1922.

VICTORIA.

# STATE ELECTRICITY COMMISSION OF VICTORIA.

# THIRD ANNUAL REPORT

FOR THE

## FINANCIAL YEAR ENDED 30TH JUNE, 1922;

TOGETHER WITH

# APPENDICES.

PRESENTED TO PARLIAMENT PURSUANT TO SECTION 26 (*b*) OF ACT No. 2990.

[*Approximate Cost of Report* - Preparation, not given. Printing (300 copies), £58.

By Authority
ALBERT J. MULLETT, GOVERNMENT PRINTER, MELBOURNE.
No. 33.—[1s. 3d.]—16776.

# REPORT.

27th November, 1922.

*The Hon. Arthur Robinson, M.L.C.,*
*Attorney-General,*
*Melbourne.*

SIR,

In accordance with the provisions of section 25 (*b*) of the *State Electricity Commission Act* 1918, No. 2996, we beg to submit our report for the financial year ended 30th June, 1922, together with statement of accounts for that period.

## ADMINISTRATION.

### 1. ELECTRIC SUPPLY TO RURAL DISTRICTS.

(*a*) *South-Western District Scheme.*—In December last the Commission submitted a report to the Government dealing with the question of the supply of electric energy to the South-Western District of the State.

It was recommended that a high-tension transmission line from Geelong to Warrnambool be erected, so that the demand for electric power which exists throughout the Western District could be met by supplying in bulk to the various undertakers, these undertakers controlling the low-tension distribution. This line would operate at 44,000 volts.

The scheme provides for the Commission purchasing energy from the Geelong Power Station of the Melbourne Electric Supply Company until such time as Morwell energy is available from the Yarraville Terminal Station. When supply is available from the latter source the final stage of the scheme will be put in hand, viz., the erection of a transmission line from Yarraville to Geelong.

Governmental approval having been given to the Commission's proposals, the work was immediately put in hand, and the progress made is referred to in this report under the heading "Electric Supply Branch."

(*b*) *Control of Branch H.T. Lines.*—The South-Western District Scheme, being the first large transmission scheme undertaken by the Commission for supply to country districts, the question of control of the branch high-tension lines was raised owing to the scheme providing for extensions to smaller country centres on either side of the main line.

The construction and maintenance of these branch lines are, from an operating point of view, almost as important as the erection and maintenance of the main line on which they depend for supply. After very careful consideration of the whole question, the Commission has decided that, with a view to enabling these branch lines to be operated and maintained at a maximum of efficiency, it would itself finance, erect, operate, and maintain all branch high-tension lines (*i.e.*, lines operating at over 500 volts) associated with State electric supply schemes.

Whilst this decision at first met with the dissent of several of the municipalities who would take supply from the particular scheme, opposition to the policy was withdrawn when the Commission explained the benefits which are derivable from this arrangement both from the financial and electrical efficiency view-point.

(*c*) *Other Transmission Lines Scheme authorized.*—During the period authority had been obtained by the Commission for the erection, in addition to the South-Western District Scheme, of some smaller, but nevertheless important, transmission schemes for supply to country centres. These schemes have been formulated and pressed to a conclusion in order to meet the urgent demands for electricity in the districts concerned; pending a supply being available from the Commission's own main generating station, temporary arrangements have had to be entered into for the supply of electricity required. The transmission lines involved have, however, been designed so as to form part of the distribution network of the State scheme, and consequently so soon as energy is available from Morwell these lines will be switched over to that source. The schemes referred to are as under:—

1. *Township of Morwell.*—In this case supply is given from the temporary power plant at the Commission's Yallourn Works, and involves the erection of 5½ miles of high-tension transmission line.
2. *Supply to the Mornington Peninsula.*—This consists of a high-tension (22,000-volt) line to be run along the Mornington Peninsula to enable supply to be given to Frankston and Mornington. As this line was run from Mentone *viâ* Dandenong, supply to this latter town is also enabled to be given.

3. *Yarra Valley.*—The townships of Lilydale, Croydon, and Ringwood in the Yarra Valley are to be supplied by a high-tension line running from Mitcham to Lilydale.

In the two first cases the energy will be purchased by the Commission from the Melbourne Electric Supply Company in bulk, and, in the latter, from the Nunawading Shire Council until such time as Morwell energy is available.

(*d*) *General.*—Whilst discussing the question of electric supply to country centres, it is worthy of record that preliminary estimates have already been made of the possibilities of supply to rural districts by means of transmission from Morwell, and these indicate that a very large portion of the State is electrically within the economic range of the Morwell supply system.

Careful surveys have been undertaken and are in progress to ascertain the electrical requirements of districts within economic range of the State generating stations, and the result of these will be made known from time to time in connexion with recommendations for extension of the transmission schemes.

(*e*) *Charges for Electricity.*—The agitation from country districts throughout Victoria that there should be a "Flat Rate" charge for electricity all over the State was such that the Commission felt it incumbent to publish its views on such a proposal. Accordingly, in March last, a report was prepared setting out the impracticability of such a proposal. As stated in that report, the object desired—namely, the electrical development of the country districts of the State—can be attained in another manner and without infringing sound economic or financial principles, and it is understood that legislation to this end is being brought before Parliament by the Government during the present session of Parliament.

## 2. Electric Supply Position in Metropolis.

(*a*) *Contracts for Electric Supply made by the Railway Department.*—During the period supply was made available by the Commission to the Melbourne Electric Supply Company and the Melbourne City Council at their respective power stations, the energy being obtained from the Railway Department Power Station at Newport.

The contracts for these supplies were originally made by the Railways Commissioners under the powers conferred by the *Railways Act* 1918, No. 2942, afterwards transferred to this Commission by reason of the Government's decision that the Commission is the sole distribution authority for bulk supply from State schemes.

The making available of the surplus energy from the Newport "A" Station to these undertakers has been the means of relieving, to some extent, the existing acute position of electric supply in the metropolitan area, which will, it is anticipated, materially improve with the coming into operation of the Commission's Newport "B" Station in the middle of 1923.

Contracts with a number of industrial consumers in the Footscray area were also taken over by the Commission from the Railway Department in accordance with the transfer of powers above referred to.

The Commission has also arranged to make available energy in bulk to two industrial consumers situated in the area described in Act No. 2942 above referred to.

(*b*) *Acquisition of the North Melbourne Electric Tramways and Lighting Co.*—At the request of the City of Essendon, which municipality was included in the area of the above company, and, in fact, represented the greater part of its area, the Commission, with the approval of the Government and the concurrence of the Melbourne and Metropolitan Tramways Board, entered into negotiations with the company for the acquisition of its complete undertaking. The result of these negotiations was that, on the Commission's recommendation, the Government authorized the acquisition of the undertaking for the very reasonable figure of £115,560 for both the tramway and lighting sides of the enterprise. The tramways portion will be transferred to the control of the Melbourne and Metropolitan Tramways Board, which will reimburse the Government its share of the purchase moneys. Possession will be taken by the Melbourne and Metropolitan Tramways Board and the Commission on 1st August, 1922.

The terms of the Order under which the company was operating provided for the transfer of the whole of the assets in 1934 to the City of Melbourne and the City of Essendon. In view of this condition, the company adopted the policy in later years of keeping strictly within the limits of the legal requirements under the Order, and making little attempt to meet the electrical development within the area, which was increasing year by year.

The operation of this policy resulted in numerous complaints reaching the Commission of failure to obtain supply, and finally the Essendon Council approached the Commission with the pressing request that the undertaking be taken over by the Government so that the very necessary development works would be no longer retarded. It is the electrical development of this most important section of the metropolis that the Commission is called upon to undertake, and it is hoped that a vigorous policy of construction will do much to improve the existing position.

### 3. Establishment of a Township at Yallourn.

Following on the instructions contained in section 11 of *State Electricity Commission Act* 1920, No. 3104, a report was submitted to the Government containing general plans and describing a scheme for the erection and establishment by the Commission of a township for the housing of its employees at the Yallourn Works. The design of the township provides for an ultimate population of 3,000, and is capable of development in two stages. The scheme was adopted by the Government, and work has been commenced, following the authorization of the first section, which comprises 200 houses and associated buildings, sufficient for a population of 1,000. The estimated cost of this first section is £224,360. Progress made with the work is referred to under the heading of "Yallourn Township."

### 4. Industrial.

The total number of workmen employed on the various works of the Commission as at 30th June, 1922, were as under:

| | |
|---|---|
| Yallourn .. .. .. .. .. .. | 943 |
| Transmission Lines .. .. .. .. | 126 |
| Metropolitan Works .. .. .. .. | 295 |
| Total .. .. .. .. .. | 1,364 |

At the inception of the construction work of the Commission it was recognised that, in connexion with works of the magnitude proposed, employing a large number of men over a long period of time, it was essential to make proper provision for their accommodation and general welfare, subject to due regard being given at all times to the influence of such a policy on economy in construction.

In pursuance of this recognition of its responsibility to its employees the Commission has established at the Yallourn Works accommodation camps consisting of suitably-designed sleeping quarters and mess rooms, together with baths, showers, &c., and a complete modern system of sanitation. Two large camps of this nature have been brought into existence, the mess rooms, with full equipment, having been handed over under strict conditions to mess committees representative of the employees. These committees arrange and control all details, including finance, in connexion with the providing of meals, operating on the co-operative system throughout, supervision being exercised by the Commission only in the direction of insuring successful operation.

In addition, a recreation building has been provided, consisting of writing rooms, rooms for indoor games, &c., and a properly-equipped billiard room. This also is controlled by a representative committee of the men, and has been very successful in providing healthy occupation for the employees during "off-work" hours.

The results generally of this phase of the Commission's policy have been very satisfactory, not only from the employees' point of view, but also as reflected in the better quality of available labour offering. The labour turnover, while still unduly high, compares very favorably with that on large constructional works of a similar nature. As the operating stage is reached, necessitating the appointment of the more permanent type of employees, it is confidently anticipated that the labour turnover will be, to all intents and purposes, eliminated.

As part of the general policy under this heading there have also been established provision stores or canteens at each of the two main construction camps at Yallourn with the object of providing, at the cheapest possible rate, goods and materials required by the employees. The balance-sheet and profit and loss account of this venture, which appear in the financial statements accompanying this report, show clearly the free use that has been made of this facility and the complete business lines on which it has been run. Due to specially favorable conditions, expenses have been extremely small in proportion to the turnover, and consequently sums have become available out of profits which have been used in further extending the operations and consequent usefulness of the stores. Later, a similar store will be established in the permanent township, with, it is hoped, an equally successful outcome.

### 5. Stores and Transportation.

Reference was made in the Second Annual Report to the proposal to erect a central store at Footscray. This work has been completed and the necessary railway sidings constructed. The completion of the store makes possible the expeditious handling of plant and materials required for the various metropolitan works.

A construction depôt and store has also been established at Dandenong at premises purchased from the Co-operative Box Factory, and which are well suited to such a purpose. This store is intended to serve the needs of the construction camps engaged in the erection of the main transmission line from Yallourn.

Temporary stores were, of course, established at the Yallourn Works to enable the considerable quantities of plant and materials arriving to be dealt with methodically and expeditiously. Steps are now being taken to erect the permanent store at the power station area. This store will function for all the Commission's operations, and will supersede the temporary stores above referred to, the latter being erected solely to meet the needs of the construction period.

The transport of materials along the greater part of the length of the main transmission line and to various works being carried on throughout the metropolis and associated with the main scheme is being effectively dealt with by motor lorries.

## 6. "Electric Light and Power Act 1915," No. 2645.

It has again been found necessary in a number of cases to recommend that the Orders in Council of the smaller electric supply authorities be amended to permit of increased charges being made for the supply of electric energy.

As in the case of former increases granted, careful investigation of the working of the undertakings concerned has indicated that, generally, the enhanced cost of labour and materials had so affected the finances of the undertakings as to make it difficult for them to carry on without serious financial loss.

A list of these undertakings is given in Appendix No. 3.

Since the passing of the Electric Light and Power Act in 1896, 163 Orders in Council authorizing the supply of electricity have been granted. Of these, 94 were granted to municipal councils and 69 to private undertakers, &c. Twenty Orders in Council have been cancelled, and seven municipal councils have transferred their powers wholly or in part to private companies for periods up to 30 years.

The following Appendices to this report relate to the operations of those undertakings which are controlled by the provisions of the *Electric Light and Power Act* 1915 :—

Appendix No. 4.—Statement of the Orders issued during the period under review.

Appendix No. 5.—Statement of the Electric Supply Undertakings operating in Victoria as at 30th June, 1922.

Appendix No. 8.—Map showing the towns or areas for which Orders are held outside the metropolitan area, distinguishing those Orders held by municipalities from those held by companies.

Appendix No. 9.—Map of metropolitan area showing the districts for which Orders are in force.

## 7. Licensing of Wiremen.

The following statement sets out the number of licences issued to date and also the number of licences issued during the period :—

| Grade. | Number issued to 30th June, 1921. | Number issued from 1st July, 1921, to 30th June, 1922. | Total. |
|---|---|---|---|
| "A" .. .. .. .. | 1,017 | 75 | 1,092 |
| "B" .. .. .. .. | 319 | 68 | 387 |
| "C" .. .. .. .. | 329 | 112 | 441 |
| Special Licence .. .. .. | 1 | 13 | 14 |
| Permits .. .. .. .. | 580 | 390 | 970 |

The Board of Examiners has conducted four examinations for the year under review, and as the result 75 "A" Grade Licences and 45 "B" Grade Licences have been awarded.

The Examiners report that the last examination results showed considerable improvement in the general work of electric wiring, but there is room for improvement in that section of the examination intended to test the knowledge of candidates on electric motors. The work on this section has always been of a poor standard, but is as important from the licensing aspect as the work of electric wiring. The Examiners have consequently recommended that candidates be required to obtain minimum marks on essential questions. This recommendation the Commission adopted, and it will take effect in all future examinations under the rules.

In co-operation with the Inspectors of the Fire Underwriters' Association, the Commission's staff is supervising the work of electric wiremen. This supervision has meant the detection of many breaches of the rules, with the result that proceedings have had to be instituted in twelve cases, the fines ranging from 5s. to £5 with costs in each case.

Whilst it is regretted that resort has to be had to this means of enforcing the rules, it has been found that prosecution is, in the end, the best means of impressing on electric wiremen generally the object of the Licensing Rules, viz., the very necessary raising of the standard of electric wiring work.

The superintendents of the various electric supply undertakings have also assisted in enforcing the rules.

The Commission having decided to formulate standard rules governing methods of wiring, and applicable to the whole State, steps are now being taken to form a committee, with a Commissioner as chairman, representative of the interests affected by this decision.

## 8. Office Accommodation.

We referred in our last report to the fact that the erection of an eight-storied building had been authorized to provide suitable office accommodation not only for the Commission's own staff but for other Government Departments.

The building has now been erected on a site at the corner of William-street and Flinders-lane, and, as foreshadowed in the report, we were enabled to enter into occupation in April of this year. This was the result of the splendid effort put forth by the various contractors, and constitutes record time for the erection of a building of this class and size.

The completion of these offices filled a long-felt want, for the absence of suitable office accommodation undoubtedly hampered the organization which at one period was spread over no less than four different offices in Melbourne.

The building, which is constructed in reinforced concrete, was designed by the Commission's Architect, Mr. A. R. La Gerche, A.R.I.B.A., and whilst essentially of utilitarian design, embodies all the features of modern building construction. The completed cost was £85,000, to which must be added an amount of £20,000 for land which the Government decided to vest in this Commission.

A photograph of the building appears in Appendix No. 7.

## 9. Briquetting and Research Branch.

As the result of investigations in Europe by the Engineer in charge of Briquetting and Research (Mr. H. Herman), definite arrangements have now been made to erect a briquetting plant at Yallourn with a capacity of about 350 tons per day. This initial installation will be only half of what is regarded as a minimum commercial unit, and will consist of conveying plant, crushing and sieving machinery, drying, cooling, pressing, storage and loading plant and appliances, as well as a high-pressure boiler plant and a back pressure turbo-generating station. Six driers, each of more than 10,000 square feet drying surface, and five powerful briquette presses, as well as a complete system of coal dust extraction, will be included in this "half-factory" plant.

After exhaustive inquiries in England and visits to briquetting works at Swansea, Mr. Herman inspected the latest briquette factories in the Rhineland, Middle German, and East German brown coal fields, as well as in North-west Bohemia. From his investigations, the Commission satisfied itself that the rational course to pursue was the purchase of the briquette factory proper from a leading German manufacturer, and, accordingly, after competitive tenders had been called from various firms, a contract was let to the Zeitzer Eisengiesserei A.G., of Zeitz, Germany, for the supply of about £100,000 worth of plant.

Although it has been necessary to deal only with Germany for the special knowledge and plant she is able to supply for the actual coal treatment portion of the briquette factory, there is every reason to think that Australian and other British tenderers will be able to satisfactorily supply the labour, plant, and machinery necessary for the boiler house, generating station, loading sheds, and minor portions of the complete installation, which, as at present approved, will cost about £400,000.

Because of the highly technical nature of the process, it was deemed necessary to engage the services of an engineer of the Zeitzer Eisengiesserei A.G. and six foremen to assist and advise in the erection of the plant at Yallourn. This arrangement was entered into because of the Commission's desire to leave no stone unturned to make this experimental plant a commercial success, and investigation proved conclusively that the engineering knowledge and skill essential to the successful erection and operation of the plant could best be obtained in Germany, where the briquetting of brown coal is at the highest state of development of any of the brown coal fields in Europe.

The necessary consent of the Commonwealth Government having been given, the erectors will sail shortly for Australia. They will, of course, return to Germany when the plant is erected and in operation, this being the arrangement arrived at with the contracting company.

A considerable portion of the plant is already at Yallourn, and the preparation of the site so as to permit of an early start on the erection of the plant is proceeding. Railway sidings to the site of the factory have been constructed by the Railways Construction Branch to enable the plant to be taken direct to the site of the works; these will form part of the siding system to be associated with the factory for the transport of briquettes from Yallourn.

Modern developments in connexion with high and low temperature carbonizing are being closely watched, in the hope that eventually it may be possible to evolve a process, capable of commercial utilization, for the production of coal tar products and carbonized lignite briquettes suitable for purposes for which, at present, high grade black coal is essential. Although this matter is receiving the close attention of the Commission, it is impossible to overlook the fact that up to the present it is difficult to find much encouragement in attempts made, not merely to produce carbonized briquettes and by-products from coal of lignitic character, but also from the many unsuccessful attempts to commercially apply low temperature carbonization even to black coals of the most suitable kind obtainable for that particular purpose. Important experiments on carbonizing and briquetting of lignites on a semi-commercial scale have recently been instituted in Canada, and the result of this work will be carefully watched. The Commission further hopes shortly to be in a position to enlarge the scope of its own research work in this direction.

## 10. Coal Supply Branch.

### *Yallourn Operations.*

*Excavating Machinery.*—The Bucyrus shovels ordered for removing the overburden and coal were delivered at Yallourn in November, 1921, and their erection was immediately put in hand.

The first machine was completed and started work at the beginning of February on the main incline to the open cut. Since that date it has been in regular operation, and has proved its suitability for the work. Brown coal has been exclusively used as fuel for steam-raising, with satisfactory results.

The erection of the second machine is nearing completion.

*Overburden Removal.*—The belt conveying system, by means of which the overburden is carried to the dump, was all manufactured in Australia to the Commission's designs. It started operation in June as soon as all sections were completed, and has worked successfully in conjunction with the Bucyrus shovel from that date.

*Flood Prevention.*—The whole of the area embraced by the first open cut and dump has been enclosed by a levee bank to exclude the flood waters of the Latrobe River, and drains have been excavated to carry external surface water clear of the workings.

*Drainage.*—The water met in the drainage shaft at the approach to the open cut proved to be less than anticipated, and is at present being effectually removed by a small temporary pump, the quantity being practically negligible.

Pumps of large capacity have been obtained to expeditiously remove all drainage and surface water which comes within the levee bank.

*Coal Transport.*—The automatic endless rope haulage systems for the transport of the coal from the open cut to the screening plant have been delivered to the works.

*Coal Screening.*—The plans of the screening plant have been prepared, and provision has been made in the design to allow for extensions as required up to a maximum capacity of 10,000 tons per day.

The concrete foundations to carry the plant have been installed, and the detail drawings of the steel building and machinery are well forward.

*Coal Storage.*—Concrete storage bins will be installed over the railway sidings to act as a buffer between the open cut and the railway transport, and the piles for the foundations are now being driven.

*Exploration.*—An extensive boring campaign has been carried out on the ground to the east of the square mile situated immediately to the south of the power house, and which has already been proved.

Thirty-four bores were completed at intervals of 10 chains on an area of 340 acres.

A tabulation giving the results of the work appears under Appendix No. 6.

With the exception of one bore on the north of the area close to the Latrobe River, where the coal is known to cut out, the results were uniformly good. The analyses of all the samples have not been completed, but the results available to date are normal.

Omitting the above-mentioned bore, the depth of overburden on this area varies from 20 feet to 38 feet, and averages 30 feet. The coal varies in thickness from 137 feet to 206 feet, and averages 163 feet. Some of this coal appears to be rather soft, but its moisture content and physical nature cannot be definitely determined until it is opened up.

The total estimated quantity of coal proved by these bores is 76,865,000 tons.

In addition to this work, 32 hand bores were put down at intervals of 3 chains to closely determine the nature and depth of overburden on the area of 33 acres which constitutes the first open cut. The overburden varied in depth from 20 feet to 40 feet, and averaged 27 feet. Any soft coal on the surface of the deposit is included in these measurements, as it will probably be sent to the dump.

The surface of the coal was regular with the exception of two depressions, which are probably due to an old water-course. It varied from 97 feet to 117 feet above sea-level, and averaged 109 feet, and the ground water level averaged 127 feet above sea-level.

*Metropolitan Distribution.*—Much consideration has been given to the question of the distribution of the coal in the metropolitan area. Two schemes for a general type of distribution station are being worked out and estimates prepared. The investigation of the first scheme is finished, whilst the second is nearing completion.

*Pulverized Coal.*—The Engineer in charge of Briquetting and Research was instructed to include in his investigations abroad the question of the use of pulverized coal, particularly in regard to its bearing on the utilization of Victorian brown coal in this manner. Special importance would attach to the finding of a commercially successful plan of utilizing pulverized brown coal for the Victorian Railways. A conference on this matter between the officers of the Railway Department and of this Commission, at which investigations made by Mr. Herman in England and Italy were fully considered, together with independent inquiries of the Railway Department, was held at the latter end of last year, and the outcome was a decision by the Railways Commissioners to equip a locomotive for burning pulverized brown coal, supplies of which will be obtainable from the special plant for pulverizing coal now approaching completion at Newport.

This experimental plant is situated close to the Railway Department's Newport "A" Power Station, and the experiments will cover the firing of stationary boilers in addition to the firing of locomotive boilers.

The steel building to house the plant has been erected and the machinery foundations have been completed. Contracts have been let for the completion of the remainder of the work by the end of November.

## 11. Electric Supply Branch.

### *Main Morwell Scheme.*

*Power Station, Yallourn.*—Early in the period final designs were prepared for the circulating water works, including screen pits, inlet and outlet conduits, pumps, and discharge pits and weir, all of which are of concrete, reinforced where necessary. Construction is in an advanced stage on nearly all of these items. The construction of roadways and drainage around the power station is also well in hand.

A commencement has been made with the construction works involved in the sewerage scheme for the power station workshops and offices.

The contract for the construction of the steel work for the power station buildings was placed with Messrs. Redpath Brown, of Glasgow, who have already delivered about 500 tons of steelwork to the site. The concrete bases for the steel columns have been prepared by the Commission's construction staff.

The contract for the supply of the twelve boilers and accessories for the station was placed with Messrs. John Thompson, Wolverhampton, in November, 1921, and the manufacture of the plant is proceeding satisfactorily. A considerable percentage of the material called for under this contract is to be manufactured in Australia in accordance with the arrangement made with the contractors when placing the order.

The Inspecting Engineers' reports indicate that Metropolitan Vickers Ltd., the contractors for the turbo-alternators, are making good progress with their contract. The 600-kw. house set has already arrived, and is being installed for the present in the temporary power plant at Yallourn.

Tenders have been invited for the feed heaters, evaporators, and coal-handling plant, whilst the preparation of specifications for the balance of the work required to complete the mechanical side of the station is being pushed on rapidly.

The erection of the switch house and installation of apparatus in the switchyard will commence shortly, the contractors having delivered to the site a large proportion of this plant.

*Temporary Power Station, Yallourn.*—To meet the anticipated demands of the coal-winning machinery, this plant was extended during the period. The second turbo-alternator and boiler were brought into service in January last, and the third turbo-alternator in March, whilst the third boiler is now nearing completion.

A large number of tests were carried out on the boiler fitted with the experimental dryer, and valuable information has been gained from the analysis of the results.

*Workshops, Yallourn.*—The erection of three bays for the permanent machine shops and smiths' shops has been completed, and a substantial proportion of the machine shop equipment has been procured and will be installed shortly.

The wood-working shop has been built and equipped.

*Main Transmission Line (Yallourn–Yarraville).*—The delivery of conductors and insulators for this line is practically completed. A representative of the contractors for the steel towers, Messrs. Milliken Bros., visited Melbourne in September last and conferred with the engineering staff in regard to finalizing the designs for the transmission towers. The Inspecting Engineers report that the manufacture of the towers is actively proceeding, and already some of the steelwork has been delivered in Melbourne.

In connexion with the erection of the line, construction depôts have been established at Dandenong and Footscray, and a supplementary store erected at Warragul.

The total length of the line is 110 miles, and contracts have been placed for gates for patrol track, clearing of right-of-way, and supply of plant for erection of towers. About 80 per cent. of the clearing is complete and 50 per cent. of the gates erected. The construction of culverts and formation of track is proceeding.

*Yarraville Terminal Station.*—This building is being constructed in reinforced concrete, and considerable progress has been made with the work. Construction work is in hand on concrete bases for switchyard plant, manholes, and ducts for cables, &c. A storm-water drainage scheme is well on toward completion.

It is anticipated that work will soon have far enough advanced to permit of a start being made with the installation of apparatus in the buildings and the switchyard. The 50-ton crane required for this station is ready for erection.

*Metropolitan Sub-stations.*—The design of the sub-stations for the distribution on the 22,000-volt network in the metropolis having been practically finalized, site works will shortly commence. The apparatus for these sub-stations is to hand from the contractors.

For the inter-connexion of sub-stations on the main network 45 miles of 22,000-volt underground cable has been ordered from Messrs. Siemens Bros. Compensated pilot protective cable for operation in conjunction with the main cable has been ordered from Messrs. Callender Ltd.

The routes for the laying of these underground cables have been investigated, and the work of laying is to be taken in hand at an early date.

### *Newport "B" Power Station.*

A good start had been made with the levelling of the site at the commencement of the period, and during the present financial year extensive work both in excavating and concreting has been done on the following items :—

Inlet and outlet conduits, pump pits, foundations for chimney, building and machines, cable tunnel ducts. The whole of the steel framing of the turbine house has been erected, and work is proceeding on the roof and wall covering. The extension of the existing screen house to accommodate the additional circulating water screens has been completed, and the work on the new switch house is well in hand. Good progress has been made with the brick chimney stack.

As to the erection of the plant, the 60-ton crane has been installed in the turbine house, and the starting-up frequency changer is in course of erection. The circulating water screens are being installed in the screen house.

Reports from the Inspectors indicate that the manufacture of the balance of the plant is proceeding quite satisfactorily.

### *Transmission Line Schemes.*

*South-Western District Scheme.*—Work is in progress on the final survey of this transmission line, which will be 120 miles in length.

Orders have already been placed for the supply of aluminium conductor steel reinforced, delivery of which is expected to be completed about the end of 1922. Tenders have also been invited for insulators, transformers, sub-station apparatus, and switchgear.

*Supply to Mornington Peninsula and Yarra Valley.*—The designs for transmission lines and sub-stations in connexion with the schemes for supply to Dandenong, Frankston, and Mornington, and also by another line to Lilydale, were completed in January last, and delivery of switchgear commenced before the end of February. The delivery of transformers has, however, retarded the completion of these schemes, but this difficulty has been overcome, and the lines will be brought into operation within the next few weeks.

*Supply to Morwell.*—This township is now receiving electricity by means of a transmission line from the temporary power plant at Yallourn Works, 5½ miles distant. This line was erected by the Commission, and will form part of the proposed scheme for serving the East Gippsland territory.

### *Hydro-Electric Schemes.*

The electrical features of the Sugarloaf–Rubicon and Strathbogie proposals have been examined in conjunction with the Consulting Hydraulic Engineers, and reports and estimates prepared. These matters have been the subject of special reports to the Government from the Commission.

## 12. Township of Yallourn.

*Dwellings.*—At the end of the period about 30 four-roomed wooden cottages had been completed. These particular cottages are the cheapest type of the houses proposed to be erected in Yallourn, and several types of this class were designed and built so as to avoid monotony of effect. At present the rental of these cottages is 18s. 6d. per week. The houses are lighted with electricity, for which the tenants are charged at the rate of 1s. per week fixed charge, and 1d. per unit of energy consumed.

The Commission's architectural staff has in hand the designs for several types of brick houses, ranging from five rooms to eight rooms, and preparations are now being made for the early erection of some of these houses, for which bricks from the Commission's brickworks will be utilized. The rental charge will, as in the case of the wooden cottages, be based on the cost of the houses, having regard to the estimated life thereof.

*Water Supply.*—After exhaustive analysis of proposals, a scheme of water supply for the township and works was approved by the Commission. Under this scheme water will be pumped from the Latrobe River by electrically-operated centrifugal pumps and delivered into a reservoir on high ground west of the township, then after chemical precipitation of suspended matter delivered to a service basin for supply to the reticulation. Cast-iron pipes were chosen from alternative tenders for the reticulation, and reticulation for 200 tenements is now almost completely laid. Work has been commenced on the site of the reservoirs, and design work is in an advanced stage.

Pending the bringing into operation of this scheme, the town is supplied by pumping from the Latrobe River to two large tanks, and during the year additions to the pumping plant were made.

*Sewerage.*—The investigation of the proposal to establish a water-carried sewerage system for Yallourn, to which reference was made in our last Annual Report, was completed during the period and a scheme submitted. The estimated cost of the proposals was, in the opinion of the Commission, too high to justify the immediate adoption of the scheme, which would have placed too heavy a burden on the tenants occupying the town during the next few years. It was therefore reluctantly decided to postpone the scheme until such time as the growth of the population of the town creates a definite demand for this modernized system of sanitation. A double-pan system has been installed, with a well-laid-out depôt some distance east of the township.

*Roads and Streets.*—The design of the roads and streets and drainage within the area covered by the first section of the township, as approved by the Government, is now practically completed, and about two-thirds of the work has been executed.

A system of storm-water drainage for the area has also been completed.

*Lighting.*—The reticulation system for the town has been designed, and the erection is, in part, complete. As stated above, the cottages are being lighted with electricity, and street lamps have also been erected.

## 13. General Construction Works, Yallourn.

The progress made with the various activities at these works are referred to in this report under the heading of the branch concerned, but the following matters associated directly with the construction of the works have also received attention :—

*Construction Camps.*—The camp established close to the site of the power station required to be extended during the period in order to accommodate the large number of workers employed. It is considered that the construction work reached its "peak" during this last financial year, when the maximum number of men employed was about 1,300. The extensions to the camp also involved additions to the mess accommodation.

*Brickworks.*—As foreshadowed in the last Annual Report, steps have been taken to install a brick-making machine at the works, together with down-draught and up-draught kilns. The estimated output from this machine is 48,000 bricks per week. It is probable that this plant will shortly be extended so as to meet practically the whole of the demands for bricks for buildings on the power station site, briquette works, and township.

*Railways.*—The Railways Construction Branch has made considerable progress with the work of constructing sidings to connect the power station, coal area, and briquette factory with the new branch line to Yallourn.

*Roads.*—The main through road from Princes-highway to the power station has now been metalled for the greater part of its length.

Branch roads to the open cut area, brickworks, and sanitary depôt have also been constructed.

## 14. Water Power Investigations.

Systematic inquiries into the water power resources of portions of the State within range of the principal centres of population were continued, and a considerable amount of valuable data was thus secured.

The detailed investigation of the power possibilities of the Goulburn River at Sugarloaf Reservoir and of its adjacent mountain tributaries, including the Rubicon and Royston Rivers and Snob's Creek, has been completed. A definite scheme of works has been drawn up by Messrs. J. M. and H. E. Coane, Consulting Hydraulic Engineers, in which five power stations are proposed to be so equipped as to develop, at a cheap rate, up to 25,800 horse-power when the turbines are fully loaded. The Consulting Engineer's report, with drawings and estimates, will be appended to the report shortly to be issued by the Commission upon the question of supply to the Northern district of the State. The sources from which energy can be developed in this scheme are within easy range of many important country centres.

With a view to the supply of electricity to important towns in the North-Eastern district, examinations of the water power resources of streams within that area were made. Of these the most promising was the Seven Creeks, which drains the Strathbogie Tableland. Investigations were subsequently carried out in detail, and a special report by Messrs. Coane will be embodied in the Commission's report on the Sugarloaf–Rubicon Scheme. Owing to limitations of stream flow in times of drought, the possibilities at Strathbogie have been found less attractive than have those of the Sugarloaf–Rubicon combination.

A promising scheme that would be supplementary to the Sugarloaf–Rubicon group of power stations is being investigated in the Murrindindi district. Examinations on similar lines are being made on the Acheron, Taggerty, Steavenson, and Yea Rivers, as well as on the Little River, all of which are within convenient distance of the Rubicon area.

The head-waters of the Goulburn River, including its principal tributaries, have been inspected, gaugings for future guidance being taken during the recent dry autumn, whilst the discharges were low.

Preliminary examinations have been made of the valley of the Moroka in Central Gippsland, where a high-head development of the Wonnangatta River and of other similar streams is possible.

## 15. Staff.

It is with pleasure that the Commission has again to record its appreciation of the services rendered by the members of the staff, who have worked whole-heartedly during the period in furthering the important and vital works which Parliament has placed in the hands of the Commission to execute.

We have the honour to be,

Sir,

Your obedient Servants.

JOHN MONASH, Chairman.

THOMAS R. LYLE, Commissioner.

ROBERT GIBSON, Commissioner.

R. LIDDELOW, Secretary.

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# APPENDIX No. 1.

## STATE ELECTRICITY COMMISSION OF VICTORIA.

STATEMENT OF RECEIPTS AND EXPENDITURE ON CAPITAL ACCOUNT AS AT 30TH JUNE, 1922.

*Dr.* *Cr.*

| — | Amount expended to 30th June, 1921. | Amount expended 1921–1922. | Total. | — | — |
|---|---|---|---|---|---|
| | £ s. d. | £ s. d. | £ s. d. | | £ s. d. |
| To Expenditure— | | | | By Receipts— | |
| Land .. | 24,644 17 8 | 90,996 13 3 | 115,641 10 11 | Capital authorized— | |
| Buildings .. | 29,399 1 3 | 155,695 13 1 | 185,094 14 4 | Loan Act No. 3029 355,000 0 0 | |
| Machinery and Plant .. | 64,727 15 0 | 325,709 16 5 | 390,437 11 5 | Loan Act No. 3101 1,430,000 0 0 | |
| Preliminary Expenses (see statement attached) .. | 17,051 9 10 | 30,350 0 5 | 47,401 10 3 | Loan Act No. 3160 2,006,000 0 0 | |
| Horses, Vehicles, and Harness | 4,163 9 8 | 1,800 8 11 | 6,043 18 7 | Treasurer's Advance Western District 4,500 0 0 | |
| Motor Vehicles | .. | 3,435 19 9 | 3,435 19 9 | | 3,795,500 0 0 |
| Implements, Appliances and Factory .. | 4,510 8 7 | 17,880 10 4 | 22,390 18 11 | | |
| Office Furniture and Equipment | 1,864 17 10 | 1,674 10 4 | 3,539 8 1 | | |
| Scientific Instruments and Equipment .. | 321 19 9 | 451 13 8 | 773 13 5 | | |
| Roads and Bridges .. | 2,452 3 3 | 20,836 13 2 | 23,288 16 5 | | |
| Water and Fire Service .. | 1,401 11 2 | 8,242 9 11 | 9,644 1 1 | | |
| Telephone Service .. | 118 3 5 | 415 11 10 | 533 15 3 | | |
| Township Electric Services | .. | 879 10 8 | 879 10 8 | | |
| Township Sewerage Services | .. | 1,732 18 11 | 1,732 18 11 | | |
| Township Drainage .. | .. | 2,549 14 4 | 2,549 14 4 | | |
| Railways and Sidings .. | 237 13 0 | 30,220 0 11 | 30,457 13 11 | | |
| Stores on hand— | | | | | |
| Melbourne .. | 9,264 9 0 | 363,266 4 5 | 372,530 13 5 | | |
| Morwell .. | 52,250 1 7 | 74,549 8 8 | 126,799 10 3 | | |
| Newport .. | 830 1 11 | 6,819 0 10 | 7,649 2 9 | | |
| Dandenong | .. | 19,706 18 10 | 19,706 18 10 | | |
| Cash on hand in London | .. | 389,236 0 0 | 389,236 0 0 | | |
| Sundry Debtors .. | .. | 352 13 1 | 352 13 1 | | |
| Balance of Authority .. | 213,238 2 11 | 1,546,882 11 9 | 1,760,120 14 8 | | |
| | | | 2,035,379 5 4 | | |
| | | | 3,795,500 0 0 | | 3,795,500 0 0 |

RECONCILIATION WITH TREASURY BOOKS.

| | £ s. d. |
|---|---|
| Total as per Treasury Books .. .. .. .. .. .. .. .. | 1,705,524 17 8 |
| Plus Accounts in Electricity Commission Books, and included in Treasury Books subsequently .. | 62,313 19 2 |
| | 1,767,838 16 10 |
| *Less* Accounts in Treasury Books included subsequently in Electricity Commission Books .. | 7,718 2 2 |
| Total as per Electricity Commission Books .. .. | 1,760,120 14 8 |

(Signed) R. LIDDELOW,
Secretary,
Electricity Commission of Victoria.

## APPENDIX No. 1—*continued.*

STATE ELECTRICITY COMMISSION OF VICTORIA—STATEMENT OF ACCOUNTS.

EXPENDITURE OUT OF CONSOLIDATED REVENUE, 1ST JULY, 1921, TO 30TH JUNE, 1922.

*Dr.* *Cr.*

| | £ | s. | d. | £ | s. | d. |
|---|---|---|---|---|---|---|
| To Salaries | | | 13,134 | 3 | 6 | |
| „ Salaries and Fees—Chairman and Commissioners | | | 4,500 | 0 | 0 | |
| „ Fitting Up and Equipping Offices | | | 1,908 | 3 | 7 | |
| „ Library | | | 216 | 0 | 0 | |
| „ Power—Investigations—Surveys— | | | | | | |
| Water Power Investigations (including Instruments £144 13s. | 6,381 | 7 | 8 | | | |
| „ Power Requirements— | | | | | | |
| Country Centres | 1,118 | 8 | 6 | | | |
| | | | 7,499 | 16 | 2 | |
| „ General Expenses— | | | | | | |
| Postage and Telegrams | 1,058 | 1 | 9 | | | |
| Printing and Stationery | 1,289 | 15 | 0 | | | |
| Rents and Rates | 1,786 | 0 | 8 | | | |
| Lighting and Heating | 289 | 2 | 10 | | | |
| Travelling Expenses | 398 | 9 | 4 | | | |
| Advertising | 150 | 16 | 6 | | | |
| Office Expenses | 791 | 6 | 3 | | | |
| Blue and Photo Printing, &c. | 469 | 3 | 3 | | | |
| Insurance | 38 | 16 | 0 | | | |
| | | | 6,271 | 11 | 7 | |
| „ Brown Coal Experimental Expenses | | | 7 | 10 | 4 | |
| „ Licensing of Wiremen | | | 720 | 6 | 1 | |
| „ Briquetting Research (including Expenses of Mr. Herman's visit to Europe) | | | 2,125 | 5 | 6 | |
| „ Electric Inspection | | | 1,940 | 7 | 4 | |
| „ Premium on Remittances to London | | | 2,458 | 15 | 0 | |
| „ Bulk Supply Electrical Energy | | | 64,875 | 5 | 6 | |
| „ Experimental Coal Pulv. Plant | | | 4,316 | 10 | 4 | |
| „ Exploratory Boring—Morwell | | | 1,134 | 10 | 9 | |
| „ Services of Agent-General and Staff | | | 500 | 0 | 0 | |
| „ Provision Store, Yallourn | | | 1,000 | 0 | 0 | |
| | | | 112,608 | 5 | 8 | |

| | £ | s. | d. | £ | s. | d. |
|---|---|---|---|---|---|---|
| By Treasury Account— | | | | | | |
| Division 70—1 | 16,143 | 8 | 2 | | | |
| „ 70—2 | 16,977 | 8 | 10 | | | |
| „ 70—3 | 2,336 | 17 | 10 | | | |
| „ 70—4 | 1,000 | 0 | 0 | | | |
| „ 70—5 | 67,334 | 0 | 6 | | | |
| „ 70—6 | 4,316 | 10 | 4 | | | |
| Special Appropriation Act No. 3104 | 4,500 | 0 | 0 | | | |
| | | | | 112,608 | 5 | 8 |
| | | | | 112,608 | 5 | 8 |

(Signed) R. LIDDELOW,
Secretary,
Electricity Commission of Victoria.

## APPENDIX NO. 1—*continued.*

### ELECTRICAL ENERGY—BULK SUPPLY.

PROFIT AND LOSS ACCOUNT FOR YEAR ENDED 30TH JUNE, 1922.

| *Dr.* | £ | *s.* | *d.* | *Cr.* | £ | *s.* | *d.* |
|---|---|---|---|---|---|---|---|
| To Purchases .. .. .. | 70,546 | 7 | 5 | By Sales .. .. .. .. | 70,698 | 1 | 9 |
| Allowances .. .. .. | 107 | 6 | 0 | | | | |
| Profit .. .. .. .. | 44 | 8 | 4 | | | | |
| | 70,698 | 1 | 9 | | 70,698 | 1 | 9 |

BALANCE-SHEET AS AT 30TH JUNE, 1922.

| *Liabilities.* | £ | *s.* | *d.* | £ | *s.* | *d.* | *Assets.* | £ | *s.* | *d.* |
|---|---|---|---|---|---|---|---|---|---|---|
| Liability to Treasury— | | | | | | | Cash in hand .. .. .. | 5,210 | 13 | 11 |
| Expenditure from provision .. .. | 64,875 | 5 | 6 | | | | Sundry debtors .. .. .. | 9,047 | 11 | 4 |
| *Less* Revenue repaid | 56,332 | 10 | 6 | | | | | | | |
| | | | | 8,542 | 15 | 0 | | | | |
| Sundry Creditors— | | | | | | | | | | |
| Victorian Railways .. | 5,541 | 10 | 8 | | | | | | | |
| Melbourne City Council .. | 129 | 11 | 3 | | | | | | | |
| | | | | 5,671 | 1 | 11 | | | | |
| Balance—Profit .. .. .. | | | | 44 | 8 | 4 | | | | |
| | | | | 14,258 | 5 | 3 | | 14,258 | 5 | 3 |

### BULK SUPPLY—EXPENDITURE.

RECONCILIATION WITH TREASURY BOOKS.

| | £ | *s.* | *d.* |
|---|---|---|---|
| Expenditure as per Treasury Books .. .. .. | 64,875 | 5 | 6 |
| Plus Accounts withheld from Treasury .. .. .. | 5,671 | 1 | 11 |
| Purchases as per Electricity Commission Books .. | 70,546 | 7 | 5 |

### BULK SUPPLY.

SUNDRY CREDITORS.

| | £ | *s.* | *d* | £ | *s.* | *d.* |
|---|---|---|---|---|---|---|
| Victorian Railways .. .. .. .. | 1,110 | 16 | 6 | | | |
| | 4,439 | 14 | 2 | | | |
| | | | | 5,541 | 10 | 8 |
| Melbourne City Council .. .. .. .. | 78 | 17 | 3 | | | |
| | 50 | 14 | 0 | | | |
| | | | | 129 | 11 | 3 |
| | | | | 5,671 | 1 | 11 |

SUNDRY DEBTORS AS AT 30TH JUNE, 1922.

| | £ | *s.* | *d.* |
|---|---|---|---|
| Angliss, W. and Company Proprietary Limited .. .. | 2,433 | 11 | 5 |
| Australian Reinforced Concrete Engineering Company .. .. | 40 | 3 | 9 |
| Commonwealth of Australia, Department Works and Railways, Aviation School, Point Cook .. .. .. .. | 111 | 2 | 11 |
| Melbourne and Metropolitan Board of Works .. .. .. | 1,934 | 13 | 10 |
| Melbourne City Council .. .. .. .. .. | 4,430 | 14 | 2 |
| Kitchen, J., and Sons Proprietary Limited .. .. .. | 97 | 5 | 3 |
| | 9,047 | 11 | 4 |

### AUDITOR-GENERAL, VICTORIA.

Melbourne.

AUDITOR-GENERAL'S CERTIFICATE.

The Accounts of the Electricity Commission have been audited and found correct. I certify that the statements exhibit a correct view of the affairs of the Commission at the 30th June, 1922.

(Signed) J. A. NORRIS,
Auditor-General.

29th November, 1922.

# APPENDIX No. 2

—

## STATE ELECTRICITY COMMISSION OF VICTORIA.

### YALLOURN GENERAL PROVISION STORE.

*Trading Account for period 1st July, 1921, to 30th June, 1922.*

| | Eastern. £ s. d. | Western. £ s. d. | | Eastern. £ s. d. | Western. £ s. d. |
|---|---|---|---|---|---|
| To Stock on hand 1st July, 1921 | 305 18 0 | | By Sales— | | |
| ,, Purchases | 10,268 14 1 | 4,138 5 5 | Cash | 4,059 11 10 | 4,217 5 10 |
| ,, Freight and handling | 149 1 1 | 99 9 6 | Credit | 5,948 18 10 | 59 15 5 |
| ,, Trading Expenses | 19 11 9 | | ,, Discounts | 217 7 9 | 87 14 2 |
| ,, Wages | 173 5 0 | 155 3 1 | ,, Stock on hand 30th June, 1922 | 1,600 0 5 | 879 6 6 |
| ,, Gross profit transferred to Profit and Loss Account | 909 5 5 | 851 3 8 | | | |
| | 11,825 18 10 | 5,244 1 11 | | 11,825 18 10 | 5,244 1 11 |

*Profit and Loss Account.*

| | £ s. d. | | £ s. d. |
|---|---|---|---|
| To Salaries | 213 5 0 | By Gross Profit transferred from Trading Account— | |
| ,, General Expenses | 86 13 10 | Eastern | 909 5 5 |
| ,, Depreciation on Plant at 10 per cent per annum | 26 5 6 | Western | 851 3 8 |
| ,, Victorian Railways claims | | ,, Gross Profit on Billiards | 53 15 9 |
| Goods damaged in transit | 1 10 3 | | |
| Goods lost in transit | 21 6 8 | | |
| ,, Hairdresser's Account Loss | 11 9 4 | | |
| ,, Salaries Suspense Account | 100 0 0 | | |
| ,, Unpaid Rent Account | 104 0 0 | | |
| ,, Interest on Capital Account | 54 7 8 | | |
| ,, Net Profit transferred to Profit and Loss Appropriation Account | 1,195 3 7 | | |
| | 1,814 4 10 | | 1,814 4 10 |

*Appropriation Account.*

| | £ s. d. | | £ s. d. |
|---|---|---|---|
| To Transfer to Reserve Fund | 1,000 0 0 | By Net Profit for year ended 30th June 1921 | 79 11 1 |
| ,, Balance unappropriated | 271 11 8 | ,, Net Profit for period transferred from Profit and Loss Account | 1,195 3 7 |
| | 1,274 14 8 | | 1,274 11 8 |

(Sgnd.) R. LIDDELOW,
Secretary,
State Electricity Commission, Victoria

## APPENDIX No. 2 *continued.*

### STATE ELECTRICITY COMMISSION OF VICTORIA.

### YALLOURN GENERAL PROVISION STORE.

*Balance-sheet as at 30th June*, 1922.

| *Liabilities.* | £ | s. | d. | £ | s. | d. | *Assets.* | £ | s. | d. | £ | s. | d. | £ | s. | d. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Trade Creditors | 1,465 | 11 | 10 | | | | Plant Account, Eastern Store | 181 | 7 | 4 | | | | | | |
| Sundry Creditors | | | | | | | *Less* Depreciation | 17 | 2 | 6 | | | | | | |
| Unpaid Salaries | 100 | 6 | 0 | | | | | | | | 164 | 1 | 10 | | | |
| Unpaid Rent | 104 | 0 | 0 | | | | Western Store | 159 | 13 | 7 | | | | | | |
| Interest on Capital (Suspense Account) | 54 | 7 | 8 | | | | *Less* Depreciation (6 months) | 7 | 19 | 8 | | | | | | |
| Reserve Fund—To be used in Business | 1,000 | 0 | 0 | | | | | | | | 151 | 13 | 11 | | | |
| Unappropriated Profit | 274 | 14 | 8 | | | | Hairdressing | 33 | 6 | 6 | | | | | | |
| Capital Account—Provided by Division 70 4 | | | | | | | *Less* Depreciation | 1 | 6 | 4 | | | | | | |
| 1920–21 £500 | | | | | | | | | | | 32 | 0 | 2 | | | |
| 1921–22 1,000 | | | | | | | | | | | | | | 347 | 18 | 11 |
| | 1,500 | 0 | 0 | | | | Stock on hand at 30th June, 1922 | | | | | | | | | |
| | | | | | | | Eastern | | | | 1,600 | 0 | 5 | | | |
| | | | | | | | Western | | | | 879 | 6 | 6 | | | |
| | | | | | | | | | | | | | | 2,479 | 6 | 11 |
| | | | | | | | Sundry Debtors | | | | | | | 675 | 5 | 9 |
| | | | | | | | Cash— | | | | | | | | | |
| | | | | | | | At Bank | | | | 963 | 0 | 1 | | | |
| | | | | | | | In Hand | | | | 23 | 2 | 6 | | | |
| | | | | | | | Petty Cash Western | | | | 10 | 0 | 0 | | | |
| | | | | | | | | | | | | | | 996 | 2 | 7 |
| | 4,498 | 14 | 2 | | | | | | | | | | | 4,498 | 14 | 2 |

(Sgnd.) R. LIDDELOW,
Secretary,
State Electricity Commission of Victoria.

The accounts have been audited by Officers under my direction. I certify that the accounts exhibit a correct view of the affairs and operations of the Store.

(Sgnd.) J. A. NORRIS,
Auditor-General.

## APPENDIX No. 3.

### INCREASED PRICES AUTHORIZED BY THE COMMISSION.

1st July, 1921, to 30th June, 1922.

| Undertaker. | Existing Price. | Proposed Charges. | Decision. |
|---|---|---|---|
| Hampden Shire Council .. | 1s. per unit, for lighting | 1s. 2d. per unit for lighting, Terang and Camperdown | Increase to 1s. 3d. per unit approved for Terang only |
| Bulla Shire Council .. .. | Lighting, 9½d. and 7d.; power, 5d. to 3d. | .. .. .. | Lighting 1s. 3d. per unit with minimum monthly charge of 4s.; and 10d. per unit. Power 6d. to 4d. Approved. |
| Eaglehawk Borough Council .. | Lighting, 8d.; power 4½d. and 1½d. | Lighting, 9d. | Lighting, 9d. per unit. Approved. |
| Yarrawonga Shire Council .. | Lighting, 11d.; power 6d. | Lighting, 1s. 3d. per unit | Lighting, 1s. 3d., minimum monthly charge, 5s. for 4 units. Approved. |
| Daylesford Borough Council .. | Lighting, 8d. and 6d.; power, 4d. and 3d. | Lighting, 1s.; power, 6d. | Lighting, 10d.; power, 5d. Approved |
| Ararat Borough Council .. | Lighting, 8d.; power, 3d. | Lighting, 1s.; power, 6d. | Approved. Minimum monthly charge of 4s. 6d. |
| Newham and Woodend Shire Council | Lighting, 10d.; power 6d. | Lighting, 1s. 3d. .. | Lighting, 1s. 3d., minimum monthly charge, 7s. 6d. for five units. Approved |
| Karkarooc Shire Council (Hopetoun) | Lighting, 1s. 2d.; power, 6d. | Lighting, 1s. 4d. .. | Lighting, 1s. 4d., minimum monthly charge, 5s. 8d. Approved |
| Karkarooc Shire Council (Beulah) | Lighting, 1s. 2d.; power, 6d. | Lighting, 1s. 4d. .. | Lighting, 1s. 4d., minimum monthly charge, 5s. 8d. Approved |
| Maffra Shire Council .. .. | Lighting, 9d.; power, 1½d. | Lighting, 1s. .. | Approved |
| Kyneton Shire Council (Trentham) | Lighting, 1s. .. | Lighting, 1s. 3d. .. | Lighting, 1s. 3d., minimum monthly charge, 5s. 6d.; power, 6d. Approved |
| Upper Yarra Shire Council (Warburton, &c.) | Lighting, 5d. .. | Lighting, 9d. .. | Approved |
| Kilmore Shire Council .. | Lighting, 9d.; power, 7d. | Lighting, 1s. 4d.; power, 8d. | Approved |
| Kerang Shire Council .. | Lighting, 7d.; power, 1d. | Lighting, 1s.; power, 7d. | Approved |
| Donald Shire Council .. | Lighting, 8d. to 5d.; power, 4½d. | Lighting, 1s.; power, 6d. | Approved |
| Dandenong Shire Council .. | Lighting, 8d. and 6d.; power, 4d. and 3d. | Lighting, 1s.; power, 6d. | Lighting, 11d. to 9d.; power, 4d. and 3d. Approved |

## APPENDIX No. 4.

### NEW ORDERS APPROVED BY THE COMMISSION.

1st July, 1921, to 30th June, 1922.

| Undertaker. | Area. | Maximum Prices. | |
|---|---|---|---|
| | | Lighting. | Power. |
| J. A. Newton .. .. | Townships of Belgrave, Upwey, Upper and Lower Fern Tree Gully | 10d. | 6d. |
| Lilydale Shire Council .. .. | Shire of Lilydale .. .. .. .. | 1s. | |
| Dunmunkle Shire Council .. | Township of Rupanyup .. .. .. | 1s. 6d. | |
| Lowan Shire Council .. .. | Township of Nhill .. .. .. .. | 1s. 3d. | |
| Benalla Shire Council .. .. | Township of Benalla .. .. .. .. | 1s. | 3d. |
| Flinders Shire Council .. .. | Township of Portsea .. .. .. .. | 1s. | |
| Federal Milk Pty. Ltd. .. .. | Township of Cohuna .. .. .. .. | 9d. | |
| Preston Shire Council .. .. | Portion of City of Northcote. (For transmission line only) | .. | |
| Melbourne Electric Supply Co. .. | Part of Bellarine Shire .. .. .. .. | 9d. | |
| Echuca Borough Council .. | Portion of Borough of Echuca (Echuca township) | 1s. 6d. to 1s. 3d. | 1s. 3d. |
| Siemerings Pty. Ltd. .. .. | Township of Murrayville .. .. .. | 9d. | |
| Walpeup Shire Council .. . | Township of Ouyen .. .. .. .. | 9d. | |

# APPENDIX No. 5.

## ELECTRIC SUPPLY UNDERTAKINGS OPERATING IN VICTORIA UNDER THE "ELECTRIC LIGHT AND POWER ACT 1915," No. 2645, ON 30TH JUNE, 1922.

| Undertaking. | Population. | Supply Authority. | System of Generation and Distribution. | Consumers. | | Present Price per kw. hour. | |
|---|---|---|---|---|---|---|---|
| | | | | Lighting. | Other Purposes. | Lighting | Power |
| Alexandra .. | 700 | Alexandra Shire Council .. | D.C., 2-wire, 230 volts .. | 146 | 1 | 1s. .. | 6d. |
| Ararat .. | 4,675 | Ararat Borough Council .. | 3-phase, 50 cycles, 240/415 volts | 500 | 10 | 1s. .. | 6d. |
| Bacchus Marsh | 1,400 | Bacchus Marsh Shire Council .. | 3-phase, 50 cycles, 230/400 volts | 150 | Total | 1s. .. | 6d. |
| Bairnsdale .. | 4,000 | A. H. Wood .. .. | D.C., 230/460 volts .. | 305 | 25 | 9d. .. | 4d. |
| Ballarat .. | 45,270 | Electric Supply Co., Victoria .. | D.C., 220/440 volts .. | 3,080 | 220 | 8d. 9d. to 3½d. | 3d. to 1½d. |
| Bendigo .. | 30,412 | Electric Supply Co., Victoria .. | D.C., 220/440 volts .. | 2,540 | 300 | 8d. 9d. to 4½d. | 4d. to 1½d. |
| Beulah .. | 550 | Karkaroo Shire Council .. | D.C., 230/460 volts .. | 118 | 3 | 1s. 2d. .. | 9d. |
| Birchip .. | 900 | Birchip Electric Supply Co. .. | D.C., 230 volts, 2-wire .. | 160 | 10 | 1s. .. | 6d. |
| Boort .. | 600 | Boort Co-operative Butter Co. | D.C., 2-wire, 230 volts .. | 120 | Total | 1s. .. | 4½d. |
| Brunswick .. | 44,476 | Brunswick City Council .. | 3-phase, 50 cycles 230/400 volts. (Supplied in bulk by Melbourne City Council) | 5,566 | 174 | 6d. .. | 2d. |
| Camperdown | 3,300 | Hampden Shire Council .. | D.C., 2-wire, 230 volts .. | 335 | 101 | 1s. .. | 5d. |
| Carrum, &c. | 5,212 | Carrum Electric Supply Co. .. | 1-phase, 50 cycles, 230/460 volts | 900 | Total | 8d. .. | 2d. |
| Casterton .. | 1,500 | Casterton Electric Supply Co... | D.C., 2-wire, 230 volts .. | 260 | 10 | 10½d. .. | 7½d. |
| Castlemaine .. | 5,330 | Castlemaine Electric Supply Co. | D.C., 3-wire, 230/460 volts | 365 | 13 | 1s. to 9d. | 4½d. to 3d. |
| Charlton .. | 1,360 | Charlton Electric Light and Power Co. | D.C., 2-wire, 230 volts .. | 235 | 37 | 1s. .. | 4½d. |
| Coburg .. | 20,500 | Coburg Town Council .. | 3-phase, 50 cycles, 230/400 volts. (Supplied in bulk by Melbourne City Council) | 1,458 | 40 | 6d. or 6½d. to 4d. | 2½d. or 2¼d. to 1¾d. |
| Cobram .. | 700 | Tungamah Shire Council .. | 2-wire, 230 volts, D.C. .. | 97 | 12 | 1s. .. | 8d. |
| Cohuna .. | .. | Federal Milk Pty. Ltd. .. | 2-wire, D.C., 230 volts .. | 70 | .. | 9d. .. | 6d. |
| Colac .. | 4,800 | Colac Shire Council .. .. | 3-phase, 50 cycles, 230/400 volts | 305 | 22 | 8d. .. | 4d. |
| Coleraine .. | 840 | Coleraine and Western District Butter Factory Co. | D.C., 2-wire, 230 volts .. | 130 | 6 | 1s. .. | 1s. |
| Doyleford .. | 3,330 | India Rubber, G.P., and Telegraph Works Co. | D.C., 230/460 volts .. | 352 | 29 | 10d. .. | 5d. |
| Dimboola .. | 1,200 | Dimboola Shire Council .. | D.C., 230/460 volts .. | 243 | 74 | 1s. 2d. .. | 7d. |
| Dandenong .. | 4,000 | Dandenong Shire Council .. | A.C., 1-phase, 230/460 volts | 500 | .. | 11d. and 9d. | 4d. to 3d. |
| Donald .. | 1,500 | Donald Shire Council .. | D.C., 230 volts .. .. | 279 | 12 | 1s. .. | 6d. |
| Doncaster .. | 2,600 | Doncaster Shire Council .. | 1-phase, 50 cycles, 200/400 volts. (Supplied in bulk by Melbourne Electric Supply Co.) | 236 | Total | 7d. .. | 3d. |
| Drouin .. | 750 | Drouin Co-operative Butter Factory Co. | D.C., 230 volts .. .. | 125 | 12 | 9d. .. | 4½d. |
| Eaglehawk .. | 4,719 | Eaglehawk Borough Council .. | D.C., 230/460 volts .. | 600 | Total | 9d. .. | 4½d. to 1½d. |
| Elmore .. | 700 | Elmore Electric Light and Power Co. | D.C., 230/460 volts .. | 120 | Total | 1s. .. | 1s. |
| Essendon .. | 35,950 | State Electricity Commission of Victoria | D.C., 220/440 volts; and 3-phase, A.C., 50 cycles, 230/400 volts. Bulk supply from Melbourne City Council at 6,000 volts | 5,000 | Total | 5½d. .. | 3¾d. to 1½d. |
| Euroa .. | 2,000 | Euroa Shire Council .. | D.C., 2-wire, 230 volts .. | 272 | 13 | 9d. .. | 6d. |
| Frankston .. | 792 | Frankston Shire Council .. | Bulk supply State Electricity Commission, 230/400 volts. 3-phase, 50 cycles | 166 | 2 | 10d. .. | 6d. |
| Footscray .. | 35,513 | Footscray City Council .. | 1-phase, 50 cycles, 200/400 volts. (Supplied in bulk by Melbourne City Council) | 6,200 | Total | 5d. .. | 2d. 1st 1,000 units, 1¾d. next 4,000 units, 1½d. next 4,000 units, all over, 1d. |
| Ferntree Gully, &c. | 2,000 | J. A. Newton .. .. | 1-phase, 50 cycles; primary, 2,000 volts; secondary, 230 volts | 400 | Total | 10d. .. | 9d. |
| Geelong, &c. | 31,689 | Melbourne Electric Supply Co. Ltd. | D.C., 230/440 volts, and 3-phase, 50 cycles, 230/400 volts | 3,158 | 1,252 | 8½d. .. | 4½d. to 1d. |
| Gisborne .. | 600 | Gisborne Shire Council .. | D.C., 2-wire, 230 volts .. | 95 | .. | 9d. .. | 4d. |
| Hamilton .. | 5,098 | Hamilton Electric Supply Co... | D.C., 2-wire, 230 volts .. | 610 | 58 | 10d. to 8d. | 6d. to 2¼d. |
| Healesville .. | 2,400 | Healesville Shire Council .. | 3-phase, 50 cycles, 230/460 volts | 263 | .. | 10d. to 6d. | 4d. to 3d. |
| Heidelberg .. | 14,681 | Heidelberg Shire Council .. | 1-phase, 50 cycles, 200/400 volts. (Supplied in bulk by Melbourne Electric Supply Co. Ltd.. | 1,866 | 300 | 6d. .. | 3d. to 2d. |
| Heathcote .. | 1,100 | Melvor Shire Council .. | D.C., 2-wire, 230 volts .. | 155 | 5 | 1s. .. | 6d. |
| Heyfield .. | 600 | Heyfield Butter Factory Co. .. | D.C., 2-wire, 230 volts .. | 100 | Total | 9d. .. | 5d. |
| Hopetoun .. | 450 | Karkaroo Shire Council .. | D.C., 2-wire, 230 volts .. | 83 | 11 | 1s. 4d. .. | 6d. |
| Horsham .. | 3,788 | Horsham Electric Supply Co... | D.C., 230/460 volts .. | 584 | 40 | 10d. .. | 5d. |
| Inglewood .. | 1,100 | Inglewood Borough Council .. | D.C., 2-wire, 230 volts .. | 90 | 40 | 10d. | |

## APPENDIX No. 5—*continued.*

### ELECTRIC SUPPLY UNDERTAKINGS OPERATING IN VICTORIA, ETC.—*continued.*

| Undertaking | Population. | Supply Authority. | System of Generation and Distribution. | Consumers. | | Present Price per kw. hour. | |
|---|---|---|---|---|---|---|---|
| | | | | Lighting. | Other Purposes. | Lighting. | Power. |
| Jeparit .. | 700 | H. J. W. Block .. .. | D.C., 2-wire, 230 volts .. | 112 | 4 | 1s. .. | 6d. |
| Kerang .. | 2,300 | Kerang Shire Council .. | D.C., 2-wire, 230 volts .. | 380 | Total | 9d. .. | 4d. |
| Kilmore .. | .. | Kilmore Shire Council .. | D.C., 2-wire, 230 volts .. | 150 | 7 | 1s. 2d. .. | 7d. |
| Koroit .. | 2,221 | Koroit Borough Council .. | D.C., 2-wire, 230 volts .. | 146 | 46 | 10d. .. | 6d. to 3d. |
| Kyabram .. | 1,613 | Kyabram Butter Factory .. | D.C., 3-wire, 230/460 volts | 237 | 64 | 9d. .. | 4d. |
| Kyneton .. | 3,062 | Kyneton Shire Council .. | 3-phase, 50 cycle, 230/400 volts | 200 | .. | 1s. .. | 5d. |
| Korumburra | 2,500 | Poowong and Jeetho Shire Council | D.C., 2-wire, 230 volts .. | 330 | 46 | 10d. .. | 5d |
| Lorne . | 250 | Winchelsea Shire Council .. | D.C., 2-wire, 115 volts .. | 61 | .. | 1s. 3d. to 1s. | |
| Leongatha .. | 1,300 | Leongatha Butter and Cheese Factory Co. | D.C., 2-wire, 230 volts .. | 201 | 91 | 10d. .. | 4d. |
| Lilydale Shire | 9,412 | Lilydale Shire Council .. | 1-phase, 230/460 volts, 50 cycles. (Supplied in bulk by State Electricity Commission) | 492 | 49 | 7d. .. | 3d. |
| Maffra .. | 1,500 | Maffra Shire Council .. | D.C., 2-wire, 230 volts .. | 200 | 40 | 1s. and 9d. | 5d. to 4½d. |
| Mansfield .. | 650 | Mansfield Shire Council .. | D.C., 2-wire, 230 volts .. | 182 | 53 | 11d. .. | 8d. |
| *Metropolitan Suburbs (see below) | 449,689 | Melbourne Electric Supply Co. Ltd. | 1-phase, 4,000 volts, 50 cycles; secondary, 200/400 volts | 58,093 | 2,360 | S.S., 5½d. down | 2½d. to 8d., with coal clause |
| Melbourne City | 105,726 | Melbourne City Council .. | (1) D.C., 230/460 volts; (2) 1-phase, 50 cycles; primary, 4,000 volts; secondary, 200/400 volts; (3) 3-phase, 50 cycles; primary, 6,000 volts; secondary, 230/400 volts | 14,477 | Total | 4½d. to 2½d. or 7d. to 1½d. | 2¼d. to ¼d.; 2½d. to ½d.; Flat rate, 2¼d. |
| Minyip .. | 577 | Dunmunkle Shire Council .. | D.C., 2-wire, 230 volts .. | 77 | 1 | 1s. 2d. .. | |
| Mildura .. | 5,100 | Mildura Shire Council .. | D.C., 230/460 volts .. | 675 | Total | 1s. .. | 6d. to 4d. |
| Mooroopna .. | 1,432 | Rodney Shire Council .. | D.C., 2-wire, 230 volts .. | 124 | 27 | 11d. .. | 7d. |
| Mornington .. | 1,350 | Mornington Shire Council .. | 230/400, 3-phase, 50 cycles. (Supplied in bulk by State Electricity Commission) | | | | |
| Mortlake .. | 800 | Mortlake Butter and Cheese Factory Co. | D.C., 2-wire, 230 volts .. | 130 | 20 | 1s. .. | 8d. |
| Murrayville .. | .. | Siemerings Pty. Ltd. .. | D.C., 2-wire, 110 volts .. | Street lighting only | | | |
| Murtoa .. | 1,148 | Dunmunkle Shire Council .. | D.C., 2-wire, 230 volts .. | 140 | .. | 10d. .. | |
| Nagambie .. | 750 | Goulburn Shire Council .. | D.C., 2-wire, 230 volts .. | 104 | 30 | 10d. .. | 6d. to 5d. |
| Nathalia .. | 860 | Numurkah Shire Council .. | D.C., 230/460 volts .. | 178 | Total | 1s. 6d. .. | 8d. |
| Nhill .. | 1,500 | Lowan Shire Council .. | D.C., 3-wire, 230/460 volts | 160 | 5 | 1s. 3d. .. | 9d. |
| Northcote .. | 30,454 | Northcote City Council .. | 1-phase, 50 cycles, 200/400 volts. (Supplied in bulk by Melbourne Electric Supply Co. Ltd.) | 4,050 | 240 | 5½d. .. | 2½d. |
| Numurkah .. | 1,196 | Numurkah Shire Council .. | D.C., 2-wire, 230 volts .. | 273 | Total | 9d. .. | 5d. to 4d. |
| Orbost .. | 2,000 | OrLost Butter and Produce Co. | D.C., 2-wire, 230 volts .. | 180 | 50 | 9d. .. | 5d. |
| Onyen .. | .. | Walpeup Shire Council .. | D.C., 2-wire, 32 volts .. | 15 | .. | 9d. | |
| Numawading Shire | 12,663 | Numawading Shire Council .. | 1-phase, 50 cycles, 200/400 volts. (Bulk supply Melbourne Electric Supply Co. Ltd.) | 1,999 | 457 | 6d. .. | 2½d. to 1½d. |
| Preston .. | 10,123 | Preston Shire Council .. | 1-phase, 50 cycles, 200/400 volts. (Bulk supply from Northcote City Council) | 1,100 | Total | 8d. .. | 2½d. to 1½d. |
| Port Melbourne | 13,100 | Port Melbourne Town Council | 3-phase, 50 cycles, 230/400 volts. (Bulk supply from Melbourne City Council) | 1,250 | Total | 5d. .. | 2d. to 1¼d |
| Rainbow .. | 900 | Rainbow Electric Supply Co. .. | D.C., 2-wire, 230 volts .. | 112 | .. | 1s. .. | |
| Rochester .. | 1,487 | Commonwealth Electric Co. Ltd. | D.C., 2-wire, 240 volts .. | 285 | 8 | 10d. to 6d. | 6d. to 4d. |
| Rupanyup .. | 550 | Dunmunkle Shire Council .. | D.C., 2-wire, 230 volts .. | 100 | .. | 1s. 3d. .. | |
| Rushworth .. | .. | Waranga Shire Council .. | D.C., 2-wire, 230 volts .. | 225 | 8 | 10d. .. | 6d. |
| Rutherglen .. | 1,200 | Rutherglen Shire Council .. | D.C., 230/460 volts .. | 140 | 50 | 10d. .. | 6d. |
| Sale .. | 3,768 | Sale and District Co-operative Butter and C.S. Co. | 3-phase, 50 cycles, 230/400 volts | 210 | 5 | 9d. .. | 3½d. |
| Sea Lake .. | 550 | Wycheproof Shire Council . | D.C., 2-wire, 230 volts .. | 114 | 32 | 1s. 4d. .. | 6d. |
| Shepparton .. | 4,000 | India Rubber G.P. and T.W. Co. | D.C., 3-wire, 230/460 volts | 475 | Total | 10½d. .. | 5½d. |
| Sorrento .. | 250 | Flinders Shire Council .. | D.C., 2-wire, 230 volts .. | 127 | 2 | £1 per ann. per 32 cp. lamp | 1s. |
| Sunbury .. | 1,500 | Bulla Shire Council .. .. | D.C., 2-wire, 230 volts .. | 117 | 31 | 1s. 3d. to 10d. | 6d. to 4d. |
| Sunshine .. | .. | H. V. McKay .. .. | D.C., 2-wire, 230 volts .. | 395 | 11 | 6½d. .. | 3d. |
| Swan Hill .. | 3,600 | Swan Hill Shire Council .. | D.C., 2-wire, 230 volts .. | 356 | 95 | 1s. .. | 5d. |
| Tatura .. | 1,230 | Tatura Butter Factory Co. .. | D.C., 2-wire, 230 volts .. | 140 | 50 | 10d. .. | 6d. |
| Terang .. | 2,255 | Hampden Shire Council .. | D.C., 2-wire, 230 volts .. | 294 | 110 | 1s. 3d. and 10d. | 5d. |
| Toora-Foster | 800 | Toora-Foster Electric Co. .. | 3-phase, 50 cycles; primary, 6,000 volts; secondary, 240/415 volts | 150 | 6 | 1s. per point per month | 4d. to 1d. |

* Richmond, Preston, St. Kilda, Malvern, Caulfield, South Melbourne, Fitzroy, Collingwood, Kew, Oakleigh, Hawthorn, Camberwell, Brighton, Sandringham, Moorabbin, Moonee Ponds, and Shire of Moorabbin.

## APPENDIX No. 5—*continued.*

### ELECTRIC SUPPLY UNDERTAKINGS OPERATING IN VICTORIA, ETC.—*continued.*

| Undertaking. | Population. | Supply Authority. | System of Generation and Distribution. | Consumers. | | Present Price per kw. hour. | |
|---|---|---|---|---|---|---|---|
| | | | | Lighting. | Other Purposes. | Lighting. | Power. |
| Warburton .. | 1,000 | Upper Yarra Shire Council .. | D.C., 2-wire, 230 volts .. | 90 | .. | 9d. .. | |
| Wahgunyah | 400 | Rutherglen Shire Council .. | D.C., 2-wire, 240 volts .. | 27 | 6 | 9d. .. | 6d. |
| Warragul .. | 1,800 | River Latrobe Hydro-Electric Co. | 3-phase, 50 cycles; primary, 23,000 volts: secondary, 230/400 volts | 200 | Total | 8d. .. | 4d. to ½d. |
| Werribee .. | 1,500 | Werribee Shire Council . | D.C., 230/460 volts, 3-wire | 180 | 29 | 1s. .. | 7d. |
| Williamstown | 19,450 | Williamstown City Council .. | 3-phase, 50 cycles, 230/400 volts. (Supplied in bulk by Melbourne City Council) | 2,310 | 40 | 5½d. .. | 4d. to 1½d. |
| Wodonga .. | 1,096 | Wodonga Electric Supply Co. | D.C., 230 volts, 2-wire .. | 171 | 5 | 9d. .. | 7d. |
| Woodend .. | 1,000 | Newham and Woodend Shire Council | D.C., 230 volts, 2-wire .. | 118 | 7 | 1s. .. | 6d. |
| Wycheproof | 760 | Wycheproof Shire Council .. | D.C., 230 volts, 2-wire .. | 110 | 13 | 1s. 3d. .. | 6d. |
| Yarrawonga | 1,650 | Yarrawonga Shire Council .. | D.C., 230 volts, 2-wire .. | 270 | Total | 1s. 3d. .. | 6d. |
| Yarram .. | 1,000 | Yarram Hydro-Electric Co. .. | A.C., 3-phase; primary, 11,000 volts, 50 cycles; secondary, 230/400 volts | 196 | 14 | 8d. .. | 4d. to 3d. |

## APPENDIX No. 6.

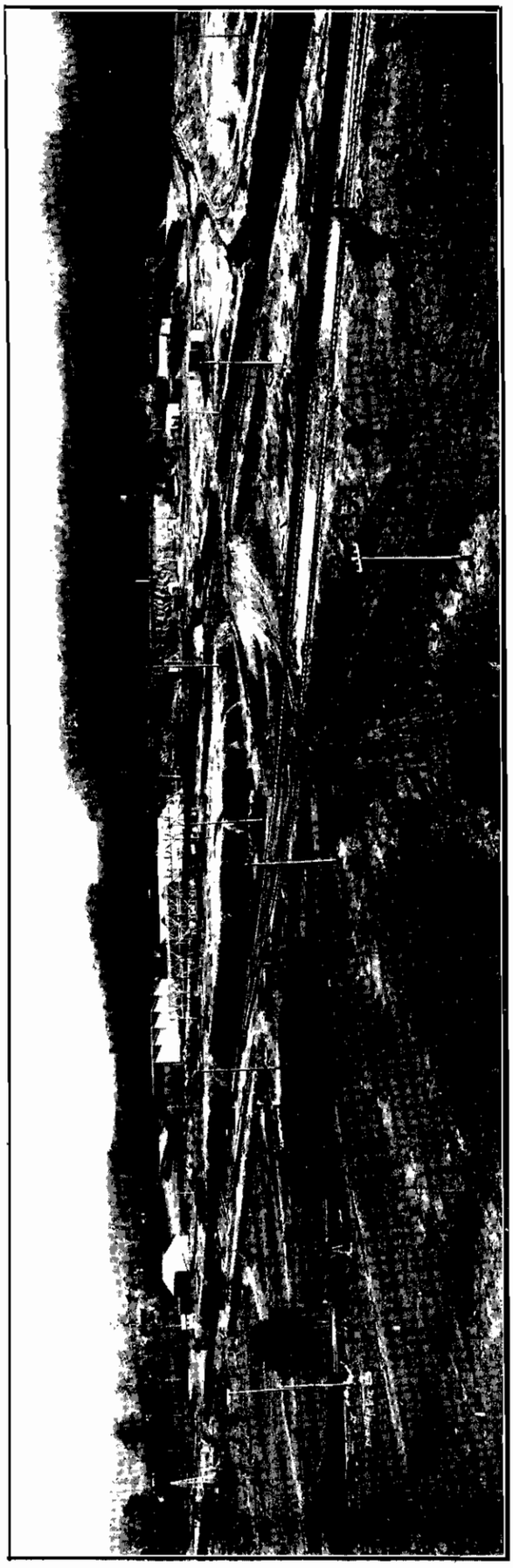
### COAL SUPPLY BRANCH.

RESULTS OF BORING CARRIED OUT TO THE EAST OF THE SQUARE MILE SITUATED SOUTH OF THE POWER STATION, YALLOURN.

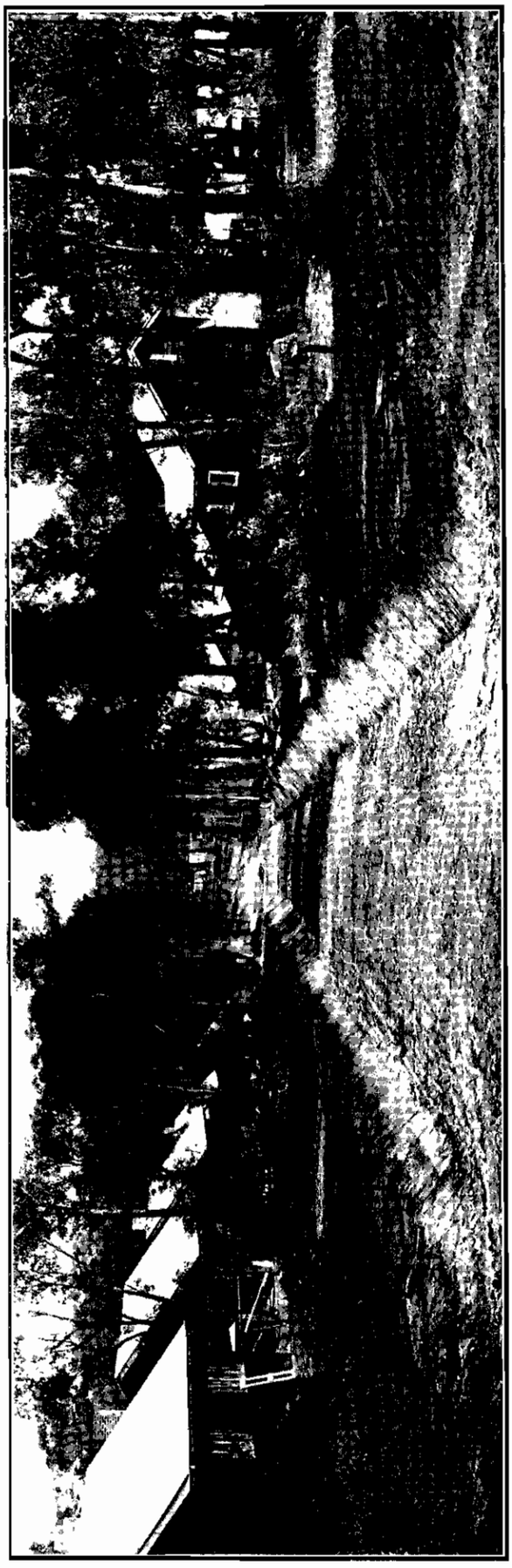
| Bore No. | Feet of Overburden. | Feet of Coal. | Tons per acre 1 1–16 cubic yards—1 ton. | R.L. of Coal Surface. | Total Depth of Bore. |
|---|---|---|---|---|---|
| | | | | | Ft. |
| 329 | 24 | 149 | 206,000 | 109 | 260 |
| 330 | 26 | 173 | 239,000 | 106 | 249 |
| 332 | 31 | 166 | 229,500 | 107 | 247 |
| 333 | 33 | 163 | 225,000 | 106·5 | 246 |
| 337 | 33 | 159 | 220,000 | 104·5 | 242 |
| 338 | 20 | 158 | 218,000 | 108·8 | 228 |
| 339 | 33 | 153 | 211,500 | 106·5 | 236 |
| 340 | 28 | 168 | 232,000 | 109 | 246 |
| 341 | 35 | 153 | 211,500 | 102·0 | 238 |
| 342 | 31 | 137 | 189,500 | 106 | 218 |
| 343 | 38 | 138 | 190,500 | 97·0 | 226 |
| 344 | 23 | 145 | 200,500 | 103·5 | 218 |
| 345 | 26 | 142 | 196,000 | 108·0 | 218 |
| 346 | 23 | 44 | 60,500 | 104·0 | 138 |
| 347 | 29 | 172 | 238,000 | 110·4 | 251 |
| 348 | 30 | 170 | 235,000 | 108·2 | 250 |
| 349 | 36 | 158 | 218,000 | 102·4 | 244 |
| 350 | 28 | 170 | 235,000 | 110·0 | 248 |
| 351 | 29 | 166 | 229,500 | 109·0 | 245 |
| 352 | 31 | 197 | 272,000 | 111·0 | 278 |
| 353 | 29 | 195 | 269,500 | 109·5 | 274 |
| 354 | 33 | 188 | 260,000 | 111·0 | 271 |
| 356 | 34 | 192 | 265,500 | 108·0 | 276 |
| 357 | 29 | 199 | 275,000 | 112·0 | 278 |
| 358 | 29 | 206 | 285,000 | 110·0 | 285 |
| 359 | 32 | 201 | 278,000 | 111·0 | 283 |
| 360 | 32 | 183 | 253,000 | 108·0 | 265 |
| 361 | 33 | 157 | 217,000 | 107·5 | 240 |
| 362 | 29 | 159 | 220,000 | 108·0 | 238 |
| 385 | 30 | 157 | 217,000 | 106·0 | 237 |
| 386 | 27 | 172 | 238,000 | 108·0 | 249 |
| 387 | 22 | 167 | 230,500 | 109·0 | 239 |
| 388 | 32 | 158 | 218,000 | 105·0 | 240 |
| 389 | 31 | 147 | 203,000 | 105·0 | 228 |
| Average | .. 29·68 | 163·59 | 226,073 | 107·2 | 245 |

# APPENDIX No. 7.

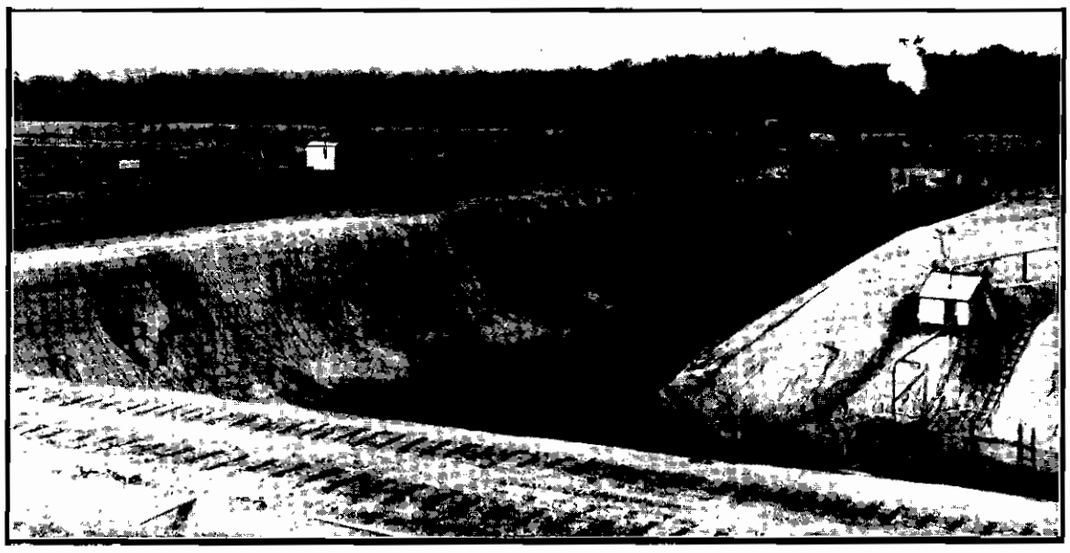
## PHOTOGRAPHS OF COMMISSION'S OPERATIONS.



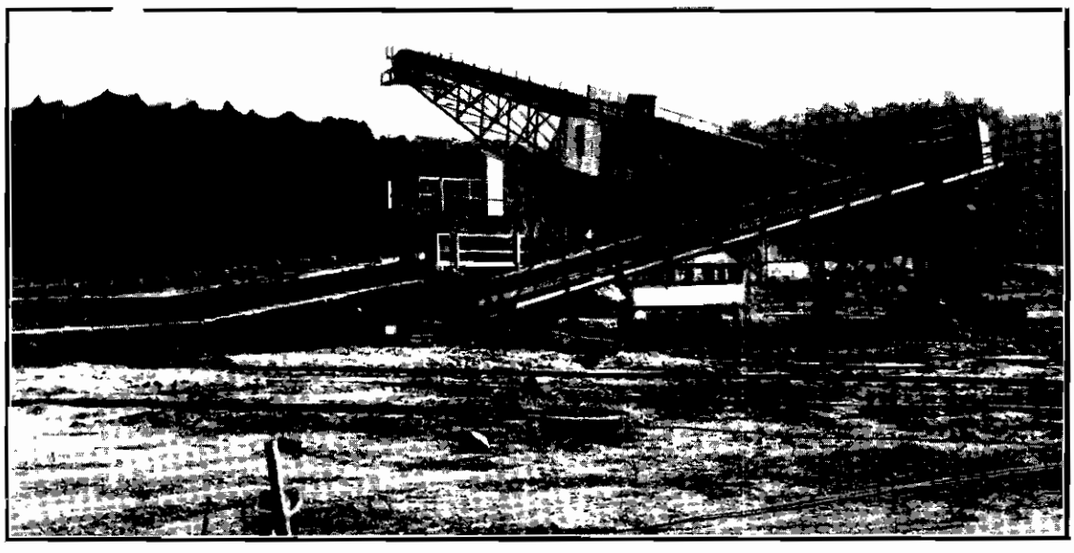
1. The Site of the Main Power Station. Central Workshops appear on the left of the Station Site.



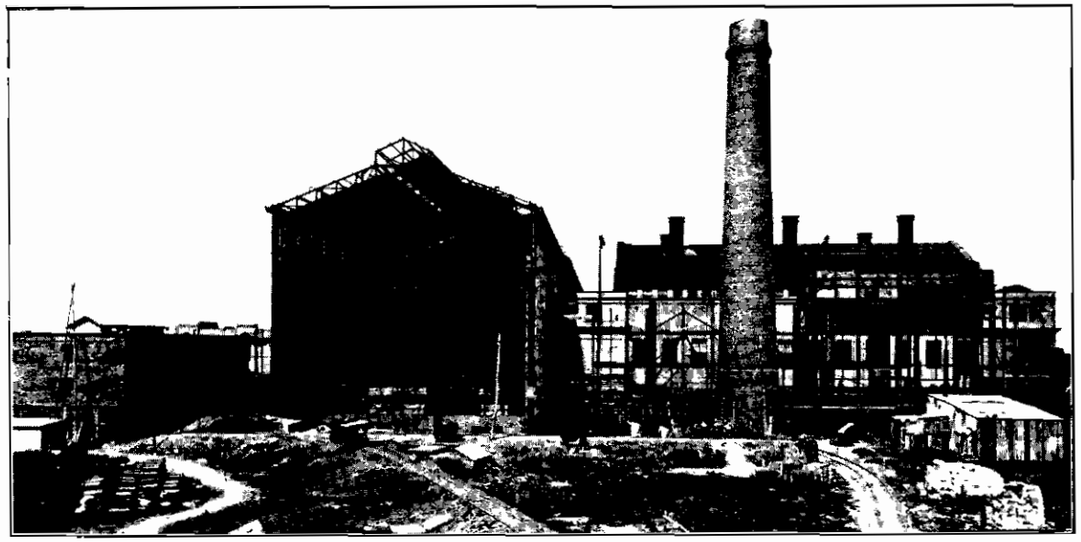
2. Yallourn Township Typical Street View.



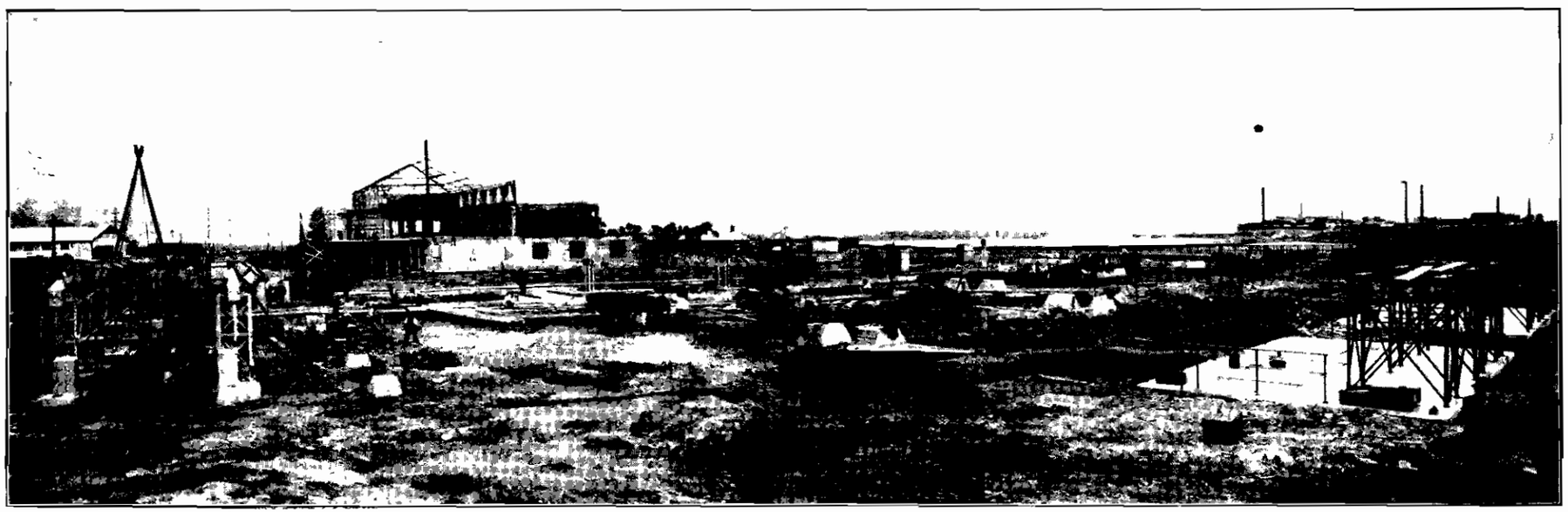
3. Yallourn Open Cut—Removal of the Overburden.



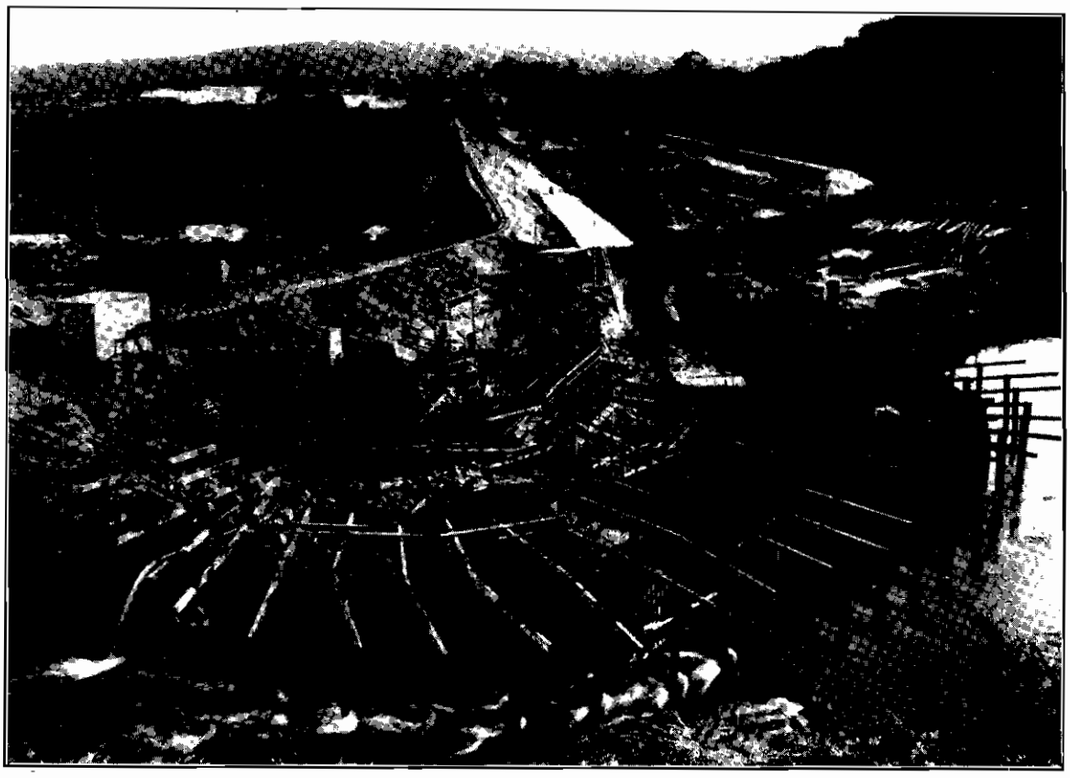
4. Yallourn Open Cut– Overburden Stacker and Dump.
This apparatus is the continuation of the Belt Conveyor appearing in Figure 3.



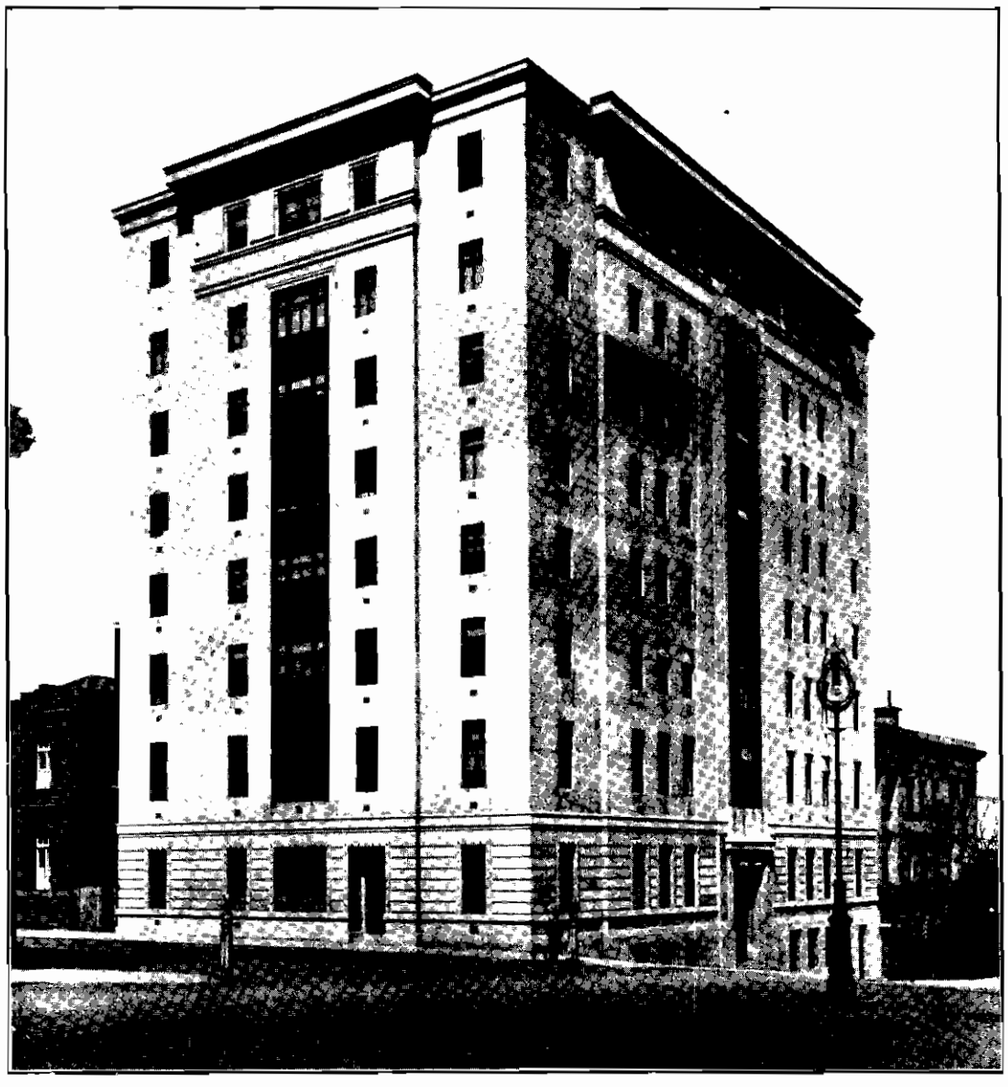
5. Newport "B" Power Station Turbine House in centre of the Picture, with Boiler House on the right. The Switch House appears on the left.



6. Yarraville Terminal Station.



7. Weir on Latrobe River.

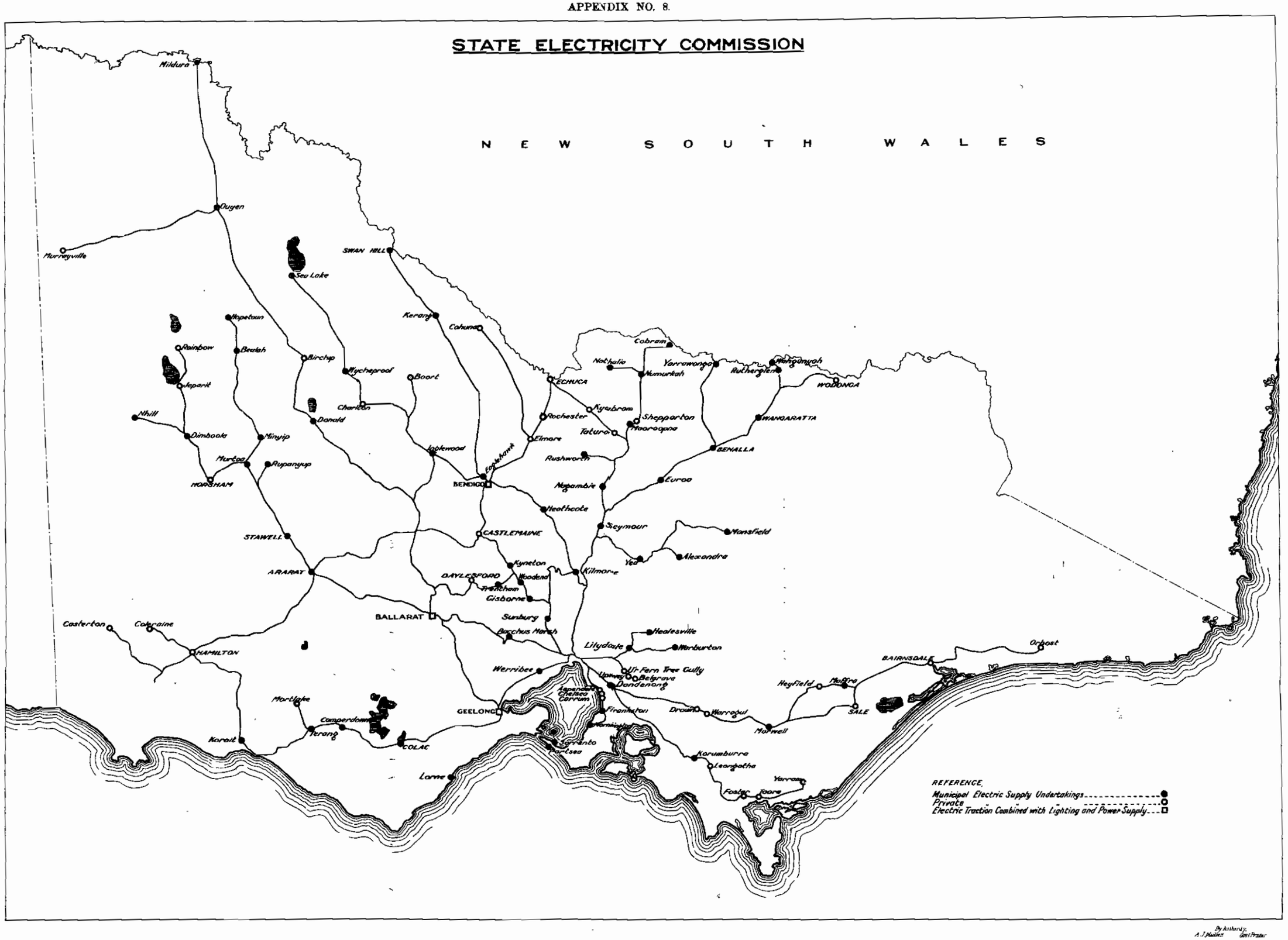


8. The Head Office Building in William Street, Melbourne.

By Authority: ALBERT J. MULLETT, Government Printer, Melbourne.

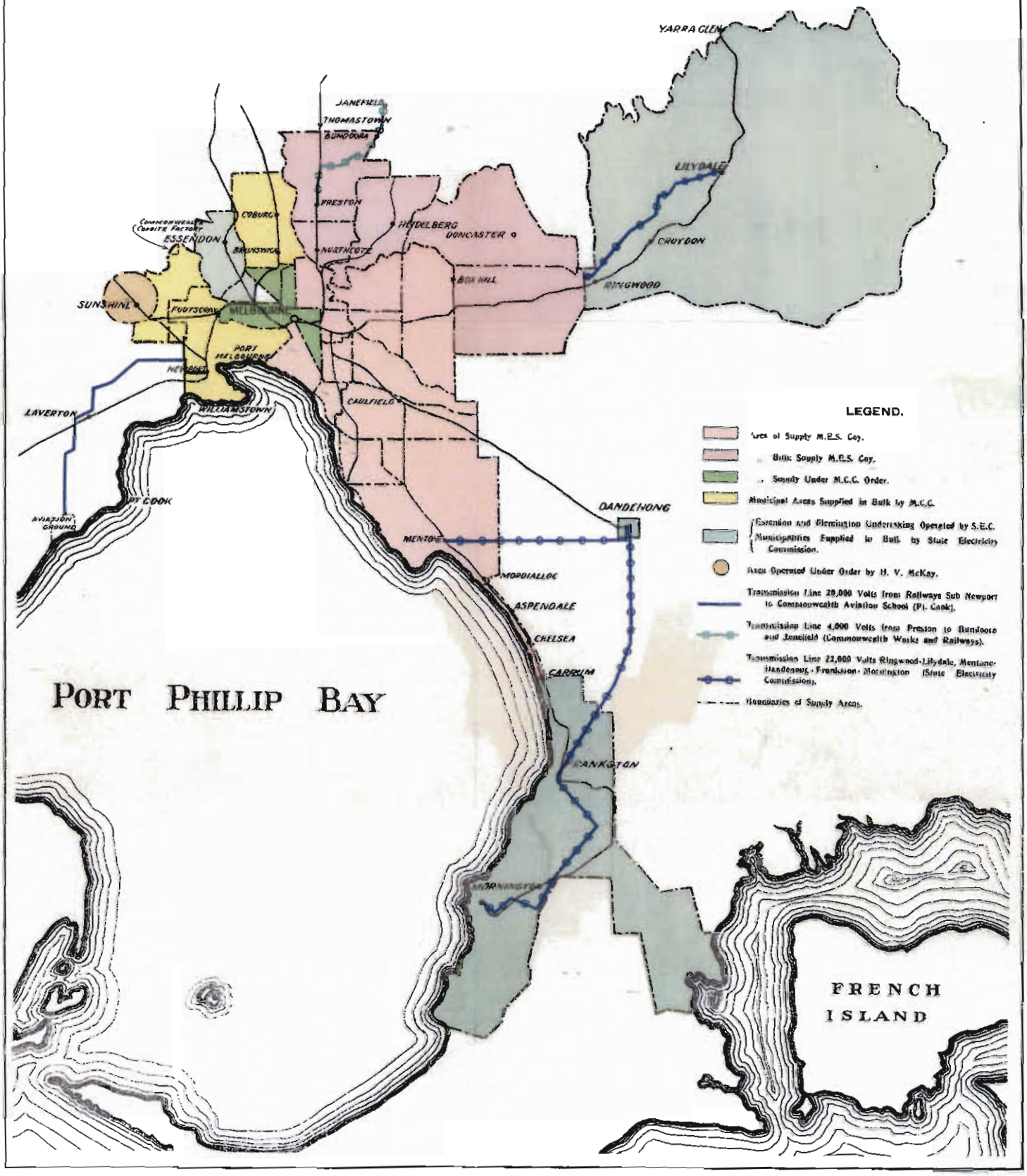
APPENDIX NO. 8.

# STATE ELECTRICITY COMMISSION




By Authority:
A. J. Mullett, Govt. Printer

# STATE ELECTRICITY COMMISSION




By Authority
A. J. Mullett Government Printer