

1923.

VICTORIA.

STATE ELECTRICITY COMMISSION.

WORKS EXECUTED OR AUTHORIZED UNDER "ELECTRICITY COMMISSIONERS ACT 1918."

RETURN to an Order of the House,

Dated 10th October, 1923, for—

A RETURN with respect to the work or works executed or authorized under the *Electricity Commissioners Act 1918* showing—

1. (a) The estimate of the works as set forth in the Commission's report submitted in the terms of the requirements of the Act ;
(b) The commitments in respect of such works ;
(c) The estimated cost of such works completed.
2. (a) The estimated cost of work consequential or additional to that specified in the above-mentioned report :
(b) The commitments in respect of such additional or consequential work :
(c) The estimated cost of such works completed.
3. The total cost incurred and estimate of all works authorized or necessary for the completion of such works.

(*Mr. Lemmon.*)

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STATE ELECTRICITY COMMISSION.

PART 1.

MORWELL SCHEME OF 1919 AS VARIED BY LATER DECISIONS ARRIVED AT IN 1920 AND 1921.

Section of Scheme.	A Estimate as per Commission's report of November, 1919.	B Estimate of <i>addi- tional</i> works on account variation.	C Total estimate of cost of the scheme as varied.	D Revised estimate of completed cost of works, including all additions.	E Difference between first estimate (C) and present estimates (D).
	£	£	£	£	£
1. Township at Works	150,000	..	224,360*	311,360	87,000
2. Briquetting	30,000 (This was for purely experi- mental purposes)	..	380,000*	438,000 (includes £50 for extra plant)	58,000
3. Opening up of Morwell Brown Coal- field	221,000	335,089	556,089	618,071	61,982
4. Electrical System (Power Station, Yal- lourn, transmission line and metro- politan distribution)	2,516,392	320,624	2,837,016	3,129,000	291,984
Total	2,917,392	655,713	3,997,465	4,496,431	498,966

NOTE.— *These schemes were authorized in 1921.

The original report of the Commission, dated November, 1919 (page 9), provided for—

“ Establishing a power house on the Morwell field of an initial capacity of 50,000 kw. with a transmission line to Melbourne and a terminal station thereat, as follows :—

	£
Power house and plant	1,442,927
Transmission line	323,102
Terminal station	226,755
	<u>1,992,784</u>

To distribute the bulk supply of energy from the terminal station to transform from 20,000 v. to 6,000 v. or 4,000 v., and make it available to the electric supply undertakings in the metropolitan area at the several sub-stations proposed to be established, would require an additional expenditure as follows :—

Melbourne distribution cables	£272,550
Melbourne sub-stations and equipment	251,058
	<u>523,608</u>

The total capital expenditure, therefore, on the electrical scheme is estimated .. 2,516,392

This does not include the expenditure necessary to open up the mine, estimated by Mr. Lindesay Clark at £221,000, which has been taken into account in arriving at the estimated cost, 2s. 3d. per ton, of winning the coal at Morwell. Interest on capital during period of construction has not been allowed for in the above estimates.”

As the scheme developed and conditions became defined it was found essential to make alterations, and, later, additions to the original conception. These alterations and additions are dealt with hereunder :—

1. *Township*.—The Commission's Report of November, 1919, although forecasting the necessity of providing a township for the accommodation of employees, did not actually include those works in the scheme, and it was not until the 15th December, 1921, that a report on the township was submitted to the Government and Parliament, and approved.

It was recommended in this report that, as a first step towards providing full accommodation, 200 dwellings and associated buildings be erected, together with the construction of necessary water supply, roads, streets, &c., all of which was estimated to cost £224,000.

The revised estimate of these works is £311,360. This is accounted for by—

- (1) Increased wages.
- (2) Higher cost of materials.

It is a matter of common knowledge that, since the date of issue of the Commission's Township Report, the cost of building work has increased enormously, due chiefly to the shortage of skilled labour in the building trades, and in a somewhat lesser degree to increases in cost of materials, including all classes of joinery and builders' fittings.

The extra cost involved is £87,000, and practically the whole of this additional amount can be regarded as a direct result of the excessively high wages which the commission found itself compelled to pay to all classes of building trades in order to attract even inexperienced tradesmen to the township works. The building programme as related to the town has been spread over a longer period than was anticipated, due entirely to this shortage of skilled labour with consequent increase in the cost of the work. The employment of this class of labour was the only course open to the Commission in the circumstances; in fact, had further delays ensued in the erection of the town, the very undesirable position would have arisen of the works being brought into commercial operation without sufficient accommodation available in the town for the Commission's permanent employees and their families.

2. *Briquetting*.—Similarly to the township, although the Commission's 1919 Report forecasted the necessity of erecting works for the production of brown coal briquettes, it was not until December, 1921, that Parliament, on the recommendation of the Commission, was asked to provide moneys for this purpose.

In the meantime, an officer of the Commission had been sent to England and the Continent to investigate and report; and, as a result of his inquiries, it was decided to proceed with the erection of a half-factory, having an estimated output of 390 tons of briquettes per day, at an estimated cost of £380,000. This estimate was based on German experience, and was supplied under conditions which rendered the making of detailed estimates out of the question. The opinion was then held, and is still adhered to, that, unless plant constructed by manufacturers of proved experience was utilized, the project could not be recommended. This condition could only be complied with by some few engineering firms in Central Europe, where conditions were at that time so uncertain that it was essential to place orders immediately to insure deliveries. The wisdom of the course taken has been amply proved by later events, but the first estimates, on revision, have been found to have been too low by an amount of £8,000, the total sum required to complete the first half-factory being thus £388,000.

In addition to this £388,000, an extra amount of £50,000 has been asked for to provide for the installation of two additional driers. This additional expenditure will not only insure greater efficiency in the operation of the plant, but will enable an increased output to be obtained.

3. *Opening up of Morwell Brown Coal-field*.—The scheme of coal-winning recommended by the Commission in 1919 on the advice of its Consulting Engineer, Mr. Lindesay C. Clark, provided for an output of 2,000 tons of coal per day at an estimated cost of £221,000, including £40,000 for preliminary removal of overburden. Later developments in regard to briquetting and the decision to erect the Newport "B" Power Station necessitated a revision of this scheme, and it became necessary to extend the scope of the coal-winning activities to meet the increased outputs so required, the probability being that within a few years an output of at least 6,000 tons a day will be called for, and, very possibly, later progressive increases on that tonnage. Recent developments in regard to the use of pulverized brown coal render it likely that these higher outputs will be required even sooner than anticipated.

Provision has consequently been made and expenditure incurred where necessary in the coal-winning plant to enable greatly increased outputs of coal to be obtained at a minimum expenditure, and without undue interference to ordinary operating conditions. Thus, the foundations for the storage bins and the foundations and buildings of the screening house need not be added to in order to cope with a tonnage of 10,000 tons daily.

In the transporting gear to the briquetting works the track work, trestle gear, and operating machinery are designed to meet, with slight alteration, the briquetting requirements up to an installation of two complete factories or four times the present installation; the only extra expenditure to be met being the replacement of the present ropes and motors by units of a larger size.

Existing railway sidings will meet all possible anticipated requirements.

Overburden removal plant now installed and in operation is capable of uncovering sufficient coal to keep well ahead of requirements up to a tonnage of 10,000 tons per day.

Steam and electric shovels for coal production, installed and on order, are capable of placing on the coal transport gear 5,500 tons per day of 16 hours.

And, in addition to all this, a system of underground tunnels has been driven at a cost of £15,000 to provide for the deep drainage of the coal measures now being laid bare.

It should be noted that the estimates prepared by Mr. Lindesay Clark, in common with the remainder of the Commission's original estimates, were based on the ruling basic wage in 1919, viz., 11s. per day. This rate, as stated elsewhere in this statement, has been considerably exceeded since the commencement of construction work, and to-day stands at 14s. 7d. per day.

4. *Electrical System (which includes Power Station, Yallourn, Transmission Line to Melbourne, and Metropolitan Distribution)* :—

1. *Estimate of additional works on account of variations of 1919 scheme*

The additional works necessitated by variations of the scheme are as follows :

(a) Installation of Driers at Yallourn Power Station	£33,624
(b) Erection additional 30 miles of main Transmission Line	148,000
(c) Erection in the Yarraville Terminal Station of frequency changer plant and of synchronous condensers of increased capacity	139,000
	<hr/>
	£320,624

The reasons which actuated the decisions to vary the original proposals are set out hereunder :

(a) *Installation of driers at Yallourn Power Station* £33,624

Owing to the percentage of moisture in the coal from the Commission's open cut being found to be greater than was assumed on the data available to the Commission in 1919 it was found necessary to install driers on the boilers at the Yallourn Power Station.

Experiments extending over a lengthy period have proved conclusively that, with the operation of driers, excellent steaming results can be obtained from the coal won from the Commission's open cut.

The Commission is strongly of the opinion that the installation of driers will not only increase the boiler efficiency to an extent which will fully justify this increased expenditure, but it will undoubtedly be the means of saving a larger expenditure which would otherwise have had to be incurred in installing additional boiler provision so as to deal effectively with the problems arising from the increase in the moisture content of the coal.

(b) <i>Erection of additional 30 miles of main Transmission Line</i>	£148,000
(c) <i>Erection of additional plant at Yarraville Terminal Station</i>	139,000

These two items are dependent upon each other, and for present purposes may be regarded as one.

The Commission has always anticipated the necessity of providing two separate and distinct lines from Yallourn to Melbourne, not only to definitely secure that factor of safety which is so essential, but also to provide sufficient means to carry the increased load due to the natural development in the demand for electric energy in the metropolitan area.

At the time of its 1919 report the Commission considered that the first of these transmission lines should be brought in to the city along the Gardiner Creek to a terminal station at Richmond. Later developments, however, made it clear that, unless the problems connected with the operations of the area controlled by the Melbourne Electric Supply Company were quickly solved, that area must be eliminated, or largely so, from the consideration of the best points at which to attack the metropolitan distribution of supply of energy from the Morwell scheme. In other words, the centre of demand, by the elimination of the Melbourne Electric Supply Company's area, was automatically shifted to the western areas of Melbourne, particularly having regard to the industrial importance of the Footscray, Williamstown, and surrounding districts. Accordingly, it became necessary to construct in the first stage, instead of the second, a transmission line round the north of Melbourne to Yarraville, thus increasing by 30 miles the length of the transmission line from Yallourn. The introduction of this feature has also met the position arising out of the decision to link the Newport "A" (Railway) Power Station to the State scheme, thereby assuring greater flexibility in the operation of the whole scheme.

Further, the maximum combined output of the power stations concerned can be increased as the result of this co-ordination, because the necessity no longer exists for providing the same proportion of standby plant as spares in each of the Stations, and thus additional generating plant is made available for service.

Apart from the evident advantages arising from the co-ordination of all State-owned Power Houses, the altered scheme provided ready means of dealing with the surplus 25 cycle energy available from Newport "A." While the Railways Commissioners had arranged to supply certain manufacturers with this particular form of energy, it was recognised that 25 cycle energy, which is designed primarily for traction purposes, is by no means as suitable for the ordinary power consumer as the standard 50 cycle energy. With the object, therefore, of converting energy from the Railways Power Station to a form more suitable for use by manufacturers in Footscray and Williamstown area, the Commission decided to install a frequency changer at its terminal station at Yarraville, thereby further increasing the cost of the original scheme by £129,000. The need to provide larger synchronous condensers in this Station, due to the additional length of line, required an additional expenditure of £10,000.

The manner in which the demand in the metropolis has developed has served to confirm in no uncertain manner that the Commission's action was the right one; and, in point of fact, if such decision had not then been arrived at the Commission would have before to-day been faced with the necessity of providing a transmission line to serve this area to be ready for operation by the time the Yallourn Power Station commences to operate.

Coupled with the decision to erect the Newport "B" Power Station, these extensions place the whole State scheme for electricity supply on a very sound basis, inasmuch as the extra works insure the linking of three State-owned stations, while the power stations provided in the Sugarloaf-Rubicon scheme will also later be linked in with the main scheme.

2. *The increase in the estimated costs as shown by comparison of the estimates of cost as per column (C) with the revised estimates in column (D) :—*

The increase in the estimate of the completed costs is shown by this comparison to be £291,984. This is due to four distinct factors—

- (i) Increase in basic wage since the preparation of the original estimates as appearing in the Commission's Report of November, 1919.
- (ii) Fluctuation in the prices of raw materials which was manifest all over the world, particularly at the time when the Commission was placing orders for plant for the scheme.
- (iii) The necessity for providing for possible extensions to the works, while the installation of the first generating plant is proceeding.
- (iv) The construction of items of general services such as railway sidings, stores, sewerage, &c., so as to provide not only for the first installation but for probable extensions to the works.

(i) It has been previously shown, in dealing with the coal supply activity, that the increase in wages paid to unskilled labourers (over the last four years) is no less than 27 per cent. The increases in wages paid to tradesmen over this period have been more than proportionate to the increase in the basic wage. Obviously, the exceedingly high rates of wages have been reflected in the costs of construction. The greatest proportion of the increased cost can be attributed directly to this factor.

(ii) The Commission succeeded in placing orders for a large percentage of the required plant at prices which showed no appreciable increase on the amounts provided therefor in the estimates; nevertheless, certain important items of the plant have cost more than the estimated prices.

Materials required for construction purposes were also seriously affected by this position, with consequent increase in construction costs.

(iii) In the layout of the power station certain appurtenances were so designed as to be capable of meeting an output of 150,000 kws., although the existing installation will have only one-third of this capacity. This applies particularly to the extensive circulating water system, which has been designed and constructed to meet the increased output mentioned. To have undertaken additional works of this nature, as and when the extensions to the station are authorized, would have only had the effect of increasing their cost, added to which there would be innumerable difficulties in the construction of the work, inasmuch as it could not then be carried out without interfering with the present installation.

(iv) As mentioned, the general services at the works have been constructed in such a way as to avoid, as far as possible, incurring further expenditure in this direction when extensions to the works are authorized. The costs of such works have, in common with the main construction works, been adversely affected by the increase in wages and the cost of materials.

PART 2.

WORKS AUTHORIZED AND IN HAND, ALL OF WHICH ARE DISTINCT FROM THE WORKS REFERRED TO IN PART 1.

(The whole of the Works are for Electricity Supply.)

Scheme.	Estimated Cost.	Estimated Completed Cost.	Remarks.
	£	£	
1. Newport "B" Power Station	800,000	800,000	Transfer line from Geelong to Warrnambool and branches to Cobden and Mortlake Branch lines to Queenscliff and Bellarine Shire, Winchelsea, Birregurra, Allansford, and Dennington; Cororooke and District
2. South-western District Scheme	116,000	116,000	
Additional Branch lines—South-western District	31,000	31,000	
3. Essendon-Flemington Undertaking			
(a) Acquisition	84,675	84,675	This does not include the tramways portion of the undertaking taken over by Tramways Board
(b) Extensions to reticulation	23,660	23,660	This is the expenditure up to 30th September, 1923
4. Gippsland Supply Scheme	114,500	114,500	Transfer line, Yallourn-Moe; Yallourn-Bairnsdale; Yallourn-Korumburra and Leongatha; Yallourn-Morwell
5. Sugarloaf-Rubicon Scheme	962,320	962,320	There are as yet no contracts entered into for this Scheme. The expenditure to 30th September, 1923, was £1,694
6. Supply to extra—			
(a) Metropolitan area	55,900	55,900	Includes transfer line Thomastown to Dandenong and lines for supply to Lilydale, Frankston, Mornington, and Dandenong
(b) Supply to Footscray and Williamstown area	30,000	30,000	Includes erection position 22,000 v. subsidiary line and works involved in giving bulk supplies in this area
7. Local Distribution undertaken by Commission—			
(Acquisition, extensions, change-over, and erection of new reticulation—)			
(a) South-western District	76,000	76,000	Supply in—Winchelsea, Birregurra, Colac, Cororooke, Alvie, Warrion, and Beeac; Camperdown, Terang, Cobden, Mortlake, Noorat, Warrnambool, Allansford, Dennington, Queenscliff, Peninsula, and Bellarine Shire
(b) Gippsland Scheme	45,700	45,700	Supply in—Moe, Trafalgar, Yarragon, Traralgon, Maffra, Sale, Tyers River District
(c) Acquisition of Dandenong Shire Undertaking	13,000	13,000	Supply in town of Dandenong
(d) Shepparton—Acquisition of Undertaking of India-Rubber C.P. and Telegraph Works	11,500	11,500	The commitment falls due when control of the undertaking is assumed in 1925
Total	£2,364,255	£2,364,255	

1. *Newport "B" Power Station.*—This station, the construction of which was recommended by a Select Committee of Parliament in December, 1920, was estimated to cost £800,000. While the station is practically complete, portion being, in fact, in operation, all payments have not yet been made. It is, however, clear that the financial result will be within a few thousand pounds of the estimate.

To insure the most economical working, arrangements have been entered into between the Electricity Commission and the Railways Commissioners whereby the latter are operating both stations under the one controlling staff.

2. *South-western District Scheme.*—Since the commencement of erection of the line from Geelong to Warrnambool, with branches to Cobden and Mortlake, as authorized by the Government in February, 1922, authority has been given for extending the benefits of the scheme to districts within reach of the main line of transmission, necessitating the erection of branch lines, which are estimated to cost £31,000.

The whole of the works involved in this scheme are not yet completed, and final costs are consequently not available. There is, however, no reason to anticipate any serious difference from the estimates.

3. *Essendon and Flemington Undertaking.*—The acquisition of this supply undertaking was authorized by Parliament on the advice of a Select Committee in December, 1922, the cost, excluding Tramways, being £84,675. Extensions to the reticulation system were estimated to cost £23,660, and this amount has been adhered to. Further extensions due to the regular growth of the demand will, in due course, require further expenditure, but it is not anticipated that any further loan moneys will be needed.

4. *Gippsland Supply Scheme.*—This scheme, which was estimated to cost £114,500, comprises transmission lines from Yallourn to Moe; Yallourn to Bairnsdale, supplying Morwell, Traralgon, Maffra, Sale, and smaller towns *en route*; and Yallourn to Leongatha and Korumburra. It is believed that these works can be completed for the amount estimated.

5. *Sugarloaf-Rubicon Hydro-electric Scheme.*—These works, as described in the Commission's Report of 6th September, 1922, and later authorized by Parliament on the recommendation of a Select Committee, are estimated to cost £962,320. No material variation in this estimate can be anticipated at this stage, though, as the construction period is to extend over some five years, rates of wages may vary considerably. The basic wage at present stands at 14s. 7d. per day, which is nearly 10 per cent. in excess of the rate used in estimating.

6. *Supply to extra Metropolitan Area and Footscray and Williamstown Area.*—The supply to the extra Metropolitan area includes a transmission line from Thomastown to Dandenong, with branches to supply Lilydale, Frankston, and Mornington, and which is estimated to cost £55,900.

The supply to Footscray and Williamstown includes the erection of portion of the 22,000 v. subsidiary line and works involved in giving supplies of energy in bulk in this area. Estimated cost, £30,000.

No variation of this estimate is anticipated.

7. *Local Distribution undertaken by Commission.*—This item includes the acquisition of existing undertakings, extensions and conversion of same, and the erection of reticulation systems in places where no previous supply had been given. Thus, supply is being arranged to all areas capable of being served from the transmission systems in the South-western District (including Bellarine and Queenscliff Peninsula) and Gippsland. In addition, agreement has been reached at the request of the Shepparton Council, with the private owners of the electrical undertaking at that place, for its acquisition when supply is available under the Sugarloaf-Rubicon scheme. There is no present reason to anticipate any variation in the estimates of costs given in the foregoing tabulated statement.

PART 3.

Those works or items of expenditure which have not been included in either Parts 1 or 2 of the tabulation but which have been authorized and are necessary for the completion of the works set out in the schedule (particularly for completion of works in Part 1) are summarized as follows:—

	Estimate. £	Expenditure to 30/9/23. £
(a) Interest during construction and certain expenditure debited to Commission under Government's instruction	600,000	234,000
(b) Provision of General Services	136,000
(c) Erection of Head Office Building, Melbourne	90,000	105,000

(a) *Interest during Construction, &c., £600,000.*—The decision of Parliament to debit the Commission with interest during construction and also with certain expenditure under Estimates related to the Commission's operations will have the effect of increasing the cost of the scheme as shown in Part 1 of schedule by not less than £600,000. The amount chargeable against the Commission is determined annually at 30th June and at 30th June, 1923, amounted to £234,000.

(b) *Provision of General Services, £136,000.*—The items of expenditure under this heading are—

1. Erection of 65-ton crane at No. 20 North Wharf.
2. Roads at Yallourn.
3. Land acquisition at Yallourn and for transmission lines.
4. Administrative Offices, Yallourn.
5. Brick and Tile Works, Yallourn.
6. Central Store and Dépôt at Footscray.

While some allowance for Items 2 and 3 was, of course, made in preparing the original estimates, the above-mentioned items, in effect, represent additional works found to be essential for the carrying out of the operations of the Commission.

The following comments take each item separately, and will serve to make clear the need for proceeding with these additional works:—

1. *Erection of 65-ton Crane.*—Mention was made in the Commission's Report of November, 1919, of the inadequate facilities available in the Port of Melbourne for the handling of heavy weights, and the bearing such a position would have in regard to the heavy parts necessary to be imported for the electrical side of the scheme was discussed. When the time arrived for the placing of orders for the plant representations were made to the Melbourne Harbor Trust through the Government for action to be taken to remove the 70-ton crane from South Wharf to a position lower down the river, but only after considerable pressure was brought to bear on the Harbor Trust, during which the Commission was placed in the position of having to promise to contribute towards the cost of the removal of the crane, was action taken in the direction of providing these improved facilities. The Commission's contribution amounted to £4,000.

2. *Roads at Yallourn.*—Whilst provision was made in the first estimate for necessary roads for the works as then conceived, the later decisions extending the scope of the operations at Yallourn and the further need of providing roads, which will not only serve present requirements but future extensions, involved the Commission in road construction on a scale not at first contemplated. Additional provision to the extent of £31,000 has, therefore, to be made to cover such road construction.

3. *Land Acquisition.*—This item was allowed for in the original scheme only to the extent of the power station area and the first open-cut—in all, an area of a little more than a square mile. In order, however, to insure that the brown coal areas adjacent to the works would always be available to the State, and to secure land in suitable positions for the briquette factory and the township the Commission acquired an area of 10 square miles, thereby obtaining on behalf of the Government full control and administration of the territory on which the works are situated to-day. This action, in addition to safeguarding a large brown coal-field to the State, has enabled the Commission to keep absolute control of the territory during the construction period. The additional amount required is £52,000.

4. *Administrative Offices, Yallourn.*—It has been necessary to provide suitable office accommodation for purposes of administration and the general clerical work associated with the many activities at Yallourn.

This expenditure calls for provision of £14,500.

5. *Brick and Tile Works, Yallourn.*—For the purpose of facilitating and cheapening construction works a brickworks with a capacity of 6,000,000 bricks per annum has been erected.

As an indication of the extent of the building operations on the works and in the town, it may be mentioned that the output from these brickworks up to date is 10,000,000 bricks. In comparison with the cost of Melbourne bricks delivered at Yallourn, the Commission is saving over £2 per 1,000 by manufacturing its own bricks at the site.

As experiments with local clays have shown that it is quite feasible to manufacture tiles on a commercial scale for use on houses in the township, steps are now being taken to establish a tile works.

The provision necessary to cover the expenditure for brick and tile works is £20,500, and it will be seen that this expenditure is fully reproductive.

6. *Central Store and Dépôt at Footscray.*—In view of the growth of the Commission's operations in the metropolis and the many schemes for country supply which it has been called upon to undertake it was necessary for a central store and construction dépôt to be established at Footscray. This store functions as a supply dépôt for those materials which are ordered in bulk.

A construction dépôt for transmission line erection and operation has also been erected at this site.

An amount of £14,000 needs to be provided to meet this expenditure.

It is to be noted that the amount of £136,000 represents the actual expenditure on these items, and as no extensions to these services are in contemplation, this amount will not be added to in any way.

(c) *Head Office Building, £105,000.*—The erection of these offices was, of course, essential for the proper carrying out of the operations intrusted to the Commission. The difference between the estimate and the completed cost is due in the main to additional fittings and extra work necessary over and above that for which the original estimates provided.

The position in relation to all works authorized to date is summarized in the appended statement :—

	Estimated Cost.	Estimated Completed Cost.
	£	£
Part 1.—Morwell Scheme as varied	3,997,465	4,496,431
Part 2.—Additional works for electricity supply (distinct from works in Part 1) ..	2,364,255	2,364,255
Works required to complete (details given in answer to Q. 3)	626,000	841,000
Grand Totals	£7,187,720	£7,701,686

Commitments.—If, by the term “ commitments ” is meant the amount estimated to be required to complete the whole of the works in hand, it is anticipated that an expenditure of £3,300,000 in addition to the expenditure up to 20th September, 1923, will be necessary to bring to completion those works which have been intrusted to the Commission as specified in Schedules 1, 2, and 3 in the foregoing statement.