

1920.  
VICTORIA.

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# ELECTRICITY COMMISSIONERS.

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## R E P O R T

FOR THE PERIOD

7<sup>TH</sup> MARCH, 1919, TO 30<sup>TH</sup> JUNE, 1920;

TOGETHER WITH

## STATEMENT OF ACCOUNTS.

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*[Approximate Cost of Report.—Preparation—Not given. Printing (500 copies), £8.]*

*By Authority:*

ALBERT J. MULLETT, GOVERNMENT PRINTER, MELBOURNE.

No. 14—[6D.]—20160.

Electricity Commissioners,  
673 Bourke-street, Melbourne,  
27th November, 1920.

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

Sir,

Pursuant to section 25 (b) of the Electricity Commissioners Act of 1918 (No. 2996), we beg to submit herewith our report for the period from the 7th March, 1919, to the 30th June, 1920, together with statement of accounts showing expenditure during the same period.

The *Electricity Commissioners Act* 1918 received the Royal Assent on the 7th January, 1919, and pursuant thereto, and by an order of the Governor in Council, dated 4th March, 1919, the following Commissioners were appointed :—

Professor T. R. Lyle, M.A., Sc.D., F.R.S.  
The Honorable George Swinburne.  
Alex. McKinstry, Esq.

The same order appointing Professor T. R. Lyle as Chairman.

On the 10th July, 1919, Mr. A. McKinstry resigned his office, and by an order of the Governor in Council, dated 26th July, 1919, Mr. Robert Gibson, C.B.E., was appointed to the vacancy.

#### THE DUTIES OF THE COMMISSIONERS.

The duties imposed on the Commissioners by Act 2996 may be divided broadly into two main sections as under :—

1. The control of the generation, supply, and use of electrical energy throughout the State ; and
2. (a) the investigation of possible sources of power ;  
(b) the exploitation and development of any such sources of power supply selected.

These duties are dealt with in detail as under :—

#### 1. CONTROL OF GENERATION, SUPPLY AND USE OF ELECTRICAL ENERGY THROUGHOUT THE STATE.

##### 1. Administration of the " *Electric Light and Power Act* 1915 " (No. 2465).

Section 9 of Act No. 2996 directs that the Electricity Commissioners shall administer the *Electric Light and Power Act* 1915 (No. 2465), and routine matters in connexion therewith have been continually dealt with during the period under review.

Six new orders of the Governor in Council authorizing the carrying out of electrical undertakings in stated areas have been issued during the period. Four of these were issued to Municipal Councils and two to Companies. The attached statement gives particulars of these Orders.

In addition to these new Orders in Council applications have been made by electrical undertakings throughout Victoria for authority to amend their charges, and statement attached gives particulars of cases where increases have been granted after careful consideration of the financial position of the undertaking concerned.

It has been noticed with some concern that a number of the small country electrical undertakings have been finding it increasingly difficult to carry on their operations without incurring financial loss, this undoubtedly being largely a consequence of the present abnormal conditions in regard to cost of fuel and materials combined with increased wages costs. This aspect of the electrical situation of Victoria is receiving the consideration of the Commissioners, and will be further and more particularly referred to in a subsequent report.

##### 2. Licensing of Wiremen.

Pursuant to section 6 of Act 2996, rules for the licensing of wiremen were approved by the Governor in Council on 23rd March, 1920, and came into force on the 1st April, 1920.

These rules provide for three grades of licences, viz., " A," " B," and " C " grades. An " A " grade licence entitles the holder to carry out electric wiring work on his own account, but the holder of a " B " grade licence must work under the supervision of the holder of an " A " grade

licence. "C" grade licences are issued to individuals under the age of 21 years who are engaged as apprentices or improvers, and the holders of these licences must work only under the continuous supervision of the holder of either an "A" or a "B" grade licence.

The object of these rules is that only competent skilled workmen shall be employed on electrical wiring installations. The rules provide a period of six months in which men at present employed on wiring work may, on application, and under certain conditions as to experience and competency, be issued with licences without examination.

On and after the 1st October, 1920, no licences will be issued except by examination, with the exception that provision is made for granting licences to returned soldiers without examination where it is considered equitable to do so. Also, in the discretion of the Commissioners, an applicant may be exempted from examination upon satisfactory proof that he has passed an equivalent examination held by an approved body, or who may hold a licence of another State, provided that the Commissioners are satisfied with the system of licensing in that State.

To insure proper consideration of the applications under the rules for licences without examination, a committee was appointed to carefully investigate the applications received, and the following gentlemen very kindly consented to act on that committee:—

Mr. C. S. Willers, Inspector of the Fire Underwriters' Association of Victoria.

Mr. W. Cuming, Electrical Contractor.

Mr. G. Henderson, Secretary of the Electrical Trades Union of Australia.

These gentlemen are now engaged in the consideration of the large number of applications being received.

## 2. (a) INVESTIGATION OF POSSIBLE SOURCES OF POWER.

Pursuant to section 10 (1) of Act 2996, which states that—

"The Electricity Commissioners shall as soon as practicable prepare and submit to the Minister a scheme with all necessary plans, specifications, estimates, and particulars for a coal-mining and electrical undertaking to be undertaken by them in the neighbourhood of Morwell and the distribution of electricity therefrom, and also a report setting forth the results of an inquiry by them into the relative practicability of utilizing water power for electrical undertakings, with estimates of cost of any scheme or schemes suggested, and for that purpose may make all such surveys, explorations, and investigations as they think necessary or expedient."

The main endeavours of the Commissioners have been directed to the investigation of alternative schemes to provide an adequate supply of cheap power to the metropolitan area as a first step in the inauguration of a State supply of electrical energy.

The results of that investigation were collected in a report on "The Utilization of Brown Coal and Water-power for the Production of Electrical Energy." This report was submitted to the Minister on the 26th November, 1919, and thereupon presented to both Houses of Parliament in accordance with Act 2996.

*Morwell Scheme.*—The Electricity Commissioners' report above referred to recommended that the scheme submitted with that report for "The Utilization of Brown Coal and Water-power for the Production of Electrical Energy" be immediately proceeded with.

This recommendation was adopted by the Government and approved by Parliament, which thereupon passed the *Electricity Supply Loan Act* 1919 (No. 3029) to provide the necessary moneys required for the purposes of the scheme for the year ending 31st December, 1920. On that authority the Commissioners have since pushed on with the inauguration of the scheme as outlined in the report, and a great deal of preliminary work has been done in connexion therewith.

*Acquisition of Land.*—Under the power given in Act 2996 and the *Lands Compensation Act* 1915 (No. 2678) an area of 3,166 acres 3 roods 2 perches of land in private ownership has been acquired at Morwell for the purpose of the scheme, and negotiations for settlement of claims are now in progress.

Preliminary inquiries in regard to land for Terminal Station and Sub-stations in the metropolitan area are being conducted.

*Coal Winning.*—The Morwell scheme, primarily, was designed for the production of electrical energy from brown coal at as early a date as possible. That date is largely dependent on the ability of manufacturers to supply the very large units of electrical plant which will be required. Owing to the acute situation in regard to fuel supply, however, the Electricity Commissioners have come to the conclusion that it is a vital necessity to endeavour to make provision to supply the fuel requirements of the State from raw brown coal. With this object in view, efforts have been directed to insure the opening up of the coal measures considerably in advance of power-house requirements, and all means are being taken to that end.

On inquiry it was found that some considerable time must elapse before certain large items of machinery required for coal winning would be delivered, and arrangements were therefore entered into with the Commonwealth Government for the loan of two Ruston-Proctor steam revolving shovels on order for them. The first of these shovels will be delivered in November and the second about a month later. It is hoped by this means and by expediting the delivery of subsidiary plant to be able to supply coal at a much earlier date than would otherwise have been possible.

In the meantime flood prevention works including levee banks and a complete system of drainage have been set out and the work is in progress.

*Electrical Plant and Equipment.*—The design of plant and the preparation of specifications have been engaging the full attention of the Commissioners' electrical engineering staff. The work is now well in hand, and arrangements have been made that tenders will be returnable in February next.

In addition to the final survey of the transmission line route which is in progress, bores are being put down on the power-house site to further determine the nature of the ground for foundation purposes. Sites of Terminal Station and Sub-stations in the metropolitan area are also being determined.

*Railway Facilities.*—At the request of the Honorable the Minister of Railways, the Chief Engineer for Railway Construction has submitted a preliminary report as to the best means to be adopted to provide railway facilities to the proposed works. This report indicated that even from a railway policy point of view it may prove the more economical course to divert the main Gippsland railway between Moe and Morwell, so as to pass the site of the proposed township and works. This suggestion is now being further investigated.

*Township.*—As indicated in the Electricity Commissioners' Report, 1918, the Commissioners have adopted the policy of providing suitable accommodation for the officers and workmen employed and to be employed at Morwell. In pursuance of this policy, arrangements have been made with the Public Works Department that the services of Mr. S. C. Brittingham, Chief Architect, and his expert staff shall be made available to plan and supervise the construction of the township. Progress is being made with the preliminary plans, and the design will embody the most modern practice. A good water supply is available and a proper sewerage system will be installed, as will also electric lighting. Special attention is being paid to cheapness of construction, and in this connexion endeavours are being made to procure, as far as possible, the raw material from local sources. The stone and sand for concrete are available, and timber required for constructional purposes will also, very probably, be procurable in the vicinity.

#### WATER-POWER INVESTIGATION.

Although at the date of the Electricity Commissioners' Report, 1918, sufficient data had been collected to indicate that the power available from the Kiewa scheme was not sufficient to supply the needs of the metropolis in 1923, it was stated in that report that the investigations would be continued and a further report submitted at a later date, with estimates of working costs and capital expenditure. The necessary investigatory work was therefore pushed on during the summer season, and is now closely approaching completion. It is hoped to submit a comprehensive report thereon towards the end of the present year.

Towards the end of April last, the Commissioners paid a visit to the Kiewa District to acquaint themselves more fully with the local conditions, and opportunity was taken to meet several of the Municipal Councils in the North-Eastern District and ascertain their views in regard to electric-power supply.

In the meantime other possible sources of water-power are being investigated.

## ADMINISTRATION.

## OFFICE ACCOMMODATION.

One of the chief difficulties with which the Commissioners have been faced is the very limited office accommodation available. In view of the importance and magnitude of the duties intrusted to the Commissioners, early consideration will need to be given to the question of obtaining suitable accommodation, and, due to the scarcity of vacant office space in Melbourne, present considerations point to the necessity of erecting a separate building for that purpose.

## STAFF.

The principal appointments made during the period under review are as follows :—

Mr. R. Liddelow, Secretary.

Mr. H. R. Harper, Chief Engineer.

Mr. J. M. Bridge, Engineer-in-Charge of Coal Winning.

In addition, Mr. A. G. M. Michell, M.C.E., has been engaged as Consulting Hydraulic Engineer, and Mr. Lindesay C. Clark, C.E., as Consulting Engineer for Coal Winning.

We have the honour to be,

Sir,

Your obedient Servants,

THOMAS R. LYLE, Chairman.

GEO. SWINBURNE, Commissioner.

R. GIBSON, Commissioner.

R. LIDDELOW, Secretary.

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# INCREASES IN PRICE AUTHORIZED BY THE COMMISSIONERS.

(7TH MARCH, 1919, TO 30TH JUNE, 1920.)

Undertaker.	Existing Price.	Proposed Charge.	Decision.
Karkaroc Shire .. ..	10d. per unit ..	1s. 2d. per unit ..	Approved.
Dimboola Shire .. ..	Lighting, 9d. per unit	10d. " ..	"
	Power, 4d. per unit	5d. " ..	"
Wycheproof Shire .. ..	9d. per unit ..	1s. " ..	Approved, position to be reviewed in twelve months.
Boort Butter Factory ..	9d. " ..	1s. " ..	Approved, position to be reviewed in two years.
Tungamah Shire .. ..	8d. " ..	1s. " ..	" " " "
Yarrawonga Shire .. ..	9d. " ..	1s. " ..	" " " "
Donald Shire .. ..	Minimum charge up to 5 units per month, 3s. 4d., and for each unit over 5 and under 19, 8d. per unit		Approved.
Birchip Electric Supply Co. ..	Lighting, 9d. per unit	1s. per unit ..	"
	Power, 6d. per unit	9d. " ..	"

# NEW ORDERS APPROVED BY THE COMMISSIONERS.

(7TH MARCH, 1919, TO 30TH JUNE, 1920.)

Order Issued to—	Area.	Maximum Charge.	
		Lighting.	Power.
Municipalities—			
Bacchus Marsh .. ..	Townships of Bacchus Marsh, Maddingley, and Darley	1s. per unit	..
Colac Shire .. ..	Town of Colac and adjacent territory .. ..	8d. " ..	5d. per unit
Healesville Shire .. ..	Portion of the shire of Healesville, including the township of Healesville	10d. " ..	..
Heytesbury Shire .. ..	Township of Cobden and adjacent territory ..	1s. " ..	6d. per unit
Companies—			
River Latrobe Hydro-electric Co.	Parishes of Noojee East, Neerim, Nayook, and portion of the parishes of Neerim East and Jindivick in shire of Buln Buln, parish of Drouin East, and portion of the parishes of Darnum and Warragul in the shire of Warragul	1s. " ..	..
Sale District Co-op. Butter and Cool Storage Co. Ltd.	The borough of Sale .. ..	9d. " ..	..

## ELECTRICITY COMMISSIONERS—STATEMENT OF ACCOUNTS.

EXPENDITURE UNDER ESTIMATES, 1ST MAY, 1919, TO 30TH JUNE, 1920.

EXPENDITURE UNDER ESTIMATES, 1ST MAY, 1913, TO 30TH JUNE, 1920.

Dr.

Cr.

	£	s.	d.		£	s.	d.	£	s.	d.
To Salaries .. .. £7,017 2 3				By Treasury Account—						
„ Salaries — Electric Inspec- tor's Branch .. 933 0 0				1918-19—						
	7,950	2	3	Div. 69A-1 .. .. 589 1 0						
„ Fees of Chairman and Commissioners .. 1,359 15 0				„ 2 .. .. 362 19 11						
„ Office furniture and equipment, including fitting up offices, strongroom, and elec- trical fittings .. .. 2,872 8 2				Special Appropriation Act 2996, sec. 7 .. .. 325 10 0						
„ Library .. .. 168 13 11								1,277	10	11
„ Water-power investigations (including in- struments, £240 5s. 9d.) .. .. 4,991 10 5				1919-20—						
„ General expenses—				Div. 70-1 .. .. 6,828 12 5						
Postages and telegrams .. £86 9 1				„ 2 .. .. 13,258 1 2						
Printing and stationery .. 538 0 0				„ 2A .. .. 10 0 0						
Rents and rates .. 156 1 8				„ 3 .. .. 606 0 0						
Lighting and heating .. 60 16 9				„ 4 .. .. 1,050 0 0						
Travelling expenses (in- cluding Electric Inspec- tor's Branch) .. 455 14 8				Special Appropriation Act 2996, sec. 7 .. .. 1,034 5 0						
Advertising .. .. 204 18 7								22,786	18	7
Office expenses .. 371 9 2										
	1,873	9	11							
„ Inquiry and report on coal-winning at Fortuna, Germany .. .. 1,019 1 6										
„ Altona Bay investigations .. .. 606 0 0										
„ Brown coal experimental expenses .. 711 11 2										
„ C. H. Merz—Report on Morwell scheme, as presented to Parliament .. .. 1,050 0 0										
„ Preliminary work, Morwell, including survey Latrobe River and boring by Mines Department .. .. 892 1 10										
„ Preliminary survey—Morwell transmission line .. .. 569 15 4										
	24,064	9	6					24,064	9	6

## ELECTRICITY COMMISSIONERS.

CAPITAL ACCOUNT AT 30TH JUNE, 1920.

Dr.							Cr.
		£	s.	d.	£	s.	d.
To Land—Valuation fee .. .. .		127	16	6	Capital authorized (Loan Act		
„ Buildings—Temporary accommodation,					3029) .. .. .	355,000	0 0
Morwell employees .. .. .		27	19	4			
„ Machinery and plant—Temporary and							
experimental steam plant .. .. .		1,499	13	11			
„ Preliminary expenses—							
Salaries, tea money, and							
overtime, Drawing Office							
staff .. .. .	£277	10	7				
„ Clearing weir site, Morwell .. .. .	23	19	7				
„ Boring power-house site .. .. .	73	9	0				
		324	19	2			
				1,980	8	11	
„ Balance of authority .. .. .				353,019	11	1	
				355,000	0	0	
						355,000	0 0

## RECONCILIATION WITH TREASURY BOOKS.

	£	s.	d.
Loan expenditure, as per Treasury books .. .. .	1,175	16	6
Accounts passed Electricity Commissioners' books—included in Treasury			
subsequently .. .. .	804	12	5
Expenditure as per Electricity Commissioners' books .. .. .	1,980	8	11

R. LIDDELOW,  
Secretary,  
Electricity Commissioners.

Audited and found correct—

J. A. NORRIS,  
Auditor-General.

19th November, 1920.