more than 50 per cent. of total production.

By-product electricity amounted to 91·002 million kWh, of which 65·08 million kWh were delivered to the main system, the remainder being used at the factory.

*Factory Plant.*—The construction of the new cooling house and the installation of cooling plant is almost complete. Two additional twin presses on order are to be installed late in 1947. The steam raising plant and coal delivery crushing arrangements are to be supplemented to assure more stable factory operation.

The conversion of the internal dust extraction system from wet to electrical separation for "A" section of the factory was completed, but experience has shown that modifications will be necessary to ensure a completely satisfactory operation.

#### *Distribution—*

##### **Sales** (excluding Commission Generating Stations—

198,586 tons)	..	..	..	..	292,855 tons
<b>Revenue</b>	..	..	..	..	£341,761
<b>Expenditure</b>	..	..	..	..	£365,755
<b>Loss</b>	..	..	..	..	£23,994

The loss arises from higher production costs. Because of the Commonwealth price fixation policy, the Commission is not in a position to increase briquette prices to meet current losses, which therefore are being met by the consumers of electricity.

As related to the national shortage of fuel the Victorian State Coal Committee of the Commonwealth Coal Commission continues to allocate the Commission's briquette output between the Commission's generating stations and industrial users. There is still no prospect of early resumption of domestic sales.

### INDUSTRIAL.

#### Wages employees at 30th June, 1946 :—

	Operation.	Construction.
Power Generation .. .. .	832	726
Main Transmission Lines, Terminal Stations and Substations .. .. .	352	321
Electricity Supply—Metropolitan Branch .. .. .	230	120
Electricity Supply—Country Branches .. .. .	334	391
Briquette Production and Distribution .. .. .	368	13
Coal Winning—Yallourn .. .. .	671	36
General Services and Workshops—Yallourn .. .. .	648	240
General Services and Workshops elsewhere .. .. .	843	179
Tramways—Ballarat, Bendigo, and Geelong .. .. .	267	—
Total .. .. .	4,545	2,026
Grand Total .. .. .	6,571	

In common with other industries, the Commission's activities have been hampered by a greatly increased labour turnover among new employees engaged since the cessation of hostilities.

There are 238 apprentices employed principally in engineering trades; 45 were indentured during the year. Reports of the progress of apprentices generally were satisfactory.

### TECHNICAL LIBRARY SERVICE.

The Technical Library service has been modernized and a well equipped library is available to technical officers throughout the State. In addition to a central library at the Commission's Head Office, there are branch libraries at its Flinders-street office, Yallourn, Yarraville, and Richmond.

### PUBLIC SAFETY AND OTHER REGULATORY RESPONSIBILITIES.

*Electric Light and Power Act, 1928.*—At the close of the financial year 84 franchises were in force. Of these, 56 were issued to 40 Municipal Councils (several of which operate under more than one Order), and 28 were issued to 24 companies or persons.

The Governor-in-Council approved the following Orders in Council :—

#### (a) AUTHORIZING SUPPLY OF ELECTRICITY—

Order No.	Undertakers.	Area of Supply.
255	Edgar Henry Bailey and Leonard John Bailey	Woomelang and environs

#### (b) REVOKING ORDERS-IN-COUNCIL PREVIOUSLY GRANTED—

Order No.	Undertakers.	Area of Supply.	Reason for Revocation.
191	Waranga Shire Council ..	Murchison .. ..	Undertaking transferred to State ownership on 30th November, 1945
60	Swan Hill Shire Council ..	Township of Swan Hill	Area now part of Borough of Swan Hill

Inspections were made of 11 electrical undertakings in addition to newly-installed generating plant and high tension systems; complaints of unsatisfactory service were also investigated.

Electricity supply undertakings which have adopted the multiple-earthed neutral system of protection were granted further extension of time because of inability to procure labour and materials for completion of the work.

Extensions (totalling 3,000 kVA) to the plants at Ararat, Birchip, Cohuna, Cowes, Kerang, Portland, Pyramid, Stawell, Swan Hill, and Wedderburn were approved. Approval was also given to the Swan Hill Shire Council's plans for important extensions of supply to rural consumers.

*Licensing of Electrical Mechanics.*—Licences in force at the 30th June, 1946: Grade "A"—2,327, Grade "B1"—111, Grade "B"—645, Grade "C"—671.

Two licensing examinations, each including theory and practice, were held.

Special conditional permits issued: 547 for periods not exceeding six months and 431 for periods not exceeding twelve months.

*Registration of Electrical Contractors.*—At 30th June, 1946, 669 registrations were in force, 256 more than last year.

*Electrical Approvals Board.*—Because of his appointment as a Commissioner, Mr. A. W. Henderson, the representative of the workers in the electrical trades, resigned on the 16th December, 1945, and Mr. C. F. Baker was appointed in his stead.

Under the Board's constitution, two of its members retire each year. This year Mr. E. B. Foster, representing the interests of wholesale electrical traders, was re-appointed, and, on the retirement owing to ill-health of Mr. W. Cumming, Mr. A. J. Wilkins was appointed to represent the interests of electrical contractors. Appreciation is recorded of the valued services of Mr. Henderson and Mr. Cumming as members of the Board, both of whom have served since its inception in 1934.

*Electrolysis Mitigation.*—The Main Committee has not yet resumed meetings, which were discontinued in 1941 owing to war conditions, but the Technical Sub-Committee has continued its work of investigating electrolysis conditions and instituting remedial measures. A slight increase in faults over the previous year was recorded; measures were introduced to check this trend.

### 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 three years from 21st December, 1945.

It is recorded with pleasure that His Majesty the King in the New Year's Honours created Mr. Commissioner A. W. Fairley a Companion of the Order of St. Michael and St. George; also that Mr. Commissioner W. D. Chapman was elected to the Standing Committee of the Convocation of the University of Melbourne.

The term of appointment of Mr. T. P. Strickland, B.E., M.Sc., M.I.E.E., M.I.E. (Aust.), M.E.I.C., M.Amer.I.E.E., expired on the 15th December, 1945, and Mr. A. W. Henderson was appointed by the Government in his place for a period of seven years from the 16th December, 1945.

The Commission placed on record its high appreciation of the valuable services rendered by Mr. Strickland during his term of office from 16th December, 1941, to 15th December, 1945. During this period the Commission had the full benefit of Mr. Strickland's sound judgment and wide engineering knowledge and experience. He made a most valuable contribution in the solution of the many problems experienced during the last four years of the war as well as in the planning for future development, especially related to the more extensive utilization of the State's brown coal resources.

### PERSONNEL.

The Commission records with regret the death of Mr. G. E. Yonge, Public Lighting Superintendent, Metropolitan Branch, on the 25th April, 1946. Mr. Yonge joined the Melbourne Electric Supply Company, Ltd., in 1917 and transferred to the Commission when that undertaking was acquired in 1930.

Mr. R. O. Moore, Works Manager, Electricity Supply Department, retired on the 12th April, 1946, and Mr. W. J. K. Dunstan, Office Manager, Ballarat Branch, on the 18th March, 1946. Mr. Moore joined the Electric Light and Traction Company (later Melbourne Electric Supply Co. Ltd.) in 1903, and Mr. Dunstan joined the Bendigo Tramway Co. (later acquired by the Electric Supply Co. of Victoria, Ltd.) in 1897. Both of these officers transferred to the Commission when the undertakings with which they were associated were acquired. Shortly after his retirement Mr. R. O. Moore became seriously ill, and it is with regret that his death, on the 12th October, 1946, is recorded.

Miss H. L. Cameron, Chief Typist, Administrative Department, retired on the 9th January, 1946, after 25 years' service with the Commission. Miss E. F. Rutter, Chairman's Private Secretary, who joined the Melbourne Electric Supply Co. Ltd. in 1908 and transferred to the Commission when that company was acquired, retired on the 11th January, 1946.

Mr. E. Bate, Chief Engineer, Power Production, was appointed Chief Engineer of the Commission; this post comprehends all engineering design and construction and related activities.

Other important staff appointments and promotions were :—

Mr. W. J. Allen	..	..	Education Officer.
Mr. H. A. L. Binder	..	..	Amenities and Welfare Officer.
Mr. G. W. Blackwood	..	..	Workshops Superintendent, Yallourn.
Mr. E. W. Bryceson	..	..	Works Manager, Electricity Supply Department.
Mr. H. D. Burford	..	..	Manager, Commercial Division, Electricity Supply Department.
Mr. E. Burgess	..	..	Senior Commercial Officer, Electricity Supply Department.
Mr. A. M. Carter	..	..	Manager, Personnel Division.
Mr. W. G. Chandler	..	..	Forestry Officer.
Mr. J. A. Cockburn	..	..	District Superintendent, Essendon, (Metropolitan Branch).
Mr. J. L. N. Cooke	..	..	Assistant Industrial Officer.
Mr. J. A. P. Gerrard	..	..	Industrial Officer.
Mr. J. A. Hutchison	..	..	Assistant Power Station Superintendent, Yallourn.
Mr. R. H. Kitson	..	..	Acting District Superintendent, Camberwell. (Metropolitan Branch).
Mr. M. W. Levin	..	..	Power Station Superintendent, Richmond.
Mr. T. P. Pringle	..	..	Power Station Superintendent, Yallourn.
Mr. L. H. S. Robertson	..	..	Deputy Publicity Officer.
Mr. H. A. E. Rutherford	..	..	Acting Office Manager, Metropolitan Branch.
Mr. D. L. Steel	..	..	Acting Office Manager, Gippsland Branch.
Mr. A. M. Thyer	..	..	Supervising Design Engineer, Power Production Department.

. . . . .

The Commission once again has pleasure in recording its appreciation of the loyal and efficient service rendered by its personnel under extremely exacting conditions which continued during the year.

We have the honour to be,

Sir,

Your obedient servants,

G. G. JOBBINS, Chairman.

ANDREW W. FAIRLEY, Commissioner.

W. D. CHAPMAN, Commissioner.

A. W. HENDERSON, Commissioner.

W. J. PRICE, Secretary,

29th November, 1946.

29th August, 1946.

DEAR MR. PREMIER,

**BROWN COAL DEVELOPMENT.**

I refer to your letter dated 9th July, 1946, asking for a statement of the Commission's proposals to meet—

- (a) the immediate fuel shortage; and
- (b) the increased demands for fuel and power over the next ten years.

In reporting to you on these two aspects of brown coal development, the Commission feels that it should, at the outset, stress the fact that, unlike its statutory obligations in respect of electricity supply, Parliament has not imposed on the Commission any similar obligations in regard to the supply of solid fuel for industrial and other purposes. This distinction will be raised by the Commission more importantly when it reports to the Government at an early date on the project to expand coal winning and briquetting operations in the Latrobe Valley.

**(a) THE IMMEDIATE FUEL SHORTAGE.****(i) BRIQUETTES.**

During the war, the Commission, as part of its contribution towards the State's endeavours to cope with the increasing shortage of solid fuel from New South Wales, has maintained briquette production at the Yallourn factory to the utmost limit of the plant's capacity. This has been done by reducing the shut-down periods for plant maintenance purposes to the absolute minimum. Throughout the entire war period and up to the present time, the factory has, therefore, been operated under conditions of *extreme* stress with related hazard to personnel and plant.

The wartime extensions of the briquette factory, which were carried out under the extremely difficult conditions governing labour and materials, provided a substantial addition to the output of briquettes, and every effort is now being made to maintain maximum production consistent with the essential needs of safeguarding personnel and equipment.

**(ii) RAW BROWN COAL.**

In the acute emergency now existing, the Commission, as you know, is rendering further assistance to industry by additional supplies of raw brown coal from the Old Open Cut at Yallourn. Approximately 2,500 tons weekly of coal are now being won from this source, the basis of distribution being determined by the State Coal Committee. The present output is equivalent in calorific value to about 1,000 tons weekly of New South Wales coal.

As I informed the Brown Coal Utilization Committee on 9th July, 1946, the Commission's objective at present is to increase output from the Old Open Cut to 5,000 tons weekly. The need to achieve this objective as speedily as possible is fully realized. It must be emphasized, however, that the factor governing present production and the further increase in output of coal is the need to reach the state of continuous three-shift removal of overburden, which is essentially a dry weather operation.

The special plant, equipment, and labour for overburden removal have been assembled on site. At the present time, however, ground conditions are so bad that they are preventing regular operation, even on single-shift working. When ground conditions permit of regular three-shift operation and provided that a sufficient labour force is available, it will be possible to remove overburden at the rate necessary to expose sufficient coal to allow 5,000 tons per week to be won. To achieve this aim, favourable weather is needed, and important considerations also are a minimum turnover in the labour force and provision of additional housing.

The Commission is preparing, furthermore, to meet, as quickly as may be possible, a demand up to 10,000 tons weekly if industry's experience in using raw brown coal during the next three months justifies production beyond the present objective of 5,000 tons weekly. I have informed the Brown Coal Utilization Committee to this effect. Additional equipment for this larger output is in sight, and production plans are being closely considered in case this further increase should be required.



(b) THE INCREASED DEMANDS FOR (i) FUEL AND (ii) POWER OVER THE NEXT TEN YEARS.

(i) FUEL.

Preparation of recommendations by the Commission relative to the proposed establishment by the State of a new open cut and associated briquetting works in the Latrobe Valley is now well advanced. As you know, investigations of this project have caused the Commission to choose an area south of Morwell. Subject to adoption of the proposals by the Government and their early approval by Parliament, preliminary work on this site could be commenced toward the end of 1946.

The proposed new briquetting factory would be designed to permit complete units to be established in progressive stages. Each unit in full operation would produce 650,000 tons of briquettes annually. The first unit would be in full production within five years, followed by the second unit three years later. Thus, within the ten-year period of this review, total production of briquettes including production from the existing Yallourn factory could be increased to 1,100,000 tons annually in five years and to 1,750,000 tons annually in eight years.

Assuming that the allocation of briquette production is no longer subject to Commonwealth control after the expiry of National Security Regulations on 31st December, 1946, the Commission, as a matter of necessity and in accord with the policy established with the Government in 1938, will give, as planned, electricity generation first claim on its briquette production. Moreover, from the Commission's viewpoint, very strong grounds exist for the restoration of briquette supplies to householders at the earliest opportunity. Before the household briquette market was completely absorbed by the war needs of industry, it had reached a total of approximately 100,000 tons annually.

Accordingly, increased briquette production resulting from operation of the first and second units of the proposed new factory, plus production from the Yallourn factory, would be distributed as shown in the following table:—

Period.	Total Production Annually.	Power Stations Annually.	Industry and Householders Annually.
	Tons.	Tons.	Tons.
1951-1954— 1st unit of New Factory plus Yallourn ..	1,100,000	500,000	600,000
1954-1956— 1st and 2nd units of New Factory plus Yallourn	1,750,000	550,000	1,200,000

Thus, within five years from now, briquette supplies to users other than the Commission's power stations would be about twice the quantity industry has been receiving in recent years; and within eight years, about four times that quantity.

However, such an increase in briquette supplies to industry will relieve only partially the dependence of Victoria on New South Wales coal. The present estimated requirements of this State for New South Wales coal total 1,530,000 tons annually, distributed thus:—general industry 600,000 tons; production of town's gas 600,000 tons; railway locomotives 330,000 tons. Fuel used by railway locomotives may not markedly increase but in the other two categories may be expected to increase correspondingly with the State's development. In addition, it is possible that the Railways Department's Newport generating station which uses about 150,000 tons annually of black coal drawn from Wonthaggi and New South Wales may find it necessary or expedient in the future to use briquettes.

It will be apparent, therefore, that, despite the establishment of the proposed new open cut and the bringing into operation of two factory units of the associated briquetting works within the next ten years, the State still will be greatly dependent upon supplies of New South Wales black coal.

## (ii) POWER PRODUCTION.

Under this heading which is related to the direct responsibilities of the Commission a clearer picture can be presented. At present the Commission has Parliamentary authority for major extensions to the generation system which, when such were authorized in 1937, were expected to meet Victoria's electrical needs up to 1952.

The rate of increase in demand on the State generating system maintained during and after the war years has caused the Commission to project its survey very much beyond that portion of the approved extensions which remains to be completed. Actually the Commission has examined extensions of the generating system likely to be needed up to 1960. However, in keeping with its well-established practice of long-range planning, a further plan was prepared by the Commission's engineers in May, 1945, specifically dealing in detail with the next ten-year period.

This ten-year plan, starting from the basis of plant capacity at the end of 1945—namely, 409,715 kW—contemplates the provision of new generating plant totalling 383,000 kW during the ensuing ten-year period. This total includes the replacement of 75,000 kW of existing plant so that the net increment of new plant would be 308,000 kW and would bring the total installed capacity of the system to 717,715 kW.

The plan provides for the completion of works for which approval already exists, namely, the Kiewa project and the Newport "C" Station. At Kiewa there is yet to be installed 93,000 kW and at Newport 90,000 kW. The balance provided in the ten-year programme is the installation of 200,000 kW of new plant at Yallourn, of which 75,000 kW would be in replacement of the six 12,500 kW turbo-generators originally installed at Yallourn and now reaching the end of their useful life. The net increment of capacity at the Yallourn station would thus be 125,000 kW.

The total projected plant increment of 308,000 kW represents an increase of 75 per cent. on the total installed capacity of 1945. Included in this increment is provision to restore a measure of reserve upon which the future operating security of the generating system will depend.

However, it must be realized that it is not possible under present conditions to be assured that plant, as and when ordered, can be manufactured and installed in accordance with programme. Furthermore, in order to obtain the full desired margin of reserve and having regard to the possible growth of load in excess of present estimates, it may and probably will be necessary for the Commission as the result of periodical review to advise the Government of still further plans to augment the generating system.

Recent experience in relation to solid fuel production and distribution has demonstrated the benefits of a greater development of hydro-electric resources. This aspect of the next ten-year period, and beyond, has been the subject of concentrated study for some considerable time.

In the process of final design of the Kiewa project, in accordance with their normal practice, the Commission's engineers have continually under investigation every possibility to secure the utmost output from the scheme. You will be interested to know that sufficient evidence has already been assembled to indicate the possibility of bringing additional water into the upper storage upon which the scheme as a whole is fundamentally based. Accordingly, the capacity of the scheme, as originally envisaged, may be increased as the project is developed.

The Government is aware that agreement on all preliminary details to utilize Hume Reservoir water for electricity generation already has been reached by the River Murray Commission and the State electricity authorities of Victoria and New South Wales. The agreement awaits formal ratification by the Commonwealth and State Governments concerned in connection with the Commonwealth Government's expressed intention to enlarge the Hume storage.

As previously advised, the power station proposed at Hume Weir will consist of two 21,000 kW turbo-generators with possibly a third set of the same capacity. Victoria and New South Wales will share equally the power generated which will be purely a by-product of irrigation water discharge.

In addition, following the recent Canberra conference on utilization of the Snowy River, investigations are proceeding on use of the upper waters of the river and particularly the effect of their diversion either to the Murrumbidgee or to the Murray. Should diversion to the Murray ultimately be adopted, it is doubtful, however, if any substantial portion of the project could be brought into operation within the ten-year period covered by this review. Subject to the results of investigations and surveys, it appears reasonable to hope for, in the ultimate, a development of the Snowy resources of not less than 300,000 kW. Allocation between the States of the power generated is, of course, yet to be determined.

#### ACTION TO ACQUIRE PLANT.

##### (a) FUEL PRODUCTION—LATROBE VALLEY PROJECT.

Arrangements are nearly complete for obtaining from Germany working drawings of the latest types of equipment which will be required for coal-winning operations. This includes principally dredgers for coal and overburden for Yallourn and the proposed new open cut. A large variety of ancillary equipment will also be required.

The outlook at present is that much of the structural portion of this equipment and a great deal of associated machinery might be built in Australia. This applies also to a considerable proportion of the plant for the proposed new briquette factory. Before manufacture of the equipment can be started in Britain or Australia, conversion of the German drawings to the engineering standards used here or in Britain will have to be completed. The amount of work and, therefore, of time involved in these conversions will be considerable, but it is technically unavoidable.

Certain essential equipment will have to be obtained from Britain. This includes major essential components of turbo-generators and very high pressure boiler plant for the proposed new briquette factory. The ability of British manufacturers to supply the equipment will be the governing factor in bringing new plant into operation at planned stages. In this connection, it must be appreciated that British manufacturers, particularly of electrical and mechanical equipment, are now under severe strain to fill existing outstanding orders.

##### (b) POWER GENERATION.

(i) Two 30,000 kW turbo-generators still required to complete the extensions at Newport station were ordered in December, 1945, and are now being manufactured in Britain. One is scheduled for delivery in April, 1948, and the other in December, 1948.

(ii) Tenders have been invited from British firms for two 50,000 kW generators and associated boiler equipment for the new Yallourn plant.

(iii) Since the completion of No. 3 power station at Kiewa in April, 1945, substantial progress has been made in work on the second stage, known as No. 4 Development, to the extent that orders have already been placed for three water turbines and generators for No. 4 power station. The first of these generating sets is scheduled for delivery in July, 1948, the second in September, 1948, and the third in November, 1948. Preliminary work at No. 4 Development has involved the provision of housing, the excavation of a tail race channel, and extensive surveys for the large amount of tunnelling and excavation in solid rock which have now been commenced.

(iv) Tenders will be invited within eighteen months to two years for plant for the No. 1 Development of Kiewa which is the stage to follow the present No. 4 Development.

Yours faithfully,

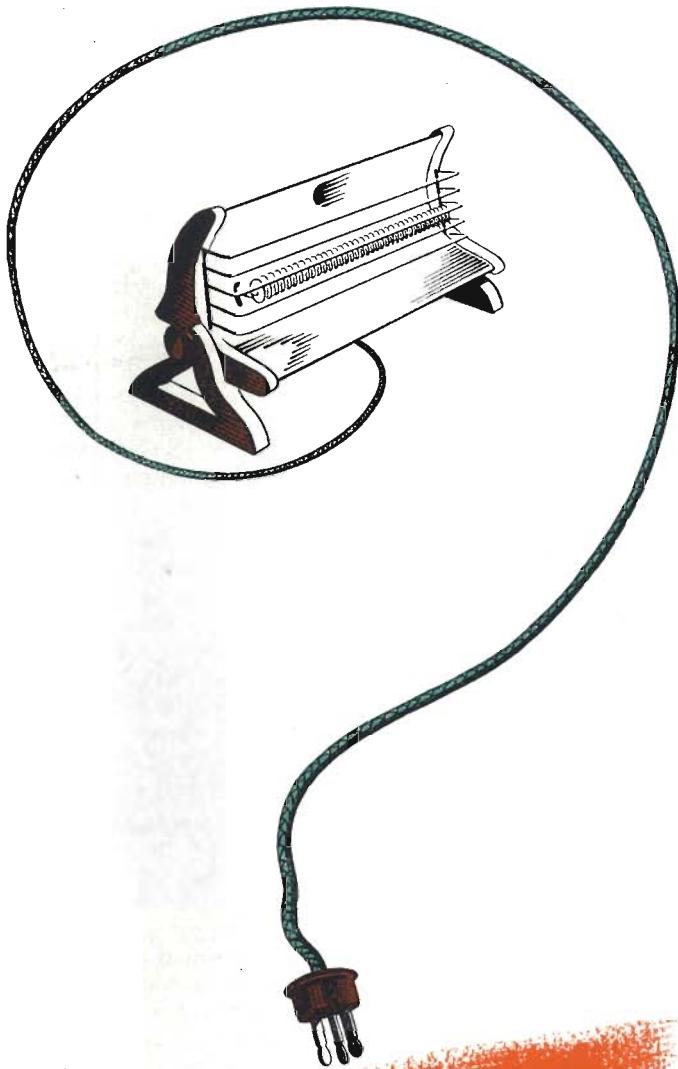
G. G. JOBBINS,  
Chairman.

The Honorable J. Cain, M.L.A.,  
Premier of Victoria,  
Melbourne.



# FACTS

## about the restrictions on use of electricity



**WHY**  
**electricity**  
**rationing?**



ISSUED AUGUST, 1946, BY THE COMMISSIONERS  
STATE ELECTRICITY COMMISSION OF VICTORIA  
FOR INFORMATION OF COMMISSION PERSONNEL

● ALL PRESENT NEEDS of electricity for light, heat and power can be supplied by the State Electricity Commission to its consumers, even though the abnormal peak demands, which occur on exceptionally cold and dark winter days, necessitate full operation for short periods of all plant in the generating system.

The system comprises thermal power stations at Yallourn, Newport, Spencer Street, Richmond, Geelong and Ballarat, and hydro-electric plant at Sugarloaf-Rubicon and Kiewa. These stations are all inter-connected. Since electricity must be generated the instant it is required, and since the demand varies according to the hour, the day, and the season, each station is planned to carry out a specific function in the inter-connected system.

Yallourn, with the largest electrical output, is the base-load station and generates the main part of the sustained daily year-round demand on the system. Hydro stations contribute energy according to the amount of water in their reservoirs or flow in streams. Thermal stations beyond Yallourn are peak-load plants designed to supplement the base load and hydro stations at times of the day when the demand for electricity is greatest.

Basically, the system is organised for complete self-dependence in fuel resources. Yallourn station burns only raw brown coal, all its needs being won economically on the spot. Thermal stations beyond Yallourn are equipped to burn either black coal or briquettes because it would be uneconomic to transport large supplies of brown coal, consisting of two-thirds water, to these stations. The yearly production of briquettes is ample for the yearly needs of these stations, using this fuel exclusively.

With all stations contributing their planned share of energy to the load on the generating system, any anticipated demand could be met without restrictions.

Why, then, has rationing been imposed this winter?

The reason is insufficient fuel for full operation of peak-load thermal stations. Basic contributory cause of this shortage is the prolonged restraint placed by other authorities under war-time powers upon the Commission's planned use of its own product, briquettes. Through circumstances beyond its control the Commission has been forced to break its tradition of maintaining continuity of service to its consumers.

(Continued inside)



# FUEL

## is the problem

● IN FULFILMENT of the trust reposed in it by Parliament, the Commission as normal policy takes every precaution within its power to ensure the full operation of the State's electrical undertaking.

Accordingly, in 1938 (Munich year), anticipating interruptions in supplies of New South Wales coal in the event of war, the Commission took steps to safeguard fuel supplies for the peak-load thermal power stations beyond Yallourn. The policy was then established with the Victorian Government that electricity generation should have at all times first claim on briquette production.

In addition, to provide against any disruption of transport by enemy action, orders were placed before the outbreak of war for reserve fuel stocks equal at that time to two years' consumption by peak-load stations. Soon after hostilities commenced, substantial reserves of both black coal and briquettes had been accumulated for war emergency use in thermal power stations beyond Yallourn.

Early in 1941 the Commonwealth Coal Control Board assumed complete command of all solid fuel stocks and distribution of all fuel supplies, including briquettes. In Victoria, this Federal authority functions through the State Coal Committee.

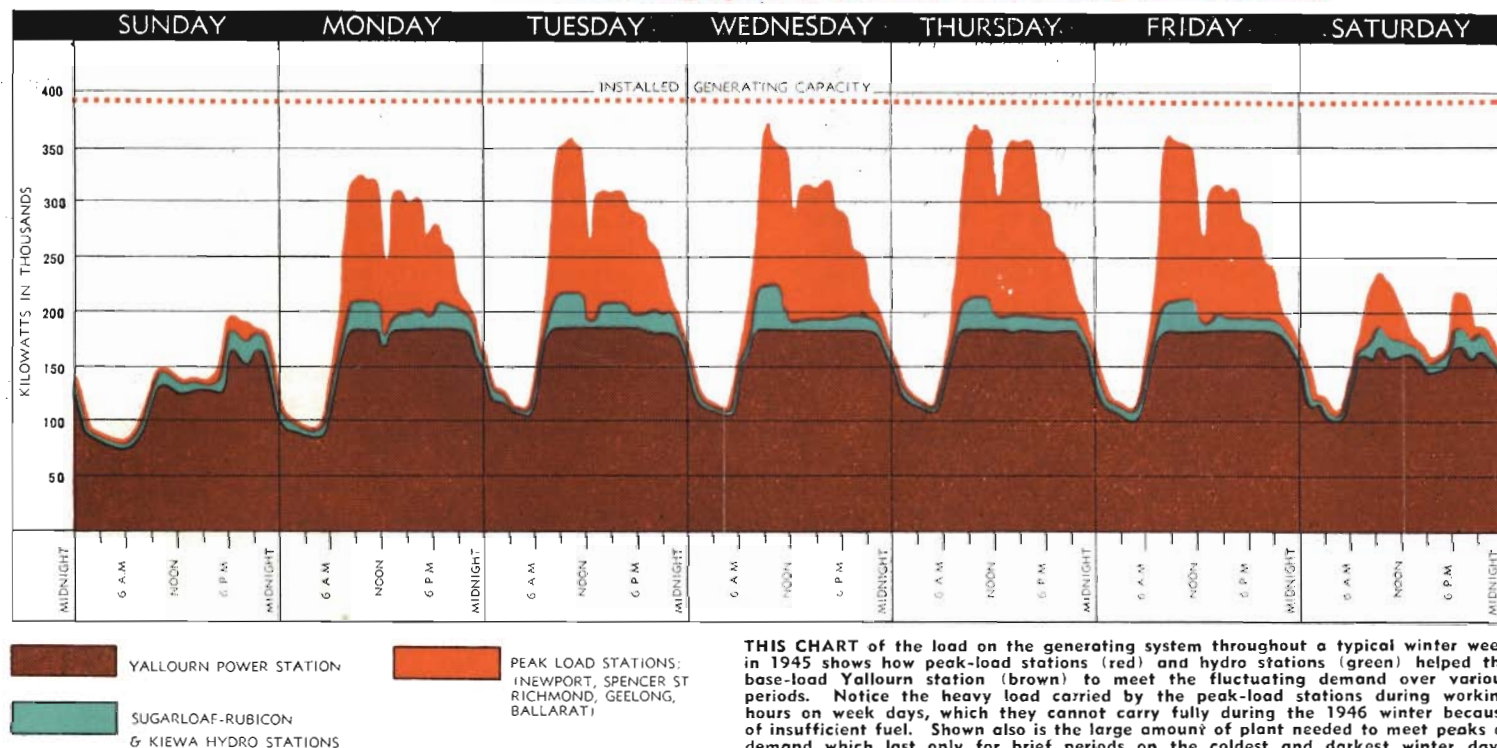
From then on the peak-load stations faced a growing fuel problem. Their fuel needs increased correspondingly with the greater demands upon them for power caused by the war, but fuel made available to these stations never equalled their consumption. Constant deficiencies were made up from the Commission's emergency reserves, which were also operated on by the State Coal Committee to meet urgent needs of other fuel users. In consequence these reserves dwindled progressively.

Perturbed by the fall in its fuel reserves, the Commission repeatedly reminded the fuel authority of the briquette policy established with the State Government in 1938, and urged without avail that adequate reserves of briquettes be established for peak-load power stations in order to ensure continuity of electricity supply. In every annual report presented to Parliament since 1942, the Commission has also recommended Government implementation of this fundamental policy, namely, the priority of electricity generation on briquettes.

The Commission has been required to maintain briquette supplies to industries at an average of more than 300,000 tons annually since the Commonwealth Coal Control was constituted in 1941. As well, consumption of briquettes by peak-load power stations has increased progressively from 62,000 tons in 1940-41 to 182,000 tons in 1945-46. In consequence, the briquetting factory has been forced to operate continuously under severe conditions of overload.

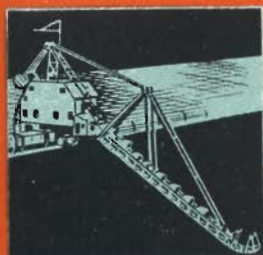
For the past eight years the briquetting factory has worked 24 hours daily, seven days a week, with only short stoppages for maintenance. War-time extensions to the factory, which have yet to realise full expected production, plus the emergency fuel reserves arranged by the Commission before the war, enabled electricity supply in Victoria to continue unrationed during the entire war period with one brief exception, after the bushfires at Yallourn.

**Winter Load on S.E.C. Generating System (Actual Week, July 8-14, 1945)**





# HOW S.E.C. HAS INCREASED PRODUCTION FROM 1938 TO 1946



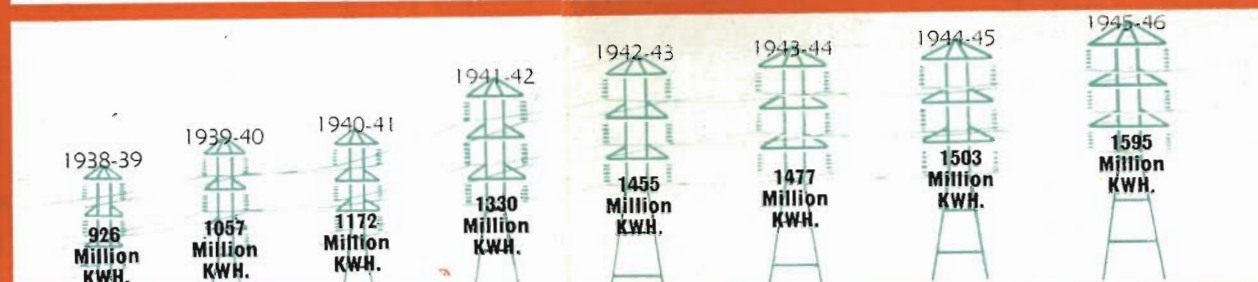
**BROWN COAL PRODUCTION**



**BRIQUETTE PRODUCTION**



**ELECTRICITY GENERATED**



The fuel crisis for the peak-load power stations arrived at the beginning of the 1946 winter. Black coal supplies to the Commission had ceased completely. Its emergency fuel reserves were practically exhausted. These stocks which, early in the war, had totalled 71,000 tons of black coal and 30,000 tons of briquettes, had fallen to approximately 1,000 tons each of black coal and briquettes by the middle of May, 1946—sufficient for only about two days' use by the peak-load stations.

Following the Commission's urgently-renewed representations concerning this critical fuel position, the State Government, in mid-May, 1946, directed the fuel authority to withhold briquette supplies from all industries except certain high-priority essential consumers. The balance of briquette production was to be used for electricity generation.

Although this decision made more briquettes available to the peak-load stations, it was much too late in the year to establish adequate stocks for their full needs throughout the 1946 winter. Briquette consumption by these stations was then greater than the increased supply, with the heaviest winter load on the generating system still ahead. Rationing of electrical output from these stations, therefore, was unavoidable, and the first restrictions were then introduced.

For the ten weeks following 18th May, when restrictions on use of electricity began, the production of briquettes totalled approximately 100,000 tons. In this period essential industries were supplied with 33,000 tons, leaving a balance of 67,000 tons available for generation of electricity.

Since electricity rationing began, therefore, the fuel supply to peak load stations has averaged 6,700 tons of briquettes weekly, supplied on a day-to-day basis. These

stations would have required throughout this period an average of 9,400 tons of briquettes weekly to enable them to meet an unrationed load on the generating system.

The Yallourn dredger mishap, occurring soon after introduction of the first stage of rationing, was thrown out of its proper perspective by newspaper references. The Commission's public statements emphasised that the temporary breakdown was only another complication in the general fuel crisis.

Actually, brown coal production for the Yallourn power station and briquetting factory was fully maintained while the dredger was out of service, the situation being met with ancillary coal-winning equipment.

By Government regulations in 1938, the Commission was established as the electricity rationing authority for this State, but on 30th May, 1946, the Minister in Charge of Electrical Undertakings notified the Commission that the Government regarded this function as its responsibility, and from that date has acted accordingly.

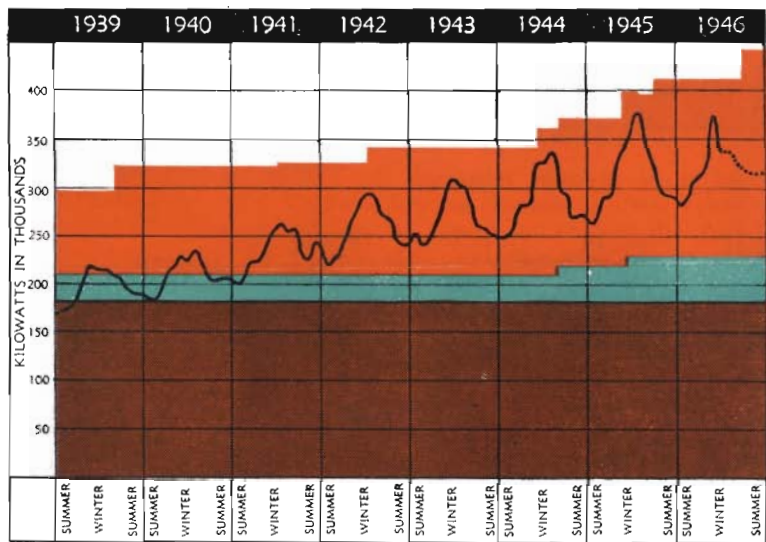
The Commission, on its part, recognises that electricity rationing in the present circumstances is a governmental function because the existing situation is caused and dominated by shortage of solid fuel in this State with consequent repercussions beyond the range of Commission responsibility.

If the existing general fuel shortage continues, rationing again during the winter of 1947 will have to be faced. It can be avoided if the Commission is permitted to accumulate sufficient stocks of its briquettes during the coming summer to meet peak-load stations' full needs of this fuel throughout the periods of heavy load on the generating system next winter. However, the initiative in building such fuel reserves for electricity generation is at present outside the jurisdiction of the Commission.



# GENERATING

plant is sufficient



INSTALLED PLANT: YALLOURN (BROWN); HYDRO (GREEN); PEAK LOAD (RED).

● THE CHART above shows that there is sufficient capacity in the Commission's generating system. Progressive additions (shown by colours) to installed generating plant made during and since the war have enabled the system to meet demand (shown by undulating black line), but due to the war's exigencies, these additions have not provided the normal reserve of plant above the peak loads of the winters.

Fortunately for the war effort, the Commission entered the war with adequate reserves of generating plant. Some stages of major extensions, planned in 1937 to meet all electrical needs of Victoria up to 1952, had also been commenced. These needs were based on forecasts from statistical analyses of past experience.

The unpredictable increase caused by the war, both in consumption and demand, jeopardised developmental plans. Generation of electricity increased from 926 million kilowatt-hours in 1938-39 to 1,595 million kilowatt-hours in 1945-46 — over 72 per cent. increase. Maximum coincident demand on the system in 1939 was 216,500 kilowatts; in 1945 it was 377,100 kilowatts — an increase of 74 per cent.

Plant extensions, on the contrary, were seriously delayed. During the war the Commission was permitted to increase its plant only to the extent just adequate to meet load without reserve. New plant which could be made in Australia was assessed as war production by the Ministry of Munitions, and then manufactured only with a munitions' priority.

Equipment necessarily sought from embattled Britain, herself without reserve installed generating capacity, was supplied also on the basis of essentials only. An essential major part of one large generator from Britain was lost at sea and was not replaced for a year.

Notwithstanding all setbacks, installed generating capacity was increased by over 37 per cent., from 297,800 kilowatts in 1939 to 409,700 kilowatts in 1946. This increase under war-time conditions was a conspicuous national achievement.

# PLANS

for future needs

● COMPLETION of that part of the Commission's developmental programme now proceeding, which includes major extensions to Newport peak-load station and the Kiewa hydro scheme, will increase installed generating capacity from the present 409,700 kilowatts (549,100 horse power) to 592,700 kilowatts (794,500 horse power).

Extensions at the Commission's Newport station include an additional 30,000 kilowatt generator to be ready for operation late in 1946; another of the same capacity to be ready before the 1948 winter; and another also of 30,000 kilowatts in 1949 or 1950, by which time additional plant will be ready at Kiewa also.

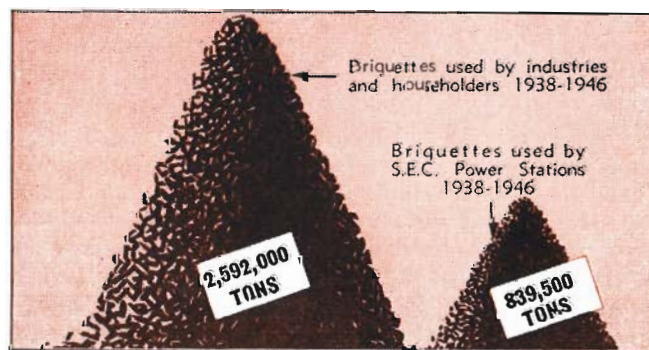
Revision of the Kiewa scheme, now being investigated, may result in an increase in its capacity. Victoria's share (at least 21,000 kilowatts) of the Hume hydro-electric project, which is purely a by-product of irrigation water discharge, will ultimately be linked with the Kiewa scheme. As well, replacement of that portion of Yallourn plant now nearing the end of its useful life will result in an increase in the capacity of this base-load station.

Subject to Parliamentary approval, further development of brown coal deposits will be carried out by the Commission in the near future by a new open cut in the Latrobe Valley. An associated second briquetting factory is expected to bring total briquette production to over one million tons annually in approximately five years.

In general, the Commission's plans for future needs will be limited only by the local availability of materials and trained personnel, and by the ability of British manufacturing plants — now severely strained in filling outstanding orders — to supply that essential equipment which cannot yet be made in Australia.

Long range planning by the Commission has provided Victoria with a sound electricity service on an ever-widening scale at progressively lower tariffs. The same traditions of community service to its consumers established by the Commission and its personnel in the past will be continued into the future.

## How S.E.C. Has Shared Briquettes



STATE ELECTRICITY COMMISSION OF VICTORIA.  
GENERAL PROFIT AND LOSS ACCOUNT FOR YEAR ENDED 30th JUNE, 1946.  
(Adjusted to the nearest £1.)

1945	EXPENDITURE—	1945.	INCOME—	£
£	Electricity Supply—	£	Electricity Supply—	£
264,477	Purchased Electricity .. .. .	1,156,468	Bulk Supplies .. .. .	1,241,071
2,163,607	Generation, Transmission and Distribution .. .. .	143,375	Public Lighting .. .. .	146,545
1,047,695	Interest .. .. .	1,636,430	Domestic .. .. .	1,772,017
412,429	Depreciation .. .. .	1,356,966	Industrial—General .. .. .	1,391,146
311,580	Administration and General Expense .. .. .	17,475	Mining .. .. .	18,935
4,189,788		190,455	Traction .. .. .	194,266
24,587	Deduct Electricity transferred to Works .. .. .	748,166	Commercial .. .. .	834,773
4,165,201		10,346	Miscellaneous .. .. .	6,580
		5,259,881		5,005,333
458,250	Briquetting—		Briquetting—	
68,754	Manufacture and Distribution .. .. .	343,644	Briquette Sales .. .. .	342,801
33,542	Interest .. .. .	18,137	Add Briquettes on hand end of year .. .. .	17,097
14,641	Depreciation .. .. .			
	Administration and General Expense .. .. .	361,781	Deduct Briquettes on hand beginning of year .. .. .	359,898
575,187		32,353		18,137
198,573	Deduct Briquettes transferred to Works .. .. .	329,428		341,761
376,614				
	Brown Coal—		Brown Coal—	
14,652	Winning and Distribution .. .. .	24,443	Brown Coal Sales .. .. .	25,702
154	Deduct Brown Coal transferred to Works .. .. .			
14,498		12,947		
132,065	Tramways—		Tramways—	
7,347	Power and Traffic Expenses .. .. .		Traffic Receipts .. .. .	145,753
10,256	Interest .. .. .	145,929	Advertising, Rents, &c. .. .. .	750
18,440	Depreciation .. .. .	676		
	Administration and General Expense .. .. .	146,605		146,503
168,108				
83,931	Sinking Fund Contributions .. .. .		Interest on Investments .. .. .	33,203
50,000	Loan Flotation Expense .. .. .	93,996	Miscellaneous Income .. .. .	7,682
	Provident Fund Contributions, Long Service Leave, and Employees Retiring Allowances .. .. .	52,582		
56,739	Pay Roll Tax .. .. .	91,438		
68,984	War Emergency Expenditure .. .. .	76,950		
39,377	Provision for Personnel serving with Forces .. .. .			
64,071	Miscellaneous Expenses .. .. .	34,158		
68,549	Profit—Carried down .. .. .	89,289		
643,089		662,778		
5,799,161		6,160,184		6,160,184
125,000	Deferred Maintenance Reserve .. .. .		Profit—Brought down .. .. .	662,778
100,000	Contingency Reserve .. .. .	125,000		
300,000	Rural Development Reserve .. .. .	100,000		
25,000	General Reserve .. .. .	300,000		
33,881	Special Retirements .. .. .	50,000		
59,208	Surplus for year .. .. .	24,315		
643,089		643,089		662,778
188,935	Accumulated Surplus—30th June, carried to General Balance Sheet .. .. .	59,208	Surplus for year .. .. .	63,463
		129,727	Accumulated Surplus—beginning of year .. .. .	188,935
		188,935		252,398

Sale of Electrical Appliances—The operating Accounts include in respect of this function .. .. . Revenue. 1944-45 36,462 1945-46 70,707 Expenditure. 31,474 66,896



**STATE ELECTRICITY COMMISSION OF VICTORIA**  
**SCHEDULE OF FIXED CAPITAL AS AT 30th JUNE, 1946.**

(Adjusted to nearest £1.)

	Expenditure during 1945-46.	Total Expenditure 30/6/46.
	£	£
<b>Coal Production—</b>		
Yallourn .. .. .	175,645	1,819,275
<b>Briquette Production—</b>		
Yallourn .. .. .	122,245	1,798,403
<b>Power Production—Steam Stations—</b>		
Geelong .. .. .	379	347,410
Newport .. .. .	512,382	3,365,997
Richmond .. .. .	3,509	162,769
Yallourn .. .. .	54,218	5,171,109
<b>Power Production—Water Stations—</b>		
Kiewa .. .. .	319,565	1,689,007
Sugarloaf-Rubicon .. .. .	3,950	829,841
Eastern Metropolitan (Warburton) .. .. .	27	5,194
<b>Transmission Systems—</b>		
Main Transmission Systems .. .. .	299,816	5,080,618
Ballarat Branch .. .. .	1,446	50,984
Bendigo Branch .. .. .	2,848	19,150
Eastern Metropolitan Branch .. .. .	22,640	259,397
Geelong Branch .. .. .	1,771	33,180
Gippsland Branch .. .. .	64,979	414,860
Metropolitan Branch .. .. .	137	20,545
Midland Branch .. .. .	12,527	143,857
North-Eastern Branch .. .. .	50,623	599,078
South-Western Branch .. .. .	31,400	516,509
<b>Distribution Systems—</b>		
Ballarat Branch .. .. .	17,473	244,920
Bendigo Branch .. .. .	16,814	180,596
Eastern Metropolitan Branch .. .. .	63,157	574,722
Geelong Branch .. .. .	20,280	376,600
Gippsland Branch .. .. .	39,438	530,404
Metropolitan Branch .. .. .	158,021	4,561,740
Midland Branch .. .. .	18,816	215,359
North-Eastern Branch .. .. .	68,146	502,650
South-Western Branch .. .. .	29,684	327,428
Yallourn and Brown Coal Mine .. .. .	1,874	31,751
<b>Tramways Systems—</b>		
Ballarat Branch .. .. .	1,352	48,359
Bendigo Branch .. .. .	2,481	31,026
Geelong Branch .. .. .	1,382	101,942
<b>General—</b>		
Ballarat Branch .. .. .	1,355	31,109
Bendigo Branch .. .. .	1,244	50,284
Eastern Metropolitan Branch .. .. .	1,002	34,573
Geelong Branch .. .. .	2,117	30,205
Gippsland Branch .. .. .	1,178	44,668
Kiewa Branch .. .. .	20,282	94,620
Metropolitan Branch .. .. .	49,571	731,511
Midland Branch .. .. .	1,003	7,099
North-Eastern Branch .. .. .	2,454	50,097
South-Western Branch .. .. .	1,563	31,464
Yallourn .. .. .	167,894	1,809,744
Head Office .. .. .	173,637	755,722
<b>Deduct—Proportion of Cost of Extension Payable by Consumer .. .. .</b>	<b>2,542,325</b>	<b>33,725,776</b>
	11,854	103,688
	<b>2,530,471</b>	<b>33,622,088</b>

Note.—Construction Work in Progress included in above figures, is shown separately in the Balance-sheet :—

At 30th June, 1945 .. .. . £1,501,772.  
At 30th June, 1946 .. .. . £2,670,751.

**STATE ELECTRICITY COMMISSION OF VICTORIA.**  
**DEBENTURES AND INSCRIBED STOCK.**

**LOANS RAISED UNDER THE AUTHORITY OF THE STATE ELECTRICITY COMMISSION'S**  
**ACTS Nos. 4087 and 4512.**

(Adjusted to nearest £1.)

Loan No.	Original Issue.	Amount Subscribed to 30th June, 1946.	Rate.	Term.	Due.	Sinking Fund.	Redeemed to 30th June, 1946.	Outstanding at 30th June, 1946.
	£	£	%	Yrs.		%	£	£
State Electricity Commn. of Victoria, Loan No. 1	600,000	600,000	3½	20	1954	1	54,896	545,104
" " " " " 2	382,000	382,000	3½	20	1954	1	42,020	339,980
" " " " " 3	100,000	100,000	4	15	1951	1	10,000	90,000
" " " " " 4	800,000	800,000	3½	10	1948	1	64,000	736,000
" " " " " 5	900,000	900,000	4½	10	1949	1	..	900,000
" " " " " 6	200,000	200,000	4½	10	1949	1	13,350	186,650
" " " " " 7	150,000	150,000	4½	15	1955	1	..	150,000
" " " " " 8	250,000	250,000	3·8125	10	1950	1	16,504	233,496
" " " " " 9	300,000	300,000	3·4375	16	1957	1	..	300,000
" " " " " 10	1,000,000	1,000,000	3·375	10	1955	1	10,000	990,000
	4,682,000	4,682,000					210,770	4,471,230

**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, 1946.
		%	%	£		£	£	£
<b>Bendigo Branch.</b>								
Marong Shire .. .. .	2	5½	5	1,700	1.7.31	1,592	652	940
Eaglehawk Borough .. ..	8	4½	4½	3,500	1.10.35	3,151	2,404	747
" " " " " 9	9	3½	3½	4,500	"	4,345	2,021	2,324
				9,700		9,088	5,077	4,011
<b>Eastern Metropolitan Branch.</b>								
Healesville Shire .. .. .	2	6	4½	8,000	1.4.33	6,215	3,965	2,250
" " " " " 3	3	6½	4½	2,000	"	1,585	1,000	585
" " " " " 9	9	5½	5	3,000	"	2,728	1,082	1,646
Lillydale Shire .. .. .	16	6½	5·0375	3,000	1.4.25	2,870	1,908	962
" " " " " 16	16	6½	5·0375	2,000	"	1,913	1,271	642
Mornington Shire .. .. .	11	5½	5	1,000	1.8.30	896	855	41
				19,000		16,207	10,081	6,126
<b>Gippsland Branch.</b>								
Maffra Shire .. .. .	1	4½	4½	6,500	1.9.24	5,660	3,642	2,018
" " " " " 2	2	5½	5	1,000	"	877	844	33
				7,500		6,537	4,486	2,051
<b>Midland Branch.</b>								
Kyneton Shire .. .. .	3	5½	4½	12,000	1.10.28	10,830	6,180	4,650
Newham and Woodend Shire ..	2	5	5	750	1.8.29	750	300	450
				12,750		11,580	6,480	5,100
<b>North-Eastern Branch.</b>								
Mansfield Shire .. .. .	6	6	5	1,200	1.6.28	1,200	..	1,200
Towong Shire .. .. .	1	4½	4½	6,500	1.11.40	4,565	1,644	2,921
Wangaratta Borough .. ..	8	6½	4½	6,500	12.3.27	6,079	3,819	2,260
" " " " " 9	9	6	4½	1,500	"	1,412	904	508
Yea Shire .. .. .	3	6½	5	6,000	1.5.45	3,391	237	3,154
" " " " " 4	4	5½	5	500	"	293	19	274
" " " " " 5	5	5½	5	1,000	"	332	67	265
" " " " " 8	8	4½	4½	1,200	"	836	55	781
				24,400		18,108	6,745	11,363
<b>GRAND TOTAL .. .. .</b>				<b>73,350</b>		<b>61,520</b>	<b>32,869</b>	<b>28,651</b>



## 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. — Deficit.			
	Capital Expenditure.	Loan Liability.	Reserves.	Electricity Supply.	Briquetting.	Tramways.	Miscellaneous.	Total.		Year.	To Date.		
									£			£	£
1925 .. ..	7,759,825	8,293,765	43,936	617,286	40,468	..	41,602	699,356	963,638	—	264,282	—	322,744
1926 .. ..	9,032,461	10,120,794	67,616	713,252	122,379	..	19,476	855,107	1,125,077	—	269,970	—	592,714
1927 .. ..	10,742,104	11,849,698	262,942	975,362	179,184	..	16,124	1,170,670	1,367,324	—	196,654	—	789,368
1928 .. ..	12,762,939	13,567,546	493,935	1,262,787	192,256	..	10,698	1,465,741	1,463,868	+	1,873	—	787,495
1929 .. ..	14,530,634	15,126,107	833,618	1,427,751	226,186	..	7,858	1,661,795	1,657,181	+	4,614	—	782,881
1930 .. ..	16,397,608	16,778,413	1,151,139	1,624,255	264,459	..	9,153	1,897,867	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	2,544,893	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	2,849,919	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	2,925,259	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	3,061,512	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	3,380,784	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	3,599,740	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	3,760,429	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	4,011,183	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	4,141,892	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	4,376,929	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	4,724,056	4,563,376	+	160,680	—	220,960
1942 .. ..	26,955,737	20,523,266	9,256,460	4,657,450	330,756	109,955	55,488	5,153,649	5,069,227	+	84,422	—	136,538
1943 .. ..	28,345,527	20,348,116	10,460,227	4,935,602	341,631	135,900	76,955	5,490,088	5,348,695	+	141,393	+	4,855
1944 .. ..	29,695,740	20,164,482	11,547,016	5,101,631	316,847	143,086	67,216	5,628,780	5,503,908	+	124,872	+	129,727
1945 .. ..	31,297,130	20,997,826	12,902,334	5,259,881	329,428	146,605	63,247	5,799,161	5,739,953	+	59,208	+	188,935
1946 .. ..	33,622,088	20,927,313	14,448,315	5,605,333	341,761	146,503	66,588	6,160,185	6,096,722	+	63,463	+	252,398

STATE ELECTRICITY COMMISSION OF VICTORIA.  
ELECTRICITY SALES—REVENUE—CONSUMER STATISTICS.

Year Ended 30th June.		Sales—kWh. (Millions).						Revenue.			Consumer Statistics—excluding Bulk Supplies.										
		Bulk Supplies.	Public Lighting.	Domestic.	Industrial.	Com-mercial.	Total.	Total.	Total.	Per kWh. Sold.			Population of Area of Supply.	Number of Consumers.	Percentage of Con- sumers to Population.	kWh. Sold per Consumer (Average).			Motors Connected.		Number of Farms Supplied.
										Domestic.	Industrial.	Com-mercial.				Domestic.	Industrial.	Com-mercial.	Number.	H.P.	
1939	..	257·394	14·282	122·134	273·372	59·915	727·097	£	d.	d.	d.	1,050,000	260,733	24·8	566	53,540	1,734	36,282	245,697	4,367	
1940	..	285·031	16·804	141·172	311·916	67·224	822·147	3,881,022	2·165	0·848	2·338	1,080,000	271,749	25·2	626	53,730	1,917	41,530	275,458	5,147	
1941	..	311·546	16·516	155·726	367·438	73·547	924·773	4,241,264	2·059	0·819	2·262	1,104,000	284,373	25·8	658	56,920	2·031	46,114	299,988	5,771	
1942	..	369·236	10·509	173·951	441·734	78·168	1,073·598	4,657,452	1·973	0·800	2·112	1,123,000	292,341	26·0	703	62,300	2,245	50,465	322,283	6,131	
1943	..	404·121	11·694	192·067	483·305	87·821	1,179·008	4,935,602	1·869	0·785	1·908	1,141,000	296,717	26·0	756	65,920	2,626	54,285	345,924	7,032	
1944	..	422·287	15·984	203·979	466·137	92·938	1,201·325	5,101,631	1·822	0·812	1·835	1,149,000	300,465	26·1	793	60,170	2,769	59,483	365,746	7,467	
1945	..	417·193	16·782	220·247	452·664	100·790	1,207·676	5,259,890	1·783	0·830	1·781	1,193,000	311,172	26·1	838	50,470	2,934	65,983	401,085	8,772	
1946	..	447·005	17·255	250·245	449·623	110·413	1,274·541	5,605,333	1·700	0·857	1·814	1,200,000	321,631	26·8	928	44,960	3,104	71,796	430,452	10,209	
Electricity Supply Department	Metropolitan 1946	0·925	13·479	182·978	338·750	60·858	596·990	2,817,263	1·472	0·814	1·765	759,735	202,208	26·62	1,025	75,617	3,290	43,740	262,326	950	
		0·785	13·212	164·431	346·250	55·865	580·543	2,704,636	1·541	0·793	1·727	752,984	199,422	26·48	927	86,740	3,083	40,812	247,683	833	
	Ballarat 1946	..	0·439	4·680	7·339	4·936	17·394	144,431	3·126	1·146	2·035	52,438	12,992	24·78	449	20,969	2,566	2,817	13,562	243	
		..	0·431	3·930	6·623	4·664	15·648	131,598	3·425	1·131	1·950	52,375	12,388	23·65	393	22,682	2,513	2,522	12,664	214	
	Bendigo 1946	..	0·492	3·568	6·290	2·437	12·787	99,960	2·986	1·015	2·381	33,835	9,263	27·38	472	25,362	1,970	1,906	13,781	234	
		..	0·488	2·904	6·564	2·234	12·180	92,095	3·375	0·908	2·323	33,904	8,845	26·09	397	39,214	1,884	1,769	12,924	176	
	Geelong 1946	..	0·485	7·219	23·347	4·895	35·946	219,345	2·738	0·840	2·401	61,020	15,483	25·37	563	72,731	2,371	4,765	31,754	333	
		..	0·472	6·309	24·340	4·723	35·844	213,242	2·944	0·817	2·379	58,500	14,987	25·62	501	100,166	2,345	4,603	31,209	252	
	Eastern Metrop'tn 1946	..	0·698	21·036	7·714	9·885	39·333	294,445	1·913	1·296	1·813	64,088	24,985	38·99	1,045	7,669	3,420	2,369	14,976	1,869	
		1·057	0·609	16·806	6·583	8·674	33·729	255,897	2·035	1·253	1·798	61,500	23,078	37·53	950	8,386	3,299	2,034	11,890	1,616	
	Gippsland 1946	..	0·415	10·026	29·176	6·378	45·995	261,542	2·171	0·939	1·889	68,796	17,360	25·23	948	11,923	2,516	5,683	32,072	2,849	
		..	0·399	8·455	26·895	6·427	42·176	236,436	2·325	0·908	1·733	66,227	16,330	24·66	747	12,349	2,629	5,125	29,838	2,623	
Midland 1946	..	0·299	3·491	6·926	3·342	14·148	101,740	2·726	1·003	1·985	37,244	8,078	21·69	571	23,882	2,527	1,589	10,452	433		
	..	0·297	2·976	6·988	3·207	13·468	94,722	2·941	0·934	1·980	36,911	7,626	20·66	510	39,038	2,287	1,482	9,808	400		
North-Eastern 1946	16·241	0·558	8·601	18·725	13·704	57·829	325,405	2·477	0·988	1·544	69,256	17,777	25·67	688	16,240	4,293	6,069	40,926	1,668		
	14·955	0·511	7·130	19·388	11·527	53·511	296,013	2·629	0·947	1·573	67,574	16,045	23·74	625	22,440	3,960	5,004	35,100	1,328		
South-Western 1946	..	0·306	6·967	11·358	2·696	21·327	150,455	2·296	1·069	2·522	48,557	12,272	25·27	795	8,993	1,508	2,775	10,419	1,630		
	..	0·293	5·749	9·043	2·314	17·399	130,130	2·473	1·115	2·506	48,440	11,284	23·29	702	8,848	1,373	2,551	9,787	1,330		
Total 1946	17·166	17·171	248·566	449·625	109·221	841·749	4,414,586	1·702	0·856	1·829	1,194,969	320,418	26·81	925	35,873	3,074	71,713	430,268	10,209		
	16·797	16·712	218·690	452·664	99·635	804·498	4,154,769	1·787	0·830	1·797	1,178,415	310,005	26·31	836	43,189	2,909	65,902	400,903	8,772		

Note.—Above figures do not include allowances for unread meters prior to 1941. \* Including Electricity Sales &c. at Yallourn.

STATE ELECTRICITY COMMISSION OF VICTORIA.  
STANDARD TARIFFS AS FROM 1ST OCTOBER, 1946.

41

APPENDIX No. 7.

TARIFFS FOR NON-RESIDENTIAL PREMISES.

Tariffs.	Residential and Commercial (See Note 2 below).			Industrial (Factories and Other Industrial Establishments).	Miscellaneous.
	Metropolitan.	Provincial City and Town. (Ballarat, Bendigo, Geelong, and Large Towns.)	Country. (Smaller Towns and Rural Areas.)	All Supply Areas.	
	1	2	3	4	5
<b>Residential Tariff</b> (Domestic and Commercial Residential Premises)— Service charge a month for each assessable room Rate a kWh. .. .. Maximum overall rate a kWh. .. ..	11d. 0-9d. 5-0d.	1s. 2d. 1-25d. 8-0d.	1s. 2d. 1-4d. 8-0d.		
<b>Lighting</b> — Block Tariff—rates a 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 20 at 4d. Balance at 3d.	Tariffs for the following centres are the same as shown in Columns 2 and 4, except the Residential Tariff:— Croydon Heathmont Ringwood
<b>Power and Heating</b> — Block Tariff—rates a kWh. (based on monthly consumption) ..	First 200 at 2d. Next 4,800 at 1-2d. " 20,000 at 0-9d. Balance at 0-8d. 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. Balance at 0-8d. 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. Balance at 0-9d. 10 p.m.-6 a.m.—0-35d. 5s.	First 200 at 2d. Next 4,800 at 1-2d. " 20,000 at 0-9d. Balance at 0-8d. 11 p.m.-7 a.m.—0-3d. 5s.	Tariffs for the following centres are the same as shown in Columns No. 3 and 4 except:— Kilsyth and Montrose (Residential Tariff) Lara and Lara Lake (Commercial Power and Heating Tariff.)
<b>Industrial All-purposes</b> — Block Tariff—rates a kWh. (Based on monthly consumption) ..	.. ..	.. ..	.. ..	First 20 at 4d. Next 480 at 3d. " 4,500 at 1-9d. " 20,000 at 0-9d. Balance at 0-7d. 11 p.m.-7 a.m.—0-3d. 5s. (See Note 3 below)	Details of tariffs for above centres will be supplied on request
Prescribed hours—rate a kWh. .. .. Rental a month for each two-rate meter .. ..	.. ..	.. ..	.. ..	£9 10s. a year for each kW. of maximum de- mand plus 0-225d. a kWh. 500 kW. (Mini- mum demand charge). Reset monthly.	
<b>Industrial Maximum Demand</b> (See Note 4 below)	.. ..	.. ..	.. ..		
<b>Commercial Cooking Tariff</b> —a kWh. .. ..	0-9d.	1-25d.	1-4d.		
<b>Water Heating</b> —Night Tariff a kWh. .. ..	11 p.m.-7 a.m.—0-35d.	10-30 p.m.-6-30 a.m.*— 0-45d.	10 p.m.-6 a.m.—0-45d.	11 p.m.-7 a.m.*—0-35d.	
<b>Minimum Charge</b> .. ..	2s. 6d.	3s.	3s. 6d.	2s. 6d.	

\* Prescribed hours are 10-30 p.m.-6-30 a.m. in Ballarat, Bendigo, and Geelong only. In other extra-metropolitan areas the hours are 10 p.m.-6 a.m.

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. Residential and Commercial tariffs also cover supply to farms.

3. A consumer adopting the Industrial All-Purposes Tariff must agree to pay a special minimum charge of £10 5s. 10d. a month.

4. The Industrial 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, 1946.

## SUMMARY.

	Population.	Consumers.		*Kilowatt-hours Sold.	
		Number.	Percentage of Grand Total.	Number.	Percentage of Grand Total.
STATE ELECTRICITY COMMISSION OF VICTORIA—					
Metropolitan .. .. .	758,044	203,213	43·31	590,258,915	48·88
Provincial Cities .. .. .	126,395	32,778	6·99	59,764,993	4·95
Country .. .. .	315,539	85,640	18·25	177,511,921	14·70
TOTAL .. .. .	1,199,978	321,631	68·55	827,535,829	68·53
OTHER UNDERTAKINGS—					
Metropolitan (receiving Bulk Supply from State Electricity Commission of Victoria) .. .. .	426,000	120,030	25·58	355,575,987	29·45
Country (Local Generation).. .. .	111,000	27,541	5·87	24,372,923	2·02
TOTAL .. .. .	537,000	147,571	31·45	379,948,910	31·47
GRAND TOTAL .. .. .	1,736,978	469,202	100·00	1,207,484,739	100·00

\* Retail sales to Victorian consumers by Electricity Supply undertakings.

## CENTRES SERVED BY STATE ELECTRICITY COMMISSION OF VICTORIA.

Municipality or Centre.	Branch.	Location of Officer-in-Charge (District Office).	System of Supply.	Population.	Number of Consumers.	Tariffs as per Appendix No. 7 Columns No.	Date Supply First Undertaken by Commission.
<b>Metropolitan.</b>							
Brighton .. .. .	Metro.	Melbourne ..	A.C., 3 ph. and 1 ph.	750,220	200,027	1 and 4	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. ..				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. ..				1.9.30
South Melbourne .. .. .	"	" ..	A.C., 3 ph. ..				1.9.30
Sunshine .. .. .	"	Sunshine ..	A.C., 3 ph. ..				1.3.27
City of Chelsea (Aspendale Bonbeach, Carrum, Chelsea, and Edithvale)	E/M	Chelsea ..	A.C., 3 ph. ..	7,694	3,141	1 and 4	31.12.44
East Oakleigh (portion only) ..	"	Dandenong ..	A.C., 3 ph. and 1 ph.	87	33	1 and 4	19.7.26
Jordanville (portion only) ..	"	" ..	A.C., 1 ph. ..	43	13	1 and 4	7.10.38
<b>Ballarat.</b>							
City of Ballarat (including Alfredton, Ballarat East, Ballarat North, Brown Hill, Canadian and Mt. Pleasant)	Ball.	Ballarat ..	A.C., 3 ph. .. D.C., 3 wire ..	41,000	10,438	2 and 4	1.7.34
Borough of Sebastopol ..	"	" ..	A.C., 3 ph. ..				
Ballarat Shire (Wendouree only)	"	" ..	A.C., 3 ph. ..				

## CENTRES SERVED BY STATE ELECTRICITY COMMISSION OF VICTORIA—continued.

Municipality or Centre.	Branch.	Location of Officer-in-Charge (District Office).	System of Supply.	Population.	Number of Consumers.	Tariffs as per Appendix No. 7 Columns No.	Date Supply First Undertaken by Commission.
<b>Bendigo.</b>							
City of Bendigo (including Golden Square, Long Gully and White Hills)	Bend.	Bendigo ..	A.C., 3 ph. ..	32,395	8,940	2 and 4	1.7.34
Borough of Eaglehawk ..	"	" ..	A.C., 3 ph. ..				1.2.36
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 (Portion only) ..	"	" ..	A.C., 3 ph. ..				1.7.34
<b>Geelong.</b>							
City of Geelong ..	Geel.	Geelong ..	A.C., 3 ph. ..	53,000	13,400	2 and 4	1.9.30 (Fyansford)
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 (Whittington) ..	"	" ..	A.C., 3 ph. ..				10.10.38
<b>Country.</b>							
Acheron ..	N/E.	Alexandra ..	A.C., 1 ph. ..	70	40	3 and 4	24.11.37
Agnes ..	Gipps.	Foster ..	A.C., 1 ph. ..	100	27	3 and 4	1.11.38
Airey's Inlet ..	S/W.	Lorne ..	A.C., 1 ph.* ..	40	26	3 and 4	24.12.36
Airly ..	Gipps.	Sale ..	A.C., 1 ph. ..	100	32	3 and 4	16.6.37
Alexandra ..	N/E.	Alexandra ..	A.C., 3 ph. ..	998	327	3 and 4	11.4.27
Allansford ..	S/W.	Warrnambool ..	A.C., 1 ph.* ..	400	103	3 and 4	20.11.24
Altona ..	Metro.	Werribee ..	A.C., 3 ph. and 1 ph. ..	2,780	712	2 and 4	9.12.24
Alvie ..	S/W.	Colac ..	A.C., 1 ph.* ..	130	26	3 and 4	15.10.24
Anglesea ..	S/W.	Lorne ..	A.C., 1 ph.* ..	90	97	3 and 4	21.12.36
Archie's Creek ..	Gipps.	Korumburra ..	A.C., 3 ph. and 1 ph. ..	250	36	3 and 4	1.9.40
Ardmona ..	N/E.	Shepparton ..	A.C., 3 ph. and 1 ph. ..	195	142	3 and 4	25.3.38
Aspot ..	Ball.	Ballarat ..	A.C., 3 ph. ..	30	11	3 and 4	7.12.38
Avoca ..	Mid.	Maryborough ..	A.C., 3 ph. ..	886	287	3 and 4	1.8.40
Bacchus Marsh ..	Mid.	Bacchus Marsh ..	A.C., 3 ph. and 1 ph. ..	2,651	612	3 and 4	3.6.41
Baddaginnie ..	N/E.	Benalla ..	A.C., 1 ph. ..	92	25	3 and 4	23.7.36
Badger Creek ..	E/M.	Healesville ..	A.C., 1 ph. ..	160	40	3 and 4	1.4.33
Bairnsdale ..	Gipps.	Bairnsdale ..	A.C., 3 ph. and 1 ph. ..	4,300	1,272	2 and 4	1.4.27
Bairnsdale Rural ..	Gipps.	Bairnsdale ..	A.C., 1 ph. ..	200	5	3 and 4	13.2.36
Bald Hills ..	Ball.	Ballarat ..	A.C., 1 ph. ..	25	3	3 and 4	13.7.38
Palintore ..	S/W.	Colac ..	A.C., 1 ph.* ..	50	8	3 and 4	1.6.37
Ballan ..	Ball.	Ballarat ..	A.C., 3 ph. and 1 ph. ..	960	199	3 and 4	1.3.40
Ballarat Rural ..	Ball.	Ballarat ..	A.C., 3 ph. ..	90	19	3 and 4	1.7.31
Ballendella ..	N/E.	Rochester ..	A.C., 1 ph. ..	150	65	3 and 4	20.3.40
Balmattum ..	N/E.	Benalla ..	A.C., 1 ph. ..	34	9	3 and 4	8.10.37
Bamawm ..	N/E.	Rochester ..	A.C., 3 ph. and 1 ph. ..	160	139	3 and 4	19.12.45
Barker's Creek ..	Mid.	Castlemaine ..	A.C., 1 ph. ..	44	10	3 and 4	15.12.44
Barnawartha ..	N/E.	Wodonga ..	A.C., 1 ph. ..	283	48	3 and 4	7.10.27
Barrabool ..	Geel.	Geelong ..	A.C., 1 ph. ..	100	14	3 and 4	10.12.45
Barwo ..	N/E.	Numurkah ..	A.C., 3 ph. ..	21	7	3 and 4	24.4.45
Barwon Heads ..	Geel.	Queenscliff ..	A.C., 1 ph. ..	500	270	3 and 4	6.9.24
Batesford ..	Geel.	Geelong ..	A.C., 1 ph. ..	150	29	3 and 4	28.2.39
Bayles ..	Gipps.	Koo-wee-rup ..	A.C., 3 ph. and 1 ph. ..	220	83	3 and 4	11.9.35
Bayswater ..	E/M.	Ringwood ..	A.C., 1 ph. ..	546	279	3 and 4	24.7.26
Beaconsfield ..	E/M.	Dandenong ..	A.C., 1 ph. ..	140	83	3 and 4	18.6.28
Beeac ..	S/W.	Colac ..	A.C., 1 ph. ..	470	117	3 and 4	21.5.24
Belgrave ..	E/M.	Belgrave ..	A.C., 3 ph. and 1 ph. ..	1,877	986	2 and 4	24.8.25
Bena ..	Gipps.	Korumburra ..	A.C., 3 ph. and 1 ph. ..	360	104	3 and 4	10.7.30
Benalla ..	N/E.	Benalla ..	A.C., 3 ph. ..	4,849	1,305	2 and 4	1.5.26
Benalla Rural ..	N/E.	Benalla ..	A.C., 1 ph. ..	90	41	3 and 4	26.5.37
Bennison ..	Gipps.	Foster ..	A.C., 1 ph. ..	80	20	3 and 4	29.10.38
Berwick ..	E/M.	Dandenong ..	A.C., 1 ph. ..	600	267	3 and 4	7.5.28
Birregurra ..	S/W.	Colac ..	A.C., 1 ph. ..	400	123	3 and 4	30.10.24
Bittern ..	E/M.	Frankston ..	A.C., 1 ph. ..	110	24	3 and 4	22.12.37
Boisdale ..	Gipps.	Maffra ..	A.C., 1 ph. ..	520	159	3 and 4	13.7.37
Bona Vista ..	Gipps.	Warragul ..	A.C., 1 ph. ..	100	35	3 and 4	30.12.38
Bonegilla ..	N/E.	Wodonga ..	A.C., 3 ph. ..	40	16	3 and 4	18.12.40
Bonnie Doon ..	N/E.	Alexandra ..	A.C., 1 ph. ..	270	43	3 and 4	31.1.41
Bookar ..	S/W.	Camperdown ..	A.C., 1 ph. ..	30	2	3 and 4	10.8.37
Boolarra ..	Gipps.	Traralgon ..	A.C., 3 ph. and 1 ph. ..	400	78	3 and 4	29.10.24
Boolarra South ..	Gipps.	Leongatha ..	A.C., 1 ph. ..	90	19	3 and 4	1.8.40
Boronia ..	E/M.	Ringwood ..	A.C., 1 ph. ..	1,100	444	3 and 4	23.1.27
Bostock's Creek ..	S/W.	Camperdown ..	A.C., 1 ph.* ..	50	15	3 and 4	15.12.24



## CENTRES SERVED BY STATE ELECTRICITY COMMISSION OF VICTORIA—continued.

Municipality or Centre.	Branch.	Location of Officer-in-Charge (District Office).	System of Supply.	Population.	Number of Consumers.	Tariffs as per Appendix No. 7 Columns No.	Date Supply First Undertaken by Commission.
<b>Country—continued.</b>							
Bowen Vale .. .. .	Mid.	Maryborough	A.C., 3 ph. and 1 ph.	50	4	3 and 4	10.5.40
Bowser .. .. .	N/E.	Wangaratta ..	A.C., 3 ph. ..	92	8	3 and 4	23.4.34
Braeside .. .. .	Metro. and E/M.	Melbourne Dandenong }	A.C., 3 ph. and 1 ph.	110	31	3 and 4	27.6.30
Brandy Creek .. .. .	Gipps.	Warragul ..	A.C., 1 ph. ..	57	13	3 and 4	15.2.39
Briagolong .. .. .	Gipps.	Maffra ..	A.C., 1 ph. ..	550	82	3 and 4	5.3.37
Briar Hill .. .. .	E/M.	Greensborough	A.C., 3 ph. ..	330	131	3 and 4	12.5.26
Bridgewater .. .. .	Bend.	Bendigo ..	A.C., 3 ph. and 1 ph.	300	101	3 and 4	27.4.40
Bright .. .. .	N/E.	Myrtleford ..	A.C., 3 ph. ..	1,570	221	3 and 4	1.12.41
Broadmeadows .. .. .	Metro.	Melbourne ..	A.C., 3 ph. ..	400	78	3 and 4	18.11.35
Bruthen .. .. .	Gipps.	Lakes Entrance	A.C., 1 ph. ..	600	116	3 and 4	1.10.30
Buffalo River .. .. .	N/E.	Myrtleford ..	A.C., 3 ph. ..	48	6	3 and 4	24.1.45
Bulla .. .. .	Mid.	Bacchus Marsh	A.C., 1 ph. ..	195	18	3 and 4	10.11.36
Bullaharrie .. .. .	S/W.	Camperdown ..	A.C., 1 ph.* ..	15	3	3 and 4	30.10.45
Bullock Swamp .. .. .	S/W.	Colac ..	A.C., 1 ph.* ..	50	14	3 and 4	12.9.24
Buln Buln .. .. .	Gipps.	Warragul ..	A.C., 1 ph. ..	176	55	3 and 4	1.12.30
Bundalaguah .. .. .	Gipps.	Sale ..	A.C., 1 ph. ..	250	46	3 and 4	13.11.36
Bundoora .. .. .	E/M.	Greensborough	A.C., 1 ph. ..	130	43	3 and 4	31.12.27
Bungaree .. .. .	Ball.	Ballarat ..	A.C., 3 ph. ..	150	40	3 and 4	14.5.40
Bung Bong .. .. .	Mid.	Maryborough	A.C., 3 ph. and 1 ph.	20	7	3 and 4	21.4.41
Buninyong .. .. .	Ball.	Ballarat ..	A.C., 1 ph. ..	650	133	3 and 4	14.1.37
Bunyip .. .. .	Gipps.	Koo-wee-rup ..	A.C., 1 ph. ..	775	130	3 and 4	15.10.28
Burramine .. .. .	N/E.	Yarrawonga ..	A.C., 1 ph. ..	72	4	3 and 4	12.9.35
Byrneside .. .. .	N/E.	Shepparton ..	A.C., 1 ph. ..	63	35	3 and 4	24.5.37
Caldermeade .. .. .	Gipps.	Koo-wee-rup ..	A.C., 1 ph. ..	150	58	3 and 4	6.9.35
Campbellfield .. .. .	Metro.	Melbourne ..	A.C., 3 ph. and 1 ph.	360	48	3 and 4	14.9.36
Campbell's Creek .. .. .	Mid.	Castlemaine ..	A.C., 1 ph. ..	389	26	3 and 4	28.11.41
Camperdown .. .. .	S/W.	Camperdown ..	A.C., 3 ph. ..	3,600	849	2 and 4	30.12.23
Camperdown Rural .. .. .	S/W.	Camperdown ..	A.C., 3 ph. and 1 ph.*	1,800	468	3 and 4	9.1.36
Caramut .. .. .	S/W.	Terang ..	A.C., 1 ph.* ..	170	34	3 and 4	12.8.38
Carisbrook .. .. .	Mid.	Maryborough	A.C., 3 ph. and 1 ph.	230	128	3 and 4	24.11.37
Carlsruhe .. .. .	Mid.	Kyneton ..	A.C., 1 ph. ..	40	3	3 and 4	13.9.44
Carranballac .. .. .	S/W.	Terang ..	A.C., 1 ph.* ..	60	5	3 and 4	18.10.39
Castlemaine .. .. .	Mid.	Castlemaine ..	A.C., 3 ph. and 1 ph.	6,465	1,444	2 and 4	31.12.29
Catani .. .. .	Gipps.	Koo-wee-rup ..	A.C., 1 ph. ..	125	62	3 and 4	27.10.36
Ceres .. .. .	Geel.	Geelong ..	A.C., 1 ph. ..	200	27	3 and 4	26.11.45
Chewton .. .. .	Mid.	Castlemaine ..	A.C., 3 ph. and 1 ph.	705	90	3 and 4	23.9.38
Chiltern .. .. .	N/E.	Rutherglen ..	A.C., 3 ph. ..	1,200	167	3 and 4	1.9.26
Chocolyn .. .. .	S/W.	Camperdown ..	A.C., 1 ph. ..	20	2	3 and 4	14.1.38
Clarkefield .. .. .	Mid.	Bacchus Marsh	A.C., 1 ph. ..	14	6	3 and 4	13.3.45
Clayton .. .. .	Metro. and E/M.	Melbourne Dandenong }	A.C., 3 ph. and 1 ph.	620	197	3 and 4	30.4.26
Clayton South .. .. .	Metro.	Melbourne ..	A.C., 3 ph. ..	30	5	3 and 4	10.11.44
Clematis .. .. .	E/M.	Belgrave ..	A.C., 1 ph. ..	41	36	3 and 4	24.8.34
Clifton Springs .. .. .	Geel.	Queenscliff ..	A.C., 1 ph. ..	30	2	3 and 4	15.12.26
Cloverlea .. .. .	Gipps.	Trafalgar ..	A.C., 1 ph. ..	228	73	3 and 4	7.4.30
Clunes .. .. .	Ball.	Ballarat ..	A.C., 3 ph. ..	1,180	248	3 and 4	9.2.38
Clydebank .. .. .	Gipps.	Sale ..	A.C., 1 ph. ..	100	21	3 and 4	9.4.36
Cobden .. .. .	S/W.	Camperdown ..	A.C., 3 ph. ..	760	258	3 and 4	26.3.24
Cobram .. .. .	N/E.	Cobram ..	A.C., 3 ph. ..	1,048	291	3 and 4	1.10.28
Cobriaco .. .. .	S/W.	Camperdown ..	A.C., 1 ph.* ..	20	1	3 and 4	22.12.38
Coghill's Creek .. .. .	Ball.	Ballarat ..	A.C., 1 ph. ..	20	7	3 and 4	7.2.46
Colac .. .. .	S/W.	Colac ..	A.C., 3 ph. and 1 ph.	6,000	1,756	2 and 4	1.9.23
Colac Rural .. .. .	S/W.	Colac ..	A.C., 3 ph. and 1 ph.	2,000	550	3 and 4	9.1.36
Coldstream .. .. .	E/M.	Healesville ..	A.C., 3 ph. and 1 ph.	110	39	3 and 4	1.7.33
Condah Swamp .. .. .	S/W.	Port Fairy ..	A.C., 1 ph. ..	12	3	3 and 4	18.10.45
Congupna .. .. .	N/E.	Shepparton ..	A.C., 3 ph. ..	58	18	3 and 4	7.9.34
Connewarre .. .. .	Geel.	Geelong ..	A.C., 1 ph. ..	120	7	3 and 4	10.8.44
Coragulac .. .. .	S/W.	Colac ..	A.C., 1 ph.* ..	100	18	3 and 4	30.4.24
Cora Lynn .. .. .	Gipps.	Koo-wee-rup ..	A.C., 3 ph. and 1 ph.	300	95	3 and 4	9.8.35
Cororooke .. .. .	S/W.	Colac ..	A.C., 3 ph. ..	400	66	3 and 4	27.3.24
Corunnun .. .. .	S/W.	Colac ..	A.C., 1 ph. ..	20	4	3 and 4	12.7.44
Couangalt .. .. .	Mid.	Bacchus Marsh	A.C., 1 ph. ..	58	7	3 and 4	1.8.37
Cowwarr .. .. .	Gipps.	Traralgon ..	A.C., 3 ph. and 1 ph.	350	82	3 and 4	8.11.24
Craigieburn .. .. .	Metro.	Melbourne ..	A.C., 3 ph. ..	100	15	3 and 4	18.7.42
Cranbourne .. .. .	E/M.	Dandenong ..	A.C., 1 ph. ..	792	160	3 and 4	12.9.28
Cressy .. .. .	S/W.	Colac ..	A.C., 1 ph. ..	300	71	3 and 4	19.11.41
Creswick .. .. .	Ball.	Ballarat ..	A.C., 3 ph. and 1 ph.	1,665	322	3 and 4	24.11.37
Crib Point .. .. .	E/M.	Frankston ..	A.C., 1 ph. ..	600	179	3 and 4	23.8.29
Crossley .. .. .	S/W.	Port Fairy ..	A.C., 1 ph.* ..	80	15	3 and 4	16.3.38
Croydon .. .. .	E/M.	Ringwood ..	A.C., 3 ph. and 1 ph.	1,900	937	5	1.4.25
Cudgee .. .. .	S/W.	Warrnambool..	A.C., 1 ph.* ..	40	3	3 and 4	7.12.38
Dalmore .. .. .	Gipps.	Koo-wee-rup ..	A.C., 3 ph. and 1 ph.	150	31	3 and 4	29.1.37
Dalyston .. .. .	Gipps.	Korumburra ..	A.C., 1 ph. ..	180	38	3 and 4	15.11.40
Dandenong .. .. .	E/M.	Dandenong ..	A.C., 3 ph. and 1 ph.	6,070	1,915	2 and 4	1.10.23
Darley .. .. .	Mid.	Bacchus Marsh	A.C., 3 ph. and 1 ph.	(See Bacchus Marsh)		3 and 4	9.9.40
Darlington .. .. .	S/W.	Camperdown ..	A.C., 1 ph.* ..	100	15	3 and 4	22.4.38
Darnum .. .. .	Gipps.	Trafalgar ..	A.C., 3 ph. ..	222	51	3 and 4	20.12.24
Dawson .. .. .	Gipps.	Maffra ..	A.C., 1 ph. ..	30	6	3 and 4	16.4.37

## CENTRES SERVED BY STATE ELECTRICITY COMMISSION OF VICTORIA—continued.

Municipality or Centre.	Branch.	Location of Officer-in-Charge (District Office).	System of Supply.	Population.	Number of Consumers	Tariffs as per Appendix No. 7 Columns No.	Date Supply First Undertaken by Commission.
<b>Country—continued.</b>							
Daylesford .. ..	Ball.	Daylesford ..	A.C., 3 ph. ..	3,000	786	2 and 4	31.10.40
Daylesford Rural ..	Ball.	Daylesford ..	A.C., 3 ph. ..	60	21	3 and 4	21.12.44
Deer Park .. ..	Metro.	Sunshine ..	A.C., 3 ph. ..	485	84	3 and 4	14.2.29
Dennington .. ..	S/W.	Warrnambool ..	A.C., 3 ph. and 1 ph.	320	73	3 and 4	1.2.29
Derrinallum .. ..	S/W.	Camperdown ..	A.C., 1 ph. ..	200	72	3 and 4	20.4.38
Devenish .. ..	N/E.	Yarrawonga ..	A.C., 3 ph. ..	210	42	3 and 4	14.2.40
Diamond Creek ..	E/M.	Greensborough ..	A.C., 1 ph. ..	460	138	3 and 4	10.5.29
Digger's Rest .. ..	Mid.	Bacchus Marsh ..	A.C., 3 ph. and 1 ph.	103	26	3 and 4	15.3.29
Dingee .. ..	Bend.	Bendigo ..	A.C., 1 ph. ..	250	31	3 and 4	9.11.44
Dingley .. ..	E/M.	Dandenong ..	A.C., 3 ph. and 1 ph.	279	66	3 and 4	10.10.29
Dixie .. ..	S/W.	Terang ..	A.C., 1 ph.* ..	20	4	3 and 4	24.9.45
Donnybrook .. ..	E/M.	Greensborough ..	A.C., 1 ph. ..	106	22	3 and 4	11.3.41
Dookie .. ..	N/E.	Shepparton ..	A.C., 1 ph. ..	280	69	3 and 4	8.3.37
Driffield .. ..	Gipps.	Traralgon ..	A.C., 1 ph. ..	100	19	3 and 4	6.4.38
Dromana .. ..	E/M.	Sorrento ..	A.C., 3 ph. and 1 ph.	650	345	3 and 4	8.12.27
Drouin .. ..	Gipps.	Warragul ..	A.C., 3 ph. ..	1,280	320	3 and 4	1.10.24
Drouin Rural .. ..	Gipps.	Warragul ..	A.C., 1 ph. ..	150	45	3 and 4	13.11.28
Drouin West .. ..	Gipps.	Warragul ..	A.C., 1 ph. ..	50	17	3 and 4	18.2.39
Drysdale .. ..	Geel.	Queenscliff ..	A.C., 1 ph. ..	1,200	226	3 and 4	13.2.24
Dumbalk .. ..	Gipps.	Leongatha ..	A.C., 3 ph. and 1 ph.	150	52	3 and 4	14.9.36
Dumbalk North ..	Gipps.	Leongatha ..	A.C., 1 ph. ..	100	81	3 and 4	7.8.39
Dunkeld .. ..	S/W.	Terang ..	A.C., 1 ph. ..	370	78	3 and 4	10.8.39
Dunolly .. ..	Mid.	Maryborough ..	A.C., 3 ph. ..	625	180	3 and 4	31.3.38
East Oakleigh .. ..	E/M.	Dandenong ..	A.C., 3 ph. and 1 ph.	31	12	3 and 4	19.7.26
Eastern View .. ..	S/W.	Lorne ..	A.C., 1 ph.* ..	40	11	3 and 4	7.9.39
Echuca .. ..	N/E.	Echuca ..	A.C., 3 ph. ..	5,140	1,113	2 and 4	10.11.24
Echuca Rural .. ..	N/E.	Echuca ..	A.C., 1 ph. ..	250	52	3 and 4	12.11.36
Eildon Weir .. ..	N/E.	Alexandra ..	A.C., 1 ph. ..	115	20	3 and 4	28.4.39
†Eldorado .. ..	N/E.	Wangaratta ..	A.C., 3 ph. ..	204	32	3 and 4	1.4.39
Elliminyt .. ..	S/W.	Colac ..	A.C., 1 ph.* ..	(See Colac)	2	2 and 4	1.7.24
Ellinbank .. ..	Gipps.	Warragul ..	A.C., 1 ph. ..	65	34	3 and 4	9.9.36
Elphinstone .. ..	Mid.	Castlemaine ..	A.C., 1 ph. ..	121	12	3 and 4	4.11.38
Eltham .. ..	E/M.	Greensborough ..	A.C., 1 ph. ..	740	282	3 and 4	12.8.26
Emerald .. ..	E/M.	Belgrave ..	A.C., 1 ph. ..	350	154	3 and 4	7.8.34
Epping .. ..	E/M.	Greensborough ..	A.C., 1 ph. ..	143	58	3 and 4	15.7.36
Euroa .. ..	N/E.	Euroa ..	A.C., 3 ph. ..	3,250	584	3 and 4	20.3.28
Eurobin .. ..	N/E.	Myrtleford ..	A.C., 3 ph. ..	70	24	3 and 4	1.8.44
Everton .. ..	N/E.	Myrtleford ..	A.C., 1 ph. ..	30	5	3 and 4	8.8.45
Exford .. ..	Mid.	Bacchus Marsh ..	A.C., 1 ph. ..	(See Melton)	3	3 and 4	20.12.39
Ferny Creek .. ..	E/M.	Belgrave ..	A.C., 1 ph. ..	180	39	3 and 4	2.9.27
Fish Creek .. ..	Gipps.	Foster ..	A.C., 3 ph. and 1 ph.	370	130	3 and 4	9.7.38
Flinders .. ..	E/M.	Mornington ..	A.C., 1 ph. ..	210	105	3 and 4	28.10.38
Flynn .. ..	Gipps.	Traralgon ..	A.C., 1 ph. ..	200	40	3 and 4	5.9.38
Foster .. ..	Gipps.	Foster ..	A.C., 3 ph. and 1 ph.	700	193	3 and 4	30.4.38
Frankston .. ..	E/M.	Frankston ..	A.C., 3 ph. and 1 ph.	3,500	1,974	2 and 4	21.2.28
Freshwater Creek ..	S/W.	Lorne ..	A.C., 1 ph.* ..	20	6	3 and 4	30.4.41
Gainsborough .. ..	Gipps.	Warragul ..	A.C., 1 ph. ..	135	27	3 and 4	28.9.36
Gapsted .. ..	N/E.	Myrtleford ..	A.C., 3 ph. ..	100	37	3 and 4	13.4.44
Garfield .. ..	Gipps.	Koo-wee-rup ..	A.C., 1 ph. ..	600	100	3 and 4	1.8.29
Garvoc .. ..	S/W.	Terang ..	A.C., 1 ph.* ..	150	19	3 and 4	25.9.37
Geelong .. ..	S/W.	Camperdown ..	A.C., 1 ph.* ..	30	4	3 and 4	6.12.44
Geelong Rural .. ..	Geel.	Geelong ..	A.C., 3 ph. and 1 ph.	100	16	3 and 4	10.10.38
Girgarre .. ..	N/E.	Kyabram ..	A.C., 3 ph. ..	259	82	3 and 4	19.5.38
Gisborne .. ..	Mid.	Bacchus Marsh ..	A.C., 3 ph. and 1 ph.	1,066	146	3 and 4	1.10.28
Glen Alvie .. ..	Gipps.	Korumburra ..	A.C., 1 ph. ..	250	36	3 and 4	23.12.40
Glen Forbes .. ..	Gipps.	Korumburra ..	A.C., 3 ph. ..	300	6	3 and 4	11.3.43
Glenarry .. ..	Gipps.	Traralgon ..	A.C., 3 ph. and 1 ph.	200	81	3 and 4	14.8.28
Glenormiston .. ..	S/W.	Terang ..	A.C., 3 ph. ..	100	19	3 and 4	10.9.29
Glenvale .. ..	E/M.	Greensborough ..	A.C., 1 ph. ..	70	17	3 and 4	12.4.40
Glen Waverley .. ..	E/M.	Dandenong ..	A.C., 1 ph. ..	296	84	3 and 4	1.6.28
Gnarwarre .. ..	Geel.	Geelong ..	A.C., 1 ph. ..	150	4	3 and 4	10.12.45
Gnotuk .. ..	S/W.	Camperdown ..	A.C., 1 ph. ..	120	17	3 and 4	1.3.36
Goorambat .. ..	N/E.	Benalla ..	A.C., 3 ph. ..	73	41	3 and 4	19.2.40
Gordon .. ..	Ball.	Ballarat ..	A.C., 1 ph. ..	300	33	3 and 4	29.5.40
Gormandale .. ..	Gipps.	Traralgon ..	A.C., 3 ph. and 1 ph.	200	76	3 and 4	14.10.38
Grahamvale .. ..	N/E.	Shepparton ..	A.C., 3 ph. ..	(See Shepparton East)	3	3 and 4	20.7.37
Grassy Spur .. ..	Gipps.	Foster ..	A.C., 1 ph. ..	40	24	3 add 4	26.10.39
Greensborough .. ..	E/M.	Greensborough ..	A.C., 3 ph. ..	894	258	3 and 4	23.3.26
Greenvale .. ..	Metro.	Melbourne ..	A.C., 3 ph. ..	100	18	3 and 4	15.7.38
Hallam .. ..	E/M.	Dandenong ..	A.C., 1 ph. ..	170	72	3 and 4	27.8.37
Hallora .. ..	Gipps.	Warragul ..	A.C., 1 ph. ..	50	14	3 and 4	12.12.44
Hampton Park .. ..	E/M.	Dandenong ..	A.C., 1 ph. ..	200	56	3 and 4	29.6.42
Harcourt .. ..	Mid.	Castlemaine ..	A.C., 3 ph. and 1 ph.	389	98	3 and 4	9.4.33
Harkaway .. ..	E/M.	Dandenong ..	A.C., 1 ph. ..	67	20	3 and 4	31.7.40
†Harrietville .. ..	N/E.	Myrtleford ..	A.C., 3 ph. ..	160	50	3 and 4	29.6.40

## CENTRES SERVED BY STATE ELECTRICITY COMMISSION OF VICTORIA—continued.

Municipality or Centre.	Branch.	Location of Officer-in-Charge (District Office).	System of Supply.	Population.	Number of Consumers.	Tariffs as per Appendix No. 7 Columns No.	Date Supply First Undertaken by Commission.
<b>Country—continued.</b>							
Harrisfield .. ..	E/M.	Dandenong ..	A.C., 1 ph. ..	309	40	3 and 4	22.10.35
Hastings .. ..	E/M.	Frankston ..	A.C., 1 ph. ..	450	148	3 and 4	28.3.27
Hawkesdale .. ..	S/W.	Port Fairy ..	A.C., 1 ph.* ..	220	12	3 and 4	26.4.40
Hazelwood .. ..	Gipps.	Traralgon ..	A.C., 1 ph. ..	200	69	3 and 4	9.9.36
Hazelwood North ..	Gipps.	Traralgon ..	A.C., 1 ph. ..	150	61	3 and 4	21.12.37
Healesville .. ..	E/M.	Healesville ..	A.C., 3 ph. and 1 ph.	1,426	642	3 and 4	1.4.33
Hearnes Oak .. ..	Gipps.	Traralgon ..	A.C., 1 ph. ..	375	92	3 and 4	18.9.36
Heatherton (portion only)	Metro.	Melbourne ..	A.C., 3 ph. ..	55	11	3 and 4	10.12.40
Heathmont .. ..	E/M.	Ringwood ..	A.C., 1 ph. ..	118	40	5	25.3.37
Hepburn Springs ..	Ball.	Daylesford ..	A.C., 3 ph. ..	500	254	3 and 4	1.10.40
Hexham .. ..	S/W.	Terang ..	A.C., 1 ph.* ..	120	16	3 and 4	8.7.38
Heyfield .. ..	Gipps.	Maffra ..	A.C., 3 ph. and 1 ph.	820	201	3 and 4	15.9.24
Hillside .. ..	Gipps.	Bairnsdale ..	A.C., 1 ph. ..	50	23	3 and 4	29.5.36
Huntly .. ..	Bend.	Bendigo ..	A.C., 1 ph. ..	200	51	3 and 4	21.11.44
Illowa .. ..	S/W.	Port Fairy ..	A.C., 1 ph.* ..	100	11	3 and 4	30.9.37
Inverloch .. ..	Gipps.	Korumburra ..	A.C., 1 ph. ..	460	141	3 and 4	1.10.34
Iona .. ..	Gipps.	Koo-wee-rup ..	A.C., 1 ph. ..	413	27	3 and 4	10.7.42
Irrewarra .. ..	S/W.	Colac ..	A.C., 1 ph.* ..	150	21	3 and 4	23.2.26
Jancourt .. ..	S/W.	Camperdown ..	A.C., 1 ph. ..	50	4	3 and 4	25.5.39
Jeetho .. ..	Gipps.	Korumburra ..	A.C., 1 ph. ..	150	11	3 and 4	4.11.41
Jindivick .. ..	Gipps.	Warragul ..	A.C., 1 ph. ..	190	80	3 and 4	23.8.38
Johnsonville .. ..	Gipps.	Lakes Entrance ..	A.C., 1 ph. ..	120	29	3 and 4	24.1.36
Jordanville .. ..	E/M.	Dandenong ..	A.C., 1 ph. ..	26	8	3 and 4	7.10.38
Joyce's Creek .. ..	Mid.	Castlemaine ..	A.C., 3 ph. and 1 ph.	78	4	3 and 4	16.12.39
Jumbunna .. ..	Gipps.	Korumburra ..	A.C., 1 ph. ..	360	42	3 and 4	24.10.30
Kalimna Point .. ..	Gipps.	Lakes Entrance ..	A.C., 1 ph. ..	140	16	3 and 4	6.12.28
Kalkallo .. ..	E/M.	Greensborough ..	A.C., 1 ph. ..	37	9	3 and 4	11.3.41
Kallista .. ..	E/M.	Belgrave ..	A.C., 1 ph. ..	269	149	3 and 4	19.8.27
Kalorama .. ..	E/M.	Belgrave ..	A.C., 1 ph. ..	222	102	3 and 4	31.5.34
Kangaroo Ground ..	E/M.	Greensborough ..	A.C., 1 ph. ..	40	4	3 and 4	27.2.45
Kardella .. ..	Gipps.	Korumburra ..	A.C., 1 ph. ..	100	9	3 and 4	23.9.36
Kariah .. ..	S/W.	Camperdown ..	A.C., 1 ph.* ..	25	5	3 and 4	12.11.38
Katamatite .. ..	N/E.	Cobram ..	A.C., 1 ph. ..	240	41	3 and 4	14.7.39
Katandra .. ..	N/E.	Shepparton ..	A.C., 1 ph. ..	260	130	3 and 4	10.10.45
Katunga .. ..	N/E.	Numurkah ..	A.C., 1 ph. ..	20	10	3 and 4	10.12.41
Keilor .. ..	Mid.	Bacchus Marsh ..	A.C., 3 ph. and 1 ph.	344	66	3 and 4	21.11.35
Kergunyah .. ..	N/E.	Wodonga ..	A.C., 1 ph. ..	88	42	3 and 4	15.6.45
Kerrisdale .. ..	N/E.	Alexandra ..	A.C., 1 ph. ..	(See Acheron)		3 and 4	5.3.46
Keysborough .. ..	E/M.	Dandenong ..	A.C., 1 ph. ..	158	39	3 and 4	21.8.41
Kialla East .. ..	N/E.	Shepparton ..	A.C., 1 ph. ..	30	7	3 and 4	5.4.46
Kiewa .. ..	N/E.	Wodonga ..	A.C., 3 ph. ..	140	75	3 and 4	12.4.39
Killarney .. ..	S/W.	Port Fairy ..	A.C., 1 ph.* ..	80	9	3 and 4	14.5.35
Kilmany South .. ..	Gipps.	Sale ..	A.C., 1 ph. ..	125	8	3 and 4	1.7.39
Kilsyth .. ..	E/M.	Ringwood ..	A.C., 1 ph. ..	160	62	5	1.4.25
Kingston .. ..	Ball.	Daylesford ..	A.C., 1 ph. ..	270	32	3 and 4	16.9.39
Kirkstall .. ..	S/W.	Port Fairy ..	A.C., 1 ph.* ..	80	4	3 and 4	9.4.40
Kolara .. ..	S/W.	Terang ..	A.C., 1 ph.* ..	70	13	3 and 4	21.3.25
Kongwak .. ..	Gipps.	Korumburra ..	A.C., 3 ph. and 1 ph.	300	86	3 and 4	10.10.30
Koonwarra .. ..	Gipps.	Leongatha ..	A.C., 1 ph. ..	100	21	3 and 4	24.9.40
Koo-wee-rup .. ..	Gipps.	Koo-wee-rup ..	A.C., 3 ph. and 1 ph.	900	210	3 and 4	1.8.35
Koo-wee-rup North ..	Gipps.	Koo-wee-rup ..	A.C., 3 ph. and 1 ph.	182	24	3 and 4	28.11.41
Koroit .. ..	S/W.	Port Fairy ..	A.C., 3 ph. ..	1,700	236	3 and 4	1.12.28
Korongah .. ..	S/W.	Port Fairy ..	A.C., 1 ph.* ..	30	4	3 and 4	4.5.38
Korrine .. ..	Gipps.	Korumburra ..	A.C., 1 ph. ..	40	11	3 and 4	19.12.40
Korumburra .. ..	Gipps.	Korumburra ..	A.C., 3 ph. and 1 ph.	3,050	642	2 and 4	1.12.24
Korumburra Rural ..	Gipps.	Korumburra ..	A.C., 1 ph. ..	100	25	3 and 4	1.11.35
Korumburra South ..	Gipps.	Korumburra ..	A.C., 1 ph. ..	100	8	3 and 4	1.12.44
Kyabram .. ..	N/E.	Kyabram ..	A.C., 3 ph. ..	2,190	583	2 and 4	1.12.26
Kyabram Rural .. ..	N/E.	Kyabram ..	A.C., 1 ph. ..	450	127	3 and 4	6.10.28
Kyneton .. ..	Mid.	Kyneton ..	A.C., 3 ph. ..	3,773	925	2 and 4	1.10.29
Ky Valley .. ..	N/E.	Kyabram ..	A.C., 3 ph. and 1 ph.	250	42	3 and 4	27.7.40
Laanecoorie .. ..	Mid.	Maryborough ..	A.C., 3 ph. ..	40	7	3 and 4	21.2.46
Lake Bolac .. ..	S/W.	Terang ..	A.C., 1 ph. ..	190	47	3 and 4	5.8.38
Lake Gilliear .. ..	S/W.	Warrnambool ..	A.C., 1 ph.* ..	50	3	3 and 4	8.7.38
Lakes Entrance .. ..	Gipps.	Lakes Entrance ..	A.C., 3 ph. and 1 ph.	1,050	215	3 and 4	19.12.28
Lancaster .. ..	N/E.	Kyabram ..	A.C., 1 ph. ..	118	16	3 and 4	1.6.35
Lance Creek .. ..	Gipps.	Korumburra ..	A.C., 1 ph. ..	80	3	3 and 4	12.4.46
Lancefield .. ..	Mid.	Bacchus Marsh ..	A.C., 3 ph. and 1 ph.	725	138	3 and 4	27.3.29
Lang Lang .. ..	Gipps.	Koo-wee-rup ..	A.C., 1 ph. ..	800	154	3 and 4	2.9.35
Lara .. ..	Geel.	Geelong ..	A.C., 3 ph. and 1 ph.	300	70	5	1.9.30
Lara Lake .. ..	Geel.	Geelong ..	A.C., 3 ph. and 1 ph.	(See Lara)		5	1.9.30
Lardner .. ..	Gipps.	Warragul ..	A.C., 1 ph. ..	110	29	3 and 4	7.2.39
Larpet .. ..	S/W.	Colac ..	A.C., 1 ph.* ..	10	1	3 and 4	20.12.44
Laverton .. ..	Metro.	Werribee ..	A.C., 1 ph. ..	500	91	3 and 4	22.11.38
Learmonth .. ..	Ball.	Ballarat ..	A.C., 3 ph. ..	350	62	3 and 4	19.3.38
Leigh Creek .. ..	Ball.	Ballarat ..	A.C., 1 ph. ..	40	15	3 and 4	27.8.40
Lemnos .. ..	N/E.	Shepparton ..	A.C., 1 ph. ..	412	34	3 and 4	1.12.38

## CENTRES SERVED BY STATE ELECTRICITY COMMISSION OF VICTORIA—continued.

Municipality or Centre.	Branch.	Location of Officer-in-Charge (District Office).	System of Supply.	Population.	Number of Consumers.	Tariffs as per Appendix No. 7 Columns No.	Date Supply First Undertaken by Commission.
<b>Country—continued.</b>							
Leongatha .. ..	Gipps.	Leongatha ..	A.C., 3 ph. ..	2,000	638	2 and 4	15.2.24
Leongatha Rural .. ..	Gipps.	Leongatha ..	A.C., 1 ph. ..	60	52	3 and 4	1.8.28
Leongatha South .. ..	Gipps.	Leongatha ..	A.C., 1 ph. ..	150	44	3 and 4	24.9.40
Leopold .. ..	Geel.	Queenscliff ..	A.C., 1 ph. ..	(See Drysdale)	3 and 4	13.2.24	
Lillico .. ..	Gipps.	Warragul ..	A.C., 1 ph. ..	150	35	3 and 4	20.4.45
Lilydale .. ..	E/M.	Ringwood ..	A.C., 3 ph. and 1 ph.	1,322	490	3 and 4	1.4.25
Lindenow .. ..	Gipps.	Bairnsdale ..	A.C., 3 ph. and 1 ph.	250	52	3 and 4	6.4.35
Lindenow South .. ..	Gipps.	Bairnsdale ..	A.C., 3 ph. and 1 ph.	150	30	3 and 4	6.4.35
Linton .. ..	Ball.	Ballarat ..	A.C., 3 ph. ..	450	73	3 and 4	7.9.39
Lismore .. ..	S/W.	Camperdown ..	A.C., 1 ph. ..	400	94	3 and 4	26.4.38
Lismore Rural .. ..	S/W.	Camperdown ..	A.C., 1 ph. ..	750	162	3 and 4	26.4.38
Loch .. ..	Gipps.	Korumburra ..	A.C., 1 ph. ..	560	150	3 and 4	18.8.30
Lockwood .. ..	E/M.	Belgrave ..	A.C., 1 ph. ..	172	89	3 and 4	23.12.36
Longford .. ..	Gipps.	Sale ..	A.C., 3 ph. ..	50	3	3 and 4	8.3.35
Longwarry .. ..	Gipps.	Koo-wee-rup ..	A.C., 3 ph. and 1 ph.	390	117	3 and 4	11.10.28
Lorne .. ..	S/W.	Lorne ..	A.C., 3 ph. and 1 ph.	990	400	3 and 4	15.12.36
Lorne Rural .. ..	S/W.	Lorne ..	A.C., 3 ph. and 1 ph.*	230	12	3 and 4	24.12.36
Lovely Banks .. ..	Geel.	Geelong ..	A.C., 3 ph. and 1 ph.	100	7	3 and 4	17.5.41
Lower Ferntree Gully .. ..	E/M.	Belgrave ..	A.C., 3 ph. and 1 ph.	925	380	3 and 4	24.8.25
Lower Plenty .. ..	E/M.	Greensborough ..	A.C., 1 ph. ..	161	93	3 and 4	13.3.28
Lucknow .. ..	Gipps.	Bairnsdale ..	A.C., 3 ph. ..	150	64	2 and 4	1.8.27
Lyndhurst .. ..	E/M.	Dandenong ..	A.C., 3 ph. ..	80	18	3 and 4	19.1.38
Lysterfield .. ..	E/M.	Belgrave ..	A.C., 3 ph. and 1 ph.	150	29	3 and 4	17.7.37
Macarthur .. ..	S/W.	Port Fairy ..	A.C., 1 ph. ..	350	68	3 and 4	3.4.40
Macarthur Rural .. ..	S/W.	Port Fairy ..	A.C., 1 ph. ..	600	179	3 and 4	3.4.40
Macedon .. ..	Mid.	Kyneton ..	A.C., 3 ph. and 1 ph.	1,444	299	3 and 4	14.6.29
Maffra .. ..	Gipps.	Maffra ..	A.C., 3 ph. ..	2,800	659	2 and 4	1.9.24
Maffra Rural .. ..	Gipps.	Maffra ..	A.C., 3 ph. and 1 ph.	310	45	3 and 4	14.8.28
Majorca .. ..	Mid.	Maryborough ..	A.C., 3 ph. ..	50	2	3 and 4	11.4.45
Maldon .. ..	Mid.	Castlemaine ..	A.C., 3 ph. and 1 ph.	1,172	221	3 and 4	1.7.36
Malmsbury .. ..	Mid.	Kyneton ..	A.C., 3 ph. and 1 ph.	820	57	3 and 4	22.12.37
Mandurang .. ..	Bend.	Bendigo ..	A.C., 1 ph. ..	100	14	3 and 4	23.5.45
Mansfield .. ..	N/E.	Alexandra ..	A.C., 3 ph. ..	836	309	3 and 4	1.6.28
Mardan .. ..	Gipps.	Leongatha ..	A.C., 1 ph. ..	150	34	3 and 4	31.7.36
Marshall .. ..	Geel.	Geelong ..	A.C., 1 ph. ..	70	20	3 and 4	6.10.39
Maryborough .. ..	Mid.	Maryborough ..	A.C., 3 ph. ..	6,500	1,603	2 and 4	1.10.37
Maryvale .. ..	Gipps.	Traralgon ..	A.C., 3 ph. and 1 ph.	100	16	3 and 4	6.8.37
Meeniyah .. ..	Gipps.	Leongatha ..	A.C., 1 ph. ..	300	122	3 and 4	14.9.36
Melton .. ..	Mid.	Bacchus Marsh ..	A.C., 3 ph. and 1 ph.	415	105	3 and 4	20.12.39
Melton South .. ..	Mid.	Bacchus Marsh ..	A.C., 1 ph. ..	(See Melton)	3 and 4	31.1.40	
Mernda .. ..	E/M.	Greensborough ..	A.C., 1 ph. ..	220	33	3 and 4	28.9.37
Merricks North .. ..	E/M.	Mornington ..	A.C., 1 ph. ..	30	20	3 and 4	24.5.40
Merrigum .. ..	N/E.	Kyabram ..	A.C., 3 ph. ..	330	135	3 and 4	22.2.27
Metropolitan Farm (Werribee) ..	Metro.	Werribee ..	A.C., 3 ph. ..	325	45	3 and 4	15.12.33
Metung .. ..	Gipps.	Lakes Entrance ..	A.C., 1 ph. ..	200	47	3 and 4	23.12.35
Mickleham .. ..	Metro.	Melbourne ..	A.C., 3 ph. and 1 ph.	50	7	3 and 4	12.6.39
Milawa .. ..	N/E.	Wangaratta ..	A.C., 3 ph. ..	100	43	3 and 4	27.7.39
Miner's Rest .. ..	Ball.	Ballarat ..	A.C., 3 ph. ..	50	16	3 and 4	14.2.38
Mirboo .. ..	Gipps.	Leongatha ..	A.C., 1 ph. ..	70	42	3 and 4	7.8.39
Mirboo East .. ..	Gipps.	Leongatha ..	A.C., 1 ph. ..	70	13	3 and 4	1.8.40
Mirboo North .. ..	Gipps.	Leongatha ..	A.C., 3 ph. and 1 ph.	700	197	3 and 4	1.10.24
Moe .. ..	Gipps.	Trafalgar ..	A.C., 3 ph. ..	1,670	403	3 and 4	23.9.23
Moe Rural .. ..	Gipps.	Trafalgar ..	A.C., 1 ph. ..	280	42	3 and 4	14.7.30
Molesworth .. ..	N/E.	Alexandra ..	A.C., 1 ph. ..	(See Yea)	3 and 4	5.3.46	
Monbulk .. ..	E/M.	Belgrave ..	A.C., 1 ph. ..	302	124	3 and 4	30.11.36
Monegeetta .. ..	Mid.	Bacchus Marsh ..	A.C., 3 ph. and 1 ph.	77	17	3 and 4	3.5.29
Monomeith .. ..	Gipps.	Koo-wee-rup ..	A.C., 1 ph. ..	75	26	3 and 4	17.1.36
Montmorency .. ..	E/M.	Greensborough ..	A.C., 1 ph. ..	370	155	3 and 4	11.5.26
Montrose .. ..	E/M.	Ringwood ..	A.C., 3 ph. and 1 ph.	338	159	5	1.4.25
Moolap .. ..	Geel.	Queenscliff ..	A.C., 1 ph. ..	(See Drysdale)	3 and 4	30.1.25	
Moolort .. ..	Mid.	Maryborough ..	A.C., 1 ph. ..	83	5	3 and 4	14.2.38
Moorooduc .. ..	E/M.	Frankston ..	A.C., 3 ph. and 1 ph.	150	53	3 and 4	2.3.25
Mooolbark .. ..	E/M.	Ringwood ..	A.C., 1 ph. ..	55	16	3 and 4	16.9.36
Mooolopna .. ..	N/E.	Shepparton ..	A.C., 3 ph. ..	1,740	317	3 and 4	1.10.26
Morang South .. ..	E/M.	Greensborough ..	A.C., 1 ph. ..	238	48	3 and 4	28.9.37
Mornington .. ..	E/M.	Mornington ..	A.C., 3 ph. and 1 ph.	2,560	878	2 and 4	1.8.30
Mortlake .. ..	S/W.	Terang ..	A.C., 3 ph. ..	950	282	3 and 4	16.5.24
Morwell .. ..	Gipps.	Traralgon ..	A.C., 3 ph. and 1 ph.	3,000	721	2 and 4	1.4.26
Morwell Bridge .. ..	Gipps.	Traralgon ..	A.C., 1 ph. ..	300	88	3 and 4	26.11.28
Mossface .. ..	Gipps.	Lakes Entrance ..	A.C., 1 ph. ..	100	11	3 and 4	1.10.30
Mountain View .. ..	Gipps.	Korumburra ..	A.C., 1 ph. ..	120	16	3 and 4	14.6.40
Moyarra .. ..	Gipps.	Korumburra ..	A.C., 1 ph. ..	100	33	3 and 4	26.6.30
Moyne View .. ..	S/W.	Port Fairy ..	A.C., 1 ph.* ..	30	5	3 and 4	27.5.37
Mt. Dandenong .. ..	E/M.	Belgrave ..	A.C., 1 ph. ..	130	135	3 and 4	20.6.33
Mt. Duneed .. ..	Geel.	Queenscliff ..	A.C., 1 ph. ..	100	20	3 and 4	5.10.39
Mt. Eliza .. ..	E/M.	Frankston ..	A.C., 3 ph. and 1 ph.	350	223	2 and 4	21.2.28
Mt. Evelyn .. ..	E/M.	Ringwood ..	A.C., 1 ph. ..	600	216	3 and 4	9.1.28
Mt. Martha .. ..	E/M.	Mornington ..	A.C., 3 ph. and 1 ph.	444	166	3 and 4	1.8.30
Mt. Waverley .. ..	E/M.	Dandenong ..	A.C., 1 ph. ..	120	49	3 and 4	1.6.28
Muckelford .. ..	Mid.	Castlemaine ..	A.C., 1 ph. ..	111	4	3 and 4	18.1.45
Mumblin .. ..	S/W.	Terang ..	A.C., 1 ph.* ..	20	4	3 and 4	24.9.45
Murchison .. ..	N/E.	Shepparton ..	A.C., 3 ph. ..	606	172	3 and 4	30.11.45

## CENTRES SERVED BY STATE ELECTRICITY COMMISSION OF VICTORIA—continued.

Municipality or Centre.	Branch.	Location of Officer-in-Charge (District Office).	System of Supply.	Population.	Number of Consumers.	Tariffs as per Appendix No. 7 Columns No.	Date Supply First Undertaken by Commission.
<b>Country—continued.</b>							
Myer's Flat .. .. .	Bend.	Bendigo ..	A.C., 1 ph. ..	30	24	3 and 4	29.6.40
Myrniong .. .. .	Mid.	Bacchus Marsh	A.C., 3 ph. and 1 ph.	116	24	3 and 4	27.5.46
Myrtlebank .. .. .	Gipps.	Sale ..	A.C., 1 ph. ..	50	51	3 and 4	3.3.38
Myrtleford .. .. .	N/E.	Myrtleford ..	A.C., 3 ph. ..	850	334	3 and 4	1.12.40
Nalangil .. .. .	S/W.	Colac ..	A.C., 1 ph.* ..	50	6	3 and 4	19.12.24
Nanneella .. .. .	N/E.	Rochester ..	A.C., 1 ph. ..	519	140	3 and 4	17.10.38
Nar-Nar-Goon .. .. .	Gipps.	Koo-wee-rup ..	A.C., 1 ph. ..	460	95	3 and 4	23.5.34
Narracan East .. .. .	Gipps.	Trafalgar ..	A.C., 1 ph. ..	56	18	3 and 4	23.7.40
Narre Warren .. .. .	E/M.	Dandenong ..	A.C., 1 ph. ..	220	64	3 and 4	13.11.28
Narre Warren North .. .. .	E/M.	Dandenong ..	A.C., 1 ph. ..	80	24	3 and 4	10.11.38
Nathalia .. .. .	N/E.	Numurkah ..	A.C., 3 ph. ..	1,050	247	3 and 4	1.10.31
Nayook .. .. .	Gipps.	Warragul ..	A.C., 1 ph. ..	80	18	3 and 4	15.1.35
Neerim .. .. .	Gipps.	Warragul ..	A.C., 1 ph. ..	180	38	3 and 4	15.1.35
Neerim East .. .. .	Gipps.	Warragul ..	A.C., 1 ph. ..	105	60	3 and 4	21.12.36
Neerim Junction .. .. .	Gipps.	Warragul ..	A.C., 1 ph. ..	150	42	3 and 4	3.5.35
Neerim North .. .. .	Gipps.	Warragul ..	A.C., 1 ph. ..	65	31	3 and 4	11.4.38
Neerim South .. .. .	Gipps.	Warragul ..	A.C., 1 ph. ..	500	204	3 and 4	15.1.35
Newborough .. .. .	Gipps.	Trafalgar ..	A.C., 1 ph. ..	325	61	3 and 4	24.6.38
New Gisborne .. .. .	Mid.	Bacchus Marsh	A.C., 1 ph. ..	250	32	3 and 4	1.3.29
Newlyn .. .. .	Ball.	Ballarat ..	A.C., 3 ph. and 1 ph.	100	21	3 and 4	14.7.44
Newry .. .. .	Gipps.	Maffra ..	A.C., 3 ph. and 1 ph.	380	83	3 and 4	25.10.26
Newstead .. .. .	Mid.	Castlemaine ..	A.C., 3 ph. ..	389	95	3 and 4	20.4.37
Nicholson .. .. .	Gipps.	Lakes Entrance	A.C., 1 ph. ..	70	3	3 and 4	12.12.34
Nilma .. .. .	Gipps.	Warragul ..	A.C., 1 ph. ..	180	88	3 and 4	23.12.27
Nilma Rural .. .. .	Gipps.	Warragul ..	A.C., 1 ph. ..	185	64	3 and 4	20.4.45
Noble Park .. .. .	E/M.	Dandenong ..	A.C., 3 ph. and 1 ph.	1,692	350	2 and 4	5.12.24
Noojee .. .. .	Gipps.	Warragul ..	A.C., 1 ph. ..	185	64	3 and 4	15.1.35
Noorlat .. .. .	S/W.	Terang ..	A.C., 3 ph. and 1 ph.	320	100	3 and 4	5.12.24
North Wonthaggi (portion only)	Gipps.	Korumburra ..	A.C., 1 ph. ..	40	5	3 and 4	17.2.41
Notting Hill .. .. .	E/M.	Dandenong ..	A.C., 1 ph. ..	200	46	3 and 4	21.7.27
Numurkah .. .. .	N/E.	Numurkah ..	A.C., 3 ph. ..	1,611	436	3 and 4	1.10.31
Nyora .. .. .	Gipps.	Korumburra ..	A.C., 1 ph. ..	320	57	3 and 4	1.10.35
Oaklands Junction .. .. .	Metro.	Melbourne ..	A.C., 1 ph. ..	90	7	3 and 4	10.12.35
Ocean Grove .. .. .	Geel.	Queenscliff ..	A.C., 1 ph. ..	300	164	3 and 4	27.9.24
Officer .. .. .	E/M.	Dandenong ..	A.C., 1 ph. ..	307	94	3 and 4	12.4.28
Olinda .. .. .	E/M.	Belgrave ..	A.C., 1 ph. ..	479	218	3 and 4	30.9.27
Ondit .. .. .	S/W.	Colac ..	A.C., 1 ph.* ..	15	3	3 and 4	23.5.44
Orrvale .. .. .	N/E.	Shepparton ..	A.C., 1 ph. ..	(See Shepparton East)	3	3 and 4	20.2.36
Outtrim .. .. .	Gipps.	Korumburra ..	A.C., 1 ph. ..	250	24	3 and 4	13.11.39
Ovens .. .. .	N/E.	Myrtleford ..	A.C., 3 ph. ..	70	38	3 and 4	20.11.44
Pakenham .. .. .	E/M.	Dandenong ..	A.C., 1 ph. ..	580	213	3 and 4	18.6.28
Panmure .. .. .	S/W.	Terang ..	A.C., 1 ph.* ..	200	22	3 and 4	3.9.37
Parwan .. .. .	Mid.	Bacchus Marsh	A.C., 3 ph. and 1 ph.	56	11	3 and 4	10.1.46
Paynesville .. .. .	Gipps.	Bairnsdale ..	A.C., 3 ph. and 1 ph.	350	67	3 and 4	25.2.38
Penshurst .. .. .	S/W.	Terang ..	A.C., 1 ph. ..	720	157	3 and 4	16.9.38
Penshurst Rural .. .. .	S/W.	Terang ..	A.C., 1 ph. ..	1,600	312	3 and 4	16.9.38
Picola .. .. .	N/E.	Numurkah ..	A.C., 3 ph. ..	180	26	3 and 4	1.11.40
Pirron Yallock .. .. .	S/W.	Colac ..	A.C., 1 ph.* ..	50	9	3 and 4	21.12.36
Plenty .. .. .	E/M.	Greensborough	A.C., 1 ph. ..	150	47	3 and 4	28.11.45
Point Cook (portion only)	Metro.	Werribee ..	A.C., 3 ph. and 1 ph.	40	6	3 and 4	1.7.40
Point Lonsdale .. .. .	Geel.	Queenscliff ..	A.C., 3 ph. and 1 ph.	250	189	3 and 4	30.12.23
Pomborneit North .. .. .	S/W.	Camperdown ..	A.C., 1 ph. ..	100	31	3 and 4	1.9.26
Pomborneit South .. .. .	S/W.	Camperdown ..	A.C., 1 ph.* ..	90	12	3 and 4	1.9.26
Poowong .. .. .	Gipps.	Korumburra ..	A.C., 3 ph. and 1 ph.	460	129	3 and 4	11.9.30
Poowong East .. .. .	Gipps.	Korumburra ..	A.C., 1 ph. ..	180	42	3 and 4	17.10.38
Poowong North .. .. .	Gipps.	Korumburra ..	A.C., 1 ph. ..	120	6	3 and 4	2.5.45
Portarlington .. .. .	Geel.	Queenscliff ..	A.C., 1 ph. ..	800	169	3 and 4	27.2.24
Port Fairy .. .. .	S/W.	Port Fairy ..	A.C., 3 ph. ..	1,850	505	3 and 4	21.12.28
Port Fairy North .. .. .	S/W.	Port Fairy ..	A.C., 3 ph. and 1 ph.	(See Port Fairy)	3	3 and 4	1.7.36
Port Fairy Rural .. .. .	S/W.	Port Fairy ..	A.C., 3 ph. and 1 ph.*	800	191	3 and 4	10.11.30
Port Franklin .. .. .	Gipps.	Foster ..	A.C., 1 ph. ..	150	35	3 and 4	23.7.38
Portsea .. .. .	E/M.	Sorrento ..	A.C., 3 ph. ..	200	173	2 and 4	1.10.27
Powlett River (portion only)	Gipps.	Korumburra ..	A.C., 1 ph. ..	60	9	3 and 4	17.1.41
Queenscliff .. .. .	Geel.	Queenscliff ..	A.C., 3 ph. ..	3,000	612	3 and 4	30.12.23
Ranceby .. .. .	Gipps.	Korumburra ..	A.C., 1 ph. ..	60	4	3 and 4	23.6.41
Raywood .. .. .	Bend.	Bendigo ..	A.C., 3 ph. ..	190	44	3 and 4	3.7.40
Red Hill .. .. .	E/M.	Mornington ..	A.C., 3 ph. and 1 ph.	440	95	3 and 4	30.6.37
Research .. .. .	E/M.	Greensborough	A.C., 1 ph. ..	145	37	3 and 4	24.5.40
Rickett's Marsh .. .. .	S/W.	Colac ..	A.C., 1 ph.* ..	30	12	3 and 4	28.8.44
Riddell .. .. .	Mid.	Bacchus Marsh	A.C., 3 ph. and 1 ph.	459	80	3 and 4	7.3.29
Ringwood .. .. .	E/M.	Ringwood ..	A.C., 3 ph. and 1 ph.	3,960	1,139	5	1.4.25
Rochester .. .. .	N/E.	Rochester ..	A.C., 3 ph. ..	1,830	428	3 and 4	1.8.35
Rockbank .. .. .	Mid.	Bacchus Marsh	A.C., 3 ph. and 1 ph.	140	25	3 and 4	3.4.39



## CENTRES SERVED BY STATE ELECTRICITY COMMISSION OF VICTORIA—continued.

Municipality or Centre.	Branch.	Location of Officer-in-Charge (District Office).	System of Supply.	Population.	Number of Consumers.	Tariffs as per Appendix No. 7 Columns No.	Date Supply First Undertaken by Commission.
<b>Country—continued.</b>							
Rokeby .. .. .	Gipps.	Warragul ..	A.C., 3 ph. and 1 ph.	50	8	3 and 4	4.4.35
Romsey .. .. .	Mid.	Bacchus Marsh ..	A.C., 3 ph. and 1 ph.	762	141	3 and 4	19.3.29
Rosebrook .. .. .	S/W.	Port Fairy ..	A.C., 1 ph.* ..	150	9	3 and 4	30.9.36
Rosebud .. .. .	E/M.	Sorrento ..	A.C., 3 ph. and 1 ph.	750	665	3 and 4	8.12.27
Rosedale .. .. .	Gipps.	Traralgon ..	A.C., 1 ph. ..	500	92	3 and 4	15.8.27
Rowville .. .. .	E/M.	Dandenong ..	A.C., 1 ph. ..	50	16	3 and 4	5.7.45
Rubicon .. .. .	N/E.	Alexandra ..	A.C., 1 ph. ..	62	3	3 and 4	4.9.27
Ruby .. .. .	Gipps.	Leongatha ..	A.C., 1 ph. ..	70	35	3 and 4	19.4.28
Rutherglen .. .. .	N/E.	Rutherglen ..	A.C., 3 ph. ..	1,410	388	3 and 4	15.10.26
Ryanston .. .. .	Gipps.	Korumburra ..	A.C., 1 ph. ..	150	13	3 and 4	14.1.41
Rye .. .. .	E/M.	Sorrento ..	A.C., 1 ph. ..	230	139	3 and 4	16.12.27
Sale .. .. .	Gipps.	Sale ..	A.C., 3 ph. ..	6,000	1,265	2 and 4	1.7.24
Sale Rural .. .. .	Gipps.	Sale ..	A.C., 1 ph. ..	320	136	3 and 4	12.12.28
Sassafras .. .. .	E/M.	Belgrave ..	A.C., 3 ph. and 1 ph.	300	233	3 and 4	9.7.27
Scarsdale .. .. .	Ball.	Ballarat ..	A.C., 1 ph. ..	230	9	3 and 4	5.9.39
Scoresby .. .. .	E/M.	Dandenong ..	A.C., 1 ph. ..	139	41	3 and 4	23.9.37
Scotsburn .. .. .	Ball.	Ballarat ..	A.C., 1 ph. ..	70	23	3 and 4	3.11.44
Seaford .. .. .	E/M.	Frankston ..	A.C., 3 ph. and 1 ph.	800	348	2 and 4	21.2.28
Selby .. .. .	E/M.	Belgrave ..	A.C., 1 ph. ..	95	54	3 and 4	12.12.35
Seymour .. .. .	N/E.	Seymour ..	A.C., 3 ph. ..	3,000	779	2 and 4	2.10.44
Seymour Rural .. .. .	N/E.	Seymour ..	A.C., 1 ph. ..	120	35	3 and 4	2.10.44
Shepparton .. .. .	N/E.	Shepparton ..	A.C., 3 ph. ..	7,590	2,024	2 and 4	1.1.25
Shepparton East .. .. .	N/E.	Shepparton ..	A.C., 3 ph. and 1 ph.	1,263	283	3 and 4	25.2.36
Shepparton Rural .. .. .	N/E.	Shepparton ..	A.C., 1 ph. ..	90	28	3 and 4	17.8.39
Sherbrooke .. .. .	E/M.	Belgrave ..	A.C., 1 ph. ..	175	49	3 and 4	29.7.27
Shoreham .. .. .	E/M.	Mornington ..	A.C., 1 ph. ..	30	10	3 and 4	24.5.40
Silvan .. .. .	E/M.	Ringwood ..	A.C., 3 ph. and 1 ph.	280	62	3 and 4	13.6.28
Skipton .. .. .	Ball.	Ballarat ..	A.C., 3 ph. and 1 ph.	590	110	3 and 4	27.10.39
Smeaton .. .. .	Ball.	Ballarat ..	A.C., 1 ph. ..	170	37	3 and 4	16.4.38
Smythesdale .. .. .	Ball.	Ballarat ..	A.C., 1 ph. ..	280	18	3 and 4	2.9.39
Somers .. .. .	E/M.	Mornington ..	A.C., 1 ph. ..	209	72	3 and 4	24.12.35
Somerton .. .. .	Metro.	Melbourne ..	A.C., 3 ph. ..	100	14	3 and 4	22.7.38
Somerville .. .. .	E/M.	Frankston ..	A.C., 3 ph. and 1 ph.	350	97	3 and 4	19.12.26
Sorrento .. .. .	E/M.	Sorrento ..	A.C., 3 ph. and 1 ph.	500	488	2 and 4	1.10.27
South Belgrave .. .. .	E/M.	Belgrave ..	A.C., 1 ph. ..	173	21	3 and 4	17.2.37
South Ecklin .. .. .	S/W.	Terang ..	A.C., 1 ph.* ..	20	4	3 and 4	24.9.45
South Gisborne .. .. .	Mid.	Bacchus Marsh ..	A.C., 3 ph. and 1 ph.	(See Gisborne)		3 and 4	1.5.37
South Purrumbete .. .. .	S/W.	Camperdown ..	A.C., 1 ph. ..	200	5	3 and 4	25.5.39
Southern Cross .. .. .	S/W.	Port Fairy ..	A.C., 1 ph.* ..	20	6	3 and 4	31.8.38
Springbank .. .. .	Ball.	Ballarat ..	A.C., 1 ph. ..	13	3	3 and 4	7.2.45
Springhurst .. .. .	N/E.	Rutherglen ..	A.C., 3 ph. ..	229	64	3 and 4	6.9.26
Springvale .. .. .	E/M.	Dandenong ..	A.C., 3 ph. and 1 ph.	2,600	766	2 and 4	5.12.24
St. Albans .. .. .	Mid.	Bacchus Marsh ..	A.C., 3 ph. and 1 ph.	932	144	3 and 4	14.2.30
St. James .. .. .	N/E.	Yarrawonga ..	A.C., 3 ph. ..	260	44	3 and 4	14.2.40
Stanhope .. .. .	N/E.	Kyabram ..	A.C., 3 ph. and 1 ph.	410	230	3 and 4	14.6.38
Stavelly .. .. .	S/W.	Terang ..	A.C., 1 ph.* ..	20	2	3 and 4	8.11.40
Stoneyford .. .. .	S/W.	Camperdown ..	A.C., 1 ph.* ..	100	10	3 and 4	20.12.37
Stony Creek .. .. .	Gipps.	Leongatha ..	A.C., 1 ph. ..	70	35	3 and 4	14.9.36
Stratford .. .. .	Gipps.	Maffra ..	A.C., 3 ph. and 1 ph.	1,000	188	3 and 4	20.12.26
Strathallan .. .. .	N/E.	Echuca ..	A.C., 1 ph. ..	30	20	3 and 4	5.11.35
Strathfieldsaye .. .. .	Bend.	Bendigo ..	A.C., 1 ph. ..	250	47	3 and 4	13.3.45
Strathmerton .. .. .	N/E.	Cobram ..	A.C., 1 ph. ..	170	27	3 and 4	19.2.35
Streatham .. .. .	S/W.	Terang ..	A.C., 1 ph.* ..	150	26	3 and 4	28.9.39
Sunbury .. .. .	Mid.	Bacchus Marsh ..	A.C., 3 ph. and 1 ph.	1,303	256	3 and 4	1.5.26
Swan Marsh .. .. .	S/W.	Colac ..	A.C., 1 ph.* ..	100	19	3 and 4	4.6.37
Swan Reach .. .. .	Gipps.	Lakes Entrance ..	A.C., 1 ph. ..	150	39	3 and 4	11.7.30
Sydenham .. .. .	Mid.	Bacchus Marsh ..	A.C., 3 ph. and 1 ph.	97	29	3 and 4	14.10.38
Talbot .. .. .	Mid.	Maryborough ..	A.C., 1 ph. ..	442	93	3 and 4	27.8.38
Tallangatta .. .. .	N/E.	Wodonga ..	A.C., 3 ph. ..	850	242	3 and 4	1.11.40
Tallygaroopna .. .. .	N/E.	Shepparton ..	A.C., 3 ph. ..	228	49	3 and 4	22.10.33
Tally Ho .. .. .	E/M.	Dandenong ..	A.C., 3 ph. ..	167	56	3 and 4	9.3.28
Tambo Upper .. .. .	Gipps.	Lakes Entrance ..	A.C., 1 ph. ..	100	14	3 and 4	24.12.37
Tandara .. .. .	Bend.	Bendigo ..	A.C., 1 ph. ..	100	9	3 and 4	9.11.44
Tandarook .. .. .	S/W.	Camperdown ..	A.C., 1 ph. ..	50	4	3 and 4	25.5.39
Tangambalanga .. .. .	N/E.	Wodonga ..	A.C., 3 ph. ..	150	46	3 and 4	12.4.39
Tanjil South .. .. .	Gipps.	Trafalgar ..	A.C., 1 ph. ..	98	37	3 and 4	27.5.37
Tarago .. .. .	Gipps.	Warragul ..	A.C., 1 ph. ..	50	14	3 and 4	23.8.38
Tatura .. .. .	N/E.	Shepparton ..	A.C., 3 ph. ..	1,506	375	3 and 4	1.11.26
Tawanga .. .. .	N/E.	Myrtleford ..	A.C., 3 ph. ..	48	22	3 and 4	15.5.46
Tecoma .. .. .	E/M.	Belgrave ..	A.C., 3 ph. ..	(See Belgrave)		2 and 4	3.9.28
Teetora Road .. .. .	Gipps.	Warragul ..	A.C., 1 ph. ..	110	42	3 and 4	27.5.41
Terang .. .. .	S/W.	Terang ..	A.C., 3 ph. and 1 ph.	2,350	643	2 and 4	4.3.24
Terang Rural .. .. .	S/W.	Terang ..	A.C., 3 ph. and 1 ph.	1,100	467	3 and 4	9.1.36
Tesbury .. .. .	S/W.	Camperdown ..	A.C., 1 ph.* ..	200	4	3 and 4	15.5.39
The Basin .. .. .	E/M.	Ringwood ..	A.C., 1 ph. ..	250	62	3 and 4	13.9.39
Thomastown .. .. .	E/M.	Greensborough ..	A.C., 3 ph. ..	150	46	3 and 4	1.6.28
Thornton .. .. .	N/E.	Alexandra ..	A.C., 1 ph. ..	170	62	3 and 4	19.7.27
Thorpdale .. .. .	Gipps.	Trafalgar ..	A.C., 1 ph. ..	175	64	3 and 4	23.12.37
Tinamba .. .. .	Gipps.	Maffra ..	A.C., 1 ph. ..	350	146	3 and 4	11.7.28
Tongala .. .. .	N/E.	Echuca ..	A.C., 3 ph. ..	478	320	3 and 4	12.9.26
Toolamba West .. .. .	N/E.	Shepparton ..	A.C., 1 ph. and 1 ph.	160	82	3 and 4	1.12.39

## CENTRES SERVED BY STATE ELECTRICITY COMMISSION OF VICTORIA—continued.

Municipality or Centre.	Branch.	Location of Officer-in-Charge (District Office).	System of Supply.	Population.	Number of Consumers.	Tariffs as per Appendix No. 7 Columns No.	Date Supply First Undertaken by Commission.
<b>Country—continued.</b>							
Toongabbie .. .. .	Gipps.	Traralgon ..	A.C., 1 ph. ..	200	30	3 and 4	11.3.29
Toora .. .. .	Gipps.	Foster ..	A.C., 3 ph. and 1 ph. ..	450	165	3 and 4	10.5.38
Tooradin .. .. .	Gipps.	Koo-wee-rup ..	A.C., 1 ph. ..	250	64	3 and 4	14.1.37
Toorloo Arm .. .. .	Gipps.	Lakes Entrance ..	A.C., 1 ph. ..	75	6	3 and 4	13.2.40
Torquay .. .. .	Geel.	Queenscliff ..	A.C., 3 ph. and 1 ph. ..	450	229	3 and 4	1.9.30
Torwood .. .. .	Gipps.	Warragul ..	A.C., 1 ph. ..	50	18	3 and 4	22.1.40
Tourello .. .. .	Ball.	Ballarat ..	A.C., 1 ph. ..	20	9	3 and 4	10.8.38
Tower Hill .. .. .	S/W.	Port Fairy ..	A.C., 1 ph.* ..	40	6	3 and 4	30.6.35
Trafalgar .. .. .	Gipps.	Trafalgar ..	A.C., 3 ph. ..	1,280	373	3 and 4	16.10.23
Trafalgar Rural .. .. .	Gipps.	Trafalgar ..	A.C., 1 ph. ..	372	156	3 and 4	3.4.28
Traralgon .. .. .	Gipps.	Traralgon ..	A.C., 3 ph. and 1 ph. ..	4,300	1,067	2 and 4	24.11.23
Traralgon Rural .. .. .	Gipps.	Traralgon ..	A.C., 1 ph. ..	200	28	3 and 4	27.11.28
Traralgon South .. .. .	Gipps.	Traralgon ..	A.C., 1 ph. ..	150	29	3 and 4	12.8.37
Trawool .. .. .	N/E.	Seymour ..	A.C., 1 ph. ..	(See Seymour Rural)	3 and 4	5.4.45	
Tremont .. .. .	E/M.	Belgrave ..	A.C., 1 ph. ..	430	113	3 and 4	2.9.27
Trentham .. .. .	Mid.	Kyneton ..	A.C., 3 ph. ..	887	186	3 and 4	8.5.39
Triholm .. .. .	Gipps.	Korumburra ..	A.C., 1 ph. ..	40	3	3 and 4	17.10.38
Tullamarine .. .. .	Metro.	Melbourne ..	A.C., 3 ph. ..	200	47	3 and 4	18.3.39
Tungamah .. .. .	N/E.	Yarrawonga ..	A.C., 3 ph. ..	308	77	3 and 4	14.2.40
Tyabb .. .. .	E/M.	Frankston ..	A.C., 1 ph. ..	260	47	3 and 4	20.1.28
Tyers .. .. .	Gipps.	Traralgon ..	A.C., 3 ph. and 1 ph. ..	260	67	3 and 4	15.10.23
Tylden .. .. .	Mid.	Kyneton ..	A.C., 1 ph. ..	274	29	3 and 4	6.7.39
Tynong .. .. .	Gipps.	Koo-wee-rup ..	A.C., 1 ph. ..	280	78	3 and 4	14.1.29
Upper Beaconsfield .. .. .	E/M.	Dandenong ..	A.C., 1 ph. ..	130	69	3 and 4	1.8.34
Upper Ferntree Gully .. .. .	E/M.	Belgrave ..	A.C., 3 ph. and 1 ph. ..	830	299	3 and 4	24.8.25
Upper Maffra West .. .. .	Gipps.	Maffra ..	A.C., 1 ph. ..	250	49	3 and 4	6.10.37
Upwey .. .. .	E/M.	Belgrave ..	A.C., 3 ph. and 1 ph. ..	1,100	561	2 and 4	24.8.25
Valencia Creek .. .. .	Gipps.	Maffra ..	A.C., 1 ph. ..	100	18	3 and 4	11.6.38
Vervale .. .. .	Gipps.	Koo-wee-rup ..	A.C., 1 ph. ..	115	7	3 and 4	10.7.42
Violet Town .. .. .	N/E.	Benalla ..	A.C., 3 ph. ..	680	137	3 and 4	1.3.36
Waaia .. .. .	N/E.	Numurkah ..	A.C., 3 ph. ..	50	16	3 and 4	5.11.40
Wahgunyah .. .. .	N/E.	Rutherglen ..	A.C., 3 ph. ..	560	103	3 and 4	1.2.26
Wallace .. .. .	Ball.	Ballarat ..	A.C., 3 ph. ..	85	25	3 and 4	17.5.40
Walpa .. .. .	Gipps.	Bairnsdale ..	A.C., 1 ph. ..	50	17	3 and 4	16.5.35
Wangaratta .. .. .	N/E.	Wangaratta ..	A.C., 3 ph. ..	5,760	1,534	2 and 4	12.3.27
Wangaratta North .. .. .	N/E.	Wangaratta ..	A.C., 1 ph. ..	26	11	3 and 4	20.5.36
Wangaratta South .. .. .	N/E.	Wangaratta ..	A.C., 3 ph. ..	57	21	3 and 4	3.5.38
Wangoom .. .. .	S/W.	Warrnambool..	A.C., 1 ph.* ..	20	3	3 and 4	9.5.39
Wantirna .. .. .	E/M.	Ringwood ..	A.C., 3 ph. ..	85	22	3 and 4	1.2.28
Warburton .. .. .	E/M.	Healesville ..	A.C., 3 ph. ..	840	323	3 and 4	1.7.44
Warncoort .. .. .	S/W.	Colac ..	A.C., 1 ph. ..	30	7	3 and 4	19.12.25
Warragul .. .. .	Gipps.	Warragul ..	A.C., 3 ph. and 1 ph. ..	3,200	919	2 and 4	1.12.30
Warragul Rural .. .. .	Gipps.	Warragul ..	A.C., 1 ph. ..	300	118	3 and 4	19.6.28
Warrandyte .. .. .	E/M.	Ringwood ..	A.C., 1 ph. ..	368	192	3 and 4	21.12.35
Warrion .. .. .	S/W.	Colac ..	A.C., 1 ph. ..	80	18	3 and 4	18.8.24
Warrnambool.. .. .	S/W.	Warrnambool..	A.C., 3 ph. and 1 ph. ..	10,000	2,576	2 and 4	30.12.23
Warrnambool Rural .. .. .	S/W.	Warrnambool..	A.C., 3 ph. and 1 ph. ..	900	293	3 and 4	9.1.36
Warrong .. .. .	S/W.	Port Fairy ..	A.C., 1 ph.* ..	20	3	3 and 4	20.4.40
Watsonia .. .. .	E/M.	Greensborough ..	A.C., 3 ph. ..	109	48	3 and 4	24.3.26
Waubra .. .. .	Ball.	Ballarat ..	A.C., 1 ph. ..	90	25	3 and 4	18.12.40
Waurin Ponds .. .. .	Geel.	Geelong ..	A.C., 1 ph. ..	100	5	3 and 4	26.11.45
Weerite .. .. .	S/W.	Camperdown ..	A.C., 1 ph. ..	30	11	3 and 4	8.6.28
Weerangourt .. .. .	S/W.	Port Fairy ..	A.C., 1 ph.* ..	15	2	3 and 4	29.9.45
Wellsford .. .. .	Bend.	Bendigo ..	A.C., 3 ph. and 1 ph. ..	20	4	3 and 4	25.1.43
Welshpool .. .. .	Gipps.	Foster ..	A.C., 3 ph. and 1 ph. ..	330	92	3 and 4	13.8.38
Werribee .. .. .	Metro.	Werribee ..	A.C., 3 ph. and 1 ph. ..	3,120	819	2 and 4	10.4.24
Werribee South .. .. .	Metro.	Werribee ..	A.C., 3 ph. and 1 ph. ..	550	119	3 and 4	24.11.36
Westbury .. .. .	Gipps.	Trafalgar ..	A.C., 1 ph. ..	40	18	3 and 4	27.5.37
Westmere .. .. .	S/W.	Terang ..	A.C., 1 ph.* ..	50	16	3 and 4	30.9.38
Wheeler's Hill .. .. .	E/M.	Dandenong ..	A.C., 1 ph. ..	141	46	3 and 4	1.2.26
Whittlesea .. .. .	E/M.	Greensborough ..	A.C., 1 ph. ..	426	122	3 and 4	28.9.37
Whorouly .. .. .	N/E.	Myrtleford ..	A.C., 3 ph. and 1 ph. ..	300	114	3 and 4	2.6.42
Willatook .. .. .	S/W.	Port Fairy ..	A.C., 1 ph.* ..	20	3	3 and 4	23.5.40
Willaura .. .. .	S/W.	Terang ..	A.C., 1 ph. ..	400	114	3 and 4	23.9.38
Willowgrove .. .. .	Gipps.	Trafalgar ..	A.C., 1 ph. ..	64	31	3 and 4	22.5.39
Winchelsea .. .. .	S/W.	Colac ..	A.C., 3 ph. ..	705	125	3 and 4	30.6.24
Wiseleigh .. .. .	Gipps.	Lakes Entrance ..	A.C., 1 ph. ..	100	9	3 and 4	24.10.30
Wodonga .. .. .	N/E.	Wodonga ..	A.C., 3 ph. ..	3,390	637	2 and 4	1.11.33
Wodonga Rural .. .. .	N/E.	Wodonga ..	A.C., 1 ph. ..	40	8	3 and 4	8.8.38
Wonga Park .. .. .	E/M.	Ringwood ..	A.C., 1 ph. ..	85	6	3 and 4	18.5.38
Woodend .. .. .	Mid.	Kyneton ..	A.C., 3 ph. and 1 ph. ..	1,454	357	3 and 4	1.8.29
Woodglen .. .. .	Gipps.	Bairnsdale ..	A.C., 3 ph. and 1 ph. ..	30	16	3 and 4	16.4.40
Wool Wool .. .. .	S/W.	Colac ..	A.C., 3 ph. ..	30	8	3 and 4	15.10.24
Woorndoo .. .. .	S/W.	Terang ..	A.C., 1 ph.* ..	40	9	3 and 4	8.12.38
Wunghnu .. .. .	N/E.	Numurkah ..	A.C., 3 ph. ..	210	40	3 and 4	1.10.33
Wy Yung .. .. .	Gipps.	Bairnsdale ..	A.C., 3 ph. and 1 ph. ..	50	10	3 and 4	28.9.28

## CENTRES SERVED BY STATE ELECTRICITY COMMISSION OF VICTORIA—continued.

Municipality or Centre.	Branch.	Location of Officer-in-Charge (District Office).	System of Supply.	Population.	Number of Consumers.	Tariffs as per Appendix No. 7 Columns No.	Date Supply First Undertaken by Commission.
Yackandandah .. ..	N/E.	Wodonga ..	A.C., 3 ph. ..	363	117	3 and 4	20.12.39
Yallock .. ..	Gipps.	Koo-wee-rup ..	A.C., 1 ph. ..	100	14	3 and 4	25.11.37
Yangery .. ..	S/W.	Port Fairy ..	A.C., 1 ph.* ..	120	7	3 and 4	22.6.38
Yannathan .. ..	Gipps.	Koo-wee-rup ..	A.C., 1 ph. ..	275	87	3 and 4	8.2.36
Yan Yean .. ..	E/M.	Greensborough ..	A.C., 1 ph. ..	128	30	3 and 4	28.9.37
Yarra Glen .. ..	E/M.	Healesville ..	A.C., 1 ph. ..	180	69	3 and 4	15.3.34
Yarragon .. ..	Gipps.	Trafalgar ..	A.C., 3 ph. and 1 ph.	658	226	3 and 4	1.11.23
Yarrowonga .. ..	N/E.	Yarrowonga ..	A.C., 3 ph. ..	2,880	692	3 and 4	1.8.25
Yea .. ..	N/E.	Alexandra ..	A.C., 3 ph. ..	950	301	3 and 4	1.5.45
Yering .. ..	E/M.	Healesville ..	A.C., 1 ph. ..	57	19	3 and 4	24.2.34
Yeringberg .. ..	E/M.	Healesville ..	A.C., 1 ph. ..	60	20	3 and 4	7.7.33
Yinnar .. ..	Gipps.	Traralgon ..	A.C., 3 ph. and 1 ph.	450	158	3 and 4	28.11.27
Yuroke .. ..	Metro.	Melbourne ..	A.C., 3 ph. ..	50	12	3 and 4	13.6.39

\* = 230 V. only.

† = Non-permanent supply.

Note.—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.

## LIST OF BRANCH OFFICES.

Branch Title.	Abbreviations.	Location of Branch Headquarters.	Telephone.
Metropolitan .. ..	Metro. .. ..	238–242 Flinders-street, Melbourne .. ..	C. 10310 JM 1525
Ballarat .. ..	Ball. .. ..	1–7 Wendouree-parade, Ballarat .. ..	1825
Bendigo .. ..	Bend. .. ..	Cr. Hargreaves and Williamson-streets, Bendigo ..	1700
Eastern Metropolitan ..	E/M. .. ..	197 Lonsdale-street, Dandenong .. ..	182
Geelong .. ..	Geel. .. ..	Corio-terrace, Geelong .. ..	5941
Gippsland .. ..	Gipps. .. ..	108–116 Franklin-street, Traralgon .. ..	114
Midland .. ..	Mid. .. ..	40 Lyttleton-street, Castlemaine .. ..	238
North-Eastern .. ..	N/E. .. ..	80 Bridge-street, Benalla .. ..	192
South-Western .. ..	S/W. .. ..	119–121 Murray-street, Colac .. ..	661

## LIST OF DISTRICT OFFICES.

District Office.	Address.	Telephone.	District Office.	Address.	Telephone.
Alexandra ..	Grant-street, Alexandra ..	88	Lorne ..	Cr. Mountjoy-parade and William-street, Lorne	29
Bacchus Marsh ..	High-street, Mansfield ..	40	Maffra ..	Johnston-street, Maffra ..	27
Bairnsdale ..	High-street, Yea ..	105	Maryborough ..	112–114 High-street, Maryborough	207
Belgrave ..	Main-street, Bacchus Marsh ..	236	Mornington ..	64 Main-street, Mornington ..	247
Benalla ..	Evans-street, Sunbury ..	14	Myrtleford ..	Myrtle-street, Myrtleford ..	60
Camperdown ..	159 Main-street, Bairnsdale ..	333	Numurkah ..	Melville-street, Numurkah ..	36
Castlemaine ..	Main-road, Belgrave ..	127	Port Fairy ..	Blake-street, Nathalia ..	54
Chelsea ..	80 Bridge-street, Benalla ..	192	Queenscliff ..	Sackville-street, Port Fairy ..	123
Cobram ..	Manifold-street, Camperdown ..	94	Ringwood ..	Hesse-street, Queenscliff ..	92
Colac ..	10 Lyttleton-street, Castlemaine	196 and 238	Rochester ..	187 Whitehorse-road, Ringwood	95
Dandenong ..	420 Point Nepean-road, Chelsea	45	Rutherglen ..	Gillies-street, Rochester ..	129
Daylesford ..	William-street, Cobram ..	45	Sale ..	Main-street, Rutherglen ..	98
Echuca ..	119–121 Murray-street, Colac	661	Seymour ..	Conness-street, Chiltern ..	31
Euroa ..	197 Lonsdale-street, Dandenong	182, 192, and 168	Shepparton ..	78 Raymond-street, Sale ..	89
Foster ..	Vincent-street, Daylesford ..	257	Sorrento ..	Station-street, Seymour ..	90
Frankston ..	196 Hare-street, Echuca ..	321	Sunshine ..	Maude-street, Shepparton ..	49 and 747
Greensborough ..	Binney-street, Euroa ..	162	Terang ..	Ocean Amphitheatre-road, Sorrento	45
Healesville ..	Main-street, Foster ..	50	Trafalgar ..	Point Nepean-road, Dromana	42
Koo-wee-rup ..	Cr. Wells and Bay-streets, Frankston	109	Traralgon ..	241 Hampshire-road, Sunshine	MW 9648
Korumburra ..	Main-street, Greensborough ..	63	Wangaratta ..	High-street, Terang ..	47
Kyabram ..	Nicholson-street, Healesville ..	165	Warragul ..	Main-street, Trafalgar ..	50
Kyneton ..	Main-street, Warburton ..	93	Warrnambool ..	108–116 Franklin-street, Traralgon	98, 114, and 164
Lakes Entrance ..	Station-street, Koo-wee-rup ..	41	Wodonga ..	110 Murphy-street, Wangaratta	262
Leongatha ..	Commercial-street, Korumburra ..	29	Yarrowonga ..	Victoria-street, Warragul ..	151
	Allan-street, Kyabram ..	221		138 Koroit-street, Warrnambool	75
	35 High-street, Kyneton ..	151		Watton-street, Werribee ..	5
	High-street, Woodend ..	74		Sydney-street, Wodonga ..	63
	Main-street, Lakes Entrance ..	76		Towong-street, Tallangatta ..	91
	Bair-street, Leongatha ..	176		Belmore-street, Yarrowonga ..	85

## ELECTRICITY SUPPLY UNDERTAKINGS (MUNICIPAL AND PRIVATE).

Municipality or Centre.	Supply Authority.	System of Supply.	Population.	Number of Consumers.	Tariffs.	
<b>METROPOLITAN.</b>						
<b>Supplied in Bulk by State Electricity Commission.</b>						
City of Melbourne (excl. Flemington)	Melbourne City Council ..	{ D.C., 230-460 v. A.C., 3 ph., 230-400 v. }	74,900	28,517	<p>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.</p> <p>In addition to the above, the Melbourne City Council has Tariffs different from Standard for commercial and industrial lighting, radiators, and power and heating.</p>	
Box Hill, and City of Nunawading	Box Hill City Council ..	A.C., 3 ph., 230-400 v.	27,186	7,806		
Brunswick ..	Brunswick City Council ..	A.C., 3 ph., 230-400 v.	54,500	14,870		
Coburg ..	Coburg City Council ..	A.C., 3 ph., 230-400 v.	48,873	12,387		
Footscray and part of Braybrook Shire	Footscray City Council ..	A.C., 3 ph., 230-400 v.	65,200	14,550		
Heidelberg (excl. Greensborough)	Heidelberg City Council ..	A.C., 3 ph., 230-400 v.	31,500	8,067		
Northcote ..	Northcote City Council ..	A.C., 3 ph., 230-400 v.	43,000	11,890		
Port Melbourne	Port Melbourne City Council ..	A.C., 3 ph., 230-400 v.	12,828	3,599		
Preston ..	Preston City Council ..	A.C., 3 ph., 230-400 v.	38,990	10,576		
Williamstown ..	Williamstown City Council ..	A.C., 3 ph., 230-400 v.	26,441	7,056		
			423,418	119,318		
<b>COUNTRY.</b>						
					Lighting.	Power.
Apollo Bay ..	H. A. Block ..	D.C., 230 v. ..	600	173	1s. 3d. to 1s. ..	6d. to 2½d.
Ararat ..	Ararat Town Council ..	A.C., 3 ph., 230-400 v.	5,000	1,287	9d. to 1'25d. ..	3½d. to 1½d.
Beaufort ..	Ripon Shire Council ..	A.C., 3 ph., 230-400 v.	1,500	297	8d. ..	4d.
†Beechworth ..	Beechworth Shire Council ..	A.C., 3 ph., 230-400 v.	2,600	493	1s. ..	6½d.
Berriwillock ..	Wycheproof Shire Council ..	A.C., 3 ph., 230-400 v.	..	(Incl. in Wycheproof)	11d. to 9d. ..	5d. to 3½d.
Beulah ..	Karkaroc Shire Council ..	D.C., 230-460 v. ..	450	133	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. ..	550	191	1s. 3d. to 9d. ..	6d. to 4d.
Broadford ..	Broadford Shire Council ..	D.C., 230 v. ..	1,150	249	9d. ..	6d.
Cardross ..	Mildura City Council ..	A.C., 3 ph., 230-400 v.	..	(Incl. in Mildura)	7d. to 5½d. ..	Dom. 2d. to 1½d. Ind. 4½d. to 1d.
Casterton ..	Casterton E.S. Co. Pty. Ltd. ..	D.C., 230 v. ..	1,800	432	9d. to 7d. ..	4d. to 1'1d.
Charlton ..	Charlton E.L. and P. Co. Ltd. ..	D.C., 230 v. ..	1,284	368	1s. to 7d. ..	5d. to 3d.
Cohuna ..	Gunbower Co-op. Butter Factory and Trading Co. Ltd. ..	A.C., 3 ph., 230-400 v.	1,080	288	1s. to 9d. ..	6d. to 2d.
†Coleraine ..	Hamilton E.S. Co. Ltd. ..	A.C., 3 ph., 230-400 v.	900	218	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.	550	184	1s. 3d. ..	6d. to 3d.
Culgoa ..	Wycheproof Shire Council ..	A.C., 3 ph., 230-400 v.	..	(Incl. in Wycheproof)	11d. to 9d. ..	5d. to 3½d.
Dimboola ..	Dimboola Shire Council ..	D.C., 230-460 v. ..	1,690	483	1s. to 8d. ..	6d. to 3d.
Donald ..	Donald Shire Council ..	D.C., 230 v. ..	1,400	402	1s. and 10d. ..	6d. to 1½d.
*Doncaster and Templestowe	Doncaster Shire Council ..	A.C., 1 ph., 200-400 v.	2,879	712	7d. ..	4d. to 0'9d.
Dumosa ..	Wycheproof Shire Council ..	A.C., 3 ph., 230-400 v.	..	(Incl. in Wycheproof)	11d. to 9d. ..	5d. to 3½d.
Edenhope ..	Edenhope E.S. Co. Pty. Ltd. ..	D.C., 230 v. ..	500	77	1s. 3d. ..	9d.
Elmore ..	Elmore E.L. and P. Co. Ltd. ..	D.C., 230 v. ..	700	192	1s. 2d. ..	9d. to 7d.
Goroke ..	Goroke Butter and Freezing Co. ..	D.C., 230 v. ..	250	73	1s. 4d. to 9d. ..	6d. to 3d.
Gunbower ..	Gunbower Co-op. Butter Factory and Trading Co. Ltd. ..	D.C., 230 v. ..	200	43	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	1,534	6d. to 4d. ..	4d. to 2d.
Heathcote ..	McIvor Shire Council ..	D.C., 230-460 v. ..	1,150	249	1s. 4d. ..	8d. to 6d.
Heywood ..	S. F. Block ..	A.C., 3 ph., 230-400 v.	1,000	162	1s. 3d. to 1s. ..	6d. to 3d.
Hopetoun ..	Karkaroc Shire Council ..	D.C., 230 v. ..	720	188	10d. and 9d. ..	4d.
Horsham ..	Horsham Town Council ..	{ D.C., 230-460 v. A.C., 3 ph., 230-400 v. }	6,000	1,593	9d. ..	4d. to 2½d.
Inglewood ..	Inglewood Borough Council ..	D.C., 230 v. ..	1,100	237	1s. and 9d. ..	6d. to 2d.
Irymple ..	Mildura City Council ..	A.C., 3 ph., 230-400 v.	..	(Incl. in Mildura)	7d. to 5½d. ..	Dom. 2d. to 1½d. Ind. 4½d. to 1d.
Jeparit ..	S. F. Block (trading as "Jeparit Electric Light and Power Station"). ..	D.C., 230 v. ..	850	214	1s. ..	6d.
Kaniva ..	Kaniva Shire Council ..	A.C., 3 ph., 230-400 v.	1,700	204	1s. ..	6d. and 5d.
Kerang ..	Kerang Shire Council ..	A.C., 3 ph., 230-400 v.	3,000	720	7d. to 4d. ..	4d. to 1½d.
Kilmore ..	Kilmore Shire Council ..	D.C., 230 v. ..	1,000	226	10d. to 6d. ..	4d. to 2d.
Koondrook ..	Kerang Shire Council ..	A.C., 3 ph., 230-400 v.	700	113	1s. 3d. ..	9d. to 3½d.
Korong Vale ..	Korong Shire Council ..	A.C., 3 ph., 230-400 v.	..	(See Wedderburn)	1s. 1d. ..	5½d. to 3d.
Mananatang ..	J. Andrews ..	D.C., 230 v. ..	320	66	1s. 4d. ..	6d. to 1d.
Merbein ..	Mildura City Council ..	A.C., 3 ph., 230-400 v.	..	(Incl. in Mildura)	7d. to 5½d. ..	Dom. 2d. to 1½d. Ind. 4½d. to 1d.

## ELECTRICITY SUPPLY UNDERTAKINGS (MUNICIPAL AND PRIVATE)—continued.

Municipality or Centre.	Supply Authority.	System of Supply.	Popu- lation.	Number of Consumers.	Tariffs.	
					Lighting.	Power.
<b>COUNTRY—con- tinued.</b>						
Mildura ..	Mildura City Council ..	A.C., 3 ph., 230-400 v.	16,000	4,195	City, 7d. to 5½d.; District, 7d. to 5½d.	City — Dom 2d. to 1½.; Ind. 4½d. to 0·9d. Dist. —Dom.; 2d. to 1½d. Ind. 4½d. to 1d.
Minyip ..	Dunmunkle Shire Council ..	D.C., 230 v.	700	178	1s. .. ..	8d. to 2d.
Mitiamo ..	C. W. Sims Jnr. ..	D.C., 230 v.	150	30	1s. 6d. to 6d. ..	1s. to 3d.
					Optional Tariff—4s. per month, plus 1s. per unit for first 12 units and 6d. per unit for all over.	
Murrayville ..	Walpeup Shire Council ..	A.C., 3 ph., 230-400 v.	370	79	1s. 3d. ..	5d. to 2d.
Murtoa ..	Dunmunkle Shire Council ..	D.C., 230 v.	1,200	221	9d. .. ..	4d. to 2d.
Nagambie ..	Goulburn Shire Council ..	D.C., 230-460 v.	800	198	10d. .. ..	6d.
Natimuk ..	H. C. Woolmer ..	A.C., 230-400 v.	557	100	1s. 3d. to 1s.	6d. to 4d.
Nhill ..	Lowan Shire Council ..	D.C., 230-460 v.	1990	513	8d. .. ..	5d. to 2d.
Nullawil ..	Wycheproof Shire Council ..	A.C., 3 ph., 230-400 v.	..	(Incl. in Wycheproof)	11d. to 9d. ..	5d. to 3½d.
Omeo ..	Omeo E.S. and Motor Co. Pty. Ltd.	A.C., 3 ph., 230-400 v.	500	99	1s. 6d. ..	6d.
Orbost ..	Orbost Butter and Produce Co. Ltd.	D.C., 230 v.	2,000	426	10d. to 8d. ..	5d. to 2d.
Ouyen ..	Walpeup Shire Council ..	D.C., 230-460 v.	1,050	284	11d. .. ..	3d. to 2d.
Phillip Island ..	Phillip Island Shire Council ..	A.C., 3 ph., 230-400 v.	350	140	† 1s. 1d. and 1s.	7d. to 4d.
Portland ..	Portland Borough Council ..	A.C., 3 ph., 230-400 v.	3,200	818	10d. to 6d. ..	5d. to 2d.
Pyramid ..	Gordon Shire Council ..	A.C., 3 ph., 230-400 v.	450	111	1s. 3d. to 6d.	6d. to 3d.
Quambatook ..	Kerang Shire Council ..	D.C., 230 v.	500	103	1s. 1d. to 1s.	6d. to 4d.
Rainbow ..	Frank Dawson Pty. Ltd.	D.C., 230 v.	1,007	206	1s. to 8d. ..	6d.
Red Cliffs ..	Mildura City Council ..	A.C., 3 ph., 230-400 v.	..	(Incl. in Mildura)	7d. to 5½d. ..	Dom. 2d. to 1½d. Ind. 4½d. to 1d.
Rupanyup ..	Dunmunkle Shire Council ..	D.C., 230 v.	700	154	1s. 1d. ..	8d. to 2d.
Rushworth ..	Waranga Shire Council ..	D.C., 230 v.	1,200	315	8d. .. ..	3½d. to 2d.
Sea Lake ..	Wycheproof Shire Council ..	A.C., 3 ph., 230-400 v.	..	(Incl. in Wycheproof)	11d. to 9d. ..	5d. to 3½d.
Serviceton ..	C. C. Wallis ..	D.C., 230 v.	150	33	1s. .. ..	6d.
Stawell ..	Stawell Borough Council ..	A.C., 3 ph., 230-400 v.	4,500	1,223	9d. .. ..	4d. to 2d.
St. Arnaud ..	St. Arnaud Borough Council ..	A.C., 3 ph., 230-400 v.	2,650	723	11d. to 6d. ..	5d. to 2½d.
Swan Hill ..	Swan Hill Borough Council ..	A.C., 3 ph., 230-400 v.	5,000	1,087	8d. to 3d. ..	5d. to 1½d. less 45%
(Borough)						
Swan Hill (Rural Supply)	Swan Hill Shire Council ..	A.C., 3 ph., 230-400 v.	1,180	631	1s. 1d. to 6d. ..	5d. to 3d.
Underbool ..	A. J. Gloster ..	D.C., 230 v.	200	40	1s. 6d. ..	8d. to 6d.
Warracknabeal ..	Warracknabeal E.L. Co. Ltd. ..	A.C., 3 ph., 230-400 v.	2,925	719	10d. and 9d. ..	6d. to 3d.
Wedderburn ..	Korong Shire Council ..	A.C., 3 ph., 230-400 v.	1,510	Wedderburn, 183 Korong Vale, 93	1s. 1d. ..	5½d. to 3d.
(Incl. Korong Vale)						
Wonthaggi ..	State Coal Mine ..	A.C., 3 ph., 240-415 v.	4,480	1,524	7d. .. ..	3d. to 1½d.
Woomelang ..	E. H. & L. J. Bailey ..	D.C., 230 v.	400	50	1s. 3d. ..	7d.
Wycheproof ..	Wycheproof Shire Council ..	A.C., 3 ph., 230-400 v.	2,200	559	11d. to 9d. ..	5d. to 3½d.
(Incl. Sea Lake and Inter- mediate Towns)						
‡ Yarram ..	Yarram H.E. Co. Ltd. ..	A.C., 3 ph., 230-400 v.	1,400	454	11d. and 10d.	4d. to 2d.

\* Supplied in bulk by State Electricity Commission.

† Special per capita tariff for Guest houses.

‡ Acquired by State Electricity Commission subsequent to 30th June, 1946.

## NEW SOUTH WALES UNDERTAKINGS (BULK SUPPLIES).

(Not included in Summary.)

Municipalities of Albury, Berrigan, Correen, Corowa, and Moama purchased from the State Electricity Commission of Victoria 16,240,716 kWh. during the year.



## STATE ELECTRICITY COMMISSION OF VICTORIA

## COUNTRY UNDERTAKINGS ACQUIRED (68)—INCREASED DEVELOPMENT SINCE ACQUISITION.

Location.	Acquisition Date.	After Acquisition, Year 1945-46.		Prior to Acquisition.			Average Revenue per kWh. Sold.	
		kWh. Sold.	Revenue.	kWh. Sold.	Revenue.	For Year Ended.	1945-46.	Prior to Acquisition.
Metropolitan Branch.			£		£		d.	d.
Werribee .. .. .	10.4.24	3,011,844	19,535	61,190	2,575	30.9.23	1.56	10.10
Ballarat Branch.								
Ballan .. .. .	1.3.40	86,651	1,228	13,261	964	30.6.39	3.40	17.45
Daylesford .. .. .	31.10.40	990,056	7,814	184,853	5,091	30.10.40	1.89	6.61
Hepburn Springs .. .. .	1.10.40	163,122	2,203	46,002	1,701	30.6.40	3.24	8.87
Wallace .. .. .	17.5.40	92,554	559	1,320	90	30.6.39	1.45	16.36
Bendigo Branch.								
Eaglehawk .. .. .	1.2.36	500,840	6,723	198,580	4,472	30.9.35	3.22	5.40
Eastern Metropolitan Branch.								
Dandenong .. .. .	1.10.23	3,223,498	23,203	77,300	4,006	30.9.23	1.73	12.44
Frankston .. .. .	21.2.28	4,132,190	30,486	293,000	8,859	30.9.27	1.77	7.25
Healesville .. .. .	1.4.33	1,091,390	10,241	108,910	4,196	30.9.31	2.25	9.24
Lilydale .. .. .	1.4.25	1,585,130	8,403	39,950	1,816	30.9.24	1.27	10.91
Mornington .. .. .	1.8.30	1,829,344	14,503	120,000	4,634	30.9.28	1.90	9.26
Ringwood and Croydon .. .. .	1.4.25	3,243,175	23,646	181,600	4,393	30.9.24	1.75	5.81
Sorrento and Portsea .. .. .	1.10.27	1,017,323	8,581	47,500*	2,440	30.9.27	2.02	12.33*
Warburton .. .. .	1.7.44	299,425	3,691	112,555	3,485	30.6.44	2.96	7.43
Gippsland Branch.								
Bairnsdale .. .. .	1.4.27	2,531,277	17,972	100,272	2,948	30.6.23	1.70	7.06
Drouin .. .. .	3.10.24	886,313	5,646	19,500	743	30.9.21	1.53	9.15
Garfield .. .. .	1.8.29	111,106	1,021	8,864	465	30.12.27	2.21	12.59
Inverloch .. .. .	1.10.34	112,101	1,192	4,000*	200	30.6.34	2.55	12.00*
Koo-wee-rup .. .. .	1.8.35	404,929	2,748	17,481	686	9.8.33	1.63	9.42
Korumburra .. .. .	1.12.24	1,542,875	9,513	85,000	3,427	30.9.23	1.48	9.68
Leongatha .. .. .	15.2.24	1,209,956	8,113	50,640	2,012	30.6.23	1.61	9.53
Maffra .. .. .	1.9.24	2,909,879	14,510	62,000	2,651	30.9.22	1.20	10.26
Morwell .. .. .	1.4.26	14,003,314	40,516	52,062	1,772	30.9.25	0.69	8.17
Neerim South-Noojee .. .. .	15.1.35	772,067	4,612	59,550	1,193	30.6.33	1.43	4.81
Sale .. .. .	1.7.24	4,091,427	27,363	114,155	3,687	30.6.24	1.61	7.75
Toora-Foster .. .. .	1.5.38	713,480	5,203	116,330	2,348	30.6.36	1.75	4.84
Thorpdale .. .. .	23.12.37	59,641	580	5,000*	312*	23.12.37	2.33	14.98*
Warragul .. .. .	1.12.30	1,833,798	14,004	150,000*	4,830	30.11.30	1.83	7.73*
Welshpool .. .. .	13.8.38	70,331	746	5,280	172*	13.8.38	2.55	7.82*
Midland Branch.								
Avoca .. .. .	1.8.40	147,240	1,746	46,410	1,922	30.6.40	2.85	9.94
Bacchus Marsh .. .. .	2.6.41	1,106,928	8,460	253,913	4,225	30.9.40	1.83	3.99
Castlemaine .. .. .	31.12.29	3,005,164	17,932	175,904	7,130	31.12.28	1.43	9.73
Dunolly .. .. .	1.4.38	98,949	1,350	32,667	1,188	30.9.37	3.27	8.73
Gisborne .. .. .	1.10.28	207,475	1,905	17,000	1,074	30.9.27	2.20	15.16
Kyneton .. .. .	1.10.29	756,631	7,421	143,340	5,433	30.9.27	2.35	9.09
Maryborough .. .. .	1.10.37	2,278,211	15,869	421,013	10,215	30.9.37	1.67	5.82
Sunbury .. .. .	1.5.26	398,768	4,417	58,501	2,490	30.9.24	2.66	10.21
Trentham .. .. .	8.5.39	95,418	1,289	21,000*	989	30.9.38	3.24	11.30*
Woodend .. .. .	1.8.29	374,570	3,604	51,000	2,555	30.9.27	2.31	12.02
North-Eastern Branch.								
Alexandra .. .. .	11.4.27	490,821	4,068	64,000*	1,875	30.9.26	1.99	7.00*
Benalla .. .. .	1.5.26	1,519,998	13,787	70,800	3,373	30.9.24	2.18	11.43
Bright .. .. .	1.12.41	278,398	2,323	49,200	1,801	31.10.41	2.00	8.79
Cobram .. .. .	1.10.28	373,674	3,376	19,500	1,416	30.9.27	2.17	17.43
Euroa .. .. .	20.3.28	466,216	5,066	46,618	1,782	30.9.25	2.61	9.17
Kyabram .. .. .	1.12.26	1,295,876	8,649	92,312	3,462	4.7.25	1.60	9.00
Mansfield .. .. .	1.6.28	350,116	3,322	25,000	1,341	30.9.27	2.28	12.88
Mooroopna .. .. .	1.10.26	1,398,515	6,830	40,000	1,457	30.9.25	1.17	8.74
Myrtleford .. .. .	1.12.40	443,581	3,746	59,260	2,089	30.6.40	2.03	8.46
Nathalia and Numurkah .. .. .	1.10.31	715,064	6,850	96,763	3,619	30.9.31	2.30	8.97
Rochester .. .. .	1.8.35	655,861	5,211	191,310	4,223	31.7.35	1.91	5.30
Rutherglen .. .. .	15.10.26	422,842	3,818	28,392	1,377	30.9.24	2.17	11.64
Seymour .. .. .	2.10.44	1,182,676	11,673	1,004,623	14,019	30.9.44	2.37	3.35
Shepparton .. .. .	1.1.25	3,714,051	27,508	163,400	4,625	30.6.24	1.78	6.79
Stanhope .. .. .	14.6.38	529,772	3,381	5,150*	341	14.6.38	1.53	15.89*
Tallangatta .. .. .	1.11.40	254,309	2,526	118,033	3,119	30.9.40	2.38	6.34
Tatura .. .. .	1.11.26	860,705	6,592	40,000	1,710	30.6.25	1.84	10.26
Violet Town .. .. .	1.3.36	78,348	1,088	14,650*	1,160	30.9.35	3.33	19.00*
Wahgunyah .. .. .	1.2.26	73,077	791	7,233	263	30.9.22	2.60	8.73
Wangaratta .. .. .	12.3.27	3,077,353	22,237	151,600	4,788	30.9.25	1.73	7.58
Wodonga .. .. .	1.11.33	705,094	6,867	64,500*	3,000*	30.6.33	2.34	11.16*
Yarrawonga .. .. .	1.8.25	907,368	7,731	47,000	2,149	30.9.24	2.04	10.97
Yea .. .. .	1.5.45	187,221	2,275	163,550	3,134	30.9.44	2.92	4.60
South-Western Branch.								
Camperdown .. .. .	1.1.24	1,022,738	8,647	97,664	4,122	30.9.23	2.03	10.13
Colac .. .. .	1.9.23	2,218,414	19,817	99,000	2,673	30.9.22	2.14	6.48
Koroit .. .. .	1.12.28	280,150	2,676	50,000	2,319	30.9.28	2.29	11.13
Lorne .. .. .	15.12.36	592,604	5,218	24,000	1,658	30.9.36	2.11	16.58
Mortlake .. .. .	16.5.24	283,407	2,759	35,306	1,626	30.9.22	2.34	11.05
Terang .. .. .	4.3.24	635,243	6,032	78,839	3,439	30.9.23	2.28	10.47
Total .. .. .	..	86,001,682	583,412	6,504,606	195,349	..	1.63	7.21

\* Approximate only.

## COMPARISON OF TOTAL FIGURES.

	kWh. Sold.	Revenue.	Average Revenue per kWh.
After acquisition .. .. .	86,001,682	583,412	1.63
Prior to acquisition .. .. .	6,504,606	195,349	7.21
Increase in sales and revenue .. .. .	1,222.2%	198.7%	Decrease 5.58 = 77.4%

## STATE ELECTRICITY COMMISSION OF VICTORIA.

## TRANSMISSION AND DISTRIBUTION SYSTEMS.

Description.	Increase during Year ended 30th June, 1946.		Total at 30th June, 1946.	
	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	135·9
Sugarloaf to Thomastown .. .. 66 kV. .. ..	..	..	62·0	345·0
Thomastown to Bendigo .. .. 66 kV. .. ..	..	..	93·4	557·7
Newport to Ballarat .. .. 66 kV. .. ..	..	..	54·8	163·5
Kiewa No. 3 to Sugarloaf .. .. 66 kV. .. ..	..	..	123·3	369·9
Main Metropolitan Transmission Lines .. .. 66 kV. .. ..	..	..	16·0	96·0
Branches—	6·0	18·0	178·6	595·7
Metropolitan .. .. 22 kV. .. ..	12·4	38·3	89·8	267·3
7·2, 6·6, 4·16 kV. .. ..	3·4	11·0	322·6	943·0
Low tension .. ..	36·4	128·1	1,773·0	6,684·6
Ballarat .. .. 22 kV. .. ..	7·7	19·4	158·6	454·5
6·6 kV. .. ..	1·1	2·0	40·4	113·2
Low tension .. ..	8·7	30·3	195·3	700·9
Bendigo .. .. 22 kV. .. ..	11·7	25·5	110·1	287·9
Low tension .. ..	8·7	19·2	155·3	594·7
Eastern Metropolitan .. .. 22 kV. .. ..	64·5	155·6	476·4	1,214·9
6·6 kV. .. ..	— 29·8	— 60·0	73·7	179·8
Low tension .. ..	50·0	164·2	673·4	2,194·8
Geelong .. .. 22 kV. .. ..	21·5	43·9	123·9	310·2
6·6 kV. .. ..	— 0·3	— 2·5	61·0	219·2
Low tension .. ..	17·5	56·0	195·8	701·4
Gippsland .. .. 22 kV. .. ..	12·8	28·6	1,027·0	2,558·4
6·6 kV. .. ..	— 0·4	— 0·7	0·8	1·6
Low tension .. ..	36·8	115·1	712·5	2,327·6
Midland .. .. 22 kV. .. ..	40·0	112·8	369·4	1,019·2
6·6 kV. .. ..	..	..	1·6	4·7
Low tension .. ..	17·5	55·9	223·0	750·9
North-Eastern .. .. 66 kV. .. ..	..	..	167·3	501·8
22 kV. .. ..	104·6	259·5	928·3	2,504·3
6·6 kV. .. ..	— 3·5	— 8·8	27·2	83·4
Low tension .. ..	63·3	217·7	477·8	1,668·7
South-Western .. .. 66 kV. .. ..	..	..	76·7	369·5
44 kV. .. ..	..	..	44·6	133·9
22 kV. .. ..	53·6	108·2	942·3	2,026·6
6·6 kV. .. ..	..	..	63·6	176·5
Low tension .. ..	30·5	51·6	353·5	914·6
Yallourn .. .. 6·6 kV. .. ..	3·5	10·5	9·1	27·2
Low tension .. ..	1·0	5·0	13·6	44·1
Summary—	..	..	190·0	1,140·0
132 kV. .. ..	..	..	638·8	2,539·3
66 kV. .. ..	..	..	44·6	133·9
22 kV. .. ..	334·8	809·8	4,404·4	11,239·0
7·2, 6·6, 4·16 kV. .. ..	— 26·0	— 48·5	600·0	1,748·6
Low tension .. ..	270·4	843·1	4,773·2	16,582·3
	579·2	1,604·4	10,651·0	33,383·1
UNDERGROUND CABLES.				
22 kV. .. ..	Cable Miles.		Cable Miles.	
11, 7·2, 6·6, 4·16 and 3·3 kV. .. ..	7·44		144·98	
Pilot, telephone, and supervisory .. ..	5·73		329·57	
Low tension .. ..	7·59		125·47	
	0·04		53·63	
	20·80		653·65	
SUB-STATIONS.				
Terminal Stations .. ..	Number.	Capacity kVA.	Number.	Capacity kVA.
Main Metropolitan Transmission Sub-stations .. ..	1	..	9	418,200
Distribution Sub-stations at Line Voltage .. ..	3	67,750	34	480,750
	— 6	— 11,200	4	16,500
Branches—	46	13,815	844	225,900
Metropolitan .. ..	13	1,735	127	8,990
Ballarat .. ..	22	1,030	95	22,255
Bendigo .. ..	61	3,213	599	20,910
Eastern Metropolitan .. ..	28	2,135	186	25,240
Geelong .. ..	24	1,660	817	23,030
Gippsland .. ..	22	925	243	17,810
Midland .. ..	125	7,650	707	65,025
North-Eastern .. ..	165	1,891	953	33,198
South-Western .. ..	1	100	13	1,675
Yallourn .. ..	505	90,704	4,631	1,359,483

## GENERATION OF ELECTRICITY.

## STATE OF VICTORIA.

## (a) ALL SUPPLY AUTHORITIES.

Authority.	State Electricity Commission	Melbourne City Council.	Victorian State Railways.			Melbourne Electric Supply Co. Ltd.		Electric Supply Co. of Victoria Ltd.		Local Authorities.	Total kWh. Generated State of Victoria. (millions).
Stations.	See below.	Spencer-street, Melbourne.	Newport "A."			Richmond.	Geelong.	Ballarat.	Bendigo.	Country Centres not Served by State Generating System. kWh. (millions).	
Year.	kWh. (millions).	kWh. (millions).	kWh. (millions).			kWh. (millions).	kWh. (millions).	kWh. (millions).	kWh. (millions).		
			(1).	(2).	Total.						
1924-25	101·8	20·0	108·0	152·7	260·7	25·3	18·0	4·0	3·5	14·0	447·3
1925-26	188·7	17·7	74·8	163·7	238·5	34·9	21·1	4·1	3·5	14·0	522·5
1926-27	284·2	14·6	27·0	169·1	196·1	38·1	30·3	4·4	3·6	15·0	586·3
1927-28	378·8	13·5	12·9	166·2	179·1	4·2	30·3	5·0	4·2	16·0	631·1
1928-29	422·3	16·0	12·0	162·5	174·5	..	32·2	5·3	4·5	16·0	670·8
1929-30	461·2	17·1	11·3	164·7	176·0	..	27·3	5·1	4·5	15·0	706·2
1930-31	458·3	12·1	15·5	154·1	169·6	..	4·7	4·9	4·8	15·0	669·4
1931-32	504·9	12·3	9·7	146·8	156·5	..	..	4·9	5·0	16·0	699·6
1932-33	549·7	10·0	10·4	150·2	160·6	..	..	5·2	5·1	17·0	747·6
1933-34	590·0	14·7	10·5	151·9	162·4	..	..	5·8	5·3	18·0	796·2
1934-35	620·1	23·9	35·2	156·2	191·4	Stations acquired by State Electricity Commission.				20·0	855·4
1935-36	716·1	35·6	12·2	159·1	171·3	..	..	..	..	22·0	945·0
1936-37	769·7	33·9	14·1	162·9	177·0	..	..	..	..	23·0	1,003·6
1937-38	836·1	34·7	14·5	165·2	179·7	..	..	..	..	26·0	1,076·5
1938-39	897·8	29·5	13·8	168·9	182·7	..	..	..	..	28·0	1,138·0
1939-40	1,024·2	33·3	14·5	153·7	168·2	..	..	..	..	26·0	1,251·7
1940-41	1,155·1	16·9	17·2	167·4	184·6	..	..	..	..	21·0	1,377·6
1941-42	1,330·5	Station now operated as part of State system.	17·9	163·4	181·3	..	..	..	..	21·0	1,532·8
1942-43	1,455·4		14·6	151·5	166·1	..	..	..	..	22·0	1,643·5
1943-44	1,475·6		15·2	153·8	169·0	..	..	..	..	24·0	1,668·6
1944-45	1,502·3		14·7	168·7	183·4	..	..	..	..	24·0	1,709·7
1945-46	1,594·6	..	13·0	162·8	175·8	..	..	..	..	27·0	1,797·4

(1) 25 cycle supplied to other authorities.

(2) 25 cycle Railway purposes.

# GENERATION OF ELECTRICITY. STATE OF VICTORIA.

## (b) STATE ELECTRICITY COMMISSION OF VICTORIA.

Station.  Year.	Yallourn.*		Newport.		Richmond.		Geelong.		Ballarat and Bendigo.		Spencer-street.		Sugarloaf-Rubicon.		Kiewa.		All Stations.	
	kWh. (millions).	M.D. kW.	kWh. (millions).	M.D. kW.	kWh. (millions).	M.D. kW.	kWh. (millions).	M.D. kW.	kWh. (millions).	M.D. kW.	kWh. (millions).	M.D. kW.	kWh. (millions).	M.D. kW.	kWh. (millions).	M.D. kW.	kWh. (millions).	M.D. kW. Coincident.
1924-25	..	Operation commenced 15.6.24. 48.4	Operation commenced 12.10.23. 53.4	15,800	..	..	..	..	..	..	..	..	..	..	..	..	101.8	40,500
1925-26	..	142.7	46.0	16,800	..	..	..	..	..	..	..	..	..	..	..	..	188.7	50,000
1926-27	..	238.8	45.4	19,800	..	..	..	..	..	..	..	..	..	..	..	..	284.2	76,000
1927-28	..	319.7	54.3	20,800	..	..	..	..	..	..	..	..	4.8	11,500	..	..	378.8	87,500
1928-29	..	304.5	49.0	20,000	3.5	15,000	..	..	..	..	..	..	65.3	16,310	..	..	422.3	95,500
1929-30	..	310.6	50.8	21,000	21.9	16,200	..	..	..	..	..	..	77.9	19,300	..	..	461.2	103,160
1930-31	..	251.9	38.4	19,800	26.6	15,520	20.5	5,570	..	..	..	..	120.9	23,100	..	..	458.3	109,013
1931-32	..	320.1	9.8	18,800	25.7	15,000	26.9	6,510	..	..	..	..	122.4	23,400	..	..	504.9	116,959
1932-33	..	386.2	2.8	14,400	22.5	15,360	27.1	6,560	..	..	..	..	111.1	23,400	..	..	549.7	123,404
1933-34	..	429.3	7.6	18,500	22.6	15,120	29.5	6,690	..	..	..	..	101.0	22,800	..	..	590.0	127,621
1934-35	..	310.8	54.0	18,200	56.5	15,500	30.8	6,980	12.7	3,711	..	..	155.3	25,300	..	..	620.1	141,993
1935-36	..	487.6	16.7	19,300	29.8	15,100	34.1	7,930	13.2	3,825	..	..	134.7	25,400	..	..	716.1	158,862
1936-37	..	531.2	27.2	19,000	25.3	15,400	32.1	7,930	12.5	3,750	..	..	141.4	25,490	..	..	769.7	173,300
1937-38	..	654.8	27.1	18,600	24.2	15,300	34.4	8,620	10.0	3,797	..	..	85.6	25,090	..	..	836.1	181,847
1938-39	..	696.6	23.9	19,600	26.7	15,200	38.0	9,230	9.4	2,716	..	..	103.2	24,300	..	..	897.8	198,000
1939-40	..	776.1	39.3	35,000	16.2	15,400	31.5	7,710	11.6	2,988	..	..	149.5	25,400	..	..	1,024.2	218,600
1940-41	..	939.5	44.6	45,300	21.2	15,360	21.7	10,050	14.3	3,820	..	..	97.8	20,800	..	..	1,155.1	261,820
1941-42	..	1,027.3	45.2	54,800	35.2	15,540	30.7	10,600	14.6	4,140	..	..	133.4	25,600	..	..	1,330.5	297,696
1942-43	..	1,110.1	45.8	63,000	38.6	15,600	34.3	11,800	15.0	5,960	..	..	156.2	26,100	..	..	1,455.4	319,300
1943-44	..	1,088.0	83.3	71,600	44.5	15,600	44.8	12,200	20.8	5,400	..	..	130.4	25,700	..	..	1,475.6	328,000
1944-45	..	1,133.2	92.1	89,500	40.2	15,530	38.8	11,200	18.9	5,000	..	..	101.1	25,500	..	..	1,502.3	351,600
1945-46	..	1,136.7	136.9	93,500	33.1	15,600	31.2	11,900	16.0	5,350	..	..	134.3	25,650	..	..	1,594.6	377,100

\* Including electricity transferred from Briquette Factory.



### GENERATION TRANSMISSION AND DISTRIBUTION

