

FEDERATED MALAY STATES.

ANNUAL REPORT OF THE ELECTRICAL BOARD FOR THE YEAR, 1923.

BOARD MEETINGS.

1. During the year under review, the Board was composed of the following gentlemen:

Mr. J. Strachan, D.P.W. (Chairman)	...	...	January to July
Col. J. P. Swettenham, Ag. D.P.W. (Chairman)	...	...	August to December
Mr. P. A. Anthony, G.M.R.	...	...	January to December
Mr. G. E. Greig, Ag. S.W.M.	...	...	January to December

2. Fifteen meetings were held and in addition to routine management of electrical work, the following matters were considered:

- (a) Five applications for water rights to generate electricity.
- (b) Five applications for concessions to supply towns.
- (c) Matters connected with the proposed Perak River Hydro-Electric Scheme.
- (d) Negotiations for an increased supply to Ipoh from Pengkalen, Ltd.
- (e) Arrangements for the taking over of Seremban Electricity Supply.
- (f) Reorganization of technical staff.
- (g) Consideration of reduced rates to induce demand for electric power during the daytime.

3. During September and the concluding months of the year, the Board gave serious consideration to the needs of Kuala Lumpur and its existing plant, eventually deciding to recommend Government to install an entirely new, up-to-date, efficient and sufficient installation in place of the various types, Belliss Steam, Diesel and Steam Turbines at Gombak Lane Power Station, and the reconditioning of the Hydro-Electric Plant at Gombak.

The Board took advantage of the visit of Mr. Arthur Preece, senior partner of Messrs. Preece, Cardew and Rider, Consulting Electrical Engineers to the Crown Agents, Westminster, passing through Malaya and sought his advice. Mr. Preece was in entire accord with the views of the Board, considerably strengthening its case at an interview given to the members by the Hon. the Chief Secretary and the local unofficial members of the Federal Council during December.

The Board's recommendations entailed an expenditure of not less than \$2,000,000, and provisional approval, subject to confirmation by the Federal Council at its January session, was given before the close of the year.

4. It will be observed from appendix "E" that the Kuala Lumpur installation produced a gross profit of \$188,980 during the year.

Ipoh installation, running only portion of the year, produced \$19,088 towards revenue account (appendix "H") which sum was insufficient by \$5,486 to meet charges under Sinking Fund Reserve and interest on capital. It is however beyond question that this plant will yield during 1924 and onwards a substantial nett profit.

STAFF.

5. The personnel was as follows:

Chief Electrical Engineer, P.W.D.	...	...	Mr. J. C. M. Matthews
Chief Electrical Inspector, F.M.S.	...	...	Mr. D. M. W. Hutchison
Executive Electrical Engineers	...	...	Mr. L. V. Fox
			Mr. E. A. Corbin
Assistant Electrical Engineers	...	...	Mr. J. E. Catt
			Mr. H. R. Sparrow
			Mr. W. G. Hamilton
Station Foremen	...	...	Mr. B. F. Lewin
			Mr. J. R. Hannaford

Mr. A. W. Every was appointed to the post of Secretary and Accountant to the Board as from the 1st May, 1923.

Owing to shortage of staff all officers have had a very considerable amount of extra work to carry out, but each has risen to the occasion in a very commendable manner.

POWERS AND FUNCTIONS.

6. The powers and functions of the Board were definitely laid down by Government during December, the Board being strengthened by the inclusion of the State Engineers of Perak, Selangor and Negri Sembilan.

KUALA LUMPUR SUPPLY BRANCH.

A.—GENERATING PLANT.

(i) *New Works.*—Work continued on the new steam turbine plant. The cooling ponds, induced draught fan house and river pump house were completed, auxiliary motors wired up and main cables run from generators to switchboard.

The condenser basement was finished and, after tests and minor adjustments, both sets were in regular commission by April.

The fitting of chain-grate stokers to old boilers, Nos. 3 and 4, was commenced but not quite completed by the end of the year. Considerable re-arrangement of switchgear was carried out departmentally to enable more efficient operation of the plant.

The cooling pond area was fenced in and the lorry and motor-car shelters re-arranged.

(ii) *Maintenance.*—The fitting of chain-grate automatic stokers to the boilers has resulted in improved combustion which is shown by almost total abolition of smoke and reduction in the coal bill.

After the minor difficulties inseparable from starting up new plant had been overcome, the steam turbines operated satisfactorily and were fully loaded at the end of the year. They ran 1,308 hours, generating 311,987 units.

The Belliss vertical steam set ran 2,188 hours generating 366,114 units and has run smoothly, as have the various auxiliary items on the works.

The Diesel engines have been run regularly with the exception of one alternating current set, which was completely stripped for overhaul. This was done departmentally and, though taking some time, the cost was extremely moderate.

No serious failures on load occurred but there were five minor stoppages, three of which were due to fuel valves and one each to an air valve and the governor gear.

The staff have carried out, departmentally, arrangements which permit the running in parallel of various A.C. units in Kuala Lumpur and at Ulu Gombak. This has effected considerable reduction in coal consumption.

Total hours run were 6,381.20 and units generated amounted to 718,782.5.

In the hydro-electric section a heavy storm caused damage to the bye-pass, banks and weirs.

The turbines were overhauled and new nozzle plates fitted. Considerable attention has been paid to water control and several spillways on the flume have been raised with the result that both turbines have been run in parallel when water was available. All repairs were carried out departmentally.

Total hours run were 8,463 and units generated 1,466,046. This is an increase of 113,802 units over 1922 which is thought to be satisfactory, when the relative cheapness of water generated units is considered.

Stoppage of supply from this source totalled 297 hours, of which shortage of water accounted for 120 hours, lightning for 105 hours, repairs to flume, etc., 42 hours and repairs in station 30 hours.

B.—MOTOR GENERATORS, KUALA LUMPUR.

These are only used during the daytime in connection with the hydro-electric plant or on peak load in case of emergency as they are of considerable age.

They ran 6,820 hours and produced 358,940 direct current units from high tension A.C.

C.—TRANSFORMER SUB-STATIONS, KUALA LUMPUR.

These are heavily loaded up—even overloaded—but the only actual failures have been three, all due to lightning.

D.—COSTS.

These are dealt with in appendix "E".

E.—METERS.

Four hundred and nineteen meters were brought in for detailed inspection and overhaul. Nine of these were found to be beyond repair. At the close of the year there were still 215 consumers charged on an average rate partly owing to late arrival of meters and partly owing to the number of new consumers exceeding the estimate.

It was also difficult to foresee the number of each size of meter needed and whether most applications would be for direct current or alternating current.

In addition to actual meter work this branch carries out repairs to electrical apparatus for the medical and other departments and charges accumulators.

F.—MAINS (OVERHEAD).

(i) *Construction*.—Three thousand four hundred and one yards run of new mains were erected, while on 4,601 yards alterations and improvements were effected. One hundred and sixty-six new services were also put in. The extensions were at Circular Road, New General Hospital, Penang Road, Kia Peng Road, Temple Road and Chan Ah Thong Street.

Alterations were in Imbi Road, Bluff Road, Venning Road and Batu Road from Sentul to Pahang Road.

Total length of overhead mains was approximately 49 miles at the close of the year.

(ii) *Maintenance*.—Storms caused interruptions to supply owing to falling trees, but a vigorous tree lopping campaign was instituted during the year with the aid of the Sanitary Board, and it is hoped that less inconvenience and, what is even more important, less danger to the public will result. It must never be forgotten that any trees in the neighbourhood of overhead mains are a potential source of danger.

The alternatives are complete denudation of trees or the very expensive placing of all mains underground.

On the transmission line from Gombak there were four faults during the year, two of which were due to tree branches.

MAINS (UNDERGROUND).

(i) *Construction*.—A distributor 91 yards long was laid in Yew Swi Guat Street and 26 yards in Rodger Street. A new feeder pillar was erected in Batu Road and sundry work carried out in connecting up the new turbo generators and in re-commissioning Bluff Road sub-station.

Total length of underground mains laid is now 19½ miles.

(ii) *Maintenance*.—There were 16 faults on cables during the year, of which eight were on house services, five on street lamp cables, two on feeders and one on a distributor.

Owing to the system of linking-in which is in operation, the stoppages of supply on the more important mains were of brief duration.

G.—STREET LIGHTING.

Four 1,000 c.p. half-watt lamps were installed in Batu Road, replacing bunches of smaller candle-power lamps, while in other important roads thirty 100 c.p. half-watt lamps replaced a similar number of 32 c.p. vacuum lamps, thus trebling the lighting at a very slight increase in current used and assisting in tapering off the degree of illumination when going from the centre of the town outwards.

H.—CONSUMERS.

After allowing for 14 Government and 10 private disconnections, the total number of consumers at 31st December, 1923, was 1,968, an increase of 408 for the year.

The total is composed of 383 Government and 1,585 private consumers, an increase of 24 and 384 respectively.

I.—GOVERNMENT QUARTERS AND BUILDINGS.

Thirty-eight new quarters and buildings were wired and three re-wired whilst 14 were disconnected. A good many alterations to wiring in offices and quarters were also carried out.

There are 782 fans maintained by the Board in Kuala Lumpur.

J.—STATISTICS.

The total number of units generated by all prime movers was 2,862,929, an increase of 538,129 units.

Units sold amounted to 2,238,878, an increase of 406,827.

Units used on works totalled 117,653, giving a figure for losses on transmission, transformation and distribution of over 17 per cent.

This is high, but is partly attributable to light load transformer losses owing to the small day load on sub-stations.

Financial results appear in appendix "E".

IPOH.

A.—COMPLETION OF INSTALLATION.

The overhead distribution system and sub-stations were completed and supply commenced in May.

B.—DESCRIPTION OF SYSTEM.

Current is bought in bulk at the power station of Pengkalen, Limited, at a pressure of 2,200 volts, 50 periods. It is stepped up for transmission to 11,000 volts by a bank of three single-phase oil-cooled transformers each of 150 K.V.A. capacity. From these, 160 yards of armoured cable leads to the 3 miles of transmission line which consists of bare copper wires carried on chengai poles. At Lahat Lane, armoured cable is taken underground to Hugh Low Street sub-station, 1,289 yards away, and a further length of 1,180 yards goes on to Cowan Street sub-station. Oxide film lightning arresters are fixed at each end of the overhead line. Each sub-station is equipped with two 200 K.V.A. three-phase oil-cooled transformers for stepping-down to the supply voltage and all switchgear is of modern cubicle type.

C.—MAINS.

Approximately 16 miles of distribution mains have been erected on concrete poles in the main streets; hardwood poles being used for light lines and house services.

D.—HARMONICS.

On starting up some difficulty was experienced due to the presence of third harmonics which caused surpressures and disturbance was also experienced on the local communication lines.

These have been mostly eliminated now but a few recommendations made by Mr. Preece remain to be carried out.

E.—STATISTICS.

At 31st December, 1923, the consumers connected were:

Government quarters and buildings	...	...	...	...	...	...	80
Private consumers	...	...	...	...	...	...	836
						Total	916

Units bought amounted to 284,218, and units sold 174,103, thus giving the high figure for transmission and transforming losses and units used on works of 39 per cent.

Steps are being taken to reduce these losses, the allocation of which has been rendered difficult by the burning out of instruments owing to the surpressures previously mentioned.

Power supply during the daytime is, at present, practically non-existent, only one 6 h.p. motor being connected. A scale of reduced rates has been approved with a view to encouraging a demand in this direction.

F.—GOVERNMENT QUARTERS AND BUILDINGS.

Eighty Government quarters and buildings were wired during the year by contractors under supervision by the Board's Engineers.

G.—STREET LIGHTING.

Twenty-five street lamps of 100 watts, two of 150 watts and one of 200 watts were installed in Lahat Road at the end of the year.

The clocks at the Birch Memorial and Anglo-Chinese School were also illuminated.

H.—FINANCIAL RESULTS.

Financial results are given in appendix "F".

SEREMBAN.

The contract with the United Engineers, Ltd., for operating this installation having been extended to 31st December, 1923, the Board only took over control as from midnight on that date.

TANJONG MALIM.

(a) This plant has operated with only a couple of minor stoppages. The set is not large enough for the future demands of the college, nor, with a single engine available, can a daytime supply be given for fans, etc.

(b) A meter was installed in February, and, adding an average for January, the total units generated were approximately 8,090. Cost of maintenance for the year was \$2,755. Generating cost exclusive of all capital charges was thus 34 cents per unit.

BATU GAJAH HOSPITAL.

(a) A new piston and liner were fitted in September. This plant has run particularly well considering that it is used for 20 hours per diem.

(b) Cost of maintenance for the year was \$3,621.

TAIPING HOSPITAL.

(a) The two Delco sets here have been kept going by continuous nursing on the part of the Board's Engineers. The cost of maintenance was \$7,679, an abnormally high figure. This plant is being replaced in 1924.

GOVERNMENT HOUSE, KUALA KANGSAR.

(a) The battery was overhauled but insufficient materials were available, extra plates ordered from England only arriving at the end of the year.

(b) Cost of maintenance for the year was \$2,978.

KLANG ESTANA.

(a) The Delco set here is in very poor condition and unless a general supply in Klang is available shortly it will have to be replaced; not only is it unreliable, but cost of maintenance is now excessive.

(b) Cost of maintenance for the year was \$2,022.

TAIPING RESIDENCY.

This has operated satisfactorily. Cost of maintenance for the year being \$798, exclusive of wages which were otherwise paid for.

INSPECTION BRANCH.

A.—INSPECTIONS.

One hundred and fifty inspections were made during the year, while numerous orders for alterations were made and duly carried out.

B.—LICENCES.

Two new public and two new private licences were issued during the year, several expired licences being renewed.

C.—CIRCULARS.

Circulars were issued by the Chief Inspector setting forth the scantlings of single and A poles required under Rule 5 (iii) of the Enactment.

D.—EXAMINATIONS.

The results of examinations were as follows:

Grade.	Passes.	Restricted certificates.	Failed.
1st Grade Engineers	—	1	—
2nd Grade Engineers	—	—	—
1st Grade Chargemen	5	3	2
2nd Grade Chargemen	5	42	8
Wiremen	20	4	15

In addition, two Engineers were registered as 1st Grade without examination; and the restrictions on two chargemen's certificates were removed.

E.—DISTRIBUTION OF PLANT SUBJECT TO THE ELECTRICITY ENACTMENT.

State.	No. of installations.	Kilowatts.
Perak	79	9,979
Selangor	30	3,129
Negri Sembilan	6	82
Pahang	4	2,715
Total for 1923	119	15,905
Total for 1922	106	11,876
Total for 1921	101	11,983

The above figures are for generating plant operated by prime movers only and do not include low voltage automatic or semi-automatic lighting plants.

F.—EMPLOYMENT OF ELECTRICAL PLANT SUBJECT TO THE ELECTRICITY ENACTMENT
IN KILOWATTS.

State.	Mining.	Agricultural.	General.	Government.	Total.
Perak	9,266	152	197	364	9,979
Selangor	2,786	67	181	95	3,129
Negri Sembilan	31	41	10	—	82
Pahang	2,705	10	—	—	2,715
Total 1923	14,788	270	388	459	15,905
Total 1922	11,273	282	256	65	11,876
Total 1921	11,316	338	264	65	11,983

G.—CLASSIFICATION OF ALL ELECTRICAL PLANTS IN THE FEDERATED MALAY STATES
IN KILOWATTS.

State.	Power K.W.	Light K.W.	Total K.W.
Perak	8,947	1,082	10,029
Selangor	4,372	4,020	8,392
Negri Sembilan	28	634	662
Pahang	2,650	65	2,715
Total 1923	15,997	5,801	21,798
Total 1922	11,314	4,684	15,998
Total 1921	11,509	3,215	14,724

A generating aggregate of 21,798 kilowatts was employed as follows:

Employment.	Power.	Light.	Total.
Mining	14,353	435	14,788
Agricultural	34	236	270
General	149	239	388
Government	1,477	4,875	6,352
	16,013	5,785	21,798

H.—ACCIDENTS.

Three fatal accidents due to contact with fallen wires and one serious accident due to a mistake in switching took place in Kuala Lumpur during the year.

The voltage in each case was 230 A.C.

In addition, one fatal accident occurred to a certified chergeman and wireman who was working, to save himself trouble, on a live switch.

The circuit voltage in this case was 650 A.C.

J.—REVENUE.

The revenue from all sources totalled \$2,571 classified as follows:

Inspection fees	\$1,303
Examination fees	580
Licence fees	140
Sale of danger plates and shock cards	548
	<u>\$2,571</u>

K.—REMARKS.

Since 1915, the capacity of generating plants in use in the Federated Malay States has increased from 10,575 to 21,788 kilowatts, or more than double.

The number of accidents during the year due to the falling of overhead wires is disconcerting and points to the advisability of taking preventive measures in places where there may be danger of falling wires due to the proximity of trees or other causes.

2nd May, 1924.

J. P. SWETTENHAM,
Chairman, Electrical Board, F.M.S.

APPENDICES.

The following appendices are attached :

- A. List of Electric Street Lights in Kuala Lumpur.
- B. Details of Votes and Expenditure, 1923.
- C. Kuala Lumpur Electrical Installation.
- D. Capital Account as at 31st December, 1923.
- E. Revenue Account for the year ending 31st December, 1923 (Kuala Lumpur Electrical Installation).
- F. Revenue Account for the year ending 31st December, 1923 (Ipoh Electricity Supply).
- G. Nett Revenue Account, 31st December, 1923 (Kuala Lumpur Electrical Installation).
- H. Nett Revenue Account, 31st December, 1923 (Ipoh Electricity Supply).
- J. General Balance Sheet as at 31st December, 1923.

APPENDIX A.

LIST OF ELECTRIC STREET LIGHTS IN KUALA LUMPUR
ON 31ST DECEMBER, 1923.

Fire Alarms (Red)	...	...	...	...	...	7 ×	8 c.p. Carbon Lamps
Clock Tower	...	...	...	...	...	24 ×	25 „ Vacuum „
Arc Posts	...	...	...	...	...	36 ×	32 „ „ „
Roads	...	...	...	...	...	912 ×	32 „ „ „
„	...	...	...	...	...	30 ×	100 „ Half-watt „
„	...	...	...	...	...	35 ×	1,000 „ „ „
„	...	...	...	...	...	22 ×	1,000 „ Brockie Pell Ares
„	...	...	...	...	...	30 ×	2,500 „ Excello „

IPOH.

Lahat Road	...	...	...	...	...	...	25 × 100 Watts
							2 × 150 „
							1 × 200 „

Birch Memorial Clock.

Anglo-Chinese School Clock.

APPENDIX B.

DETAILS OF VOTES AND EXPENDITURE, 1923.

Votes.	Provision.	Expenditure.	Balance.	Remarks.
	\$	\$	\$	
1. Personal Emoluments	120,290	102,966	17,324	Provision for additional staff not yet appointed
2. Temporary Allowances ... ..	...	15,048	...	
3. Other Charges, Annually Recurrent ...	312,100	205,093	107,007	This saving was due to the fact that Ipoh Electric Supply was in commission for only seven months; also to economical working and reduced costs
4. „ Special Expenditure ...	176	156	20	
5. Loan Expenditure, Kuala Lumpur ...	40,000	24,656	15,344	
6. „ Ipoh	75,000	71,763	3,237	
Total ...	547,566	419,682	142,932	} Works not completed

SUMMARY OF EXPENDITURE.

(a) Engineering and Administration	...	...	...	\$ 118,014
(b) Annually Recurrent	...	...	...	205,093
(c) Special Services	...	...	...	156
(d) Loan Expenditure	...	...	...	96,419
Total	...	...	...	<u>\$ 419,682</u>

APPENDIX C.

KUALA LUMPUR ELECTRICAL INSTALLATION.

Type of plant.	Hours run.	Units generated.	Works cost not including salaries.	Per unit generated, Cents.
			\$	
Steam Belliss	2,188	366,114	44,618	6.58
Steam Turbo	1,308	311,987		
Diesel	6,381	718,782	29,644	4.10
Hydro-Electric	8,463	1,466,046	13,739	.93
Totals ...	18,340	2,862,929	88,001	3.08

DISTRIBUTION.

	Units.	Revenue.
		\$
Central Workshops... ..	328,280	49,242
Other Railway Supplies	163,940	24,631
Government Buildings	217,823	40,570
Government Quarters	136,737	21,467
Private Consumers	1,037,818	204,502
Street Lighting	355,435	59,690
	2,240,033	400,102
Total Units Generated... ..	...	2,862,929
.. .. Sold	2,240,033	
.. .. Used in Station	117,653	
.. .. Lost in Transmission	505,243	
Transmission Losses... ..	...	17.66 per cent.

APPENDIX D.

CAPITAL ACCOUNT AS AT 31ST DECEMBER, 1923.

—	Value on 31st Dec., 1922.	Expenditure 1923.	Value on 31st Dec., 1923.	—	Value on 31st Dec., 1922.	Expenditure 1923.	Value on 31st Dec., 1923.
	\$	\$	\$		\$	\$	\$
KUALA LUMPUR INSTALLATION.				BY F.M.S. GOVERNMENT.			
HYDRO-ELECTRIC SECTION.				Kuala Lumpur account	970,235	201,923	1,172,158
				Ipoh account	211,112	71,354	282,467
1. Land	7,700	...	7,700				
2. Buildings... ..	9,200	...	9,200				
3. Dams and Flumes	201,300	...	201,300				
4. Power Pipe and Syphon... ..	32,100	...	32,100				
5. Generating Plant at Ulu Gombak	5,000	...	5,000				
6. Transmission Line	38,500	...	38,500				
OIL AND STEAM SECTION.							
7. Land	12,800	...	12,800				
8. Buildings... ..	55,923	4,747	60,671				
9. Generating Plant and Apparatus	158,550	2,816	161,366				
10. Turbo Plant and Equip- ment	182,658	142,768	325,426				
11. Mains, Feeders, Sub- stations, etc.	253,113	47,701	300,815				
12. Meters	4,591	3,890	8,481				
13. Motor Lorry	8,800	...	8,800				
IPOH INSTALLATION.							
1. Land	1,600	...	1,600				
2. Transmission Line	21,041	663	21,704				
3. Mains Distributors	88,875	28,339	117,213				
4. Sub-stations and Trans- formers	45,451	4,433	49,885				
5. High Tension Cables	19,512	2,370	21,882				
6. House Services ... ..	...	20,882	20,882				
7. Tools	4,954	317	5,271				
8. Electrical Instruments	12,388	306	12,694				
9. Meters	5,875	322	6,197				
10. Furniture and Fittings	129	57	186				
11. Street Lighting ... ..	...	272	272				
12. Salaries	10,115	11,799	21,914				
13. General Charges... ..	1,172	1,595	2,766				
Total ...	1,181,347	273,277	1,454,625	Total ...	1,181,347	273,277	1,454,625

APPENDIX E.

KUALA LUMPUR ELECTRICAL INSTALLATION.

REVENUE ACCOUNT FOR THE YEAR ENDING 31st DECEMBER, 1923.

Dr.	\$	\$		\$	\$	Cr.
A.—GENERATION OF ELECTRICITY.						
1. Coal and Fuel	39,127		1. By Sale of Current to :			
2. Oil; Waste and Engine-room Stores	6,487		Central Workshops ...	49,242		
3. Salaries	16,627		Other Railway Supplies ...	24,631		
4. Wages	44,914		Government Buildings ...	40,319		
5. Repairs and Maintenance of Buildings and Machinery (other than wages)	7,321		" Quarters ...	20,965		
		114,476	Private Consumers ...	204,465		339,622
			Sanitary Board :			
			Current supplied for Street Lighting ...	59,301		
			Cost of Maintenance of Street Lighting ...	20,380		79,681
B.—DISTRIBUTION OF ELECTRICITY.			2. Charging Accumulators ...	33		33
1. Salaries	15,038		3. Sale of Bulbs	723		723
2. Wages	29,988		4. Miscellaneous Revenue ...	1,812		1,812
3. Repairs and Maintenance of Mains and Meters and Sub-stations (other than wages)	8,060	53,086				
C.—PUBLIC LIGHTING.						
1. Wages	12,399					
2. Maintenance and Renewals ...	7,982	20,381				
D.—MANAGEMENT.						
1. Salaries	26,024					
2. General Charges	2,066					
3. Printing and Stationery ...	588					
4. Rent	479					
5. Steamer Fares on Leave ...	4,297	33,454				
E.—SANITARY BOARD COMMISSION.						
For collecting Revenue ...		11,234				
Bad debts written off ...		260				
TOTAL EXPENDITURE ...		232,891				
Balance transferred to Net Revenue Account ...		188,980				
		421,871				421,871

APPENDIX F.

IPOH ELECTRICITY SUPPLIES.

Revenue Account for the year ending 31st December, 1923.

	\$	\$		\$	\$
1. Purchase of Current ... ..	...	19,043	Revenue from sale of Current...	46,003	
			Sale of Lamps	152	
DISTRIBUTION.					46,155
2. Wages	2,999				
3. Repairs and Maintenance	439	3,438			
MANAGEMENT.					
4. Salaries	2,185				
5. General Charges	888				
6. Printing and Stationery	238				
7. Commission to Sanitary Board for collecting Revenue	1,275	4,586			
Balance transferred to Net Revenue Account ... ..	...	19,088			
		46,155			46,155

APPENDIX G.

KUALA LUMPUR ELECTRICAL INSTALLATION.

Net Revenue Account, 31st December, 1923.

	\$		\$
1. To Maintenance Reserve	20,000	By Balance brought forward from 1922 Account	30,185
2. „ Sinking Fund Reserve	64,800	By Revenue Account	188,980
3. „ Interest on Capital	58,608		
4. „ Balance carried forward	75,757		
	219,165		219,165

APPENDIX H.

IPOH ELECTRICITY SUPPLY.

Net Revenue Account, 31st December, 1923.

	\$		\$
1. To Sinking Fund Reserve	10,451	By Revenue Account	19,088
2. „ Interest on Capital at 5 per cent.	14,123	„ Balance Loss on seven months work- ing... ..	5,486
	24,574		24,574

APPENDIX J.

GENERAL BALANCE SHEET AS AT 31st DECEMBER, 1923.

LIABILITIES.		\$	ASSETS.		\$
1. To Capital Account as per Sheet No. I:			1. By Capital Account as per Sheet No. I:		
Kuala Lumpur		1,172,158	Kuala Lumpur		1,172,158
Ipoh		282,468	Ipoh		282,468
2. „ Sundry Creditors :			2. „ Stores in hand, Kuala Lumpur :		
Kuala Lumpur		5,609	Coal	\$ 539	
Ipoh		4,304	Liquid Fuel	944	
3. „ Maintenance Reserve, Kuala Lumpur		38,979	Maintenance—Stores and		
4. „ Sinking Fund Reserve :			Spares	108,616	110,099
Kuala Lumpur	\$113,609		3. „ Stores, Ipoh		4,767
Ipoh	10,452	124,061	4. „ Sundry Debtors for Current supplied,		
5. „ Net Revenue Account :			Balance outstanding 31st December,		
Balance Profit, K. Lumpur	75,757		1923 :		
Less loss Ipoh	5,486	70,271	Kuala Lumpur		45,553
			Ipoh		10,523
		1,697,850	6. „ F.M.S. Government		72,282
					1,697,850

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