

Northern Ireland Electricity plc

A report on a reference under Article 15 of
the Electricity (Northern Ireland) Order 1992



Northern Ireland Electricity plc

A report on a reference under Article
15 of the Electricity (Northern Ireland)
Order 1992

**Presented to the Director General of Electricity Supply
for Northern Ireland
March 1997**

Members of the Monopolies and Mergers Commission as at 26 March 1997

Sir Graeme Odgers (*Chairman*)
Mr P H Dean CBE (*Deputy Chairman*)
Mr D G Goyder CBE (*Deputy Chairman*)
Dr D J Morris¹ (*Deputy Chairman*)
Professor J Beatson¹
Professor M Cave
Mr A T Clothier¹
Mr P G Corbett CBE
Mr R H F Croft CB
Mr R O Davies
Professor S Eilon
Mr J Evans CBE
Mr N H Finney OBE
Sir Archibald Forster
Sir Ronald Halstead CBE
Mr D B Hammond
Ms J C Hanratty
Ms P A Hodgson CBE
Mr D J Jenkins¹ MBE
Mr H H Liesner CB
Mr R Lyons
Mr P Mackay CB
Mr N F Matthews
Professor J S Metcalfe CBE
Mrs K M H Mortimer
Mr R J Munson¹
Professor D M G Newbery
Dr G F Owen
Professor J F Pickering
Mr M R Prosser
Professor J A Rees
Mr T S Richmond
Dr A Robinson
Mr J K Roe
Dr L M Rouse
Mr C R Smallwood
Mr G H Stacy CBE
Mrs E C Tritton QC

Miss P A Boys (*Secretary*)

¹These members, together with Professor J A M Kennerley (selected by the Chairman of the MMC under Article 15(9)(a) of the Electricity (Northern Ireland) Order 1992), formed the Group which was responsible for this report, under the chairmanship of Dr D J Morris.

Note by the Office for the Regulation of Electricity and Gas

In accordance with Article 16(6) of the Electricity (Northern Ireland) Order 1992, the Department of Economic Development has directed the Director General of Electricity Supply for Northern Ireland to exclude from the published report certain matters publication of which appears to the Department to be against the public interest or the commercial interests of a person. Accordingly certain figures and text have been omitted. The omissions are indicated by a note in the text.

Contents

	<i>Page</i>
Part I-Summary and Conclusions	
<i>Chapter</i> 1	Summary 3
2	Conclusions 5
Part II-Background and evidence	
3	Northern Ireland and its electricity supply industry 55
4	The regulatory background 76
5	History, activities and financial performance of NIE 84
6	Quality of service 105
7	The capital investment programme of NIE 120
8	The operational efficiency of NIE 140
9	Cost of capital and financial projections 161
10	Views of NIE 206
11	Views of the DG 215
12	Views of third parties 223
	List of signatories 247

<i>Appendices</i>	(The numbering of the appendices indicates the chapters to which they relate.)
1.1	The reference and background 248
2.1	Schedule 4 to NIE's licence 250
2.2	Schedule 6 to NIE's licence 259
2.3	Articles 4 and 6 of the Electricity (Northern Ireland) Order 1992 266
2.4	The MMC's calculations of possible valuations for NIE at flotation, based on its prospectus 268
2.5	Effects of MMC proposal concerning depreciation 270
2.6	Derivation of opening and closing values of the RAB for the T&D Business 274
2.7	Calculation of NPV effect of adjustment for underspend 276
2.8	The MMC's assessment of an efficient level of operating expenditure for NIE 277
3.1	Generating plant capacity, contract expiry dates and earliest cancellation dates 286
3.2	PESs' views on the supply market in Northern Ireland 287
3.3	NIE's tariffs 288
3.4	Prices to domestic customers, 1990/91 to 1996/97 291
3.5	Privatization and regulation of the electricity supply industry in the UK 292
3.6	Annual domestic bill by fuel component in 1996/97 293
5.1	NIE Board members and Board Committees 294
5.2	Principal subsidiary undertakings of NIE at 31 March 1996 295
5.3	Extracts from NIE's prospectus at June 1993 296
6.1	New standards of performance for NIE proposed by OFREG 301
6.2	Main findings of OFREG's market research survey 306
7.1	NIE: details of capital expenditure underspend for period 1992/93 to 1996/97 307

	<i>Page</i>
7.2 NIE's internal guidance on the categorization of network expenditure between capital and revenue	308
8.1 Organization and organizational changes	310
8.2 Manpower costs, planning and productivity	312
8.3 The views of NIE and the DG on comparators	319
8.4 Comparative studies of NIE's operating efficiency	321
9.1 The CAPM and the DGM	324
9.2 [<i>Details omitted. See note on page iv.</i>]	327
9.3 Comparison of debt premia in 1996	328
9.4 Analysts' estimates of NIE's profits and NIE's actual profits	329
9.5 Information on NIE from the prospectus and from brokers' reports in 1992 and 1993	330
9.6 A note by NIE on its estimate of its initial price control value	334
9.7 HCA fixed asset summary from 31 March 1992 to 31 March 1996	336
9.8 CCA fixed asset summary from 31 March 1992 to 31 March 1996	337
12.1 Members of the Action Group on Northern Ireland Energy Issues	338
Glossary	339
Index	347

Part I

Summary and Conclusions

1 Summary

1.1. On 18 September 1996 the Director General of Electricity Supply for Northern Ireland (the DG) made a reference to us under the Electricity (Northern Ireland) Order 1992 (the Electricity Order) concerning two sets of price controls in the licence of Northern Ireland Electricity plc (NIE). The terms of reference are set out in Appendix 1.1.

1.2. The structure of the electricity supply industry in Northern Ireland is different from that in Great Britain. The generating sector is almost all in the hands of three private sector companies to which the power stations were sold in 1992. NIE, which was privatized in June 1993, has a statutory monopoly of transmission and distribution (T&D) in Northern Ireland and is the Public Electricity Supplier (PES) for the province. It also has a Power Procurement Business (PPB) which has a statutory monopoly in both the purchasing of wholesale electricity from generators and its sale to suppliers. NIE's Supply Business is in principle open to competition and three companies have been granted second-tier supply licences but their share of the market to date is well under 1 per cent.

1.3. During 1995 and 1996 the DG carried out a review of the price controls on NIE's three main regulated businesses—the PPB, the T&D Business and the Supply Business—and published proposals for revised controls to apply from 1 April 1997. NIE accepted the proposals for the PPB but rejected those for T&D and Supply. Consequently the DG referred these matters to us. Our terms of reference require us to report on whether the continuation without modification of the provisions in Schedule 4 to NIE's licence, which restrict NIE's T&D charges, and the provisions in Schedule 6 which restrict its Supply charges, in either case operates or may be expected to operate against the public interest; and if so, whether the effects adverse to the public interest could be remedied or prevented by modifications to the licence.

1.4. In considering the appropriate level of price controls on the T&D Business we have adopted the following:

- (a) a cost of capital of 7 per cent;
- (b) a value of £370 million for the asset base of the business at privatization, at 1993/94 prices; after allowing for new investment since then, for depreciation and for inflation, that led us to a value of £475 million at 1996/97 prices for the asset base as at the beginning of the forthcoming regulatory period;
- (c) a level of £310 million (at 1996/97 prices), after deducting customer contributions, for capital expenditure over the next five years; and
- (d) an amount of £328 million (at 1996/97 prices) for operating expenditure over that period.

For the purpose of our calculations we have also made a downward adjustment because of the extent and nature of the capital underspend in the period since privatization.

1.5. On the basis of these assessments we consider that the price control for the next five years should be set to give NIE total revenues from its T&D Business with a net present value (NPV) of £575 million at 1996/97 prices. We also propose that the term in the price formula concerning electricity losses, which is intended to give NIE an incentive to reduce the rate of losses, should be reduced from 10.5 to 10 per cent in line with the DG's proposals.

1.6. Continuation without modification of the present price controls would lead to revenues far higher than the amount referred to in paragraph 1.5. We therefore concluded that continuation of the existing provisions of Schedule 4 may be expected to operate against the public interest and that the adverse effects which we identified could be prevented by modifications to those provisions. Specifically, we propose that revenues allowed by the price control formula should be reduced by 25 per cent in 1997/98, compared with the level allowed in 1996/97, and should fall by 2 per cent in real terms in each of the four subsequent years of the period.

1.7. The Supply Business requires relatively little capital expenditure and the key element affecting its need for finance is operating expenditure. In reviewing the price controls on the business we adopted:

- (a) an amount of £90 million (at 1996/97 prices) for operating expenditure over the next five years;
- (b) an amount of £0.6 million a year for energy efficiency activities, as proposed by the DG; and
- (c) a return of 0.5 per cent on total turnover as a suitable level of profit. Turnover is very high in relation to the costs of the Supply Business because it includes the pass-through of electricity and T&D costs. A rate of 0.5 per cent on turnover would give the business about £11.5 million in profit, at 1996/97 prices, over the five years.

On this basis we consider that the price control for the next five years should be set to give NIE total revenues for its Supply Business of £105 million at 1996/97 prices.

1.8. Continuation without modification of the present price controls would lead to revenues well above this level. We therefore concluded that the continuation of the existing provisions of Schedule 6 may be expected to operate against the public interest and that the adverse effects which we identified could be prevented by modifications to those provisions. We propose modifications which would entail a reduction of 42 per cent in the revenues allowed under the formula in 1997/98, compared with 1996/97, and a real reduction of 2 per cent a year in the following four years.

1.9. We estimate that the effect of our proposals will be to reduce domestic electricity prices in Northern Ireland by about 14 per cent in real terms between 1996/97 and 1997/98. The first-year reduction for large industrial customers will be smaller, about 5 per cent, because generation costs account for a much higher proportion of the final price to them than for domestic customers. These estimates do not take account of changes in the generation component of electricity prices, or the deployment of the sum which the Government is providing to reduce prices in Northern Ireland, neither of which is affected by our inquiry. The reductions are a little lower than those which would have resulted from implementation of the DG's proposals, but greater than those implied by NIE's counter-proposals. The amounts which we have adopted for capital and operating expenditure will provide a basis for NIE to achieve, in a number of respects, a better quality of service than would have been likely under the DG's proposals.