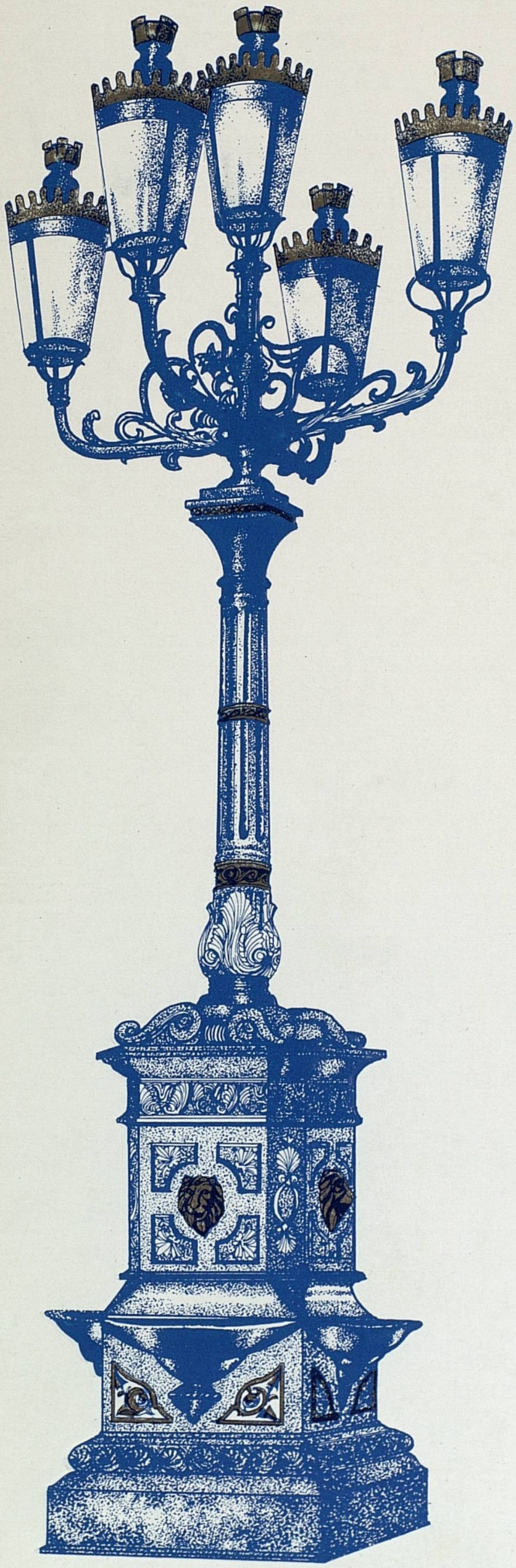
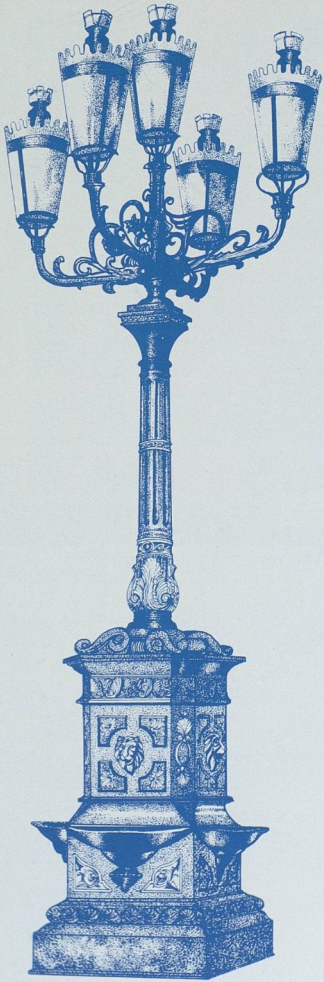


ELECTRICITY SUPPLY BOARD
BORD SOLÁTHAIR AN LEICTREACHAIS

Annual Report for year ending 31st December 1987



Pl. 5643



The cover illustration features the Five Lamps, one of Dublin's famous landmarks. This fine example of decorative cast iron was erected *c.*1870 as a memorial to a Galwegian, General Henry Hall. Originally lit by gas the Five Lamps were converted to electricity in the late 1930s. Today the Five Lamps are illuminated by high pressure sodium lamps bringing to this century-old monument the most advanced lighting technology.

1988
DUBLIN
CELEBRATING A THOUSAND YEARS



"DER UBERMANN" one of the Sean Keating paintings commissioned by the ESB during the construction of the Shannon Scheme.

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Tá leagan Gaeilge den Tuarascáil seo le fáil, ach é a iarraidh.

ESB INPUT TO IRELAND'S ECONOMY

	1983/84 £ millions	1984/5 £ millions	1985/86 £ millions	1986 (9 mths) £ millions	1987 £ millions
Fuel: Natural Gas, Peat, Native Coal	208	210	199	86	117
Irish Suppliers of Goods and Services including Capital Work	111	120	97	86	120
Rates Levy and Local Rates	23	25	26	20	27
Payroll Costs including Capital Projects	194	203	209	163	223
Interest paid to Irish Lenders & Stockholders	34	39	50	49	40
TOTAL	570	597	581	404	527

DATA SUMMARY

	1986 (9 mths)	1987
FINANCIAL		
Financial Outcome. Surplus/(Deficit)	£6m	(£5m)
Income	£577m	£780m
Assets in Commission (before Depreciation)	£1,807m	£2,050m
Sales (Million Units)	7,295	10,506
Effective Generating Capacity (MW)	3,852	4,009
Peak Load (MW)	2,178	2,351
Customers	1,207,051	1,221,600
EMPLOYMENT		
Total Employment	11,763	11,383
Operations	9,402	9,143
New Works	1,882	1,802
External Activities and Secondment	149	134
Apprentices	330	304
Pay	£134m	£185m
ESB Contribution to Pension Fund, PRSI and Expenses	£29m	£38m

Board Members

PROFESSOR C. T. G. DILLON, M.E., C.Eng., F.I.E.I., F.I.E.E., F.I.Mech.E., **Chairman**
S. CONERNEY
W. CREMINS
BETTY DILLON
P. J. KEVANS, Solicitor
J. LaCUMBRE
K. LYNCH, Dip.Eng.(Mech.), M.I.E., C.Eng., M.I.E.I.
W. McCANN, F.C.A.
C. McCARTHY, B.Comm., M.Econ.Sc.
P. J. MORIARTY, F.C.I.S., F.Mgt.I., F.I.P.M., F.I.E.I., LL.D., **Chief Executive**
N. S.O'HARA, B.E., M.I.E., C.Eng., M.I.E.I.
J. WRYNN, B.Sc., B.Comm., M.B.A.

Directors

Strategic Planning and Development K. O'BRIEN, B.E., M.Eng.Sc., M.B.A., M.I.E.I.
Customer Operations K. O'HARA, B.E., M.I.E., C.Eng., F.I.E.I.
Generation and Transmission Operations A. G. KELLY, B.E., Ph.D., C.Eng., F.I.Mech.E., F.A.S.M.E., F.I.E.I.
Corporate Services F. A. MALIN, A.C.I.S.
Finance D. J. MORAN, F.C.M.A.

Managing Director, ESB International

M. HAYDEN, B.E., M.Ind.E., C.Eng., F.I.E.I.

Chief Operations Officer

J. A. DUFFY, B.E., C.Eng., M.I.E.I.

Secretary

J. F. WILLIAMS, F.C.I.S.

ELECTRICITY SUPPLY BOARD

Lower Fitzwilliam Street, Dublin 2, Ireland.
Telephone 765831 and 771821. Telex Dublin 93727 ESB EI. Telefax 615376.

The floodlit Georgian houses in Merrion Square, Dublin.



To the Minister for Energy and for Communications

In accordance with the provisions of the Electricity Supply Acts of 1927/1985 the Board presents its Annual Report and Accounts for the 12 months ended 31st December, 1987.

REVIEW OF THE YEAR

Plans and strategies, carefully developed and put in place over previous years, produced real benefits:

— Change and adaptation to new technologies, systems and re-organisation are now accepted as normal by management and staff.

— ESB is now a slimmer, fitter company than it was and the Board is determined to keep the price of electricity at its present level at least until 1992.

— Following price reductions in 1986, prices were again reduced in January 1987 by an average of 5.3 per cent and in January 1988 by approx. 5 per cent.

The financial outturn for the year — a deficit of £5 million — was satisfactory taking the drop in revenue of £41 million, resulting from the price reduction, into account. The Board's accumulated deficit now stands at £71 million.

For the first time in almost 20 years the ESB's overall level of debt reduced as a result of completion of major construction projects and favourable exchange rates. Despite this welcome turn-of-events the level of debt at £1.21 billion remains a major financial burden. For long term financial stability the ESB will have to reduce the level of debt significantly over the next five years. The management of this aspect of our finances is now, and will continue to be, a high priority and its success will depend on an unremitting attack on costs in every part of the company.

Supplying, as we do, every home in the country the ESB staff are, more than most, conscious of the financial pressure on many people. Our approach to these problems is one of sensitivity and understanding. During the year we launched a new programme called HELP to inform customers of the range of payment facilities available to help them manage electricity bills and above all to educate those who need it about the abuses of moneylenders.



Growth of electricity sales over the last few years has been modest and 1987 was no exception with growth of 2.4 per cent. This was below the target figure of 3% set at the start of the year.

One of the highlights of 1987 was the much improved performance of our shops. Turnover increased by an impressive 30%, to £20.3 million, bringing appliance sales into profit for the first time in many years. The shops are now set fair to go from strength to strength in the years ahead but a lot remains to be done to put the whole chain of activity from sale to deliveries on a modern cost effective basis.

The upper and lower lakes of Turlough Hill pumped storage station in Co. Wicklow.





Energy efficient, all electric, Gold Shield Homes in Galway.



The All-Ireland CookElectric Competition finalists with their dishes.



An Taoiseach, Mr. Charles J. Haughey, T.D., speaking at the formal switch-on of electricity supply on Innisturk off the Mayo Coast.

Fixing game guards on power lines over the Royal canal to protect swans in flight.



Following the very difficult weather conditions in 1986 which caused widespread supply disruption, 1987 was a relatively mild year with no major storms. In England it was very different. In mid-October there was one of the worst storms ever. The South and South-East of England were particularly badly hit with very extensive damage to networks. We were asked to help. Within 24 hours 300 ESB Staff — linesmen, supervisors, engineers — were on the road. Their performance in England was magnificent. They worked for three weeks without even a minor accident. The many commendations given in the U.K. to ESB staff are a source of great pride to the Board.

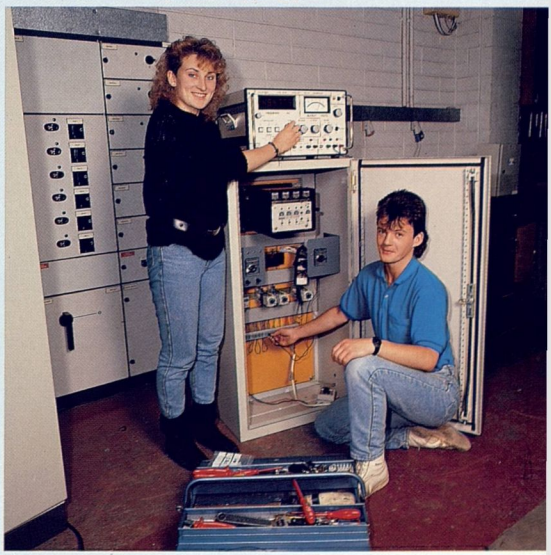
The circumstances under which there was a two-day strike and power cuts in May 1987 are now history. The Board regrets the disruption which was caused and hopes that a climate of employee relations has developed in its wake which will guarantee continuity of electricity supply and progress of change. Progress in employee relations includes the consolidation of the joint participation councils set up in 1985. The ESB has now a system of sub-Board employee participation, which fulfils the objectives envisaged by the Minister for Labour in his current legislative proposals.

The third 300MW unit in Moneypoint was commissioned in April, three months ahead of schedule. This station is now producing almost 40 per cent of our electricity, at the lowest cost of all our thermal power stations. Twenty-one per cent of electricity generation was from oil, substantially down on 1986, natural gas accounted for 18%. Careful planning has brought about the present capacity to use different fuels compared to ten years ago when the ESB was dependent on oil for 70% of electricity.

1987 was once again a difficult year for our international consultancy business with little change in market conditions. Turnover at £10.1 million, and a modest surplus, were satisfactory in the circumstances. New markets are being developed in Africa, the Far East, the United States and Great Britain.

The Board thanks all the staff for their efforts in 1987. The achievements of the last twelve months have been significant and the staff have contributed in a major way to the progress which was achieved.

ESB apprentice electricians, Denice Byrne and John Harkin, testing an under frequency tripping panel.



THE BOARD

The following were the members of the Board at 31st December, 1987.

Professor C. T. G. Dillon, M.E., C.Eng., F.I.E.I., F.I.E.E., F.I.Mech.E., CHAIRMAN (17)

S. Conerney (16)

W. Cremins (17)

Betty Dillon (9)

P.J. Kevans, Solicitor (12)

J. LaCumbre (16)

K. Lynch, Dip.Eng.(Mech.), M.I.E., C.Eng., M.I.E.I. (15)

W. McCann, F.C.A. (15)

C. McCarthy, B.Comm., M.Econ.Sc. (12)

P.J. Moriarty, F.C.I.S., F.Mgt.I., F.I.P.M., F.I.E.I., LL.D., CHIEF EXECUTIVE (16)

N.S. O'Hara, B.E., M.I.E., C.Eng., M.I.E.I. (14)

J. Wrynn, B.Sc., B.Comm., M.B.A. (12)

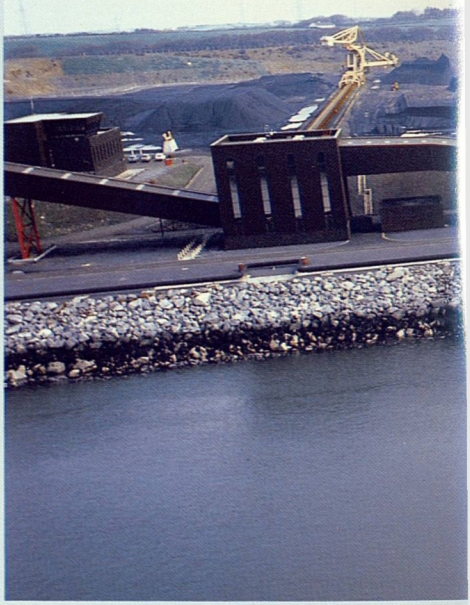
The Board welcomes the appointment to the Board of Mr. James Wrynn in January, 1987.

The triennial election under the Worker Participation (State Enterprises) Act 1977 was held during the year. Mr. Willie Cremins, Mr. Sean Geraghty, Mr. Denis Holland and Mr. Joe LaCumbre were elected and subsequently appointed to the Board by the Government from January 1988.

The Board wishes to record its appreciation of the invaluable contributions of Mr. Seamus Conerney and Mr. Noel O'Hara whose terms of office ended on 31st December, 1987.

There were 17 separate meetings of the Board during the year ended 31st December, 1987. The numbers in brackets opposite each name above are the number of meetings attended by each Board Member.





This report was approved by the Board at its meeting on 19th April, 1988 for submission to the Minister for Energy and for Communications.

Signed:

Charles T.G. Dillon, *Chairman*

P.J. Moriarty, *Chief Executive*

J.F. Williams, *Secretary*

A view of the coal yard at Moneypoint, Co. Clare.

ESB teams return home having assisted with storm damage repair in South East England.




Electricity Service

ELECTRICITY SUPPLY BOARD
BORD SOLÁTHAIR AN LEICTREACHAIS

Accounts and Schedules for year ended 31st December, 1987

◀ *Day and night, ESB crews work to keep the network in first class condition.*

Balance Sheet

Account No. 2

31st December, 1986				31st December, 1987
		Assets Employed:		
£000's	*Reference*		£000's	£000's
1,519,364	Schedule E	**Net Investment in Capital Assets** including work-in-progress		1,535,265
319,053	Schedule F	**Current Assets**	295,711	
		Less:		
155,002	Schedule F	**Current Liabilities**	143,422	
164,051		**Net Current Assets**		152,289
60,255	Schedule G	**Sinking Fund Investments,** at cost (including interest accrued £1,670)		59,977
£1,743,670				£1,747,531
		Financed as follows:		
1,302,766	Schedule H	**Borrowings**		1,213,154
		Reserves		
446,395	Schedule J	Capital	545,685	
60,255	Schedule G	Sinking funds for repayment of borrowings	59,977	
(65,746)	Account No. 1	Profit and Loss Account balance (deficit)	(71,285)	
440,904				534,377
£1,743,670				£1,747,531

Note: At 31st December, 1987 contractual commitments amounted to approximately £16m. (at 31st December, 1986 - £24m.). In addition, work approved by the Board but not yet contracted for amounted to approximately £50m. (at 31st December, 1986 - £76m.).

Signed: Charles T. G. Dillon *Chairman*

Signed: P. J. Moriarty *Chief Executive*

D. J. Moran *Director, Finance*

19th April, 1988

Electricity Income and Expenditure Account

Schedule A

1986 (9 Months) £000's						1987 (12 Months) £000's
		£000's	£000's	£000's	£000's	
550,620	**Income** – Electricity Sales	736,441				
1,834	– Miscellaneous	2,035				
552,454						738,476
	Expenditure:	**Generation**	**Transmission**	**Distribution**	**Total**	
164,629	Fuel (including purchased electricity)	218,924			218,924	
134,676	Operation, maintenance and local charges	85,139	9,312	91,163	185,614	
47,786	General charges	27,080	6,778	35,618	69,476	
1,442	Stations now decommissioned	2,994			2,994	
43,284	Depreciation	40,410	9,417	19,063	68,890	
391,817		374,547	25,507	145,844	545,898	
	Unapportioned Costs:					
18,000	Rates Levy				24,240	
81,528	Interest				102,840	
491,345						672,978
£61,109	Surplus transferred to Profit and Loss Account					£65,498

Notes: – All figures in £000's

Charges include: Fisheries Conservation Cost £1,019 (Previous 9 months £605), Local Authority Rates £3,097(£2,205), Bad Debts £2,647(£1,085), Audit Fee £85(£82), Board Members' Remuneration including full-time Chairman £56(£39).

Appliance and Contracts Income and Expenditure Account

Schedule B

	Total		Appliance Sales		Appliance Repairs		Installations Contracts	
	1986 (9 mths)	1987 (12 mths)	1986 (9 mths)	1987 (12 mths)	1986 (9 mths)	1987 (12 mths)	1986 (9 mths)	1987 (12 mths)
	£000's	£000's	£000's	£000's	£000's	£000's	£000's	£000's
Income	16,462	26,686	12,380	20,317	1,399	2,131	2,683	4,238
Direct Costs	13,250	21,586	9,915	16,181	1,320	2,079	2,015	3,326
Gross Profit	3,212	5,100	2,465	4,136	79	52	668	912
Overheads:								
Payroll costs	1,950	2,952	1,232	1,854	478	669	240	429
Publicity	265	291	219	241	44	48	2	2
Premises costs	786	1,056	488	646	243	338	55	72
Sundry expenses	387	298	144	223	108	17	135	58
General charges and interest, as apportioned	1,005	1,447	392	612	351	475	262	360
	4,393	6,044	2,475	3,576	1,224	1,547	694	921
Less: transfer to Electricity Income and Expenditure Account (See Schedule M – Note 12)	679	915	–	–	620	834	59	81
	3,714	5,129	2,475	3,576	604	713	635	840
Surplus/(Deficit) transferred to Profit and Loss Account	£(502)	£(29)	£(10)	£560	£(525)	£(661)	£33	£72

External Activities Income and Expenditure Account

Schedule C

1986 (9 Months) £000's			1987 (12 Months) £000's
7,308	**Income**		10,101
	Expenditure:		
5,628	Direct Costs	7,930	
	Overheads:		
741	Directly allocated	1,056	
930	General charges and interest, as apportioned	973	
7,299			9,959
£9	Surplus transferred to Profit and Loss Account		£142

Statement of Source and Application of Funds

Schedule D

1986 (9 Months) £000's	Reference			1987 (12 Months) £000's
		Source:		
60,562	Account No. 1	Operations before Amortisation Charge		65,578
	Account No. 1	Exceptional Item – Part settlement of 1985/86 Consequential Loss Insurance Claim		2,075
1,432	Schedule I	Provision towards premium on Stock Redemption		1,702
47,673	Schedule E	Depreciation		75,729
2,445	Schedule E	Credits on disposal of assets		1,735
6,680	Account No. 1	Interest on Sinking Fund Investments		10,836
315	Schedule G	Decrease in Sinking Fund		278
119,107				157,933
10,852	Account No. 1	Non-Repayable Supply Contributions		11,610
71,861	Schedule H	Borrowings		73,300
£201,820				£242,843
		Application:		
99,611	Schedule E	Capital expenditure		93,365
89,139	Schedule H	Redemption of Borrowings		161,240
5,525	Schedule G	Payment of premium on Premium Stock		–
	Schedule F	Net Movement in Current Assets/Current Liabilities:		
		– Cash/Temporary Investments/ESB Stocks	(22,774)	
		– Debtors/Creditors	14,323	
		– Inventories	(3,311)	
7,545				(11,762)
£201,820				£242,843

Statement of Capital Assets

(Including Analysis of Depreciation)

Schedule E

	Total Gross Assets at 31st December, 1986	Additions during year	Retirements during year	Total Gross Assets at 31st December, 1987	Less Accumulated Depreciation	**Total Net Assets at 31st December, 1987**
	£000's	£000's	£000's	£000's	£000's	**£000's**
ASSETS						
Generation	979,608	172,851	477	1,151,982	284,389	**867,593**
Transmission	272,777	26,036	552	298,261	64,892	**233,369**
Distribution	448,558	40,126	2,673	486,011	169,395	**316,616**
General Buildings, Transport and Working Equipment	104,602	9,655	2,224	112,033	34,310	**77,723**
Fisheries	1,177	194	1	1,370	277	**1,093**
	1,806,722	248,862	5,927	2,049,657	553,263	**1,496,394**
Work-in-Progress, including payments on account						**38,871**
Net Investment in Capital Assets						**£1,535,265**

Work carried out in the year amounted to £93.365m. (Previous 9 months £99.611m.).

ACCUMULATED DEPRECIATION

	£000's	£000's
Total as at 31st December, 1986		481,726
Movements in year:		
Depreciation of assets - Plant and Buildings	68,926	
- Tools, Vehicles etc.	6,803	
	75,729	
Assets Retired	(5,927)	69,802
		551,528
Amount allocated from proceeds of disposal of assets. (see Schedule M – Note 3)		1,735
Total as at 31st December, 1987		£553,263

Statement of Current Assets and Current Liabilities

Schedule F

31st December, 1986 £000's	Current Assets	£000's	£000's	31st December, 1987 £000's
	Inventories:			
55,422	Fuel		50,601	
34,512	Plant/Network Stocks and Miscellaneous Spares and Sundries		35,534	
3,109	Appliances		3,597	
93,043				89,732
3,305	**Repayable Work–in–Progress at cost**			2,977
	Accounts Receivable:			
	Electricity: billed	46,844		
	: unbilled	86,365		
128,218			133,209	
20,188	Appliance and Contracts (including £22.8m. Hire Purchase, maximum term 5 years)		23,904	
	Others: VAT Refund Due	3,344		
	: Sundry (completed) Repayable Work	8,734		
	: Miscellaneous	19,408		
37,122			31,486	
185,528				188,599

		Nominal Value £000's (31st December, 1986)	£000's	
	Temporary Investments at cost:			
1,766	– Euro Bonds	1,727	–	–
1,681	**ESB Stocks** – to support market	1,764	2,770	2,707
33,730	**Bank and Cash**			11,696
£319,053				£295,711

	Current Liabilities	
1,182	**Bank Overdrafts**	16,533
62,141	**Accounts Payable**	51,739
2,929	**Progress Payments on Repayable Work-in-Progress**	2,504
17,009	**Temporary Borrowings and Borrowings for Hire Purchase Financing**	18,731
6,559	**Supply Contributions and Deposits**	5,940
3,559	**P.A.Y.E.**	4,577
626	**P.R.S.I.**	789
41,533	**Accrued Charges and Provisions**	20,521
19,464	**Accrued Interest on Borrowings**	22,088
£155,002		£143,422

Statement of Sinking Funds for Borrowings

Schedule G

1986 (9 Months) £000's		£000's	1987 (12 Months) £000's
57,169	Opening Balance – Investments	57,883	
3,401	– Interest Accrued	2,372	
60,570			60,255
	Additions:		
54,193	Amortisation charge in year (Account No. 1)	73,192	
1,432	Provision for premium on ESB Stocks (Schedule I)	1,702	
6,680	Interest for year (including interest accrued)	10,836	
62,305			85,730
122,875			145,985
	Utilisation:		
	Redemption of borrowings viz:–		
	– Minister for Finance	2,977	
	– ESB Stocks	2,733	
	– Other Borrowings	80,298	
(57,095)	Reflected in Repaid Capital Reserve (Schedule J)		(86,008)
(5,525)	Premium Paid on Stock Redemption		–
	Closing Balance: (as per Balance Sheet)		

	Market £000's	Cost £000's		
Investments – Government Stocks	48,599	37,966		
– Euro Bonds	5,238	4,559		
– Bank Deposits	15,782	15,782		
57,883			58,307	
2,372	Interest accrued		1,670	
£60,255				£59,977

Note: Redemption of individual Borrowings is shown in detail in the Appendices.

Statement of Borrowings

Schedule H

	Balance Outstanding 31st December, 1986 £000's	Borrowed during year £000's	Redeemed during year £000's	Adjustment for currency changes £000's	**Balance Outstanding 31st December, 1987 £000's**
Irish Pound Borrowings:					
Fixed Rate Facilities	140,302	–	6,644	–	**133,658**
Floating Rate Facilities	259,000	250	44,000	–	**215,250**
	399,302	250	50,644	–	**348,908**
Foreign Currency Borrowings:					
Project Finance	556,345	23,516	36,578	2,067	**545,350**
Fixed Rate Facilities	227,930	49,534	43,139	6,517	**240,842**
Floating Rate Facilities	119,189	–	30,879	(10,256)	**78,054**
TOTAL – FOREIGN CURRENCY BORROWINGS	903,464	73,050	110,596	(1,672)	**864,246**
TOTAL – IRISH POUND BORROWINGS	399,302	250	50,644	–	**348,908**
TOTAL – ALL BORROWINGS	£1,302,766	£73,300	£161,240	£(1,672)	**£1,213,154**

Note: Individual borrowing details are shown in the Appendices.

Statement of Borrowings

Schedule H (Continued)

Currency and Repayment Profile of Borrowings

	Repayable Within 1 Year £000's	Repayable Within 2 to 5 Years £000's	Repayable Within 6 to 10 Years £000's	Repayable After 10 Years £000's	Total £000's	Currency as % of Total Borrowings %
Irish Pounds	69,232	211,829	48,068	19,779	348,908	29
European						
Sterling	2,262	25,648	6,582	15,582	50,074	4
Deutsche Marks	53,320	87,533	31,877	4,222	176,952	15
Swiss Francs	14,131	89,275	118,144	3,269	224,819	18
Belgian Francs	2,246	2,246	–	–	4,492	–
French Francs	1,958	7,720	10,133	11,480	31,291	3
Dutch Guilders	28,482	14,023	9,072	13,574	65,151	5
Luxembourg Francs	–	10,774	27,908	11,194	49,876	4
ECU's	–	8,511	18,741	17,118	44,370	4
Italian Lira	–	715	1,624	1,829	4,168	–
Others						
U.S. Dollars	18,426	55,173	37,596	9,217	120,412	10
Canadian Dollars	4,577	16,018	–	–	20,595	2
Japanese Yen	6,880	29,487	17,217	18,207	71,791	6
Miscellaneous	33	154	68	–	255	–
	£201,547	£559,106	£327,030	£125,471	£1,213,154	
Repayment Profile	17%	46%	27%	10%		100%

See Note No. 9 – Amortisation of Borrowings

Statement of Interest

Schedule I

1986 (9 Months) £000's		£000's	£000's	1987 (12 Months) £000's
	Interest on:			
	Advances from Minister for Finance		1,484	
	Borrowings in Irish pounds	36,542		
	Add: Provision for funding of premium on redemption of ESB Stocks	1,702		
			38,244	
	Borrowings in other currencies		74,175	
			113,903	
	Less: Interest receivable		4,759	
£95,082				**£109,144**
	Allocated as follows:			
	Interest:			
	Income and Expenditure Accounts:			
	– Electricity		102,840	
	– Appliance and Contracts		278	
	– External Activities		245	
	Fisheries – Salmara		201	
	Capital Works		5,580	
£95,082				**£109,144**

Statement of Capital Reserves

Schedule J

	£000's	£000's	**£000's**
Non-Repayable Supply Contributions:			
Contributions from State under Electricity (Supply) Acts towards capital cost of supplying rural areas – as at 31st December, 1986		27,890	
Other contributions – as at 31st December, 1986	124,169		
Additions in year	11,610		
		135,779	
			163,669
Repaid Capital Reserve:			
Amortisation of Borrowings, less write-off of intangible assets, adjustment for changes in currency parities and discounts on stock issues – as at 31st December, 1986		279,220	
Movements in year:			
Amortisation of Borrowings (Schedule G)	86,008		
Adjustment for changes in currency parities (Schedule M – Note 8)	1,672		
		87,680	
			366,900
Asset Renewal Reserve:			
Balance as at 31st December, 1986			**15,116**
Total as at 31st December, 1987 (as per Balance Sheet)			**£545,685**

Fisheries – Salmara

Schedule K

1986 (9 Months) £000's		£000's	1987 (12 Months) £000's
942	**Income**		2,811
	Expenditure:		
718	Direct Costs	1,589	
	Overheads and General Charges:		
92	Payroll, expenses and charges	186	
32	Depreciation	36	
100	Interest	201	
942			2,012
NIL	Surplus transferred to Profit and Loss Account		£799

Note: Investment in Fisheries Assets (incorporated in the Board's General Assets) at 31st December, 1987 includes the following:

	£m.
– Hatcheries/Fish Farms etc.	1.1
– Joint Venture Investment	0.5
– Inventories (fish and food)	0.4
	2.0

Fisheries – Conservation Operations

Schedule K(i)

1986 (9 Months) £000's		1987 (12 Months) £000's
605	Direct Costs	1,043
	Overheads:	
22	General charges and expenses	5
627		1,048
	Less:	
22	Letting of fishing rights and miscellaneous income	29
£605	Net Cost for Year included in Electricity Income and Expenditure Account	£1,019

Value Added Statement

Schedule L

1986 (9 Months) £m's		£m's	1987 (12 Months) £m's
	Sources of Income:		
551	Electricity Sales	736	
16	Appliance and Contracts Trading	27	
7	External Activities	10	
1	Fisheries – Salmara	3	
–	Insurance Claim Settlement	2	
2	Miscellaneous	2	
577			**780**
	Less Costs of:		
165	Fuel	219	
90	Materials and Services (including Rates Levy £24m)	132	
48	Depreciation of Assets	76	
303			**427**
£274	**Value Added**		**£353**
	Distribution of Value Added:		
132	Employees – Payroll (Inclusive of deductions for PAYE/PRSI etc.)		**182**
	Lenders		
82	– Interest	104	
54	– Amortisation of Borrowings	73	
136			**177**
6	Reduction/(Increase) in Deficit brought forward		**(6)**
£274			**£353**

Basis of Accounting:

1. The Financial Statements (Accounts/Schedules) are prepared in accordance with generally accepted accounting principles; however, an amortisation charge is made which is calculated to spread recovery from Income of amounts borrowed together with the effect of any currency movements on such borrowings (See Note 8). This treatment is considered to be appropriate to a public utility and is consistent with the requirements of the Electricity (Supply) Acts 1927–1985.
   The Financial Statements are expressed in Irish pounds (£s).

Principal Accounting Policies:

2. **Capital Assets:**
   Capital Assets are valued at cost. Cost includes prime cost, overheads and interest costs during construction. Assets include land (£24.1m) most of which is held freehold.
   Leased assets are not capitalised and payments under such leases are charged to the Electricity Income and Expenditure Account: at year end, the capital element of outstanding finance leases amounted to £26m.

3. **Depreciation of Capital Assets:**
   Depreciation is designed to recover historical cost over allotted lifespans. Methods used are appropriate to the nature of the Board's business and to the character and extent of its capital assets.
   Assets are grouped and allotted lifespans in line with international practice. Major asset classifications and their allotted lifespans are:–

: Generation Plant and Thermal Station Structures (other than Moneypoint Station)	20 years
: Distribution Plant and Structures	25 years
: Transmission Plant and Structures and Moneypoint Station Plant	30 years
: General Buildings, Hydro Stations and Moneypoint Station Structures	50 years

   Depreciation is provided:
   : On the straight-line method for Transmission, Distribution and General Assets.
   : On a projected plant usage basis for Generating Units.
   : On all assets from date of commissioning.

   Assets when retired from service are charged against Accumulated Depreciation.
   Retirement of Assets (Schedule E): From 1987, the proceeds of disposal and stores value of assets retired less shortfalls arising in the depreciation fund are credited to Electricity Income and Expenditure Account and included in Miscellaneous Income – £.037m in the current year (Previously included in Asset Renewal Reserve, Schedule J). The effect of the change is not significant.
   Depreciation continues to be provided on decommissioned stations which, together with other costs pertaining thereto, are disclosed separately.

4. **Inventories:**
   Stocks are valued at the lower of average cost and net realisable value.
   Spares held to provide for major plant breakdowns are capitalised as part of generating plant and depreciated accordingly.

5. **Repayable Work-in-Progress:**
   Installations Contracts are valued at direct cost together with appropriate overheads; sundry works at direct cost.

6. **Accounts Receivable:**
   The figure for Accounts Receivable in the Statement of Current Assets and Current Liabilities is net of a provision for doubtful debts, considered adequate in relation to the size and nature of the business. Bad debts are written off as they arise.

7. **Capital Borrowings:**
   The Statement of Borrowings includes borrowings initially contracted for a period in excess of twelve months, irrespective of phased repayment arrangements, and of the lapsed portion of repayment period. Discounts on Borrowings have been charged against the Repaid Capital Reserve. Other borrowing costs are charged against Profit and Loss Account.

8. **Borrowings in Foreign Currencies:**
   Irish Pound Equivalent is at exchange rates ruling at year end. Changes are reflected in the Capital Reserve.

9. **Amortisation of Borrowings:**
   This charge is made to reflect certain provisions of Section 21 (2) of the Electricity (Supply) Act, 1927.

It is determined as follows:

: The charge for ESB stock issues is in accordance with contractual commitments.

: The charge for other borrowings is calculated at 5% of their Irish Pound value as at the previous year-end.

: The charge to cover cumulative effect of exchange rates adjustments is calculated at 5% of the aggregate adjustment for changes in currency parities over the previous five years.

The sinking fund provision towards the premium element payable on redemption of ESB Premium Stock is included in the charge for interest.

Sinking Fund Investments are stated at cost.

10. Non-Repayable Supply Contributions:
Non-Repayable Supply Contributions are credited to Capital Reserves (Schedule J).

11. Hire Purchase Transactions:
Profit on Hire Purchase sales is taken in the year of sale. Credit for interest is taken on a reducing balance basis over the Hire Purchase term.
Hire Purchase financing operations are reflected in the Appliance and Contracts Trading Account.

12. Apportionments:

(a) Capital Expenditure:
Capital Expenditure bears interest on the average value of (1) Work-in-Progress (2) stocks held and (3) advances made to suppliers in respect of capital works at the rates appropriate to the financing of individual projects, and a proportion of general overhead expenses calculated at a percentage rate on the prime cost of work paid for during the year.

(b) Appliance and Contracts Income and Expenditure Account:
This account bears appropriate proportions of general overhead expenses and interest; premises costs include a charge for depreciation.
Overhead elements of Appliance and Installations Contracts which are appropriate to the Electricity Income and Expenditure Account have been allocated directly as they occur. An amount, calculated at 75p per customer per annum, is transferred to the latter account, in recognition of the total safety and social role of Appliance Repairs and Installations Contracts.

(c) External Activities and Fisheries bear appropriate proportions of general overhead expenses and interest.

13. Taxation:
The Board is liable for Corporation Tax at the reduced rate applicable to manufacturing companies. Because of large continuing capital expenditure, liability to tax will not arise in the foreseeable future and a deferred tax provision is not deemed necessary (unutilised capital allowances/losses forward at 31st December, 1987 are estimated at £932m). The potential tax liability deferred as a consequence of accelerated capital allowances is estimated at £33m. (31st December, 1986 – £28m).

14. Exceptional Expenditure:
Essential maintenance and repairs are charged to the Electricity Income and Expenditure Account in the year in which the liability arises, on an estimated basis if necessary. Costs incurred to improve system efficiency are charged to the Electricity Income and Expenditure Account over the number of years corresponding to the benefits secured: similar treatment has been applied to Moneypoint Generating Station pre-commissioning costs.

15. Superannuation Scheme:
The Board contributes towards a pension scheme for staff under the provisions of the Electricity Supply Board (Superannuation) Act 1942 as amended: the scheme is subject to regular actuarial review. The Board's liability is confined to such contributions.

16. Comparative Figures:
Where appropriate, previous period's comparative figures are regrouped.

17. Accounting Year:
Income and Expenditure are aligned on a 52 or 53 week year as appropriate. The period to 31st December, 1987 covers 53 weeks. (The period to 31st December, 1986 covers 39 weeks as the accounting date was changed in that year).

Auditors' Report

As Auditors appointed by the Minister for Energy, with the consent of the Minister for Finance, we have audited the Profit and Loss Account, Balance Sheet and attached Schedules A to M of the Electricity Supply Board, in accordance with approved auditing standards, and have obtained all the information and explanations which we considered necessary.

In our opinion, the Profit and Loss Account and Balance Sheet, together with the Statement of Source and Application of Funds (Schedule D), which have been prepared under the Historical Cost Convention, give, when read in conjunction with the relevant schedules and notes appearing thereon and the basis of accounting and principal accounting policies, a true and fair view of the results of the Board for the year ended 31st December, 1987 and of the state of the Board's affairs as at that date.

In our opinion, the Board has kept proper books of account with which the above mentioned financial statements are in agreement.

1 Stokes Place,
St. Stephen's Green,
DUBLIN 2.
19th April, 1988

Stokes Kennedy Crowley,
Chartered Accountants.


DANGER
BELOW

ELECTRICITY SUPPLY BOARD
BORD SOLÁTHAIR AN LEICTREACHAIS

Statistics and Indicators

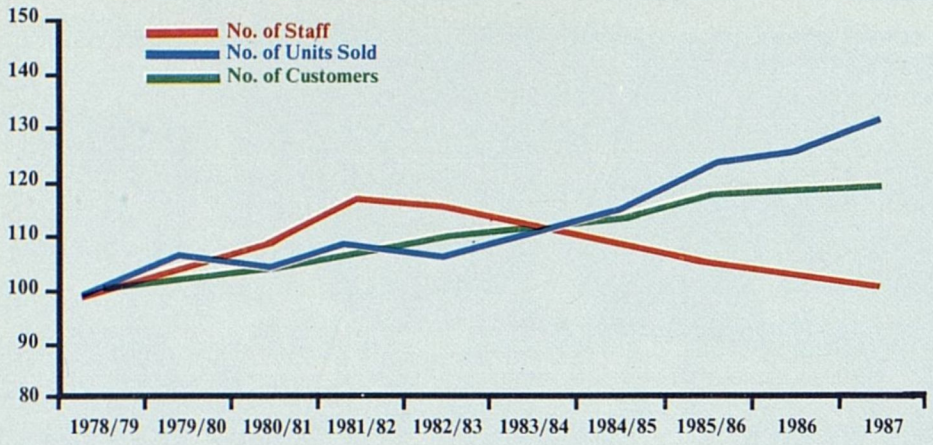
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◀ *Working on the Galway inner city renewal programme.*

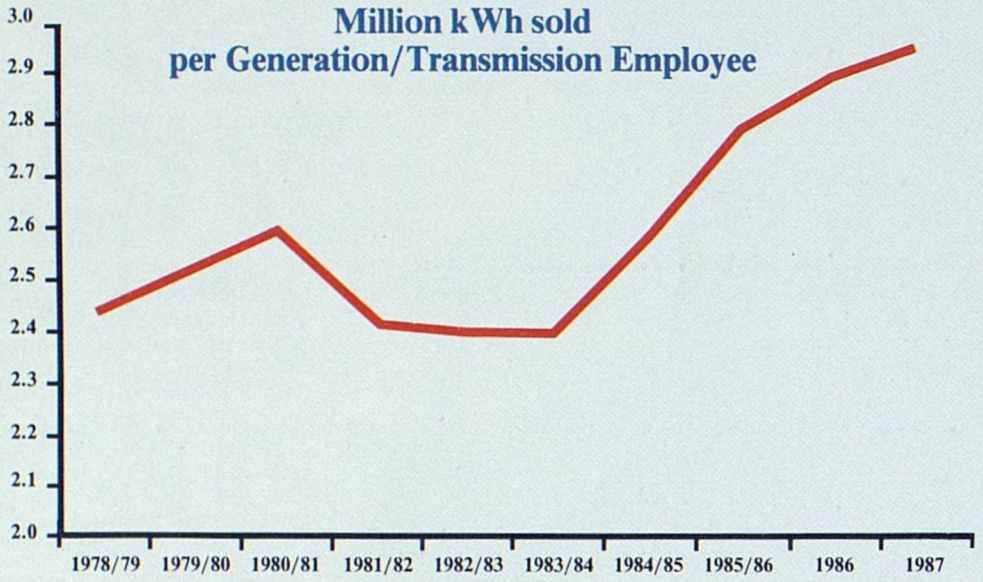
Staff Productivity

Index Base 1978/9 = 100



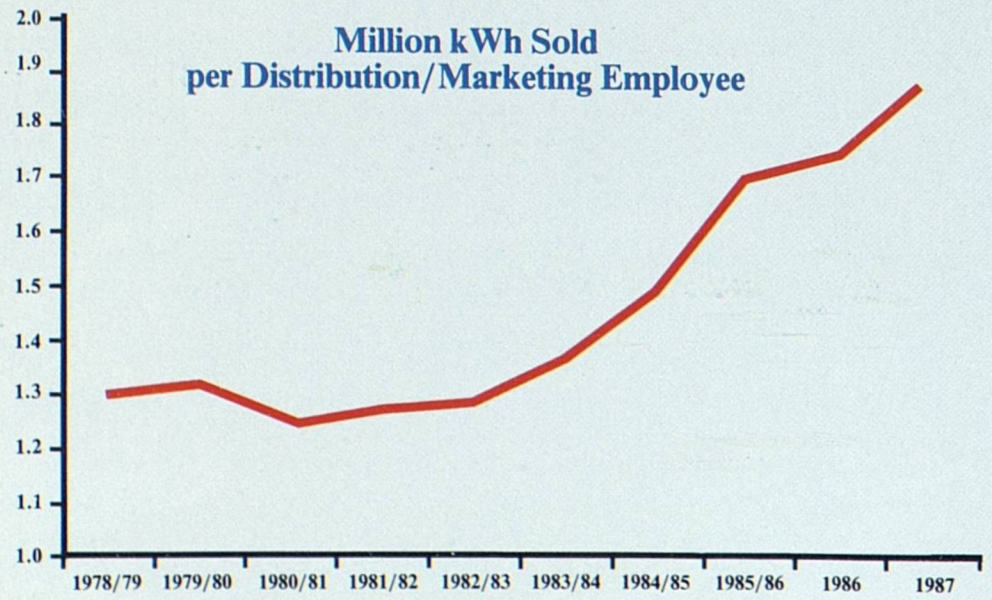
Graph 1

Million kWh sold per Generation/Transmission Employee



Graph 2

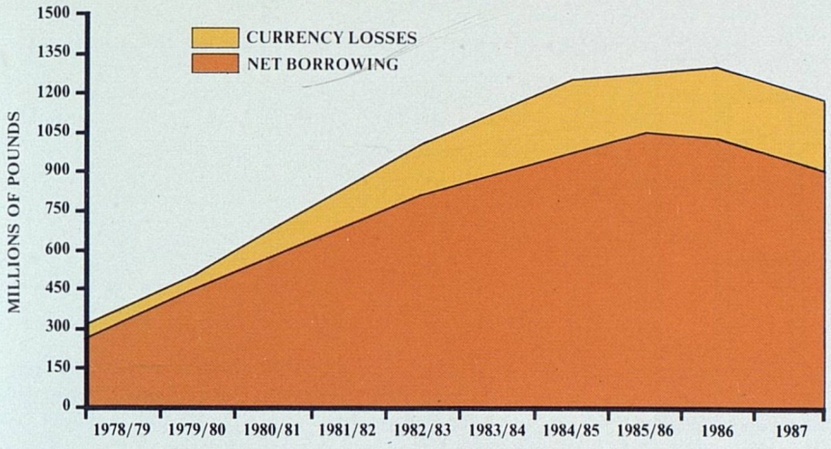
Million kWh Sold per Distribution/Marketing Employee



Graph 3

Graphs 1, 2 and 3 show the continued trend in improvement in staff productivity measured against customer numbers and units of electricity sold.

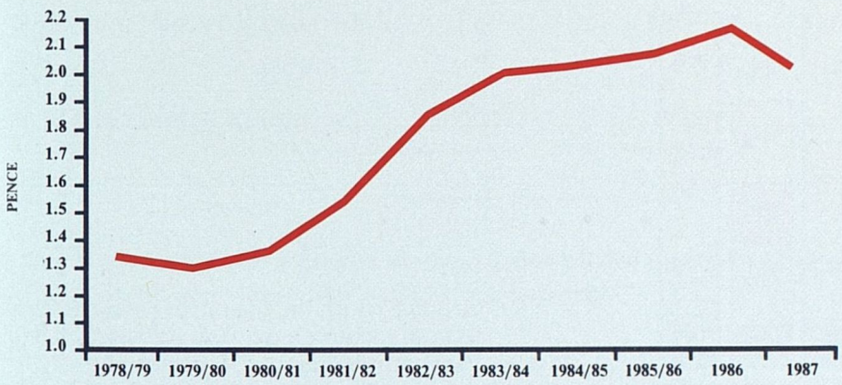
Borrowings Outstanding and Impact of Currency Movements



Graph 4

Graph 4 shows the impact of currency movements on total debt. Overall borrowing has decreased but currency loss position remains constant.

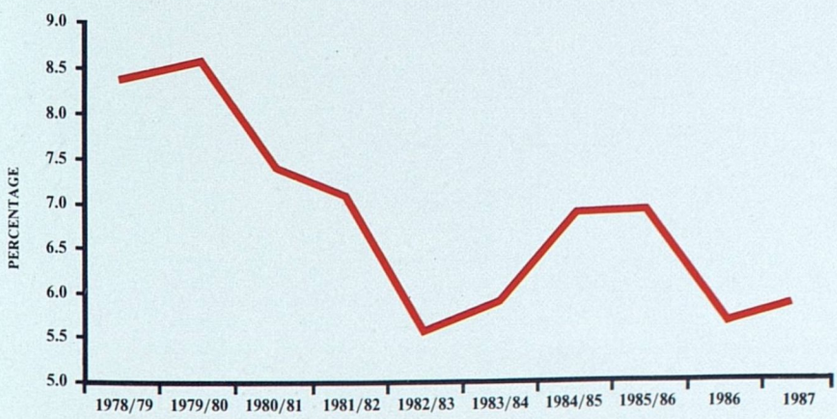
Debt Servicing + Rates Levy Per Unit Sold 1987 Prices



Graph 5

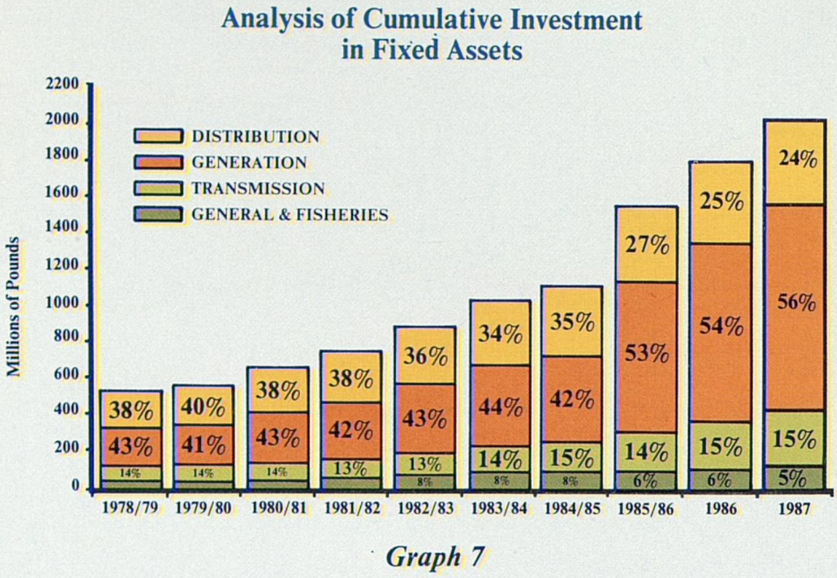
Graph 5: The fall in the debt servicing cost reflects a relative stability in currency and interest rates and a reduction in total debt.

Debtors as % of Annual Billing



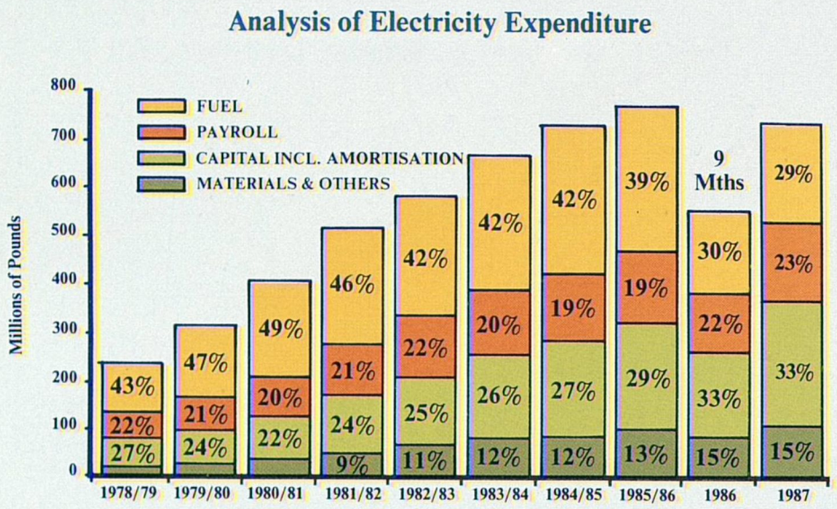
Graph 6

Graph 6: The slight disimprovement can be attributed to a distortion due to the timing of price decreases in 1986 and 1987.



Graph 7

Graph 7: Capital Investment is continuing to decline following the commissioning of Moneypoint.



Graph 8

Graph 8: Both the overall expenditure and its composition have now stabilised due to the commissioning of Moneypoint.

SUMMARY OF ELECTRICITY AND TRADING FIGURES

	Period Ended 31st Dec. 1987 (12 mths)* £000's	Period Ended 31st Dec. 1986 (9 mths)* £000's
Electricity		
Expenditure:		
Fuel	218,924	164,629
Payroll	167,859	119,728
Capital Charges (incl. Amortisation)	244,922	179,005
Other Costs	114,465	82,176
	746,170	545,538
Revenue Income	738,476	552,454
Surplus/(Deficit)	(7,694)	6,916
Trading etc.		
Trading Results (Sch.B)	(29)	(502)
External Activities Result (Sch.C)	142	9
Fisheries–Salmara Result (Sch.K)	799	Nil
Insurance Claim Settlement	2,075	—
Expenses on New Borrowings	(832)	(54)
Result for all Activities	(5,539)	6,369

The result for the year increases the total deficit carried forward to 1988 to £71,285,000.

*1987 is a 53 week year; 1986 was a 39 week period.

5 YEAR SUMMARY — FINANCIAL STATISTICS AND KEY RATIOS

FINANCIAL STATISTICS	1983/84 £m.	1984/85 £m.	1985/86 £m.	1986 (9 mths) £m.	1987 £m.
OPERATIONS:					
Income	669	727	791	577	780
Expenditure	692	754	799	571	785
Surplus/(Deficit)	(23)	(27)	(8)	6	(5)
Cumulative Surplus/(Deficit)	(37)	(64)	(72)	(66)	(71)
FUNDING CAPITAL DEVELOPMENT PROGRAMME:					
Requirements:					
Capital Expenditure	227	240	172	100	93
Working Capital Movement	(34)	(32)	79	7	(12)
	193	208	251	107	81
Financing:					
Internal Resources	35	40	66	67	83
Borrowings	158	168	185	40	(2)
	193	208	251	107	81
SOURCES AND EMPLOYMENT OF CAPITAL:					
Sources:					
* Debt Liabilities Outstanding	1,052	1,179	1,224	1,242	1,153
Reserves	226	255	402	441	534
	1,278	1,434	1,626	1,683	1,687
Employment:					
Net Fixed Assets in Commission	704	739	1,119	1,325	1,496
Capital Work-in-Progress	465	618	350	194	39
Net Current Assets	109	77	157	164	152
	1,278	1,434	1,626	1,683	1,687
* Inclusive of Cumulative Currency Gain/(Loss)	(188)	(200)	(119)	(145)	(122)
KEY RATIOS					
Return on Average Net Assets (%)	9.0	8.9	10.5	8.6	10.2
Debt/Net Assets (%)	82.0	82.0	75.0	74.0	68.0
Current Ratio (Times)	1.5	1.4	2.0	2.1	2.1
Interest Cover (Times) (excl. interest Capitalised)	1.5	1.5	1.7	1.7	1.7
Foreign/Total Borrowings (%)	77.0	72.0	67.0	70.0	71.0
Internal Resources / Cap. Expenditure (%)	16.0	17.0	39.0	68.0	89.0
Average Electricity Credit Period (Days from Date Billed)	26.0	27.3	30.1	25.6	23.7

Statement of Borrowings

Statement of Borrowings

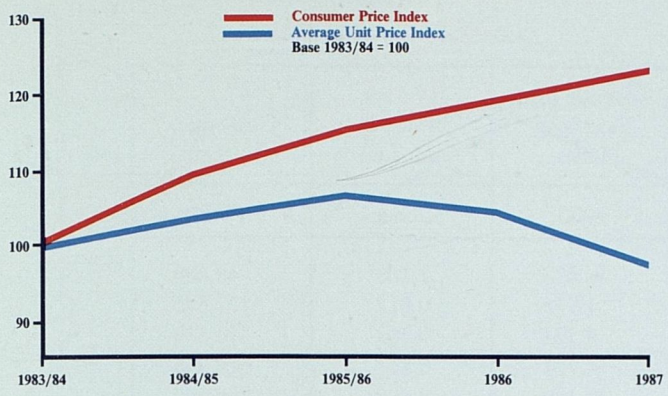
Amount Borrowed £000's	Year(s) of Borrowing				Balance Outstanding 31st December, 1986 £000's	Borrowed during year £000's	Redeemed during year £000's	Adjustment for currency changes £000's	Balance Outstanding 31st December, 1987 £000's
Irish Pound Borrowings:									
68,450	1928-59	Advances	– Minister for Finance		33,346	–	2,977	–	**30,369**
500	1962	Loan	– New Ireland Assurance Co. Ltd. 6% – 1962/87		19	–	19	–	**–**
14,865	1972	Loan	– Central Bank of Ireland 7.25% – 1972/87		793	–	793	–	**–**
12,000	1962-63	Stock	– 6%	– 1982/87	2,733	–	2,733	–	**–**
16,500	1964-65	Stock	– 6%	– 1984/89	5,181	–	–	–	**5,181**
13,000	1966-67	Stock	– 7%	– 1986/91	4,538	–	–	–	**4,538**
7,000	1968	Stock	– 7.25%	– 1988/93	1,571	–	–	–	**1,571**
9,250	1970	Stock	– 9.5%	– 1985/90	3,215	–	–	–	**3,215**
12,000	1972	Stock	– 9%	– 1992/95	3,497	–	–	–	**3,497**
16,800	1977	Stock	– 13%	– 1988	8,214	–	–	–	**8,214**
12,000	1978	Stock	– 13%	– 1990/92	8,646	–	–	–	**8,646**
14,000	1983	Stock	– 10%	– Premium (25%) 1988	13,648	–	–	–	**13,648**
20,000	1983	Stock	– 13.5%	– 2006/2008	19,779	–	–	–	**19,779**
35,000	1985	Stock	– 10%	– Premium (25%) 1991	35,000	–	–	–	**35,000**
761	1982-84	Project Finance		– 1982/87	122	–	122	–	**–**
					140,302	–	6,644	–	**133,658**
Floating Rate Facilities:									
25,500*	1978–85	– Domestic Banks		– 1981/92	12,000	–	12,000	–	**–**
30,000*	1981	– Domestic Banks		– 1987/92	30,000	–	15,000	–	**15,000**
15,000	1982	– Domestic Banks – Note Issue		– 1988	13,000	250	–	–	**13,250**
30,000*	1982	– Domestic Banks		– 1987/90	30,000	–	15,000	–	**15,000**
10,000*	1983	– Domestic Bank		– 1987/91	10,000	–	2,000	–	**8,000**
45,000*	1984	– Domestic Banks		– 1988/91	45,000	–	–	–	**45,000**
25,000*	1984	– Domestic Bank		– 1994	25,000	–	–	–	**25,000**
12,000*	1984	– Domestic Bank		– 1992/93	12,000	–	–	–	**12,000**
10,000	1984	– Domestic Banks		– 1990/92	10,000	–	–	–	**10,000**
10,000*	1984	– Domestic Bank		– 1989/92	10,000	–	–	–	**10,000**
25,000*	1985	– Domestic Banks		– 1990/92	25,000	–	–	–	**25,000**
30,000*	1985	– Domestic Banks		– 1990/94	30,000	–	–	–	**30,000**
7,000*	1986	– Domestic Bank		– 1990/92	7,000	–	–	–	**7,000**
					259,000	250	44,000	–	**215,250**

Amount Borrowed 000's	Year(s) of Borrowing				Balance Outstanding 31st December, 1986 £000's	Borrowed during year £000's	Redeemed during year £000's	Adjustment for currency changes £000's	Balance Outstanding 31st December, 1987 £000's
Foreign Currency Borrowings:									
Fixed Rate Facilities:									
Registered Notes/Bonds and Bearer Bonds									
US$30,000	1972	– Japanese Banks 7.75%		– 1973/92	6,024	–	860	(–) 1,001	**4,163**
US$12,000	1977	– U.S. Syndicate 9.25%		– 1983/92	5,163	–	750	(–) 845	**3,568**
B.Fr.1,000,000	1973-74	– Belgian Banks 8.75%		– 1980/89	6,549	–	2,241	185	**4,493**
D.M.75,000	1980	– German Bank 8.5%		– 1988	27,604	–	–	719	**28,323**
D.M.150,000	1979	– Banking Syndicate 9.2%		– 1986/91	46,007	–	9,410	1,168	**37,765**
D.M.120,000	1982	– Banking Syndicate 9.75%		– 1983/92	26,500	–	4,481	639	**22,658**
Yen5,000,000	1982	– Japanese Bond Issue 9.1%		– 1987	22,548	–	23,296	748	**–**
Yen5,000,000	1983	– Japanese Banks 8.5%		– 1987/92	22,548	–	2,101	1,843	**22,290**
D.G.75,000	1983	– Dutch Banks – Note Issue 8.75%		– 1988	24,487	–	–	680	**25,167**
D.M.50,000	1984	– German Bank 8.05%		– 1988/93	18,403	–	–	480	**18,883**
Sw.Fr.50,000	1985	– Swiss Banks 5.375%		– 1992	22,097	–	–	1,207	**23,304**
Sw.Fr.107,764	1987	– Swiss Banks 5.0%		– 1995	–	49,534	–	694	**50,228**
					227,930	49,534	43,139	6,517	**240,,842**
Floating Rate Facilities:									
US$20,000*	1980	– Domestic Banks		– 1984/88	8,605	–	5,286	(–) 940	**2,379**
US$20,000*	1981	– Floating Rate Note Issue		– 1987	14,342	–	13,663	(–) 679	**–**
Can$30,000*	1981	– Canadian Bank		– 1987/89	15,585	–	5,104	(–) 1,327	**9,154**
Can$25,000*	1982	– Canadian Bank		– 1989	12,988	–	–	(–) 1,545	**11,443**
US$25,000*	1984	– Middle East Bank		– 1989	17,927	–	–	(–) 3,060	**14,867**
US$15,000*	1985	– Banking Syndicate		– 1989/91	10,756	–	–	(–) 1,836	**8,920**
US$15,000*	1985	– Domestic Bank		– 1988	10,756	–	–	(–) 1,836	**8,920**
US$10,000*	1985	– Domestic Bank		– 1987	7,171	–	6,826	(–) 345	**–**
Stg.£20,000*	1986	– Sterling Acceptance Credit		– 1992	21,059	–	–	1,312	**22,371**
					119,189	–	30,879	(–) 10,256	**78,054**
TOTAL – FOREIGN CURRENCY BORROWINGS					903,464	73,050	110,596	(–) 1,672	**864,246**
TOTAL – IRISH POUND BORROWINGS					399,302	250	50,644	–	**348,908**
TOTAL – ALL BORROWINGS					£1,302,766	£73,300	£161,240	(–) £1,672	**£1,213,154**

000's									
Project Finance:									
IR£20,000*	1978	– European Investment Bank 9.2%		– 1983/98	24,273	–	1,134	(–) 2,653	**20,486**
IR£10,000*	1979	– European Investment Bank 9.35%		– 1983/99	12,411	–	543	(–) 657	**11,211**
IR£15,000*	1979	– European Investment Bank 9.45%		– 1983/99	19,520	–	989	(–) 714	**17,817**
IR£20,000*	1979	– European Investment Bank 9.45%		– 1983/99	26,032	–	1,319	(–) 951	**23,762**
IR£10,785*	1979	– European Investment Bank 8.45%		– 1985/94	11,927	–	1,512	293	**10,708**
IR£5,715*	1979	– European Investment Bank 12.0%		– 1985/96	7,970	–	248	(–) 1,331	**6,391**
IR£3,000*	1980	– European Investment Bank 8.75%		– 1984/95	3,493	–	337	119	**3,275**
IR£20,000*	1980	– European Investment Bank 8.75%		– 1985/95	24,952	–	2,406	854	**23,400**
IR£30,000*	1981	– European Investment Bank 7.65%		– 1986/96	41,118	–	3,652	2,172	**39,638**
IR£17,000*	1981	– European Investment Bank 9.3%		– 1985/2001	24,888	–	1,150	2,111	**25,849**
IR£22,000*	1981	– European Investment Bank 10.55%		– 1987/2001	30,956	–	1,161	1,530	**31,325**
IR£18,000*	1981	– European Investment Bank 14.0%		– 1987/2001	21,683	–	669	751	**21,765**
IR£16,000*	1982	– European Investment Bank 11.375%		– 1985/92	14,693	–	2,484	376	**12,585**
IR£20,000*	1982	– European Investment Bank 12.0%		– 1995/2002	16,316	–	–	1,017	**17,333**
IR£8,000*	1982	– European Investment Bank 7.0%		– 1986/94	9,897	–	944	509	**9,462**
IR£18,500*	1983	– European Investment Bank 6.4%		– 1988/98	21,415	–	–	1,170	**22,585**
IR£8,250*	1983	– European Investment Bank 6.5%		– 1984/95	7,479	–	731	380	**7,128**
IR£6,750*	1983	– European Investment Bank 12.15%		– 1989/98	7,076	–	–	146	**7,222**
IR£14,010*	1983	– European Investment Bank 10.4%		– 1989/98	15,661	–	–	308	**15,969**
IR£5,000*	1985	– European Investment Bank 9.4%		– 1990/2000	5,311	–	–	110	**5,421**
IR£15,000*	1986	– European Investment Bank 9.0%		– 1991/98	16,565	–	–	326	**16,891**
IR£11,400*	1986	– European Investment Bank 7.95%		– 1990/2001	11,392	–	–	235	**11,627**
IR£ 4,300*	1986	– European Investment Bank 9.8%		– 1990/2001	4,316	–	–	(–) 148	**4,168**
IR£ 4,300*	1986	– European Investment Bank 5.45%		– 1990/2001	4,209	–	–	230	**4,439**
IR£16,500*	1986	– European Investment Bank 7.7%		– 1990/2001	16,687	–	–	328	**17,015**
IR£16,790*	1986	– European Investment Bank 7.8%		– 1991/2001	16,691	–	–	(–) 13	**16,678**
IR£20,000*	1987	– European Investment Bank 7.8%		– 1990/2001	–	20,000	–	101	**20,101**
US$14,500*	1969-73	– I.B.R.D., Washington 6.5%		– 1974/94	8,813	–	683	477	**8,607**
US$20,000*	1971-76	– I.B.R.D., Washington 7.25%		– 1976/87	2,419	–	2,462	43	**–**
US$15,000*	1972-77	– I.B.R.D., Washington 7.25%		– 1977/88	3,126	–	1,533	72	**1,665**
US$44,388	1981-87	– Export-Import Bank of the United States 8.0%		– 1986/98	28,017	2,547	2,540	(–) 4,841	**23,183**
US$10,840	1981-82	– Export-Import Bank of the United States 8.375%		– 1983/91	3,887	–	924	(–) 546	**2,417**
US$23,578	1981-87	– Export-Import Bank of the United States 8.0%		– 1988/2000	16,721	183	–	(–) 2,881	**14,023**
F.Fr.376,961	1973-85	– French Banks		– 1977/2004	16,585	–	1,970	(–) 2	**14,613**
Stg.£25,725	1971-87	– United Kingdom Banks/Suppliers		– 1975/90	6,767	221	2,519	400	**4,869**
Sw.Fr.125,565	1981-87	– Swiss Export Agency		– 1986/97	53,079	565	4,668	2,746	**51,722**
					556,345	23,516	36,578	2,067	**545,350**

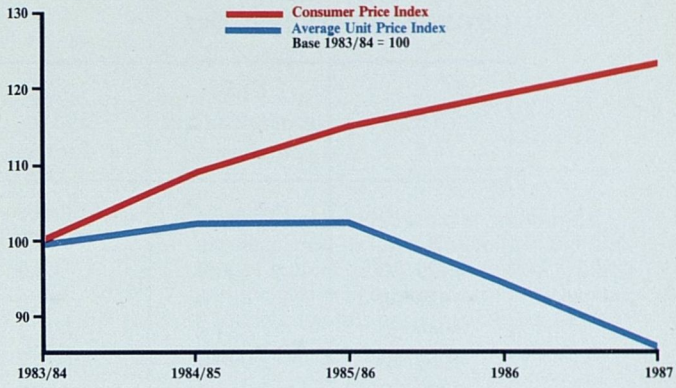
* Multi-Currency Facilities (Equivalent to amount of indicated currency at drawdown).

Total
Average Unit Price vs. CPI



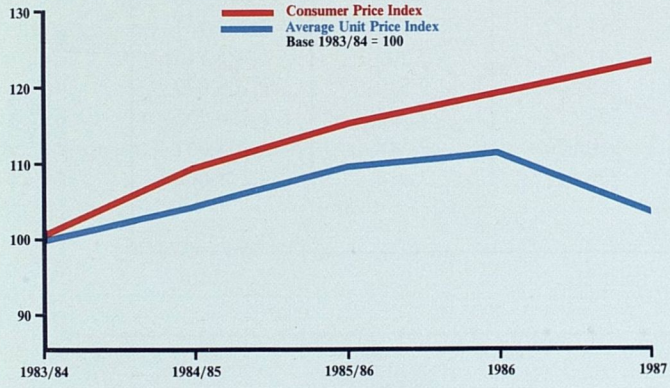
Graph 9

Industrial
Average Unit Price vs. CPI



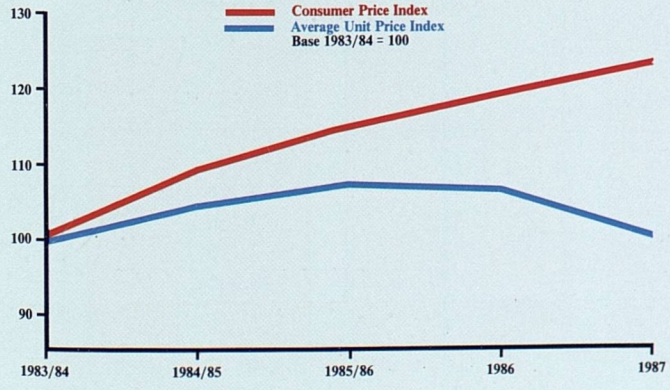
Graph 12

Domestic
Average Unit Price vs. CPI



Graph 10

Commercial
Average Unit Price vs. CPI



Graph 11

Graphs 9, 10, 11 and 12 show the impact of further price reductions in 1987 and confirm the Board's success in its corporate objective to keep the price trend lower than national inflation as measured by the Consumer Price Index.

ANALYSIS OF UNITS SOLD — 1987

Class of Supply	Millions
Domestic	
General Supply	4,020.9
Night Rate	209.5
	4,230.4
Commercial	
General Supply	909.7
Heating, Cooking and Water Heating	236.2
Night Space Heating	193.0
Public Lighting	134.5
Maximum Demand	859.7
Miscellaneous	103.7
	2,436.8
Industrial	
Maximum Demand	
High Tension	2,958.2
Low Tension	748.6
Miscellaneous	132.1
	3,838.9
Total	10,506.1

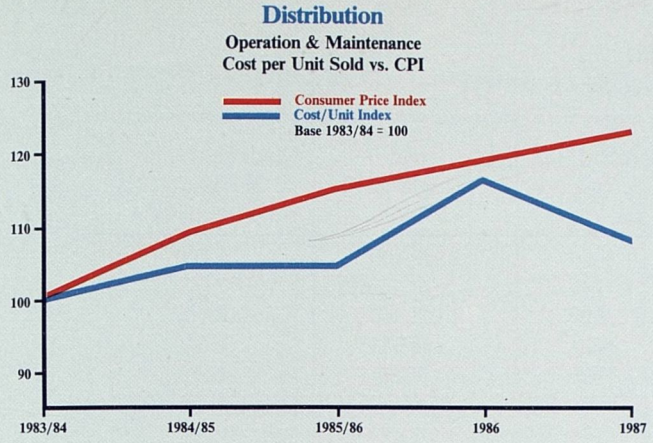
GROWTH OF ESB 1930–1987

Year	Units generated (and purchased)*	Units sold to Customers	Revenue from Electricity Sales	Average price per unit sold	Customers
	Millions	Millions	£000	Pence	Total
1929/30	60.9	43.2	478	1.108	48,606
1939/40	407.0	318.6	1,946	0.612	172,545
1949/50	784.8	626.1	4,774	0.763	310,639
1959/60	2,096.0	1,692.2	14,724	0.871	610,946
1969/70	5,245.7	4,411.6	39,400	0.892	786,500
1972/73	6,749.1	5,705.1	60,321	1.057	845,119
1973/74	7,253.1	6,152.0	73,063	1.188	873,764
1974/75	7,298.7	6,153.1	111,261	1.808	901,000
1975/76	7,534.6	6,259.0	136,277	2.177	931,469
1976/77	8,160.5	6,783.2	173,429	2.557	959,428
1977/78	8,828.4	7,329.9	210,029	2.865	986,256
1978/79	9,602.7	7,965.3	222,768	2.797	1,015,636
1979/80	10,213.6	8,560.3	300,024	3.505	1,043,428
1980/81	10,038.4	8,364.6	408,965	4.889	1,070,049
1981/82	10,385.9	8,661.7	517,029	5.969	1,096,950
1982/83	10,194.4	8,518.3	571,992	6.715	1,122,461
1983/84	10,559.2	8,903.5	641,460	7.205	1,145,818
1984/85	10,972.7	9,274.2	696,506	7.510	1,168,679
1985/86	11,465.1	9,787.8	757,172	7.736	1,194,765
9 mths 1986	8,656.6	7,295.4	550,620	7.548	1,207,051
1987	12,491.0	10,506.1	736,441	7.010	1,221,600

*Excluding Units absorbed by Storage Pumping

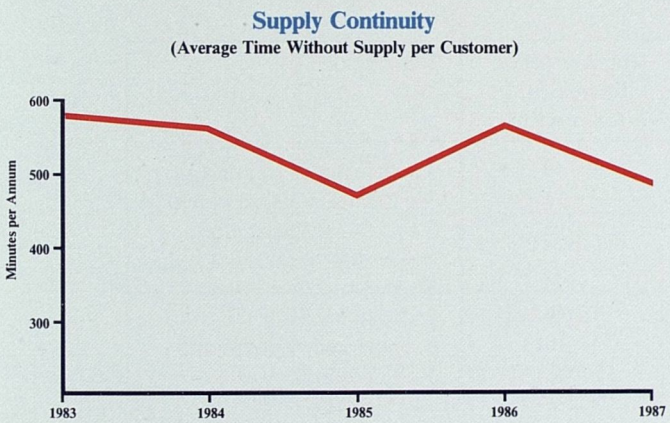
ELECTRICITY SALES BY SECTOR
(Million Units)

YEAR	DOMESTIC	COMMERCIAL	INDUSTRIAL	TOTAL
1978/79	3,404	1,624	2,938	7,965
1979/80	3,600	1,722	3,238	8,560
1980/81	3,515	1,774	3,076	8,365
1981/82	3,659	1,887	3,116	8,662
1982/83	3,599	1,911	3,009	8,518
1983/84	3,703	2,002	3,198	8,904
1984/85	3,795	2,074	3,405	9,274
1985/86	4,001	2,234	3,553	9,788
9 mths 1986	2,821	1,635	2,840	7,296
1987	4,230	2,437	3,839	10,506



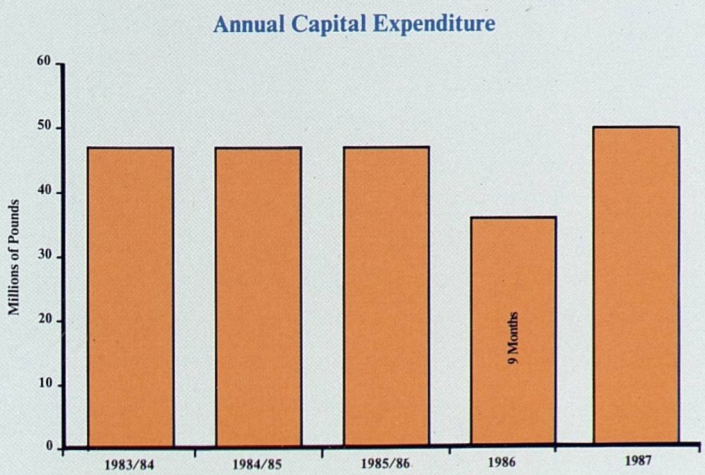
Graph 13

Graph 13: Apart from the exceptional 9 month period in 1986, which included the cost of repairs following Hurricane Charlie and the major lightning storm in June, the trend in costs has been satisfactory for the last 5 years.



Graph 14

Graph 14: Supply continuity improved to 490 minutes per customer in 1987, reflecting network improvements and benign weather conditions.



Graph 15

Graph 15: Distribution capital expenditure has stabilised and the likelihood is for a decline for the next few years.

DISTRIBUTION SYSTEM 31st DECEMBER 1987
DISTRIBUTION SYSTEM (INCLUDING RURAL NETWORKS)

Transformer Station	No. in Commission	Increase (+) or Decrease (–) for Year	Total Capacity in KVA	Increase (+) or Decrease (–) for Year in KVA
38 kV Stations	388	Nil	2,932,100	+16,200
10kV Stations excluding U.R.D.	132,330	+2,239	4,198,367	+113,609
10kV Stations U.R.D.	1,881	Nil	108,686	Nil
5kV Stations	6	Nil	900	Nil

Distribution Lines & Cables	Length km	Increase (+) or Decrease (–) for year km	Description
38kV Lines	5,606	–40	3 x 35 to 3 x 50 sq mm Cu 3 x 100 to 3 x 300 sq mm SCA
38kV Cables	284*	+3	3 x 95 to 3 x 680 sq mm copper and aluminium
10kV Lines	76,266	+526	Single and Three Phase
10kV & 5kV Cables	3,394	+64	2 x 16 to 3 x 240 (Copper and Aluminium)
3.3kV Cables	4	Nil	3 x 185 sq mm

*Correction of error in Apr. '85 Annual Report (Error carried through April '86 and December '86 reports).

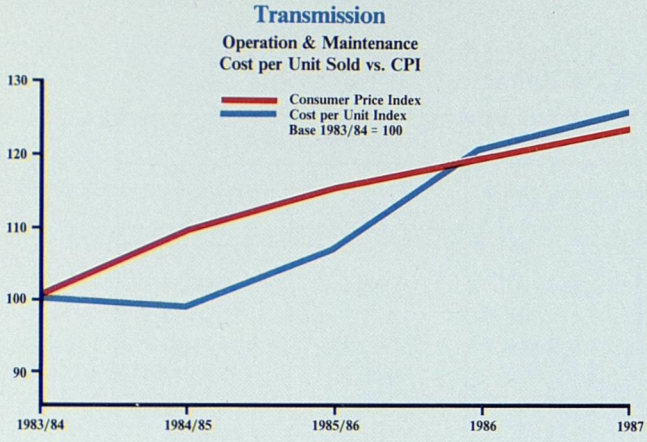
DISTRIBUTION SYSTEM TRENDS — CUMULATIVE DATA

Year	No. of Customers	TRAFOS		NETWORKS (km)	
		38kV (kVA)	10kV/5kV (kVA)	38kV	10kV/5kV/ 3.3kV
78/79	1,015,636	2,309,900	3,137,100	5,444.4	72,586.7
79/80	1,043,428	2,398,900	3,270,000	5,501.5	73,583.7
80/81	1,070,049	2,523,100	3,369,881	5,566.3	74,344.7
81/82	1,096,950	2,647,300	3,563,530	5,645.5	75,171.1
82/83	1,122,461	2,716,700	3,683,911	5,714.7	76,042.3
83/84	1,145,818	2,792,500	3,843,827	5,807.2	76,850.5
84/85	1,168,679	2,828,700	3,976,454	5,890.8	77,802.0
85/86	1,194,765	2,859,900	4,110,894	5,929.4	78,623.6
1986 (9 mths)	1,207,051	2,915,900	4,194,344	5,945.0	79,074.0
1987	1,221,600	2,932,100	4,307,953	5,890.0	79,664.0

FREQUENCY RANGE
(Hertz)

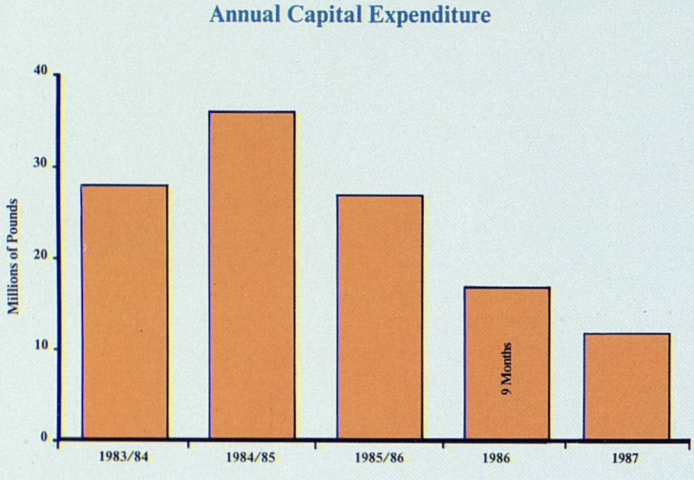
YEAR	FREQUENCY RANGE
1978/79	49.78 to 50.22
1979/80	49.79 to 50.21
1980/81	49.84 to 50.16
1981/82	49.82 to 50.18
1982/83	49.79 to 50.21
1983/84	49.78 to 50.22
1984/85	49.80 to 50.20
1985/86	49.82 to 50.18
1986 (9 mths)	49.82 to 50.18
1987	49.81 to 50.17

The frequency was maintained within the range shown for 95% of the time.



Graph 16

Graph 16: The upward trend is due to increased staff costs in the operations area and increased maintenance activity on the Transmission System.



Graph 17

Graph 17: Transmission capital expenditure continues to decrease with the completion of the 400kV development.

PLANT AVAILABILITY — TRANSMISSION

YEAR	AVAILABILITY (%)
1978/79	96.5
1979/80	96.4
1980/81	97.3
1981/82	95.4
1982/83	96.4
1983/84	97.0
1984/85	97.4
1985/86	95.3
1986 (9 mths)	95.0
1987	95.8

TRANSMISSION SYSTEM AT 31st DECEMBER 1987

Stations

Transformer/Switching Stations	No. in Commission	Increase for Year	Total Capacity in kVA	Increase in Capacity for Year in kVA
400 kV Stations	3	Nil	990,000 at 17/400 kV 1,500,000 at 400/220 kV	+330,000 +500,000
220 kV Stations	18	+1	600,000 at 275/220 kV 4,253,000 at 220/110 kV 1,180,000 at 20/220 kV 420,000 at 13/220 kV 1,072,000 at 10/220 kV 693,000 at 110/38 kV 412,000 at 10/110 kV 20,000 at 110/6 kV	Nil Nil Nil Nil Nil Nil Nil Nil
110 kV Stations	80	+1	3,045,000 at 110/38 kV 159,000 at 110/10 kV 40,000 at 110/6 kV 132,400 at 38/10 kV 1,177,500 at 10/110 kV 88,000 at 10/38/110 kV 5,000 at 10/38 kV	+51,000 Nil Nil +20,000 –14,000 Nil Nil

Lines and Cables

Lines and Cables	Length km.	Increase for Year km.	Description
400 kV Lines	437.5	Nil	3 x twin 600 sq. mm. single circuit SCA
275 kV Lines	10.5	Nil	6 x twin 485 sq. mm. double circuit SCA
220 kV Lines	88.0	+5.4	6 x 600 sq. mm. double circuit SCA
220 kV Lines	1,133.5	Nil	3 x 600 sq. mm. single circuit SCA
220 kV Lines	276.8	Nil	3 x 425 sq. mm. single circuit SCA
220 kV Lines	3.9	Nil	3 x 425 sq. mm. twin, SCA
220 kV Lines	12.7	+12.7	3 x 600 sq. mm. twin, single circuit SCA
110 kV Lines	1.8	Nil	6 x 95 sq. mm. double circuit copper
110 kV Lines	12.4	–20.2	3 x 95 sq. mm. single circuit copper
110 kV Lines	113.0	Nil	6 x 200 and 6 x 300 sq. mm. double circuit SCA
110 kV Lines	3,515.7	+20.2	3 x 200 to 3 x 425 sq. mm. single circuit SCA
400 kV Cables	1.8	Nil	Oil filled
220 kV Cables	19.2	Nil	High pressure oil pipe-type
220 kV Cables	44.2	–0.1	Oil filled
110 kV Cables	43.6	Nil	Oil filled
110 kV Cables	38.8	Nil	Pipe compression
110 kV Cables	1.7	Nil	Cross-linked polyethylene

TRANSMISSION CAPACITY TRENDS

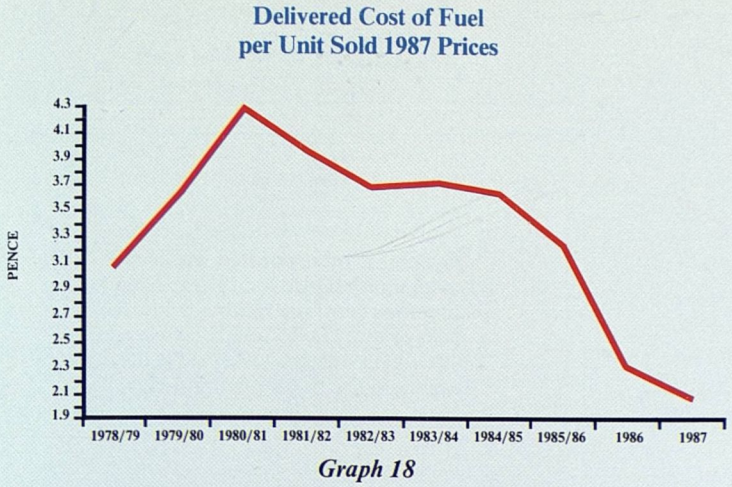
Station Capacity in kVA — Cumulative Data

YEAR	110 kV	220 kV	400 kV
1978/79	3,991,900	5,202,000	—
1979/80	4,150,900	5,952,000	—
1980/81	4,475,400	6,262,000	—
1981/82	4,664,400	6,887,000	—
1982/83	4,508,900	7,682,000	—
1983/84	4,556,900	7,900,000	—
1984/85	4,582,400	8,400,000	—
1985/86	4,587,400	8,400,000	830,000
1986 (9 mths)	4,589,900	8,650,000	1,660,000
1987	4,646,900	8,650,000	2,490,000

TRANSMISSION CAPACITY TRENDS

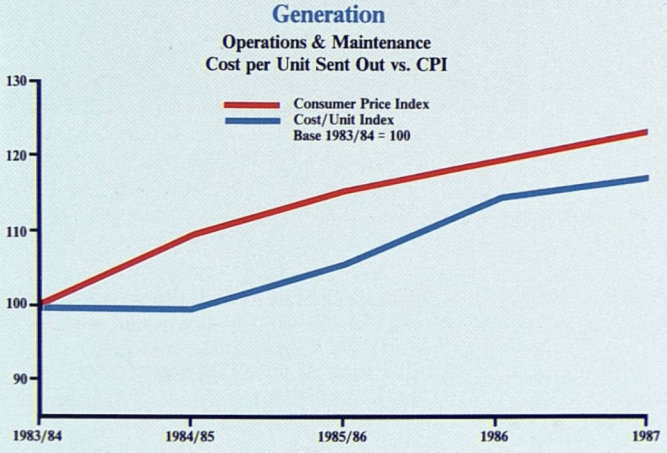
Kilometres of Lines/Cables — Cumulative Data

YEAR	110 kV	220 kV	275 kV	400 kV
1978/79	3,401.2	1,180.2	10.5	—
1979/80	3,411.7	1,180.2	10.5	—
1980/81	3,430.8	1,313.6	10.5	—
1981/82	3,476.4	1,424.2	10.5	—
1982/83	3,546.2	1,427.2	10.5	—
1983/84	3,668.6	1,453.3	10.5	—
1984/85	3,710.3	1,453.3	10.5	0.6
1985/86	3,723.5	1,467.9	10.5	229.8
1986 (9 mths)	3,727.0	1,560.0	11.0	439.0
1987	3,727.0	1,578.0	11.0	439.0



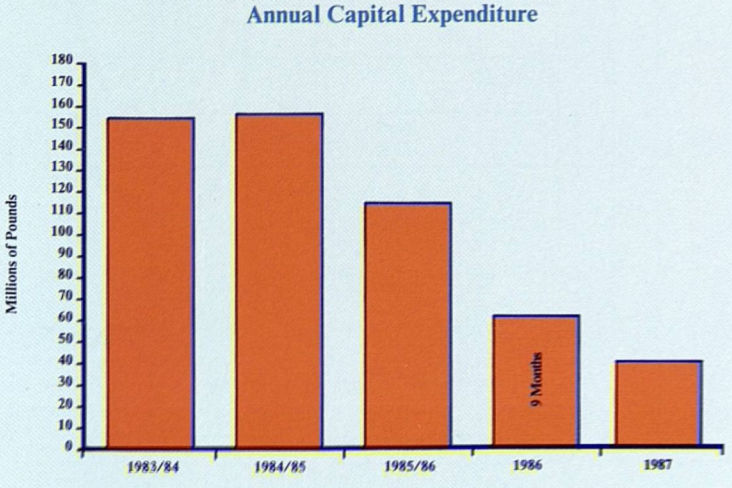
Graph 18

Graph 18: The improving trend in real fuel costs continued in 1987, due to falling fuel prices and increased coal consumption.



Graph 19

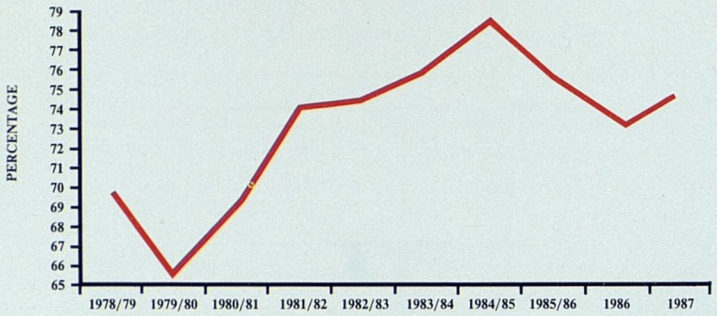
Graph 19: The trend in generation costs (excluding fuel) continued below the level of inflation.



Graph 20

Graph 20: Generation Capital Expenditure continues to decline dramatically with the completion of major construction projects.

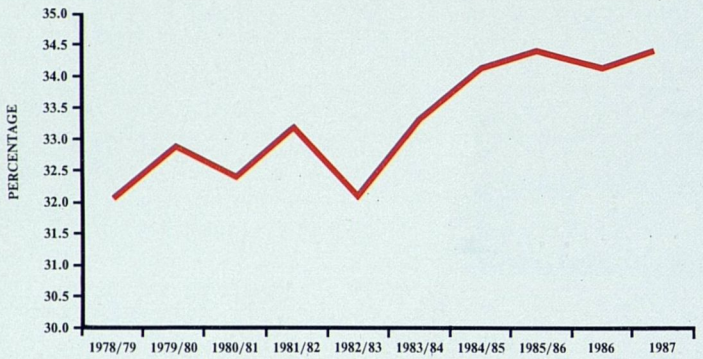
Generating Plant Availability



Graph 21

Graph 21: Incorporated within the 74.7% availability figure for 1987 (73.2% for previous year) is a relatively low forced outage rate (7.9%) and a high level of scheduled outages (17.1%) for desirable maintenance as opportunity permitted.

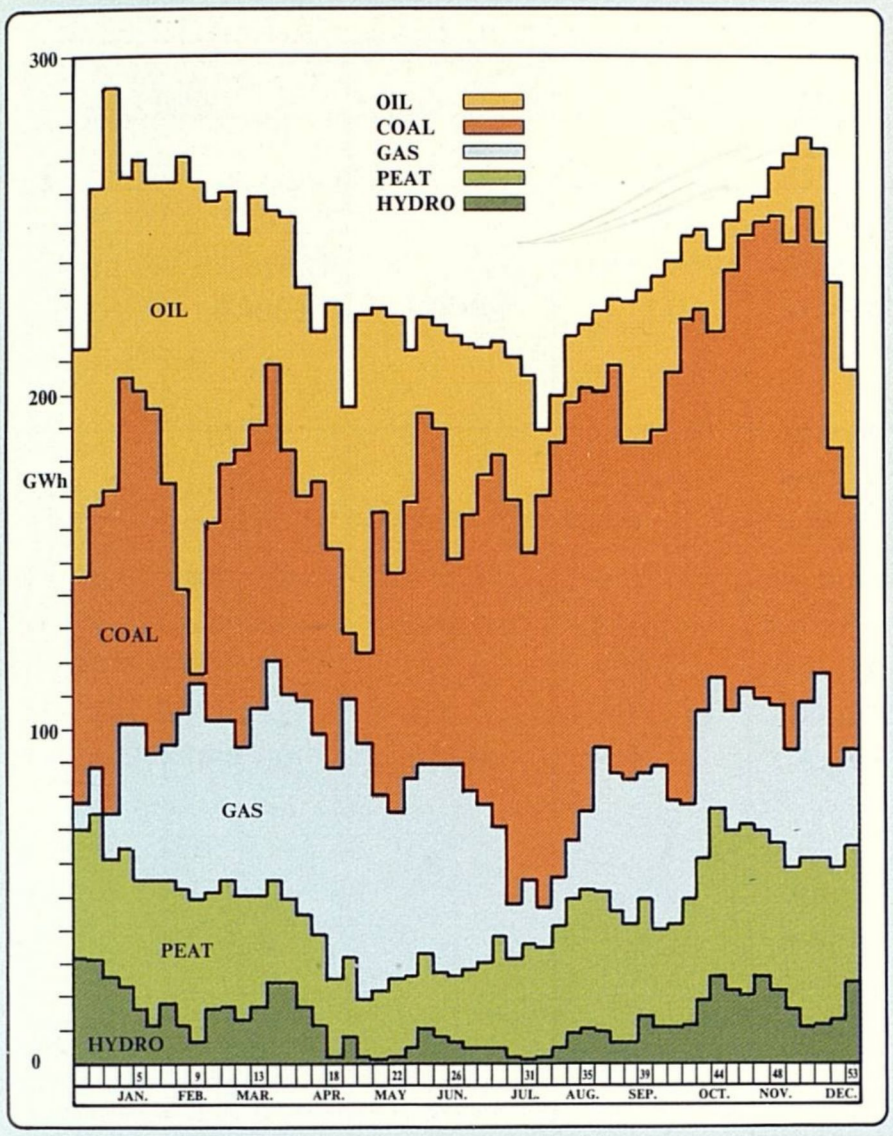
Thermal Efficiency of Generating Plant



Graph 22

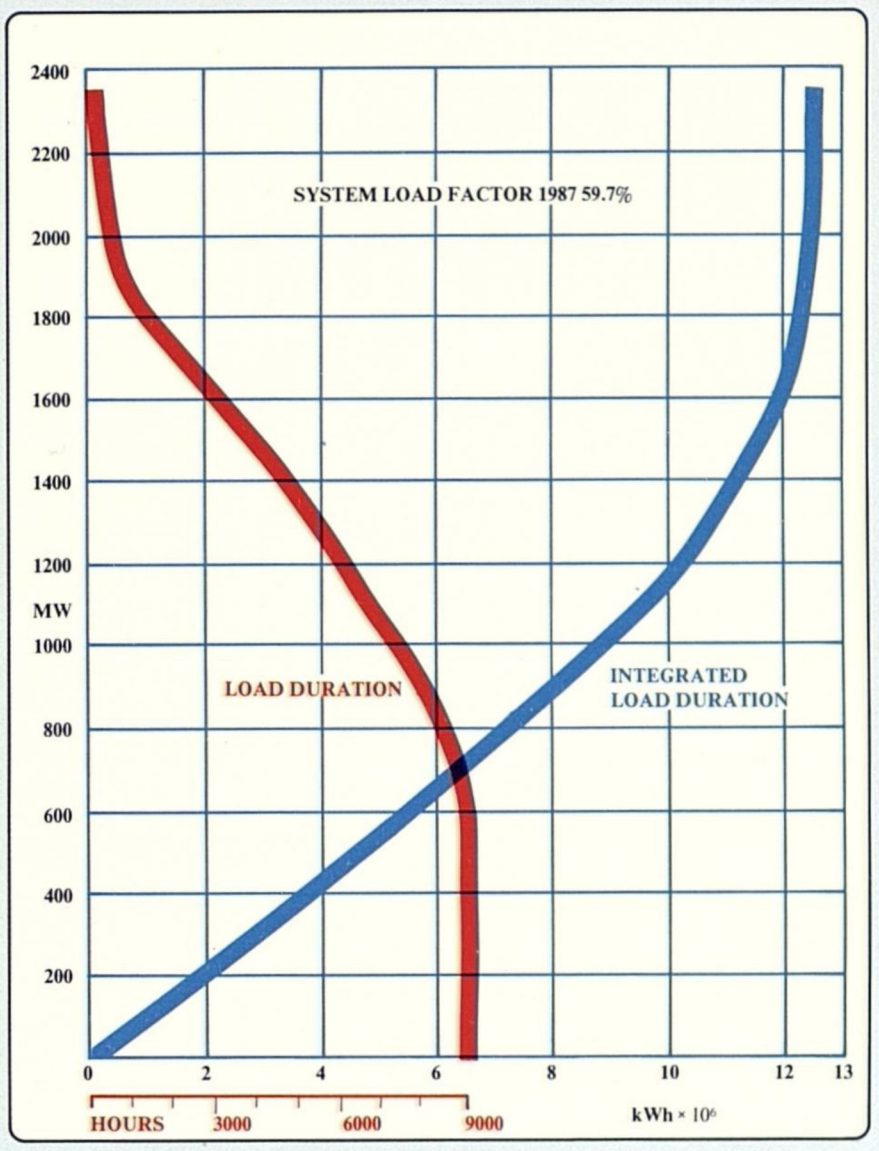
Graph 22: The overall thermal efficiency was 34.4% for 1987 compared with 34.2% for 1986. This increase is largely attributable to the increased load factor of high merit plant, particularly Moneypoint.

Weekly System Demand 1987



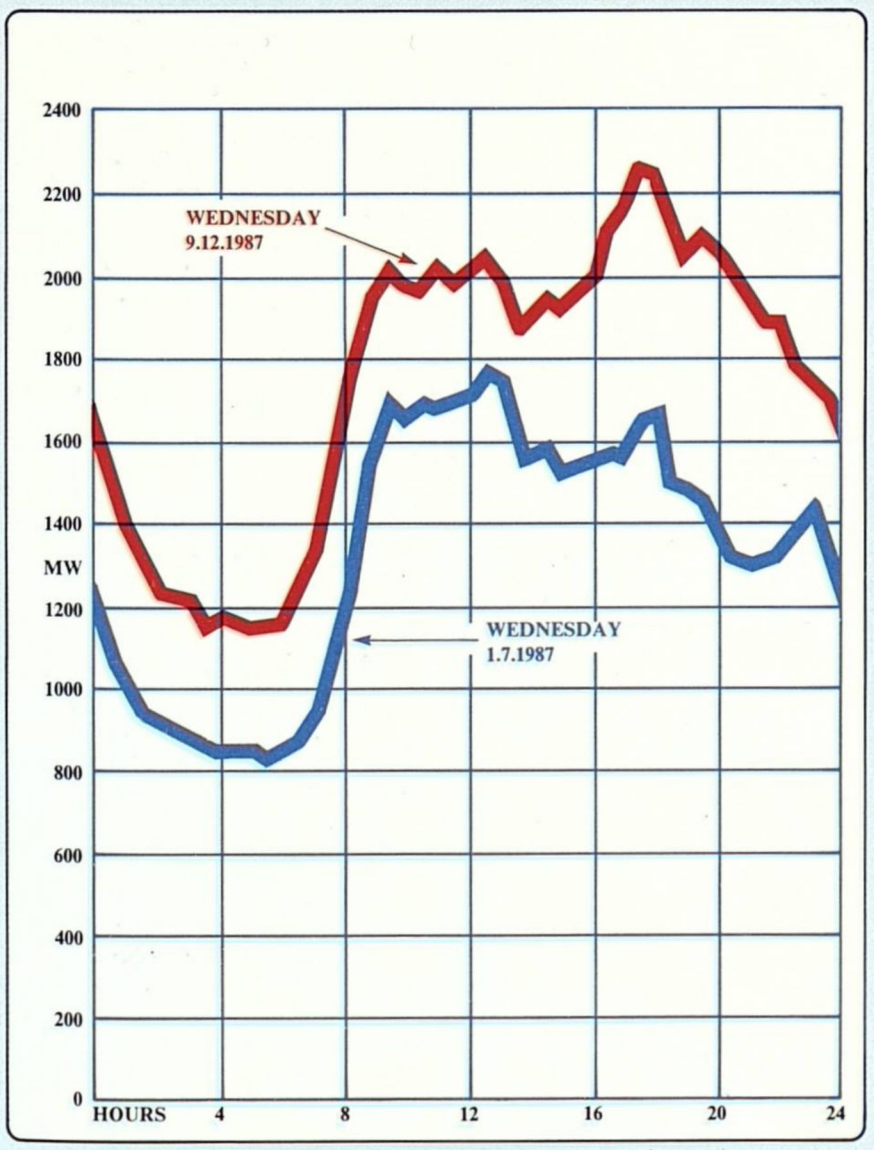
Graph 23

System Load Duration & Integrated Load Duration Curves 1987



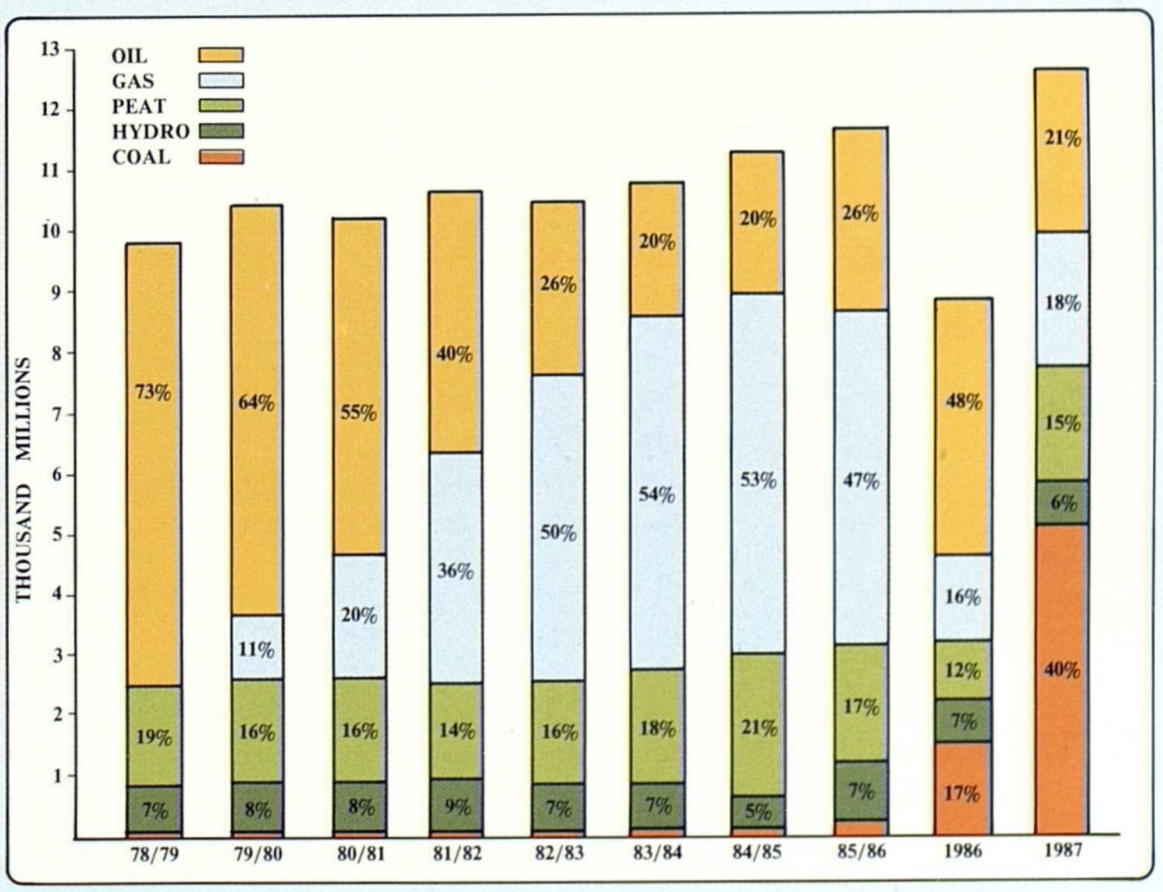
Graph 24

System Daily Load Curves 1987



Graph 25

Energy Sources Units Generated 1978/79 to 1987



Graph 26

STATEMENT OF GENERATION COSTS

Generating Stations	Fuel	Operation	Maintenance	Local Charges	Works Cost 1987 (12 Months)	Works Cost 1986 (9 Months)	Depreciation	Total Cost 1987 (12 Months)	Total Cost 1986 (9 Months)
	£000's	£000's	£000's	£000's	£000's	£000's	£000's	£000's	£000's
Coal/Oil/Gas									
Marina	5,348	2,043	2,263	386	**10,040**	13,551	753	**10,793**	14,155
Arigna	3,366	779	434	121	**4,700**	3,146	6	**4,706**	3,150
Great Island	2,900	1,680	1,392	475	**6,447**	10,499	500	**6,947**	11,164
Tarbert	17,483	1,893	5,785	715	**25,876**	31,956	1,508	**27,384**	33,194
Poolbeg	30,172	2,911	5,296	1,598	**39,977**	33,415	4,012	**43,989**	36,567
Aghada	25,841	1,728	2,807	516	**30,892**	25,784	3,141	**34,033**	28,204
North Wall	12,468	1,281	1,630	513	**15,892**	16,015	5,416	**21,308**	20,041
Moneypoint	60,162	5,416	6,928	1,626	**74,132**	31,309	19,724	**93,856**	40,354
Sod Peat (Machine)									
Portarlington	939	855	420	135	**2,349**	2,143	5	**2,354**	2,147
Allenwood	2,098	1,259	749	284	**4,390**	2,555	7	**4,397**	2,561
Milled Peat									
Ferbane	15,279	2,414	2,116	425	**20,234**	8,828	18	**20,252**	8,841
Rhode	9,696	1,854	1,690	356	**13,596**	8,644	14	**13,610**	8,655
Bellacorick	2,274	1,324	1,266	256	**5,120**	4,471	209	**5,329**	4,629
Shannonbridge	17,410	2,393	2,027	494	**22,324**	12,823	2,174	**24,498**	14,472
Lanesborough	12,444	1,798	1,358	368	**15,968**	9,493	2,012	**17,980**	11,119
Sod Peat (Hand-Won)									
Three 5 MW Stations	581	891	435	177	**2,084**	1,479	4	**2,088**	1,482
Total-Fuel Stations	218,461	30,519	36,596	8,445	**294,021**	216,111	39,503	**333,524**	240,735
Hydro									
Shannon		959	1,787	419	**3,165**	2,699	37	**3,202**	2,729
Erne		438	743	246	**1,427**	1,128	131	**1,558**	1,229
Liffey		129	540	100	**769**	575	32	**801**	601
Lee		336	506	151	**993**	563	74	**1,067**	623
Clady		73	102	19	**194**	177	20	**214**	194
Pumped Storage Turlough Hill		684	1,041	287	**2,012**	1,306	613	**2,625**	1,790
Total-Hydro Stations		2,619	4,719	1,222	**8,560**	6,448	907	**9,467**	7,166
Total-All Stations	218,461	33,138	41,315	9,667	**302,581**	222,559	40,410	**342,991**	247,901
Electricity Purchased in Bulk (net)								**463**	353
General Charges								**27,080**	18,203
Costs (current and remaining) of Stations now decommissioned								**2,994**	1,442
Fisheries (Net Conservation Cost)								**1,019**	605
TOTAL COST								**£374,547**	£268,504

NOTE: Station works cost per unit sent-out is included with the Generating Statistics under the heading "Particulars and Performance of Plant".

INSTALLED CAPACITY

YEAR	MW	YEAR	MW
1978/79	2,895	1983/84	3,260
1979/80	2,863	1984/85	3,247
1980/81	3,117	1985/86	3,547
1981/82	3,287	1986 (9 mths)	3,852
1982/83	3,175	1987	4,009

PERCENTAGE INSTALLED CAPACITY ANALYSED BY FUEL

YEAR	OIL	PEAT	HYDRO	COAL	GAS
1978/79	59	15	18	1	7
1979/80	59	16	18	1	7
1980/81	54	14	16	—	15
1981/82	51	14	16	—	20
1982/83	46	15	16	—	23
1983/84	27	15	16	—	41
1984/85	24	15	16	—	45
1985/86	22	14	14	9	41
1986 (9 mths)	20	13	13	16	38
1987	15	12	13	23	36*

*Of the plant classified as Gas, 82% can also burn Oil.

PERCENTAGE PLANT FORCED OUTAGE RATE

YEAR	%	YEAR	%
1978/79	22.5	1983/84	8.0
1979/80	21.3	1984/85	6.2
1980/81	15.9	1985/86	12.3
1981/82	11.4	1986 (9 mths)	12.9
1982/83	12.1	1987	7.9

THERMAL EFFICIENCY PERCENTAGE
(of Conversion of Primary Energy to Electricity)

	1978/9	1979/80	1980/81	1981/82	1982/83	1983/84	1984/85	1985/86	1986 (9 mths)	1987
GAS	—	34.6	36.0	37.0	35.1	37.3	38.7	38.7	35.2	37.0
OIL	35.2	36.1	35.8	35.8	34.6	35.2	36.5	36.2	36.8	36.5
MILLED PEAT	24.0	23.7	23.4	23.0	23.8	24.0	25.2	24.8	24.8	24.8
SOD PEAT	23.5	21.5	20.8	20.0	21.2	21.5	22.6	22.0	19.6	19.0
COAL	—	—	—	—	—	—	—	—	35.5*	37.6*
OVERALL	32.1	32.9	32.4	33.2	32.1	33.3	34.2	34.4	34.2	34.4

*Includes native coal

STATION STAFF NUMBERS PER MW OF INSTALLED CAPACITY

YEAR	PEAT	OIL	GAS	COAL
1978/79	2.29	0.58	—	—
1979/80	2.39	0.61	1.02	—
1980/81	2.49	0.60	0.66	—
1981/82	2.67	0.61	0.54	—
1982/83	2.46	0.62	0.48	—
1983/84	2.21	0.51	0.45	—
1984/85	2.20	0.50	0.45	—
1985/86	2.04	0.59	0.45	—
1986 (9 mths)	2.05	0.49	0.45	—
1987	1.96	0.59	0.46	0.46

AGE OF GENERATING PLANT AT YEAR-END

Age / Fuel Type	Under 5 Years MW	5 to 10 Years MW	10 to 15 Years MW	15 to 20 Years MW	20 to 25 Years MW	25 to 30 Years MW	Over 30 Years MW	Total MW
Oil	—	—	500	120	—	—	—	620
Peat	45	45	40	—	170	65	122	487
Gas	250*	910*	—	240	60	—	—	1,460
Hydro	—	1	292	—	—	4	215	512
Coal	915	—	—	—	—	15	—	930
Total MW	1,210	956	832	360	230	84	337	4,009

*Combined Cycle plant at Marina and North Wall incorporates refurbished steam turbines.

GENERATION STATISTICS FOR 1987 (53 WEEKS)

Station	Year 1987			9 month period Year 86
	Generated Million Units	Station Use Million Units	Sent Out Million Units	Sent Out Million Units
Ardnacrusha	305.3	2.8	302.5	304.9
Cliff	76.2	1.1	75.1	65.7
Cathaleen's Fall	183.9	2.1	181.8	160.4
Carrigadrohid	21.1	0.4	20.7	19.5
Inniscarra	56.6	0.9	55.7	49.9
Pollaphuca	17.9	1.0	16.9	16.2
Golden Falls	6.8	0.1	6.7	6.0
Leixlip	12.7	0.2	12.5	10.9
Clady	15.8	0.1	15.7	13.2
Ferbane	425.7	36.3	389.4	140.1
Rhode	299.3	26.7	272.6	161.5
Bellacorick	67.3	6.3	61.0	60.2
Shannonbridge	536.0	52.8	483.2	273.3
Lanesboro	443.0	41.3	401.7	225.9
Portarlington	24.5	3.2	21.3	22.9
Allenwood	58.4	5.2	53.2	18.6
Cahirciveen	6.0	0.7	5.3	3.3
Screeb	2.8	0.4	2.4	0.5
Gweedore	2.8	0.7	2.1	2.0
Marina	267.4	4.0	263.4	415.9
Aghada	1,304.3	58.3	1,246.0	702.7
Poolbeg	1,645.5	96.7	1,548.8	1,605.9
North Wall	632.8	12.7	620.1	464.9
Moneypoint	5,022.0	367.3	4,654.7	1,337.9
Great Island	167.6	13.0	154.6	460.8
Tarbert	948.2	66.2	882.0	1,701.6
Arigna	67.8	4.6	63.2	41.7
Turlough Hill (generation)	434.5	4.6	429.9	255.1
Turlough Hill (pumping)	577.4	—	577.4	394.8
ESB Import	—	—	—	—
ESB Export	—	—	—	—
Purchased	16.2	—	16.2	10.9
System Demand	12,491.0	809.7	11,681.3	8,157.6
Maximum Daily Generation — Million Units			44.8	40.4
Maximum Load Generated in MW			2,351	2,178

NOTES: System demand is total units generated by all stations including Turlough Hill plus ESB Import and units purchased, less Turlough Hill pumping and ESB Export.
The figures for 1986 are for a nine month period (April–December).

PARTICULARS AND PERFORMANCE OF GENERATING PLANT

Thermal Stations

Station	Plant Particulars					Plant Performance for 1987			
	Generating Sets		Boilers			Units sent out millions	Plant load factor %	Fuel cost per unit sent out (pence)	Works cost per unit sent out (pence)*
	No.	Total Capacity MW	No.	Total Capacity Tonne/hr.	Fuel Type				
Bellacorick	2	40	2	191	Milled Peat	61.0	18.9	3.729	8.396
Ferbane A	3	60	3	300	Milled Peat	213.5	44.3	4.282	5.674
Ferbane B	1	30	1	130	Milled Peat	175.9	70.8	3.489	4.615
Shannonbridge	3	125	3	522	Milled Peat	483.2	48.2	3.603	4.620
Lanesboro	2	85	2	349	Milled Peat	401.7	58.5	3.098	3.975
Portarlington	1	12	3	205	Sod Peat	21.3	23.0	4.402	11.012
Allenwood	2	40	4	273	Sod Peat	53.2	16.4	3.945	8.255
Cahirciveen	1	5	1	28	Sod Peat	9.8	8.8	5.918	21.225
Gweedore	1	5	1	28	Sod Peat				
Screeb	1	5	1	28	Sod Peat				
Rhode A	2	40	2	191	Milled Peat	77.9	24.1	4.181	6.685
Rhode B	1	40	1	173	Milled Peat	194.8	60.0	3.307	4.308
Moneypoint #	3	915	3	2808	Coal	4654.7	67.6	1.293	1.593
Arigna	1	15	1	75	Coal	63.2	50.8	5.328	7.441
Great Island	1	120	1	250	Oil	129.8	13.1	2.235	4.968
Marina	1	60	1	250	Gas/Oil	263.4	0.4	2.030	3.811
	1	30	1	132	HR**				
	1	85	Combustion Turbine		Gas		25.9		
Aghada	1	270	1	800	Gas	1246.0	50.3	2.074	2.479
	3	255	Combustion Turbines		Gas/Oil		4.2		
Poolbeg	3	510	3	1560	Gas/Oil	1548.8	36.2	1.948	2.581
Tarbert	2	500	2	1600	Oil	882.0	21.3	1.982	2.934
North Wall	1	104	Combustion Turbine		Gas/Oil	620.1	4.5	2.011	2.563
	3	42	1	174	HR**				
	1	104	Combustion Turbine		Gas/Oil		45.5		

Excludes plant decommissioned as of the end of the year: Ringsend 270 MW, Tarbert 120 MW, Marina 30 MW, Great Island 120 MW, Poolbeg 28 MW.

* Works cost per unit is affected by items such as load factor and load profile; the figures in this column cannot, therefore, be used directly for comparing station performances.

**Heat Recovery: Operated on combined cycle with associated combustion turbine.

\# One unit in commission for part of the year only.

PARTICULARS AND PERFORMANCE OF GENERATING PLANT

Hydro Stations

Station	Average Annual generation million units	Plant Particulars		Plant Performance for 1987		
		Generating Sets		Units sent out millions	Plant load factor %	Works cost per unit sent out (pence)
		No.	Capacity (MW)			
Ardnacrusha	315	5	86	302.5	39.9	1.046
Pollaphuca	45	2	30	16.9	6.7	2.129
Golden Falls		1	4	6.7	19.1	
Leixlip		1	4	12.5	35.7	
Cliff	275	2	20	75.1	42.8	0.556
Cathaleen's Fall		2	45	181.8	45.9	
Carrigadrohid	77	1	8	20.7	29.6	1.299
Inniscarra		2	19	55.7	33.5	
Clady	13	1	4	15.7	44.4	1.239
Turlough Hill — Pumped Storage	—	4	292	429.9	—	—

PEAK LOAD TRENDS

YEAR	MW
1978/79	1,934
1979/80	1,971
1980/81	1,892
1981/82	1,999
1982/83	1,924
1983/84	1,994
1984/85	2,092
1985/86	2,130
1986 (9 mths)	2,178
1987	2,351

SYSTEM DEMAND TRENDS

YEAR	MILLION UNITS
1978/79	9,603
1979/80	10,214
1980/81	10,038
1981/82	10,386
1982/83	10,194
1983/84	10,559
1984/85	10,973
1985/86	11,465
1986 (9 mths)	8,657
1987	12,491

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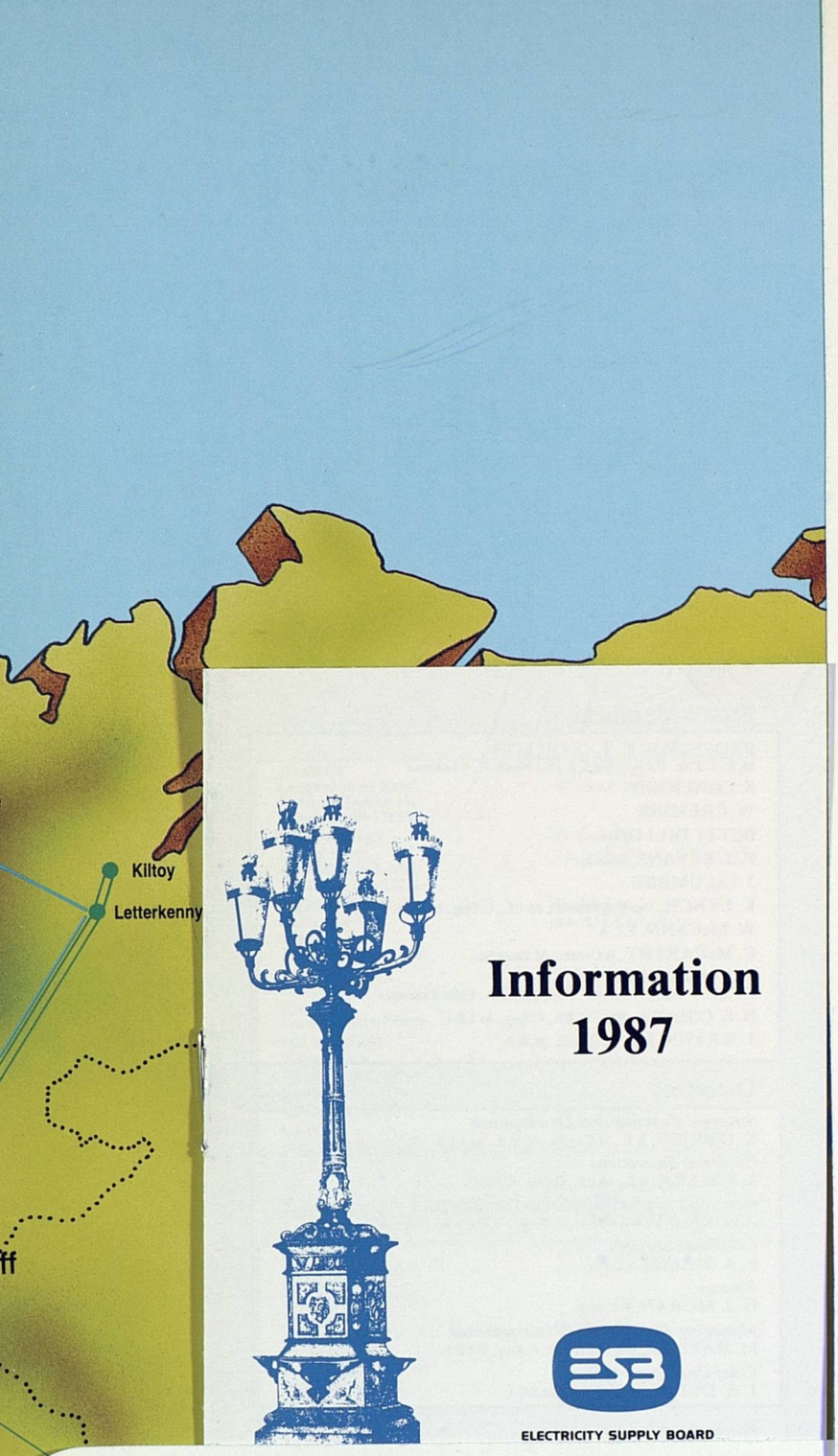
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Information 1987

ELECTRICITY SUPPLY BOARD

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GENERAL OUTLINE OF THE

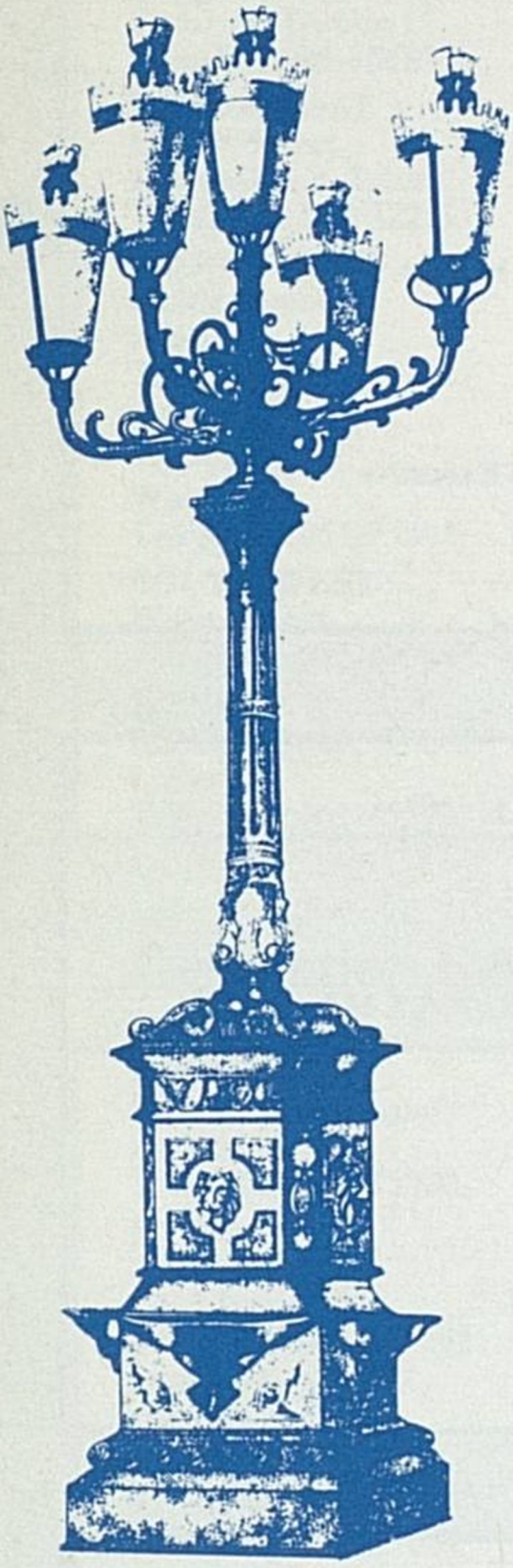
GENERATION AND TRANSMISSION SYSTEMS

- Hydro Stations
- Steam Stations
- Pumped Storage Station
- 400kV Transformer Stations
- 220kV Transformer Stations
- 110kV Transformer Stations
- 110kV Transformer Stations Projected

- 400kV Lines
- 220kV Lines
- 220kV Lines Projected
- 110kV Lines
- 110kV Lines Projected
- Other High Voltage Lines
- 275kV Lines

31 DECEMBER 1987





Information 1987

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ESB Input to Ireland's Economy

	1983/84 £ millions	1984/85 £ millions	1985/86 £ millions	1986 (9 mths) £ millions	1987 £ millions
Fuel: Natural Gas, Peat, Native Coal	208	210	199	86	117
Irish Suppliers of Goods and Services including Capital Work	111	120	97	86	120
Rates Levy and Local Rates	23	25	26	20	27
Payroll Costs including Capital Projects	194	203	209	163	223
Interest paid to Irish Lenders & Stockholders	34	39	50	49	40
TOTAL	570	597	581	404	527

Data Summary

	1986 (9 mths)	1987
FINANCIAL		
Financial Outcome. Surplus/(Deficit)	£6m	(£5m)
Income	£577m	£780m
Assets in Commission (before Depreciation)	£1,807m	£2,050m
Sales (Million Units)	7,295	10,506
Effective Generating Capacity (MW)	3,852	4,009
Peak Load (MW)	2,178	2,351
Customers	1,207,051	1,221,600
EMPLOYMENT		
Total Employment	11,763	11,383
Operations	9,402	9,143
New Works	1,882	1,802
External Activities and Secondment	149	134
Apprentices	330	304
Pay	£134m	£185m
ESB Contribution to Pension Fund, PRSI and Expenses	£29m	£38m

Generation Capacity

FUEL TYPE	MW
HYDRO	220
HYDRO (PUMPED STORAGE)	292
COAL	930
PEAT	487
GAS	385
OIL	620
GAS OR OIL	1075
TOTAL:	4009

Sources of Energy

	Primary Generation (Million Units)	%
HYDRO	696	6
PEAT	1,866	15
COAL	5,090	40
GAS	2,256	18
OIL	2,710	21
TOTAL PRIMARY GENERATION	12,618	100
PUMPED STORAGE (GENERATION)	435	
PUMPED STORAGE (PUMPING)	(577)	
PURCHASED	16	
TOTAL SYSTEM DEMAND	12,492	

Analysis of Units Sold — 1987

Class of Supply	Millions
Domestic	
General Supply	4,020.9
Night Rate	209.5
	4,230.4
Commercial	
General Supply	909.7
Heating, Cooking and Water Heating	236.2
Night Space Heating	193.0
Public Lighting	134.5
Maximum Demand	859.7
Miscellaneous	103.7
	2,436.8
Industrial	
Maximum Demand	
High Tension	2,958.2
Low Tension	748.6
Miscellaneous	132.1
	3,838.9
Total	10,506.1

Growth of ESB 1930-1987

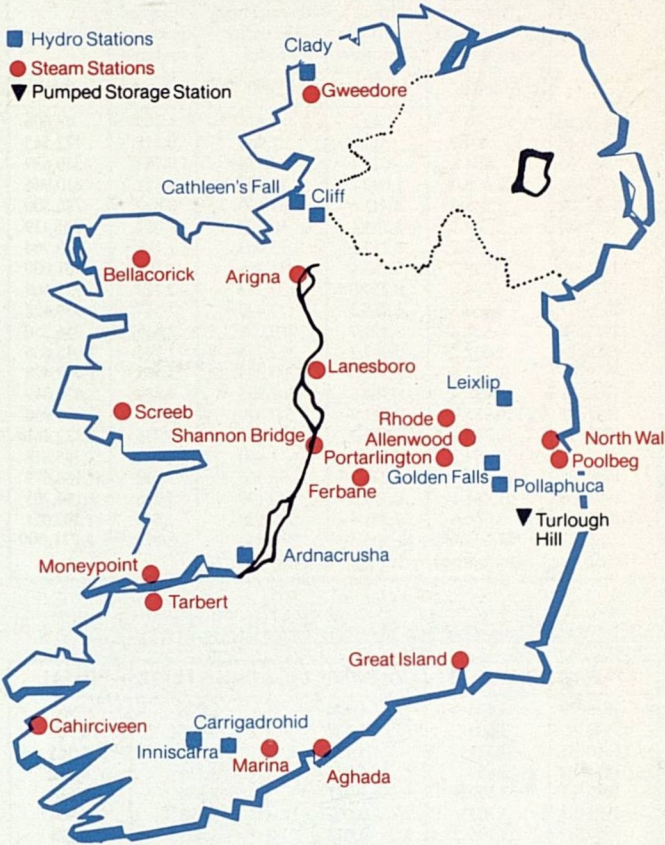
Year	Units generated (and purchased)*	Units sold to Customers	Revenue from Electricity Sales	Average price per unit sold	Customers
	Millions	Millions	£000	Pence	Total
1929/30	60.9	43.2	478	1.108	48,606
1939/40	407.0	318.6	1,946	0.612	172,545
1949/50	784.8	626.1	4,774	0.763	310,639
1959/60	2,096.0	1,692.2	14,724	0.871	610,946
1969/70	5,245.7	4,411.6	39,400	0.892	786,500
1972/73	6,749.1	5,705.1	60,321	1.057	845,119
1973/74	7,253.1	6,152.0	73,063	1.188	873,764
1974/75	7,298.7	6,153.1	111,261	1.808	901,000
1975/76	7,534.6	6,259.0	136,277	2,177	931,469
1976/77	8,160.5	6,783.2	173,429	2.557	959,428
1977/78	8,828.4	7,329.9	210,029	2,865	986,256
1978/79	9,602.7	7,965.3	222,768	2.797	1,015,636
1979/80	10,213.6	8,560.3	300,024	3.505	1,043,428
1980/81	10,038.4	8,364.6	408,965	4.889	1,070,049
1981/82	10,385.9	8,661.7	517,029	5.969	1,096,950
1982/83	10,194.4	8,518.3	571,992	6.715	1,122,461
1983/84	10,559.2	8,903.5	641,460	7.205	1,145,818
1984/85	10,972.7	9,274.2	696,506	7.510	1,168,679
1985/86	11,465.1	9,787.8	757,172	7.736	1,194,765
9 mths 1986	8,656.6	7,295.4	550,620	7.548	1,207,051
1987	12,491.0	10,506.1	736,441	7.010	1,221,600

*Excluding Units absorbed by Storage Pumping

Electricity Sales by Sector (Million Units)

YEAR	DOMESTIC	COMMERCIAL	INDUSTRIAL	TOTAL
1978/79	3,404	1,624	2,938	7,965
1979/80	3,600	1,722	3,238	8,560
1980/81	3,515	1,774	3,076	8,365
1981/82	3,659	1,887	3,116	8,662
1982/83	3,599	1,911	3,009	8,518
1983/84	3,703	2,002	3,198	8,904
1984/85	3,795	2,074	3,405	9,274
1985/86	4,001	2,234	3,553	9,788
9 mths 1986	2,821	1,635	2,840	7,296
1987	4,230	2,437	3,839	10,506

IRELAND'S GENERATING STATIONS



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