TWELFTH ANNUAL REPORT

OF THE

ELECTRICITY SUPPLY BOARD

(Including Report on Shannon Fisheries.)

DUBLIN

1938-39

TWELFTH

ANNUAL REPORT

OF THE

ELECTRICITY SUPPLY BOARD

Year ended 31st March, 1939.

(Including Report on the Shannon Fisheries.)

(Presented to the Minister for Industry and Commerce in pursuance of Section 32 (1) and Section 7 (4) of the Electricity (Supply) Act, 1927, and Sections 17 and 18 of the Shannon Fisheries Act, 1935.)

ELECTRICITY SUPPLY BOARD.

Report and Accounts

YEAR ENDED 31st MARCH, 1939.

(Including Report on the Shannon Fisheries.)

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(Instituted Report on the Electricity Supply)

YEAR ENDED 31st MARCH, 1930.

Report and Accounts

ELECTRICITY SUPPLY BOARD.

REPORT

OF THE

Electricity Supply Board.

60-62 UPPER MOUNT STREET,
DUBLIN.

TO THE MINISTER FOR INDUSTRY AND COMMERCE.

In accordance with Section 7 (4) and Section 32 (1) of the Electricity (Supply) Act, 1927, the Board presents the Annual Report and Accounts for the year ended 31st March, 1939.

The balance carried down in the Profit and Loss Account amounts to £226,810, as compared with £195,952 in the previous year. In arriving at this figure provision has been made for depreciation, interest on capital, repayment of capital in respect of local authority liabilities, and for repayment of advances to the Minister for Finance to which reference is made later.

The following are the summarised figures of income and expenditure for the years ended 31st March, 1939, and 31st March, 1938, respectively :—

	Year ended 31st March, 1939.	Year ended 31st March, 1938.
	£	£
Gross Revenue	1,915,115	1,736,800
Working Expenditure (including depreciation)	1,029,149	954,064
Balance carried to Profit and Loss Account	885,966	782,736
Interest, repayment of advances, and discharge of Capital Liabilities acquired with Local Authority Undertakings	659,156	586,784
Balance ...	£226,810	£195,952

The year was marked by an unusual increase in the sales of electricity. The number of units sold exceeded that of the previous year by 50,798,471. This includes a large addition to sales through supply to the cement industry. Revenue from sales increased by £175,690 as compared with an increase of £140,440 in the preceding year. The reductions in prices for general lighting were not introduced until towards the close of the year, and have not therefore affected the income of the present year.

Excluding the increased provision for depreciation, working expenditure shows a growth of £60,085. Of this £23,588 was incurred on coal. The remainder is chiefly under the

heading of Distribution, and is consequent on development and the larger number of areas of supply.

The arrears of depreciation, which had accrued in earlier years in respect of renewable assets forming part of the transferred Shannon Works or created by the Board through advances from the Minister for Finance, have now been fully overtaken. In addition to the ordinary annual charge for depreciation of £230,000, a final sum of £100,000 has been allocated for arrears. The total amount available at 31st March, 1939, towards the replacement of wasting assets was, in consequence, £1,720,972.

The Board has been advised, as follows, by letter dated 15th March, 1939, of the determination of the Minister for Finance in regard to the repayment of advances in accordance with Section 14 (1) and Section 15 (4) of the Electricity (Supply) Act, 1927 :—

" (1) Advances outstanding on the 31st December, 1938, shall be repaid by half-yearly payments on the 1st July and the 1st January in each year, commencing on the 1st July, 1939, and continuing for a period of 50 years. Accordingly, an annuity shall be set up to provide for the repayment with interest of such advances within the period specified, the Sinking Fund portion of such annuity to be accumulated by half-yearly rests at 5 per cent. per annum rate of interest ; and

(2) Advances made in each calendar year subsequent to the year 1938 shall be similarly repaid in a period of 50 years, the 1st half-yearly payment to be made on the 1st July following the end of the calendar year in question."

Provision has, accordingly, been made in the accounts for a sum of £14,100 representing a moiety of the instalment falling due for repayment on 1st July, 1939.

The repayment of capital liabilities assumed from local authorities has been met by providing the required amount through the Profit and Loss Account. The total of such liabilities which had been discharged at the 31st March, 1939, was £558,976.

The Board considers that at this stage of the development of the undertaking provision of a substantial reserve for contingencies should be made, and has, accordingly, decided to allocate to such a reserve the nett surplus of £132,757 remaining at the 31st March, 1939. In coming to this decision the Board had in mind certain categories of expenditure in which, under unusual circumstances, fluctuations may occur within very wide limits.

The gross amount of additional capital investment for the year was £821,600 as compared with £751,812 in the preceding year. The capital expansion related mainly to extension of supply and to the steady growth in total demand which necessitated extensions of plant on generation and transmission systems. The following is an analysis of the year's capital expenditure :—

	£
Generation	206,555
Transmission	264,283
Distribution	307,806
Equipment, Transport, etc.	42,956
	£821,600

The aggregate capital expenditure at 31st March, 1939, was £14,647,513.

It will be observed that the form of the Electricity Revenue Account has been altered to show under the main heads of Generation, Transmission and Distribution, respectively, the appropriate amounts of the year's depreciation, and the expenditure for local supervision and administration. The amounts appearing under General Administration are thus confined to actual overhead expenditure of a general nature. The essential comparative figures of the preceding year have been inserted on this and other Accounts.

SALE OF ELECTRICITY AND NUMBER OF CONSUMERS.

The number of units generated and sold, the average price per unit, the revenue and the number of consumers for each of the ten years ending on 31st March, 1939, are shown in the following table :—

Year ended on 31st March	Units Generated	Units Sold	Revenue from Sales of Energy	Average Price in Pence per Unit		Total Consumers
				Generated	Sold	
			£			
1930 ..	60,947,775	43,177,228	478,006	1·88	2·66	48,606
1931 ..	119,842,716	85,500,494	735,302	1·47	2·06	69,045
1932 ..	151,843,717	110,677,196	938,933	1·48	2·04	78,511
1933 ..	166,076,275	120,098,523	1,044,475	1·51	2·09	83,052
1934 ..	185,383,327	138,503,130	1,149,681	1·49	1·99	91,267
1935 ..	206,105,570	156,964,146	1,258,388	1·47	1·92	103,037
1936 ..	244,098,692	187,015,590	1,429,888	1·41	1·84	116,704
1937 ..	284,117,500	218,758,085	1,584,433	1·34	1·74	130,483
1938 ..	314,477,200	244,460,235	1,724,873	1·31	1·69	145,230
1939 ...	377,637,400	295,258,706	1,900,563	1·21	1·54	160,382

Appendix I gives details of the number of consumers in each area in this year as compared with the previous year, and certain other particulars relating to supply. The total number of new consumers connected was 15,152.

AREA DEVELOPMENT.

The electricity undertakings at Kilrush, Kilkee, Castleblayney, Castlerea and Kingscourt were acquired. The following areas were connected to the national transmission network: —

Ballylongford.
Ballymore Eustace.
Bettystown-Laytown.
Castleblayney.
Castlemahon (or Mahoonagh).
Castlerea.
Cloncagh.
Daingean (or Philipstown).
Glin.
Kilkee.
Kilrush.
Mornington.
Newtownsandes.
Tarbert.
Timoleague.

ANALYSIS OF UNITS SOLD.

The following table gives an analysis of the units sold divided approximately amongst the various categories of supply, and indicates the progress made in these classes :—

Class of Supply	Units Sold		Increase	Percentage Increase
	Year Ending 31st March, 1939	Year ending 31st March, 1938		
Domestic	84,375,923	71,923,321	12,452,602	17·3
General Lighting	29,568,470	28,444,462	1,124,008	4·0
General Heating, Cooking and Water Heating	27,471,752	23,922,715	3,549,037	14·8
Motive Power	115,302,040	80,517,818	34,784,222	43·2
Public Lighting	14,237,480	12,871,464	1,366,016	10·6
Traction	18,939,445	22,557,240	(—)3,617,795	(—)16·0
Miscellaneous	5,363,596	4,223,215	1,140,381	27·0
Totals ...	295,258,706	244,460,235	50,798,471	20·8

DOMESTIC DEVELOPMENT.

Good progress continued to be shown in the sale of electricity for domestic purposes and increased consumption was maintained over the country as a whole. Exhibitions and demonstrations of domestic electric appliances in country towns were a special feature of the year's work.

The following table shows the progress in domestic consumption for the past six years :—

Year ended on 31st March	Units sold to domestic consumers	Increase in units sold over previous year
1934 ...	29,563,000	—
1935 ...	35,627,000	6,064,000
1936 ..	47,107,000	11,480,000
1937 ...	59,622,000	12,515,000
1938 ...	71,923,000	12,301,000
1939 ...	84,376,000	12,453,000

GENERAL LIGHTING.

The consumption of electricity for general lighting purposes showed an increase of 4%. In Dublin City the increase was 2½% ; over the remainder of the country it averaged 6¼%.

To foster public interest in improved standards of lighting, lectures and demonstrations were given in a number of the larger towns by the expert staff of the Board's Lighting Service Bureau. Appreciation on the part of consumers was reflected in the increased demand on the services of the Bureau both in the cities and throughout the country. Educational authorities, in particular, showed increasing interest in improved lighting for schools and colleges.

GENERAL HEATING, COOKING AND WATER HEATING.

Electricity sold for heating, cooking and water heating, to consumers other than domestic consumers, such as public institutions, hotels, restaurants, schools, etc., is included under this heading. Consumption showed an increase of 14·8%, this being a further improvement on the progress of the previous year. The increase in electricity consumption for cooking purposes reached the satisfactory figure of 21%.

Of special interest was the marked development in the application of electricity as the sole source of heat for all laundry processes. This new field of application of electricity is being developed on a large scale for the first time in this country. The great interest shown by the laundry trade is a tribute to the economy and cleanliness of electricity as a source of process heat. Some twenty-two installations have been carried out in laundries attached to convents, hospitals and institutions, amongst them being some commercial laundries.

Another interesting development is the use by a number of dairy farms connected to the system of electric heating for hot water and steam supply for sterilization purposes.

INDUSTRIAL MOTIVE POWER.

The total recorded industrial motive power, representing motors of ½ H.P. and upwards connected to the Board's system at the end of the financial year was 107,829 H.P., being an increase of 13,668 H.P. on the previous year. Of this new motive power load, Dublin City was responsible for 1,349 H.P., and Cork City for 288 H.P. In the remainder of the country, 12,031 H.P. was connected. In Appendix I the growth of connection and the horse-power are recorded for all cities, towns and villages supplied from the Board's system.

Units sold for industrial motive power purposes showed an increase of approximately 35 million units on the previous year's sales of 80½ million units. Of these 35 million units, 24½ million units were derived from the sale of power to the new cement industry ; the residual growth of some 10½million units compares well with the growth in previous

years and represents an increase of 13%. The following table sets out an analysis of units sold for industrial motive power during the past six years :—

ANALYSIS OF UNITS SOLD FOR INDUSTRIAL MOTIVE POWER.

Year ended on 31st March	In Dublin City	In Cork City	In rest of country	In whole country
1934	23,046,000	7,735,000	11,858,000	42,639,000
1935	26,040,000	9,064,000	14,887,000	49,991,000
1936	29,807,000	12,436,000	20,092,000	62,335,000
1937	31,911,000	14,842,000	25,878,000	72,631,000
1938	33,653,000	14,737,000	32,128,000	80,518,000
1939	35,486,000	14,741,000	65,075,000	115,302,000

PUBLIC LIGHTING.

The total number of public lighting lamps supplied from the Board's system was 26,053, an increase of 3,129 lamps over the previous year. The consumption of electricity for public lighting purposes showed an increase of 10·7% over the country as a whole and 13·8% in Dublin City. These figures indicate an acceleration of progress in improved and extended public lighting.

The most important contracts for new public lighting installations completed during the year were for the central Dublin City area and the main traffic route from Dublin to Dalkey. The former covers approximately one mile of the principal streets of the centre of the City, while the latter provides a consistent standard of good lighting over a total distance of approximately eight miles of main traffic route out of the city.

TRACTION.

With the gradual change-over in Dublin of the electric tramway system to oil-driven buses, the consumption of electricity for traction purposes showed a decrease of 16% over the year.

SALES OF APPLIANCES.

The sale of appliances and apparatus for which credit has been taken amounted to £79,573 13s. 3d., which compares with a figure of £68,274 8s. 0d. for the previous year. The rate of gross profit on sales was 17·9%. Having charged a proper proportion of general overhead expenses, the Merchandise Trading Account shows a net profit of £5,653 6s. 8d. It will be noticed in this Account that the cost value of transactions for which credit has not yet been taken amounted in the present year to £34,831, as against a figure of £32,465 for the previous year.

CONSUMERS' INSTALLATIONS DEPARTMENT.

The credit taken for contracts completed and invoiced for work carried out by the Department amount to £66,627 14s. 6d. as compared with a figure of £73,102 1s. 11d. for the previous year. The rate of gross profit was 20·5%. Having debited to the Installations Trading Account a proper proportion of overhead expenses, there is net profit of £1,883.

TARIFFS.

Towards the close of the year revised prices for electricity consumed for general lighting purposes were introduced over the country as a whole. Particulars of these charges are shown in Appendix II. The new rates represent a very considerable reduction, particularly to large consumers, such as public institutions, hospitals, large hotels, etc.

GENERATION.

The statistics of generation in both the main and local stations, and the load development on the main system, are shown in the following table, together with the corresponding values for the preceding year :—

	UNITS GENERATED.			Load Development (Main Stations)	
Year ended on 31st March	Main Stations	Local Stations	Total of all Stations	Maximum Daily Output in KWH.	Maximum Load in K.W.
1938	Ardnacrusha ... 239,202,800 Pigeon House ... 73,528,600 Cork ... 736,700				
	Total ... 313,468,100	1,009,100	314,477,200	1,389,900	106,800
1939	Ardnacrusha ... 286,483,600 Pigeon House ... 89,477,600 Cork ... 1,028,200				
	Total ... 376,989,400	648,000	377,637,400	1,725,000	118,500
	Increase during year ended 31st March, 1939 ...	—	63,160,200	335,100	11,700

The maximum load of 118,500 K.W. was rather high as extremely low temperatures and severe snowstorms coincided with the peak load period.

The total number of units generated (377,637,400) represents an increase of 20·1% on the output of the previous year.

The average yearly load was 43·1 MW. The yearly load factor, on the basis of the units generated, was 36·4%, as compared with 33·6% last year.

For the purpose of reference the following information is contained in the Appendices :—

(i)	Duration of load curve for the main system	Appendix III.
(ii)	Distribution at high tension of units generated ...	Appendix IV.
(iii)	Monthly output of all Stations	Appendix V.
(iv)	Typical daily load curve for each quarter	Appendix VI.
(v)	Capacity of the Board's Main Generating Stations ...	Appendix VII.
(vi)	Weekly summary of operating conditions	Appendix IX.

EXTENSION OF PLANT AND NEW WORKS.

Shannon Works :

An additional 8,000 kVA. 10/38 kV. on-load tap-changing transformer was installed at Ardnacrusha Power Station. To provide increased facilities for the repair and overhaul of the plant in the Station, plans were completed for the extension and conversion of the oil stores to form a new workshop having a floor space of approximately 5,000 sq. ft. A new building will be erected as an oil store, and the present workshop will be utilised as additional accommodation for spare parts.

Pigeon House Works :

In the course of the year the following works, involved in the extension of the Pigeon House Station, were completed :—

(a) The erection and placing in commission of the 20/25,000 kVA. steam turbo-generator set (No. 6).

(b) The erection and placing in commission of two steam boilers, each of 100,000 lbs. per hour steaming capacity (Nos. 6 and 7).

(c) The extension of the coal handling plant to increase the total storage accommodation to 40,000 tons of coal.

(d) One 25,000 kVA. 5/38kV. transformer directly coupled to Generating Unit No. 6.

(e) Oil storage and filtering plant for the transformers and switchgear.

The following plant was in process of erection :—

(a) A 20/25 M.W. steam turbo-generator set (No. 5), which it is anticipated will be in commission towards the end of 1939.

(b) Two steam boilers, each of 100,000 lbs. steam per hour capacity (Nos. 8 and 9), which are expected to be put into commission towards the end of 1939.

(c) A 1,600 B.H.P. Diesel generator set.

When the works enumerated above have been completed, the capacity of the Pigeon House Station will be :—

Steam Boiler capacity :

(a) 9 boiler units, each having a normal output of 100,000 lbs. of steam per hour.

(b) 4 boiler units, each having a normal output of 25,000 lbs. of steam per hour.

Generating Capacity :

One 5 M.W. Steam Turbo-Alternator Set (Unit No. 1).
„ 10 M.W. „ „ „ „ (Unit No. 2).
„ 20/25 M.W. „ „ „ „ (Unit No. 3).
„ 23 M.W. „ „ „ „ (Unit No. 4).
„ 20/25 M.W. „ „ „ „ (Unit No. 5).
„ 20/25 M.W. „ „ „ „ (Unit No. 6).
„ 1·1 M.W. Diesel Alternator Set (Auxiliary Set).

LIFFEY HYDRO-ELECTRIC DEVELOPMENT.

The work on the erection of the dam and intake to the tunnel had advanced well, and will be completed during the coming year. The site for the Poulaphouca power station had been made ready for the commencement of the excavation. The tunnel to connect this station with the main reservoir will be about a quarter of a mile in length ; some twenty yards of the outlet end of the tunnel had been completed, and at the inlet a pilot tunnel had been advanced for a length of thirty-three yards. The diversion channel at the Golden Falls dam is under construction.

Contracts were placed for the mechanical and electrical equipment for the Poulaphouca and Golden Falls stations. The first delivery of the plant on site is expected towards the end of 1939, and it is anticipated that the erection of the plant will be completed by the middle of 1941. At the Poulaphouca station two units with Kaplan type turbines will be installed, each unit having an output of 15,000 kW. at the generator terminals. At the Golden Falls station two units with Francis type turbines with outputs of 4,000 kW. and 250 kW. respectively, will be installed.

The new bridge at Burgage, having eleven spans of 60 ft. each, was under construction and will be completed in August, 1939. The bridge at Blessington, having eight 60 ft. spans, will be ready a few months later. The approach road to the new bridge at Humphreystown had been constructed.

Arrangements have been concluded with the owners of 4,500 acres of land out of the total area of 5,500 acres which will be flooded by the new reservoir. Work had been well advanced in the clearing of all trees and fences. The reservoir will have a total storage capacity of 150,000,000 cbm.

The number of men continuously employed has varied between 300 and 400.

TRANSMISSION AND DISTRIBUTION SYSTEMS.

The following constructional work involving extensions and additions to the transmission and distribution lines was carried out :—

	Miles.
(1) Low tension overhead mains	85·2
(2) Low tension overhead mains (reconstructed or strengthened) ...	47·2
(3) Low tension underground mains	22·3
(4) 5 kV. underground cables	2·1
(5) 10 kV. underground cables	23·5
(6) 38 kV. underground cables	20·5
(7) 10 kV. overhead transmission lines	69·5
(8) 38 kV. overhead transmission lines	58·0
(9) 110 kV. overhead transmission lines	161·1

The erection of the new 110 kV. lines—Dublin/Dundalk and Dublin/Waterford/Cork—was completed. The Dublin/Dundalk and Dublin/Waterford lines were placed in commission at 38 kV. Materials have been ordered for the projected 110 kV. line from Ardnacrusha to Carrick-on-Shannon.

The programme for 110/38 kV. transformer station development was modified, owing to local load development, to include a new 110/38 kV. station at Drogheda instead of at Dundalk. The second 15,000 kVA. 110/38 kV. transformer, with 110 kV. and 38 kV. switchgear, was placed in commission at the Portlaoighise station. A third 110/38/10 kV transformer was placed in commission at Kilbarry station, and orders issued for the necessary equipment to extend the 110 kV. and 38 kV. switchgear.

Orders were placed for 110/38 kV. transformers and 110 kV. and 38 kV. switchgear and equipment for the proposed new 110/38 kV. transformer stations at Drogheda, Waterford and Carrick-on-Shannon. It is anticipated that work on the construction of these stations will commence during the coming year. Work on the extensions of the Inchicore 110/38 kV. station was commenced.

The additional transformer stations which have been placed in commission and the increase in capacity are shown in Appendix VIII. Although the figures in the Appendix show a decrease of one in the number of 5kV. stations in commission, actually seven new stations were placed in commission and eight obsolete stations withdrawn from service.

The Galway, Kildare and Tullamore 38/10 kV. transformer stations were extended.

To increase the reliability of supply in South County Dublin, the three 38 kV. stations —Inchicore, Milltown and Deansgrange—were connected by 38 kV. underground cable in duplicate, together with the necessary telephone and pilot cables.

WATER STORAGE AND SHANNON RIVER CONTROL.

The following data in connection with the flow of the River Shannon is contained in Appendix X :—

(i) Daily water levels of, and average daily outflow from Lough Allen, Lough Ree and Lough Derg, respectively.
(ii) Average daily outflow from Parteen Weir.
(iii) Average daily consumption at the Power Station.
(iv) Average daily outflow at Killaloe.

The average inflow to the Shannon catchment at Killaloe for the calendar year 1938 was 215·7 cbm/sec. or 110·9% of the mean of 194·4 cbm/sec. over a long period of years. This is the first year since 1931 for which the inflow has been greater than the mean flow. The distribution of the flow over the year was generally favourable for power production, except for the two months of April and May when the inflow was only approximately one-third of the average. The water utilised for power generation amounted to 62·8% of the total inflow for the calendar year 1938.

The important hydrometric figures for the year ended on 31st March, 1939, are as follows :—

Total average rainfall in Shannon catchment	46·4 inches.
Average inflow to Shannon catchment	239·1 cbm/sec.
Average water used at Ardnacrusha	147·0 cbm/sec.
Average water used per unit generated	16·2 cbm.
Maximum level reached in Lough Derg at Killaloe ...	33·6 metres O.D.
Minimum level reached in Lough Derg at Killaloe ...	32·8 metres O.D.
Average available head at Power Station	28·2 metres.
Maximum available head at Power Station	30·4 metres.
Minimum available head at Power Station	24·9 metres.

PERMITTED UNDERTAKINGS.

At the 31st March, 1939, there were 87 permitted undertakings holding permits from the Board as compared with a figure of 90 at the end of the previous year. During the year 5 permits lapsed as a result of the acquisition of the undertakings ; one permit was not renewed owing to cessation of supply, and three new permits were granted. Particulars of all permitted undertakings, except where the number of consumers supplied is 3 or under, are contained in Appendix XI.

STAFF.

The numerical strength of the Board's regular staff at the 31st March, 1939, was 2,484.

The Board once more wishes to place on record its appreciation of the capable and willing manner in which all members of the staff have continued to carry out their duties.

(Signed) R. F. BROWNE, Chairman.
J. M. FAY,
T. A. McLAUGHLIN,
LAURENCE J. KETTLE,
LIAM FORDE,
HENRY KENNEDY.

PATRICK J. DEMPSEY, Secretary.
30th June, 1939.

REPORT

ON THE

SHANNON FISHERIES.

60-62 UPPER MOUNT STREET,
DUBLIN.

TO THE MINISTER FOR INDUSTRY AND COMMERCE.

In accordance with the provisions of Sections 17 and 18 of the Shannon Fisheries Act, 1935, the Board presents the Annual Report and Accounts for the year ended the 31st March, 1939.

In pursuance of the policy of endeavouring to replenish the stock of fish in the River Shannon, no salmon fishing was carried out, and it is the intention not to engage in such fishing until the new weir, in course of construction near Limerick, has been completed. The income shown has been derived almost wholly from the sale of eels. The debit balance on the Trading Account was £4,817 6s. 8d., and having charged interest on the capital invested in the Fisheries the deficiency for the year amounted to £8,567 6s. 8d.

At the beginning of the year all the principal freshwater and estuarine salmon fisheries in the River Shannon had been acquired by the Board, together with the eel weirs at Castleconnell and Athlone. Under the Shannon Fisheries Act, 1938, which amends the Principal Act, the remaining fisheries and fishing rights in the fresh waters of the river, vested in the Board as from the 1st August, 1938. The fisheries so transferred included thirty-five eel weirs, the former owners of which were allowed to operate them until the close of the season ending on the 31st January, 1939.

A number of men who were precluded from compensation under the terms of the Shannon Fisheries Act, 1935, received compensation for loss of livelihood in accordance with the provisions of Section 10 of the Shannon Fisheries Act, 1938. A sum of £40,000 was paid to the Abbey Fishermen's Guild under the same section.

SALMON FISHERIES.

A grant of £3,000, to be expended wholly on protection of the Shannon and its tributaries, was made to the Limerick Board of Conservators. This is £500 higher than the

amount made available last year partly by reason of the greater area to be protected, and partly by reason of the contraction in the revenue of the Conservators through the closing down of the stake weirs and reductions in the valuations of the freshwater fisheries. The result of similar measures taken last year was reflected in the number of smolts which descended the Shannon. Considerable numbers passed down the main river, and also through the head-race canal from which they were lowered, by means of the navigation locks, to the tail-race at Ardnacrusha, thus having free access to the sea.

The construction of the salmon-catching weir in the vicinity of Limerick has progressed satisfactorily. Work had, of necessity, to be suspended over the period of winter high water. Approximately one-third of the piers have been erected in the river. It is anticipated that the weir will be ready for operation during the 1940 season.

ROD FISHERIES.

The rod fisheries at Castleconnell were not fished to any large extent, but many bookings have been secured for the 1939 season. Some difficulty has been experienced owing to the low level of the water in the river, but this is being surmounted by clearing the pools and erecting spur walls.

EEL FISHERIES.

The eel fisheries at Athlone, Killaloe and Castleconnell were operated by the Board, resulting in a catch of 25 tons of eels which realised £2,879 8s. 5d. A very large stock of eel fry ascended during the months of May and June.

OYSTER FISHERIES.

To enable the Board to revive and develop the cultivation of oysters on a commercial basis in the Shannon estuary, an Order was sought under the provisions of the Oyster Cultivation (Ireland) Act, 1884. Pending the making of this Order a substantial amount of preliminary work has been carried out in regard to the suitability of various sites for oyster beds, and the method of cultivation to be adopted. A survey of the estuary was made, and certain sites for development as oyster beds were selected. The feasibility of installing oyster-purification plant has been under consideration and full information has been obtained about similar plants in operation in other countries.

(Signed) R. F. BROWNE, Chairman.
J. M. FAY,
T. A. McLAUGHLIN,
LAURENCE J. KETTLE,
LIAM FORDE,
HENRY KENNEDY.

PATRICK J. DEMPSEY, Secretary.

30th June 1939.

LIST OF APPENDICES.

Appendix.

I.—Number of Consumers and other particulars relating to all Areas supplied by the Board.

II.—Reduction in Rates of Charge for general lighting.

III.—Duration of load, main Shannon system.

IV.—Distribution at high tension of units generated during the year.

V.—Monthly output of the Board's generating stations during the year.

VI.—Typical daily load curves.

VII.—Capacity of the Board's main generating stations.

VIII.—Transmission and distribution systems in commission.

IX.—Weekly summary of operating conditions.

X.—Water levels and discharges of Loughs Allen, Ree and Derg, for the year.

XI.—Particulars of authorised and permitted undertakings providing supply at 31st March, 1939.

XII.—Units generated (from 1st April, 1928, to 31st March, 1939).

DUBLIN No. 1 DISTRICT.

Towns Supplied	Population (1936)	No. of Consumers at 31st March		Industrial Motive H.P. at 31st March	
		1938	1939	1938	1939
Dublin City	475,594	46,139	50,415	24,604	25,907
Rathmines		7,281	7,561		
Terenure and Kimmage ...		1,940	2,268		
Crumlin		3,617	4,790		
Rathfarnham		615	699		
Pembroke		8,202	8,660	2,582	2,628
Templeogue		133	146	Nil	Nil
Firhouse		24	27	Nil	Nil
Woodtown		1	1	284	284
Dublin United Tramways Co. (1896) Ltd. ...	——	—	—	—	—
TOTALS ...	475,594	67,952	74,567	27,470	28,819

CORK No. 1 DISTRICT.

Towns Supplied	Population (1936)	No. of Consumers at 31st March		Industrial Motive H.P. at 31st March	
		1938	1939	1938	1939
Cork City	99,011	9,686	10,856	16,623	16,911
TOTALS ...	99,011	9,686	10,856	16,623	16,911

ATHLONE DISTRICT.

Towns Supplied	Population (1936)	No. of Consumers at 31st March		Industrial Motive H.P. at 31st March	
		1938	1939	1938	1939
Athlone	7,257	954	1,037	667	1,662
Ahascragh	269	39	42	6	6
Athleague	208	10	12	Nil	Nil
Ballinasloe	5,834	259	279	299	244
Ballygar	335	58	58	Nil	Nil
Roscommon	2,040	233	261	59	59
Ballymahon	643	78	83	18	22
Birr	—	1	1	54	54
Banagher	720	81	84	45	45
Borrisokane	551	94	103	Nil	5
Cloghan...	188	22	22	Nil	Nil
Eyrecourt	323	29	27	Nil	Nil
Ferbane	301	65	68	1	2
Kilcormac (or Frankford) ...	448	28	44	Nil	Nil
Lorrha	98	12	12	Nil	Nil
Portumna	—	Nil	1	Nil	325
Clara	1,590	213	241	320	352
Kilbeggan	593	67	72	Nil	10
Longford	3,807	419	455	74	76
Edgeworthstown ...	515	68	71	27	28
Granard	1,236	111	114	7	8
Moate	1,326	108	109	2	2
Mullingar	5,237	521	611	394	444
Tullamore	5,135	553	625	468	468
Daingean (or Philipstown)...	518	Nil	39	Nil	14
TOTALS ...	39,172	4,023	4,471	2,441	3,826

DUBLIN No. 2 DISTRICT.

Towns Supplied	Population (1936)	No. of Consumers at 31st March		Industrial Motive H.P. at 31st March	
		1938	1939	1938	1939
Balbriggan	2,434	217	260	165	163
Skerries	—	2	2	64	64
Blackrock and Monkstown		2,069	2,314	247	263
Cabinteely		60	63	18	18
Carrickmines		70	78	1	1
Dalkey		547	606	89	89
Dundrum	54,129	1,240	1,380	46	59
Dun Laoghaire		2,534	2,782	495	515
Foxrock		267	286	36	36
Killiney—Ballybrack ...		260	283	33	33
Kill-o'-the-Grange ...		48	65	55	55
Stillorgan		180	201	148	148
Bray	10,133	1,653	1,730	1,122	1,175
Kilmacanogue	—	20	24	Nil	Nil
Shankill—Loughlinstown ...	2,332	236	264	1	1
Celbridge	627	94	96	72	76
Ballydowd	—	20	20	Nil	Nil
Blessington	289	56	73	2	8
Clondalkin	967	139	151	1,491	1,522
Kilcock	475	56	59	23	23
Leixlip	571	91	103	79	80
Lucan	867	140	226	9	45
Maynooth	632	77	79	62	72
Rathcoole	223	43	48	6	6
Saggart ...	116	16	17	913	913
Tallaght	406	78	75	138	138
Chapelizod	—	200	245	60	60
Blanchardstown	417	61	76	7	9
Castleknock	1,789	95	106	20	43
Clonee	112	15	15	Nil	4
Clonsilla—Porterstown ...	819	67	70	Nil	Nil
Dunboyne	290	23	26	1	15
Finglas	1,040	149	158	44	44
Knockmaroon	—	8	8	Nil	Nil
Palmerstown	208	28	31	56	56
The Ranch	—	70	85	Nil	15
Greystones	1,535	462	471	11	11
Delgany—Killincarrig ...	1,060	91	92	Nil	Nil
Newtownmountkennedy ...	208	25	24	30	30
Naas	3,290	287	353	129	131
Ballymore Eustace ...	338	Nil	64	Nil	23
Clane	145	19	25	Nil	Nil
Kill and Johnstown ...	95	23	27	Nil	Nil

DUBLIN No. 2 DISTRICT—*continued.*

Towns Supplied	Population (1936)	No. of Consumers at 31st March		Industrial Motive H.P. at 31st March	
		1938	1939	1938	1939
Poulaphouca	—	1	1	860	995
Sallins & Clongowes ...	276	29	29	179	179
Swords	838	147	165	76	121
Artane	996	34	40	Nil	Nil
Baldoyle	765	118	128	12	12
Coolock	349	37	47	2	2
Donabate	186	41	53	Nil	Nil
Howth and Sutton ...	4,832	964	986	116	116
Lusk	305	48	50	4	4
Malahide	1,259	191	238	6	6
Portmarnock	516	83	88	10	10
Raheny	—	123	154	6	6
Rush	1,651	197	225	16	16
Santry	116	57	59	19	19
Wicklow	3,183	287	350	65	117
Rathdrum	504	133	131	244	244
Rathnew	547	53	52	7	7
TOTALS ...	101,870	14,379	15,957	7,295	7,798

CORK No. 2 DISTRICT.

Towns Supplied	Population (1936)	No. of Consumers at 31st March		Industrial Motive H.P. at 31st March	
		1938	1939	1938	1939
Bandon	—	5	7	261	261
Clonakilty	2,961	312	355	487	487
Courtmacsherry	221	27	31	Nil	Nil
Innishannon	182	5	8	Nil	Nil
Kinsale	2,422	254	274	108	108
Timoleague	248	Nil	21	Nil	Nil
Blarney	723	100	102	74	74
Bishopstown	97	3	5	82	82
Carrigaline	315	51	58	15	15
Crosshaven	724	112	118	18	60
Kilnap	272	6	7	119	119
Monkstown	2,648	68	75	Nil	Nil
Passage West		101	112	14	14
Mount Desart	—	1	1	6	Nil
Rochestown	—	1	1	Nil	6
Buttevant	881	132	139	53	53
Doneraile	740	94	101	2	14
Castletownroche	443	28	34	12	12
Cobh	6,178	525	622	70	70
Dunmanway	1,561	195	202	146	146
Ballineen	272	47	48	10	10
Bantry	2,643	373	354	106	100
Drinagh	—	13	13	77	359
Enniskeane	162	24	26	2	2
Glandore	124	2	7	Nil	Nil
Leap	157	3	15	Nil	Nil
Macroom	2,382	262	297	31	41
Skibbereen	2,541	283	313	83	103
Fermoy	4,123	320	337	127	240
Glanworth	261	31	34	Nil	Nil
Mitchelstown	1,902	307	364	180	199
Mallow	4,948	472	549	188	188
Drommahane	96	12	13	Nil	Nil
Midleton	2,711	203	245	201	202
Ballinacurra	403	55	58	172	172
Castlemartyr	346	39	42	5	5
Cloyne	684	65	69	45	45
Upper Aghada	155	15	15	Nil	Nil
Whitegate	286	21	42	Nil	Nil
Youghal	5,131	263	286	154	184
TOTALS ...	49,943	4,830	5,400	2,848	3,371

DUNDALK DISTRICT.

Towns Supplied	Population (1936)	No. of Consumers at 31st March		Industrial Motive H.P. at 31st March	
		1938	1939	1938	1939
Ardee	2,383	192	202	119	156
Ballybay	1,034	165	170	5	14
Bailieborough	854	125	133	88	108
Carrickmacross	2,095	261	273	105	116
Castleblayney	1,725	3	232	60	74
Kingscourt	631	Nil	66	Nil	Nil
Monaghan	4,780	259	293	364	401
Shercock	228	30	33	12	12
Cavan	3,393	376	379	192	205
Arvagh	525	64	61	11	11
Ballyjamesduff	434	81	82	8	8
Belturbet	1,341	117	132	106	106
Killeshandra	473	71	71	193	204
Oldcastle	586	119	123	9	12
Virginia	418	54	59	Nil	2
Cootehill	1,593	152	170	34	97
Clones	2,235	298	308	49	51
Drogheda	14,494	1,146	1,302	1,948	2,058
Bettystown—Laytown ...	143	Nil	41	Nil	44
Mornington	115	Nil	8	Nil	Nil
Dundalk	16,214	1,969	2,168	2,767	2,792
Blackrock (Louth) ...	695	75	84	23	26
An Uaimh (Navan) ...	4,123	433	556	290	318
Athboy	520	94	102	18	21
Dowdstown	—	2	2	40	40
Ceanannus Mór (Kells) ...	2,304	293	300	179	181
Kilcairne	—	1	1	48	48
Randalstown	—	2	2	28	28
Roughgrange	—	1	1	120	120
Trim	1,455	143	150	32	33
Newtown	—	1	1	557	5,431
TOTALS ...	64,791	6,527	7,505	7,405	12,717

GALWAY DISTRICT.

Towns Supplied	Population (1936)	No. of Consumers at 31st March		Industrial Motive H.P. at 31st March	
		1938	1939	1938	1939
Castlebar	4,826	500	540	370	373
Newport (Mayo) ...	353	52	54	5	10
Westport	3,409	417	464	320	336
Claremorris	1,132	291	305	209	226
Ballyhaunis	1,160	211	219	31	37
Galway	18,294	2,315	2,431	1,140	1,184
Athenry	1,048	158	172	52	52
Gort	1,034	155	154	86	87
Loughrea	2,891	266	268	121	122
Tuam	4,181	528	542	118	140
TOTALS ...	38,328	4,893	5,149	2,452	2,567

LIMERICK DISTRICT.

Towns Supplied	Population (1936)	No. of Consumers at 31st March		Industrial Motive H.P. at 31st March	
		1938	1939	1938	1939
Cahir	1,638	212	228	180	200
Cashel	3,028	247	269	77	122
New Inn	117	9	9	96	96
Castlemungret	—	1	1	2,670	2,670
Rathluirc (Charleville) ...	1,625	261	274	242	256
Ballylanders	193	20	22	Nil	Nil
Bruff	349	65	66	13	13
Galbally	195	18	22	Nil	15
Hospital	609	78	79	35	36
Herbertstown	85	3	3	136	136
Kilfinane	818	102	109	26	56
Kilmallock	861	148	154	198	198
Knocklong	—	14	17	295	297
Ennis	5,897	724	791	249	411
Clarecastle	549	42	49	Nil	Nil
Ennistymon	1,264	151	165	135	145
Kilkee	1,863	Nil	208	Nil	8
Kilrush	3,426	Nil	333	Nil	21
Lahinch	327	49	51	Nil	Nil
Lisdoonvarna	193	66	72	19	21
Miltown-Malbay ...	809	96	105	1	6
Newmarket-on-Fergus ...	368	51	53	17	17
Rynanna and Ballygireen...	—	6	7	5	107
Kilkishen	108	14	14	Nil	Nil
Tulla	474	77	77	25	6
Limerick City	43,663	6,058	6,461	5,366	5,836
Nenagh	4,902	515	554	794	797
Newport (Tipp.) ...	494	64	67	122	122
Annacotty	—	9	11	90	90
Ardnacrusha and Clonlara	249	64	67	248	338
Birdhill	—	2	7	15	15
Castleconnell	219	33	39	Nil	Nil
Castletroy	—	18	19	10	16
Killaloe & Ballina (Tipp.) ...	1,066	141	148	38	88
Rathkeale	1,565	168	172	97	97
Adare	497	79	82	93	93
Ardagh	119	13	14	91	91
Askeaton	581	79	83	42	42
Ballingarry (Co. Limerick)	339	11	27	Nil	20
Castlemahon	72	1	13	91	91
Cloncagh	—	Nil	1	Nil	18
Croom	791	70	71	10	10
Newcastle West	2,943	275	284	126	126
Tipperary	5,384	421	465	244	281
Cappamore	558	54	56	108	108
Cappawhite	426	43	47	3	3
Doon	478	50	51	9	9
Limerick Junction ...	206	37	39	64	64
TOTALS ...	89,348	10,659	11,956	12,080	13,192

PORTLAOIGHISE DISTRICT.

Towns Supplied	Population (1936)	No. of Consumers at 31st March		Industrial Motive H.P. at 31st March	
		1938	1939	1938	1939
Athy	3,628	335	380	372	385
Carlow	7,649	646	652	554	566
Muine Bheag (Bagenalstown)	1,897	150	160	126	138
Baltinglass	659	87	97	5	4
Castledermot	276	69	70	71	77
Leighlinbridge	425	37	42	107	107
The Swan	—	3	3	151	151
Tullow	1,616	162	162	66	67
Kildare	1,758	157	171	126	144
Ballymany and Loughbrown	—	20	31	9	14
Brownstown	118	26	28	5	5
Curragh Camp	—	1	1	258	258
Edenderry	2,093	208	213	220	223
Kilcullen	441	45	51	Nil	8
Monasterevan	580	72	82	83	101
Droichead Nua (Newbridge)	2,375	246	285	383	383
Portarlington & Clonsast ...	1,851	239	237	825	966
Rathangan	431	38	38	22	22
Kilkenny	10,237	905	973	338	361
Ballyragget	449	53	50	15	20
Callan	1,516	148	155	55	64
Castlecomer	809	114	125	79	1,166
Freshford	456	63	70	48	48
Johnstown (Co. Kilkenny)	307	35	40	Nil	Nil
Talbot's Inch	108	28	28	13	13
Urlingford	528	28	36	Nil	6
Portlaoighise	3,396	473	535	654	656
Abbeyleix	664	129	131	36	36
Ballinakill	338	21	23	Nil	Nil
Ballyroan	127	6	6	Nil	Nil
Durrow	462	69	72	6	6
Mountmellick	2,314	196	207	55	55
Mountrath	1,116	126	129	11	15
Stradbally	762	93	101	20	20
Roscrea	3,060	396	407	442	481
Ballybrophy	—	1	1	7	7
Borris-in-Ossory ...	216	30	30	Nil	Nil
Rathdowney	825	107	112	8	9
Templemore	1,981	174	181	41	101
Borrisoleigh	544	66	69	34	34
Thurles	5,648	613	658	224	243
TOTALS ...	61,660	6,415	6,842	5,469	6,960

SLIGO DISTRICT.

Towns Supplied	Population (1936)	No. of Consumers at 31st March		Industrial Motive H.P. at 31st March	
		1938	1939	1938	1939
Ballymote	738	144	151	25	39
Boyle	—	1	1	36	36
Elphin	548	61	72	Nil	2
Strokestown	628	118	124	13	13
Carrick-on-Shannon ...	1,015	205	220	59	62
Charlestown and Bellahy	773	109	118	8	11
Curry	—	13	13	Nil	Nil
Tubbercurry	823	114	121	23	24
Foxford...	805	96	102	240	241
Ballina	5,728	650	816	249	310
Crocketstown (Ballina Quay)	171	10	11	Nil	Nil
Crossmolina	660	91	91	41	41
Enniscrone	399	72	71	Nil	Nil
Gorteen	—	26	28	Nil	Nil
Ballaghaderreen	1,122	218	227	21	45
Castlerea	1,313	Nil	216	Nil	42
Letterkenny	2,649	291	305	88	75
Mohill	714	108	118	8	8
Sligo	12,565	1,194	1,351	547	496
Swinford	1,203	207	216	62	62
Kiltimagh	1,090	150	158	19	19
TOTALS ...	32,944	3,878	4,530	1,439	1,526

TRALEE DISTRICT.

Towns Supplied	Population (1936)	No. of Consumers at 31st March		Industrial Motive H.P. at 31st March	
		1938	1939	1938	1939
Kanturk	1,555	237	246	152	185
Boherbue	242	38	40	21	22
Dromtariffe	—	2	2	44	44
Millstreet	975	170	175	57	58
Newmarket	838	132	144	6	6
Killarney	5,609	535	591	155	180
Castlemaine	104	16	16	128	128
Killorglin	775	142	155	39	43
Milltown	311	50	54	7	9
Listowel	3,098	411	431	409	423
Abbeyfeale	1,122	165	173	44	47
Ballylongford	514	Nil	46	Nil	Nil
Glin	516	Nil	34	Nil	68
Newtownsandes	230	Nil	28	Nil	Nil
Tarbert	315	Nil	21	Nil	Nil
Tralee	10,620	1,341	1,446	1,132	1,219
Castleisland	1,325	190	201	164	165
Edenburn	—	1	1	18	18
TOTALS ...	28,149	3,430	3,804	2,376	2,615

WATERFORD DISTRICT.

Towns Supplied	Population (1936)	No. of Consumers at 31st March		Industrial Motive H.P. at 31st March	
		1938	1939	1938	1939
Arklow	4,680	542	610	280	318
Ballyhale	102	10	15	Nil	Nil
Graiguenamanagh and Tinnehinch ...	1,125	51	67	37	47
Thomastown	769	75	81	4	4
Ballypatrick	—	1	1	58	33
Carrick-on-Suir	4,840	442	477	159	248
Piltown	287	25	42	Nil	138
Portlaw	847	1	52	450	468
Clonmel	9,391	586	671	455	397
Fethard	1,112	141	145	28	46
Dungarvan	5,361	556	599	462	489
Cappoquin	1,038	131	133	26	26
Lismore...	1,194	101	115	8	8
Tallow	779	115	117	10	10
Enniscorthy	5,873	478	511	430	447
Ferns	342	43	42	21	21
Carnew	516	39	47	Nil	Nil
Newtownbarry and Carrick-duff	766	104	109	40	40
Gorey	2,323	214	262	38	38
New Ross	5,056	475	507	398	418
Tramore	2,047	393	405	102	64
Dunmore East ...	308	57	60	16	16
Passage East	431	36	36	Nil	Nil
Waterford	27,968	3,204	3,447	1,939	2,941
Wexford	12,247	612	661	1,012	1,022
Rosslare Strand	189	51	55	51	49
Rosslare Harbour and Kilrane	629	75	78	239	239
TOTALS ...	90,220	8,558	9,345	6,263	7,527

SUMMARY.

Area Supplied	Population (1936)	No. of Consumers at 31st March		Industrial Motive Power at 31st March	
		1938	1939	1938	1939
Dublin No. 1 District ...	475,594	67,952	74,567	27,470	28,819
Cork No. 1 District ...	99,011	9,686	10,856	16,623	16,911
Dublin No. 2 District ...	101,870	14,379	15,957	7,295	7,798
Cork No. 2 District ...	49,943	4,830	5,400	2,848	3,371
Athlone District	39,172	4,023	4,471	2,441	3,826
Dundalk District ...	64,791	6,527	7,505	7,405	12,717
Galway District	38,328	4,893	5,149	2,452	2,567
Limerick District	89,348	10,659	11,956	12,080	13,192
Portlaoighise District ...	61,660	6,415	6,842	5,469	6,960
Sligo District	32,944	3,878	4,530	1,439	1,526
Tralee District	28,149	3,430	3,804	2,376	2,615
Waterford District ...	90,220	8,558	9,345	6,263	7,527
TOTALS	1,171,030	145,230	160,382	94,161	107,829

REDUCTION IN RATES OF CHARGE FOR GENERAL LIGHTING.

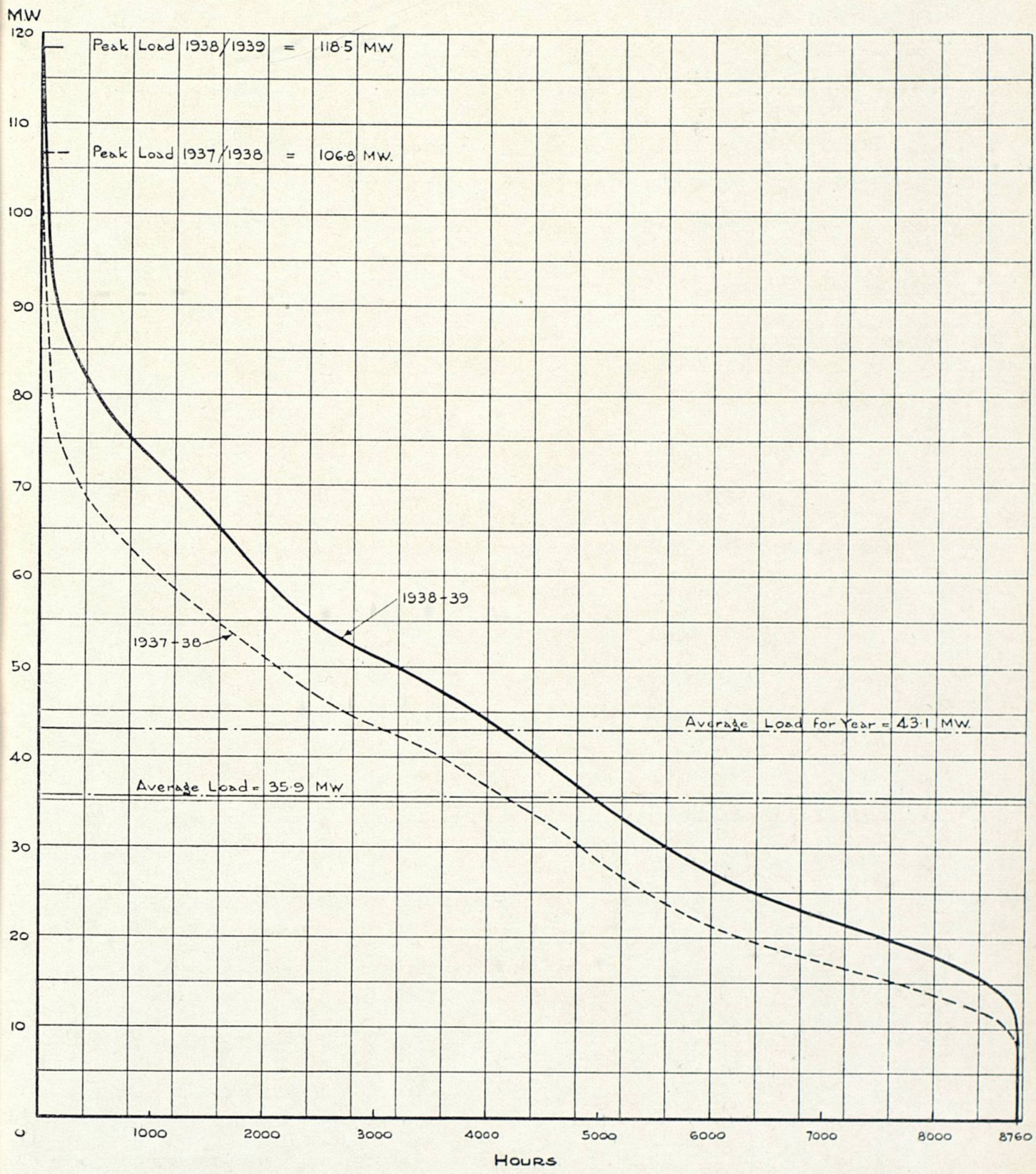
(Applicable to all consumers supplied from the national transmission network and chargeable at standard flat rates).

Effective in the Dublin City area from and including the February/March and March/April, 1939, accounting periods, and, in the remaining areas, from and including the April/May and May/June, 1939, accounting periods.

Units per Two-Monthly Period	Price per Unit		
	In Dublin City area	In Cork City area	In all other areas
For the first 1,000 units consumed ...	4d.	5½d.	6d.
For the next 1,200 units consumed ...	3½d.	4½d.	5d.
For the next 2,400 units consumed ...	3d.	3½d.	4d.
For the next 32,400 units consumed ...	2d.	2d.	2d.
For the excess over 37,000 units consumed ...	1d.	1d.	1d.

DURATION OF LOAD—MAIN SYSTEM GENERATION.
YEAR ENDING 31ST MARCH, 1939.

APPENDIX III.



To face page 32.

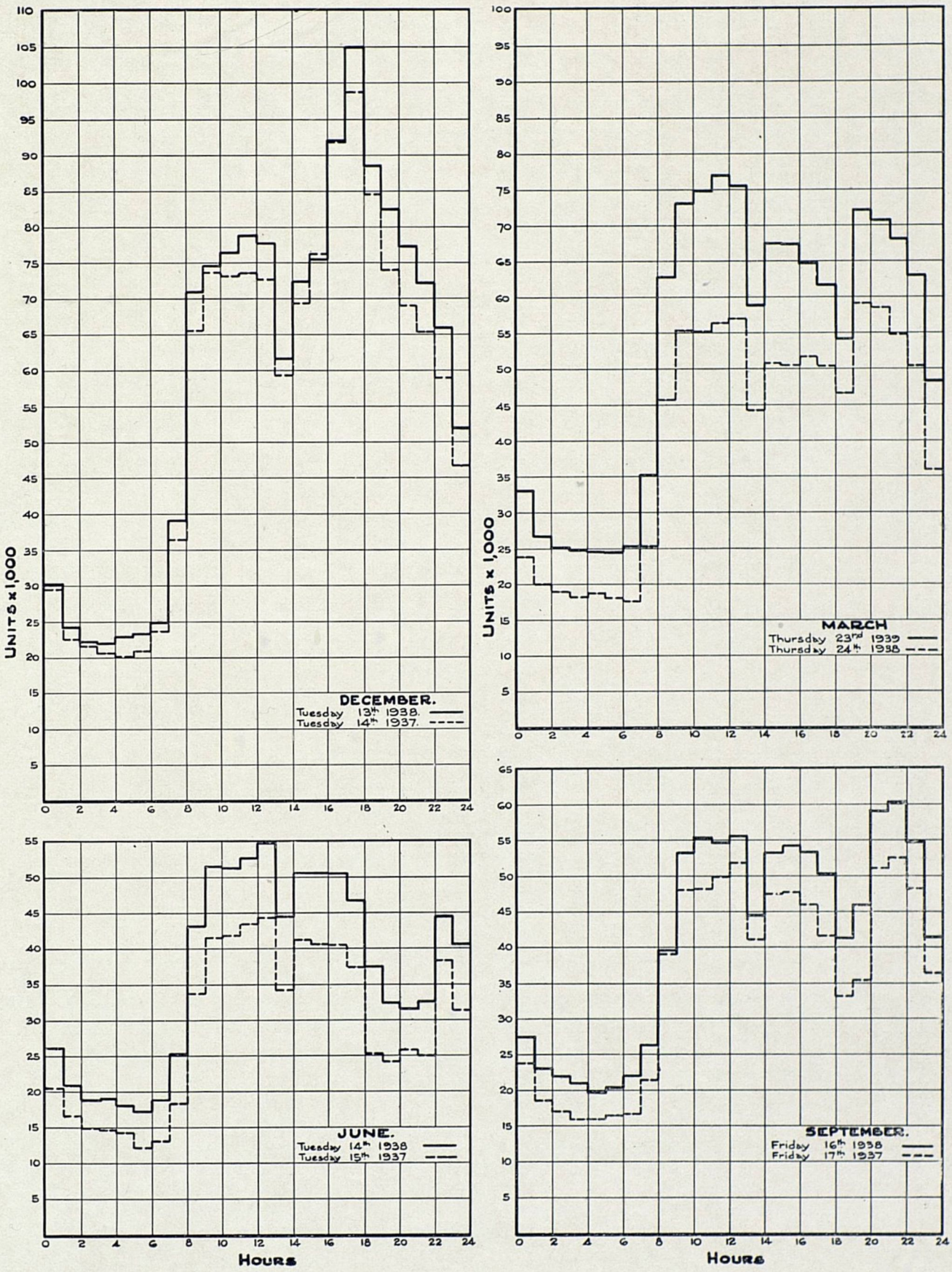
Distribution at High Tension of Units Generated Year ending 31st March, 1939.

District			High Tension Units	Percentage of Total
Dublin City 5 kV. Supply	97,328,900			
Dublin City 10 kV. Supply	24,697,900			
DUBLIN CITY TOTAL			122,026,800	32·3
Dublin United Tramways Co. (1896), Ltd.			18,939,400	5·0
Cork City D.C. Supply	12,272,600			
Cork City A.C. Supply	14,270,000			
CORK CITY TOTAL			26,542,600	7·0
Athlone District			9,440,200	2·5
Cork No. 2 District			7,119,700	1·9
Dublin No. 2 District			36,528,400	9·7
Dundalk District			30,176,500	8·0
Galway District			7,716,200	2·0
Limerick District			26,469,700	7·0
Portlaoighise District			15,234,200	4·0
Sligo District			5,199,300	1·4
Tralee District			5,119,800	1·4
Waterford District			15,153,300	4·0
Station Auxiliaries			12,864,000	3·4
High Tension Losses			39,107,300	10·4
TOTAL GENERATION—ALL STATIONS ...			377,637,400	100·0

Monthly Output (kWH) of the Board's Generating Stations—Year ending 31st March, 1939.

Month (Calendar)	Ardnacrusha	Pigeon House (Dublin)	Cork	Letterkenny	Acquired Stations closed down	Total of all Stations
April	14,568,600	9,877,600	111,900	25,000	44,000	24,627,100
May	4,161,800	21,828,300	349,000	23,900	36,800	26,399,800
June	8,239,400	15,788,800	89,100	22,300	32,000	24,171,600
July	21,067,700	3,083,500	3,800	23,700	28,500	24,207,200
August	20,500,500	3,372,800	66,900	22,900	28,200	23,991,300
September ...	17,010,500	10,058,000	—	25,800	24,400	27,118,700
October ...	27,164,800	5,662,700	278,900	33,300	14,800	33,154,500
November ...	30,226,600	5,609,700	49,200	38,100	14,000	35,937,600
December ...	36,539,400	5,195,900	68,700	46,000	16,300	41,866,300
January ...	38,628,100	4,585,700	10,700	44,300	13,400	43,282,200
February ...	33,048,600	2,805,600	—	37,800	7,300	35,899,300
March	35,327,600	1,609,000	—	37,900	7,300	36,981,800
TOTALS ...	286,483,600	89,477,600	1,028,200	381,000	267,000	377,637,400

TYPICAL DAILY LOAD CURVES.



To face p. 34.

Capacity of the Board's Main Generating Stations at the 31st March, 1939.

Generating Stations	Type	Installed Capacity
ARDNACRUSHA ...	Hydro	(*a*) 3 Francis Turbines, each rated at 30,000 H.P. coupled to 30,000 kVA generators, each giving an output of approximately 21,000 kW. 1 Kaplan Turbine rated at 30,000 H.P. coupled to a 25,000 kVA generator. Total capacity at Generator Terminals :— 93,500 kW. at 30 m. head. 77,500 kW. at 25·5 m. head. (*b*) 3 Step-up Transformers (10/110 kV) of a total capacity of 90,000 kVA and 3 Step-up Transformers (10/38 kV) with a total capacity of 24,000 kVA.
PIGEON HOUSE ...	Steam	(*a*) Steam capacity equivalent to 84,000 kW. approximately. (*b*) Steam accumulator capacity of approximately 5,000 kW. for 45 minutes. (*c*) Generator capacity equivalent to 79,000 kW. (*d*) 4 Transformers (5/38 kV) of 85,000 kVA total capacity.
CORK	Steam	(*a*) Steam capacity equivalent to 5,000 kW. approximately. (*b*) Generator capacity equivalent to 6,500 kW. (D.C.).

Transmission and Distribution Systems in Commission and under Construction at the 31st March, 1939.

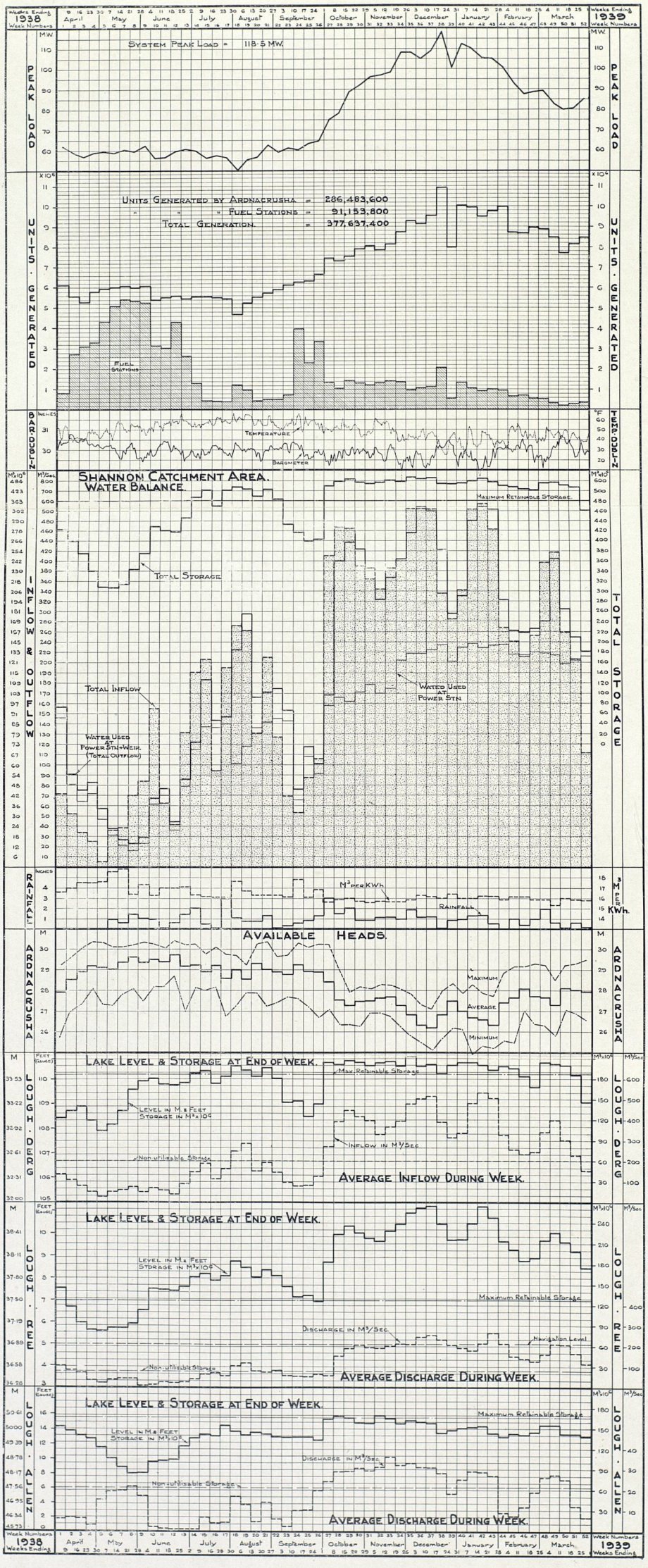
Transformer Stations	Number in Commission	Increase for year	Total Capacity	Increase in capacity for year
110 kV Stations ...	3	—	110/38 kV. Stations=102,000 kVA 110/10 kV. Stations= 22,500 kVA	19,000 kVA 7,500 kVA
38 kV Stations ...	86	—	198,410 kVA.	10,300 kVA
10 kV Sub-stations	978	116	129,770 kVA.	17,540 kVA
5 kV Sub-stations	102	Decrease of 1	72,388 kVA.	3,950 kVA
D.C. Sub-stations	7	—	15,500 kW.	—
Frequency-Changing Sub-station ...	1	—	6,320 kVA.	—

Transmission and Distribution Systems	Length	Increase for Year	Description
110 kV Lines ...	184·4 Kms.	—	6×95 sq. mm. Double Circuit.
110 kV Lines ...	435·6 Kms.	257·9 Kms.	3×95 sq. mm. Single Circuit.
38 kV Lines ...	1,812·8 Kms.	93·1 Kms.	3×50 sq. mm.
38 kV Lines ...	325·0 Kms.	—	3×35 sq. mm.
10 kV Lines ...	2,802·9 Kms.	111·7 Kms.	10, 16, 35 and 50 sq. mm.
38 kV Cables ...	43·8 Kms.	31·6 Kms.	3×185 sq. m.m.
38 kV Cables ...	28·6 Kms.	—	3×150 sq. mm.
38 kV Cables ...	9·2 Kms.	2·0 Kms.	3× 95 sq. mm., including 1 Km. Submarine Cable.
10 kV Cables ...	236·2 Kms.	38·0 Kms.	Various sizes from 3× 10 to 3× 185 sq. mm.
5 kV Cables ...	255·6 Kms.	3·4 Kms.	Ditto.
3·3 kV Cables ...	2·6 Kms.	—	3×185 sq. mm.

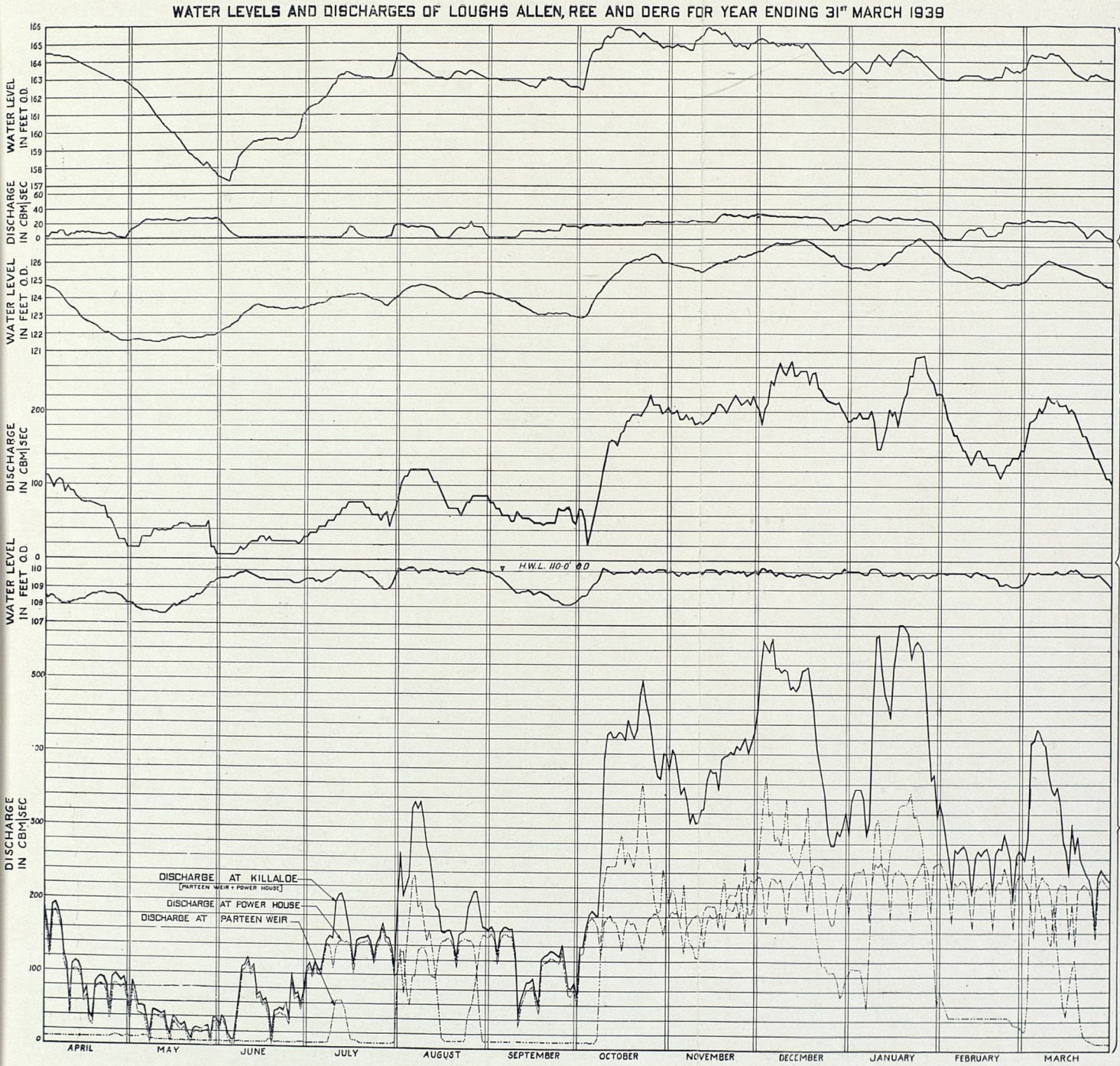
Main Shannon System.

Weekly Summary of Operating Conditions.

Year ending 31st March, 1939.



To face page 35 (1).



To face page 36 (b).

Particulars of Electricity Undertakings which at 31st March, 1939, had not been acquired by the Electricity Supply Board.

NOTE.—In 12 cases where the number of consumers is 3 or under Permits have also been issued. These undertakings are not shown in the following Schedule.

(1) Town	(2) Population	(3) Name of Undertaker	(4) No. of Consumers	(5) Normal Tariffs per Unit for			(6) Units Sold, Year ended 31st March 1939
				Lighting	Heating and Cooking	Power	
Ardara	442	The Ardara Woollen & Industrial Co., Ltd ...	90	10d.	1d.	—	12,800 estd
Ardfinnan	325	Mulcahy, Redmond & Co., Ltd.	7	1/6	—	—	1,410
Balla	282	John McEllin	46	1/–	—	6d.	7,828
Ballinlough	248	Ballinlough Electricity Supply Co. ...	47	1/–	5d.	—	3,096
Ballinamore	814	F. J. McAvinia	119	1/–	6d.	—	20,800 estd
Ballindine	209	E. W. Griffith	25	8d. & 10d.	—	—	1,910
Ballinrobe	1,351	The Ballinrobe Electric & Woollen Co., Ltd.	197	10d.	3d.	3d.	59,761
Ballybofey and Stranorlar	1,198	Ballybofey & Stranorlar Electric Supply Co.	140	1/–	6d.	6d.	16,493
Ballybunion	543	The Ballybunion Electricity Supply Co., Ltd.	182	1/–	6d.	6d.	23,854
Ballyconnell	276	William Stewart	69	10d.	—	—	6,620
Ballyshannon	2,223	John Myles & Co.	680	6d. to 8d.	1d. to 2d.	1d. to 2d.	183,654
Ballysodare	205	W. G. & T. Pollexfen	33	6d./7d.	2½d.	2½d.	11,590
Bandon	2,839	The Bandon Milling & Electric Lighting Co., Ltd.	580	10d.	4d. to 1d.	4d. to 1d.	409,724
Belmullet	684	M. McEntyre	58	10d.	—	5d.	7,692
Belmont, Offaly ...	—	Robert Perry & Co. (1927), Ltd. ...	7	6d.	—	4d.	1,759
Birr	3,297	The Birr E. L. & Power Co., Ltd. ...	429	8d.	2d. to 4d.	2d. to 4d.	123,152
Blacklion	110	Capt. W. J. Nixon	24	1/–	—	—	1,737
Boyle	2,093	George Stewart	82	7d.	1d. to 3d.	2d.	28,272

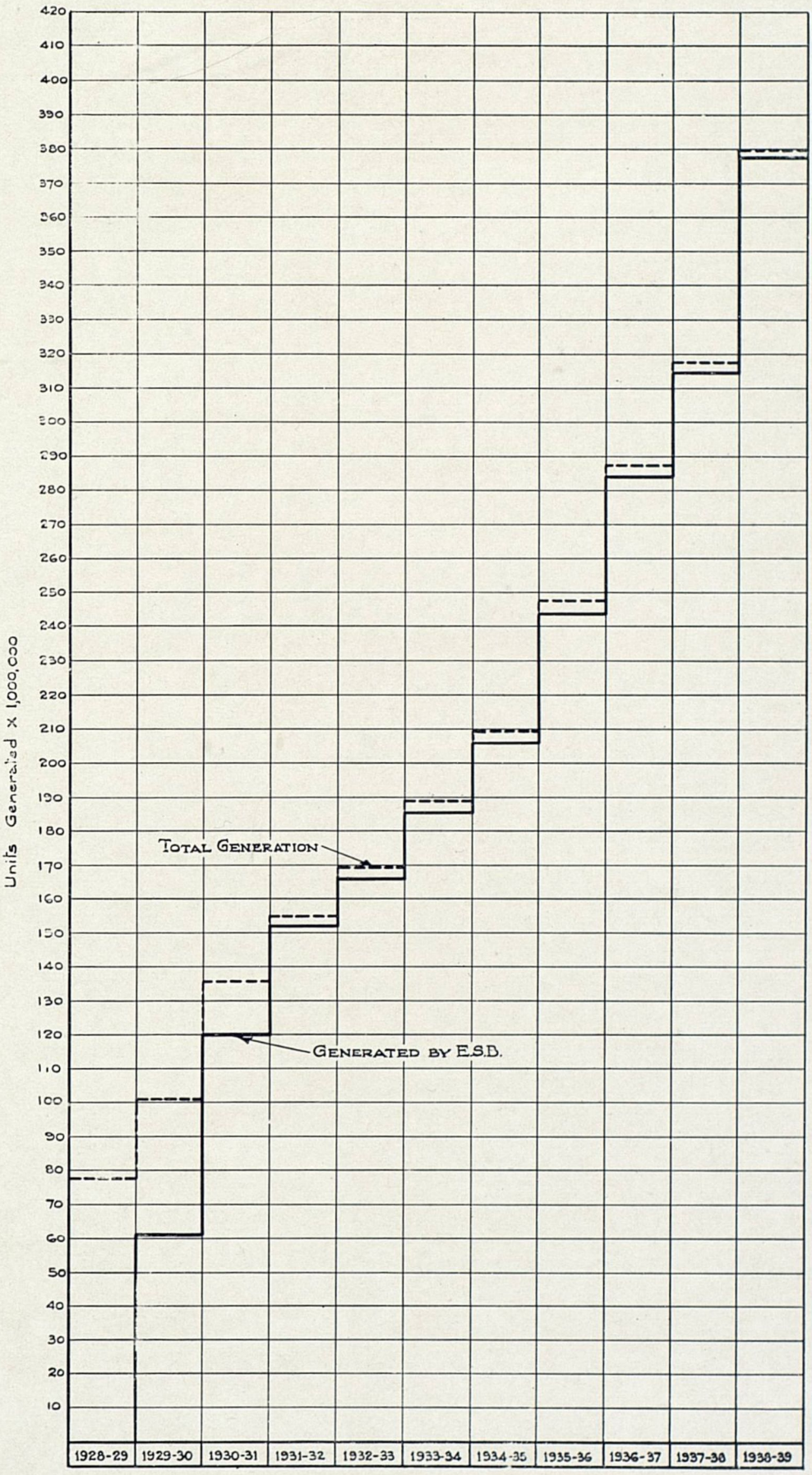
(1) Town	(2) Population	(3) Name of Undertaker	(4) No. of Consumers	(5) Normal Tariffs per Unit for			(6) Units Sold, Year ended 31st March, 1939
				Lighting	Heating and Cooking	Power	
Boyle	—	John Stewart	287	New Housing Scheme Charges: 40 watts. 6d. per week; 65 ,, 9d. ,,; 100 ,, 1/- ,,			118,678
				6d. to 7d.	1d. to 4d.	2d. to 3d.	
Borris, Co. Carlow ...	530	Borris Electricity Co., Ltd.	45	6d. & 1/-	—	6d.	8,600 estd.
Buncrana	2,295	The Buncrana Electric Supply Co. ...	330	4d. to 7d.	2½d.	2½d. to 1½d.	237,463
Bundoran	1,352	John Myles & Co.	538	6d.	2d.	1½d. to 2d.	124,327
Cahirciveen	1,680	The Cahirciveen E. L. & Power Co., Ltd.	240	10d.	6½d.	6½d.	34,251
Campile	117	John Kenny	4	1/6	—	—	321
Carlingford	488	The Carlingford Electricity Co., Ltd. ...	60	10d. to 3d.	10d. to 3d.	5d.	9,715
Carndonagh	660	James Kelly	120	10d.	4d.	2d. to 4d.	35,600
Carrigallen	245	John McLoughlin	4	1/4	—	—	900
Carrigart	115	Miss M. Maguire	12	1/-	—	—	1,300
Castlepollard	460	The Irish Electrical Construction Co. ...	86	11d.	5d.	3d.	17,716
Clifden	1,019	Clifden E. L. & Power Station	135	10d.	3d.	3d.	17,000 estd.
Clogheen	479	John Browne	82	11d.	6d. Miscellaneous	—	10,997
Clonmany	123	Patrick Gallen	27	10d.	—	5d.	1,624
Collooney	310	W. A. G. Middleton	67	7½d.	1½d.	Nil	22,000 estd.
Cloughjordan	416	Martin Gleeson	86	1/-	—	—	16,500
Dingle	1,800	The Dingle E. L. & Power Co.	192	8d. & 10d.	5d.	5d. & 4d.	31,924
Donegal	1,315	J. McGowan & Sons	189	10d.	3d.	3d.	37,055
Drumkeeran	232	The Drumkeeran Electricity Supply Co., Ltd.	47	1/-	—	4d. (Radio)	4,757
Drumshambo	553	C. S. Laird, Ltd.	89	8d.	2d.	—	20,244
Dromahair	279	Paul Jeiter	32	9d.	3d. & 1½d.	—	12,600 estd.
Dungloe	593	The Templecrone Co-op. Agrl. Society, Ltd.	125	8d.	—	—	6,001
Dunmore Co. Galway ...	482	Dunmore Electric Light Co., Ltd. ...	93	1/-	5d.	5d.	8,532
Emyvale	237	C. McCluskey	38	8d. & 4d.	—	—	3,288
Enniskerry	145	The Enniskerry E. S. Co-op. Society ...	46	1/-	4d.	4d.	6,346
Foynes	497	Foynes Saw Mills, Ltd.	55	8d.	—	4d.	13,300 estd.
Frenchpark	196	Frenchpark Electric Lighting Co., Ltd. ...	32	1/-	—	5d.	3,615
Glendalough	—	Messrs. Wynne	10	Included in rent.		—	5,000 approx.
Glenties	360	Glenties Electricity Supply Co., Ltd. ...	79	1/-	3d.	—	10,026
Kenmare	921	O'Shea Bros.	182	6d. to 10d.	3d.	3d.	33,000 estd.
Kilkelly	160	Michael Snee	52	8d.	—	—	9,061 estd.

(1) Town	(2) Population	(3) Name of Undertaker	(4) No. of Consumers	(5) Normal Tariffs per Unit for			(6) Units Sold, Year ended 31st March, 1939
				Lighting	Heating and Cooking	Power	
Killybegs	631	Rev. Bro. Superior, St. Columba's E. L. Station	85	1/-	—	6d.	8,802
Kilmacthomas ...	357	Patrick Kiersey	37	10d.	—	3d.	7,170
Kinnegad	270	Thomas Dunne	5	11d.	—	—	1,500 estd.
Letterfrack	—	The Superior, Industrial School	9	8d.	—	—	1,490
Malin, Co. Donegal ...	112	Donal McGilligan	17	10d.	6d.	—	not available
Manorhamilton ...	976	Manorhamilton & District E. L. Co., Ltd. ...	140	6½d. & 9½d.	—	2d.	42,443
Milford } Co. Donegal ...	377	McMahon Bros.	40	1/-	—	—	4,060
Milford }		William Russell	30	1/-	—	—	2,004
Mountbellew	284	Mountbellew Co-op. Agrl. Dairy Society, Ltd.	52	1/-	—	—	5,280 estd.
Moville	937	The Moville Electric Supply Co.	189	8d. & 9d.	—	4d. & 3d	26,750
Pettigo	251	Shaw Bros.	41	8d.	—	—	5,676
Portumna	894	The Portumna E. L. & Power Co., Ltd. ...	152	10d. & 1/-	—	7d.	22,373
Ramelton	924	Robert J. Campbell	78	7½d. to 9d.	—	4½d.	12,648
Raphoe	754	Raphoe Electric Lighting Co., Ltd. ...	71	10d.	—	6d.	1,1900 estd.
Rathfarnham	657	The Rathfarnham Mfg. Co., Ltd. ...	33	3d.	3d.	3d.	31,829
Riverstown, Co. Sligo ...	225	Flanagan Bros.	5	1/2	—	—	268
St. Ann's Hill, Blarney	—	St. Ann's Hill Hydropathic Co., Ltd ...	10	6d. per unit minimum charge			3,915
St. Johnston, Co. Donegal	270	Edward J. White	35	(Supply to Bungalows in Hydro Grounds) 10d.	—	—	2,820
Shillelagh	147	The Earl of Fitzwilliam	4	6d. and Agreement for lighting Railway Station for £11 per year.			1,948
Sixmilebridge	323	James O'Flynn & Sons, Ltd.	24	5d.	—	1½d.	59,200
Skerries	2,134	Reps. of Wm. Flanagan	392	1/- to 8d.	3d. to 6d.	3½d.	75,822
Tuamgraney	101	E. McLysaght, Raheen, Tuamgraney ...	4	1/-	—	—	1,248
Waterville	164	Electricity Supply Co., Ltd. Waterville, Co. Kerry	29	1/-	6d.	6d.	2,314
Windgap	72	Windgap Co-op. Dairy Society, Ltd. ...	10	Fixed yearly rent including Wiring etc.	—	—	1,500
Woodford	184	Mrs. John Roche	30	10d.	4d.	—	17,600 estd.
Various Districts ...	—	Great Northern Railway Co. (Ireland) ...	76	1d. to 1/-	1d. & 1·125d.	1·125d.	22,666

Total No. of undertakings 75; Total Population 46,242; Total No. of Consumers 7,797; Units sold 2,157,000 approximately.

UNITS GENERATED FROM APRIL 1ST, 1928,
TO 31ST MARCH, 1939.

APPENDIX XII.



To follow page 39.

ACCOUNTS

No. 1. **INSTALLATIONS TRADING ACCOUNT FOR**

Dr.

					Year 1937/38
			£	s. d.	£
To Cost value of work for which credit had not been taken at 31st March, 1938			23,468	9 0	27,313
,, Cost of installation work carried out during the year ...			49,598	10 2	53,849
,, Gross profit, carried down			13,641	5 4	15,408
			£86,708	4 6	£96,570
	£	s. d.			
To Salaries, wages and state insurance ...	6,334	10 3			
,, Travelling expenses	982	15 11			
,, Rents and rates	133	6 1			
,, Sundry expenses	408	10 0			
,, General overhead expenses and interest, as apportioned	3,899	3 1			
			11,758	5 4	9,921
,, BALANCE, carried to PROFIT AND LOSS ACCOUNT ...			1,883	0 0	5,487
			£13,641	5 4	£15,408

No. 2. **MERCHANDISE TRADING ACCOUNT FOR**

Dr.

					Year 1937/38.
			£	s. d.	£
To Cost value of transactions for which credit had not been taken at 31st March, 1938			32,465	2 2	19,631
,, Cost of goods issued as sales			61,675	15 11	62,772
,, Sundry costs in connection with sales			5,978	13 1	5,781
,, Gross profit, carried down			14,285	8 6	12,555
			£114,404	19 8	£100,739
	£	s. d.			
To Salaries, wages, commission and state insurance	3,967	5 1			
,, Travelling expenses	414	19 2			
,, Rents and rates	356	3 9			
,, Sundry expenses	779	9 11			
,, General overhead expenses and interest, as apportioned	4,134	17 6			
			9,652	15 5	8,654
,, BALANCE, carried to PROFIT AND LOSS ACCOUNT			5,653	6 8	4,692
			£15,306	2 1	£13,346

THE YEAR ENDED 31st MARCH, 1939.

Cr.

	£ s. d.	Year 1937/38 £
By Credit taken for contracts completed and charged ...	66,627 14 6	73,102
,, Cost value of work for which credit has not yet been taken	20,080 10 0	23,468
	£86,708 4 6	£96,570
By Gross Profit, brought down	13,641 5 4	15,408
	£13,641 5 4	£15,408

THE YEAR ENDED 31st MARCH, 1939.

Cr.

	£ s. d.	Year 1937/38. £
By Credit taken for sales	79,573 13 3	68,274
,, Cost value of transactions for which credit has not yet been taken	34,831 6 5	32,465
	£114,404 19 8	£100,739
By Gross profit, brought down	14,285 8 6	12,555
,, Hireage receipts on hire-purchase appliances	1,020 13 7	791
	£15,306 2 1	£13,346

No. 3. [ELECTRICITY REVENUE ACCOUNT FOR

Dr.

	£ s. d.	£ s. d.	Year 1937/38 £
To GENERATION :			
Operating expenses	42,744 19 2		
Fuel	95,514 14 8		
Maintenance and repair	42,527 11 6		
Transfer to depreciation reserve ...	61,000 0 0		
Supervision and local administration	19,212 18 10		
		261,000 4 2	230,034
,, TRANSMISSION :			
Operating expenses	10,594 19 5		
Maintenance and repair	22,698 17 9		
Transfer to depreciation reserve ...	54,000 0 0		
Supervision and local administration	15,265 13 5		
		102,559 10 7	98,810
,, DISTRIBUTION :			
Operating expenses	130,939 19 3		
Maintenance and repair	86,224 14 0		
Transfer to depreciation reserve ...	108,000 0 0		
Supervision and local administration	172,368 11 1		
		497,533 4 4	456,940
,, GENERAL ADMINISTRATION :			
Board, Secretariat and Consultants ...	26,534 6 6		
Engineering	33,610 4 2		
Accounting	38,297 13 4		
Audit fee	1,000 0 0		
Sales promotion and publicity ...	43,887 16 0		
General expenses	27,861 4 8		
Transfer to depreciation reserve— general assets	7,000 0 0		
	178,191 4 8		
Less : apportionment charged to other accounts and to capital works ...	18,667 0 0		
		159,524 4 8	159,115
,, Provision for bad debts		3,700 0 0	3,300
,, Depreciation of stocks of material		4,831 16 10	5,865
,, BALANCE, carried to PROFIT AND LOSS ACCOUNT		885,965 11 11	782,736
		£1,915,114 12 6	£1,736,800

THE YEAR ENDED 31st MARCH, 1939.

Cr.

	£	s.	d.	£	s.	d.	Year 1937/38 £
By Charges for electricity, etc. :							
General consumers ...	1,759,748	8	0				
Public lighting	91,980	2	8				
Meter and other rents ...	48,834	0	5				
				1,900,562	11	1	1,724,873
,, Miscellaneous revenue				14,552	1	5	11,927
				£1,915,114	12	6	£1,736,800

No. 4.
Dr.

ELECTRICITY PROFIT AND LOSS ACCOUNT

	£	s.	d.	£	s.	d.	Year 1937/38. £
To Interest payable to the Minister for Finance	589,684	9	1				
,, Interest on loans and loan-stocks of acquired undertakings	14,837	8	2				
,, Other interest	67,252	19	9				
	671,774	17	0				
Less: apportionment charged to other accounts and to capital works ...	44,422	0	0				
				627,352	17	0	561,636
,, Loan-stock management charges				213	18	8	222
,, Gross contributions to loan-stock sinking funds of acquired undertakings				14,753	11	2	14,299
,, Reserves, being the amount of capital of acquired undertakings repaid or provided for repayment				9,867	11	8	17,010
,, Premium at which loan-stock was redeemed				677	12	2	329
,, Provision for redemption of capital advanced by the Minister for Finance				14,100	0	0	—
,, BALANCE, carried down				226,810	4	6	195,952
				£893,775	15	2	£789,448
To Annuity in respect of moiety of advance by the Minister for Finance under the provisions of the Cork Tramways (Employees' Compensation) Act, 1933				1,589	0	6	1,589
,, Amount transferred to reserve for depreciation of physical capital assets				100,000	0	0	—
,, BALANCE, carried down				132,757	10	8	204,542
				£234,346	11	2	£206,131
To CONTINGENCIES RESERVE				£132,757	10	8	

FOR THE YEAR ENDED 31st MARCH, 1939.

Cr.

			Year 1937/38.
	£ s. d.		£
By Balance transferred from Revenue Account	885,965 11 11		782,736
,, Loan-stock sinking funds' investment income	4,289 5 8		4,032
,, Discount at which loan-stock was redeemed	85 19 1		68
,, Interest receivable	3,434 18 6		2,612
	£893,775 15 2		£789,448
By BALANCE, brought down	226,810 4 6		195,952
	£ s. d.		
,, Installations trading profit	1,883 0 0		
,, Merchandise trading profit	5,653 6 8		
	7,536 6 8		10,179
	£234,346 11 2		£206,131
By BALANCE, brought down	£132,757 10 8		

No. 5. ELECTRICITY CAPITAL ACCOUNT FOR

Dr.

	Total to 31st March, 1938 less— amounts written off	Expenditure during year to 31st March, 1939 less— amounts written off	Total to 31st March, 1939 less— amounts written off
	£ s. d.	£ s. d.	£ s. d.
To GENERATION : physical assets ...	5,753,325 6 10	94,026 8 10	5,847,351 15 8
„ TRANSMISSION : physical assets ...	2,460,392 5 8	251,829 12 9	2,712,221 18 5
„ DISTRIBUTION : (*a*) physical assets ...	3,238,123 15 3	253,013 0 6	3,491,136 15 9
(*b*) other capital expenditure	481,889 10 7	24,446 3 0	506,335 13 7
„ GENERAL : (*a*) physical assets ...	211,583 10 1	37,493 5 2	249,076 15 3
(*b*) other capital expenditure	338,923 9 4	(—) 2,415 12 8	336,507 16 8
	£12,484,237 17 9	£658,392 17 7	13,142,630 15 4
„ NON-CLASSIFIED EXPENDITURE : New works in progress			920,103 14 3
		TOTAL ...	14,062,734 9 7
			£14,062,734 9 7

THE YEAR ENDED 31st MARCH, 1939.

Cr.

	Total Receipts to 31st March, 1938 less— redemptions	Receipts during year to 31st March, 1939 less— redemptions	Total Receipts to 31st March, 1939 less— redemptions
	£ s. d.	£ s. d.	£ s. d.
By Loans and loan-stocks of local authority undertakings, and amount capitalised under section 39 (7) of the Electricity (Supply) Act, 1927:	... ...	...	
Loans and Loan-Stocks	215,777 14 8	(—) 21,462 7 7	194,315 7 1
Liability under Section 39 (7) ...	4,236 2 11	(—) 1,506 13 4	2,729 9 7
„ Minister for Finance: For advances under the Electricity (Supply) Act, 1927—			
Section 12 (2) ...	156,000 0 0	—	156,000 0 0
Section 12 (3) ...	1,903,688 6 1	—	1,903,688 6 1
For advances under the Electricity (Supply) (Amendment) Act, 1931 as extended by the Electricity (Supply) (Amendment) Acts, 1932 and 1934 and Liffey Reservoir Act, 1936	3,384,881 12 3	740,000 0 0	4,124,881 12 3
For advances to the Shannon Power Development Fund applicable as determined under section 15 of the Electricity (Supply) Act, 1927, to Shannon Works handed over	5,953,571 5 8	—	5,953,571 5 8
Total ...	£11,618,155 1 7	£717,030 19 1	12,335,186 0 8
By Balance			1,727,548 8 11
			£14,062,734 9 7

No. 6. **ELECTRICITY BALANCE SHEET**

Dr.

LIABILITIES.					31/3/1938.
			£ s. d.		£
To Receipts, as per Capital Account			12,335,186 0 8		11,618,155
„ Sundry Creditors			380,161 1 5		358,395
„ Working Capital Loan of an acquired undertaking...			12,000 0 0		14,400
„ Amount reserved in respect of sinking funds for loan-stocks of acquired undertakings			32,599 6 5		30,931
„ Amounts reserved in respect of capital loans repaid, capital receipts non-repayable and sale of assets, together with additional amounts reserved for depreciation and retirement of assets, less assets retired			2,195,621 18 4		1,838,040
„ Capital Assets Adjustment Reserve			187,338 1 5		185,973
	£	s. d.			
„ Reserves: Amount provided by acquired undertakings	77,897	14 4			
Other reserves and provisions	148,668	5 1			
			226,565 19 5		87,233
			£15,369,472 7 8		£14,133,127

AS AT 31st MARCH, 1939.

Cr.

ASSETS.				31/3/1938.
	£	s.	d.	£
By CAPITAL ASSETS, as per CAPITAL ACCOUNT	14,062,734	9	7	13,005,072
„ STOCKS ON HAND OR IN TRANSIT	645,513	4	1	585,832
„ COST VALUE OF INSTALLATIONS WORK AND SALES FOR WHICH CREDIT HAS NOT BEEN TAKEN	72,851	2	2	59,721
„ SUNDRY DEBTORS, after providing for bad and doubtful debts	400,037	3	8	354,952
„ SHANNON FISHERIES, temporary advances	57,878	7	2	46,829
„ CASH IN HAND OR WITH BANKS	97,858	14	7	49,790
„ SINKING FUNDS (held by local authorities) for loan-stocks :—				
Investments (at cost) ... £19,878 18 10				
Cash not invested ... 12,720 7 7				
	32,599	6	5	30,931
	£15,369,472	7	8	£14,133,127

No. 7. SHANNON FISHERIES TRADING ACCOUNT

Dr.

	£ s. d.	Year 1937/38 £
To Operation, maintenance and repair of fisheries... ...	6,635 16 9	5,059
„ Fishery rates	366 10 1	348
„ General management and overhead expenses	864 11 4	686
	£7,866 18 2	£6,093

No. 8. SHANNON FISHERIES PROFIT AND LOSS ACCOUNT

Dr.

	£ s. d.	£ s. d.	Year 1937/38. £
To Balance brought from Trading Account		4,817 6 8	4,249
„ Interest :			
Payable to the Minister for Finance	2,250 0 0		
Apportionment in respect of temporary advances from Electricity Funds	1,500 0 0		
		3,750 0 0	1,694
		£8,567 6 8	£5,943
To Balance, brought down		8,567 6 8	5,943
„ Balance brought forward from last year's account ...		10,531 14 5	4,589
		£19,099 1 1	£10,532
To Balance, brought down		£19,099 1 1	

FOR THE YEAR ENDED 31st MARCH, 1939.

Cr.

			Year 1937/38
	£ s. d.		£
By Sales of fish and letting of fishing rights	3,049 11 6		1,844
„ Balance, carried to Profit and Loss Account ...	4,817 6 8		4,249
	£7,866 18 2		£6,093

FOR THE YEAR ENDED 31st MARCH, 1939.

Cr.

			Year 1937/38.
	£ s. d.		£
By Balance, carried down	8,567 6 8		5,943
	£8,567 6 8		£5,943
By Balance, carried down	19,099 1 1		10,532
	£19,099 1 1		£10,532

No. 9. **SHANNON FISHERIES CAPITAL ACCOUNT**

Dr.

	Total to 31st March, 1938	Expenditure during year to 31st March, 1939	Total to 31st March, 1939
	£ s. d.	£ s. d.	£ s. d.
To Fishery rights and fisheries ...	30,020 11 5	53,306 6 5	83,326 17 10
„ Other capital expenditure ...	31 0 0	8 4 5	39 4 5
	£30,051 11 5	£53,314 10 10	83,366 2 3
„ Non-classified expenditure : New works in progress ...			15,026 1 5
			£98,392 3 8

No. 10. **SHANNON FISHERIES BALANCE SHEET**

Dr.

LIABILITIES		31/3/1938
	£ s. d.	£
To Receipts as per Capital Acccount	60,000 0 0	—
„ Electricity Funds, temporary advances	57,878 7 2	46,829
„ Temporary bank overdraft	16 1 4	—
	£117,894 8 6	£46,829

FOR THE YEAR ENDED 31st MARCH, 1939.

Cr.

	Total Receipts to 31st March, 1938	Receipts during year to 31st March, 1939	Total Receipts to 31st March, 1939
	£ s. d.	£ s. d.	£ s. d.
By Minister for Finance :—			
For advances under the Shannon Fisheries Act, 1935	—	60,000 0 0	60,000 0 0
„ Balance			38,392 3 8
			£98,392 3 8

AS AT 31st MARCH, 1939.

Cr.

ASSETS.			31/3/1938
	£ s. d.		£
By Capital assets, as per Capital Account	98,392 3 8		35,995
„ Stock of material	397 5 4		195
„ Cash in hand	5 18 5		107
„ Deficiency, as per Profit and Loss Account	19,099 1 1		10,532
	£117,894 8 6		£46,829

	Total Receipts to 31st March, 1939
	£ s. d.
UNDER ELECTRICITY ACTS.	
Loans and loan-stocks of local authority undertakings, and amount capitalised under section 39 (7) of the Electricity (Supply) Act, 1927 :—	
LOANS AND LOAN-STOCKS	740,955 7 5
LIABILITY UNDER SECTION 39 (7)	15,065 16 10
Minister for Finance :—	
For advances under the Electricity (Supply) Act, 1927—	
SECTION 12 (2)	156,000 0 0
SECTION 12 (3)	1,903,688 6 1
For advances under the Electricity (Supply) (Amendment) Act, 1931, as extended by the Electricity (Supply) (Amendment) Acts, 1932 and 1934 and Liffey Reservoir Act, 1936	4,124,881 12 3
For advances to the Shannon Power Development Fund applicable, as determined under section 15 of the Electricity (Supply) Act, 1927, to the Shannon Works handed over	5,953,571 5 8
	£12,894,162 8 3
UNDER SHANNON FISHERIES ACTS.	
Minister for Finance :—	
For advances under the Shannon Fisheries Act, 1935 ...	60,000 0 0
	£12,954,162 8 3

REDEMPTION THEREOF TO THE 31st MARCH, 1939.

Redeemed			Balance of Capital Receipts Outstanding at 31st March, 1939
Total to 31st March, 1938	During year to 31st March, 1939	Total to 31st March, 1939	
£ s. d.	£ s. d.	£ s. d.	£ s. d.
525,177 12 9	21,462 7 7	546,640 0 4	194,315 7 1
10,829 13 11	1,506 13 4	12,336 7 3	2,729 9 7
——	——	——	156,000 0 0
——	——	——	1,903,688 6 1
——	——	——	4,124,881 12 3
——	——	——	5,953,571 5 8
£536,007 6 8	£22,969 0 11	£558,976 7 7	£12,335,186 0 8
——	——	——	60,000 0 0
£536,007 6 8	£22,969 0 11	£558,976 7 7	£12,395,186 0 8

No. 12.

GENERAL BALANCE SHEET

Dr.

LIABILITIES.	£	s.	d.	£	s.	d.	31/3/1938 £
To Receipts:							
per Electricity Capital Account	12,335,186	0	8				
per Shannon Fisheries Capital Account	60,000	0	0				
				12,395,186	0	8	11,618,155
„ Sundry Creditors				380,161	1	5	358,395
„ Working Capital Loan of an acquired undertaking				12,000	0	0	14,400
„ Amount reserved in respect of sinking funds for loan-stocks of acquired undertakings				32,599	6	5	30,931
„ Amounts reserved in respect of capital loans repaid, capital receipts non-repayable and sale of assets, together with additional amounts reserved for depreciation and retirement of assets, less assets retired				2,195,621	18	4	1,838,040
„ Capital Assets Adjustment Reserve				187,338	1	5	185,973
„ Reserves:	£	s.	d.				
Amount provided by acquired undertakings...	77,897	14	4				
Other reserves and provisions	148,668	5	1				
				226,565	19	5	87,233
				£15,429,472	7	8	£14,133,127

R. F. BROWNE, *Chairman.*

PATRICK J. DEMPSEY, *Secretary.*

AS AT 31st MARCH, 1939.

Cr.

ASSETS.	£ s. d.	£ s. d.	31/3/1938
By Capital Assets:			£
per Electricity Capital Account	... 14,062,734 9 7		
per Shannon Fisheries Capital Account	98,392 3 8		
		14,161,126 13 3	13,041,067
„ Stocks on Hand or in Transit		645,910 9 5	586,027
„ Cost Value of Installations Works and Sales for which Credit has not been taken ...		72,851 2 2	59,721
„ Sundry Debtors, after providing for bad and doubtful debts		400,037 3 8	354,952
„ Cash in Hand or with Banks		97,848 11 8	49,897
„ Sinking Funds (held by local authorities) for loan-stocks—			
Investments (at cost) ...	19,878 18 10		
Cash not invested ...	12,720 7 7		
		32,599 6 5	30,931
„ Deficiency, as per Shannon Fisheries Profit and Loss Account		19,099 1 1	10,532
		£15,429,472 7 8	£14,133,127

F. WECKLER, *Chief Accountant.*

AUDITORS' REPORT.

As Auditors appointed by the Minister for Industry and Commerce, with the consent of the Minister for Finance, we have examined the foregoing Accounts and Balance Sheet. We certify, subject to the undermentioned qualifications, that the Balance Sheet as at the 31st March, 1939, exhibits a true and correct view of the state of the Board's affairs according to the best of our information and the explanations given to us, and as shown by the books of the Board.

Depreciation has been charged in the Revenue Account in respect of the year ended 31st March, 1939, on the Capital Assets referred to as physical assets in the Capital Account, including those acquired from Local Authorities, on the basis of a re-classification and re-valuation made by the Board's Officials and at rates approved by the Board governed by the life of the Assets as estimated by the Board's Officials. Depreciation of the physical assets acquired from Local Authorities has been treated, up to the 31st March, 1937, as having been provided for in the amounts charged in respect of the replacement of loans and loan-stocks of the undertakings acquired.

Overhead expenses are charged in the foregoing accounts in accordance with the estimated allocations made by the Board's Officials and approved by the Board :

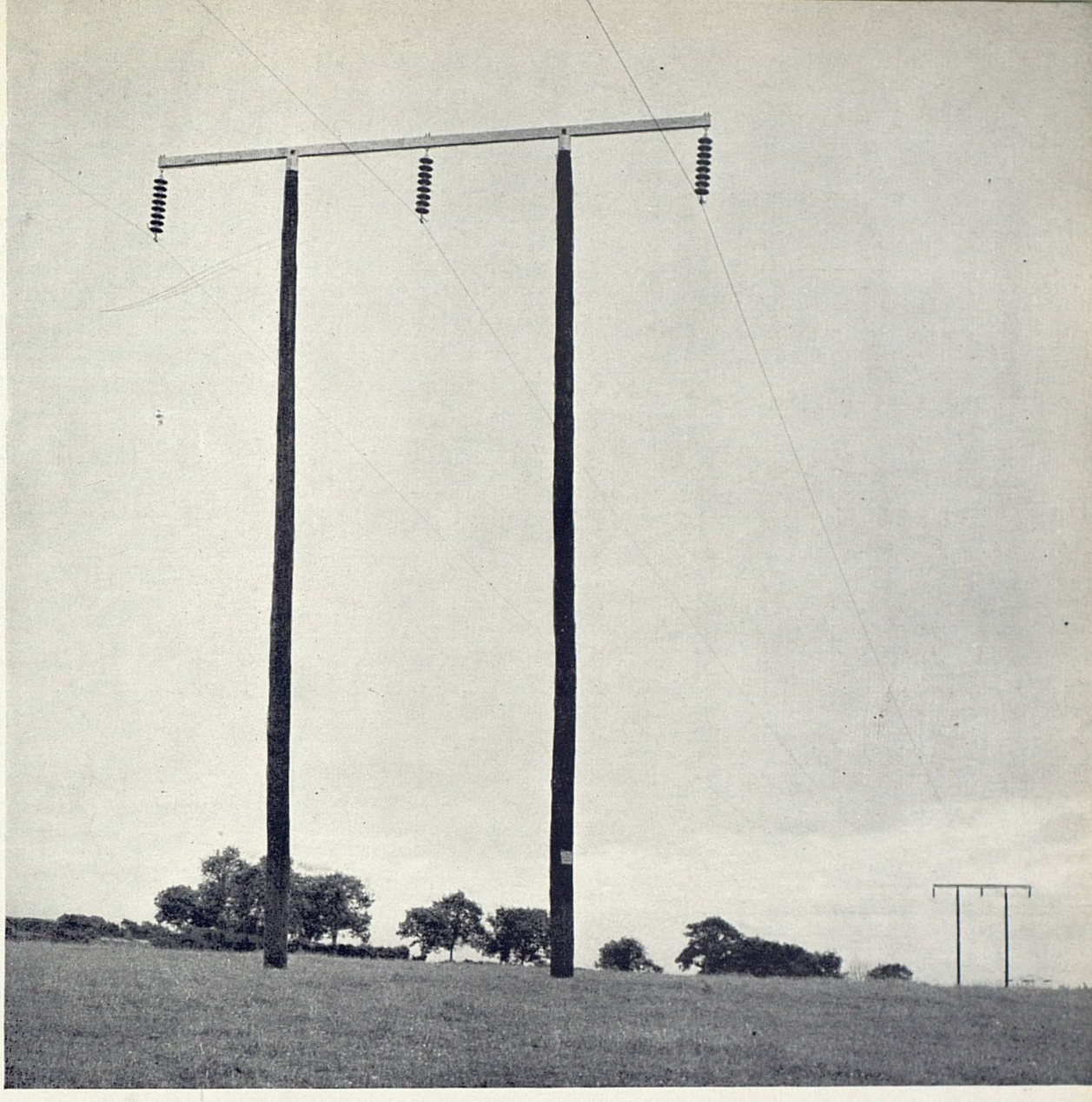
(*a*) The Revenue Account has been relieved of a proportion of supervision and administration expenses which has been charged to the Installations Trading Account, the Merchandise Trading Account, the Shannon Fisheries Trading Account, and to capital expenditure on new works.

(*b*) The Profit and Loss Account has been relieved of a proportion of the interest chargeable which has been transferred to the Installations Trading Account, the Merchandise Trading Account, the Shannon Fisheries Profit and Loss Account, and to capital expenditure on new works.

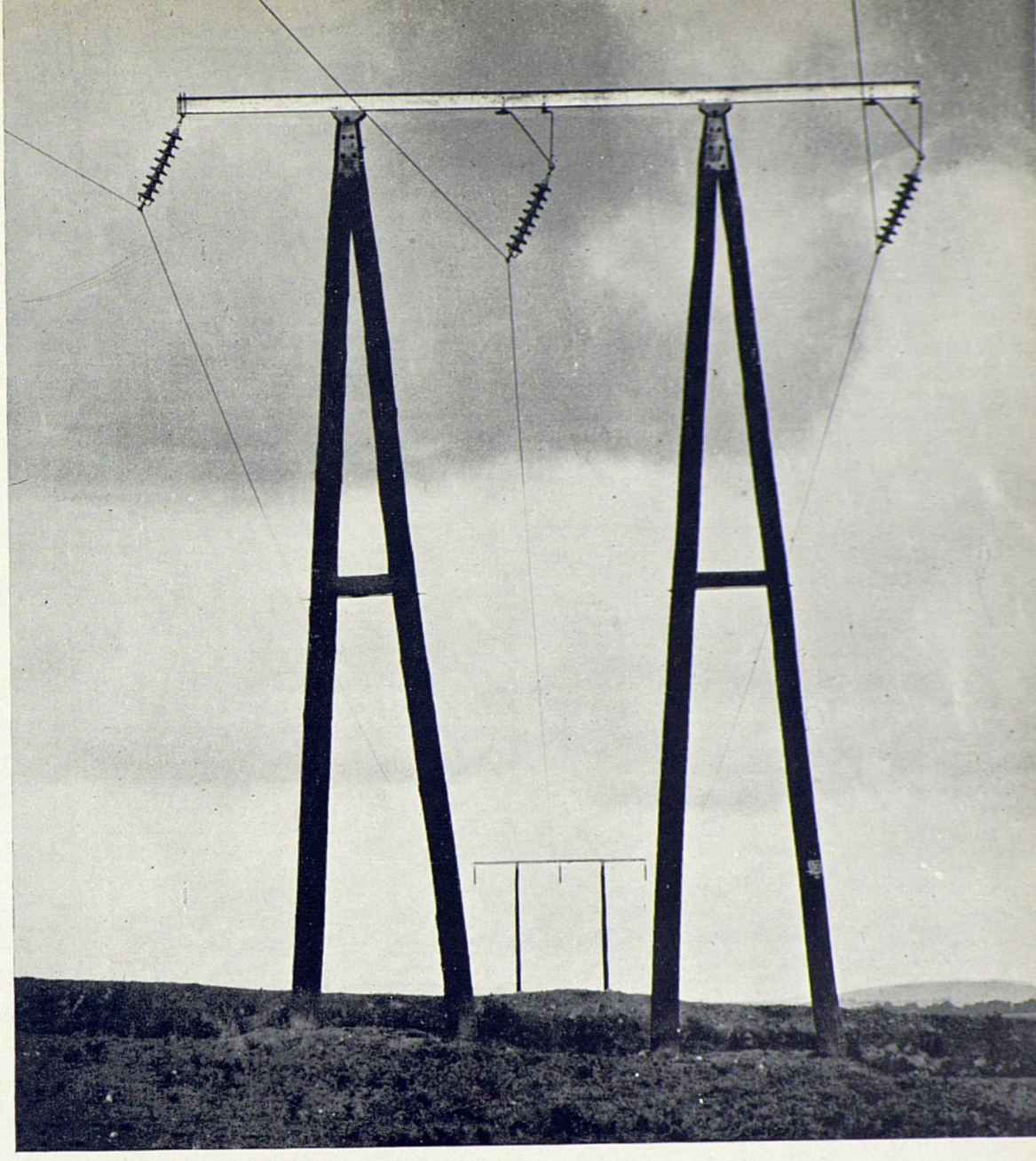
(*c*) Credit has been given to the Merchandise Trading Account for a sum representing a proportion of the expenses regarded as relating to the sales of electricity, and this amount has been charged to Revenue Account.

(Signed) KENNEDY, CROWLEY & CO.,
Auditors.

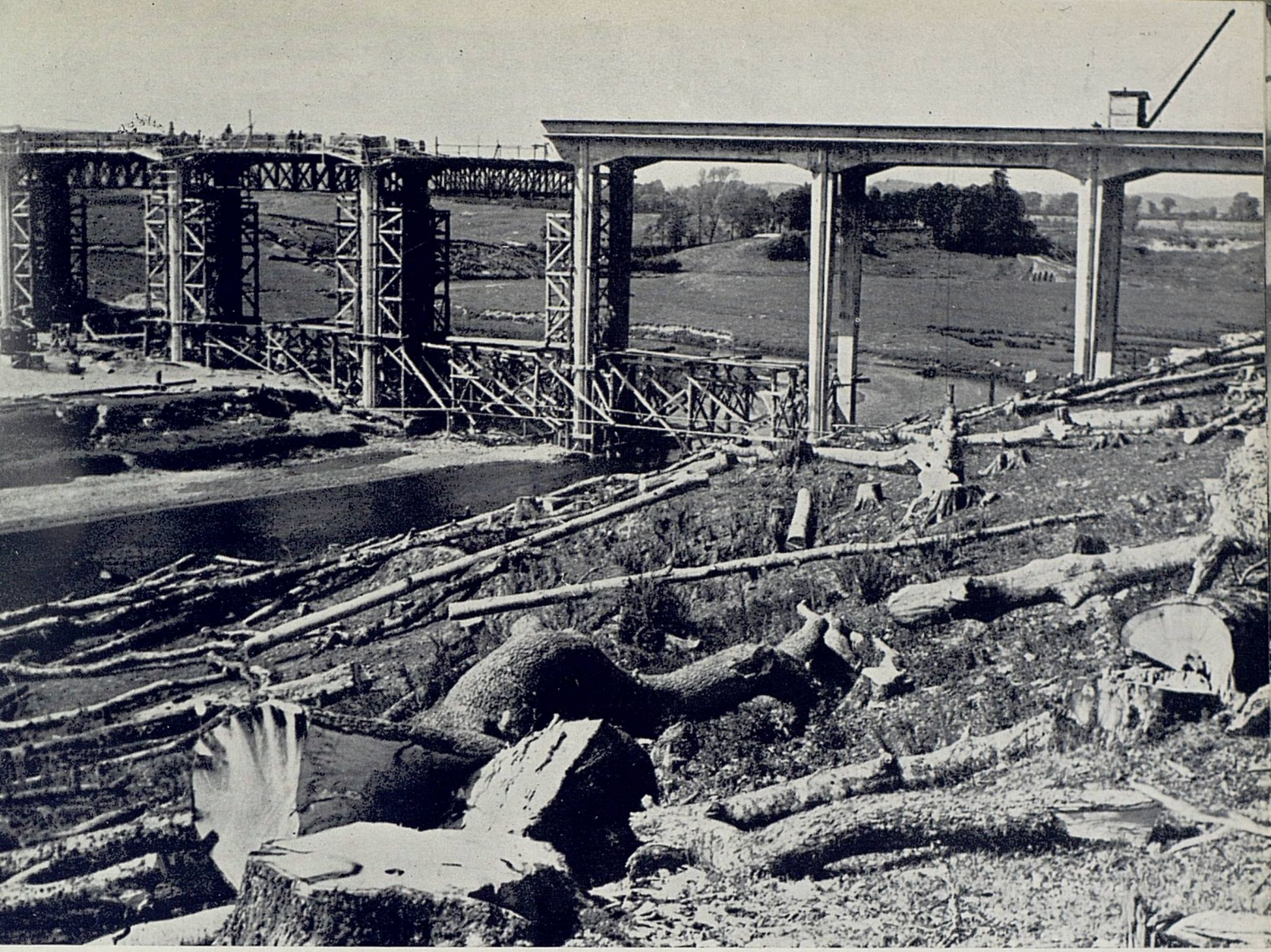
4 AND 5 WESTMORELAND STREET,
DUBLIN, 3rd *July*, 1939.



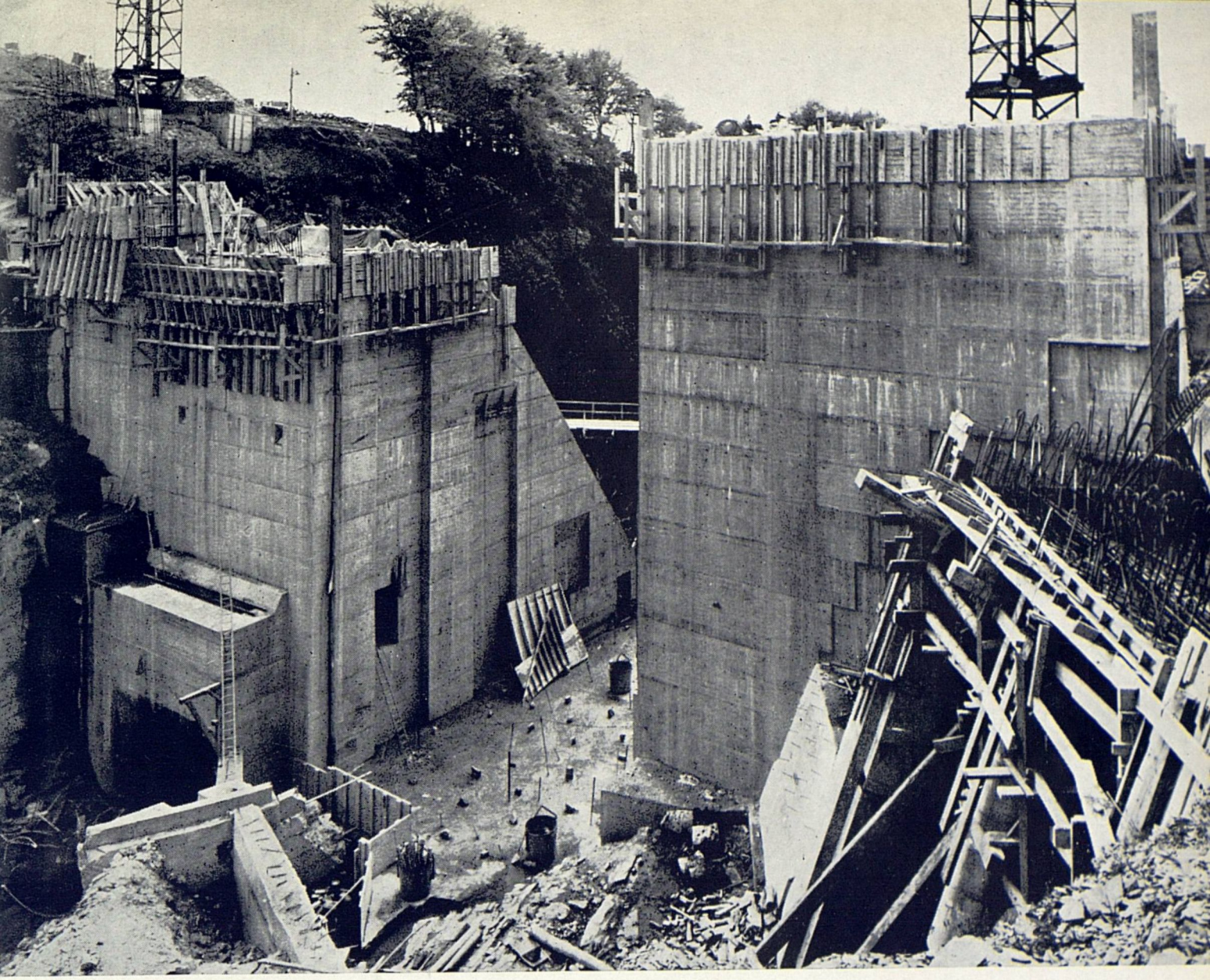
110 kV Wood Pole Transmission Line—typical straight line mast.



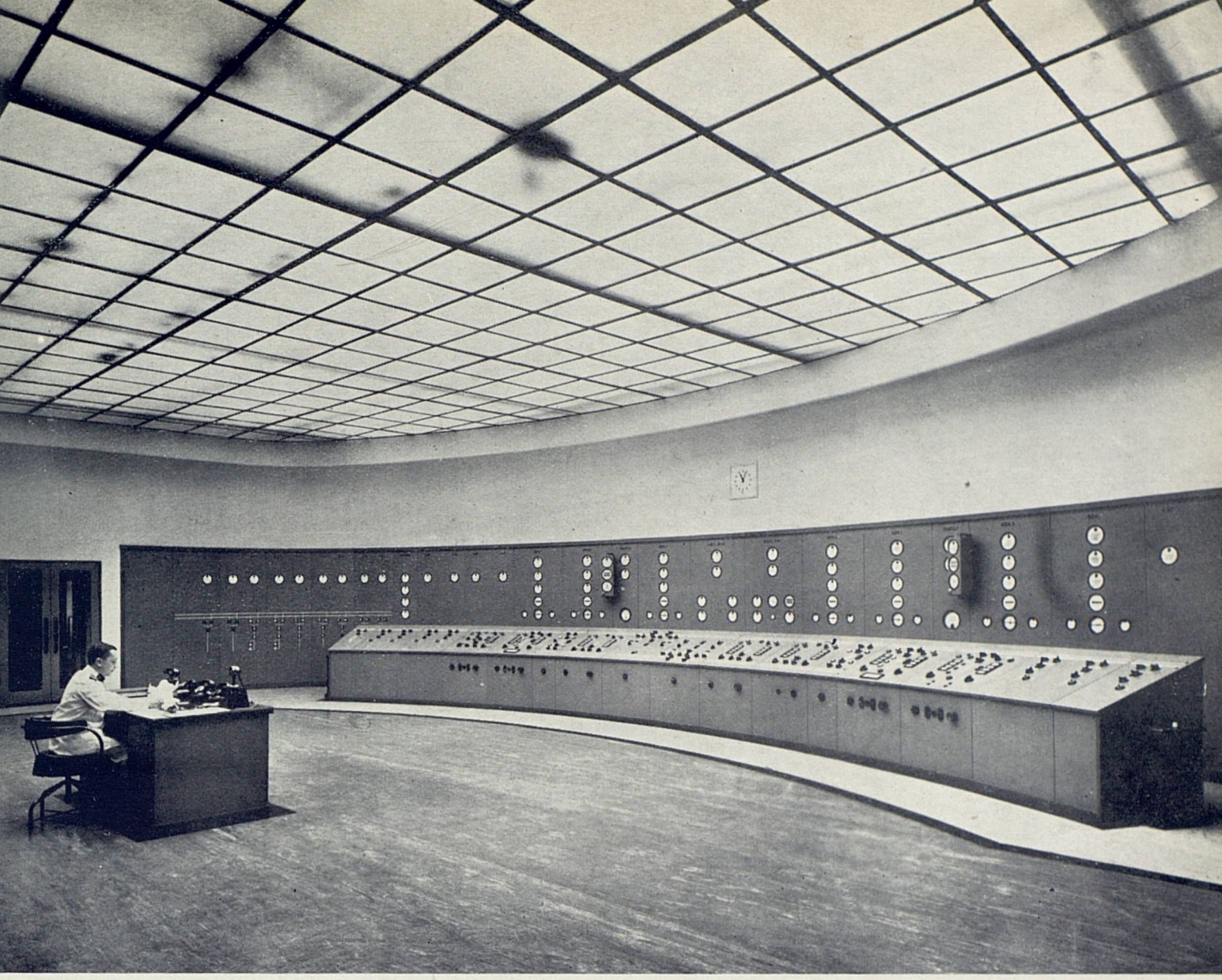
110 kV Wood Pole Transmission Line—typical mast for angles



Liffey Power Scheme—New Burgage Bridge under construction.



Liffey Power Scheme—Dam at Poulaphouca under construction.



A View in the New Control Room at Pigeon House Station.

Alex. Thom & Co., Ltd